



**CHAMPAIGN COUNTY BOARD  
FACILITIES COMMITTEE AGENDA**

**County of Champaign, Urbana, Illinois**

Wednesday, April 3, 2019-6:30 pm

Lyle Shields Meeting Room

Brookens Administrative Center, 1776 E. Washington St., Urbana IL 61802

**Committee Members:**

Stan Harper – Chair  
Steve Summer – Vice-Chair  
Mike Ingram  
Jon Rector

Leah Taylor  
James Tinsley  
Jodi Wolken  
Charles Young

- I. Call to Order and Roll Call
- II. Approval of Agenda/Addenda
- III. Approval of Minutes – March 5, 2019 1 - 2
- IV. Public Participation
- V. Communications
- VI. New Business
  - A. Approval of Authorization for ITB#2019-002 JDC Roof Replacement Project Bid Document
    - i. Bid Documentation for JDC Roof Replacement Project 3 - 132
    - ii. Finalized Bailey Edward Architects Contract (attached) 133 - 135
  - B. Update on ITB#2019-001 Art Bartell Road – Sidewalk Project – Pre-Construction Meeting Thursday, March 28, 2019
    - i. Pre-Construction Meeting Agenda – Thursday, March 28, 2019 136 - 139
  - C. Update on Courthouse Column Base Support Project – ITB #2019-003
    - i. Proposed Schedule (attached) 140
    - ii. Finalized IGW Architects Contract (attached) 141 - 145
  - D. Update on Brookens POD #100 Roof Replacement Project – ITB #2019-004
    - i. Proposed Schedule (attached) 146
    - ii. Finalized IGW Architecture Contract (attached) 147 - 151
  - E. Update on Mold Study and Remediation at METCAD (attached) 152 - 205
  - F. Update on Panel Issue at Downtown Jail (attached) 206 - 207
- VII. Other Business
- VIII. Presiding Officer’s Report
  - A. Future Meeting-Tuesday, May 7, 2019
- IX. Designation of Items to be Placed on the Consent Agenda
- X. Adjournment

All meetings are at Brookens Administrative Center – 1776 E Washington Street in Urbana – unless otherwise noted. To enter Brookens after 4:30 p.m., enter at the north (rear) entrance located off Lierman Avenue.

Champaign County will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities. Please contact Administrative Services, 217-384-3776, as soon as possible but no later than 48 hours before the scheduled meeting.



**Champaign County Board  
Facilities Committee  
County of Champaign, Urbana, Illinois**

**MINUTES – SUBJECT TO REVIEW AND APPROVAL**

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**DATE:** Tuesday March 5, 2019  
**TIME:** 6:30 p.m.  
**PLACE:** Lyle Shields Meeting Room  
Brookens Administrative Center, 1776 E. Washington St., Urbana IL 61802

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**Committee Members**

**Present:** Mike Ingram, Jon Rector, Steve Summers, Leah Taylor, James Tinsley, Jodi Wolken, Stan Harper, Charles Young

**Absent:**

**County Staff:** Dana Brenner (Facilities Director) Ashley Peete (Recording Secretary)

**Others Present:** Giraldo Rosales (County Board Chair)

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**MINUTES**

**I. Call to Order and Roll Call**

Committee Chair Stan Harper called the meeting to order at 6:31 p.m.

**II. Approval of Agenda/Addenda**

**MOVED** by Mr. Summers to approve the agenda: seconded by Ms. Wolken. Upon Vote, the **Motion Carried Unanimously.**

**III. Approval of Minutes-February 5, 2019**

**MOVED** by Mr. Ingram to approve the minutes; seconded by Ms. Wolken. Upon vote, the **Motion Carried Unanimously.**

**IV. Public Participation**

John Burge, a citizen of Champaign County, had questions in regards to the process of selection and proposals for the jail project. Mr. Brenner suggested Mr. Burge to come in and speak with him regarding the project and any other questions he may have can be asked at that time.

**V. Communications**

None

**VI. New Business**

A. Update on ITB#2019-001 Art Bartell Sidewalk Project

Mr. Brenner stated that the contract has been signed by Scanlon Concrete. Bailey Edwards Architecture is currently looking over all documentation. Application for Storm Water Runoff permit from Environmental Health Protection Agency has been completed and sent. We have a pre-construction meeting scheduled for Thursday, March 28, 2019 with Scanlon, Bailey Edward, MSA Engineering and the Physical Plant. This project is on schedule and moving forward. The substantial completion date is June 28, 2019.

B. Update on ITB#2019-002 JDC Roof Replacement Project Proposed Schedule

Mr. Brenner reviewed the attached proposed schedule for the JDC roof replacement project. Bailey Edward Architecture has agreed and approved this project schedule. Bailey Edwards in design work and writing the construction/bid documentation. Mr. Brenner stated this is to have substantial completion by August 30, 2019.

C. Update on Courthouse Colum Base Supports

Mr. Brenner reviewed handouts of photos. During the last 5 years there has been three different issues with members of the public and the base column supports at the courthouse. The corners of these column bases are a liability issue for the County. Mr. Brenner would like to bid this project out to get the best price for repairs. Mr. Brenner would like this project completed by late summer or early fall 2019. The work will have to be done off hours, weekends, nights, etc.; ultimately increasing the cost of this project.

D. Update on Brookens POD #100 Roof Replacement Project

Mr. Brenner stated that the POD 100 roof was completed in 1996 and has had numerous of leaks during the past five years. Mr. Brenner believes pricing will be similar to the POD 200 roof replacement project, completed in 2016. IGW Architecture will design the project and provide Bid Documentation.

Not on schedule, Mr. Brenner reviewed handouts given on the door control panel issues at the Downtown Jail. Replacement parts are no longer available for this panel. Glitches are causing doors to be open without officer's consent. Sheriff is aware of this issue and it is a safety issue for officers and inmates. Mr. Brenner is hoping this can be corrected as quickly as possible. We have contracted with the original installer and we are flying him out for a site visit to inspect the system and provide insight.

**VII. Other Business**

A. Semi-annual Review of CLOSED Session Minutes

**MOVED by** Mr. Rector to leave the minutes in the closed session review sheet remain confidential from that column and the minutes listed from place in open files be placed in open files; seconded by Mr. Tinsley. Upon vote, the **Motion Carried Unanimously.**

**VIII. Presiding Officer's Report**

A. Future Meeting-Tuesday April 2, 2019

**IX. Designation of Items to be placed on the Consent Agenda**

None

**X. Adjournment**

Meeting was adjourned at 7:14 pm

*\*\*Please note the minutes reflect the order of the agenda and may not necessarily reflect the order of business conducted at the meeting.*

# **PROJECT MANUAL**

## **CHAMPAIGN COUNTY JUVENILE DETENTION CENTER ROOF REPLACEMENT**

FOR

CHAMPAIGN COUNTY, ILLINOIS  
400 ART BARTELL ROAD  
URBANA, ILLINOIS 61802

## **95% CONSTRUCTION DOCUMENTS**

Architect's Project # 15029.6

ITB # 2019-02

March 28, 2019

**Bailey Edward Design, Inc.**  
1103 S. Mattis Avenue  
Champaign, Illinois 61821  
217.363.3375



END OF SECTION 00 01 10

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS

Section 00 11 16 – Invitation to Bid

**INVITATION TO BID:**

**CHAMPAIGN COUNTY JUVENILE DETENTION CENTER(JDC) ROOF REPLACEMENT**

Sealed bids for the Champaign County JDC Roof Replacement Project will be received by the Champaign County at the Brookens Administrative Center, 1776 East Washington Street, Urbana, IL 61802. Bids will be opened publicly.

Work generally includes but is not limited to the following:

- Remove existing EPDM roofing and ballast.
- Remove existing flashing and coping.
- Install additional insulation and EPDM roofing.
- Install 2 metal flashings and coping.

Proposals must be submitted on the forms provided and shall contain no qualifications or interlineations. In submitting a bid, it is agreed that the bid may not be withdrawn for a period of thirty (30) days after Bid Date.

The Owner reserves the right to require from any bidder, prior to contract award, a detailed statement regarding the business and technical organization of the bidder that is available for the contemplated work, and a list of his proposed subcontractors. Information pertaining to financial resources may also be required.

A Bid Security in the form of a cashier's check, certified check, or acceptable bidder's surety bond, made payable to the Owner, in an amount that is not less than ten percent (10%) of the Bid proposal submitted, including all Alternates, shall accompany each Bid as a guarantee that: (1) the Bidder will not modify, withdraw or cancel the proposal for thirty (30) days after the bid date; and (2) the bidder, if awarded the contract, will promptly enter into a contract and execute such bonds and furnish such insurance certificates as may be required. Should the Bidder fail to honor these two (2) guarantee for any reason, the Owner shall total the damages and shall deduct the amount of such damages from the Bidder's Bid Security. Should the damages total less than the amount of the Bid Security, the difference shall be returned to the Bidder. However, all damages in excess of the Bid Security shall be borne by the Owner. Damages may include, but shall not be limited to, reasonable compensation for the Owner's additional time spent, additional Architect's fees, costs to the Owner for delays in completion of the Work based upon the Bidders proposed Contract Time and the Contract Time as Awarded including, but not limited to, interest expense and lost revenue, the difference between the Bidder's proposed Contract Sum and the Contract Sum as awarded and costs to re bid the Project should such action become necessary. Such bid securities will be returned to the unsuccessful bidders after execution of the Contract.

Sealed bids for the proposed work will be received up to the hour of **2:00 P.M.** Central Standard Time on **Thursday, May 2, 2019** at the Lyle Shields Meeting Room, Brookens Administrative Center, 1776 East Washington Street, Urbana, IL 61802.

A pre-bid conference will be held in the Lyle Shields Meeting Room, Brookens Administrative Center, 1776 East Washington Street, Urbana, IL 61802, on **Tuesday, April 23, 2019** at **2:00 P.M.** CST.

A complete set of documents will be available from Dean's Superior Blueprint, 404 E. University Ave., Champaign, IL. 61820, [www.deansblueprint.com](http://www.deansblueprint.com), 217.359.3261.

Refundable Plan Deposit: \$75 for each set of bid documents. Two (2) sets maximum, Additional sets may be purchased without refund. An Electronic set may be purchased for a non-refundable cost of \$25.00. Contact Bailey Edward at 217.363.3375 for Electronic set.

Plan deposits will be refunded in full upon the return of the Bid Documents, in good condition, within ten (10) days after the bid opening. The deposits of General Contractors, who do not submit a bonafide bid or do not return the Bid Documents within ten (10) days after the bid opening, will not be refunded.

Contractor and Subcontractors shall include in bids, the cost for the current prevailing wage (Illinois Prevailing Wage Act - 820 ILCS 130/0.01 et seq.). The Contractor shall ensure that any Subcontractors shall comply with the Illinois Prevailing Wage Act.

The Owner reserves the right to reject any or all bids, to waive any irregularities in the bidding, or to accept the bids that in their judgment will be for their best interest.

Once awarded the contract, the Contractor will furnish a satisfactory performance bond, execute the contract and proceed with the work. The Contractor shall indicate the amount of the performance bond on the bid form.

END OF SECTION 00 11 16

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS

Section 00 21 13 – Instructions to Bidders

1.1 INSTRUCTIONS TO BIDDERS

A. AIA Document A701, "Instructions to Bidders," is hereby incorporated into the Procurement and Contracting Requirements by reference.

1. A copy of AIA Document A701-1997, "Instructions to Bidders," is bound in this Project Manual.

B. AIA Document A201 "General Conditions" is hereby incorporated into the Procurement.

1. A copy of AIA Document A201-2017 "General Conditions" is bound in this project manual.

END OF DOCUMENT 00 21 13



# AIA® Document A701™ – 1997

## Instructions to Bidders

### for the following PROJECT:

*(Name and location or address)*

Champaign County Juvenile Detention Center Roof Replacement  
400 Art Bartell Road  
Urbana, IL 61802

### THE OWNER:

*(Name, legal status and address)*

Champaign County, Illinois  
1776 East Washington Street  
Urbana, IL 61802

### THE ARCHITECT:

*(Name, legal status and address)*

Bailey Edward Design, Inc.  
1103 S. Mattis Avenue  
Champaign, IL 61821

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- 8 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

## ARTICLE 1 DEFINITIONS

§ 1.1 Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid form, and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, or in other Contract Documents are applicable to the Bidding Documents.

§ 1.3 Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

§ 1.4 A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

§ 1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.

§ 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

§ 1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.

§ 1.8 A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.

§ 1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.

## ARTICLE 2 BIDDER'S REPRESENTATIONS

§ 2.1 The Bidder by making a Bid represents that:

§ 2.1.1 The Bidder has read and understands the Bidding Documents or Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.

§ 2.1.2 The Bid is made in compliance with the Bidding Documents.

§ 2.1.3 The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.

§ 2.1.4 The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.

## ARTICLE 3 BIDDING DOCUMENTS

### § 3.1 COPIES

§ 3.1.1 Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement or Invitation to Bid in the number and for the deposit sum, if any, stated therein. The deposit will be refunded to Bidders who submit a bona fide Bid and return the Bidding Documents in good condition within ten days after receipt of Bids. The cost of replacement of missing or damaged documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the Bidding Documents and the Bidder's deposit will be refunded.

§ 3.1.2 Bidding Documents will not be issued directly to Sub-bidders unless specifically offered in the Advertisement or Invitation to Bid, or in supplementary instructions to bidders.

§ 3.1.3 Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

§ 3.1.4 The Owner and Architect may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

### § 3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

§ 3.2.1 The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered.

§ 3.2.2 Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Architect at least seven days prior to the date for receipt of Bids.

§ 3.2.3 Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.

### § 3.3 SUBSTITUTIONS

§ 3.3.1 The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.

§ 3.3.2 No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

§ 3.3.3 If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

§ 3.3.4 No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

### § 3.4 ADDENDA

§ 3.4.1 Addenda will be transmitted to all who are known by the issuing office to have received a complete set of Bidding Documents.

§ 3.4.2 Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

§ 3.4.3 Addenda will be issued no later than four days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

§ 3.4.4 Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

## **ARTICLE 4 BIDDING PROCEDURES**

### **§ 4.1 PREPARATION OF BIDS**

§ 4.1.1 Bids shall be submitted on the forms included with the Bidding Documents.

§ 4.1.2 All blanks on the bid form shall be legibly executed in a non-erasable medium.

§ 4.1.3 Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.

§ 4.1.4 Interlineations, alterations and erasures must be initialed by the signer of the Bid.

§ 4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change."

§ 4.1.6 Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall make no additional stipulations on the bid form nor qualify the Bid in any other manner.

§ 4.1.7 Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. The Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

### **§ 4.2 BID SECURITY**

§ 4.2.1 Each Bid shall be accompanied by a bid security in the form and amount required if so stipulated in the Instructions to Bidders. The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the Owner fails to comply with Section 6.2.

§ 4.2.2 If a surety bond is required, it shall be written on AIA Document A310, Bid Bond, unless otherwise provided in the Bidding Documents, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney.

§ 4.2.3 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn or (c) all Bids have been rejected.

### **§ 4.3 SUBMISSION OF BIDS**

§ 4.3.1 All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

§ 4.3.2 Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

§ 4.3.3 The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

§ 4.3.4 Oral, telephonic, telegraphic, facsimile or other electronically transmitted bids will not be considered.

### **§ 4.4 MODIFICATION OR WITHDRAWAL OF BID**

§ 4.4.1 A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid.

**§ 4.4.2** Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date- and time-stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.

**§ 4.4.3** Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.

**§ 4.4.4** Bid security, if required, shall be in an amount sufficient for the Bid as resubmitted.

## **ARTICLE 5 CONSIDERATION OF BIDS**

### **§ 5.1 OPENING OF BIDS**

At the discretion of the Owner, if stipulated in the Advertisement or Invitation to Bid, the properly identified Bids received on time will be publicly opened and will be read aloud. An abstract of the Bids may be made available to Bidders.

### **§ 5.2 REJECTION OF BIDS**

The Owner shall have the right to reject any or all Bids. A Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular is subject to rejection.

### **§ 5.3 ACCEPTANCE OF BID (AWARD)**

**§ 5.3.1** It is the intent of the Owner to award a Contract to the lowest qualified Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.

**§ 5.3.2** The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

## **ARTICLE 6 POST-BID INFORMATION**

### **§ 6.1 CONTRACTOR'S QUALIFICATION STATEMENT**

Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request, a properly executed AIA Document A305, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted as a prerequisite to the issuance of Bidding Documents.

### **§ 6.2 OWNER'S FINANCIAL CAPABILITY**

The Owner shall, at the request of the Bidder to whom award of a Contract is under consideration and no later than seven days prior to the expiration of the time for withdrawal of Bids, furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Unless such reasonable evidence is furnished, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

### **§ 6.3 SUBMITTALS**

**§ 6.3.1** The Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, after notification of selection for the award of a Contract, furnish to the Owner through the Architect in writing:

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the manufacturers, products, and the suppliers of principal items or systems of materials and equipment proposed for the Work; and
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

**§ 6.3.2** The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

**§ 6.3.3** Prior to the execution of the Contract, the Architect will notify the Bidder in writing if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.

**§ 6.3.4** Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

## **ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND**

### **§ 7.1 BOND REQUIREMENTS**

**§ 7.1.1** If stipulated in the Bidding Documents, the Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Bonds may be secured through the Bidder's usual sources.

**§ 7.1.2** If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. If the furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.

**§ 7.1.3** If the Owner requires that bonds be secured from other than the Bidder's usual sources, changes in cost will be adjusted as provided in the Contract Documents.

### **§ 7.2 TIME OF DELIVERY AND FORM OF BONDS**

**§ 7.2.1** The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section 7.2.1.

**§ 7.2.2** Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum.

**§ 7.2.3** The bonds shall be dated on or after the date of the Contract.

**§ 7.2.4** The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

## **ARTICLE 8 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR**

Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on AIA Document A101, Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment Is a Stipulated Sum.



# AIA® Document A201™ – 2017

## General Conditions of the Contract for Construction

### for the following PROJECT:

*(Name and location or address)*

Champaign County Juvenile Detention Center Roof Replacement  
400 Art Bartell Road  
Urbana, IL 61802

### THE OWNER:

*(Name, legal status and address)*

Champaign County, Illinois  
1776 East Washington Street  
Urbana, IL 61802

### THE ARCHITECT:

*(Name, legal status and address)*

Bailey Edward Design, Inc,  
1103 S. Mattis Avenue  
Champaign, IL 61821

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### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.

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## 14 TERMINATION OR SUSPENSION OF THE CONTRACT

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## ARTICLE 1 GENERAL PROVISIONS

### § 1.1 Basic Definitions

#### § 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements.

#### § 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

#### § 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

#### § 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

#### § 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

#### § 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

#### § 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

#### § 1.1.8 Initial Decision Maker

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

### § 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent

consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

**§ 1.2.1.1** The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

**§ 1.2.2** Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

**§ 1.2.3** Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

### **§ 1.3 Capitalization**

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

### **§ 1.4 Interpretation**

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

### **§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service**

**§ 1.5.1** The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

**§ 1.5.2** The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

### **§ 1.6 Notice**

**§ 1.6.1** Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

**§ 1.6.2** Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

### **§ 1.7 Digital Data Use and Transmission**

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

### § 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

## ARTICLE 2 OWNER

### § 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

### § 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

§ 2.2.3 After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.4 Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

### § 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements,

assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

**§ 2.3.2** The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

**§ 2.3.3** If the employment of the Architect terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

**§ 2.3.4** The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

**§ 2.3.5** The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

**§ 2.3.6** Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

#### **§ 2.4 Owner's Right to Stop the Work**

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

#### **§ 2.5 Owner's Right to Carry Out the Work**

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

### **ARTICLE 3 CONTRACTOR**

#### **§ 3.1 General**

**§ 3.1.1** The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

**§ 3.1.2** The Contractor shall perform the Work in accordance with the Contract Documents.

**§ 3.1.3** The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

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### § 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

### § 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

### § 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

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**§ 3.4.2** Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

**§ 3.4.3** The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

### **§ 3.5 Warranty**

**§ 3.5.1** The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

**§ 3.5.2** All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

### **§ 3.6 Taxes**

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

### **§ 3.7 Permits, Fees, Notices and Compliance with Laws**

**§ 3.7.1** Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

**§ 3.7.2** The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

**§ 3.7.3** If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

### **§ 3.7.4 Concealed or Unknown Conditions**

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15.

**§ 3.7.5** If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

### **§ 3.8 Allowances**

**§ 3.8.1** The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

**§ 3.8.2** Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

**§ 3.8.3** Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

### **§ 3.9 Superintendent**

**§ 3.9.1** The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

**§ 3.9.2** The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

**§ 3.9.3** The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

### **§ 3.10 Contractor's Construction and Submittal Schedules**

**§ 3.10.1** The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

**§ 3.10.2** The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the

Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

**§ 3.10.3** The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

### **§ 3.11 Documents and Samples at the Site**

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

### **§ 3.12 Shop Drawings, Product Data and Samples**

**§ 3.12.1** Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

**§ 3.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

**§ 3.12.3** Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

**§ 3.12.4** Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

**§ 3.12.5** The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

**§ 3.12.6** By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

**§ 3.12.7** The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Architect.

**§ 3.12.8** The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

### § 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

### § 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

### § 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

### § 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

### § 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

### § 3.18 Indemnification

**§ 3.18.1** To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

**§ 3.18.2** In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

## ARTICLE 4 ARCHITECT

### § 4.1 General

**§ 4.1.1** The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

**§ 4.1.2** Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

### § 4.2 Administration of the Contract

**§ 4.2.1** The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

**§ 4.2.2** The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

**§ 4.2.3** On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the

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Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

#### **§ 4.2.4 Communications**

The Owner and Contractor shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

**§ 4.2.5** Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

**§ 4.2.6** The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

**§ 4.2.7** The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

**§ 4.2.8** The Architect will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

**§ 4.2.9** The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

**§ 4.2.10** If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

**§ 4.2.11** The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

**§ 4.2.12** Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations

and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.

**§ 4.2.13** The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

**§ 4.2.14** The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

## **ARTICLE 5 SUBCONTRACTORS**

### **§ 5.1 Definitions**

**§ 5.1.1** A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.

**§ 5.1.2** A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

### **§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work**

**§ 5.2.1** Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

**§ 5.2.2** The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

**§ 5.2.3** If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

**§ 5.2.4** The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner or Architect makes reasonable objection to such substitution.

### **§ 5.3 Subcontractual Relations**

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor,

prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Subcontractors.

#### **§ 5.4 Contingent Assignment of Subcontracts**

**§ 5.4.1** Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

**§ 5.4.2** Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

**§ 5.4.3** Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

### **ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

#### **§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts**

**§ 6.1.1** The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

**§ 6.1.2** When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

**§ 6.1.3** The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

**§ 6.1.4** Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

#### **§ 6.2 Mutual Responsibility**

**§ 6.2.1** The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

**§ 6.2.2** If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work,

promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

**§ 6.2.3** The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

**§ 6.2.4** The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

**§ 6.2.5** The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

### **§ 6.3 Owner's Right to Clean Up**

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Architect will allocate the cost among those responsible.

## **ARTICLE 7 CHANGES IN THE WORK**

### **§ 7.1 General**

**§ 7.1.1** Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

**§ 7.1.2** A Change Order shall be based upon agreement among the Owner, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

**§ 7.1.3** Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

### **§ 7.2 Change Orders**

**§ 7.2.1** A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor, and Architect stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

### **§ 7.3 Construction Change Directives**

**§ 7.3.1** A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

**§ 7.3.2** A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

**§ 7.3.3** If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

Init.

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Architect;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

#### § 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will

affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

## **ARTICLE 8 TIME**

### **§ 8.1 Definitions**

**§ 8.1.1** Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

**§ 8.1.2** The date of commencement of the Work is the date established in the Agreement.

**§ 8.1.3** The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

**§ 8.1.4** The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

### **§ 8.2 Progress and Completion**

**§ 8.2.1** Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

**§ 8.2.2** The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

**§ 8.2.3** The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

### **§ 8.3 Delays and Extensions of Time**

**§ 8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine.

**§ 8.3.2** Claims relating to time shall be made in accordance with applicable provisions of Article 15.

**§ 8.3.3** This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

## **ARTICLE 9 PAYMENTS AND COMPLETION**

### **§ 9.1 Contract Sum**

**§ 9.1.1** The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

**§ 9.1.2** If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

### **§ 9.2 Schedule of Values**

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Architect before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and supported by such data to substantiate its accuracy as the Architect may require, and

unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

### § 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner or Architect require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

### § 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

## § 9.5 Decisions to Withhold Certification

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Contractor shall reflect such payment on its next Application for Payment.

## § 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

**§ 9.6.6** A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

**§ 9.6.7** Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

**§ 9.6.8** Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

### **§ 9.7 Failure of Payment**

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

### **§ 9.8 Substantial Completion**

**§ 9.8.1** Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

**§ 9.8.2** When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

**§ 9.8.3** Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

**§ 9.8.4** When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

**§ 9.8.5** The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

## **§ 9.9 Partial Occupancy or Use**

**§ 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

**§ 9.9.2** Immediately prior to such partial occupancy or use, the Owner, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

**§ 9.9.3** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

## **§ 9.10 Final Completion and Final Payment**

**§ 9.10.1** Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

**§ 9.10.2** Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

**§ 9.10.3** If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

**§ 9.10.4** The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

**§ 9.10.5** Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

## **ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY**

### **§ 10.1 Safety Precautions and Programs**

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

### **§ 10.2 Safety of Persons and Property**

**§ 10.2.1** The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

**§ 10.2.2** The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

**§ 10.2.3** The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

**§ 10.2.4** When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

**§ 10.2.5** The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

**§ 10.2.6** The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

**§ 10.2.7** The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

### § 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

### § 10.3 Hazardous Materials and Substances

**§ 10.3.1** The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition.

**§ 10.3.2** Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

**§ 10.3.3** To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

**§ 10.3.4** The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

**§ 10.3.5** The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

**§ 10.3.6** If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

### § 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

## ARTICLE 11 INSURANCE AND BONDS

### § 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 **Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

### § 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 **Failure to Purchase Required Property Insurance.** If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 **Notice of Cancellation or Expiration of Owner's Required Property Insurance.** Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

### § 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

### § 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

### § 11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

## ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

### § 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to

the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

## **§ 12.2 Correction of Work**

### **§ 12.2.1 Before Substantial Completion**

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

### **§ 12.2.2 After Substantial Completion**

**§ 12.2.2.1** In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.5.

**§ 12.2.2.2** The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

**§ 12.2.2.3** The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

**§ 12.2.3** The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

**§ 12.2.4** The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

**§ 12.2.5** Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

## **§ 12.3 Acceptance of Nonconforming Work**

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## **ARTICLE 13 MISCELLANEOUS PROVISIONS**

### **§ 13.1 Governing Law**

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

## § 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

## § 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

## § 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.4.5 If the Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

## § 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

## ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

### § 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

### § 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or Suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance,

the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.

#### **§ 14.3 Suspension by the Owner for Convenience**

**§ 14.3.1** The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

**§ 14.3.2** The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

#### **§ 14.4 Termination by the Owner for Convenience**

**§ 14.4.1** The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

**§ 14.4.2** Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

**§ 14.4.3** In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

### **ARTICLE 15 CLAIMS AND DISPUTES**

#### **§ 15.1 Claims**

##### **§ 15.1.1 Definition**

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

##### **§ 15.1.2 Time Limits on Claims**

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

##### **§ 15.1.3 Notice of Claims**

**§ 15.1.3.1** Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

#### § 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

#### § 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

#### § 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

#### § 15.1.7 Waiver of Claims for Consequential Damages

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

#### § 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the

Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

**§ 15.2.3** In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

**§ 15.2.4** If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

**§ 15.2.5** The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

**§ 15.2.6** Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

**§ 15.2.6.1** Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

**§ 15.2.7** In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

**§ 15.2.8** If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

### **§ 15.3 Mediation**

**§ 15.3.1** Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

**§ 15.3.2** The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

**§ 15.3.3** Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

#### § 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

#### § 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS  
Section 00 22 13 – Supplementary Instructions to Bidders

1.1 INSTRUCTIONS TO BIDDERS

- A. Instructions to Bidders for Project consist of the following:
  - 1. AIA Document A701-1997, "Instructions to Bidders" a copy of which is bound in this Project Manual.
  - 2. The following Supplementary Instructions to Bidders that modify and add to the requirements of the Instructions to Bidders.

1.2 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS, GENERAL

- A. The following supplements modify AIA Document A701-1997, "Instructions to Bidders." Where a portion of the Instructions to Bidders is modified or deleted by these Supplementary Instructions to Bidders, unaltered portions of the Instructions to Bidders shall remain in effect.

1.3 ARTICLE 2 - BIDDER'S REPRESENTATIONS

- A. Add Section 2.1.3.1:
  - 1. 2.1.3.1 - The Bidder has investigated all required fees, permits, and regulatory requirements of authorities having jurisdiction and has properly included in the submitted bid the cost of such fees, permits, and requirements not otherwise indicated as provided by Owner.
- B. Add Section 2.1.5:
  - 1. 2.1.5 - The Bidder is a properly licensed Contractor according to the laws and regulations of the local and state jurisdictions and meets qualifications indicated in the Procurement and Contracting Documents.
- C. Add Section 2.1.6:
  - 1. 2.1.6 - The Bidder has incorporated into the Bid adequate sums for work performed by installers whose qualifications meet those indicated in the Procurement and Contracting Documents.

1.4 ARTICLE 3 - BIDDING DOCUMENTS

- A. 3.4 - Addenda:
  - 1. Delete Section 3.4.3 and replace with the following:
    - a. 3.4.3 - Addenda may be issued at any time prior to the receipt of bids.

2. Add Section 3.4.4.1:
  - a. 3.4.4.1 - Owner may elect to waive the requirement for acknowledging receipt of 3.4.4 Addenda as follows:
    - 1) 3.4.4.1.1 - Information received as part of the Bid indicates that the Bid, as submitted, reflects modifications to the Procurement and Contracting Documents included in an unacknowledged Addendum.
    - 2) 3.4.4.1.2 - Modifications to the Procurement and Contracting Documents in an unacknowledged Addendum do not, in the opinion of Owner, affect the Contract Sum or Contract Time.

## 1.5 ARTICLE 4 - BIDDING PROCEDURES

- A. 4.1 - Preparation of Bids:
  1. Add Section 4.1.9:
    - a. 4.1.9 - Owner may elect to disqualify a bid due to failure to submit a bid in the form requested, failure to bid requested alternates or unit prices, failure to complete entries in all blanks in the Bid Form, or inclusion by the Bidder of any alternates, conditions, limitations or provisions not called for.
- B. 4.3 - Submission of Bids:
  1. Add Section 4.3.1.2:
    - a. 4.3.1.2 - Include Bidder's Contractor License Number applicable in Project jurisdiction on the face of the sealed bid envelope.
- C. 4.4 - Modification or Withdrawal of Bids:
  1. Add the following sections to 4.4.2:
    - a. 4.4.2.1 - Such modifications to or withdrawal of a bid may only be made by persons authorized to act on behalf of the Bidder. Authorized persons are those so identified in the Bidder's corporate bylaws, specifically empowered by the Bidder's charter or similar legally binding document acceptable to Owner, or by a power of attorney, signed and dated, describing the scope and limitations of the power of attorney. Make such documentation available to Owner at the time of seeking modifications or withdrawal of the Bid.
    - b. 4.4.2.2 - Owner will consider modifications to a bid written on the sealed bid envelope by authorized persons when such modifications comply with the following: the modification is indicated by a percent or stated amount to be added to or deducted from the Bid; the amount of the Bid itself is not made known by the modification; a signature of the authorized person, along with the time and date of the modification, accompanies the modification. Completion of an unsealed bid form, awaiting final figures from the Bidder, does not require power

of attorney due to the evidenced authorization of the Bidder implied by the circumstance of the completion and delivery of the Bid.

## 1.6 ARTICLE 5 - CONSIDERATION OF BIDS

### A. 5.2 - Rejection of Bids:

#### 1. Add Section 5.2.1:

- a. 5.2.1 - Owner reserves the right to reject a bid based on Owner's and Engineer's evaluation of qualification information submitted following opening of bids. Owner's evaluation of the Bidder's qualifications will include: status of licensure and record of compliance with licensing requirements, record of quality of completed work, record of Project completion and ability to complete, record of financial management including financial resources available to complete Project and record of timely payment of obligations, record of Project site management including compliance with requirements of authorities having jurisdiction, record of and number of current claims and disputes and the status of their resolution, and qualifications of the Bidder's proposed Project staff and proposed subcontractors.

## 1.7 ARTICLE 6 - POSTBID INFORMATION

### A. 6.1 - Contractor's Qualification Statement:

#### 1. Add Section 6.1.1:

- a. 6.1.1 - Submit Contractor's Qualification Statement no later than five days after the bid submittal.

## 1.8 ARTICLE 7 - PERFORMANCE BOND

### A. 7.1 - Bond Requirements:

#### 1. Add Section 7.1.1.1:

- a. 7.1.1.1 – A Performance Bond will be required, in an amount equal to 100 percent of the Contract Sum.

### B. 7.2 - Time of Delivery and Form of Bonds:

#### 1. Delete the first sentence of Section 7.2.1 and insert the following:

- a. The Bidder shall deliver the required bonds to Owner no later than 10 days after the date of Notice of Intent to Award and no later than the date of execution of the Contract, whichever occurs first. Owner may deem the failure of the Bidder to deliver required bonds within the period of time allowed a default.

2. Delete Section 7.2.3 and insert the following:

- a. 7.2.3 - Bonds shall be executed and be in force on the date of the execution of the Contract.

1.9 ARTICLE 8 - FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

- A. The form of agreement between Owner and Contractor is included in specifications and is bound in this project manual.

1.10 ARTICLE 9 - EXECUTION OF THE CONTRACT

A. Add Article 9:

1. 9.1.1 - Subsequent to the Notice of Intent to Award, and within 10 days after the prescribed Form of Agreement is presented to the Awardee for signature, the Awardee shall execute and deliver the Agreement to Owner, in such number of counterparts as Owner may require.
2. 9.1.2 - Owner may deem as a default the failure of the Awardee to execute the Contract and to supply the required bonds when the Agreement is presented for signature within the period of time allowed.
3. 9.1.3 - Unless otherwise indicated in the Procurement and Contracting Documents or the executed Agreement, the date of commencement of the Work shall be the date of the executed Agreement or the date that the Bidder is obligated to deliver the executed Agreement and required bonds to Owner.
4. 9.1.4 - In the event of a default, Owner may declare the amount of the Bid security forfeited and elect to either award the Contract to the next responsible bidder or re-advertise for bids.

END OF DOCUMENT 00 22 13

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS  
Section 00 22 44 - Additional Insurance Requirements

1.1 INSURANCE

The Contractor shall purchase and maintain insurance as required in the current edition of the Standard Form of Agreement Between Owner and Contractor where the Basis of Payment is a Stipulated Sum, AIA Document A101 and the General Condition of the Contract for Construction, AIA Document A201 as modified by these specifications, AIA General Conditions and Supplements to the AIA General Conditions, Article 11

- A. All of the above documents shall be thoroughly studied prior to purchases of an insurance policy to cover the Project.
- B. While not limited to the following requirements, the requirements listed below are brought to the Contractors Specific attention.
  - 1) Champaign County, and the Architect/Engineer shall be named as additional insureds on the Commercial General Liability Policy and the Umbrella Liability Policy.
  - 2) Waivers of Subrogation are required for both Property Insurance and for Liability Insurance.

1.2 ADDITIONAL LIABILITY INSURANCE REQUIREMENTS

In addition to the liability insurance requirements noted in Paragraph 1.01 above, the following requirements also apply:

- A. The Contractor shall purchase and maintain a Commercial General Liability Policy which shall include the following coverage areas:
  - 1) Operations of the Contractor - direct liability coverage for the Contractors activities at a permanent location and the Project Site;
  - 2) Operations of Subcontractors - Liability coverage for those entities for which the Contractor has a duty to supervise and stand legally responsible for their conduct;
  - 3) Completed Operations - Liability for property damage and bodily injury and death that occurs after Substantial Completion;
  - 4) Personal Injury - Including but not limited to, libel, slander, defamation of character, wrongful eviction, right of private occupancy, false arrest and detention and other similar personal injuries;
  - 5) Employees as Additional Insured - Include employees and their acts into the coverage;
  - 6) Explosion, Collapse, Underground - Liability coverage for the property of others to include, but not limited to, unknown utilities; and
  - 7) Contractual Liability - coverage for the assumption of others by Contract.
- B. The Commercial General Liability Policy shall name Champaign County, the Architect, the Architect's Consultants, their agents and employees as additional insured.
- C. The Contractor shall purchase and maintain Workers Compensation and Employees Liability Insurance.
- D. The Contractor shall purchase and maintain commercial Automobile Liability Insurance. This policy shall cover Owned, Non-owned and Hired vehicles.
- E. The Contractor shall purchase and maintain Umbrella Liability Coverage to provide higher limits of

liability above those required for General Liability, Employers Liability and Automobile Liability.

- F. The Umbrella Liability Policy shall name Champaign County, the Architect, the Architect's Consultants, their agents and employees as additional insured.
- G. The Contractor shall purchase and maintain Owners Liability Insurance (Owners Protection Liability) which shall cover the Owners liability for all injuries and damages arising from the Project. This policy shall name the Architect and the Architect's Consultants, their agents and employees as additional insured.
- H. Liability limits shall be as specified herein or the maximum exposure as stated in the Government Tort Claims Acts as most recently amended, whichever is higher.
- I. The minimum amount of coverage and the limits of liability shall be as specified below:
  - 1) Claims under workers' or workman's compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed:
    - a. As required by law.
  - 2) Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees:
    - a. \$1,000,000.00
  - 3) Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees:
    - a. \$ 500,000.00
  - 4) Claims for damages insured by usual personal injury liability coverage which are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor, or (2) by another person:
    - a. \$1,000,000.00
  - 5) Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom:
    - a. \$ 500,000.00
  - 6) Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle:
    - a. \$1,000,000.00
  - 7) Claims involving contractual liability insurance applicable to the Contractor's obligations under Paragraph 3.18 of the General Conditions for the Contract for Construction as modified:
    - a. \$ 500,000.00

1.3 SUBMITTAL REQUIREMENTS

- A. Submit ACORD 25-S form along with the signed Agreement Between Owner and Contractor.
- B. Champaign County shall be listed as Certificate Holder.
- C. Include the following sentence under Special Items:

**"The Certificate Holder is Champaign County, Architect, Architect's Consultants, including their Agents and Employees are named as additional insured's in both the General and Umbrella Liability Policy. Waivers of Subrogation are in effect for both liability and property insurance policies."**

1.4 LOSS OF USE INSURANCE

- A. The Owner, at the Owners option, may purchase and maintain such insurance that will protect the Owner against the loss of use of this property.

END OF SECTION 00 22 44

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS  
Section 00 25 13 – Prebid Meeting

1.1 PREBID MEETING

- A. There will be a Prebid meeting as indicated below:
1. Meeting Date: Tuesday, April 23, 2019.
  2. Meeting Time: 2:00 P.M. CST.
  3. Location: Brookens Administrative Center, 1776 East Washington Street, Urbana, IL 61802, Lyle Shields Meeting Room.
- B. Bidder Questions: Submit written questions to be addressed at Prebid meeting a minimum of two business days prior to meeting.
- C. Agenda: Prebid meeting agenda will include review of topics that may affect proper preparation and submittal of bids, including the following:
1. Procurement and Contracting Requirements:
    - a. Instructions to Bidders.
    - b. Bidder Qualifications.
    - c. Bonding.
    - d. Insurance.
    - e. Bid Form and Attachments.
    - f. Bid Submittal Requirements.
    - g. Notice of Award.
  2. Communication during Bidding Period:
    - a. Obtaining documents.
    - b. Bidder's Requests for Information.
    - c. Bidder's Substitution Request/Prior Approval Request.
    - d. Addenda.
  3. Contracting Requirements:
    - a. Agreement.
    - b. The General Conditions.
    - c. The Supplementary Conditions.
    - d. Other Owner requirements.
  4. Construction Documents:
    - a. Scopes of Work.
    - b. Temporary Facilities.
    - c. Use of Site.
    - d. Work Restrictions.
    - e. Unit Price.
    - f. Substitutions following award.

5. Schedule:
    - a. Project Schedule.
    - b. Contract Time.
    - c. Other Bidder Questions.
  6. Site/facility visit or walkthrough.
  7. Post-Meeting Addendum.
- D. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes to attendees of prebid meeting only. Minutes of meeting are issued as Available Information and do not constitute a modification to the Procurement and Contracting Documents. Modifications to the Procurement and Contracting Documents are issued by written Addendum only.
1. Sign-in Sheet: Minutes will include list of meeting attendees.

END OF DOCUMENT 00 25 13

**RETURN WITH BID**

DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS  
Document 00 41 06 – Bid Bond

\_\_\_\_\_  
as Principal, and  
a corporation of the State of \_\_\_\_\_  
as Surety, are held and firmly bound unto the Champaign County the amount of ten percent (10%) of the amount of the base bid for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, to this agreement.

Principal has submitted to Obligee a bid to enter into a written contract, for

Project Number: \_\_\_\_\_ Division of Work: \_\_\_\_\_  
in accordance with bidding documents for the project, which contract is by reference made a part hereof and is hereinafter referred to as "the Contract".

THE CONDITION OF THIS OBLIGATION is that if Principal, upon acceptance by Obligee of its bid within the period of time specified for acceptance, shall comply with all post award requirements as required by the terms of the bid within the time specified after date of the Notice of Award, or in the event of the failure to comply with all post award requirements, if Principal shall pay Obligee (1) for all costs of procuring the work which exceeds the amount of its bid, or (2) shall pay Obligee the amount of this bond as liquidated damages in the event Principal is a sole bidder and after an attempt to secure other bids by readvertising none can be obtained, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Surety hereby agrees that its obligation shall not be impaired by any extensions of time for Obligee's acceptance or compliance with post award requirements. Surety hereby waives notice of such extensions.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
SURETY

BY \_\_\_\_\_  
SIGNATURE

BY \_\_\_\_\_  
OFFICER OF THE SURETY

Title \_\_\_\_\_

Title \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
CORPORATE SECRETARY (Corporations only)

**JURAT (Notary's Statement Authenticating Signature)**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_  
I,

\_\_\_\_\_, a Notary Public in and for said county, do hereby certify that

**(Insert Name of Attorney-In-Fact for SURETY)**

who is personally known to me to be the same person whose name is subscribed to the foregoing instrument on behalf of SURETY, appeared before me this day in person and acknowledged respectively, that he/she signed, sealed, and delivered said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20 \_\_\_\_\_

My commission expires \_\_\_\_\_

Notary Signature \_\_\_\_\_

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS  
Section 00 41 13 – Bid Form – Stipulated Sum (Single-Prime Contract)

1.1 BID INFORMATION

- A. Bidder: \_\_\_\_\_.
- B. Project Name: Champaign County Juvenile Detention Center Roof Replacement
- C. Project Location: Art Bartell Drive, Urbana, IL 61802.
- D. Owner: Champaign County

1.2 CERTIFICATIONS AND BID

- A. **Base Bid, Single-Prime (All Trades) Contract:** The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Bailey Edward Design, Inc., 1103 S. Mattis Avenue, Champaign, IL 61821, and their consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

1. \_\_\_\_\_ Dollars  
(\$ \_\_\_\_\_)

1.3 TIME OF COMPLETION

- A. Provided the contractor receives Notice to Proceed on or prior to June 2, 2019 the bidder agrees to be substantially complete with the Base Bid work on or before August 30, 2019.

1.4 ACKNOWLEDGEMENT OF ADDENDA

- A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:
  - 1. Addendum No. 1, dated \_\_\_\_\_.
  - 2. Addendum No. 2, dated \_\_\_\_\_.

1.5 SUBMISSION OF BID

A. In submitting the Bid, the under signed agree that this Proposal will not be withdrawn for a period of thirty (30) calendar days from the date of submission. It is understood the Owner reserves the right to reject any and all Bids and to waive informalities and irregularities.

1. Respectfully submitted this \_\_\_\_ day of \_\_\_\_\_, 2019.
2. Submitted By : \_\_\_\_\_  
(Name of bidding firm or corporation).
3. Authorized Signature : \_\_\_\_\_  
(Handwritten signature).
4. Signed By : \_\_\_\_\_  
(Type or print name).
5. Title : \_\_\_\_\_  
(Owner/Partner/President/Vice President).
6. Witness By : \_\_\_\_\_  
(Handwritten signature).
7. Attest : \_\_\_\_\_  
(Handwritten signature).
8. By : \_\_\_\_\_  
(Type or print name).
9. Title : \_\_\_\_\_  
(Corporate Secretary or Assistant Secretary).
10. Street Address: \_\_\_\_\_.
11. City, State, Zip: \_\_\_\_\_.
12. Phone: \_\_\_\_\_.
13. License No.: \_\_\_\_\_.
14. Federal ID No. : \_\_\_\_\_

(Affix Corporate Seal Here).

END OF DOCUMENT 00 41 13

**BIDDER'S / CONTRACTOR'S  
DISCLOSURE AFFIDAVIT**

STATE OF ILLINOIS )  
 ) SS  
COUNTY OF \_\_\_\_\_ )

**BUSINESS STATUS STATEMENT**

I, the undersigned, being duly sworn, do state as follows:

A. \_\_\_\_\_ (hereafter "Contractor") is a:  
Company Name

(Place a mark in front of appropriate type of business)

- \_\_\_\_\_ Corporation (If a Corporation, complete B)
- \_\_\_\_\_ Partnership (If a Partnership, complete C)
- \_\_\_\_\_ Individual Proprietorship (If an Individual, complete D)

**B. CORPORATION**

The State of Incorporation is \_\_\_\_\_

The registered agent of the Corporation in Illinois is:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

The Corporate officers are as follows:

President: \_\_\_\_\_

Vice President: \_\_\_\_\_

Secretary: \_\_\_\_\_

Treasurer: \_\_\_\_\_

C. PARTNERSHIP

The Partners are as follows (attach additional sheets if necessary):

_____	_____
Name	Address
_____	_____
Name	Address
_____	_____
Name	Address
_____	_____
Name	Address

The business address is: \_\_\_\_\_

D. INDIVIDUAL PROPRIETORSHIP

The business address is: \_\_\_\_\_

Business Telephone: \_\_\_\_\_

My home address is: \_\_\_\_\_

Home Telephone: \_\_\_\_\_

E. Under penalty of perjury \_\_\_\_\_

(Contractor's Name)

Certifies that \_\_\_\_\_ (FEIN / SSN)  
is its correct Federal Taxpayer Identification Number, or in the case of an individual or sole proprietorship, Social Security Number.

**NON-DISCRIMINATION STATEMENT**

The Contractor does not and will not engage in discriminatory practices; the Contractor does not and will not engage in discrimination because of race, sex, age, religion, national origin or sensory, mental, or physical handicap in hiring or firing; and the Contractor is, in fact, an equal opportunity employer.

**NON-COLLUSION STATEMENT**

- A. That the only persons or corporations interested with \_\_\_\_\_  
(Name of Bidder)  
in the delivery of the materials and/or services bid upon under the Contract other than its officers,  
directors, shareholders and employees are:

_____ Name	_____ Address

- B. That the said Bid is made without any connection or common interest in the profits with any other persons making any Bid or Proposal for said Work except as listed above.
- C. That this Contract is in all respects fair and entered into without collusion or fraud.
- D. That no employee or any officer of the Owner has any financial interest, directly or indirectly, in the award of this Bid to Bidder except as listed above.
- E. That the Bidder is not barred from bidding on this Contract as a result of violation of either Section 33E-3 (Bid Rigging) or Section 33E-4 (Bid Rotating) of Chapter 38, Illinois Revised Statutes.
- F. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

**NO DELINQUENT ILLINOIS TAXES STATEMENT**

The undersigned certifies that the Contractor is not delinquent in payment of any tax administered by the Illinois Department of Revenue except that the taxes for which liability for the taxes or the amount of the taxes are being contested, in accordance with the procedure established by the appropriate Revenue Act; or the Contractor has entered into an agreement (2) with the Illinois Department of Revenue for the payment of all such taxes due and is in compliance with the agreement.

**FAMILIARITY WITH LAWS STATEMENT**

I, the undersigned, being duly sworn, do hereby state that \_\_\_\_\_  
(Company Name)  
is familiar with and will comply with all Federal, State and Local laws applicable to the Project, which include, but are not limited to, the Prevailing Wage Act and the Davis-Bacon Act.

**PENDING AND UNCOMPLETED WORK**

I, the undersigned, being duly sworn, do hereby declare that the following is a true and correct statement relating to all uncompleted contracts of the undersigned for Federal, State, County, City and private work, including all subcontract work; and all pending low BIDS not yet awarded or rejected:

Total Projects Under Contract \_\_\_\_\_  
Total Projects with Pending Low Bids \_\_\_\_\_  
Total Value of Projects Under Contract and Pending Low Bids \_\_\_\_\_

\_\_\_\_\_  
(Affiant's Signature) (Print Name & Title)  
\_\_\_\_\_  
(Company Name)

SUBSCRIBED and SWORN to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2018

Notary Public

My Commission Expires: \_\_\_\_\_

(SEAL)

**INSTRUCTIONS:** This affidavit is to be completely filled out and executed by the chief officer of the Bidder authorized to submit the affidavit. Attach written explanation where applicable.



- D. Notify the Owner within 10 days after receiving notice under paragraph A.3.b. above from an employee or otherwise receiving actual notice of such conviction.
- E. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program by any employee who is so convicted.
- F. Assist employees in selecting a course of action in the event drug counseling, treatment or rehabilitation is required and a trained referral team is in place.
- G. Make a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

If an individual, the Contractor certifies that it will not engage in the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance in the performance of the Owner's contract.

The Contractor shall, within 30 days after receiving notice from an employee of a conviction of a violation of a criminal drug statute occurring in the workplace:

- A. Take appropriate personnel action against such employee up to and including termination; and
- B. Require the employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement or other appropriate agency.

**Contractor:**

By: \_\_\_\_\_

Title: \_\_\_\_\_

SIGNED and SWORN to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
Notary Public

DIVISION 0 - BIDDING & CONTRACT REQUIREMENT

Section 00 43 43 – Prevailing Rate of Wages

1. PREVAILING WAGE ACT

- 1.1 Pursuant to Illinois Compiled Statutes 820 ILCS 130/0.01 et seq., these specifications list on the following pages, the Illinois Department of Labor prevailing rate of wages for the county where the contract is being performed and for each craft or type of worker needed to execute the contract.
- 1.2 Contractor shall submit certified payrolls with monthly application for payment.
- 1.3 A Project Labor Agreement is required for this project.

END OF SECTION 00 43 43

Effective Date	County	Trade Title	Region	Type	Clas:	Base	W	Foreman	V	OT	M-F	OT	Sa	OT	S	O	T	H	H/W	Pension
8/15/2018	Champaign	ASBESTOS ABT-GEN	All	BLD		32.12		33.37			1.5	1.5	2	2					6.3	15.4
8/15/2018	Champaign	ASBESTOS ABT-MEC	ALL	BLD		22.4		23.4			1.5	1.5	2	2					6.8	6.55
11/23/2018	Champaign	BOILERMAKER	All	BLD		40		43			2	2	2	2					7.07	18.19
8/15/2018	Champaign	BRICK MASON	All	BLD		31.72		33.31			1.5	1.5	2	2					9.1	13.96
8/15/2018	Champaign	CARPENTER	All	BLD		36.49		38.74			1.5	1.5	2	2					10.05	11.75
8/15/2018	Champaign	CARPENTER	All	HWY		36.85		38.6			1.5	1.5	2	2					8.55	13.95
8/15/2018	Champaign	CEMENT MASON	All	BLD		33.16		35.16			1.5	1.5	2	2					9.1	10
8/15/2018	Champaign	CEMENT MASON	All	HWY		34.15		36.15			1.5	1.5	2	2					9.1	10.45
8/15/2018	Champaign	CERAMIC TILE FNSHER	All	BLD		31.03		31.03			1.5	1.5	2	2					9.1	10.07
8/15/2018	Champaign	ELECTRIC PWR EQMT OP	All	ALL		45.09		56.52			1.5	1.5	2	2					7.1	12.62
8/15/2018	Champaign	ELECTRIC PWR GRNDMAN	All	ALL		30.81		56.52			1.5	1.5	2	2					6.67	8.62
8/15/2018	Champaign	ELECTRIC PWR LINEMAN	All	ALL		50.11					1.5	1.5	2	2					7.25	14.03
8/15/2018	Champaign	ELECTRIC PWR TRK DRV	All	ALL		32.32		56.52			1.5	1.5	2	2					6.72	9.05
8/15/2018	Champaign	ELECTRICIAN	All	BLD		40.16		42.57			1.5	1.5	2	2					7.05	8.28
8/15/2018	Champaign	ELECTRONIC SYS TECH	All	BLD		30.83		32.83			1.5	1.5	1.5	1.5					6.95	8.77
8/15/2018	Champaign	ELEVATOR CONSTRUCTOR	All	BLD		43.43					1.5	1.5	2	2					15.28	15.71
8/15/2018	Champaign	FENCE ERECTOR	ALL	ALL		32.21		34.11			1.5	1.5	2	2					8.84	10.02
8/15/2018	Champaign	GLAZIER	All	BLD		35.91					1.5	1.5	2	2					6.25	10.2
8/15/2018	Champaign	HT/FROST INSULATOR	All	BLD		38.7		39.7			1.5	1.5	2	2					10.35	12.21
8/15/2018	Champaign	IRON WORKER	All	ALL		32.86		34.76			1.5	1.5	2	2					11.14	12.09
8/15/2018	Champaign	LABORER	All	BLD		29.62					1.5	1.5	2	2					6.3	16.15
8/15/2018	Champaign	LABORER	All	HWY		31.72		32.72			1.5	1.5	2	2					6.3	16.23
8/15/2018	Champaign	LATHER	All	BLD		36.49		38.74			1.5	1.5	2	2					8.55	13.25
8/15/2018	Champaign	MACHINIST	All	BLD		48.38		50.88			1.5	1.5	2	2					7.23	8.95
8/15/2018	Champaign	MARBLE FINISHERS	ALL	BLD		30.48		30.48			1.5	1.5	2	2					8.57	9.94
8/15/2018	Champaign	MARBLE MASON	All	BLD		31.72		33.31			1.5	1.5	2	2					9.1	13.96
8/15/2018	Champaign	MILLWRIGHT	All	BLD		32.24		34.49			1.5	1.5	2	2					8.55	17.96
8/15/2018	Champaign	MILLWRIGHT	All	HWY		34.98		36.73			1.5	1.5	2	2					8.55	18.52
8/15/2018	Champaign	OPERATING ENGINEER	All	ALL	1	41		42			1.5	1.5	2	2					9.6	10.5
8/15/2018	Champaign	OPERATING ENGINEER	All	ALL	2	41		43			1.5	1.5	2	2					9.6	10.5
8/15/2018	Champaign	OPERATING ENGINEER	All	ALL	3	41					1.5	1.5	1.5	1.5					9	10.35

8/15/2018	Champaign	PAINTER	All	ALL	35.29		1.5	1.5	2	2	8.57	5.33	
8/15/2018	Champaign	PAINTER SIGNS	All	ALL	35.29		1.5	1.5	2	2	8.57	5.33	
8/15/2018	Champaign	PILEDRIVER	All	BLD	37.49	39.74	1.5	1.5	2	2	8.55	13.25	
8/15/2018	Champaign	PILEDRIVER	All	HWY	36.85	38.6	1.5	1.5	2	2	8.55	13.95	
11/16/2018	Champaign	PIPEFITTER	All	BLD	43.59	46.09	1.5	1.5	2	2	7.25	10.25	
8/15/2018	Champaign	PLASTERER	All	BLD	32.35		1.5	1.5	2	2	0	0	
11/9/2018	Champaign	PLUMBER	All	BLD	43.59	46.09	1.5	1.5	2	2	7.25	10.25	
8/15/2018	Champaign	ROOFER	All	BLD	32.7	34.7	1.5	1.5	2	2	9	8.5	
10/26/2018	Champaign	SHEETMETAL WORKER	All	BLD	36.26	38.26	1.5	1.5	2	2	9.2	15.75	
8/15/2018	Champaign	SPRINKLER FITTER	All	BLD	42.87	45.62	1.5	1.5	2	2	8.67	9.55	
8/15/2018	Champaign	STONE MASON	All	BLD	31.72	33.31	1.5	1.5	2	2	9.1	13.96	
8/15/2018	Champaign	TERRAZZO FINISHER	ALL	BLD	30.48	30.48	1.5	1.5	2	2	8.57	9.94	
8/15/2018	Champaign	TERRAZZO MASON	ALL	BLD	31.98	31.98	1.5	1.5	2	2	8.57	9.94	
8/15/2018	Champaign	TILE MASON	All	BLD	32.53	32.53	1.5	1.5	2	2	9.1	10.07	
8/15/2018	Champaign	TRUCK DRIVER	All	ALL	1	37.16	1.5	1.5	2	2	12.65	5.64	
8/15/2018	Champaign	TRUCK DRIVER	All	ALL	2	37.6	1.5	1.5	2	2	11.65	6.12	
8/15/2018	Champaign	TRUCK DRIVER	All	ALL	3	36.91	1.5	1.5	1.5	1.5	12.16	5.89	
8/15/2018	Champaign	TRUCK DRIVER	All	ALL	4	37.25	1.5	1.5	2	1.5	12.16	5.89	
8/15/2018	Champaign	TRUCK DRIVER	All	ALL	5	39.21	41.07	1.5	1.5	2	2	12.65	6.12
8/15/2018	Champaign	TRUCK DRIVER	All	O&C	1	29.65	32.86	1.5	1.5	2	2	12.65	6.12
8/15/2018	Champaign	TRUCK DRIVER	All	O&C	2	30.08	32.86	1.5	1.5	2	2	12.65	6.12
8/15/2018	Champaign	TRUCK DRIVER	All	O&C	3	30.28	32.86	1.5	1.5	2	2	12.65	6.12
8/15/2018	Champaign	TRUCK DRIVER	All	O&C	4	30.56	32.86	1.5	1.5	2	2	12.65	6.12
8/15/2018	Champaign	TRUCK DRIVER	All	O&C	5	31.37	32.86	1.5	1.5	2	2	12.65	6.12
8/15/2018	Champaign	TUCKPOINTER	All	BLD	31.72	33.31	1.5	1.5	2	2	9.1	13.96	

DIVISION 1 - GENERAL REQUIREMENTS  
Section 01 11 00 – Project Summary

1. GENERAL

1.1 WORK INCLUDED

A. Contractor shall provide all labor and materials associated with the work of this section, including:

1. Project information.
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and drawing conventions.

1.2 PROJECT INFORMATION

A. Project Identification:

Champaign County Juvenile Detention Center Roof Replacement

1. Art Bartell Drive, Urbana, IL 61802.

B. Owner's Representative: Champaign County.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. Base Scope:

2. PRODUCTS (NOT APPLICABLE)

3. EXECUTION (NOT APPLICABLE)

END OF SECTION 01 11 00

DIVISION 1 - GENERAL REQUIREMENTS  
Section 01 32 00 - Construction Schedule

1. GENERAL

1.1 REQUIREMENTS INCLUDE:

- A. The General Contractor shall prepare and maintain a detailed project schedule as described below.
- B. The project schedule shall be the Contractor's working schedule; used to execute the work and record and report actual progress. It shall show how the Contractor plans to complete the work within the contract time and meet any contractually specified intermediate milestone dates.

1.2 RELATED REQUIREMENTS

- A. Specified Elsewhere:
  - 1. Section 01 11 00 - Project Summary
  - 2. Section 01 33 23 - Shop Drawings, Product Data and Samples

1.3 FORM OF SCHEDULE

- A. The schedule shall provide sufficient detail and clarity so that the General Contractor can plan and control the work and the Owner and the A/E can readily monitor and follow the progress of all portions of the work. The critical activities must be clearly shown. The degree of detail must be satisfactory to the A/E and the Owner.
- B. The project schedule shall be in the form of a Gantt chart, and shall indicate the critical path, including durations.

1.4 CONTENTS OF SCHEDULE

- A. The schedule must be inclusive of all installation tasks of the work.
- B. Submittal and approval of shop drawings and material samples as well as delivery dates of major equipment shall be included in the project schedule.
- C. Activity duration shall be in whole working days.
- D. There should be at least one activity for each specification section.

1.5 UPDATING

- A. The project schedule shall be updated monthly.
- B. Actual activity completion dates shall be reported and recorded on the schedule.
- C. Progress on uncompleted activities shall be reported.
- D. Projected completion dates and activities shall be reviewed and revised if necessary.

1.6 REPORTS AND SUBMITTALS

- A. Within 15 days of the Authorization to Proceed, the Contractor shall submit the project schedule to the A/E and the Owner.
- B. Five (5) days prior to the pay/progress meeting, the contractor shall submit the current updated schedule to the A/E and the Owner.

1.7 REVIEWS

- A. Payment and reduction of retainage may be denied by the Owner for failure to submit a proper schedule and maintaining work progress according to the project schedule.

2. PRODUCTS

(NOT APPLICABLE)

3. EXECUTION

(NOT APPLICABLE)

END OF SECTION 01 32 00

DIVISION 1 - GENERAL REQUIREMENTS  
Section 01 33 23 - Shop Drawings, Product Data & Samples

1. GENERAL

1.1 REQUIREMENTS INCLUDE

- A. The Sub-contractor shall make submittals to the General Contractor. The General Contractor shall maintain a master list of submittals.
- B. Submittals shall be complete and legible. Incomplete submittals will be returned and not reviewed.

1.2 GENERAL CONTRACTOR:

- A. Review Sub-contractor's submittals within 5 business days.
  - 1. Verify field dimensions.
  - 2. Verify compliance with Contract requirements.

1.3 RELATED REQUIREMENTS

- A. Specified elsewhere:
  - 1. Submittal specific to each section are further outlined within the technical submittals as such within submittal package. Submittals deemed incomplete or not indication supplied by separate sub, shall be returned without review.

1.4 DEFINITIONS

- A. Shop drawings: Shop drawings are original drawings prepared by Contractor, subcontractor, sub-subcontractor, supplier or distributor, which illustrated some portion of the work, showing fabrication, layout, setting or erection details.
  - 1. Prepared by qualified detailer
  - 2. Identify details by reference to sheet and detail numbers shown on contract drawings
  - 3. Maximum sheet size: 30" x 42"
  - 4. Submit a maximum of (5) copies. Electronic copies of submittals are preferred.
- B. Product data:
  - 1. Manufacturer's standard schematic drawings edited to fit this project
  - 2. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.
    - a. Clearly mark each copy to identify pertinent materials, products or models.
    - b. Show dimensions and clearances.
    - c. Show wiring diagrams and controls.
- C. Samples: Physical samples to illustrate materials, equipment or workmanship. Approved samples establish standards by which complete work is judged. Maintain at site as directed. Protect until no longer needed.
  - 1. Office samples: Of sufficient size to clearly illustrate:
    - a. Functional characteristics of product or material.
    - b. Full range of color samples.
    - c. After review, samples may be used on construction of project.

2. Field samples and mock-ups:
  - a. Erect at project site at location approved by the Architect.
  - b. Construct each sample or mock-up complete, including work of all crafts required in finished work.
  - c. Remove as directed.

#### 1.5 SCHEDULE SUBMITTAL

- A. Submit schedule of all exhibits to Architect/Engineer within fifteen (15) business days after preconstruction meeting.

1. Prepare schedule in bar chart format, Include:

- a. Exhibit identification
- b. Specification section and page number
- c. Date of submittal to Architect/Engineer
- d. Latest date for final approval
- e. Fabrication time.
- f. Date of Installation

2. Architect/Engineer will review and comment on exhibit schedule and will advise the Contractor as to which submittals require longer review durations.

Submit number of copies of shop drawings, product data and samples which contractor requires for distribution plus (2) copies which will be retained by Architect/Engineer.

- B. Accompany submittals with transmittal letter, in duplicate, containing.

1. Date
2. Project title and number
3. Contractor's name and address.
4. The number of shop drawings, product data and samples submitted.
5. Notification of deviations from Contract.
6. Other pertinent data.

- C. Submittals shall include:

1. Date and revision
2. Project title and number
3. Name of:
  - a. Architect/ Engineer
  - b. Architect/ Engineer consultant
  - c. Subcontractor
  - d. Sub-subcontractor
  - e. Supplier
  - f. Manufacturer
  - g. Separate detailer when pertinent
4. Identification of product or material.
5. Relation to adjacent structure or material.
6. Field dimensions clearly identified as such.
7. Specification section and page number.

8. Specified standards, such as ASTM number or ANSI.
  9. A blank space, (5"x5"), for Architect/Engineer's stamp.
  10. Identification of previously approved deviation(s) from contract documents.
  11. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of field measurements and compliance with Contract.
  12. Space for Contractor's approval stamp.
- D. Electronic Submittals: All submittals may be submitted electronically except for those specifically listing a requirement for paper submittals or physical samples. Identify and incorporate information in each electronic submittal file as follows:
1. Assemble complete submittal package into a single file (pdf format) incorporating submittal requirements of a single Specification Section and transmittal form. Only complete submittals will be accepted.
  2. Name file with submittal number or other unique identifier, including revision identifier.
    - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g.; PROJNAME\_061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g.; PROJNAME\_061000.01A)
  3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Using Agency/ Architect/ Engineer.
  4. Transmittal Cover Sheet Form for Electronic Submittals: As described by the Architect and containing all information as indicated above for paper submittals.

## 1.6 RESUBMISSION REQUIREMENTS

- A. Resubmit all shop drawings, product data, and samples as requested by the Contractor and/or A/E.

## 1.7 RESPONSIBILITIES

- A. Review shop drawings, product data and samples prior to submission to the next level of authority. Review Subcontractor's submittals within five (5) business days. Certify review and transmit to Architect.
- B. Verify:
  1. Field dimensions.
  2. Field construction criteria.
  3. Catalog numbers and similar data.
  4. Verify compliance with contract documents.
- C. Coordinate each submittal with requirements of:
  1. The work.
  2. The contract documents.
  3. The work of other contractors.
  4. The existing conditions indicated to remain.
- D. Contractor's responsibility for errors, omissions or deviation from contract documents in submittals is not relieved by the Architect/Engineer's review of submittals.
- E. Prior to submission, notify the Architect/Engineer in writing of all proposed deviations in submittals from Contract requirements. Substitution of materials or equipment may only be approved by change order.

- F. Do not begin any work which requires submittals without Architect/Engineer's approval.
- G. After Architect/Engineer's review, make response required by A/E's stamp and distribute copies. Indicate by transmittal that copy of approved data has been delivered to installer.

1.8 ARCHITECT/ENGINEER'S RESPONSIBILITIES

- A. Review submittals within fourteen (14) calendar days.
- B. Review for:
  - 1. Design concept of project.
  - 2. Compliance with Contract Documents.
- C. Review all requests for proposed deviations.
- D. Affix stamp, date and initials or signature certifying review of submittal, and with instructions for the Contractor.
- E. Return submittals to sender for response or distribution.

2. PRODUCTS  
(NOT APPLICABLE)

3. EXECUTION  
(NOT APPLICABLE)

END OF SECTION 01 33 23

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 35 16 - Remodeling Project Procedures

1. GENERAL

1.1 REQUIREMENTS INCLUDE

A. Each Contractor:

1. Coordinate work of employees and subcontractors.
2. Schedule elements of remodeling and renovation work to expedite completion.
3. Schedule noisy or hazardous work to avoid problems with Owner's operations.
4. In addition to demolition, cut, move or remove existing construction to provide access or to allow remodeling and new work to proceed. Include:
  - a. Repair or remove hazardous or unsanitary conditions.
  - b. Remove abandoned piping, conduit and wiring.
  - c. Remove unsuitable or extraneous materials not marked for salvage, such as rotted wood, brick paving, rusted metals and deteriorated concrete.
5. Patch, repair and refinish existing items to remain, to the specified condition for each material, with a neat transition to adjacent new or restored construction.
6. Note or record existing project conditions before beginning work to minimize later disputes.

1.2 RELATED REQUIREMENTS

A. Specified elsewhere:

1. 01 32 00 - Construction Schedules.
2. 01 51 50 - Use of Existing Facilities
3. 01 73 29 - Cutting & Patching
4. 01 74 13 - Construction Cleaning
5. 01 74 23 - Final Cleaning.

1.3 SEQUENCE AND SCHEDULES

A. Submit separate detailed sub-schedule for alterations work, coordinated with Construction Schedule. Show:

1. Each stage of work; occupancy dates of areas.
2. Date of Substantial Completion for each area of alteration work.
3. Crafts and subcontractors employed in each stage.

1.4 ALTERATIONS, CUTTING AND PROTECTION

A. Cut finish surfaces by methods to terminate surfaces in a straight line at a natural point of division.

2. PRODUCTS (NOT USED)

3. EXECUTION

3.1 REMOVE EXISTING CONSTRUCTION

A. Temporary Removals:

1. Remove all items as noted on the drawings or otherwise required to complete the work shown.
2. Store all items as noted on the drawings or otherwise required to complete the work shown.
3. Recondition all existing items as noted on the drawings or otherwise required to complete the work shown.
4. Reinstall all as noted on the drawings or otherwise required to complete the work shown.

B. Remove and dispose of existing items as noted on Drawings.

3.2 PERFORMANCE. Patch and extend existing work using skilled craftsmen capable of matching existing quality of workmanship. For patched or extended work, provide quality equal to that specified for new work.

3.3 DAMAGED SURFACES

A. Patch and replace all portions of existing finished surfaces found to be damaged, lifted, discolored or showing other imperfections, with matching material.

1. Provide adequate support prior to patching the finish.
2. Refinish patched portions of painted or coated surfaces in a manner to produce uniform color and texture over entire surface.
3. When existing surface cannot be matched, refinish entire surface to nearest intersections or change of direction.

3.4 TRANSITION FROM EXISTING TO RESTORED WORK

A. When restored work abuts or finishes flush with existing work, make a smooth transition. Patched work shall match existing adjacent work in texture and appearance.

1. When finished surfaces are cut in such a way that a smooth transition with restored work is not possible, terminate existing surface in a neat manner along a straight line at a natural line of division, and provide trim appropriate to finished surface.

3.5 CLEANING

A. Perform construction cleaning as specified in 01 74 13 and as follows:

1. Clean User occupied areas daily.
2. Clean all spillage, overspray or heavy dust collections in User occupied areas immediately.

- B. At completion of work of each craft, clean area and make surfaces ready for work of successive crafts.
- C. At completion of alterations work in each area, provide final cleaning in accord with 01 74 23 and return space to a condition suitable for use of User.

END OF SECTION 01 35 16

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 51 50 - Use of Existing Facilities

1. GENERAL
  - 1.1 The project will be constructed at a public road. These requirements supplement the Standard Documents for Construction and other sections of the Project Manual.
  - 1.2 The Owner and public will continue use of the Juvenile Detention Center through construction. Some limited closure or barricades are expected for portions of the work. Contractor is responsible for coordinating all closures with Champaign County and the Using Agency as necessary.
  - 1.3 REQUIREMENTS INCLUDE - Contractor provide:
    - A. Scheduling
    - B. Security and site regulations
    - C. Entrances (if required)
    - D. Construction aids
    - E. Temporary enclosures and barriers
    - F. Fences
    - G. Temporary utilities
    - H. Construction Cleaning
    - I. Storage
    - J. Close-out
2. EXECUTION
  - 2.1 SCHEDULING
    - A. Schedule the work to allow the Owner to use the facility with as minimal impact as possible. Submit separate detailed subschedule showing:
      1. Staging of work and occupancy dates.
    - B. Schedule noisy or hazardous work to avoid problems with Owner's operations.
  - 2.2 SECURITY AND SITE REGULATIONS
    - A. Confer with the Owner's representative and obtain full knowledge of all site rules and regulations affecting work.
  - 2.3 ENTRANCES Unless otherwise approved by the Owner, the primary entrance will be from the west entry.
  - 2.4 CONSTRUCTION AIDS: Except as noted, Contractor provide and maintain construction aids and equipment for common use and to facilitate execution of the work.

- 2.5 TEMPORARY ENCLOSURES AND BARRIERS - Contractor:
- A. Provide temporary enclosures to separate work areas from existing parking and from areas occupied by Owner.
  - B. Provide and maintain suitable barriers to prevent unauthorized entry, and to protect the work.
- 2.6 TEMPORARY UTILITIES
- A. Contractor shall provide and pay for extension or modification of services to perform the work, and for restoration of services at completion of work.
- 2.7 ACCESS ROADS & PARKING AREAS
- A. Limit any loading of existing paved areas to 4000 p.s.i. maximum.
  - B. Use of existing parking facilities for construction personnel or for contractor's vehicles or equipment may be permitted. Verify location with Owner.
  - C. Maintain roads, walks and parking areas in a sound, clean condition. Restore areas not in contract to original condition upon work completion prior to Final Acceptance.
  - D. Control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, Owner's operations or construction operations.
  - E. Coordinate any temporary construction vehicle entrance onto the property for deliveries or access with the Owner a minimum of (3) days prior to the necessity.
  - F. Equipment with bearing pressure above 4000 psi shall not be allowed on the grounds or paving.
- 2.8 TRAFFIC REGULATION Contractor provide traffic control and directional signs, mounted on barricades or standard posts:
- A. At each change of direction of a roadway and at parking areas.
  - B. Provide qualified and suitably equipped flaggers when construction operations encroach on traffic lanes, as required for traffic regulation.
  - C. Where contractor requires sidewalk closure to execute scope of work, permits and alternative access for pedestrians shall be provided in the work of this contract.
- 2.9 CONSTRUCTION CLEANING
- A. Each Contractor provide cleaning and disposal of waste materials, debris and rubbish during construction.
  - B. Coordinating Contractor to supervise and coordinate cleaning operations of all Assigned Contractors.
  - C. Each Contractor provide covered containers for deposit of waste materials, debris and rubbish.
- 2.10 STORAGE Make arrangements with Owner's Representative for any on-site storage of materials and equipment to be installed in project. Protection and security for stored materials and equipment is solely contractor's responsibility.

2.11 CLOSEOUT

- A. Upon completion of need to use existing user-provided facilities, or when directed by Architect/Engineer, restore each to original or specified condition.
- B. At completion of work in each area, provide final cleaning and return space to a condition suitable for use of Owner.

3. EXECUTION (NOT APPLICABLE)

END OF SECTION 01 51 50

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 56 00 - Barriers

1. GENERAL

1.1 Work Includes:

A. Base Bid:

1. General Contractor provide fencing.
  - a. Open mesh fence. Temporary chain link fence panels, min. 6' in height. Panels shall be wired together with sand bags as supports. Provide wind screen continuously at perimeter fence.
  - b. Moveable barricades and caution tape for temporary closures are acceptable if maintained.
2. Maintain fences and barriers during entire construction period. Relocate as construction progresses.

2. PRODUCTS

(NOT APPLICABLE)

3. EXECUTION

(NOT APPLICABLE)

END OF SECTION 01 56 00

1. GENERAL

1.1 SUMMARY

A. Section Includes:

1. Administrative and procedural requirements for substitutions.

1.2 SUBSTITUTIONS

A. Base Bid shall be in accordance with the Contract Documents.

B. Substitution requests prior to bidding shall be submitted to Architect, in writing, a minimum of ten (10) days prior to bid date.

C. After the end of the bidding period, substitution requests will be considered only in case of:

1. Product unavailability
2. Other conditions beyond the control of the Contractor

D. Substitution Requests: Submit PDF electronic file of each request submitted for consideration. Identify product or fabrication or installation method to be replaced. Submit requests for substitutions on attached form. Submit a separate request form for each substitution. Include Specification Section number, title, and Drawing numbers and titles. Support each request with the following information:

1. Complete data substantiating compliance of proposed substitution with requirements stated in Contract Documents:
  - a. Product identification, including manufacturer's name and address.
  - b. Manufacturer's literature, identifying:
    - 1) Product description
    - 2) Reference standards
    - 3) Performance and test data
2. Itemized comparison of the proposed substitution with product specified, listing significant variations.
3. Data relating to changes in construction schedule.
4. Effects of substitution on separate contracts.
5. List of changes required in other work or products.
6. Accurate cost data comparing proposed substitution with product specified.
  - a. Amount of net change to Contract Sum
7. Designation of required license fees or royalties.
8. Designation of availability of maintenance services sources replacement materials.

E. Substitutions will not be considered for acceptance when:

1. A substitution is indicated or implied on shop drawings or product data submittals without a formal request from the Contractor.
2. Acceptance will require substantial revision of Contract Documents.
3. In judgment of the Architect, the substitution request does not include adequate information necessary for a complete evaluation.
4. Requested directly by a Subcontractor or supplier.

- F. Substitutions for Convenience: Not allowed
- G. Do not order or install substitute products without recommendation of the Architect and acceptance by the Owner/Using Agency.
- H. Architect will determine acceptability of proposed substitutions.
- I. No verbal or written approvals other than by Change Order will be valid.

1.3 CONTRACTOR'S REPRESENTATION

- A. In making formal request for substitution the Contractor represents that:
  - 1. The proposed product has been investigated and it has been determined that it is equivalent, or superior, in all respects to the product specified.
  - 2. The same warranties or bonds will be provided for the substitute product as for the product specified.
  - 3. Coordination and installation of the accepted substitution into the Work will be accomplished and changes as may be required for the Work to be complete will be accomplished.
  - 4. Claims for additional costs caused by substitution which may subsequently become apparent will be waived by the Contractor.
  - 5. Complete cost data is attached and includes related costs under the Contract, but not:
    - a. Costs under separate contracts.
    - b. Architect's costs for redesign or revision of Contact Documents.

1.4 REQUEST FOR SUBSTITUTION FORM

- A. 01 62 04.1 – Substitution Request Form
- B. Substitutions will be considered only when the substitution form is completed and included with the request for substitution submittal and back-up data.

2. PRODUCTS

(NOT APPLICABLE)

3. EXECUTION

(NOT APPLICABLE)

END OF SECTION 01 62 04

DIVISION 1 - GENERAL REQUIREMENTS  
Section 01 62 04.1 – Request for Substitution Form

REQUEST FOR SUBSTITUTION FORM

Note: Use separate form for each material, product, or equipment item.

Date: \_\_\_\_\_ Request No.: \_\_\_\_\_

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Name of material, product, or equipment item submitted as substitution:

\_\_\_\_\_

Name of material, product, or equipment item specified:

\_\_\_\_\_

Specification Section \_\_\_\_\_, Article \_\_\_\_\_, Paragraph \_\_\_\_\_

Qualities that differ from specified product or system: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name of Manufacturer/(Fabricator):

\_\_\_\_\_

Address

\_\_\_\_\_

City, State, and Zip

( \_\_\_\_\_ ) \_\_\_\_\_  
Telephone

\_\_\_\_\_

Name of Vendor/Supplier

Address

City, State, and Zip

( )  
Telephone

Reason for requesting substitution:

Substitution affects other materials or systems, such as dimensional revisions, redesign of structure, or modifications to other work:

\_\_\_\_\_ No

\_\_\_\_\_ Yes; describe requirements:

If substitution requires modifications to dimensions indicated on drawings, are such modifications clearly indicated on attached data?

\_\_\_\_\_ Yes

\_\_\_\_\_ No; if no, explain:

Substitution has an effect on construction schedule:

\_\_\_\_\_ No

\_\_\_\_\_ Yes; describe effect on schedule:

---

Savings or credit to Contract Amount for accepting substitute:

---

Written Amount \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)  
Amount in Figures

The attached data is furnished herewith for evaluation of the substitution:

Product Data \_\_\_\_\_, Drawings \_\_\_\_\_, Samples \_\_\_\_\_, Tests \_\_\_\_\_, Reports \_\_\_\_\_

Other Information \_\_\_\_\_

The undersigned hereby certifies:

1. The proposed substitution has been fully investigated and is equal or superior to specified product.
2. The same or better warranty will be furnished for proposed substitution as for specified material, product or equipment.
3. All changes in the work resulting from the use of this substitution, if approved, will be coordinated and completed in all respects and all costs, including, but not limited to, those for additional services rendered by the Architect are the responsibility of this Contractor at no additional cost to the Contract.

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Signed by

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, and Zip

**For Use by Architect:**

- Recommend  
 Not Recommended  
 Insufficient Data  
 Recommend as Noted  
 Received Too Late

**For Use by Owner:**

- Approved  
 Not Approved  
 Approved as Noted

By: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

END OF FORM

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 66 00 - Storage & Protection

1. GENERAL

A. REQUIREMENTS INCLUDE

1. General Contractor make arrangements with Owner for storage of materials and equipment to be installed in project. Protection and security for stored materials and equipment, on and off site is solely contractor's responsibility.

- B. OFF-SITE AUTHORIZATION. Payment for materials/equipment stored off-site will be permitted only on prior written authorization, proof of insurance is submitted, and the material is stored in an independent warehouse under the owner's name and paid for by the contractor.

C. SUBMITTALS.

1. In accordance with Section 01 33 23, submit:
  - a. Request for allocation of storage space.
  - b. List of materials and equipment to be stored.
  - c. Proposed location for storage.
  - d. Special storage requirements.
  - e. Schedule of anticipated storage dates.

2. PRODUCTS

A. PROTECTIVE MATERIALS

1. For duration of storage period, provide materials which will provide proper protection against the elements or other harmful environmental conditions.

3. EXECUTION

A. LOCATION

1. Where authorized by Owner.
2. Contractor will resolve conflicts in storage requirements of all subcontractors.

B. PROTECTION

1. Appropriate protection is required as necessary to maintain quality and intent of stored materials.

END OF SECTION 01 66 00

1. GENERAL

1.1 REQUIREMENTS INCLUDE

- A. Unless noted otherwise, each contractor shall:
1. Execute cutting (including excavating), filling or patching of work to:
    - a. Install specified work.
    - b. Remove samples of installed work specified for testing.
    - c. Remove and replace defective work.
  2. In addition, upon written instructions of Architect/Engineer:
    - a. Uncover work to provide for observation of covered work.
    - b. Remove samples of installed materials for testing.
    - c. Remove work to provide for alteration of existing work.
  3. Do not cut or alter work of another contractor without written consent of Architect/Engineer.

1.2 SUBMITTALS

- A. Prior to cutting which affects structural members or work of another contractor, submit written notice to Architect/Engineer requesting consent to proceed with cutting, including:
1. Project identification.
  2. Description of affected work.
  3. Necessity for cutting.
  4. Effect on other work, on structural integrity of project.
  5. Description of proposed work. Designate:
    - a. Scope of cutting and patching.
    - b. Contractor and Crafts to execute the work.
    - c. Products proposed to be used.
    - d. Extent of refinishing.
  6. Alternatives to cutting and patching.
  7. Designation of party responsible for cost of cutting and patching.
- B. Prior to cutting and patching done on instruction of Architect/ Engineer, submit cost estimate.
- C. When conditions of work, or schedule, indicate change of materials or methods, submit recommendation to Architect/Engineer, including:
1. Condition indicating change.
  2. Recommendation for alternative materials or methods.
  3. Submittals specified for substitutions.
- D. Submit written notice to Architect/Engineer, designating time work will be uncovered, to provide for observation.

### 1.3 PAYMENT FOR COSTS

- A. Costs caused by ill-timed or defective work, or work not conforming to contract documents, including costs for additional services of Architect/Engineer: Party responsible for ill-timed, rejected or non-conforming work.
- B. Work done on instructions of Architect/Engineer (by change order only), other than defective or non-conforming work: Owner

## 2. PRODUCTS

- 2.1 MATERIALS. For replacement of work removed: Comply with specifications for type of work to be performed.

## 3. EXECUTION

### 3.1 INSPECTION

- A. Inspect existing conditions of work, including elements subject to movement or damage during:
  - 1. Cutting and patching.
  - 2. Excavating and backfilling.
- B. After uncovering work, inspect conditions affecting installation of new products.

### 3.2 PREPARATION

- A. Prior to cutting:
  - 1. Provide shoring, bracing and support to maintain structural integrity of project.
  - 2. Provide protection for other portions of the project.
  - 3. Provide protection from elements.

### 3.3 PERFORMANCE

- A. Execute fitting and adjustment of products to provide finished installation to comply with specified tolerances, finishes.
- B. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs and new work.
- C. Restore work which has been cut or removed; install new products to provide completed work in accord with contract documents.
- D. Refinish entire surfaces to provide an even finish.
- E. Continuous surfaces: To nearest intersection(s).
- F. Assembly: Entire refinishing.

END OF SECTION 01 73 29

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 74 13 - Construction Cleaning

1. GENERAL

1.1 REQUIREMENTS INCLUDE

A. General Contractor: Supervise and coordinate cleaning operations.

1.2 RELATED REQUIREMENTS

A. Specified elsewhere:

1. Individual Specification Sections: specific cleaning for product or work.
2. Section 01 35 16 – Remodeling Project Procedures

2. PRODUCTS

2.1 EQUIPMENT

A. As designated in individual specification sections.

3. EXECUTION

3.1 CLEANING

A. As designated in individual specification sections.

3.2 DISPOSAL

- A. Maintain individual disposal units for sorting of debris for recycling and general disposal.
- B. Properly dispose of all contents of dumpsters off site in an environmentally friendly manner and in compliance with local, state and federal regulations.
- C. No burning of debris or materials is acceptable on site.
- D. All hazardous materials shall be disposed of off-site in an EPA approved facility.

END OF SECTION 01 74 13

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 74 23 - Final Cleaning

1. GENERAL

1.1 REQUIREMENTS INCLUDE

A. General Contractor: Provide final cleaning:

1. At completion of work, or at such other times as directed by the Contractor, remove all waste, debris, rubbish, tools, equipment, machinery and surplus materials. Clean all sight exposed surfaces; leave work clean and ready for occupancy.

1.1 RELATED REQUIREMENTS

A. Specified elsewhere:

1. Section 01 74 13 - Construction Cleaning.

2. PRODUCTS

- 2.1 All products shall be environmentally friendly "Green" cleaning products.

3. EXECUTION

3.1 FINAL CLEANING

A. Employ experienced workmen for final cleaning.

B. Remove grease, dust, dirt, stains, labels, fingerprints, protection and other foreign materials from sight-exposed finished surfaces; polish surfaces so designated to specified finish.

1. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed surfaces, and of concealed spaces to ensure performance.

C. Repair, patch and touch up marred surfaces to specified finish, to match adjacent surfaces.

D. Contractor soft broom clean all exposed concrete surfaces clean; other paved areas with soft or stiff broom as directed. Rake clean other surfaces on grounds.

E. Contractor to replace air handling filters if units were not protected during construction and shown to have construction dust/debris.

F. Contractor maintain finally cleaned areas until project, or designated portion thereof, is accepted by A/E.

END OF SECTION 01 74 23

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 78 36 - Warranties & Bonds

1. GENERAL

1.1 REQUIREMENTS INCLUDE

A. Each Contractor shall warrant their work in accordance with the Standard Documents for Construction. In addition, the following Warranties and Bonds shall be provided as specified.

B. Champaign County will be the designated agent during the warranty period.

2. PRODUCTS

A. Warranties and Bonds. Include the following:

a. Warranty and/or bond.

b. List of circumstances and conditions that would affect validity of warranty or bond.

3. EXECUTION (NOT APPLICABLE)

END OF SECTION 01 78 36

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Coordinating Contractor shall provide all labor, materials, equipment and supplies necessary.
  - 1. Demolition and removal of selected portions of building as noted on the drawings and as required to complete the work shown on the drawings.
- B. All contractors are responsible for providing the penetrations required to complete their work in the Contactor's respective division.

1.2 RELATED SECTIONS

- A. Drawings.
- B. General provisions of the contract including General and Supplemental Conditions.
- C. Division 01 Specifications.

1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and returned to owner or removed and reinstalled.
- B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Using Agency/University cleaned and ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, clean and prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.4 INFORMATIONAL SUBMITTALS

- A. Proposed Protection Measures: Submit report, including drawings, that indicates the measures proposed for protecting individuals and property for dust control and for noise control. Indicate proposed locations and construction of barriers.
- B. Schedule of Selective Demolition Activities: Indicate the following:

1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's building manager's on-site operations are uninterrupted.
  2. Interruption of utility services. Indicate how long utility services will be interrupted.
  3. Coordination for shutoff, capping, and continuation of utility services.
  4. Coordination on the use of elevator and stairs.
  5. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
- C. Inventory: Submit a list of items to be removed and salvaged and deliver to Owner prior to start of demolition
- D. Pre-demolition Photographs or Video: Submit before Work begins.
1. Any damage not documented as pre-existing will be repaired by contractor.
- E. Warranties: Documentation indicated that existing warranties are still in effect after completion of selective demolition.
- F. Closeout Submittals
1. Inventory: Submit a list of items that have been removed and salvaged

## 1.5 QUALITY ASSURANCE

- A. Pre-demolition Conference: Conduct conference at Project site.
1. Inspect and discuss condition of construction to be selectively demolished.
  2. Review structural load limitations of existing structure.
  3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
  5. Review areas where existing construction is to remain and requires protection.

## 1.6 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Storage or sale of removed items or materials on-site is not permitted.
- E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

- F. Warranty: Existing Warranties. Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties. Notify warrantor before proceeding.
- G. If any suspected hazardous materials are encountered do not disturb; immediately notify Architect and Owner.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.
- C. Call the Fire Department and notify the Using Agency if the following systems will be disabled/ restricted at any time during construction/ renovation.
  - 1. Fire Alarm.
  - 2. Fire Suppression.
  - 3. Emergency exit and evacuation.
- D. Any construction/renovation that creates excessive dust (i.e. demolition of plaster, drywall, or flooring) must use dust barriers and negative pressure ventilation.
- E. Any construction/renovation that involves temporary loss of power or ventilation must be coordinated/scheduled with the Facility Manager and will be discussed and determined at the pre-construction meeting.
- F. Any construction/ renovation that creates excessive noise (i.e. jack hammering, use of power saws, power drills,) must be coordinated/ scheduled with the Facility Manager or Using Agency, which will be determined at the pre-construction meeting.
- G. Any construction/ renovation that breaches/ penetrates the building envelope (roof, window, and wall) must be protected from water damage and subsequent mold growth.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review record documents of existing construction provided by Owner. Owner and Architect do not guarantee that existing conditions are same as those indicated in record documents.

- C. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.
- E. Verify hazardous materials have been remediated prior to proceeding with building demolition operations.

### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL/PLUMBING SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
  - 1. Comply with requirements for existing services/systems interruptions specified in Division 01 Section "Summary."
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
  - 2. Arrange to shut off indicated utilities with utility companies.
  - 3. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
  - 4. Disconnect, demolish, and remove plumbing, and HVAC systems, equipment, and components indicated to be removed.
    - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
    - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material.
    - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
    - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational. Any disruption in operations is to be scheduled with Facility Manager a minimum of 72 hours in advance and will be operational at the end of each construction day.

### 3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Comply with requirements for access and protection specified in Division 01 Section "Temporary Facilities and Controls."
- B. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  2. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  3. Cover and protect furniture, furnishings, and equipment that have not been removed.
  4. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Division 01 Section "Temporary Facilities and Controls."
- C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
1. Strengthen or add new supports when required during progress of selective demolition.
- D. Remove temporary barricades and protections where/when hazards no longer exist.

### 3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations and for two (2) hours after operations cease.
  4. Maintain adequate ventilation when using cutting torches.
  5. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  6. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  7. Dispose of demolished items and materials promptly.
- B. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse.
  2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  3. Protect items from damage during transport and storage.

4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- C. Unless otherwise indicated, demolition waste becomes the property of the Contractor.
- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.

### 3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be reused, returned to Owner, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site.
  1. Do not allow demolished materials to accumulate on-site.
  2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

### 3.6 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 02 41 19

PART 1 - GENERAL

1.1. WORK INCLUDES

- A. Coordinating Contractor shall provide all labor, materials, equipment and supplies for:
  - 1. Carpentry work shown on the drawings for blocking.

1.2. RELATED WORK

- A. Drawings.
- B. General provisions of the contract including General and Supplemental Conditions.
- C. Division 01 Specifications.

1.3. REFERENCES

- A. All references are the current editions unless noted otherwise.
- B. ALSC - American Lumber Standards Committee: Softwood Lumber Standards.
- C. APA - American Plywood Association: Grades and Standards.
- D. AWPA - American Wood Preservers' Association
- E. FS TT-W-571 - Wood Preservation: Treating Practices.
- F. NFPA - National Forest Products Association.
- G. SFPA - Southern Forest Products Association.
- H. WCLIB - West Coast Lumber Inspection Bureau: Standard Grading Rules for West Coast Lumber.
- I. WWPA - Western Wood Products Association.

1.4. QUALITY ASSURANCE

- A. Plywood Standard: Comply with DOC, PS 1.

1.5. PRODUCT HANDLING

- A. Delivery and Storage: Keep materials dry during delivery and storage. Protect against exposure to weather and store above ground on framework or blocking. Cover with protective waterproof covering. Stack plywood to provide air circulation within stacks.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Wood sheathing for roofs shall be 5/8" thickness.
- B. 2 x 2 blocking will be straight and smooth with no knots or blemishes.
- C. Fasteners and Anchorages: Provide size, type, material and finish as recommended by applicable Standards for nails, staples, screws, bolts, nuts, washers and anchoring devices.
- D. Treated wood is not permitted.

### PART 3 - EXECUTION

#### 3.1 INSPECTION

- A. Examine the supporting structure and the conditions under which the carpentry work is to be installed. Notify the Architect in writing of conditions detrimental to the work. Do not proceed with the installation until unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION

- A. Basic requirements:
  1. Discard units of material with defects which might impair the quality of the work, and units which are too small to fabricate the work with minimum joints or the optimum joint arrangement.
  2. Set carpentry work accurately to indicated levels and lines, with members plumb and true and accurately cut and fitted.
  3. Securely attach carpentry work by anchoring and fastening as shown or by recognized standards. Countersink nail heads on exposed carpentry work and fill holes. Use common wire nails, except as otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials.
  4. Make tight connections between members: Install fasteners without splitting of wood; predrill as required.
  5. Select fasteners of a size that will make tight all connections between members. Install fasteners without the splitting of wood; pre-drill as required.
- B. Wood blocking :
  1. Provide wherever shown and where required for screeding or attachment of other work or equipment / items requiring blocking. Form to shapes as shown and cut for true line and level of work to be attached. Coordinate location with other work involved.
  2. Attachment shall support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise shown.
- C. Installation of plywood:
  1. Comply with recommendations of the American Plywood Association (APA) for the installation of plywood.

END OF SECTION 06 10 00

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

Section - 07 41 00 - Metal Roof and Wall Panels

1. GENERAL

1.1 WORK INCLUDES

- A. Contractor shall furnish and install soffit panels at the main entry canopy.

1.2 RELATED WORK

- A. Section 06 10 00 - Rough Carpentry.
- B. Section 07 62 00 - Flashing and Sheet Metal.
- C. Section 07 72 00 - Roof Accessories.

1.3 REFERENCES

- A. American Iron & Steel Institute (AISI) Specification for the Design of Cold formed Steel Structural Members.
- B. ASTM 792-86 AZ-50 Aluminum Zinc Alloy Coated Steel.
- C. ASTM E-283-84.
- D. ASTM E-331-86.
- E. Spec Data Sheet - Aluminum Zinc Alloy Coated Steel Sheet Metal by Bethlehem Corp.
- F. SMACNA - Architectural Sheet Metal Manual.
- G. Building Materials Directory - Underwriter's Laboratories, Test Procedure 580 - UL-90.

1.4 ASSEMBLY DESCRIPTION

- A. The soffit includes preformed sheet metal panels and related accessories.

1.5 SUBMITTALS

- A. Submit detailed shop drawings showing layout of panels, attachment details, joint details, trim, flashing, and accessories.
- B. Submit a sample of each type of panel, complete with factory finish, from manufacturer's full selection for product.

## 1.6 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in Architectural Sheet Metal Products with ten (10) years minimum experience.

## 1.7 DELIVERY, STORAGE AND HANDLING

- A. Upon receipt of panels and other materials, installer shall examine the shipment for damage and completeness.
- B. Panels should be stored in a clean, dry place. One end should be elevated allowing moisture to run off.
- C. Panels with strippable film must not be stored in the open, exposed to the sun.
- D. Stack all materials to prevent damage and to allow adequate ventilation.

## 1.8 WARRANTY

- A. Prefinished material shall have a twenty-year warranty against failure due to corrosion, rupture or perforation.

## 2. PRODUCT

### 2.1 ACCEPTABLE MANUFACTURERS

- A. Carlisle Syntec Systems.
- B. Berridge Manufacturing Company.
- C. Firestone Metal Products.

### 2.2 SHEET MATERIALS

- A. Prefinished metal shall be Aluminum-Zinc Alloy Coated Steel Sheet, 24-Gauge or 22-Gauge, ASTM 792-08, Grade 40, yield strength 40 ksi min.
- B. Finish shall be full strength Kynar 500<sup>®</sup> or Hylar 5000<sup>™</sup> fluoropolymer coating applied by the manufacturer on a continuous coil coating line, with a top side dry film thickness of  $0.75 \pm 0.05$  mil over  $0.20 \pm 0.05$  mil prime coat, to provide a total top side dry film thickness of  $0.95 \pm 0.10$  mil. Bottom side shall be coated with a primer (non-metallics only) and beige urethane coating with a total dry film thickness of  $0.35 \pm 0.05$  mil. Finish shall conform to all tests for adhesion, flexibility, and longevity as specified by the Kynar 500<sup>®</sup> or Hylar 5000<sup>™</sup> finish supplier.
- C. Strippable film shall be applied to the top side of all prefinished metal to protect the finish during fabrication, shipping and field handling. This strippable film MUST be removed immediately before installation.

- D. Unpainted metal shall be Aluminum-Zinc Alloy Coated Steel Sheet, 24-Gauge or 22-Gauge, ASTM 792-08, Grade 40, yield strength 40 ksi min., with clear acrylic coating on both sides of material.
- E. Field protection must be provided by the contractor at the job site so stacked or coiled material is not exposed to weather and moisture.
- F. Flashing maybe factory fabricated or field fabricated. Unless otherwise specified all exposed adjacent flashing shall be of the same material and finish as panel system.

## 2.3 ACCESSORY MATERIALS

- A. Fasteners: Stainless Steel.
- B. Sealant: Sealant shall be an ultra low modulus, high performance, one-part, moisture curing silicone joint sealant. (Do not use a clear sealant or sealants which release a solvent or acid during curing).
- C. Sealant must be resistant to environmental conditions such as wind loading, wind driven rain, snow, sleet, acid rain, ozone, ultraviolet light and extreme temperature variations.

## 2.4 FABRICATION

- A. Hem all exposed edges of flashing on underside, ½ inch.

## 2.5 SOFFIT PANEL SYSTEM

- A. Panels shall have a minimum 12" wide face exposure with concealed fasteners and interlocking sidelap.
- B. Panels shall be formed in continuous lengths for soffit and shall have no exposed fasteners.
- C. Attachment to metal supports with #8 x 12" TEK screws at maximum spacing of 2'-0" on center.

## 3. EXECUTION

### 3.1 INSPECTION

#### A. Substrate

1. Examine existing conditions for proper attachment to framing.
2. Inspect to insure an installation that is smooth and without waves or depressions.
3. Verify substrate is dry and free of snow or ice. .

#### B. Underlayment:

1. Provide underlayment materials approved by the manufacturer for watertightness.
2. Fasteners shall be approved by the manufacturer.

### 3.2 INSTALLATION

- A. Comply with manufacturers standard instructions and conform to standards set forth in the Architectural Sheet Metal Manual, in order to achieve a watertight installation.
- B. Install panels in such a manner that horizontal lines are true and level and vertical lines are plumb.
- C. Install starter and edge trim before installing roof panels.
- D. Remove protective strippable film prior to installation of roof panels.
- E. Attach panels using manufacturer's standard clips and fasteners, spaced in accordance with approved shop drawings.
- F. Install sealants for preformed roofing panels as approved on shop drawings.
- G. Do not allow panels or trim to come into contact with dissimilar materials.
- H. Protect installed soffit from damage caused by adjacent construction until completion of installation.
- I. Remove and replace any panels or components which are damaged beyond successful repair.

### 3.3 CLEANING

- A. Clean any grease, finger marks or stains from the panels per manufacturer's recommendations.
- B. Remove all scrap and construction debris from the site.

END OF SECTION 07 41 00

DIVISION 7 - THERMAL AND MOISTURE PROTECTION  
Section 07 53 23 - Ethylene-Propylene-Diene-Monomer (EPDM) Roofing

PART 1 - GENERAL

1.1 WORK INCLUDES

A. Coordinating Contractor shall provide all labor, materials, equipment and supplies for:

1. Fully adhered ethylene-propylene-diene-terpolymer (EPDM) roofing system.
2. Roof insulation.
3. Cover board.
4. Walkways.

1.2 PREINSTALLATION MEETINGS

A. Pre-installation Conference: Coordinating Contractor shall arrange conference at project site. General Contractor, installation contractor, project manager, site foreman, and Architect shall be in attendance. If the work impacts other trades, a representative from those contractors shall also be in attendance.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. For insulation and roof system component fasteners.

B. Shop Drawings: Include roof plans, sections, details, and attachments to other work, including the following:

1. Layout and thickness of insulation.
2. Base flashings and membrane terminations.
3. Flashing details at penetrations.
4. Tapered insulation, thickness, and slopes.
5. Roof plan showing orientation of steel roof deck and orientation of roof membrane and fastening spacings and patterns for mechanically fastened roofing system.
6. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.
7. Tie-in with air barrier.

C. Samples: For the following products:

1. Roof membrane and flashings of color required.
2. Walkway pads or rolls, of color required.

D. Wind Uplift Resistance Submittal: For roofing system, indicating compliance with wind uplift performance requirements.

#### 1.4 INFORMATIONAL SUBMITTALS

##### A. Manufacturer Certificates:

1. Performance Requirement Certificate: Signed by roof membrane manufacturer, certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
  - a. Submit evidence of complying with performance requirements.
2. Special Warranty Certificate: Signed by roof membrane manufacturer, certifying that all materials supplied under this Section are acceptable for special warranty.

##### B. Product Test Reports: For components of roof membrane and insulation, for tests performed by a qualified testing agency, indicating compliance with specified requirements.

##### C. Research reports.

##### D. Field Test Reports:

1. Concrete internal relative humidity test reports.
2. Fastener-pullout test results and manufacturer's revised requirements for fastener patterns.

##### E. Field quality-control reports.

##### F. Sample warranties.

#### 1.5 CLOSEOUT SUBMITTALS

##### A. Maintenance data.

##### B. Certified statement from existing roof membrane manufacturer stating that existing roof warranty has not been affected by Work performed under this Section.

#### 1.6 QUALITY ASSURANCE

##### A. Manufacturer Qualifications: A qualified manufacturer that is UL listed for roofing system identical to that used for this Project.

##### B. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer (if required by manufacturer) to install manufacturer's product and that is eligible to receive manufacturer's special warranty.

#### 1.7 WARRANTY

##### A. Special Warranty: Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period.

1. Warranty Period: **20** years non-prorated from Date of Substantial Completion.

- B. Contractor's Warranty: Two (2) years on workmanship, non-prorated.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Johns Manville
- B. Firestone
- C. Versico
- D. Mulehide

### 2.2 PERFORMANCE REQUIREMENTS

- A. Accelerated Weathering: Roof membrane shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.
- B. Impact Resistance: Roof membrane shall resist impact damage when tested according to ASTM D 3746, ASTM D 4272, or the Resistance to Foot Traffic Test in FM Approvals 4470.
- C. Exterior Fire-Test Exposure: ASTM E 108 or UL 790, Class A for application and roof slopes indicated; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
- D. Fire-Resistance Ratings: Comply with fire-resistance-rated assembly designs indicated. Identify products with appropriate markings of applicable testing agency.

### 2.3 ETHYLENE-PROPYLENE-DIENE-TERPOLYMER (EPDM) ROOFING

- A. EPDM Sheet: ASTM D 4637/D 4637M, Type II, scrim or fabric internally reinforced.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Carlisle SynTec Incorporated.
    - b. Firestone Building Products.
    - c. GenFlex Roofing Systems.
    - d. International Diamond Systems.
    - e. Johns Manville; a Berkshire Hathaway company.
    - f. Lexcan Limited.
    - g. Mule-Hide Products Co., Inc.
    - h. Roofing Products International, Inc.
    - i. Versico Roofing Systems.
  - 2. Thickness: 60 mils (1.5 mm) nominal.
  - 3. Exposed Face Color: White on black.

## 2.4 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with other roofing components.
  - 1. Adhesive and Sealants: Comply with VOC limits of authorities having jurisdiction.
- B. Sheet Flashing: 60-mil- (1.5-mm-) thick EPDM, partially cured or cured, according to application.
- C. Protection Sheet: Epichlorohydrin or neoprene nonreinforced flexible sheet, 55 to 60 mils (1.4 to 1.5 mm) thick, recommended by EPDM manufacturer for resistance to hydrocarbons, non-aromatic solvents, grease, and oil.
- D. Slip Sheet: Manufacturer's standard, of thickness required for application.
- E. Prefabricated Pipe Flashings: As recommended by roof membrane manufacturer.
- F. Bonding Adhesive: Manufacturer's standard.
- G. Modified Asphaltic Fabric-Backed Membrane Adhesive: Roofing system manufacturer's standard modified asphalt, asbestos-free, cold-applied adhesive formulated for compatibility and use with fabric-backed membrane roofing.
- H. Water-Based, Fabric-Backed Membrane Adhesive: Roofing system manufacturer's standard water-based, cold-applied adhesive formulated for compatibility and use with fabric-backed membrane roofing.
- I. Low-Rise, Urethane, Fabric-Backed Membrane Adhesive: Roof system manufacturer's standard spray-applied, low-rise, two-component urethane adhesive formulated for compatibility and use with fabric-backed membrane roofing.
- J. Seaming Material: Single-component, butyl splicing adhesive and splice cleaner.
- K. Lap Sealant: Manufacturer's standard, single-component sealant, colored to match membrane roofing.
- L. Water Cutoff Mastic: Manufacturer's standard butyl mastic sealant.
- M. Metal Termination Bars: Manufacturer's standard, predrilled stainless steel or aluminum bars, approximately 1 by 1/8 inch (25 by 3 mm) thick; with anchors.
- N. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening components to substrate, and acceptable to roofing system manufacturer.
- O. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, molded pipe boot flashings, preformed inside and outside corner sheet flashings, reinforced EPDM securement strips, T-joint covers, in-seam sealants, termination reglets, cover strips, and other accessories.
  - 1. Provide white flashing accessories for white EPDM membrane roofing.

## 2.5 ROOF INSULATION

- A. Polyisocyanurate Board Insulation: ASTM C 1289, [**Type II, Class 1, Grade 2**] [**Type II, Class 2, Grade 2**], felt or glass-fiber mat facer on both major surfaces.
1. <Double click here to find, evaluate, and insert list of manufacturers and products.>
  2. Size: [**48 by 48 inches (1219 by 1219 mm)**] [**48 by 96 inches (1219 by 2438 mm)**].
  3. Thickness:
    - a. Base Layer: [**1-1/2 inches (38 mm)**] **<Insert thickness>**.
    - b. Upper Layer: **<Insert thickness>**.
- B. Tapered Insulation: Provide factory-tapered insulation boards.
1. Material: [**Match roof insulation**] **<Insert material>**.
  2. Minimum Thickness: 1/4 inch (6.35 mm).
  3. Slope:
    - a. Roof Field: [**1/4 inch per foot (1:48)**] **<Insert slope>** unless otherwise indicated on Drawings.
    - b. Saddles and Crickets: [**1/2 inch per foot (1:24)**] **<Insert slope>** unless otherwise indicated on Drawings.

## 2.6 INSULATION ACCESSORIES

- A. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roof insulation[ **and cover boards**] to substrate, and acceptable to roofing system manufacturer.
- B. Insulation Adhesive: Insulation manufacturer's recommended adhesive formulated to attach roof insulation to substrate or to another insulation layer as follows:
1. Modified asphaltic, asbestos-free, cold-applied adhesive.
  2. Bead-applied, low-rise, one-component or multicomponent urethane adhesive.
  3. Full-spread, spray-applied, low-rise, two-component urethane adhesive.
- C. Cover Board: ASTM C 1325, fiber-mat-reinforced cementitious board, 1/2-inch thick.

## 2.7 WALKWAYS

- A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads, approximately 3/16 inch (5 mm) thick and acceptable to roofing system manufacturer.
1. Size: Approximately 36 by 60 inches (914 by 1524 mm).
  2. Color: Contrasting with roof membrane.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
  - 1. Verify that minimum concrete drying period recommended by roofing system manufacturer has passed.
  - 2. Verify that concrete substrate is visibly dry and free of moisture, and that minimum concrete internal relative humidity is not more than 75 percent, or as recommended by roofing system manufacturer when tested according to ASTM F 2170.
    - a. Test Frequency: One test probe per each 1000 sq. ft. (93 sq. m), or portion thereof, of roof deck, with not less than three test probes.
    - b. Submit test reports within 24 hours of performing tests.
  - 3. Verify that concrete-curing compounds that will impair adhesion of roofing components to roof deck have been removed.
  - 4. Verify that joints in precast concrete roof decks have been grouted flush with top of concrete.

### 3.2 PREPARATION

- A. Perform fastener-pullout tests according to roof system manufacturer's written instructions.
  - 1. Submit test result within 24 hours of performing tests.
    - a. Include manufacturer's requirements for any revision to previously submitted fastener patterns required to achieve specified wind uplift requirements.
- B. Install sound-absorbing insulation strips according to acoustical roof deck manufacturer's written instructions.

### 3.3 ROOFING INSTALLATION, GENERAL

- A. Install roofing system according to roofing system manufacturer's written instructions, FM Approvals' RoofNav assembly requirements, and FM Global Property Loss Prevention Data Sheet 1-29.
- B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.
- C. Install roof membrane and auxiliary materials to tie in to existing roofing to maintain weathertightness of transition.
- D. Coordinate installation and transition of roofing system component serving as an air barrier with air barrier specified under [**Section 072713 "Modified Bituminous Sheet Air Barriers."**] [**Section 072715**

**"Nonbituminous Self-Adhering Sheet Air Barriers." [Section 072726 "Fluid-Applied Membrane Air Barriers."]**

3.4 SUBSTRATE BOARD INSTALLATION

- A. Install substrate board with long joints in continuous straight lines, with end joints staggered not less than 24 inches (610 mm) in adjacent rows.
  - 1. At steel roof decks, install substrate board at right angle to flutes of deck.
    - a. Locate end joints over crests of steel roof deck.
  - 2. Tightly butt substrate boards together.
  - 3. Cut substrate board to fit tight around penetrations and projections, and to fit tight to intersecting sloping roof decks.
  - 4. Fasten substrate board to top flanges of steel deck according to recommendations in FM Approvals' RoofNav assembly requirements and FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification.
  - 5. Fasten substrate board to top flanges of steel deck to resist uplift pressure at corners, perimeter, and field of roof according to roofing system manufacturers' written instructions.
  - 6. Loosely lay substrate board over roof deck.

3.5 INSULATION INSTALLATION

- A. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at end of workday.
- B. Comply with roofing system and insulation manufacturer's written instructions for installing roof insulation.
- C. Installation Over Metal Decking:
  - 1. Install base layer of insulation with **[joints staggered not less than 24 inches (610 mm) in adjacent rows] [end joints staggered not less than 12 inches (305 mm) in adjacent rows] [ and with long joints continuous at right angle to flutes of decking].**
    - a. Locate end joints over crests of decking.
    - b. Where installing composite and noncomposite insulation in two or more layers, install noncomposite board insulation for bottom layer and intermediate layers, if applicable, and install composite board insulation for top layer.
    - c. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
    - d. Make joints between adjacent insulation boards not more than 1/4 inch (6 mm) in width.
    - e. At internal roof drains, slope insulation to create a square drain sump with each side equal to the diameter of the drain bowl plus 24 inches (610 mm).
      - 1) Trim insulation so that water flow is unrestricted.
    - f. Fill gaps exceeding 1/4 inch (6 mm) with insulation.

- g. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
  - h. Loosely lay base layer of insulation units over substrate.
  - i. Mechanically attach base layer of insulation[ **and substrate board**] using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to metal decks.
    - 1) Fasten insulation according to requirements in FM Approvals' RoofNav for specified Windstorm Resistance Classification.
    - 2) Fasten insulation to resist specified uplift pressure at corners, perimeter, and field of roof.
2. Install upper layers of insulation[ **and tapered insulation**] with joints of each layer offset not less than 12 inches (305 mm) from previous layer of insulation.
- a. Staggered end joints within each layer not less than 24 inches (610 mm) in adjacent rows.
  - b. Install with long joints continuous and with end joints staggered not less than 12 inches (305 mm)in adjacent rows.
  - c. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
  - d. Make joints between adjacent insulation boards not more than 1/4 inch (6 mm) in width.
  - e. At internal roof drains, slope insulation to create a square drain sump with each side equal to the diameter of the drain bowl plus 24 inches (610 mm).
  - f. Trim insulation so that water flow is unrestricted.
  - g. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
  - h. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
  - i. Loosely lay each layer of insulation units over substrate.
  - j. Adhere each layer of insulation to substrate using adhesive according to FM Approvals' RoofNav assembly requirements and FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification, as follows:
    - 1) Set each layer of insulation in a solid mopping of hot roofing asphalt, applied within plus or minus 25 deg F (14 deg C) of equiviscous temperature.
    - 2) Set each layer of insulation in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.
    - 3) Set each layer of insulation in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.

### 3.6 INSTALLATION OF COVER BOARDS

- A. Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches (150 mm) in each direction.
  - 1. Trim cover board neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
  - 2. At internal roof drains, conform to slope of drain sump.
    - a. Trim cover board so that water flow is unrestricted.
  - 3. Cut and fit cover board tight to nailers, projections, and penetrations.

4. Loosely lay cover board over substrate.
  5. Adhere cover board to substrate using adhesive according to FM Approvals' RoofNav assembly requirements and FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification, as follows:
    - a. Set cover board in a solid mopping of hot roofing asphalt, applied within plus or minus 25 deg F (14 deg C) of equiviscous temperature.
    - b. Set cover board in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.
    - c. Set cover board in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.
- B. Install slip sheet over cover board and immediately beneath roofing.

### 3.7 ADHERED ROOFING INSTALLATION

- A. Adhere roof membrane over area to receive roofing according to roofing system manufacturer's written instructions.
- B. Unroll membrane roof membrane and allow to relax before installing.
- C. Start installation of roofing in presence of roofing system manufacturer's technical personnel[ **and Owner's testing and inspection agency**].
- D. Accurately align roof membrane, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.
- E. Bonding Adhesive: Apply to substrate and underside of roof membrane at rate required by manufacturer, and allow to partially dry before installing roof membrane. Do not apply to splice area of roof membrane.
- F. Hot Roofing Asphalt: Apply a solid mopping of hot roofing asphalt to substrate at temperature and rate required by manufacturer, and install fabric-backed roofing. Do not apply to splice area of roof membrane.
- G. Fabric-Backed Roof Membrane Adhesive: Apply to substrate at rate required by manufacturer, and install fabric-backed roof membrane.
- H. In addition to adhering, mechanically fasten roof membrane securely at terminations, penetrations, and perimeters.
- I. Apply roof membrane with side laps shingled with slope of roof deck where possible.
- J. Adhesive Seam Installation: Clean both faces of splice areas, apply splicing cement.
  1. Firmly roll side and end laps of overlapping roof membrane to ensure a watertight seam installation.
  2. Apply lap sealant and seal exposed edges of roofing terminations.
  3. Apply a continuous bead of in-seam sealant before closing splice if required by roofing system manufacturer.

- K. Tape Seam Installation: Clean and prime both faces of splice areas, apply splice tape.
  - 1. Firmly roll side and end laps of overlapping roof membrane to ensure a watertight seam installation.
  - 2. Apply lap sealant and seal exposed edges of roofing terminations.
- L. Factory-Applied Seam Tape Installation: Clean and prime surface to receive tape.
  - 1. Firmly roll side and end laps of overlapping roof membrane to ensure a watertight seam installation.
  - 2. Apply lap sealant and seal exposed edges of roofing terminations.
- M. Spread sealant or mastic bed over deck-drain flange at roof drains, and securely seal roof membrane in place with clamping ring.
- N. Adhere protection sheet over roof membrane at locations indicated.

### 3.8 BASE FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to roofing system manufacturer's written instructions.
- B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.
- D. Clean splice areas apply splicing cement, and firmly roll side and end laps of overlapping sheets to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of sheet flashing terminations.
- E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

### 3.9 WALKWAY INSTALLATION

- A. Flexible Walkways: Install walkway products according to manufacturer's written instructions.
  - 1. Install flexible walkways at the following locations:
    - a. Perimeter of each rooftop unit.
    - b. Between each rooftop unit location, creating a continuous path connecting rooftop unit locations.
    - c. Between each roof hatch and each rooftop unit location or path connecting rooftop unit locations.
    - d. Top and bottom of each roof access ladder.
    - e. Between each roof access ladder and each rooftop unit location or path connecting rooftop unit locations.
    - f. Locations indicated on Drawings.
    - g. As required by roof membrane manufacturer's warranty requirements.

2. Provide 6-inch (76-mm) clearance between adjoining pads.
3. Adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

B. Roof-Paver Walkways: Install walkway roof pavers according to manufacturer's written instructions.

1. Install roof paver walkways at the following locations:
  - a. Perimeter of each rooftop unit.
  - b. Between each rooftop unit location, creating a continuous path connecting rooftop unit locations.
  - c. Between each roof hatch and each rooftop unit location or path connecting rooftop unit locations.
  - d. Top and bottom of each roof access ladder.
  - e. Between each roof access ladder and each rooftop unit location or path connecting rooftop unit locations.
  - f. Locations indicated on Drawings.
  - g. As required by roof membrane manufacturer's warranty requirements.
2. Provide 3 inches (75 mm) of space between adjacent roof pavers.

### 3.10 PROTECTING AND CLEANING

- A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing system, inspect roofing system for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.
- B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 07 53 23

DIVISION 7 - THERMAL & MOISTURE PROTECTION  
Section 07 62 00 - Flashing and Sheet Metal

PART 1 - GENERAL

1.1 WORK INCLUDES:

- A. Base Bid:
  - 1. General Contractor shall provide all labor and materials for:
    - a. Flashing and sheet metal not specifically described in other Sections of these Specifications but required to prevent penetration of water through the exterior shell of the building.

1.2 RELATED WORK:

- A. Specified elsewhere:
  - 1. Section 07 72 00 – Roof Accessories

1.3 QUALITY ASSURANCE

- A. Use skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. In addition to complying with pertinent codes and regulations, comply with pertinent recommendations contained in the current edition of "Architectural Sheet Metal Manual" published by the Sheet Metal and Air Conditioning Contractors National Association (SMACNA).
- C. Standard commercial items may be used for flashing, trim, reglets, and similar purposes provided such items meet or exceed the quality standards specified.

1.4 SUBMITTALS

- A. Submit:
  - 2. Product data:
    - a. Materials list of items proposed to be provided under this Section
    - b. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
    - c. Manufacturer's recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the work.
  - 3. Shop drawings:
    - a. In sufficient detail to show fabrication, installation, anchorage, and interface of the work of this section with the work of adjacent trades.

1.5 WARRANTY

- A. Special Warranty on Finishes: Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
  - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:

- a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
  - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
  - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
2. Finish Warranty Period: 10 years from date of substantial completion

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Sheet Metal Standard for Flashing and Trim: Comply with NRCA's "The NRCA Roofing Manual" and SMACNA's "Architectural Sheet Metal Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.
- C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects.
- D. Two piece counterflashing will be provided at all membrane terminations. The vertical distance from the roof surface to membrane termination will be 8" minimum.
- E. Through wall scupper flashing shall project 1/4" minimum beyond face of wall to provide a drip edge. Welded or soldered watertight corners will be provided.

### 2.2 SHEET METALS

- A. Exposed Flashing:
  - a. Material and Thickness
    - 1) Stainless Steel – Type 304.
    - 2) Finish – Factory finished, Kynar. Color as selected by Architect to match original.
    - 3) Gauge - 24.
- B. Concealed Through Wall Flashing:
  - a. Material and Thickness
    - 1) Stainless Steel – Type 304.
    - 2) Finish – Mill finish.
    - 3) Gauge - 24.

### 2.3 NAILS, RIVETS, AND FASTENERS

- A. Use only stainless steel rivets, stainless steel screws and nails, with washers in connection with stainless steel.

## 2.4 OTHER MATERIALS

- A. Provide separation of dissimilar materials to prevent galvanic action.
- B. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the contractor subject to the approval of the Architect.

## PART 3 - EXECUTION

### 3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

### 3.2 WORKMANSHIP

- A. General:
  - 1. Form sheet metal accurately and to the dimensions and shapes required, finishing molded and broken surfaces with true, sharp, and straight lines and angles and, where intercepting other members, coping to an accurate fit and soldering securely.
  - 2. Unless otherwise specifically permitted by the Architect, turn exposed edges back 1/2 inch.
- B. Form, fabricate, and install sheet metal so as to adequately provide for expansion and contraction in the finished work.
- C. Weatherproofing:
  - 1. Finish watertight and weather tight where so required.
  - 2. Make lock seam work flat and true to line.
  - 3. Where lap seams are not soldered, lap according to pitch, in no case less than three (3) inches.
  - 4. Make flat and lap seams in the direction of flow.
- D. Joints:
  - 1. Join parts with stainless steel sheet metal screws where necessary for strength and stiffness.
- E. Nailing:
  - 1. Whenever possible, secure metal by means of clips or cleats, without nailing through the exterior metal.
  - 2. In general, space nails, rivets, and screws not more than eight (8) inches apart and, where exposed to the weather, use stainless steel or neoprene washers.
  - 3. For nailing into concrete, use drilled plugholes and plugs.
- F. Separate dissimilar metals from each other by painting each metal surface in area of contact with a heavy application of bituminous coating, or by other permanent separation as recommended by manufacturers of dissimilar metals.
- G. Installation of Aluminum Items:
  - 1. Where aluminum flashing is shown with contact to non-ferrous or ferrous metal, wood or cementitious materials, apply 15-mil bituminous coating or heavy trowel coating of roofing cement on substrate or as back-coating on flashing.

2. Provide form flat-lock seams with epoxy seam sealer or other permanent sealer recommended by aluminum manufacturer except at expansion joints.
3. Clean exposed aluminum surfaces of every substance, which is visible or might cause corrosion of metal or deterioration of finish.

3.3 EMBEDMENT

- A. Embed metal in connection with roofs in a solid bead of sealant, using materials and methods approved in advance by the Architect/Engineer.

3.4 TESTS

- A. Upon request of the Architect/Engineer, demonstrate by hose or standing water that the flashing and sheet metal are completely watertight.

END OF SECTION 07 62 00

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Base Bid: Contractor shall provide all labor and materials to install:
  - 1. Equipment supports.
  - 2. Hatch-type heat and smoke vents.
  - 3. Dropout-type heat and smoke vents.
  - 4. Pipe and duct supports.
  - 5. Pipe portals.
  - 6. Preformed flashing sleeves.

1.2 RELATED DOCUMENTS

- A. Drawings.
- B. General provisions of the contract including General and Supplemental Conditions.
- C. Division 01 Specifications.
- D. Including but not limited to the following specifications:
  - 1. Section 07 62 00 "Sheet Metal Flashing and Trim" for shop- and field-formed metal flashing, roof-drainage systems, roof expansion-joint covers, and miscellaneous sheet metal trim and accessories.

1.3 COORDINATION

- A. Coordinate layout and installation of roof accessories with roofing membrane and base flashing and interfacing and adjoining construction to provide a leakproof, weathertight, secure, and noncorrosive installation.
- B. Coordinate dimensions with rough-in information or Shop Drawings of equipment to be supported.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of roof accessory.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: For roof accessories.
  - 1. Include plans, elevations, keyed details, and attachments to other work. Indicate dimensions, loadings, and special conditions. Distinguish between plant- and field-assembled work.

- C. Samples: For each exposed product and for each color and texture specified, prepared on Samples of size to adequately show color.
- D. Delegated-Design Submittal: For equipment supports and walkways indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
  - 1. Detail mounting, securing, and flashing of roof-mounted items to roof structure. Indicate coordinating requirements with roof membrane system.
  - 2. Wind-Restraint Details: Detail fabrication and attachment of wind restraints. Show anchorage details and indicate quantity, diameter, and depth of penetration of anchors.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Roof plans, drawn to scale, and coordinating penetrations and roof-mounted items. Show the following:
  - 1. Size and location of roof accessories specified in this Section.
  - 2. Method of attaching roof accessories to roof or building structure.
  - 3. Other roof-mounted items including mechanical and electrical equipment, ductwork, piping, and conduit.
  - 4. Required clearances.
- B. Sample Warranties: For manufacturer's special warranties.

#### 1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For roof accessories to include in operation and maintenance manuals.

#### 1.7 WARRANTY

- A. Special Warranty on Painted Finishes: Manufacturer's standard form in which manufacturer agrees to repair finishes or replace roof accessories that show evidence of deterioration of factory-applied finishes within specified warranty period.
  - 1. Fluoropolymer Finish: Deterioration includes, but is not limited to, the following:
    - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
    - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
    - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
  - 2. Finish Warranty Period: 20 years from date of Substantial Completion.
- B. Provide a letter from original roof manufacturer that warranty on entire roof will still be in full effect after vent installation is complete. Work done at roof shall not negate existing roof warranty and installation contractor shall comply with all requirements at existing roof mount.

## 1.8 PRE-INSTALLATION CONFERENCE

- A. Coordinating Contractor shall arrange conference at project site. Coordinating Contractor, Installation Contractor, Project Manager, Site Foreman and Architect shall be in attendance. If the work impacts other trades, a representative from those contractors shall also be in attendance.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. General Performance: Roof accessories shall withstand exposure to weather and resist thermally induced movement without failure, rattling, leaking, or fastener disengagement due to defective manufacture, fabrication, installation, or other defects in construction.
- B. Delegated Design: Engage a qualified professional engineer, as defined in Section 01 40 00 "Quality Requirements," to design equipment supports to comply with wind performance requirements, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

### 2.2 METAL MATERIALS

- A. Aluminum Sheet: ASTM B 209, manufacturer's standard alloy for finish required, with temper to suit forming operations and performance required.
  - 1. Mill Finish.
  - 2. Anodized.
  - 3. Kynar Coated.
- B. Aluminum Extrusions and Tubes: ASTM B 221, manufacturer's standard alloy and temper for type of use, finished to match assembly where used; or Kynar color as selected by Architect.
- C. Steel Shapes: ASTM A 36/A 36M, hot-dip galvanized according to ASTM A 123/A 123M unless otherwise indicated.
- D. Galvanized-Steel Tube: ASTM A 500/A 500M, round tube, hot-dip galvanized according to ASTM A 123/A 123M.
- E. Steel Pipe: ASTM A 53/A 53M, galvanized.

### 2.3 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, protective coatings, sealants, and other miscellaneous items required by manufacturer for a complete installation.
- B. Polyisocyanurate Board Insulation: ASTM C 1289, thickness and thermal resistivity to match existing and as indicated on documents.
- C. Wood Nailers: Douglas Fir, complying with AWPA C2; not less than 1-1/2 inches thick.

- D. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant as recommended by roof accessory manufacturer for installation indicated; low modulus; of type, grade, class, and use classifications required to seal joints and remain watertight.
- E. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for expansion joints with limited movement.

## 2.4 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions, and other conditions affecting performance of the Work.
- B. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
- C. Verify dimensions of roof openings for roof accessories.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. General: Install roof accessories according to manufacturer's written instructions.
  - 1. Install roof accessories level; plumb; true to line and elevation; and without warping, jogs in alignment, buckling, or tool marks.
  - 2. Anchor roof accessories securely in place so they are capable of resisting indicated loads.
  - 3. Use fasteners, separators, sealants, and other miscellaneous items as required to complete installation of roof accessories and fit them to substrates.
  - 4. Install roof accessories to resist exposure to weather without failing, rattling, leaking, or loosening of fasteners and seals.
- B. Metal Protection: Protect metals against galvanic action by separating dissimilar metals from contact with each other or with corrosive substrates by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturer.
  - 1. Coat concealed side of uncoated aluminum and stainless-steel roof accessories with bituminous coating where in contact with wood, ferrous metal, or cementitious construction.

2. Underlayment: Where installing roof accessories directly on cementitious or wood substrates, install a course of underlayment and cover with manufacturer's recommended slip sheet.
  3. Bed flanges in thick coat of asphalt roofing cement where required by manufacturers of roof accessories for waterproof performance.
- C. Equipment Support Installation: Install equipment supports so top surfaces are level with each other.
- D. Heat and Smoke Vent Installation:
1. Install heat and smoke vent so top perimeter surfaces are level.
  2. Install and test heat and smoke vents and their components for proper operation according to NFPA 204.
- E. Pipe Support Installation: Comply with MSS SP-58 and MSS SP-89. Install supports and attachments as required to properly support piping. Arrange for grouping of parallel runs of horizontal piping, and support together.
1. Pipes of Various Sizes: Space supports for smallest pipe size or install intermediate supports for smaller diameter pipes as specified for individual pipe hangers.
- F. Preformed Flashing-Sleeve and Flashing Pipe Porta Installation: Secure flashing sleeve to roof membrane according to flashing-sleeve manufacturer's written instructions; flash sleeve flange to surrounding roof membrane according to roof membrane manufacturer's instructions.
- G. Seal joints with elastomeric or butyl sealant as required by roof accessory manufacturer.

### 3.3 REPAIR AND CLEANING

- A. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing according to ASTM A 780/A 780M.
- B. Touch up factory-primed surfaces with compatible primer ready for field painting according to Section 09 91 13 "Exterior Painting."
- C. Clean exposed surfaces according to manufacturer's written instructions.
- D. Clean off excess sealants.
- E. Replace roof accessories that have been damaged or that cannot be successfully repaired by finish touchup or similar minor repair procedures.

END OF SECTION 07 72 00



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Phone: 217-493-8547  
e-mail: [dbrenner@co.champaign.il.us](mailto:dbrenner@co.champaign.il.us)

Date: December 5, 2018  
RE: Champaign County- JDC Roof Replacement

Dear Dana,  
The following constitutes Bailey Edward's proposal for Professional Services on the above referenced project.

**Project Understanding**

- 1. Overview: Bailey Edward proposes to provide design / bid documents, for the roof replacement at JDC. The existing roof is a ballasted EPDM, low slope roof which will be replaced with a fully adhered, white EPDM. Existing drawings indicate the insulation at the roof to be 3". Roof cores will be done to determine the condition and depth of existing insulation.
  
- 2. Project Design Team: Robin Whitehurst, Principal  
Karla Smalley, Project Manager / Architect
  
- 3. Budget: \$550,000
- 4. Schedule: Documents ready to bid in Spring
- 5. Documents Reviewed: Original Construction Documents Dated 04.20.99

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 Phone: (217) 244-1100  
 Fax: (217) 244-1101  
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**Professional Services:**

**BASIC SERVICES**                      Schematic Design  
                                                  Design Development  
                                                  Construction Documents  
                                                  Bidding and Permit  
                                                  Construction Administration

**ADDITIONAL SERVICES**            On-Site Observation  
                                                  Warranty Review

**Deliverables**                            24" x 36" Drawings  
                                                  PDF copies of documents

**Compensation**

Based upon the *Project Understanding* and *Professional Services* above and upon the *Qualifications* section that follows, we propose professional service fees as follows:

**BASIC SERVICES FEE**

For the Basic Services defined in the *Professional Services* section above, we propose a hourly, not to exceed amount as follows:

Schematic Design	\$7,425	19%
Design Development	\$9,900	25%
Construction Documents	\$19,800	51%
Bidding and Permit	\$1,980	5%
	\$39,105	100%

**REIMBURSABLE SERVICES**

The cost for allowable reimbursable expenses for this project is estimated to be:

Roof Cores/ Contractor Assist	\$4,500
Printing (12 sets)	\$2,500
	\$7,000

**ADDITIONAL SERVICES FEE**

If Champaign County chooses to initiate construction, the following fees for Additional Services defined in the *Professional Services* section above is as follows:

Construction Administration (flat fee)	\$10,395
Construction On-Site Observation (hourly fee)	\$3,500
Warranty Review (hourly fee)	\$900
	\$14,795

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Chicago, IL 60610

**EXCLUSIONS:**

Printing of Bidding and Permit Sets Beyond allowance indicated above

- Certification Services
- Environmental Services
- LEED Building Design
- Record Drawings
- Registration Services

**QUALIFICATIONS**

Two (2) Client and User meetings are included.

Opinions of Probable Construction Cost will be provided at the 50% and 100% Document Submissions, two (2) total.

Three (3) total site visits during construction by either the Project Manager, Project Architect, Construction Observer or Project Engineers are included in the Construction Administration fee.

Construction Administration and Construction Observation services will be provided for a maximum of one hundred eighty (180) days from award of contract to preferred bidder.

Respectfully Submitted,

Robin Whitehurst, Principal  
312.789.4012  
[rwhitehurst@baileyedward.com](mailto:rwhitehurst@baileyedward.com)

Karla Smalley  
217.866.1973  
[ksmalley@baileyedward.com](mailto:ksmalley@baileyedward.com)

x

Name:  
Title:

responsive architecture

Agency Name: Champaign County  
**Project Name: ITB 2019-001 Champaign County Art Bartell**  
Project Location: Juvenile Detention Center  
BE No: 15029.5  
Meeting Purpose: Pre-Construction Meeting  
Date: March 28, 2019  
Time: 10:00am  
Location: Brookens Administrative Center  
Attachments: None

1. Introductions

2. Points of Contact

A. Owner Representatives

i. Champaign County: Dana Brenner

B. Architects / Engineers

i. Design / Prime Architect Bailey Edward  
1. Project Manager: Karla Smalley  
Phone: 217.866.1973 Email: [ksmalley@baileyedward.com](mailto:ksmalley@baileyedward.com)  
ii. Civil Engineer MSA Professional Services  
1. Project Manager: David Atchley  
Phone: 217.352.6976 Email:

C. Contractor

i. Coordinating Contractor: Scanlon Excavating & Concrete Inc.  
1. Project Manager: Beth Scanlon  
Phone: 815.937.9565 Email:

3. Project Schedule

A. This project has a fixed end date. Overtime and multiple shift work may be required to meet the construction schedule and shall be included in the bid price if required.

B. Deadlines:

i. Notice to Proceed (begin submission process) Thursday, March 12, 2019  
ii. Authorization to Proceed on site: Thursday, March 12, 2019  
iii. Substantial Completion: Saturday, June 8, 2019  
iv. Complete Punchlist: Friday, July 12, 2019

#### 4. Construction Documents

- A. The ISSUED FOR BID documents along all addenda shall be used and referenced throughout construction. Obtain additional sets as required, from the Architect's office.
- B. As-Built Drawings: The contractor should keep and maintain a marked-up set of drawings onsite at all times showing any changes marked in red ink.

#### 5. Permits, Certifications, Utilities

- A. This project is NOT seeking LEED certification.
- B. Contractor is responsible for all permits.

#### 6. Procedures for Communications, Correspondence, and Project Coordination

- A. All Contractor communication to go through Bailey Edward
- B. Request for Information (RFI) - Subject of the RFI should clearly define the issue and identify related drawings, specifications, field dimensions and conditions, as appropriate.
  - i. RFIs should be submitted directly to Karla Smalley.
- C. RFI format.
  - i. Contractor shall include a suggested solution and if said solution(s) impacts the contract time for the contract sum, this impact shall be identified in the RFI.
  - ii. Attachments: Include sketches, descriptions, measurements, photos, product data, shop drawings, coordination drawings and other information necessary to fully describe items in need of interpretation.
  - iii. The following request topics are considered erroneous and will be returned without action:
    - 1. Requests for approval of submittals.
    - 2. Requests for approval of substitutions other than instances outlined in sections 01 33 23 and 01 62 04
    - 3. Requests for coordination information already in documents.
    - 4. Requests for adjustments in contract time or contract sum.
    - 5. Incomplete RFI's or inaccurately prepared RFI's.
    - 6. Correspondence submitted from other than General Contractor.
  - iv. Architects action may request additional information, in which case Architect's time of response will date from time of receipt of additional information.
  - v. The Architects response is not an authorization to proceed with work involving a change in cost or time to the contract. If Contractor believes the RFI response warrants a change in contract time or contract sum, Contractor is to notify Architect in writing within seven (7) days of receipt of RFI response.

#### 7. Meetings

- A. General Contractor will schedule and chair Construction Progress meetings.
  - i. Contractor shall provide one week look ahead at meeting
  - ii. Contractor shall provide overall Project Duration Schedule
- B. General Contractor will distribute minutes following each Progress meeting.
- C. Contractor will schedule a pre-installation conference for major portions of work as required by specifications or as deemed necessary to ensure proper coordination by all trades.
- D. Bailey Edward will conduct on-site observations as required and issue a Field Report documenting observations.

## 8. Submittals / Shop Drawings

- A. All submittals / shop drawings to go through BE. BE will forward on to appropriate parties as necessary.
- B. Submittal.
  - i. Expedite shop drawings and long lead items.
  - ii. Suggest start of O&M's/closeout books simultaneously with submittals.
  - iii. No partial submittals – reference requirements in specifications.
- C. Submittal format to A/E
  - i. For submittals 11X17 and smaller, submittals to the A/E shall be in electronic format (preferred).
    - 1. Shop Drawings should be electronically submitted in ONE all-inclusive PDF document
    - 2. Shop Drawings should cover the ENTIRE spec section unless a spec section covers multiple trades.
    - 3. Contractor has responsibility to identify any deviation from contract documents.
  - ii. For submittals larger than 11X17 hard copies shall be delivered to per Sect 01 33 00.
  - iii. Send notification to Karla Smalley at [ksmalley@baileyedward.com](mailto:ksmalley@baileyedward.com)
    - 1. Architect has five (5) calendar days for review of submittals.
- D. An approved submittal review by the Architect does not relieve the Contractor from requirements of the contract documents.
  - i. No work shall be installed prior to review and approval of all submittals related to that portion of work.
- E. Long lead items, please identify and coordinate submittal priority based on those items.
- F. Discuss Architect's schedule for review of submittals
- G. Submittals received after 3 pm will be processed the next morning, at the earliest. Submittals received after 1 pm on Friday will be processed on Monday.

## 9. Request For Proposal (RFP) / Proceed Order Request (PR)

- A. A/E creates RFP and issues to Contractor.
- B. RFPs are not a directive to execute work. Contractor to provide pricing package within time frame set forth by request or within 14 days if not indicated otherwise.
- C. Upon receipt, review and acceptance of Contractor pricing, a Proceed Order Authorization (PR) form will be signed and issued to Contractor initiating execution of said work.
- D. Construction Change Directives
  - i. Not to Exceed (NTE) numbers
  - ii. Time and Material (T&M) backup

## 10. Payment

- A. GC to submit a Subcontractor and Vendor/Supplier directory to BE.
- B. GC to submit to Owner & Architect a detailed Schedule of Values for review due at preconstruction meeting.
- C. All Contractor Schedule of Values line items shall include material and labor breakdowns and be specific and easily observed.
  - i. Example: In lieu of "Concrete," line item should say "1<sup>st</sup> Level concrete slab".
  - ii. Manpower; site logistics; phasing; deliveries; utility outages; submittals
- D. Monthly payment applications shall include partial lien waivers by all parties requesting payment.

- E. Contractor shall provide draft payment application for review at least one (1) week prior to submitting final application for signatures.
- F. Review Storage and Protection, Specification Section 01 66 00, regarding requirements for materials and/or equipment stored on and/or off site.
- G. Review Client check payment schedule.

#### 11. Job-Site Safety / Security

- A. Contractors are solely responsible for safety and security in connection with the Work in accordance with the General Conditions.

#### 12. Building / Site Logistics

- A. Contractor to take all precautions to protect existing finishes and equipment from damage due to new work, such as existing heat pump units. Document any existing damage prior to start of work.
- B. Schedule a walk thru to document existing equipment before demolition and renovation work begins.
- C. Shut-down of mechanical units, protection against dust, extra filters, etc.
- D. Any utility outages require prior notification.
- E. Contractor to provide temporary toilets. Existing toilets not to be used.
- F. Parking will be allowed on surrounding surface streets at public designated parking. Contractor parking will be permitted on site at areas coordinated with the Owner.
- G. Schedule a walk thru to document existing condition of areas listed above prior to Contractor mobilization.
- H. Construction entrance – Coordinate exact location on site with Owner and Architect.
- I. Staging & On-Site.
- J. Document any existing damage prior to start of work.
- K. Abatement Contract
  - i. General Contractor will need to coordinate demolition to allow for abatement.

#### 13. Project Close-out – send all literature to A/E; goal is to have all submitted 30 days after substantial completion

- A. As-Built Drawings
- B. Operations & Maintenance Manuals, suggest compilation of closeout books begins during submittal process.

#### 14. Questions / Comments

**Champaign County  
Capital Asset Project**

**Courthouse Column Base Project  
ITB #2019-03**

**Proposed Project Schedule  
03/27/2019**

<u>Date</u>	<u>Action</u>
March 2019 thru April 2019	IGW Architecture to Design Brookens POD 100 Roof Replacement Project and Create Bid Documents
Tuesday, May 7, 2019	Present draft bid documents to Facilities Committee for approval
<b>Wednesday, May 8, 2019</b>	<b>Advertise and Post Bid</b>
<b>Tuesday, May 21, 2019, @ 3:00pm</b>	<b>Vendor Pre-Bid Meeting – Brookens Administrative Center, 1776 E. Washington St., Urbana, Illinois 61802 – Lyle Shields Meeting Room</b>
Thursday, May 23, 2019, 12:00noon	Deadline for submission of questions and clarifications
<b>Tuesday, May 28, 2019</b>	<b>IGW responds to submitted questions or clarifications.</b>
<b>Friday, May 31, 2019, @ 11:00am</b>	<b>Bid Opening – Brookens Administrative Center, 1776 E. Washington St., Urbana, Illinois 61802 – Lyle Shields Meeting Room</b>
Tuesday, June 4, 2019	Present to the Facilities Committee for bid award approval
Thursday, June 20, 2019	Present to County Board for bid award approval
Tuesday, June 25, 2019	Finalize and sign agreement with successful low bidder. Successful low bidder submits “A & E Shop Drawings” to IGW for approval.
<b>Monday, July 1, 2019</b>	<b>IGW will notify low bidder about A &amp; E Submittals by Monday, July 1, 2019. Upon approval, low bidder shall order all materials necessary for this project.</b>
July 2019 thru August 2019	Contractor to mobilize/stage equipment and begin project – all materials for project must be on-site or available daily as needed during this project.
<b>Friday, August 30, 2019</b>	<b>Substantial Completion of Project</b>
Tuesday, September 3 2019	Publish Punch List
<b>Friday, Sept. 20 2019</b>	<b>Complete Punch List and Project</b>

ISAKSEN GLERUM WACHTER . LLC  
114 WEST MAIN STREET T / 217 328 1391  
URBANA, ILLINOIS 61801 F / 217 328 1401



File: 1923

March 5, 2019

Mr. Dana Brenner, Facilities Director  
Champaign County Administrative Services  
Brookens Administrative Center  
1776 E. Washington  
Urbana, IL 61802

Re: Column Base Modifications  
Champaign County Courthouse  
Urbana, Illinois

Dear Dana:

In response to your request, we are pleased to submit the following proposal for architectural services in connection with the referenced project.

#### **PROJECT UNDERSTANDING**

Based on our recent discussion we understand the County would like to modify the column bases on existing columns in the Courthouse to reduce tripping on the column bases. This includes approximately 16 columns on the first floor, 12 columns on the second floor and 12 columns on the third floor. These include a combination of full and partial column covers with a total of approximately 122 corners on the square bases to these columns.

We would recommend the corners of each fiberglass reinforced plaster column base be cut at a 45 degree angle and the plaster then patched to provide an octagonal base to the column. The existing terrazzo floor base would be removed, cut and reinstalled to follow the octagonal base. Based on our investigation of one of the columns each column will probably require floor tile to be cut to infill a small triangular gap between the existing floor tile and column base after the column bases are modified. With a preliminary construction cost estimate of \$50,000 this provides for an improved safety condition for the Courthouse patrons. The construction work will be performed on off hours to limit disruption at the Courthouse.

Further, we assume that the design, construction documentation and bidding services will be performed in normal chronological order and that no fast tracking (overlapping of design and construction/early bid packages) will be required. Finally, we assume a public procurement process (competitive bidding) will be followed, the project will be constructed under a single general (roofing) contract and construction will proceed in a single continuous phase of work.

## SCOPE OF SERVICES

Based on the understanding and assumptions above, IGW will provide architectural services as outlined in the following phases of work:

- A. **PRELIMINARY DESIGN** – Review existing facility plans and any other information which is available and pertinent to the project. Inspect and field measure the existing building as necessary for preparation of accurate plans and elevations and collect other existing data necessary for the design. Meet with designated representatives of the County to review and finalize the scope of work and decisions relating to design. Assist in the confirmation of the project budget and development of a project schedule for design and construction.

Based upon an approved scope of work, budget and schedule, initiate the preliminary design phase of services. This phase will define all systems, materials and details associated with the roof replacement. Deliverables for this phase will be preliminary design documents consisting of drawings and other documents illustrating the general scope, scale and relationship of project components for approval by the County. A preliminary opinion of probable construction cost based on the preliminary design documents and current cost indices will be developed.

- B. **CONSTRUCTION DOCUMENTS PHASE:** Following the County's approval of the preliminary design documents and preliminary opinion of probable construction cost, prepare construction drawings and specifications setting forth in detail all of the architectural construction requirements for the project. The construction documents will consist of AutoCAD-generated drawings and a Project Manual with bidding and contract provisions, general project requirements and technical specifications. The documents shall provide sufficient information for accurate and competitive pricing and be suitable for construction. An update of the preliminary opinion of probable costs will be provided based on the construction documents prior to their issuance for bidding.
- C. **BIDDING OR NEGOTIATIONS PHASE:** Following the County's approval of the construction drawings and specifications and updated opinion of probable construction cost, assist the County in obtaining bids or negotiated proposals for the project including coordination and issuance of documents, answer contractor questions during bidding, evaluation of substitutions, issuance of necessary addenda, review and evaluate the bids received, make recommendations and assist the County in the award and preparation of construction contracts.
- D. **CONTRACT ADMINISTRATION/OBSERVATION** – During the construction phase of the project, provide contract administration and partial on-site observation services. Services will include review of any project submittals, review of contractor's requests for payment, response to contractor's requests for information/clarification, review of change order proposals and attendance at any needed contractor progress/coordination and pay request meetings. Services will also include periodic site visits at appropriate stages of construction to check the progress and conformance of the work to the requirements of the contract documents. One on-site visit per month during the construction phase are included in this proposal. Project closeout services will include substantial completion inspection, final punch-list activities, and the issuance of the Certificate of Substantial Completion for the County's review and acceptance. After completion of any punch list items, IGW will conduct a final completion inspection and forward final contractor submittals (as-built drawings, warranties, etc.) and issue a Final Certificate of Acceptance.

**COMPENSATION AND REIMBURSABLES**

Phases A, B, C, and D services above, we propose a stipulated sum fee in the amount of \$4,800.00, exclusive of reimbursable expenses, other County consultants and testing agencies, if any. All fixed fees for the project shall be allocated to each phase of work on a percentage basis in accordance with accepted professional standards and practice of the industry as follows:

A. PRELIMINARY DESIGN PHASE	(35%)	-\$	1,680.00
B. CONSTRUCTION DOCUMENTATION PHASE	(40%)	-\$	1,920.00
C. BIDDING/NEGOTIATION PHASE	( 5%)	-\$	240.00
D. CONSTRUCTION ADMIN/OBSERVE	(20%)	-\$	960.00
Total Phases A-D (Fixed Fee)		(100%)	-\$ 4,800.00

For Phases A-D services, IGW will invoice monthly based upon a percentage completion of work by phase. Payment is due thirty (30) days after the receipt of our invoices after which they will accrue interest at the prevailing prime rate plus 2% as recorded by Busey Bank, Urbana. For services requested that are in addition to the scope of services defined above, IGW shall be compensated at our attached hourly billing rates.

In addition to the fee quoted above, IGW shall be reimbursed at 1.1 x cost for out-of-pocket expenses directly related to the project including reprographics, plotting, telecommunications, commercial ground transportation, travel and subsistence for business travel related to the project (out-of-town only), US mail, overnight courier services and other similar expenses. For this project, there should be only minor expenses associated with the printing of bidding documents.

**CONSULTANTS**

IGW Architecture does not anticipate employing any outside consultants for this project.

**CONTRACTS**

If the terms written above and the attached IGW Conditions of Agreement meet with your approval, this letter may serve as authorization and formal agreement to proceed with the work described herein. As such, the return of a signed copy would confirm your acceptance.

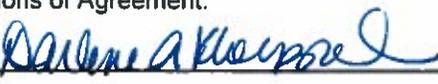
Along with this letter agreement, we have available for use a coordinated set of pre-printed and time-tested AIA forms and documents that facilitate the construction phase activities of a project. Included among these is the standard AIA Document A107, Owner-Contractor Agreement-2007 Edition and AIA Document A201, General Conditions of the Contract for Construction-2007 Edition. We will supplement the AIA and Project Manual information with any general conditions and other project requirements specific to Champaign County.

Thank you for the opportunity to continue our work with Champaign County on this project. If you have any questions or require further information, please call. We look forward to a great working relationship and positive results.

Sincerely,  
ISAKSEN GLERUM WACHTER . LLC

Scot W. Wachter  
Principal/President

Encl: IGW Rate Schedule  
IGW Conditions of Agreement.

ACCEPTED:  DATE: 3/8/19  
**Darlene A. Kloeppel County Executive**



## Hourly Rate Schedule

Principals .....	\$ 170.00 - 215.00
Project Architect 1.....	\$ 155.00 - 170.00
Project Architect 2.....	\$ 120.00 - 155.00
Architect/Designer 1 .....	\$ 105.00 - 120.00
Architect/Designer 2 .....	\$ 85.00 - 105.00
Architectural Intern.....	\$ 75.00 - 85.00
Construction Administrator/Observer .....	\$ 105.00 - 170.00
Account/Contract Administrator.....	\$ 85.00
Clerical/Data Processing .....	\$ 60.00
Reimbursables.....	@ Cost x 1.1
Consultants.....	@ Cost x 1.1
Mileage Rate.....	.535 cents/mile

Effective 1 January 2019, subject to annual adjustment.

ISAKSEN GLERUM WACHTER . LLC  
114 WEST MAIN STREET T / 217 328 1391  
URBANA, ILLINOIS 61801 F / 217 328 1401

## IGW CONDITIONS OF AGREEMENT

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1. **STANDARD OF CARE** – The Architect will perform the services under this agreement in accordance with generally accepted practice, in a manner consistent with the level of care and skill ordinarily exercised by members of this profession under similar circumstances in this locality. No other warranties implied or expressed, in fact or by law, are made or intended in this agreement.
2. **CONFIDENTIALITY** – The Architect shall hold confidential the business and technical information obtained or generated in performance of services under this agreement, and as identified in writing by the Client as confidential.
3. **DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS** – All original drawings, specifications, electronic data and other documents are instruments of the Architect's service for use solely with respect to this project and shall remain the property of the Architect. The Client shall be permitted to retain copies including reproducible copies of the Architect's documents for information and reference in connection with the client's use and occupancy of the project. Owner's reuse of documents generated by this Agreement shall only be permitted by written approval from the Architect.
4. **SURVEYS/TESTS** – The Architect shall recommend to the Client the appropriate investigation, surveys, tests, analyses and reports to be obtained as necessary for the proper execution of the Architect's services.
5. **AUTHORITY AND RESPONSIBILITY** – The Architect shall not have control or charge of, and shall not be responsible for, construction means, methods, techniques, sequences or procedures, for safety precautions and programs in connection with the Work, for the acts or omissions of the Contractor, Subcontractors or any other persons performing any of the Work, or for the failure of any of them to carry out the Work in accordance with the Contract Documents.
6. **RESPONSIBILITY FOR CONSTRUCTION COST** – It is recognized that neither the Architect nor the Client has control over the cost of labor, materials or equipment over the Contractor's method of determining bid prices, or over competitive bidding, marketing or negotiating conditions. Accordingly, the Architect cannot and does not warrant or represent that bids or negotiated prices will not vary from any Opinion of Construction Cost or evaluation prepared or agreed to by the Architect.
7. **INSURANCE** – The Architect shall maintain comprehensive general liability and professional liability insurance coverage and the Architect's employees are covered by Workers Compensation Insurance. Certificates of Insurance can be provided to the Client upon written request. The Architect shall not be responsible for any loss, damage, or liability beyond these insurance limits and conditions.
8. **LIMITATION OF LIABILITY** – Neither the Architect, the Architect's consultants, nor their agents or employees shall be jointly, severally or individually liable to the Client in excess of the compensation to be paid pursuant to this agreement by reason of any act or omission, including breach of contract or negligence not amounting to a willful or intentional wrong.
9. **HAZARDOUS MATERIALS** – The Architect and the Architect's consultants shall have no responsibility for discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances. If required by law, the client shall accomplish all necessary inspections and testing to determine the type and extent, if any, of hazardous materials at the project site. Prior to the start of services, or at the earliest time such information is learned, it shall be the duty of the client to advise the Architect (in writing) of any known or suspected hazardous materials. Removal and proper disposal of all hazardous materials shall be the responsibility of the client.
10. **CLIENT'S CONSULTANTS** – Contracts between the Client and Client's consultants shall request the consultants to coordinate their drawings and other instruments of service with those of the Architect and to advise the Architect of any potential conflict. The Architect shall have no responsibility for the components of the project designed by the Client's consultants. The Client shall indemnify and hold harmless the Architect, Architect's Consultants and their employees from and against claims, damages, losses and expenses arising out of services performed for this project by other consultants of the Client.
11. **REMODELING AND RENOVATION** – For Architect's services provided to assist the Client in making changes to an existing facility, the Client shall furnish documentation and information upon which the Architect may rely for its accuracy and completeness. Unless specifically authorized or confirmed in writing by the Client, the Architect shall not be required to perform or have others perform destructive testing or to investigate concealed or unknown conditions. The Client shall indemnify and hold harmless the Architect, the Architect's Consultants, and their employees from and against claims, damages, losses and expenses which arise as a result of documentation and information furnished by the Client.
12. **AMENDMENTS** – This Agreement may be amended only by written documentation signed by both the Architect and Client.
13. **TERMINATION** – This Agreement may be terminated by either party upon written notice and the Architect will be paid only for those services and costs incurred to date of termination.
14. **MEDIATION** – In the event of a dispute, the parties shall endeavor to settle disputes by mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect unless the parties mutually agree otherwise. Demand for mediation shall be filed in writing with the other party to this Agreement. A demand for mediation shall be made within a reasonable time after the claim, dispute or other matter in question has arisen. In no event shall the demand for mediation be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.
15. **PLACE OF LAW** – Unless otherwise provided, this agreement shall be governed by the law of the principal place of business of the Architect.

**Champaign County  
Capital Asset Project**

**Brookens POD 100 – Roof Replacement Project  
ITB #2019-04**

**Proposed Project Schedule  
03/26/2019**

<u>Date</u>	<u>Action</u>
March 2019 thru April 2019	IGW Architecture to Design Brookens POD 100 Roof Replacement Project and Create Bid Documents
Tuesday, May 7, 2019	Present draft bid documents to Facilities Committee for approval
<b>Wednesday, May 8, 2019</b>	<b>Advertise and Post Bid</b>
<b>Tuesday, May 21, 2019, @ 2:00pm</b>	<b>Vendor Pre-Bid Meeting – Brookens Administrative Center, 1776 E. Washington St., Urbana, Illinois 61802 – Lyle Shields Meeting Room</b>
Thursday, May 23, 2019, 12:00noon	Deadline for submission of questions and clarifications
<b>Tuesday, May 28, 2019</b>	<b>IGW responds to submitted questions or clarifications.</b>
<b>Friday, May 31, 2019, @ 10:00am</b>	<b>Bid Opening – Brookens Administrative Center, 1776 E. Washington St., Urbana, Illinois 61802 – Lyle Shields Meeting Room</b>
Tuesday, June 4, 2019	Present to the Facilities Committee for bid award approval
Thursday, June 20, 2019	Present to County Board for bid award approval
Tuesday, June 25, 2019	Finalize and sign agreement with successful low bidder. Successful low bidder submits “A & E Shop Drawings” to IGW for approval.
<b>Monday, July 1, 2019</b>	<b>IGW will notify low bidder about A &amp; E Submittals by Monday, July 1, 2019. Upon approval, low bidder shall order all materials necessary for this project.</b>
July 2019 thru August 2019	Contractor to mobilize/stage equipment and begin project – all materials for project must be on-site or available daily as needed during this project.
<b>Friday, August 30, 2019</b>	<b>Substantial Completion of Project</b>
Tuesday, September 3 2019	Publish Punch List
<b>Friday, Sept. 20 2019</b>	<b>Complete Punch List and Project</b>

ISAKSEN GLERUM WACHTER . LLC  
114 WEST MAIN STREET T / 217 328 1391  
URBANA, ILLINOIS 61801 F / 217 328 1401



File: 1922

March 4, 2019

Mr. Dana Brenner, Facilities Director  
Champaign County Administrative Services  
Brookens Administrative Center  
1776 E. Washington  
Urbana, IL 61802

Re: Pod 100 Reroof  
Brookens Administrative Center  
Urbana, Illinois

Dear Dana:

In response to your request, we are pleased to submit the following proposal for architectural services in connection with the referenced project.

#### PROJECT UNDERSTANDING

Based on our recent discussion we understand the County would like to replace the existing roof on Pod 100 of the Brookens Administration Center. The existing roof is long past its warranty coverage and has reached the end of its useful life as evidenced by active leaking, soft insulation and the excessive ongoing repairs and associated maintenance costs. From our records it appears that the existing EPDM roof was laid over an existing built-up roof with an additional 3 inches of rigid insulation.

We would recommend a complete tear-off of the two layers of roof and insulation down to the existing metal deck. For the new roofing system a white thermoplastic polyolefin (TPO) single-ply membrane or white EPDM is recommended to be fully adhered over mechanically fastened polyiso insulation with a R-value of 30 which represents a durable, cost-effective and environmentally friendly choice that can provide energy savings through its increased insulation value and heat reflective properties. It is likely that most, if not all, existing roof drains, downspouts, roof edges and flashings will be replaced as part of the project. Sump areas will be provided at the roof drains to improve the drainage off the roof. Up to 20 year system warranties are available with the single-ply systems. With a preliminary construction cost estimate of \$220,000 this provides for a comprehensive approach with many long term benefits.

Further, we assume that the design, construction documentation and bidding services will be performed in normal chronological order and that no fast tracking (overlapping of design and construction/early bid packages) will be required. Finally, we assume a public procurement process (competitive bidding) will be followed, the project will be constructed under a single general (roofing) contract and construction will proceed in a single continuous phase of work.

## SCOPE OF SERVICES

Based on the understanding and assumptions above, IGW will provide architectural services as outlined in the following phases of work:

- A. **PRELIMINARY DESIGN** – Review existing facility plans and any other information which is available and pertinent to the project. Inspect and field measure the existing building as necessary for preparation of accurate plans and elevations and collect other existing data necessary for the design. Meet with designated representatives of the County to review and finalize the scope of work and decisions relating to design. Assist in the confirmation of the project budget and development of a project schedule for design and construction.

Based upon an approved scope of work, budget and schedule, initiate the preliminary design phase of services. This phase will define all systems, materials and details associated with the roof replacement. Deliverables for this phase will be preliminary design documents consisting of drawings and other documents illustrating the general scope, scale and relationship of project components for approval by the County. A preliminary opinion of probable construction cost based on the preliminary design documents and current cost indices will be developed.

- B. **CONSTRUCTION DOCUMENTS PHASE:** Following the County's approval of the preliminary design documents and preliminary opinion of probable construction cost, prepare construction drawings and specifications setting forth in detail all of the architectural construction requirements for the project. The construction documents will consist of AutoCAD-generated drawings and a Project Manual with bidding and contract provisions, general project requirements and technical specifications. The documents shall provide sufficient information for accurate and competitive pricing and be suitable for construction. An update of the preliminary opinion of probable costs will be provided based on the construction documents prior to their issuance for bidding.
- C. **BIDDING OR NEGOTIATIONS PHASE:** Following the County's approval of the construction drawings and specifications and updated opinion of probable construction cost, assist the County in obtaining bids or negotiated proposals for the project including coordination and issuance of documents, answer contractor questions during bidding, evaluation of substitutions, issuance of necessary addenda, review and evaluate the bids received, make recommendations and assist the County in the award and preparation of construction contracts.
- D. **CONTRACT ADMINISTRATION/OBSERVATION** – During the construction phase of the project, provide contract administration and partial on-site observation services. Services will include review of any project submittals, review of contractor's requests for payment, response to contractor's requests for information/clarification, review of change order proposals and attendance at any needed contractor progress/coordination and pay request meetings. Services will also include periodic site visits at appropriate stages of construction to check the progress and conformance of the work to the requirements of the contract documents. One on-site visit per month during the construction phase are included in this proposal. Project closeout services will include substantial completion inspection, final punch-list activities, and the issuance of the Certificate of Substantial Completion for the County's review and acceptance. After completion of any punch list items, IGW will conduct a final completion inspection and forward final contractor submittals (as-built drawings, warranties, etc.) and issue a Final Certificate of Acceptance.

## COMPENSATION AND REIMBURSABLES

Phases A, B, C, and D services above, we propose a stipulated sum fee in the amount of \$19,800.00, exclusive of reimbursable expenses, other County consultants and testing agencies, if any. All fixed fees for the project shall be allocated to each phase of work on a percentage basis in accordance with accepted professional standards and practice of the industry as follows:

A. PRELIMINARY DESIGN PHASE	(35%)	-\$ 6,930.00
B. CONSTRUCTION DOCUMENTATION PHASE	(40%)	-\$ 7,920.00
C. BIDDING/NEGOTIATION PHASE	( 5%)	-\$ 990.00
D. CONSTRUCTION ADMIN/OBSERVE	(20%)	-\$ 3,960.00
Total Phases A-D (Fixed Fee)		(100%) -\$ 19,800.00

For Phases A-D services, IGW will invoice monthly based upon a percentage completion of work by phase. Payment is due thirty (30) days after the receipt of our invoices after which they will accrue interest at the prevailing prime rate plus 2% as recorded by Busey Bank, Urbana. For services requested that are in addition to the scope of services defined above, IGW shall be compensated at our attached hourly billing rates.

In addition to the fee quoted above, IGW shall be reimbursed at 1.1 x cost for out-of-pocket expenses directly related to the project including reprographics, plotting, telecommunications, commercial ground transportation, travel and subsistence for business travel related to the project (out-of-town only), US mail, overnight courier services and other similar expenses. For this project, there should be only minor expenses associated with the printing of bidding documents.

## CONSULTANTS

IGW Architecture does not anticipate employing any outside consultants for this project.

## CONTRACTS

If the terms written above and the attached IGW Conditions of Agreement meet with your approval, this letter may serve as authorization and formal agreement to proceed with the work described herein. As such, the return of a signed copy would confirm your acceptance.

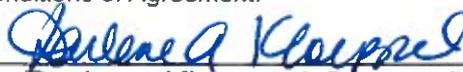
Along with this letter agreement, we have available for use a coordinated set of pre-printed and time-tested AIA forms and documents that facilitate the construction phase activities of a project. Included among these is the standard AIA Document A107, Owner-Contractor Agreement-2007 Edition and AIA Document A201, General Conditions of the Contract for Construction-2007 Edition. We will supplement the AIA and Project Manual information with any general conditions and other project requirements specific to Champaign County.

Thank you for the opportunity to continue our work with Champaign County on this project. If you have any questions or require further information, please call. We look forward to a great working relationship and positive results.

Sincerely,  
ISAKSEN GLERUM WACHTER . LLC

Scot W. Wachter  
Principal/President

Encl: IGW Rate Schedule  
IGW Conditions of Agreement.

ACCEPTED:  DATE: 3/12/19  
Darlene Kloepfel County Executive



## Hourly Rate Schedule

Principals .....	\$ 170.00 - 215.00
Project Architect 1.....	\$ 155.00 - 170.00
Project Architect 2.....	\$ 120.00 - 155.00
Architect/Designer 1 .....	\$ 105.00 - 120.00
Architect/Designer 2 .....	\$ 85.00 - 105.00
Architectural Intern.....	\$ 75.00 - 85.00
Construction Administrator/Observer .....	\$ 105.00 - 170.00
Account/Contract Administrator.....	\$ 85.00
Clerical/Data Processing .....	\$ 60.00
Reimbursables.....	@ Cost x 1.1
Consultants.....	@ Cost x 1.1
Mileage Rate.....	.535 cents/mile

Effective 1 January 2019, subject to annual adjustment.

ISAKSEN GLERUM WACHTER , LLC  
114 WEST MAIN STREET T / 217 328 1391  
URBANA, ILLINOIS 61801 F / 217 328 1401

## IGW CONDITIONS OF AGREEMENT

---

1. **STANDARD OF CARE** – The Architect will perform the services under this agreement in accordance with generally accepted practice, in a manner consistent with the level of care and skill ordinarily exercised by members of this profession under similar circumstances in this locality. No other warranties implied or expressed, in fact or by law, are made or intended in this agreement.
2. **CONFIDENTIALITY** – The Architect shall hold confidential the business and technical information obtained or generated in performance of services under this agreement, and as identified in writing by the Client as confidential.
3. **DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS** – All original drawings, specifications, electronic data and other documents are instruments of the Architect's service for use solely with respect to this project and shall remain the property of the Architect. The Client shall be permitted to retain copies including reproducible copies of the Architect's documents for information and reference in connection with the client's use and occupancy of the project. Owner's reuse of documents generated by this Agreement shall only be permitted by written approval from the Architect.
4. **SURVEYS/TESTS** – The Architect shall recommend to the Client the appropriate investigation, surveys, tests, analyses and reports to be obtained as necessary for the proper execution of the Architect's services.
5. **AUTHORITY AND RESPONSIBILITY** – The Architect shall not have control or charge of, and shall not be responsible for, construction means, methods, techniques, sequences or procedures, for safety precautions and programs in connection with the Work, for the acts or omissions of the Contractor, Subcontractors or any other persons performing any of the Work, or for the failure of any of them to carry out the Work in accordance with the Contract Documents.
6. **RESPONSIBILITY FOR CONSTRUCTION COST** – It is recognized that neither the Architect nor the Client has control over the cost of labor, materials or equipment over the Contractor's method of determining bid prices, or over competitive bidding, marketing or negotiating conditions. Accordingly, the Architect cannot and does not warrant or represent that bids or negotiated prices will not vary from any Opinion of Construction Cost or evaluation prepared or agreed to by the Architect.
7. **INSURANCE** – The Architect shall maintain comprehensive general liability and professional liability insurance coverage and the Architect's employees are covered by Workers Compensation Insurance. Certificates of Insurance can be provided to the Client upon written request. The Architect shall not be responsible for any loss, damage, or liability beyond these insurance limits and conditions.
8. **LIMITATION OF LIABILITY** – Neither the Architect, the Architect's consultants, nor their agents or employees shall be jointly, severally or individually liable to the Client in excess of the compensation to be paid pursuant to this agreement by reason of any act or omission, including breach of contract or negligence not amounting to a willful or intentional wrong.
9. **HAZARDOUS MATERIALS** – The Architect and the Architect's consultants shall have no responsibility for discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances. If required by law, the client shall accomplish all necessary inspections and testing to determine the type and extent, if any, of hazardous materials at the project site. Prior to the start of services, or at the earliest time such information is learned, it shall be the duty of the client to advise the Architect (in writing) of any known or suspected hazardous materials. Removal and proper disposal of all hazardous materials shall be the responsibility of the client.
10. **CLIENT'S CONSULTANTS** – Contracts between the Client and Client's consultants shall request the consultants to coordinate their drawings and other instruments of service with those of the Architect and to advise the Architect of any potential conflict. The Architect shall have no responsibility for the components of the project designed by the Client's consultants. The Client shall indemnify and hold harmless the Architect, Architect's Consultants and their employees from and against claims, damages, losses and expenses arising out of services performed for this project by other consultants of the Client.
11. **REMODELING AND RENOVATION** – For Architect's services provided to assist the Client in making changes to an existing facility, the Client shall furnish documentation and information upon which the Architect may rely for its accuracy and completeness. Unless specifically authorized or confirmed in writing by the Client, the Architect shall not be required to perform or have others perform destructive testing or to investigate concealed or unknown conditions. The Client shall indemnify and hold harmless the Architect, the Architect's Consultants, and their employees from and against claims, damages, losses and expenses which arise as a result of documentation and information furnished by the Client.
12. **AMENDMENTS** – This Agreement may be amended only by written documentation signed by both the Architect and Client.
13. **TERMINATION** – This Agreement may be terminated by either party upon written notice and the Architect will be paid only for those services and costs incurred to date of termination.
14. **MEDIATION** – In the event of a dispute, the parties shall endeavor to settle disputes by mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect unless the parties mutually agree otherwise. Demand for mediation shall be filed in writing with the other party to this Agreement. A demand for mediation shall be made within a reasonable time after the claim, dispute or other matter in question has arisen. In no event shall the demand for mediation be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.
15. **PLACE OF LAW** – Unless otherwise provided, this agreement shall be governed by the law of the principal place of business of the Architect.

January 11, 2019

Dana Brenner  
Executive Director  
Champaign County Physical Plant  
1776 E. Washington Street  
Urbana, Illinois 61802

Re: Indoor Air Quality Evaluation  
METCAD Call Center (911)  
1905 E. Main Street  
Urbana, Illinois

Dear Mr. Brenner:

Occupational Environmental Health Solutions, Incorporated (OEHS, Inc.) is pleased to provide this proposal to you for an Indoor Air Quality Fungal Evaluation Survey at the METCAD Call Center (911) located at 1905 E. Main Street in Urbana, Illinois.

Attached to this letter are two copies of our Professional Services Agreement. If acceptable, please sign one copy and return it to our Chatham, Illinois office. The other copy is for your files.

Please contact me at (217) 483-9296 if you have questions. Occupational Environmental Health Solutions, Inc. welcomes the opportunity to be of continued service to Champaign County Physical Plant.

Sincerely,

Occupational Environmental  
Health Solutions, Inc.



James Barnes, MS, CIH  
President

**OCCUPATIONAL ENVIRONMENTAL HEALTH SOLUTIONS,  
INCORPORATED  
PROFESSIONAL SERVICES AGREEMENT**

This Agreement is made this 11<sup>th</sup> day of January, 2019 between Champaign County Physical Plant subsequently referred to as "CLIENT," and Occupational Environmental Health Solutions, Incorporated, subsequently referred to as "OEHS."

By joining in this Agreement, CLIENT retains OEHS to provide Industrial Hygiene services in connection with an Indoor Air Quality Fungal Evaluation Survey at the METCAD Call Center located at 1905 E. Main Street in Urbana, Illinois, subsequently referred to as "PROJECT."

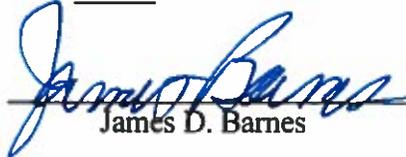
By this Agreement, the scope of OEHS's services on this PROJECT is limited to that described in Exhibit A.

The attached Terms and Conditions 19IH Rev. 0 are incorporated into and made a part of this Agreement.

CLIENT agrees to compensate OEHS for providing the above services in the manner described in Exhibit B.

CLIENT and OEHS hereby agree to, and accept, the terms and conditions stated above, including terms and conditions stated in the attached General Conditions, the receipt of which is acknowledged.

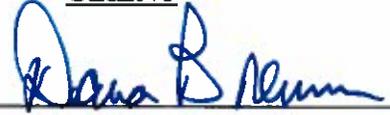
OEHS

By:   
James D. Barnes

Title: President

Date: 2/11/19

CLIENT

By: 

Title: Facilities Dir.

Date: 2/6/19

## **EXHIBIT A**

### **SCOPE OF SERVICES PROFESSIONAL SERVICES AGREEMENT**

Agreement Date: January 11, 2019

Project: Champaign County Physical Plant, Indoor Air Quality Fungal Evaluation Survey, METCAD Call Center (911) located at 1905 E. Main Street in Urbana, Illinois

#### **PROJECT DESCRIPTION:**

The Scope of Work is limited to an Indoor Air Quality Fungal Evaluation Survey in conjunction with the METCAD Call Center (911) located at 1905 E. Main Street in Urbana, Illinois.

#### **SERVICES:**

##### **TASK 1 – SAMPLING STRATEGY DEVELOPMENT**

An exposure sampling strategy will be developed for the microbiological fungal exposure-monitoring program. Issues that will be considered in formulating this exposure monitoring are as follows:

- A. The areas to be sampled.
- B. The number of samples to be taken.
- C. The sampling interval.

The sampling strategy will be designed to identify the residential property envelope airborne and/or bulk fungal concentrations of water intrusion indicator species of fungi and those which are known to cause adverse health effects in humans that may exceed three times the ambient concentrations. Microbiological non-culturable and/or culturable fungal sampling will be conducted by means of air and/or bulk monitoring methods. This will be accomplished to identify the types of environmental fungi (i.e. genus and/or species) and the concentrations associated with various monitoring locations. This sampling methodology will be utilized in-order to reduce analytical fees and the analytical results turn-around time, even though supplementary sampling methods with higher degrees of accuracy are available.

Due to the potential for the distribution of fungal spores and subsequent contamination of the contents of the occupied space, invasive sampling techniques (i.e. penetration of wall & ceiling interstitial spaces) will not be conducted during this investigation unless requested by the Client. It should be noted that elimination of this sampling methodology reduces the potential for the identification of fungal contamination in the structure.

Breaching of interstitial spaces should be conducted only with full containment under negative pressure or be conducted in a limited and controlled method to maintain negligible invasiveness through the use of wet methods/HEPA vacuum exhaust and low speed drill and/or awl penetration of the wall/ceiling cavity. This eliminates potential contamination of the structure's contents and occupied zone.

The purpose of this task is to select areas of potential contamination so that there is a high probability that the random samples will contain at least one area with high exposure, if one exists.

## **TASK 2 - BUILDING SURVEY**

A survey of the residential property will be conducted. This will include a review of the home and the potential interrelationship with the area(s) in question. As a part of this investigation, if required, the following tasks will be accomplished:

1. Review of the pressure zones within the building and the relationship between them and the air flow patterns produced by the HVAC system. The site will be surveyed with respect to the HVAC system to determine the following information: the pressure zones and the air flow patterns for the supply and return diffusers will be evaluated, if present. These data will be compared to ASHRAE standards and good Industrial Hygiene practices.
2. A moisture survey will be conducted in and around the home. A moisture level meter will be used to test such materials as drywall, carpeting, ceiling tile, insulation and wood. The instrument produces a relative index of moisture content (0 to 100 %) and is used to determine the potential for biological growth.
3. The Indoor Air Quality parameter data (i.e. temperature, relative humidity, dew point and absolute relative humidity) will be collected from areas of the residential property. The purpose is to determine the air monitoring locations with a high probability to identify fungal contamination.
4. An inspection of the building will be conducted to determine the presence of fungal growths, accumulations of dust or other foreign matter.

## **TASK 3 - NON-CULTURABLE FUNGAL SPORE AIR SAMPLING AND ANALYSIS**

If requested by the client, non-culturable fungal spore sampling will be conducted in the home. Air-O-Cell particle sampling cassettes will be utilized to collect fungal spores from eight (8) locations in and around the building. In addition, one (1) exterior ambient to serve as a control and one (1) blank for quality assurance purposes will be collected and submitted for analysis. The sampling protocol will follow the guidelines established by the American Industrial Hygiene Association (AIHA) Bio-Safety Committee.

The sample cassettes will be shipped next day air under chain-of-custody to an American Industrial Hygiene Association (AIHA) Environmental Microbiology (EMLAP) accredited analytical laboratory to be analyzed for fungal spores. Non-culturable fungal spore traps (Air-O-Cell) will be utilized in this indoor air quality fungal evaluation. If additional samples are collected, the fee is \$95 per sample plus the media.

#### **TASK 4 – CULTURABLE MICROBIOLOGICAL SWAB/BULK SAMPLING & ANALYSIS**

If requested by the Client, microbiological swab/bulk sampling will be conducted in the building. Sterile swab or bulk sample will be utilized to collect sample(s) in four (40) locations of commercial property. The sampling protocol will follow the guidelines established by the American Industrial Hygiene Association (AIHA) Bio-safety Committee.

The swabs/bulks will be shipped under chain-of-custody to an American Industrial Hygiene Association (AIHA) Environmental Microbiology (EMLAP) accredited analytical laboratory to be analyzed for environmental fungi. The three most predominant types of environmental fungi will be identified. If additional samples are collected, the fee is \$105 per sample plus the media.

#### **TASK 5 – REPORT**

By comparing the microbiological profiles at the contaminated sites with those at uncontaminated sites, it is possible to determine if amplification of microorganisms has occurred in the contaminated areas of the home. If sampling is conducted, the analytical sampling report will present observations, and classify specific findings, which will include the type of fungi, if any are present, at the sample locations. In addition, anticipated needs for control of the microbiological growth will be discussed. If fungi that are known to cause adverse health effects in humans are identified, an abatement protocol will be provided with recommendations to complete the remediation project.

**EXHIBIT B  
CHARGES FOR SERVICES  
PROFESSIONAL SERVICES AGREEMENT**

Agreement Date: January 11, 2019

Project: Champaign County Physical Plant, Indoor Air Quality Fungal Evaluation Survey, METCAD Call Center (911) located at 1905 E. Main Street in Urbana, Illinois

**BASIS OF CHARGES:**

OEHS's charges for professional services listed in the SCOPE OF SERVICES will be made according to the attached schedules, "Basis of Payment, Consulting Services" 19BOPCS Rev. 0 and "Basis of Payment, Industrial Hygiene, Environmental, and Safety Equipment Charges" 19IHEQ Rev. 0.

**ESTIMATE OF COST:**

The amount of effort necessary to complete the required scope of services will depend upon several factors, which may include additional site time and/or sampling locations. Services provided by OEHS will be held to that minimum necessary to complete the project.

It is estimated that the total cost to accomplish the scope of services for this project will be \$2,500 OEHS agrees not to exceed \$2,500 without prior written notification to the CLIENT.

Exhibit B  
Charges for Services  
Page 1 of 1

# GENERAL CONDITIONS PROFESSIONAL SERVICES AGREEMENT

Agreement Date: January 11, 2019

Project: Champaign County Physical Plant, Indoor Air Quality Fungal Evaluation Survey, METCAD Call Center (911) located at 1905 E. Main Street in Urbana, Illinois

1. **COMMENCEMENT OF SERVICES:** OEHS will commence performing Services within a reasonable period following CLIENT'S execution of this Agreement.
2. **SCOPE OF SERVICES:** OEHS will perform for CLIENT only those Services described in the "Scope of Services" attached hereto as Exhibit A.
3. **INVOICES:** Charges for Services will be billed at least as frequently as monthly, and again at the completion of the project. OEHS may require advance or progress payments. CLIENT shall pay OEHS for all such Services and also for any sales or value added taxes, which apply to such Services performed under this Agreement or any addendum thereto. CLIENT agrees that OEHS'S charges for Services set forth in Exhibit B cover basic Services only, and OEHS may charge additional amounts for the use of equipment, additional products and additional services and programs that may be necessitated by unforeseen conditions. CLIENT agrees to pay an additional two (2) percent per month compounded on amounts outstanding by more than thirty (30) days.
4. **INSURANCE:** CLIENT authorizes CLIENT'S insurance company to solely pay OEHS directly for that portion of the work covered by CLIENT'S insurance policy. If for any reason the Services are not covered by CLIENT'S insurance policy, CLIENT understands that CLIENT is financially responsible for the entire amount charged by OEHS. If for any reason the check for payment should be signed over or made payable to CLIENT, CLIENT agrees to either endorse such check over to OEHS or to pay OEHS immediately upon receipt of the check from CLIENT'S insurance company.
5. **TERMINATION:** This Agreement may be terminated by either party upon written notice to the other party; provided, however, that Client may terminate this Agreement only for good cause such as unavailability of adequate financing or major changes in the scope of Services. In the event of any termination, CLIENT shall immediately pay OEHS for all Services and expenses rendered by OEHS to the date of OEHS'S receipt of notice of termination on a basis of payroll cost times a multiplier of 3.5 (if not previously provided for) plus reimbursable expenses to be determined at the sole discretion of OEHS, plus reasonable termination expenses, including the cost of completing analyses, records, and reports necessary to document job status at the time of termination.
6. **REUSE OF DOCUMENTS:** All documents including drawings, photographs, analytical reports and specifications furnished by OEHS pursuant to this Agreement are proprietary in nature and shall remain the property of OEHS. Documents or computerized materials generated by OEHS and provided to CLIENT in performance of Services are for CLIENT'S sole use and only for the purposes set forth in the "Scope of Services" attached hereto as Exhibit A. CLIENT shall not transfer any such documents or computerized materials to others or use them or permit them to be used at other projects for which they were not prepared without OEHS'S express written consent. Any reuse without the express written consent of OEHS will be at CLIENT'S sole risk and without liability to OEHS, and CLIENT shall indemnify and hold harmless OEHS from all claims, damages, losses and expenses including court costs and attorney's fees arising out of or resulting there from. If OEHS shall provide written consent for any such reuse, OEHS may require that CLIENT pay additional compensation to OEHS at rates to be determined by OEHS and OEHS may make any such reuse conditional upon OEHS'S adaptation of any and all document to be reused.
7. **STANDARD OF CARE:** Services performed by OEHS under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions and performing the same or similar services at the same time in the same geographic area. OEHS will not be obligated to perform services not authorized in the Agreement.
8. **LIMITATIONS ON RELIANCE ON DATA COLLECTED:** All physical, biological or chemical readings and/or measurements taken and samples collected are only representative of the conditions existing at the time and location such readings and/or measurements were taken and samples collected. OEHS makes no guarantee that actual readings will not change after the time OEHS takes such readings and collects such samples. OEHS is not responsible for any conditions that existed prior to the time OEHS performed Services set forth in this Agreement, or for any conditions that came into existence after OEHS performed such Services.
9. **NO WARRANTIES:** No warranties or guaranties, express or implied, are made with respect to the Services performed by OEHS under this Agreement, and OEHS EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. CLIENT expressly agrees and understands that OEHS makes no such warranty or guaranty and that no such warranty or guaranty is intended to be given by OEHS to client in (i) this Agreement, (ii) any representation made, conclusions reached or opinions rendered by OEHS, whether expressed or implied, written or verbal, (iii) any samples collected by OEHS or (iv) any report, opinion or document produced by OEHS.
10. **RIGHT OF ENTRY:** CLIENT shall provide for OEHS'S right to enter property owned by CLIENT and/or others in order for OEHS to perform Services.
11. **GENERAL LIABILITY INSURANCE AND LIMITATION:** OEHS is covered by general liability insurance for bodily injury and property damage arising directly from its negligent acts or omissions with limits which OEHS in its sole discretion considers reasonable. Certificates of insurance shall be provided to CLIENT upon request in writing. CLIENT expressly agrees that OEHS shall not be responsible for any loss, damage or liability which exceeds the lesser of (i) the amounts, limits and conditions of such insurance or (ii) the amount paid by CLIENT to OEHS for the Services.
12. **THIRD PARTY LIABILITY:** OEHS shall not be responsible for any loss, damage or liability arising from any act or omission of CLIENT, its agents, staff, other consultants, independent contractors, third parties or others working on the project over which OEHS has no supervision or control. OEHS shall not have any duty or authority to direct, supervise or oversee any of CLIENT'S contractors or subcontractors. However, OEHS may periodically recommend to, or advise CLIENT of, concerns OEHS may have regarding contractor's conduct or performance. OEHS'S presence shall not relieve other contractors of their responsibilities. OEHS shall not be liable for the failure of CLIENT or other contractors to fulfill their responsibilities, and CLIENT agrees to indemnify, hold harmless and defend OEHS against any claims arising out of such failures or contractor's performance.
13. **CONFIDENTIALITY:** Any information provided by OEHS in or pursuant to this Agreement which is privileged, proprietary, confidential, or otherwise protected by law, including but not limited to any technical or pricing information, or any trademarked or copyrighted material, shall not be disclosed by CLIENT to any other person or entity without the express prior written consent of OEHS.

14. **THIRD PARTY RELIANCE:** Nothing contained in this Agreement shall be construed, nor is intended to give any rights or benefits to any person or entity, other than to CLIENT and OEHS. All duties and responsibilities set forth and/or undertaken pursuant to this Agreement are for the sole and exclusive benefit of CLIENT and OEHS and for no other person or entity. CLIENT agrees not to disclose to any person or entity not a party to this Agreement any information, data, reports, documents, or other items provided by OEHS pursuant to this Agreement without the express prior written consent of OEHS. CLIENT understands and agrees that, in the event of any such disclosure without the prior written consent of OEHS, OEHS shall have no liability or responsibility to CLIENT or to any other person or entity as to any liability, damages, judgments, settlements, fees, costs, expenses, or any other amounts whatsoever incurred or resulting from such disclosure. Notwithstanding the foregoing, CLIENT shall be permitted to use any written reports issued by OEHS and any attachments or exhibits thereto to indicate the status of the subject property to the current owner(s), renter(s), lender(s) or prospective purchaser(s) in response to any duly served governmental request for information or documentation as to the condition or remediation of the subject property.

15. **INDEMNIFICATION:** CLIENT agrees to protect, indemnify, hold harmless and defend OEHS, its employees and officers, agents, representatives, or heirs from and against any and all liabilities, judgments, demands, claims, fines, penalties, damages, forfeitures and suits, together with reasonable attorneys' fees and witness fees and other costs and expenses of defense and settlement, which OEHS may incur, become responsible for, or pay out as a result of death or bodily injury or threat thereof to any person, destruction or damage to any property, contamination of or adverse effects on the natural environment, any violation of local, state or federal laws, regulations or orders, or any applicable foreign laws, or any other damages claimed by third parties based on or arising in whole or in part out of OEHS'S performance under this Agreement or out of CLIENT'S violation of law or breach of this Agreement. CLIENT shall provide prompt written notice to OEHS if CLIENT becomes aware of any claim, including any errors, omissions or inconsistencies in Services performed under this Agreement. CLIENT shall at its expense defend any claim or suit resulting from this Agreement and shall pay any judgment or settlement resulting there from. If, after such defense and payment, it is determined that the damage was caused by OEHS'S sole or contributory gross negligence, then OEHS shall reimburse CLIENT for the judgment and reasonable defense costs in proportion to OEHS'S negligence. OEHS shall have the right, but not the duty, to participate in any such claim or suit with attorneys of its own selection. The obligations in this paragraph survive termination of this Agreement.

16. **LIMITATION OF LIABILITY:** With regard to Services, OEHS shall not be liable to CLIENT, or to anyone who may claim any right due to any relationship with OEHS, for any acts or omissions in the performance of Services on the part of OEHS or on the part of the agents or employees of OEHS, except when acts or omissions of OEHS are due to willful misconduct or gross negligence of OEHS. CLIENT shall hold OEHS free and harmless from any obligations, costs, claims, judgments, settlements, attorneys' fees and attachments arising from or growing out of the services rendered to CLIENT pursuant to this Agreement or in any way connected with the rendering of Services, except when the same shall arise due to the willful misconduct or gross negligence of OEHS and OEHS is adjudged to be liable for willful misconduct or gross negligence by a court of competent jurisdiction.

17. **LIMITATION OF REMEDIES:** In the event of OEHS'S liability, whether based on contract or tort, CLIENT'S sole and exclusive remedy will be limited to, at OEHS'S option, replacement or correction of any Services not in conformance with this Agreement or to the repayment of the portion of compensation paid by CLIENT attributable to the nonconforming services. OEHS will not be liable to CLIENT for any other damage, either special, direct, indirect, incidental, consequential or otherwise, and in no event shall OEHS'S liability to CLIENT exceed the amount paid by CLIENT to OEHS for such nonconforming services.

18. **FORCE MAJEURE:** OEHS shall not be responsible for any delay or failure of performance caused by fire or other casualty, labor dispute, government or military action, terrorism, transportation delay, inclement weather, acts of God, epidemic, act or omission of CLIENT or its contractors, or any other cause beyond OEHS'S reasonable control, and OEHS may equitably adjust its charges to compensate OEHS for any additional costs it incurs due to any such delay.

19. **SEVERABILITY:** The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity and enforceability of any other provision herein. If any paragraph, sentence or clause of this Agreement shall be adjudged illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall have no effect on this Agreement as a whole or on any paragraph, sentence or clause herein not expressly so adjudged.

20. **WAIVER:** Any waiver by either party of any provision or condition of this Agreement shall not be construed or deemed to be a waiver of any other provision or condition of this Agreement, nor a waiver of a subsequent breach of the same provision or condition, unless such waiver be so expressed in writing and signed by the party to be bound.

21. **AMENDMENTS:** No modification of or change in this Agreement, waiver of any of its provisions or additional provisions shall be valid or enforceable unless previously approved in writing by the parties or their duly authorized representatives in the form of an amendment to this Agreement signed by the parties.

22. **COLLECTION OF DEBT:** In the event that CLIENT fails to make payment at the time it is due hereunder or to perform any other obligation of CLIENT hereunder, CLIENT agrees to pay all costs of collection of said amount incurred by OEHS, including but not limited to attorneys fees and collection costs.

23. **GOVERNING LAW:** This Agreement shall be governed by and interpreted pursuant to the laws of the State of Illinois and CLIENT freely submits to a court of competent jurisdiction situated in Sangamon County, Illinois should any dispute arise under the terms of this Agreement.

24. **ENTIRE AGREEMENT:** This Agreement represents the entire understanding and agreement between the parties relating to Services furnished by OEHS. This Agreement supersedes any and all prior agreements, whether written or oral, that may exist between the parties regarding same. No other terms, conditions, prior course of dealing, course of performance, usage of trade, understandings, purchase orders or agreements purporting to modify, vary, supplement or explain any provision of this Agreement shall be effective unless in writing and signed by representatives of both parties authorized to amend this Agreement.

## Basis of Payment (Consulting Services)

The following schedule is for normal design and consulting services on an hourly basis:

1. **Industrial Hygienist/Environmental Specialist/ Scientist Positions:**

Industrial Hygienist/Environmental Specialist/Scientist I -----	\$80.00
Industrial Hygienist/Environmental Specialist/Scientist II -----	\$85.00
Industrial Hygienist/Environmental Specialist/Scientist III -----	\$90.00
Industrial Hygienist/Environmental Specialist/Scientist IV -----	\$95.00
Industrial Hygienist/Environmental Specialist/Scientist V -----	\$100.00
Certified Industrial Hygienist I -----	\$110.00
Certified Industrial Hygienist II -----	\$120.00
Principal -----	\$140.00

2. **Technical Positions:**

Technician I -----	\$50.00
Technician II -----	\$55.00
Technician III -----	\$60.00
Technician IV -----	\$65.00
Technician V -----	\$70.00
Technician VI -----	\$75.00
Technician VII -----	\$85.00

3. **Administrative:**

Administrative I -----	\$45.00
Administrative II -----	\$50.00
Administrative III -----	\$55.00
Administrative IV -----	\$65.00

4. Charges for special services, expert testimony, etc. will be negotiated.
5. The above rates cover straight time only. Overtime (i.e. greater than eight per day) directed by the client will be surcharged by 25 percent.
6. Charges for outside consultants and contractors (other than outside consultants and contractors who perform services substantially similar to the services performed by employees within the job classifications described in paragraphs 1, 2 and 3 above) will be at invoice cost plus 15 percent.
7. Services performed by outside consultants and contractors who perform services substantially similar to the services performed by employees within the job classifications described in paragraphs 1, 2 and 3 above will be paid at the applicable rate set forth in paragraphs 1, 2 or 3 above, as appropriate.
8. Use of computer-aided design, drafting, microcomputers and GIS will be charged at \$ 45.00 hour.
9. All direct job expenses, materials and office supplies will be charged at cost plus 15 percent.
10. Mileage charges for automobile = \$0.65 per mile. Truck = \$0.75 per mile.
11. Charges for vehicles that will remain assigned to a specific job will be \$75.00 per day or \$1200.00 per month for automobiles, plus the actual cost of fuel in lieu of mileage charges.
12. Services will be billed monthly, and at the completion of the project. There will be an additional charge of 2.0 percent per month compounded on amounts outstanding more than 30 days.
13. Per Diem will be charged at 65.00 per day.
14. Invoices will be submitted on a bi-monthly basis.
15. Rates are subject to change and may be superseded by a new schedule on or about January 1, 2020.

## Basis of Payment

### Industrial Hygiene, Environmental and Safety Equipment Charges

Description	Unit Cost
Alnor Velometer Jr.	\$25.00 day
Alnor Velometer Sr.	\$75.00 day
Air-O-Cell Bioaerosol Sampling Cassette	\$12.00 each
Air-O-Cell Cassette Fungal Spore Analysis	\$95.00*each
Asbestos PCM Analysis	\$25.00 each
Asbestos PLM Analysis (5 day turn-around)	\$18.00* each
Asbestos PLM (Point Count) [5 day turn-around]	\$50.00* each
Asbestos TEM Analysis (5 day turn-around)	\$50.00* each
Bioaerosol Sampler (Anderson N-6)	\$75.00 day
Bioaerosol Fungal Air Sample Analysis (2 Plate)	\$100.00 each
Bioaerosol Fungal Micro-Vacuum Analysis	\$110.00 each
Bioaerosol Bacteria Air Sample Analysis (4 Plate)	\$230.00 each
Bioaerosol Fungal & Bacteria Air Sample Analysis (6 Plate)	\$270.00 each
Bioaerosol Fungal & Bacteria Air Sample Analysis (7 Plate)	\$290.00 each
Digital Camera (35mm)	\$35.00 day
Computer PC & Lap Top	\$30.00 day
Confined Space Meter, 4 Channel	\$75.00 day
Detector Tube Pump	\$10.00 day
Detector Tubes	\$9.00 each
High Volume Air Sample Pump	\$15.00 day
IAQ Parameter Data Log Meter (Metrosonics)	\$75.00 day
IAQ Parameter Testing (Delmhorst)	\$20.00 day
Lead Analyzer (Niton)	\$200.00 day
Lead Analysis (wipe, dust, bulk, soil)	\$25.00* each
Magnahelic Pressure Gage	\$10.00 day
Met One Particle Counter	\$60.00 day
Mini Buck Calibrator	\$20.00 day
Microbiological Fungal Swab/Bulk Sample Analysis	\$105.00 each
Microbiological Bacteria Swab/Bulk Sample Analysis	\$170.00 each
Microbiological Fungal & Bacterial Swab Sample Analysis	\$190.00 each
Microscope (PCM)	\$65.00 day
Moisture Detector (Delmhorst)	\$20.00 day
Noise Dosimeter	\$100.00 day
Photograph Prints	\$2.50 each
Personal Sampling Pump	\$25.00 day
Respirator (Full Face)	\$10.00 day
Respirator (Half Face)	\$5.00 day
Respirator (PAPR)	\$25.00 day
Respiratory Cartridges HEPA Filter	\$7.00 pair
Respiratory Cartridges (APR)	\$15.00 pair
SAS 360 Microbial Air Sampler	\$150.00 day
Sound Level Meter/Octave Band Analyzer	\$90.00 day
TSI Electronic Digital Pressure Gauge	\$25.00 day
Rotometer, Calibration Chamber	\$2.50 day
Smoke Tubes	\$4.00 each
Tape Lift Fungal Spore Analysis	\$70.00 each
TYVEK Coveralls	\$15.00 each
<b>Analytical Sample Media &amp; Equipment</b>	
Bioaerosol Air Sample Agar (2) Plate Set	\$10.00 each
Bioaerosol air Sample Agar (4) Plate Set	\$20.00 each
Bioaerosol Air Sample Agar (7) Plate Set	\$25.00 each
Bio-Swab/Bio-Bulk Media	\$2.00 each
Tape Lift Slide	\$2.00 each
Wall-Check Apparatus	\$2.00 each
Lead Wipes	\$1.00 each
Lead Centrifuge Tube	\$1.00 each
PCM Cassette	\$3.00 each
TEM Asbestos Cassette	\$3.50 each
4 oz. Wide Mouth Sample Container	\$3.00 each
8 oz. Wide Mouth Sample Container	\$4.00 each

\*Microbiological laboratory analytical fees of \$190 each are for non-priority services. In the event CLIENT requests next day turn-around, such fee shall be \$120 each. In the event CLIENT request same day turn-around, such fee shall be \$285 each.

\*Asbestos/Lead laboratory analytical fees are for non-priority services. In the event CLIENT requires expedited sane day or next day turn-around, please call for fees.

March 5, 2019

Dana Brenner  
Executive Director  
Champaign County Physical Plant  
1776 E. Washington Street  
Champaign, Illinois 61802

Re: Indoor Air Quality Evaluation  
METCAD Call Center (911)  
1905 E. Main Street  
Champaign, Illinois

Dear Mr. Brenner:

Occupational Environmental Health Solutions, Inc. (OEHS, Inc) was retained to conduct an Indoor Environmental Quality Investigation at the above-referenced location. Aspects of the investigation included the collection of culturable fungal swab and non-culturable fungal spore air samples from locations within the facility and inspection of the property. The purpose of the investigation was to evaluate the Indoor Air Quality within the facility to determine if fungal contamination is present in the building.

### **Background**

The building, located at 1905 E. Main Street in Champaign, Illinois consists of a single story building over a full basement utilized at a 911 call center. The building was originally constructed in about 1960's. The property contains approximately 10,000 ft<sup>2</sup> of floor space for both levels.

The purpose of this evaluation was to assess the facility for suspect fungi and to determine if fungal amplification is present in the building.

### **SUMMARY OF DATA COLLECTION ACTIVITIES**

On February 11, 2019, OEHS, Inc. conducted an inspection assessment of the building, examined the property for the presence of microbiological growth, and collected air and swab samples from areas on the ground floor.

OEHS, Inc. collected eight (8) non-culturable fungal spore air samples in the property, one (1) ambient outdoor sample to serve as a control and one (1) blank sample for quality assurance purposes for a total of ten (10) samples. In addition, two (2) culturable swab samples were collected.

## **Sampling Methodology**

### **Limited Invasive Sampling**

Due to the potential for the distribution of fungal spores and subsequent contamination of the contents of the occupied space, limited invasive sampling techniques (i.e. penetration of wall cavity interstitial spaces) were conducted in a controlled method during this investigation.

Breaching of interstitial spaces was controlled to maintain negligible invasiveness through the use of wet methods and low speed drill and/or awl penetration of the wall cavity. This eliminated potential contamination of the structure's contents and occupied zone.

### **Assessment Observations**

The interior and exterior of the facility were inspected for the presence of microbiological growth and related issues which could precipitate amplification of fungi.

### **Environmental Parameters**

An Environmental Parameters survey (i.e. temperature, relative humidity, dew point, absolute humidity) was conducted with a Delmhorst Model HT-3000 Thermo-Hygrometer. The purpose of the survey was to determine if environmental parameter levels of the facility were of sufficient quantity to promote fungal growth. Environmental parameter readings were also collected from the ambient atmosphere to serve as a control.

### **Microbiological Fungal Spore Air, and Swab Sampling**

Microbiological non-culturable fungal spore air and culturable fungal swab sampling was conducted in the property on February 11, 2019.

#### **Non-Culturable Fungal Spore Air Sampling Procedure**

Air-O-Cell air quality particle-sampling cassettes were used to collect the non-culturable fungal spore air samples. The Air-O-Cell cassette operates on the principle of inertial impaction. The principle of operation consists of a pump that pulls air at a fixed flow rate of 15 L/min. through the tapered slit. The pump is pre- and post-calibrated with a rotameter. The rotameter is calibrated quarterly utilizing a primary standard. The air is deflected 90 degrees by an optically clear sampling media surface below the slit. Smaller particles will follow the gas streamlines; however, larger particles with sufficient inertia will deviate from the streamlines and impact onto the adhesive gel strip surface while the remainder of the particles exit the back of the cassette.

Immediately after impactor sampling, the cassettes were stored with the sticky media side up in an insulated container. The insulated container maintained the impactor cassettes at room temperature during storage and shipment. The cassettes were shipped next day air under chain-of-custody to an American Industrial Hygiene Association (AIHA) Environmental Microbiology (EMLAP) accredited analytical laboratory.

Non-culturable fungal spore air samples were collected from the following locations on February 11, 2019:

1. Blank
2. Ambient
3. Ground Floor – Call Center
4. Ground Floor – Main Corridor Adjacent Entrance
5. Basement – Main Corridor
6. Basement – Education Center Room 110
7. Basement – Emergency Operations Center North End – Room 119
8. Basement – Emergency Operations Center South End – Room 119
9. Ground Floor – Emergency Management Agency – Room 105
10. Ground Floor – Mechanical Room

#### Culturable Fungal Swab Sample Procedure

The surface of the suspect fungal amplification was collected using a sterile swab and sterile techniques. The collection media was wetted with sterile water to enhance particle collection; the sample was collected aseptically through the use of gloves and touching only the bare end of the swab stick to the sample surface. The collected swab sample was placed in a sterile container and stored at about 41°F for shipment under chain-of-custody to an American Industrial Hygiene Association (AIHA) Environmental Microbiology (EMLAP) accredited analytical laboratory.

The culturable fungal swab sample was collected from the following location on February 11, 2019:

1. Ground Floor – Call Center East Wall – West End
2. Ground Floor – Call Center East Wall – East End

The sampling protocol followed the guidelines established by the American Industrial Hygiene Association (AIHA) Biosafety Committee. The swab samples collected on February 11, 2019 were to be analyzed for fungi. The three most predominant of each type of microorganism were to be identified.

### **DISCUSSION**

#### **Indoor Air Quality Complaints**

Indoor Air Quality complaints result in symptoms, which are the direct consequences of an inadequate indoor climate. Typically, building occupants complain of headaches and irritation of eyes, nose and throat. Indoor Air Quality concerns can be due to several types of building problems, which include sick building syndrome (SBS), building-related illnesses (BRI), and mass psychogenic illness (MPI).

#### **Sick Building Syndrome (SBS)**

Sick Building Syndrome is a condition associated with complaints of discomfort that include headache, nausea, dermatitis, eye, nose, throat, and respiratory irritation, coughing, difficulty concentrating, sensitivity to odors, muscle pain and fatigue. The specific causes of these symptoms are often not known but are sometimes attributed to the consequence of a combination of substances or individual susceptibility to low concentrations of contaminant. The symptoms are associated with periods of occupancy, and often disappear after the resident leaves the building site.

### **Building-Related Illnesses (BRI)**

Building-Related Illnesses are those for which there is a clinically defined illness of known etiology and includes infections such as Legionellosis and allergic reactions such as hypersensitivity diseases. Physical symptoms and laboratory findings often document these illnesses.

### **Mass Psychogenic Illness (MPI)**

Mass Psychogenic Illness refers to an apparent epidemic of complaints for which the probable source is social/psychological rather than toxicological. Symptoms might include headaches, fatigue, nausea, hyperventilation, and fainting. MPI is characterized by a sudden onset of symptoms, frequently coinciding with an unusual odor, and spreading by contact like a contagious disease.

### **Microbiological Contamination**

In recent years, bioaerosols (the term given to airborne microorganisms and their products) have become an important health issue in the areas of agriculture, biotechnology, non-industrial and residential indoor environments. Much of the concern regarding exposure to bioaerosols has focused on the ability of certain microorganisms to illicit inappropriate immunological responses in susceptible individuals. Adverse health effects to microorganisms are ultimately determined by the immunological state of the exposed individual, the affecting agent (i.e., fungi, bacteria, viruses, cell wall constituents, protozoas, and metabolic products such as mycotoxins), the airborne concentration, and the associated disease outcome (infection versus a sensitization reaction).

Microorganisms (including fungi and bacteria) are normal inhabitants of the environment. The saprophytic varieties (those utilizing non-living organic material as a food source) inhabit soil, vegetation, water, or any reservoir that can provide an ample supply of nutrients. Under the appropriate conditions (optimum temperature, and pH, sufficient moisture, and available nutrients) saprophytic microorganisms' populations can be amplified. Through various mechanisms, these microorganisms can then be disseminated as individual cells or in association with soil, dust, or water particles. In the outdoor environment, the level of bioaerosols will vary according to the geographic location, climatic conditions, and surrounding activity. In a well-maintained indoor environment, where there is no unusual source of microorganisms, their level may vary somewhat as a function of HVAC system filtration, the overall cleanliness of the HVAC system, and the number and activity level of occupants. Typically, the indoor levels of fungal bioaerosols are expected to be below the outdoor levels with a consistently similar ranking among the individual microorganisms. Acceptable levels of bioaerosols have not been established. This is primarily because allergic reactions can occur even with relatively low airborne concentrations of allergens, and because individuals differ with respect to immunogenic susceptibilities, and the diversity of the microorganisms to which we may be exposed is immense. It is unlikely that evaluation criteria for bioaerosols will be established in the near future given the lack of scientifically valid epidemiological and toxicological data to establish dose-response relationships. Because of this, the current strategy for the evaluation of environmental microbiological contamination involves an inspection to identify sources (reservoirs) of microbial growth and potential routes of dissemination (pathways). In those locations where contamination is either visible or suspect, bulk/surface samples and/or air

samples may be collected to identify the predominant microorganisms (fungi, bacteria, and thermoactinomycetes).

Dose-response data are not available for most microorganism exposures. In addition, health organizations have established no exposure limit for bioaerosols. Because of this, indoor bioaerosol levels must be compared to outdoor levels and/or to an asymptomatic control area. In general, indoor levels are lower than outdoor levels, and the taxa are similar. Until guidelines on acceptable concentrations of biological agents are developed for particular environments and human populations, it is imperative that knowledge, experience, and good industrial hygiene practice be used to interpret biological data information and to design remediation strategies.

### **Indicator Species**

Fungi whose presence indicates excessive moisture or a health hazard are described as indicator species (i.e. those recognized toxigenic fungi that are uncommon in outdoor air) and require the ability to identify fungi to the species level and knowledge of the prevalence of various fungal species in indoor and outdoor environments. The mere presence of a few colony forming units (CFUs) or spores of an indicator species should be interpreted with caution. Identification of the presence of a particular fungus in an indoor environment does not allow investigators to conclude that building occupants are exposed to antigenic or toxic agents. It is also important to note that fungi which are named as indicator species are not the only fungi of significance. Many fungi other than those specifically listed by various groups may cause problems for building occupants exposed through inhalation of fungal aerosols or via other contact.

The following are the recommendations from Europe and North America for fungi that should be considered indicator organisms.

#### Netherlands

1. *Aspergillus fumigatus*
2. *Aspergillus versicolor*
3. *Eurotium*
4. *Exophiala*
5. *Penicillium*
6. *Rhodotorula*
7. *Trichoderma*
8. *Wallemia*

#### Canada

##### Health Canada

1. *Aspergillus*
2. *Aspergillus fumigatus*
3. *Cryptococcus neoformans*
4. *Fusarium*
5. *Histoplasma*
6. *Penicillium*
7. *Stachybotrys chartarum*

## United States

### American Industrial Hygiene Association (AIHA)

1. *Stachybotrys chartarum*
2. *Aspergillus versicolor*
3. *Aspergillus flavus*
4. *Aspergillus fumigatus*
5. *Fusarium moniliforme*
6. *Histoplasma capsulatum*
7. *Cryptococcus neoformans*

### American Conference of Governmental Industrial Hygienists (ACGIH)

The ACGIH has taken the position that active fungal growth in indoor environments is inappropriate and may lead to unacceptable exposure and adverse health effects, rather than focusing on specific kinds of fungi or on quantitative measures of fungal prevalence. The following is a summary of ACGIH guidelines for assessing fungal issues in non-industrial indoor environments:

1. The presence of visible fungal growth confirmed by source sampling in occupied indoor environments is strong evidence that exposure may occur. The conditions leading to such growth should be corrected and the growth removed, using appropriate precautions.
2. The presence of moldy odors in occupied indoor environments is strong evidence that fungal growth is occurring. Such growth should be located and confirmed by source sampling. The conditions leading to the growth should be corrected and the growth removed, using appropriate precautions.
3. The persistent presence of water in indoor environments (except in places designed for the carriage or storage of water) is likely to lead to fungal growth. The conditions allowing such water to accumulate should be corrected.
4. Interpretation of source or air sampling data in the absence of any of the above conditions requires a sufficient number of samples (including controls) to ensure that results are not due to random chance. If these data requirements are met, an investigator may consider sampling results in light of the following:

Indoor/outdoor relationships are assessed both by comparing concentrations and species composition of comparably collected samples. In non-problem environments, the concentration of fungi in indoor air typically is similar to or lower than the concentration seen outdoors, except when outdoor air concentrations are near zero (i.e., during periods of snow cover). If fungal concentrations indoors are consistently higher than those outdoors, the indoor sources are indicated. However, indoor fungal growth may also be present in situations where indoor concentrations of airborne fungi are equal to or lower than those outdoors, and interpretation of data depends on knowledge of the kinds of fungi present in the two environments.

## **FINDINGS**

### **Building Interior**

Microbiological samples were collected from the interior and exterior of the building. The purpose of the sample collection was to determine if suspect fungal growth that is the result of fungal microorganisms are inhabiting the space.

### **Assessment Observations**

During the inspection on February 11, 2019 the following issues were identified:

1. There are sound proofing panels installed on the wall of the call center.
2. There is suspect fungal amplification on the backsides of the sound proofing panels and the grout lines of the concrete block wall located in the call center.

### **Environmental Parameters Survey**

The environmental parameters survey for relative humidity was negative for moisture concentrations which can precipitate fungal amplification in the building. Relative humidity levels which exceed 60% are known to provide moisture conditions suitable to precipitate fungal amplification (i.e. growth) of fungal organisms. The dew point temperature is the temperature at which moisture will begin to condense from the air. When the temperature of the air cools to the same value as the dew point temperature, the air is said to be “saturated”, it has reached 100% relative humidity. In this survey, the following levels were observed in the facility (See Table 1).

### **Culturable Microbiological Swab Sampling**

Microbiological swab sampling was conducted in the facility to determine the potential source of odors and suspect fungal amplification in the structure. The sample was collected in the above-captioned location.

Based on the sampling and analytical results, Tables 2 & 2a were used to interpret the data. Table 2 may be used to evaluate fungi and bacteria, while table 2a is used only for the evaluation of fungi.

Row five of Table 2 (i.e. samples with greater than 100,000 colony-forming units (CFU) per gram/square inch of fungi) is considered a high level of biological contamination. This Table was used to evaluate the culturable fungi swab sample. These criteria have been developed by PathCon Laboratory and are based on thousands of sample analyses.

Row five column two of Table 2a (i.e. samples with greater than 10,000 CFU/in<sup>2</sup>) represents guidelines published by the American Industrial Hygiene Association (AIHA). These guidelines have been established by practicing industrial hygienists from across the United States. It should be noted, that these guidelines were developed for addressing concerns regarding fungal and

**Table 1**  
**Environmental Parameters**  
**Indoor Environmental Air Quality Evaluation**  
**Champaign County Physical Plant METCAD 911 Call Center**  
**1905 E. Main Street**  
**Champaign, Illinois**  
**February 11, 2019**

<b>Sample Location</b>	<b>Relative Humidity (%)*</b>	<b>Temperature (°F)</b>	<b>Absolute Humidity (gpp)**</b>	<b>Dew Point (°F)</b>
Ambient	53.7	43.0	22.0	27
Ground Floor Call Center	34.4	71.1	39.1	42
Ground Floor Main Corridor Adjacent Entrance	25.7	63.7	25.1	31
Basement Main Corridor	24.9	70.0	27.1	33
Basement Education Center Room 110	25.3	70.3	27.5	33
Basement Emergency Operation Center South End Room 119	26.9	67.8	26.9	32
Ground Floor Emergency Management Agency	25.8	65.5	24	29
Ground Floor Mechanical Room	24.7	70.7	27.5	33

\*- Relative humidity also measures water vapor but relative to the temperature of the air. It is expressed as the amount of water vapor in the air as a percentage of the total amount that could be held at its current temperature.

\*\*-Absolute humidity is the measure of water vapor (moisture) in the air, regardless of temperature. It is expressed as grams of moisture per pound of air (gpp).

## **Culturable Microbiological Swab Sampling**

Microbiological swab sampling was conducted in the facility to determine the potential source of suspect fungal amplification in the structure. The sample was collected in the above-captioned location.

Based on the sampling and analytical results, Tables 2 & 2a were used to interpret the data. Table 2 may be used to evaluate fungi and bacteria, while table 2a is used only for the evaluation of fungi.

Row five of Table 2 (i.e. samples with greater than 100,000 colony-forming units (CFU) per gram/square inch of fungi) is considered a high level of biological contamination. This Table was used to evaluate the culturable fungi swab sample. These criteria have been developed by PathCon Laboratory and are based on thousands of sample analyses.

Row five column two of Table 2a (i.e. samples with greater than 10,000 CFU/in<sup>2</sup>) represents guidelines published by the American Industrial Hygiene Association (AIHA). These guidelines have been established by practicing industrial hygienists from across the United States. It should be noted, that these guidelines were developed for addressing concerns regarding fungal and fungi assessment and abatement and would not necessarily apply to health effects. In addition, they should not be used as the only means of decision-making in the remediation of fungal contamination.

### **Swab Samples**

The analytical results for the culturable swab samples collected from the call center east wall were considered to be at a moderate level of fungal contamination respectively as described in Table 2. Also, Table 2a describes the result of these sample location as the probable source of contamination of fungi. See Table 3 for the analytical results and Appendices A & B for the chain-of-custody form and the laboratory analytical report, respectively.

## **Non-Culturable Spore Air Sampling**

Dose-response data are not available for most microorganism exposures. In addition, health organizations have established no exposure limit for bioaerosols. Because of this, indoor bioaerosol levels must be compared to outdoor levels and/or to an asymptomatic control area. In general, indoor levels are lower than outdoor levels, and the taxa are similar. By comparing the microbiological profiles at the contaminated sites with those at uncontaminated sites, it is possible to determine if amplification of microorganisms has occurred in the contaminated areas of the building. If interior fungal spore counts are about 3 times the ambient it is considered to be a statistically significant amplification issue.

It is significant to note that the ambient levels of *Aspergillus/Penicillium* were 27 spores per cubic meter (S/m<sup>3</sup>), *Chaetomium* 0 S/m<sup>3</sup> while the facility had the following concentrations of *Aspergillus/Penicillium* & *Chaetomium*.

The analytical results for the non-culturable fungal spore air samples collected in the ground floor call center and the main corridor locations indicated elevated levels of *Aspergillus/Penicillium* of 21.0 and 5.2 times the ambient concentrations when compared to the ambient sample. In addition, *Chaetomium* was identified in the ground floor main corridor. See Table 5 for analytical results.

Spores are identified by direct microscopic examination. The size and shape of the spores are used for this purpose. When viewed under the microscope *Aspergillus* and *Penicillium* spores are of similar size and shape. Because of this, laboratories cannot differentiate between the two genera of fungi and they are reported as *Aspergillus/Penicillium*. In this investigation both *Penicillium* was identified during the culturable swab sampling.

**Table 2**  
**Path Con Laboratories**  
**Interpretation of Findings with Bulk and Swab Samples**  
**Colony-Forming Units (CFU) per gram or Square Inch**

CFU	Fungi
<1,000	Low
1,000<10,000	Moderate
10,000<100,000	Moderate
100,000<1,000,000	High
1,000,000 or greater	High

**Table 2a**  
**American Industrial Hygiene Association**  
**Guidelines for Fungal/Fungi Contamination**

Type	Normal Background*	Possible Contamination Source	Probable Contamination Source
Air Samples from Residential Building	<5,000 spores/m <sup>3</sup> <500 cfu/m <sup>3</sup>	5,000-10,000 spores/m <sup>3</sup> 500-1,000 cfu/m <sup>3</sup>	>10,000 spores/m <sup>3</sup> >1,000 cfu.m <sup>3</sup>
Air Samples from Commercial Building	<2,500 spores.m <sup>3</sup> <250 cfu/m <sup>3</sup>	2,500-10,000 spores/m <sup>3</sup> 250-1,000 cfu/m <sup>3</sup>	>10,000 spores/m <sup>3</sup> >1,000 cfu/m <sup>3</sup>
Dust Samples	<100,000 spores/g <10,000 cfu/g <50,000 mycelial frags/g	100,000-1,000,000 sporesm <sup>3</sup> >10,000-100,000 cfu/g 50,000-100,000 mycelial frags/g	1,000,000 spores/g >100,000 cfu/g >100,000 mycelial frags/g
Bulk Samples	<100,000 spores/g <10,000 cfu/g <50,000 mycelial frags/g	100,000-1,000,000 spores/g 10,000-100,000 cfu/g 50,000-100,000 mycelial frags/g	>1,000,000 spores/g >100,000 cfu/g >100,000 mycelial frags/g
Swab Samples	<10,000 cfu/in <sup>2</sup> <1,500 cfu/cm <sup>2</sup>	---	>10,000 cfu/in <sup>2</sup> >1,500 cfu/cm <sup>2</sup>
Tape Samples	NSFM or NSFB ** 1-5%	5-25%	25-100%

- \*Types and relative proportions of fungal spores should be similar to outdoors.
- \*\*NSFM = no significant fungal material; NSFB = no significant fungal biomass

These guidelines were developed for the purpose of addressing concerns regarding fungal assessments and abatement and would not necessarily apply to health effects. In addition, they should not be used as the only means of decision-making in the remediation of fungal contamination.

**Table 4**  
**Culturable Swab Sample Analytical Results**  
**Champaign County Physical Plant METCAD 911 Call Center**  
**1905 E. Main Street**  
**Urbana, Illinois**  
**Samples Collected February 11, 2019**

Sample Number	Sample Location	Sample Description	Fungi Analytical Results (CFU) <sup>1</sup> Interpretation <sup>2</sup> Taxa <sup>3</sup>
1	East Wall Call Center	Swab	Total 45,000 <i>Penicillium</i> species (39,000) Non-sporulating colonies (6,000)
2	East Wall Call Center	Swab	Total 17,000 <i>Penicillium</i> species (14,000) Non-sporulating colonies (3,000)

1 - Colony forming units of fungi on Malt Extract Agar per swab. Limits of the test were approximately 10 cfu/swab.

2 - Genera listed in descending order of occurrence. For fungal identifications, at least the 6 most predominant taxa present are listed.

3 - ( ) = Taxon Count/Total Count.

**Table 5**  
**Non-Culturable Fungal Spore Air Sample Analytical Results**  
**Champaign County Physical Plant METCAD 911 Call Center**  
**1905 E. Main Street**  
**Urbana, Illinois**  
**Samples Collected February 11, 2019**

Sample Number	Sample Location	Sample Time (Minutes)	Sample Description	Fungi Analytical Results <sup>1</sup> Taxa Number <sup>2</sup>
1	Blank	N/A	N/A	No Trace Detected <7
2	Ambient	10	Air Sample	160 <i>Cladosporium</i> (93) <i>Penicillium/Aspergillus</i> group (27) ascospores (20) basidiospores (7) Hyphal elements (7) Smuts/ <i>Periconia</i> /Myxomycetes (7)
3	Call Center	10	Air Sample	613 <i>Penicillium/Aspergillus</i> group (573) <i>Alternaria</i> (27) basidiospores (7) <i>Nigrospora</i> (7)
4	Ground Floor Main Corridor	10	Air Sample	193 <i>Penicillium/Aspergillus</i> group (140) basidiospores (20) Smuts/ <i>Periconia</i> /Myxomycetes (13) <i>Chaetomium</i> (7) Hyphal elements (7) Unknown (7)
5	Basement Main Corridor	10	Air Sample	140 <i>Penicillium/Aspergillus</i> group (67) <i>Cladosporium</i> (20) basidiospores (13) Hyphal elements (13) ascospores (7) <i>Epicoccum</i> (7) Smuts/ <i>Periconia</i> /Myxomycetes (7) Unknown (7)
6	Basement Education Center	10	Air Sample	73 <i>Penicillium/Aspergillus</i> group (67) Smuts/ <i>Periconia</i> /Myxomycetes (7)

**Table 5 Continued**  
**Non-Culturable Fungal Spore Air Sample Analytical Results**  
**Champaign County Physical Plant METCAD 911 Call Center**  
**1905 E. Main Street**  
**Urbana, Illinois**  
**Samples Collected February 11, 2019**

Sample Number	Sample Location	Sample Time (Minutes)	Sample Description	Fungi Analytical Results <sup>1</sup> Taxa Number <sup>2</sup>
7	Emergency Operations Center North End	10	Air Sample	40 Hyphal elements (13) <i>Penicillium/Aspergillus</i> group (13) basidiospores (7) <i>Cladosporium</i> (7)
8	Emergency Operations Center South End	10	Air Sample	60 <i>Penicillium/Aspergillus</i> group (27) <i>Cladosporium</i> (13) basidiospores (7) Hyphal elements (7) Unknown (7)
9	Ground Floor Emergency Management Agency	10	Air Sample	113 <i>Penicillium/Aspergillus</i> group (40) <i>Cladosporium</i> (27) Hyphal elements (20) basidiospores (7) <i>Epicoccum</i> (7) Rusts (7) Unknown (7)
10	Ground Floor Mechanical Room	10	Air Sample	100 <i>Penicillium/Aspergillus</i> group (53) Smuts/ <i>Periconia/Myxomycetes</i> (13) <i>Alternaria</i> (7) ascospores (7) <i>Aureobasidium</i> (7) basidiospores (7) <i>Cladosporium</i> (7)

1 - Estimated fungal spore concentration per Cubic Meter of Air. Counts may include other fungal fragments if present.

2 - Number of spores identified for the individual taxa.

## **Fungi**

The most predominate or significant fungal organisms that were identified were:

### **1. *Penicillium***

Members of the genus *Penicillium* are the common blue-green moulds that exist ubiquitously in nature and are among the most common of all laboratory contaminants. They colonize relatively dry materials (i.e., house dust at high RH). *Penicillium* species are generally cold temperature molds and predominate in temperate and colder regions. Many species produce antibiotics of value as chemotherapeutic agents in human medicine, while other species produce mycotoxins, which have serious deleterious effects on humans and animals.

In general, *Penicillium* species are regarded as low temperature molds. Because of this physiological limitation, they are not regarded as important clinical pathogens of humans and animals. However, there are exceptions to any biological rule. Some strains of *Penicillium* are rare opportunistic pathogens in humans, causing infections of the eyes, ears, lungs, urinary tract, and membrane lining of the heart.

Many species, such as *P. notatum* (penicillin) and *P. griseofulvum* (griseofulvin), produce antibiotics of value as chemotherapeutic agents in human medicine. Many other species produce mycotoxins, which have serious deleterious effects on humans and animals throughout the world, e.g., ochratoxins, citrinin, and patulin. *Penicillium brevicompactum* can produce the mycotoxins brevianamide A and mycophenolic acid.

### **2. *Aspergillus***

*Aspergillus* is a genus of fungi containing over 100 species, approximately 15 of which are commonly encountered in dwellings. All naturally occurring *aspergilli* are toxigenic. Aspergillosis is now considered the second most common fungal infection requiring hospitalization in the U.S. *Aspergillus* is routinely isolated from respiratory secretions, and skin scrapings. These opportunistic molds grow in most body tissues and fluids.

However, colonization or invasion is common, but not solely, associated with subcutaneous soft tissue and mucous membranes.

Indoor growth occurs in water-damaged building materials and may occur in damp linings of heating systems in fall and winter. They are commonly recorded in indoor and outdoor air sampling.

Most fungi require free water for growth. There are some species of *Aspergillus*, however, that can absorb water molecules directly from humid air. These xerophilic *Aspergillus* species can grow when the relative humidity of the air exceeds 60%. This humidity is commonly exceeded in the lower level of many buildings and, in these cases; *Aspergillus* then becomes a domestic hazard as an allergen. Species of the same genus can also grow in high substrate (low moisture) concentrations and are said to be osmotolerant. Several *Aspergillus* species are found as some of the most predominant fungi in indoor and outdoor air.

### **3. *Basidiomycetes (Basidiospores)***

Basidiomycota is a Division of fungi which include mushrooms, shelf fungi, puffballs, and rusts. Basidiomycetes are important decomposers of wood and other plant material.

The division also includes mycorrhiza-forming mutualists and plant parasites. Of all fungi, the saprobic basidiomycetes are best at decomposing the complex polymer lignin, an abundant component of wood. Two of the groups of basidiomycetes, the rusts and smuts, include particularly obnoxious plant parasites. Basidiospores are asexual spores from mushrooms. They are found worldwide in soil and decaying vegetation. Many are plant pathogens. Some species are an agent of dry rot.

#### 4. *Cladosporium*

In most parts of the world *Cladosporium* is the most abundant genus identified from atmospheric sampling. *Cladosporium* is known as the dry air spora. During crop harvesting or mowing, incredible levels of *Cladosporium* spores ( $10^9$  spores/m<sup>3</sup>) may be dispersed into the atmosphere. *Cladosporium* is routinely the most prevalent spore found during indoor air monitoring.

Allergic rhinitis, bronchitis and asthma typically occur in atopic individuals and are characteristic of an immediate upper-airway response within minutes of exposure to the relevant allergen. This is predominantly a type 1 IgE-mediated immune response. *Cladosporium* is one of the commonest genera causing seasonal mold allergies of this type.

### **Fungi**

A kingdom of organisms defined technically as a parasitic or saprobic, filamentous or single-celled eucaryotic organism devoid of chlorophyll and characterized by heterotrophic growth, production of extracellular enzymes, and a distinctive L-lysine biosynthesis pathway. Fungi (i.e. mold, yeasts, and mushrooms) may cause indoor environmental quality problems through the dissemination of conidia, spores, toxins or cell wall constituents.

Over 60 species of fungi are known to produce allergens that cause allergic rhinitis (hay fever) and asthma.

Fungi digest their food outside of the fungal cell. To accomplish this, they excrete enzymes into the environment. Many of these enzymes are unique to the fungi and allow degradation of extremely resistant substances (i.e. lignin, cellulose, and polyethylene).

In addition to enzymes, the fungi produce secondary metabolites that either accumulate in the environment or are stored within the fungus. These metabolites may be involved in the pathogenesis of fungal invasive disease. On the negative side, the most carcinogenic natural substance known is aflatoxin B1, a fungal metabolite. Fungi also produce many volatile compounds during active growth that can be odoriferous, and cause irritation.

The fungi have evolved primarily as decay organisms and are responsible for most aerobic decay in nature. There are fungi that will utilize almost any non-living organic substrate, and a few that will invade plant and animal (including human) tissue.

The majority of fungi are found on dead plant materials. All fungal spores found in indoor environments are ultimately derived from outdoor sources.

There are three classifications of infection caused by fungi:

1. **Systemic Infection:** The systemic fungal infections include *Histoplasmosis*, *Coccidioidomycosis*, *Blastomycosis* and *Paracoccidioidomycosis*. In most cases, infection is initiated when spores of the fungi that cause these diseases are inhaled. A large majority of these infections are self-limiting and produce minimal or no symptoms. Immune suppressed individuals may develop a chronic localized infection or the disease may disseminate throughout the body, which generally proves to be fatal.
2. **Opportunistic Infection:** Opportunistic infections are generally limited to individuals with impaired immunological defenses, where infection is secondary to a primary disease or condition. The opportunistic fungi are facultative parasites, meaning they can use both living and dead substrates for nutrients. Common opportunistic fungi include species of *Aspergillus*, *Cladosporium*, *Mucor*, *Rhizopus* and *Cryptococcus*.
3. **Dermatophytes:** Dermatophytes are a group of fungi that infect the hair, skin and nails. Infection usually occurs through direct contact with an infected individual or indirectly by sharing clothes, grooming utensils, towels, etc. Transmission to humans from an environmental source is extremely rare, although outbreaks from soil have been reported.

Conditions in the indoor environment that are especially conducive to the growth of fungi are high relative humidity (which allows condensation and absorption of water by hygroscopic materials), moisture that accumulates in appliances, and leaks and floods. In general, fungi prefer dampness rather than standing water, although some (i.e. *fusarium*, *phialophora*, and yeasts) will grow in standing water and have been recovered from humidifier reservoirs.

### Mycotoxins

The fungi produce many agents that can be toxic with sufficient exposure. In general, these agents fall into two classes: (a) secondary products of metabolism (i.e., mycotoxins, antibiotics, and VOC's), and (b) structural components [i.e.,  $\beta$ - (1 $\rightarrow$ 3)-D-glucans]. Mycotoxins are nonvolatile; relatively low-molecular-weight secondary metabolic products that may affect exposed persons in a variety of ways, the best known of, which are deleterious.  $\beta$ -1, 3-glucan is a constituent of fungal cell walls suggested as one of the possible causative agents of adverse effects in buildings with a history of water damage. Glucans comprise the bulk of the cell walls of most fungi. Glucans have anti-tumor activity and modulate the endotoxin-stimulated release of cytokines in Gram-negative bacterial infections. Glucans have irritant effects similar to, although less potent than, those of endotoxin. Exposure to glucans in dust has been associated with BRIs. Whether the glucans, some other fungal agent, or other factors associated with conditions leading to fungal growth actually mediated the effect remains to be investigated.

Mycotoxins are  $\gamma$ -products of fungal metabolic processes. These compounds are considered secondary metabolites because they are natural products not necessary for fungal growth and are derived from a few precursors formed during primary metabolism. The function of fungal toxins has not been clearly established. However, they are considered to play a role in regulating competition with other microorganisms, and mycotoxins probably help parasitic fungi invade host tissues.

Fungi that have been shown to produce mycotoxins are:

*Aspergillus*  
*Alternaria*  
*Fusarium*  
*Penicillium*  
*Stachybotrys*  
*Mrothecium*

### **Trichothecene**

A class of toxins produced by certain fungal species such as *Fusarium sporotrichoides* and *Stachybotrys chartarum*. These mycotoxins cause severe health effects in humans and other animals (i.e., T-2; HT-t; diacetoxyscirpenol, or DAS).

### **Mycotoxigenic**

The production of mycotoxins, which are known as specialized fungal toxins. Many different types of toxins are included in this broad category. Most are small, non-volatile molecules such as polyketides, amino acid derivatives, alkaloids, and trichothecenes.

### **Antigens/Allergens**

Fungi produce a variety of antigen and allergen compounds. In most cases, sensitization to antigens and allergens occurs via the airborne route. Two types of diseases that are caused by airborne fungal antigens are allergic diseases (asthma and rhinitis/hypersensitivity pneumonitis). In addition, some fungi can grow in the thick secretions that can build up in the lungs of some asthmatic patients. These fungi do not actually invade the human tissue but grow in the mucus and produce antigens (and possibly toxins) that cause disease. The most common fungus causing this disease is *Aspergillus fumigatus*, a ubiquitous environmental fungus that is also an opportunistic infectious agent.

### **Irritants**

The fungi produce volatile organic compounds during degradation of substrates that cause the typical “moldy” odor associated with fungal growth, as well as a wide variety of other odors. These substances can be irritating to the mucous membranes and some evidence is accumulating that they may cause headaches and possibly other kinds of acute toxic symptoms.

Only a few fungi (i.e., *Histoplasma*, *Blastomyces*, and *Cryptococcus*) are considered primary, systemic, human pathogens that can infect healthy persons. A large number of fungal species are known to cause infection in immunocompromised persons, such as those with AIDS or those receiving chemotherapy. These infections are known as opportunistic infections, and frequently involve fungi from the genera *Aspergillus* and *Fusarium*. Exposure to *Aspergillus* in this population may lead to respiratory or systemic forms of aspergillosis. *Fusarium* infections are rare, and normally cause local skin infections, although lethal invasive cases have been documented.

Allergic respiratory diseases resulting from exposure to fungi have been documented in agricultural and industrial biotechnology settings, offices, and building environments. These include allergic rhinitis (nasal allergy), allergic asthma, allergic bronchopulmonary aspergillosis,

and hypersensitivity pneumonitis (HP). Allergic rhinitis is characterized by sneezing, itching of the mucous membranes, and nasal congestion.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusions**

Dose-response data are not available for most microorganism exposures. In addition, health organizations have established no exposure limit for bioaerosols. Because of this, indoor bioaerosol levels must be compared to outdoor levels and/or to an asymptomatic control area. Comparison of the diversity of indoor fungi to that of outdoors is of primary importance to the interpretation of an indoor air quality study. If no reservoirs or amplification sites of fungi are located indoors, then it is anticipated that the same biodiversity will be found as outdoors. In general, indoor levels are lower than outdoor levels, and the taxa are similar. By comparing the microbiological profiles at the contaminated sites with those at uncontaminated sites, it is possible to determine if amplification of microorganisms has occurred in the contaminated areas of the building. It is important to note the differences in taxa between the building interior and ambient levels.

The sampling and analytical results indicate that there is currently fungal amplification present in the sampled area of the call center and main corridor (i.e. 21 and 5.2 times the ambient concentration respectively). The fungal amplification identified in the ground floor appears to be a result of a previous water intrusion issue associated with the sound proofing on the exterior block wall. Based on the sampling and analytical data, the areas with fungal amplification do appear to represent a contamination issue and should be remediated by a professional organization. It is important to note that these are recommendations for your consideration. These are not mandatory; therefore, the work practices outlined below can be performed by your staff.

### **Recommendations**

The United States Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) have issued guidelines entitled "Mold Remediation in Schools and Commercial Buildings". In addition, the New York City Department of Health (NYCHD) has issued guidelines entitled "Guidelines on Assessment and Remediation of Fungi in Indoor Environments".

The Institute of Inspection, Cleaning and Restoration Certification (IICRC) has published as document "Standard and Reference Guide for Professional Mold Remediation". The guidelines should also be followed during the remediation process. The Occupational Safety and Health Administration (OSHA) has promulgated a guideline for employee protection and work practices for use during fungal abatement projects which should be followed while completing this project.

The following actions are recommended for your consideration to address the above listed issues:

Follow the guidelines established by the U.S. Environmental Protection Agency (EPA) Occupational Safety and Health Administration (OSHA) the New York City Health Department (NYCHD), and the Institute of Inspection, Cleaning and Restoration Certification (IICRC) for the remediation of fungal contamination.

## 1. SHEET PLASTIC

- A. Polyethylene Sheet: Provide flame-resistant polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-Resistant Textiles and Films. Provide largest size possible to minimize seams, 6.0 mil (0.15 mm) thick frosted or black as indicated.

## 2. TEMPORARY ENCLOSURES - The area of contamination should be isolated during the remediation and decontamination process.

- A. Work Area: The location where Microbiological abatement work occurs. The work area is a variable of the extent of work of the contract. It may be a portion of a room, a single room, or a complex of rooms. A "Work Area" is considered contaminated during the work and must be isolated from the balance of the building and decontaminated at the completion of the Microbiological control work.
- B. Completely isolate the work area from other parts of the building to prevent Microbiological containing dust or debris from passing beyond the isolated area. Should the area beyond the work area(s) become contaminated with Microbiological-containing dust or debris because of the work, clean those areas in accordance with the procedures indicated in Paragraphs 7, & 8. Perform all such required cleaning or decontamination at no additional cost to owner.
- C. Construct enclosures to provide an airtight seal around ducts and openings into existing ventilation systems and around penetrations for electrical conduits, telephone wires, water lines, drain pipes, etc. Construct enclosures to be both airtight and watertight except for those openings designed to provide entry and/or air flow control.
- D. Size: Construct enclosure with sufficient volume to encompass all of the working surfaces yet allow unencumbered movement by the worker(s), provide unrestricted air flow past the worker(s), and ensure walking surfaces can be kept free of tripping hazards.
- E. Shape: The enclosure may be any shape that optimizes the flow of ventilation air past the worker(s).
- F. Structural Integrity: The walls, ceilings, and floors must be supported in such a manner that portions of the enclosure will not fall down during normal use.
- G. Barrier Supports: Provide frames as necessary to support all unsupported spans of sheeting.
- H. Openings: It is not necessary that the structure be airtight; openings may be designed to direct airflow. Such openings are to be located at a distance from active removal operations. They are to be designed to draw air into the enclosure under all anticipated circumstances. In the event that negative pressure is lost, they are to be fitted with either HEPA filters to trap dust or automatic trap doors that prevent dust from escaping the enclosure. Openings for exits are to be controlled by an airlock or a vestibule.

- I. Place all tools, scaffolding, staging, etc. necessary for the work in the area to be isolated prior to completion of work area isolation.
- J. Areas within an Enclosure: Each enclosure consists of a work area, a decontamination area, and waste storage area. The work area where the Microbiological removal operations occur are to be separated from both the waste storage area and the contamination control area by physical curtains, doors, and/or airflow patterns that force any airborne contamination back into the work area.
- K. Removing Mobile Objects: Clean movable objects and remove them from the work area before an enclosure is constructed unless moving the objects creates a hazard. Mobile objects will be assumed to be Microbiological contaminated and are to be either cleaned with amended water and a HEPA vacuum and then removed from the area or wrapped and then disposed of as Microbiological-contaminated waste.
- L. Disabling HVAC Systems: The power to the heating, ventilation, and air conditioning systems that service the regulated area must be deactivated and locked out. All ducts, grills, access ports, windows, and vents must be sealed off with two layers of plastic to prevent entrainment of contaminated air.
- M. Lockout power to work area by switching off all breakers serving power or lighting circuits in work area. A lock and tag corridor be placed on each breaker used to de-energize circuits and equipment with notation "DANGER circuit being worked on." Lock panel and have all keys under control of authorized person who has applied the locks.
- N. Lockout power to circuits running through work area wherever possible by switching off all breakers or removing fuses serving these circuits. Label breakers with tape over breaker with notation "DANGER circuit being worked on." Lock panel and have all keys under control of authorized person who applied locks. If circuits cannot be shut down for any reason, label at intervals four ft (1-22 in) on center with signs reading, "DANGER live electric circuit. Electrocutation hazard." Label circuits in hidden locations, but which may be affected by the work in a similar manner.

### 3. CRITICAL BARRIERS

- A. Completely separate the work area from other portions of the building, and the outside by closing all openings with sheet plastic barriers at least 6 mil (0.15 mm) in thickness, or by sealing cracks leading out of work area with duct tape.
- B. Individually seal all ventilation openings (supply and exhaust), lighting fixtures, clocks, doorways, windows, convectors and speakers, and other openings into the work area with duct tape alone or with polyethylene sheeting at least 6 mil (0.15 mm) in thickness, taped securely in place with duct tape. Maintain seal until all work including project decontamination is completed. Take care in sealing of lighting fixtures to avoid melting or burning of sheeting.

- C. Provide sheet plastic barriers at least 6 mil (0.15 mm) in thickness as required to seal openings completely from the work area into adjacent areas. Seal the perimeter of all sheet plastic barriers with duct tape or spray cement.
- D. Mechanically support sheet plastic independently of duct tape or spray cement seals so that seals do not support the weight of the plastic. Following are acceptable methods of supporting sheet plastic barriers. Alternative support methods may be used if approved in writing by the designer.
  - 1. Plywood squares 6 in. x 6 in. x 3/8 in. (152 mm x 152 mm x 9.53 mm) held in place with one 6d smooth masonry nail or electro-galvanized common nail driven through center of the plywood and duct tape on plastic so that plywood clamps plastic to the wall. Locate plywood squares at each end, corner and at maximum 4 ft (1.22 in) on centers.
  - 2. Nylon or polypropylene rope or wire with a maximum unsupported span of 10 ft (3.05 m), minimum 1/4 in. (6.35 mm) in diameter suspended between supports securely fastened on either side of opening at maximum 1 ft (304.8 mm) below ceiling. Tighten rope so that it has 2 in. (50.8 mm) maximum dip. Drape plastic over rope from outside work area so that a 2 ft long flap of plastic extends over rope into work area. Staple or wire plastic to itself 1 in. (25.4 mm) below rope at maximum 6 in. (152 mm) on centers to form a sheath over rope. Lift flap and seal to ceiling with duct tape or spray cement. Seal loop at bottom of flap with duct tape. Erect entire assembly so that it hangs vertically without a "shelf" upon which debris could collect.
- E. Provide pressure-differential system per Paragraph 7.
  - 1. Clean housings and ducts of all overspray materials prior to erection of any critical barrier that will restrict access.

#### 4. PRIMARY BARRIER

- A. Protect building and other surfaces in the work area from damage from water and high humidity or from contamination from Microbiological-containing debris, slurry or high airborne organism levels by covering with a primary barrier as described below.
  - 1. Sheet Plastic: Protect surfaces in the work area with two (2) layers of plastic sheeting on floor and walls, or as otherwise directed on the contract drawings or in writing by the designer. Perform work in the following sequence.
    - a. All seams in the sheeting should overlap, be staggered, and not be located at corners or wall-to-floor joints.

#### 5. ISOLATION AREA

- A. Maintain isolation areas between the work area and adjacent building area.
  - 1. In unoccupied areas located between work area and adjacent occupied portions of the building.

2. In locations where separation between work area and occupied portions of building is formed by sheet plastic and/or temporary barriers.
  3. Floor below work area.
- B. Form isolation area by controlling access to the space in the same manner as a work area. Physically isolate the space from the work area and adjacent areas. Accomplish physical isolation by:
1. Installing critical barriers in unoccupied space.
  2. Erecting a second critical barrier a minimum of 3 ft (1.0 m) away from work area.
6. The area of contamination should be placed under a negative pressure with a high efficiency particulate air (HEPA) filtered negative air machine.
- A. Isolate the work area from all adjacent areas or systems of the building with a pressure differential that will cause a movement of air from outside to inside at any breach in the physical isolation of the work area.
- B. Relative Pressure in Work Area: Continuously maintain the work area at an air pressure that is lower than that in any surrounding space in the building, or at any location in the immediate proximity outside of the building envelope. This pressure-differential when measured across any physical or critical barrier must equal or exceed a static pressure of-
1. 0.02 in. (0.5 mm) of water.
- C. Accomplish the pressure-differential by exhausting a sufficient number of HEPA-filtered fan units from the work area. The number of units required will depend on machine characteristics, the seal at barriers, and required air circulation. The number of units will increase with increased make-up air or leaks into the work area. Determine the number of units required for pressure isolation by the following procedure:
1. Establish required air circulation in the work area, personnel and equipment decontamination units.
  2. Establish isolation by increased pressure in adjacent areas or as part of seals where required.
  3. Exhaust a sufficient number of units from the work area to develop the required pressure-differential.
  4. The required number of units is the number determined above plus one additional unit.
  5. Vent HEPA-filtered fan units to outside of building unless authorized in writing by designer.

6. Vent each HEPA-filtered fan unit to inlet of second unit. Vent second unit to a controlled area in the building. Insure that controlled area is isolated from balance of building by critical barriers at all times that units are in operation.
  7. Mount units to exhaust directly or through disposable ductwork.
  8. Use only new ductwork except for sheet metal connections and elbows.
  9. Use ductwork and fittings of same diameter or larger than discharge connection on fan unit.
  10. Use inflatable, disposable plastic ductwork in lengths not greater than 100 ft (30 meters).
  11. Use spiral wire-reinforced flex duct in lengths not greater than 50 ft (15 meters).
  12. Arrange exhaust as required to inflate duct to rigidity sufficient to prevent flapping.
  13. If direction of discharge from fan unit is not aligned with duct, use sheet metal elbow to change direction. Use 6 ft (2 meters) of spiral wire reinforced flex duct after direction change.
7. Contract with a licensed builder to correct all moisture intrusion issues in the facility prior to beginning abatement activities.

#### Ground Floor

8. Porous building construction materials located in the ground floor (i.e. block walls and sound proofing) that are contaminated with visible fungal growth should be washed with a strong detergent solution [(i.e. Trisodium Phosphate) (one cup in two gallons of water)] to remove gross contamination, and HEPA vacuumed to remove any remaining fungi and/or fungal spores. When utilizing this cleaning method, caution is advised due to the corrosive nature of TSP. Adequate Personal Protective Equipment (PPE) should be provided and used to protect the eyes and skin of workers. If contamination is found to extend past the surface of these construction materials, (i.e. >1/16"), the construction material should be removed or the contamination should be removed by sanding or other mechanical method.

Subsequent to abatement and cleaning activities, a HEPA filtered negative air machine should be allowed to operate in the ground floor forty-eight hours to eliminate any contamination. During the period that the negative air machines are operating, the HVAC air conditioning systems should not be operated. This is because of the potential of back-drafting (pulling carbon monoxide) from gas fired equipment into the occupied space of the building.

Subsequent to completion of remediation activity, commercial dehumidification equipment should be operated in the ground floor until post abatement verification testing has been completed.

## Basement

- 8a. Subsequent to abatement and cleaning activities, a HEPA filtered negative air machine should be allowed to operate in the basement for forty-eight hours to eliminate any contamination. During the period that the negative air machines are operating, the HVAC air conditioning systems should not be operated. This is because of the potential of back-drafting (pulling carbon monoxide) from gas fired equipment into the occupied space of the building.
9. The heating ventilating and air conditioning (HVAC) system supply and return ductwork and/or plenum, AC coil and condensate pan should be cleaned by a licensed contractor.
10. Personnel entering the space to conduct decontamination work should be provided with negative pressure air purifying full face respirators equipped with HEPA cartridges. Prior to placing employees in respiratory protection devices, comply with U.S. Department of Labor Occupational Safety and Health Administration, Safety and Health Standards Section 29 CFR 1910.134.
11. Provide and require the use of protective clothing, such as coveralls or similar whole body clothing, head covering, gloves and foot covering for any employee exposed to airborne concentrations of microbiological organisms. Require that workers change out of coveralls in the equipment room of the personnel decontamination unit. Dispose of coveralls as microbiological waste at completion of all work.
12. Provide worker protection as required by the most stringent OSHA Standard and/or EPA Guidelines applicable to the work. The following procedures are minimums to be adhered to regardless of organism count in the work area.
  - A. Require all workers to adhere to the following personal decontamination procedures whenever they leave the work area:
    1. Air-Purifying Negative Pressure Respirators: Require that all workers use the following decontamination procedure as a minimum requirement whenever leaving the work area with a full-face cartridge-type respirator:
      - a. When exiting area, remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the equipment room.
      - b. Still wearing respirators, proceed to clean room. Care must be taken to follow reasonable procedures in removing the respirator and filters to avoid microbiological organisms. The following procedure is required as a minimum:
        - c. Take a deep breath, hold it and/or exhale slowly, wet wipe face, thoroughly wetting face, respirator and filter (air-purifying respirator). While still holding breath, remove respirator and hold it away from face before starting to breathe.
        - d. Dispose of wet filters from air-purifying respirator.

- e. Carefully wash face piece of respirator inside and out.
- f. Proceed from clean room to changing room and change into street clothes or into new disposable work items.

B. Within Work Area

1. Require that workers NOT eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the work area. To eat, chew, drink or smoke, workers corridor follows

the procedure described above, and then dress in street clothes before entering the non-work areas of the building.

13. The work of this procedure involves activities that will disturb microbiological-containing materials (MCM). The disturbance or dislocation of MCM may cause microbiological organisms to be released into the building's atmosphere, thereby creating a potential health risk to workers. Apprise all workers, supervisory personnel, subcontractors and consultants who will be at the job site of the seriousness of the risk and of proper work procedures, which must be followed.
14. All workers are to be accredited by the Association of Specialists in Cleaning & Restoration (ASCR) or the Institute of Inspection, Cleaning and Restoration Certification (IICRC).
15. Waste Disposal
  - A. All waste is to be hauled by a waste hauler with all required licenses from all state and local authority with jurisdiction.
  - B. Liquid Waste: Mix all liquid, microbiological-containing waste or Microbiological-contaminated waste with a solid material so that it forms a solid (non-liquid) form and have the concurrence of the landfill operator prior to disposal.
  - C. Load all adequately wetted RMCM in disposal bags or leak-tight containers. All materials are to be contained in one of the following:
    1. Two 6 mil (0.15 mm) disposal bags; or
    2. Two 6 mil (0.15 mm) disposal bags and a fiberboard drum; or
    3. Sealed steel drum with no bag.
  - D. Protect interior of truck or dumpster with critical and primary barriers as described in paragraphs 3 & 4.
  - E. Carefully load containerized waste in fully enclosed dumpsters, trucks, or other appropriate vehicles for transport. Exercise care before and during transport to ensure that no unauthorized persons have access to the material.

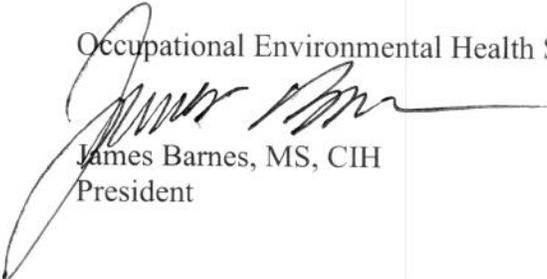
- F. Warning Signs: During loading and unloading, mark dumpsters, receptacles, and vehicles with a sign complying with requirements of the EPA Guidelines in a manner and location that a person can read the following legend:
- DANGER  
MICROBIOLOGICAL DUST HAZARD  
AUTHORIZED PERSONNEL ONLY
- G. Do not store containerized materials outside of the work area. Take containers from the work area directly to a sealed truck or dumpster.
- H. Do not transport disposal bagged materials on open trucks. Label drums with same warning labels as bags. Uncontaminated drums may be reused. Treat drums that have been contaminated as RCM and dispose of in accordance with this specification.
- I. Advise the landfill operator or processor, at least ten days in advance of transport, of the quantity of material to be delivered.
- J. At disposal site unload containerized waste:
1. At a disposal site, sealed plastic bags may be carefully unloaded from the truck. If bags are broken or damaged, return to work site for rebagging. Clean entire truck and contents using procedures set forth in Paragraph 7.
  2. At a processing site, truck and loading dock are arranged as a controlled work area and containerized waste is transferred to storage area by site personnel. All bags, including broken ones, will be transferred. Clean truck, using procedures set forth in Paragraph 7.
- K. Retain receipts from landfill or processor for materials disposed of.
- L. At completion of hauling and disposal of each load, submit copy of waste manifest, chain- of-custody form, and landfill receipt to designer.
16. It is important to note that some remediation firms deliberately convince their clients to not consider or allow post abatement verification testing by an independent company subsequent to the completion of the fungal abatement project. This intentional lack of post abatement verification testing sanctions abatement contractors to only partially complete the project, knowing that post abatement verification testing will expose a deficient job. However, the owner should recognize that without post abatement verification there is no evidence to substantiate successful completion of the project. In addition, there is no documented evidence which can be provided to an intermediary to comply with regulatory agencies.
17. Subsequent to remediation, post abatement verification air sampling should be conducted in the property to document that the fungal contamination has been successfully abated.

Data regarding site conditions may vary depending upon when and where obtained, resulting in possible uncertainty with respect to the interpretation of actual conditions at the site. Non-invasive sampling was conducted on the date, and at the time and place, of the inspection assessment. Occupational Environmental Health Solutions, Inc. OEHS offers no assurances and assumes no liability for site conditions or activities which are outside the scope of the inspection assessment requested by client. This inspection assessment report presents data collected on the date, and at the time and place, of the inspection assessment. OEHS MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE INSPECTION ASSESSMENT. Any alteration, editing or characterization of this inspection assessment report without the express written permission of OEHS is strictly prohibited.

If you have any questions please contact me at (217) 483-9296.

Sincerely

Occupational Environmental Health Solutions, Inc.



James Barnes, MS, CIH  
President



346 Williams Lane  
 P.O. Box 252  
 Chatham, Illinois 62629  
 Phone (217) 483-9296  
 FAX (217) 483-4196  
 Toll Free (877) 634-7462

**Bill To**

**Champaign County Physical Plant**  
**Dana Brenner, Dir. Facilities**  
**1776 E Washington Street**  
**Urbana, Illinois 61802**

Date	Invoice #
3/26/2019	7764

# Invoice

Terms
Due on receipt

Item	Description	Qty	Rate	Serviced	Amount
Indoor Air Qua...	Champaign County Physical Plant, Indoor Air Quality Evaluation, Metcadd Call Center, 1905 E. Main Street, Urbana, Illinois	1	2,500.00	2/11/2019	2,500.00
Post Abatement...	Indoor Air Quality Fungal Evaluation	1	1,500.00	3/18/2019	1,500.00
	Post Abatement Verification Air Monitoring				

Thank you for your business.		<b>Total</b>	\$4,000.00
		<b>Payments/Credits</b>	\$0.00
		<b>Balance Due</b>	<b>\$4,000.00</b>

March 27, 2019

Dana M. Brenner  
Administrator  
Champaign County Physical Plant  
1776 E. Washington Street  
Urbana, Illinois 61802

Re: Indoor Air Quality Services  
Post Abatement Testing  
METCAD Call Center (911)  
1905 E. Main Street  
Urbana, Illinois

Dear Mr. Brenner:

Occupational Environmental Health Solutions, Inc. (OEHS) was retained by Champaign County Physical Plant to conduct Indoor Air Quality Fungal Post Abatement Verification Air Monitoring for the above-referenced location. Aspects of the project included post abatement verification monitoring that included the collection of non-culturable fungal air samples from locations within the facility. The purpose of the air monitoring episode was to document that fungal abatement was successful and that contamination generated by the remediation activity did not migrate into the occupied portion of the building.

### **BACKGROUND**

Fungal contamination was identified in the Champaign County METCAD Call Center (911) during the February 11, 2019 indoor air quality evaluation of the property. The source of the contamination is unknown.

### **AIR SAMPLING METHODS**

#### **MICROBIOLOGICAL POST ABATEMENT SAMPLING**

##### **Non-Culturable Fungal Post Abatement Verification Air Sample Locations**

At the request of the Client, non-culturable fungal air sampling rather than culturable air monitoring was conducted in the facility at the following locations:

March 18, 2019

1. Blank
2. Ambient
3. Call Center – Outside Containment
4. Call Center – Main Corridor

## 5. Call Center – Inside Containment

The purpose was to determine if the fungal contamination identified during the February 11, 2019 inspection had been eliminated subsequent to abatement activity and cleaning. Air-O-Cell air quality particle-sampling cassettes were used to collect the non-culturable fungal spore air samples.

### Post Abatement Verification Air Monitoring Method

The Air-O-Cell cassette operates on the principle of inertial impaction. The principle of operation consists of a pump that pulls air at a fixed flow rate of 15 L/min. through the tapered slit. The pump is pre- and post-calibrated with a rotameter. The rotameter is calibrated quarterly utilizing a primary standard (see Appendix A for the calibration data sheets). The air is deflected 90 degrees by an optically clear sampling media surface below the slit. Smaller particles will follow the gas streamlines; however, larger particles with sufficient inertia will deviate from the streamlines and impact onto the adhesive gel strip surface while the remainder of the particles exits the back of the cassette.

Immediately after impactor sampling, the cassettes were stored with the sticky media side up in an insulated container. The insulated container maintained the impactor cassettes at room temperature during storage and shipment. The cassettes were shipped next day air under chain-of-custody to an American Industrial Hygiene Association (AIHA) Environmental Microbiology (EMLAP) accredited analytical laboratory.

## **FINDINGS**

### **MICROBIOLOGICAL RESULTS**

#### Non-Culturable Fungal Post Abatement Verification Air Samples

Dose-response data are not available for most microorganism exposures. In addition, health organizations have established no exposure limit for bioaerosols. Because of this, indoor bioaerosol levels must be compared to outdoor levels and/or to an asymptomatic control area. In general, indoor levels are lower than outdoor levels, and the taxa are similar. By comparing the microbiological profiles at the contaminated sites with those at uncontaminated sites, it is possible to determine if amplification of microorganisms has occurred in the contaminated areas of the facility. If interior fungal spore counts are about 3 times the ambient it is considered to be a statistically significant amplification issue.

#### Non-Culturable Fungal Air Post Abatement Verification Results

The analytical results for the post abatement verification non-culturable fungal air samples collected from the facility on March 18, 2019 were not considered contaminated with fungi when compared to the ambient sample. See Table 1 for the laboratory analytical results and Appendix A & B respectively for the Chain-O-Custody and laboratory analytical report.

## **CONCLUSIONS**

Occupational Environmental Health Solutions, Inc. conducted non-culturable fungal post abatement air sampling for the above captioned facility. Based on the sampling and analytical results, the facility should be considered not contaminated.

**Table 1**  
**Non-Culturable Fungal Spore Air Sample Analytical Results**  
**Indoor Environmental Air Quality Evaluation**  
**METCAD Call Center (911)**  
**1905 E. Main Street**  
**Urbana, Illinois**  
**Samples Collected March 18, 2019**

Sample Number	Sample Location	Sample Time (Minutes)	Sample Description	Fungi Analytical Results <sup>1</sup> Taxa Number <sup>2</sup>
1	Blank	N/A	N/A	No Trace Detected <7
2	Ambient	10	Air Sample	113 basidiospores (87) <i>Penicillium/Aspergillus</i> group (20) ascospores (7)
3	Outside Containment Call Center	10	Air Sample	13 basidiospores (13)
4	Main Hallway	10	Air Sample	40 basidiospores (20) <i>Cladosporium</i> (7) <i>Penicillium/Aspergillus</i> group (7) Smuts/ <i>Periconia/Myxomycetes</i> (7)
5	Inside Call Center Containment	10	Air Sample	13 basidiospores (13)

1 - Estimated fungal spore concentration per Cubic Meter of Air. Counts may include other fungal fragments if present.  
2 - Number of spores identified for the individual taxa.

Abatement activities were begun on about March 10, 2019 and concluded on March 15, 2019. Fungal abatement was performed inside the affected areas of the facility using negative pressure gross containments constructed of 6-mil poly sheeting. The gross containments were under negative pressure (i.e. 5 Pascals or 0.02" w.g.) during abatement activities and until air monitoring documented fungal levels were equal to or less than three times the ambient concentrations. Air monitoring was conducted subsequent to abatement activities, inside the gross containment area, and outside the containment area.

#### Facility Post Abatement Verification Conclusions

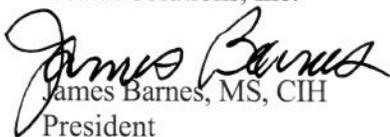
The containment and associated equipment (negative air HEPA filtered machines) remained in place until the post abatement verification air sample analytical results were received. The purpose of this post abatement verification air sampling procedure was to determine if the fungal concentration inside of the facility were equal to or below the established fungal levels. At the completion of abatement project, airborne fungal levels in and around the facility was less than three times the ambient levels and the remediation was considered successful.

Data regarding site conditions may vary depending upon when and where obtained, resulting in possible uncertainty with respect to the interpretation of actual conditions at the site. OEHS offers no assurances and assumes no liability for site conditions or activities which are outside the scope of the post abatement air monitoring assessment requested by client. This post abatement air monitoring assessment report presents data collected on the date, and at the time and place of the post abatement air monitoring. OEHS MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE POST ABATEMENT AIR MONITORING ASSESSMENT. Any alteration, editing or characterization of this post abatement verification inspection assessment report without the express written permission of OEHS is strictly prohibited.

If you have any questions concerning this issue, please contact me at (217) 483-9296.

Sincerely,

Occupational Environmental  
Health Solutions, Inc.

  
James Barnes, MS, CIH  
President

OEHS, Inc.  
346 Williams Lane P.O. Box 252  
Chatham, Illinois 62629  
Attn: Doug Barnes  
Project: **CC 911 Call Center 31819**  
Condition of Sample(s) Upon Receipt: Acceptable

Date Collected: 03/18/2019  
Date Received: 03/20/2019  
Date Analyzed: 03/25/2019  
Date Reported: 03/25/2019  
Project ID: 19010791  
Page 1 of 3

1054 Spore Trap Analysis: SOP 3.8

Client Sample Number	1				2			
Sample Location	Blank				Ambient			
Sample Volume (L)	0				150			
Lab Sample Number	19010791-001				19010791-002			
Spore Identification	Raw Ct	spr/m <sup>3</sup>	% Ttl	In/Out	Raw Ct	spr/m <sup>3</sup>	% Ttl	In/Out
ascospores	-	-	-	-	1	7	6	-
basidiospores	-	-	-	-	13	87	76	-
Penicillium/Aspergillus group	-	-	-	-	3	20	18	-
	Debris Rating 0				Debris Rating 2			
Analytical Sensitivity	Analytical Sensitivity: 0 spr/m <sup>3</sup>				Analytical Sensitivity: 7 spr/m <sup>3</sup>			
Comments								
Total *See Footnotes	0	0	-	-	17	113	~100%	-

Client Sample Number	3				2			
Sample Location	Outside Containment Call Center				Ambient			
Sample Volume (L)	150				150			
Lab Sample Number	19010791-003				19010791-002			
Spore Identification	Raw Ct	spr/m <sup>3</sup>	% Ttl	In/Out	Raw Ct	spr/m <sup>3</sup>	% Ttl	In/Out
ascospores	-	-	-	-	1	7	6	-
basidiospores	2	13	100	1/7	13	87	76	-
Penicillium/Aspergillus group	-	-	-	-	3	20	18	-
	Debris Rating 2				Debris Rating 2			
Analytical Sensitivity	Analytical Sensitivity: 7 spr/m <sup>3</sup>				Analytical Sensitivity: 7 spr/m <sup>3</sup>			
Comments								
Total *See Footnotes	2	13	~100%	1/9	17	113	~100%	-

OEHS, Inc.  
346 Williams Lane P.O. Box 252  
Chatham, Illinois 62629  
Attn: Doug Barnes  
Project: **CC 911 Call Center 31819**  
Condition of Sample(s) Upon Receipt: Acceptable

Date Collected: 03/18/2019  
Date Received: 03/20/2019  
Date Analyzed: 03/25/2019  
Date Reported: 03/25/2019  
Project ID: 19010791  
Page 2 of 3

Client Sample Number	<b>4</b>				<b>2</b>			
Sample Location	<b>Main Hallway</b>				<b>Ambient</b>			
Sample Volume (L)	<b>150</b>				<b>150</b>			
Lab Sample Number	<b>19010791-004</b>				<b>19010791-002</b>			
<b>Spore Identification</b>	Raw Ct	spr/m <sup>3</sup>	% Ttl	In/Out	Raw Ct	spr/m <sup>3</sup>	% Ttl	In/Out
ascospores	-	-	-	-	1	7	6	-
basidiospores	3	20	50	1/4	13	87	76	-
Cladosporium	1	7	17	-	-	-	-	-
Penicillium/Aspergillus group	1	7	17	1/3	3	20	18	-
Smuts, Periconia, Myxomycetes	1	7	17	-	-	-	-	-
	Debris Rating <b>3</b>				Debris Rating <b>2</b>			
Analytical Sensitivity	Analytical Sensitivity: <b>7 spr/m<sup>3</sup></b>				Analytical Sensitivity: <b>7 spr/m<sup>3</sup></b>			
Comments								
Total *See Footnotes	6	40	~100%	1/3	17	113	~100%	-

Client Sample Number	<b>5</b>				<b>2</b>			
Sample Location	<b>Inside Call Center Containment</b>				<b>Ambient</b>			
Sample Volume (L)	<b>150</b>				<b>150</b>			
Lab Sample Number	<b>19010791-005</b>				<b>19010791-002</b>			
<b>Spore Identification</b>	Raw Ct	spr/m <sup>3</sup>	% Ttl	In/Out	Raw Ct	spr/m <sup>3</sup>	% Ttl	In/Out
ascospores	-	-	-	-	1	7	6	-
basidiospores	2	13	100	1/7	13	87	76	-
Penicillium/Aspergillus group	-	-	-	-	3	20	18	-
	Debris Rating <b>2</b>				Debris Rating <b>2</b>			
Analytical Sensitivity	Analytical Sensitivity: <b>7 spr/m<sup>3</sup></b>				Analytical Sensitivity: <b>7 spr/m<sup>3</sup></b>			
Comments								
Total *See Footnotes	2	13	~100%	1/9	17	113	~100%	-

OEHS, Inc.  
346 Williams Lane P.O. Box 252  
Chatham, Illinois 62629  
Attn: Doug Barnes  
Project: **CC 911 Call Center 31819**  
Condition of Sample(s) Upon Receipt: Acceptable

Date Collected: 03/18/2019  
Date Received: 03/20/2019  
Date Analyzed: 03/25/2019  
Date Reported: 03/25/2019  
Project ID: 19010791  
Page 3 of 3

## Footnotes and Additional Report Information

### Debris Rating Table

1	Minimal (<5%) particulate present	Reported values are minimally affected by particulate load.
2	5% to 25% of the trace occluded with particulate	Negative bias is expected. The degree of bias increases directly with the percent of the trace that is occluded.
3	26% to 75% of the trace occluded with particulate	Negative bias is expected. The degree of bias increases directly with the percent of the trace that is occluded.
4	75% to 90% of the trace occluded with particulate	Negative bias is expected. The degree of bias increases directly with the percent of the trace that is occluded.
5	Greater than 90% of the trace occluded with particulate	Quantification not possible due to large negative bias. A new sample should be collected at a shorter time interval or other measures taken to reduce particulate load.

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1. Penicillium/Aspergillus group spores are characterized by their small size, round to ovoid shape, being unicellular, and usually colorless to lightly pigmented. There are numerous genera of fungi whose spore morphology is similar to that of the Penicillium/Aspergillus type. Two common examples would be Paecilomyces and Acremonium. Although the majority of spores placed in this group are Penicillium, Aspergillus, or a combination of both. Keep in mind that these are not the only two possibilities.

2. Ascospores are sexually produced fungal spores formed within an ascus. An ascus is a sac-like structure designed to discharge the ascospores into the environment, e.g. Ascobolus.

3. Basidiospores are typically blown indoors from outdoors and rarely have an indoor source. However, in certain situations a high basidiospore count indoors may be indicative of a wood decay problem or wet soil.

4. The colorless group contains colorless spores which were unidentifiable to a specific genus. Examples of this group include Acremonium, Aphanocladium, Beauveria, Chrysosporium, Engyodontium microconidia, yeast, some arthrospores, as well as many others.

5. Hyphae are the vegetative mode of fungi. Hyphal elements are fragments of individual Hyphae. They can break apart and become airborne much like spores and are potentially allergenic. A mass of hyphal elements is termed the mycelium. Hyphae in high concentration may be indicative of colonization.

6. Dash (-) in this report, under raw count column means 'not detected (ND)'; otherwise 'not applicable' (NA).

7. The positive-hole correction factor is a statistical tool which calculates a probable count from the raw count, taking into consideration that multiple particles can impact on the same hole; for this reason the sum of the calculated counts may be less than the positive hole corrected total.

8. Due to rounding totals may not equal 100%.

9. Analytical Sensitivity for each spores is different for Non-viable sample when the spores are read at different percentage. Analytical Sensitivity is calculated as  $\text{spr}/\text{m}^3$  divided by raw count.  $\text{spr}/\text{m}^3 = \text{raw counts} \times (100/\% \text{ read}) \times (1000/\text{Sample volume})$ . If Analytical Sensitivity is  $13 \text{ spr}/\text{m}^3$  at 100% read, Analytical Sensitivity at 50% read would be  $27 \text{ spr}/\text{m}^3$ , which is 2 times higher. Analytical Sensitivity provided on the report is based on an assumed 100% of the trace being analyzed.

10. Minimum Reporting Limits (MRL) for BULKs, DUSTS, SWABS, and WATER samples are a calculation based on the sample size and the dilution plate on which the organism was counted. Results are a compilation of counts taken from multiple dilutions and multiple medias. This means that every genus of fungi or bacteria recovered can be counted on the plate on which it is best represented.

11. If the final quantitative result is corrected for contamination based on the blank, the blank correction is stated in the sample comments section of the report.

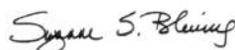
12. The results in this report are related to this project and these samples only.

13. For samples with an air volume of < 100L, the number of significant figures in the result should be considered (2) two. For samples with air volumes between 100-999L, the number of significant figures in the result should be considered (3) three. For example, a sample with a result of  $55,443 \text{ spr}/\text{m}^3$  from a 75L sample using significant figures should be considered 55,000. The same result of  $55,443$  from a 150L sample using significant figures should be considered  $55,400 \text{ spr}/\text{m}^3$ .

14. If the In/Out ratio is greater than 100 times it is indicated >100/1, rather than showing the real value.

#### Terminology Used in Direct Exam Reporting

**Conidiophores** are a type of modified hyphae from which spores are born. When seen on a surface sample in moderate to numerous concentrations they may be indicative of fungal growth.



Suzanne S. Blevins, B.S., SM (ASCP)  
Laboratory Director

**19010791**  
 19010791



LAB #192683 (CO)  
 LAB #102977 (GA)  
 LAB #3063 (VA)  
 LAB #10229 (AZ)

<b>Aerobiology Client</b> OEHS, Inc.		AZ CO GA VA NJ	
<b>Field Contact</b>	Doug Barnes	<b>Collected By/Date</b>	<i>[Signature]</i> 3/18/19
<b>Reporting Address</b>	346 Williams Lane P.O. Box 252	<b>Relinquished By/Date</b>	<i>[Signature]</i> 3/18/19
<b>Billing Address</b>	Chatham, Illinois 62629	<b>Received By/Date</b>	ST 3/24/19
<b>Phone/Fax</b>	217-483-9296	<b>Sampler Type</b>	Andersen <u>    </u> SAS <u>    </u>
<b>Reporting Email(s)</b>	jbarnes@oehsinc.com	<b>Sample Aire</b>	AeroTrap <u>    </u>
<b>Routine</b>	<input checked="" type="radio"/> 24 Hour <input type="radio"/> Same Day <input type="radio"/> 4 Hou <input type="radio"/> 2 Hou	<b>Other</b>	BioCulture <u>    </u>
<b>SAMPLING LOCATION ZIP CODE</b>		<b>PO#/Job#:</b>	
		<b>Project Name:</b>	CC 911 Call Center <del>31819</del> 31819
		<b>5 Day (Asbestos Only)</b>	<b>Notes:</b>
		<b>CC Info:</b>	

Sample No.	Test Code	Sample Location	Total Volume/Area
1	1054	Blank	NA
2	1054	Ambient	150
3	1054	Outside Containment Call Center	150
4	1054	Main Hallway	150
5	1054	Inside Call Center Containment	150
6			
7			
8			
9			
10			
11			
12			
13			
14			

1054	Direct, Non-viable Spore Trap	1015	Culture - WATER Legionella
1051	Direct, Qualitative- Swab/Tape	1017	Culture - SWAB Legionella
1050	Direct, Qualitative- Bulk	1010	WATER - Potable - E. coli/total coliforms
1005	AIR Culture - Bacterial Count w/ ID's	1012	SWAB - E. coli/total coliforms
1030	AIR Culture - Fungal Count w/ ID's	1028	Sewage Screen (E. coli/Enterococcus/fecal coliforms)
1006	SWAB Culture - Bacterial Count w/ ID's	2056	Heterotrophic Plate Count
1031	SWAB Culture - Fungal Count w/ ID's	3001	ASBESTOS - Point count
1008	BULK Culture - Bacterial Count w/ ID's	3002	ASBESTOS - PLM Analysis
1033	BULK Culture - Fungal Count w/ ID's	3003	ASBESTOS - Particle characterization
1007	WATER Culture - Bacterial Count w/ID's	3004	ASBESTOS - PCM Analysis

7184 North Park Drive Pennsauken NJ 08109 - (856) 486-1177 Fax (856) 486-0005 - email info@pureearthlab.com  
 2400 Herodian Way Suite 190 Smyrna GA 30080 - (866) 620-9313 Fax (770) 947-2938 - email ATL@aerobiology.net  
 780 Simms Street Suite 104 Golden CO 80401 - (866) 620-9348 Fax (303) 232-0283 - email denver@aerobiology.net  
 43760 Trade Center Place Suite 100 Dulles VA 20166 - (877) 648-9150 Fax (877) 598-0946 - email info@aerobiology.net  
 15061 Springdale Street Suite 111 Huntington Beach CA 92649 - (714) 895-8401 - (866) 895-8132 - email social@aerobiology.net  
 2228 West Northern Avenue Suite B110 Phoenix AZ 85021 - (855) 738-5619 Fax (602) 441-2818 - email phoenix@aerobiology.net



346 Williams Lane  
 P.O. Box 252  
 Chatham, Illinois 62629  
 Phone (217) 483-9296  
 FAX (217) 483-4196  
 Toll Free (877) 634-7462

**Bill To**

**Champaign County Physical Plant  
 Dana Brenner, Dir. Facilities  
 1776 E Washington Street  
 Urbana, Illinois 61802**

Date	Invoice #
3/7/2019	7764

# Invoice

Terms
Due on receipt

Item	Description	Qty	Rate	Serviced	Amount
Indoor Air Qua...	Champaign County Physical Plant, Indoor Air Quality Evaluation, Metcadd Call Center, 1905 E. Main Street, Urbana, Illinois Indoor Air Quality Fungal Evaluation	1	2,500.00	2/10/2019	2,500.00

Thank you for your business.		<b>Total</b>	\$2,500.00
		<b>Payments/Credits</b>	\$0.00
		<b>Balance Due</b>	<b>\$2,500.00</b>



## ServiceMaster Restoration DSI

2506 N Mattis Ave  
Champaign, IL 61822  
TIN: 36-3711293

Insured: METCAD  
Business: 1905 E Main St  
Urbana, IL 61802

Business: (217) 265-4101

Estimator: Brandi Semonick  
Business: 2506 N Mattis Ave  
Champaign, IL 61822

Cellular: (217) 202-7428  
E-mail: brandis@smdsi.com

**Claim Number:**

**Policy Number:**

**Type of Loss: MOLD**

<b>Coverage</b>	<b>Deductible</b>	<b>Policy Limit</b>
Dwelling	\$0.00	\$0.00
Other Structures	\$0.00	\$0.00
Contents	\$0.00	\$0.00

Date Contacted: 3/6/2019

Date of Loss:

Date Received: 3/6/2019

Date Inspected: 3/7/2019

Date Entered: 3/7/2019 7:51 PM

Price List: ILCH8X\_MAR19  
Restoration/Service/Remodel  
Estimate: CHAMP\_COUNTY\_METCAD

Depreciate Material: Yes  
Depreciate Non-material: Yes  
Depreciate Removal: No

Depreciate O&P: No  
Depreciate Taxes: Yes



**ServiceMaster Restoration DSI**

2506 N Mattis Ave  
 Champaign, IL 61822  
 TIN: 36-3711293

**CHAMP\_COUNTY\_METCAD**

**Supplies/Materials**

CAT	SEL	ACT DESCRIPTION	REMOVE	REPLACE	TAX	TOTAL
	CALC	QTY				
8. HMR	PPE+	+ Add for personal protective equipment - Heavy duty				
	3*3*3	27.00 EA	0.00+	18.82 =	50.81	558.95
9. HMR	PPERC	+ Respirator cartridge - HEPA only (per pair)				
	3	3.00 EA	0.00+	10.58 =	3.17	34.91
10. FCW	BARRV	& R&R Containment barrier - visqueen - 6mil				
	1	1.00 RL [*]	0.00+	125.00 =	0.01	125.01
13. DMO	MASKFL	- Floor protection - self-adhesive plastic film				
	2	2.00 RL	15.00+	0.00 =	0.02	30.02
15. DRY	MASKLF	+ Mask - tape				
	2	2.00 RL [*]	0.00+	8.00 =	0.05	16.05
18. HMR	NAFAN	+ Negative air fan/Air scrubber (24 hr period) - No monit.				
	1*3	3.00 DA	0.00+	72.07 =	0.00	216.21
19. HMR	FHEPA	+ Add for HEPA filter (for negative air exhaust fan)				
	1	1.00 EA	0.00+	196.51 =	18.24	214.75
20. WTR	DHM>	+ Dehumidifier (per 24 hour period) - Large - No monitoring				
	1*3	3.00 EA	0.00+	73.13 =	0.00	219.39
<b>Totals: Supplies/Materials</b>					<b>72.30</b>	<b>1,415.29</b>

**Labor**

CAT	SEL	ACT DESCRIPTION	REMOVE	REPLACE	TAX	TOTAL
	CALC	QTY				
2. LAB	HMRT	+ Mold Cleaning Technician - per hour				
	2*24	48.00 HR [*]	0.00+	95.00 =	0.00	4,560.00
5. LAB	HMRT-S	+ Mold Cleaning -Supervisory/Admin- per hour				
	1*24	24.00 HR [*]	0.00+	100.00 =	0.00	2,400.00
<b>Totals: Labor</b>					<b>0.00</b>	<b>6,960.00</b>
<b>Line Item Totals: CHAMP_COUNTY_METCAD</b>					<b>72.30</b>	<b>8,375.29</b>



## ServiceMaster Restoration DSI

---

2506 N Mattis Ave  
Champaign, IL 61822  
TIN: 36-3711293

### Summary for Dwelling

Line Item Total	8,302.99
Material Sales Tax	72.30
<b>Replacement Cost Value</b>	<b>\$8,375.29</b>
<b>Net Claim</b>	<b>\$8,375.29</b>

---

Brandi Semonick



## ServiceMaster Restoration DSI

---

2506 N Mattis Ave  
Champaign, IL 61822  
TIN: 36-3711293

### Recap of Taxes

	Material Sales Tax (10%)	Food & Med State Tax (1%)	Food & Med Local Tax (1.25%)
<b>Line Items</b>	72.30	0.00	0.00
<b>Total</b>	<b>72.30</b>	<b>0.00</b>	<b>0.00</b>



## ServiceMaster Restoration DSI

---

2506 N Mattis Ave  
Champaign, IL 61822  
TIN: 36-3711293

### Recap by Room

Estimate: **CHAMP\_COUNTY\_METCAD**

Supplies/Materials	1,342.99	16.17%
Labor	6,960.00	83.83%
<hr/>		
Subtotal of Areas	8,302.99	100.00%
<hr/>		
Total	8,302.99	100.00%



## ServiceMaster Restoration DSI

2506 N Mattis Ave  
Champaign, IL 61822  
TIN: 36-3711293

### Recap by Category

<b>Items</b>	<b>Total</b>	<b>%</b>
<b>GENERAL DEMOLITION</b>	<b>30.00</b>	<b>0.36%</b>
<b>DRYWALL</b>	<b>16.00</b>	<b>0.19%</b>
<b>FLOOR COVERING - WOOD</b>	<b>125.00</b>	<b>1.49%</b>
<b>HAZARDOUS MATERIAL REMEDIATION</b>	<b>952.60</b>	<b>11.37%</b>
<b>LABOR ONLY</b>	<b>6,960.00</b>	<b>83.10%</b>
<b>WATER EXTRACTION &amp; REMEDIATION</b>	<b>219.39</b>	<b>2.62%</b>
<b>Subtotal</b>	<b>8,302.99</b>	<b>99.14%</b>
<b>Material Sales Tax</b>	<b>72.30</b>	<b>0.86%</b>
<b>Total</b>	<b>8,375.29</b>	<b>100.00%</b>



Restoration Specialist  
 Residential/Commercial  
 General Contractor  
 TIN: 36-3711293

**DSI Holdings Corporation**  
 Servicemaster DSI  
 2400 Wisconsin Avenue  
 Downers Grove IL 60515  
 800 954-9444

# Invoice

*An independent business  
 licensed to serve you by  
 ServiceMaster Restore*

<b>Bill To:</b>
Champaign County Admin Service 1776 E Washington St Urbana IL 61802

<b>Service Address:</b>
Champaign County Admin Service 1905 E Main St Urbana IL 61802

Customer ID	Customer PO/ Claim No	Payment Terms	
5627531		30DY	
Project Manager	Invoice Number	Invoice Date	Due Date
Brandi Semonick	06-01088.001	03/27/2019	<b>04/26/2019</b>
Description	Unit Price	Amount	
Mold Mitigation Services	8,375.29	8,375.29	

Thank you for allowing ServiceMaster by DSI the opportunity to be of service to you. If a claim has been filed, please contact your adjuster regarding claim and payment status.

If you have questions regarding the services billed, please contact your project manager. All other payment inquiries may be made by contacting the Accounts Receivable department at 800-954-9444.

We thank you and are grateful for your business.

For MO Residents:

Notice to Owner: Failure of this contractor to pay those persons supplying materials or services to complete this contract can result in the filing of a mechanic's lien on the property which is a subject of this contract pursuant to chapter 429, RSMO. To avoid this result you may ask this contractor for "lien waivers" from all persons supplying material or service for the work described in this contract. Failure to secure lien waivers may result in you paying for labor and material twice.

Invoice Amount:	\$8,375.29
Payment/Credit Applied:	\$0.00
<b>Amount Due</b>	<b>\$8,375.29</b>

**You can now pay your bill online. Visit us at [www.ServiceMasterDSI.com](http://www.ServiceMasterDSI.com).** 206

**Etech Controls Corporation**  
**Detention Systems Design and Integration**

4051 Alvis Court Ste 3  
 Rocklin, CA 95677

Phone # 916-630-1300 Fax # 916-630-1100

CERTIFIED SMALL BUSINESS #52189 EXP. 3/31/2017

**Manufacturer of**  
**Secure-Tech.com**  
**Detention Products**

**ESTIMATE/QUOTE**

DATE: 3/5/2019
ESTIMATE/QUOTE #: 2984

**Bill To:**

Champaign County Facility Director  
 Brookens Administrative Center  
 1776 E. Washington Street  
 Urbana, IL 61802

**Ship To:**

Downtown Jail  
 204 E. Main Street  
 Urbana, IL 61802

Estimate Prepared For:	Job Name:	Projected Ship Date:	Customer Phone	Customer Fax
Chris Smith		TBD	(217) 384-3765	

Qty	U/M	Item	Description	Unit Price	Total Estimate:
8		Travel Time	Travel time to facility (Day 1)	120.00	960.00
1		Travel Time	Travel OVERTime to facility (Day 1)	180.00	180.00
16		Service / Maintenance Services	Service/Maintenance (Day 2 & Day 3)	190.00	3,040.00
8		Travel Time	Travel Time from facility (Day 4)	120.00	960.00
8		Travel Time	Travel OVERTime from facility (Day 4)	180.00	1,440.00
1		travel expense	Round trip Flight from Sacramento to Champaign IL airport \$929.70 + 25%	1,162.12	1,162.12
3		Per Diem	Per Diem	95.00	285.00
3		travel expense	Lodging \$115 + 25%	143.75	431.25
1		travel expense	Car Rental \$160.00 + 25% 2 days rental	200.00	200.00
1	ea	STHC-0682D	PROGRAMMABLE SERIAL PLC CPU CONTROLLER	631.00	631.00
1	ea	STHC-0715	SERIAL SHIFT REGISTER 32 OUTPUT MOD	345.00	345.00
1	ea	STHC-0714C	SERIAL SHIFT REGISTER 32 INPUT MOD	442.00	442.00
1	ea	4000-ELK-P624	POWER SUPPLY/ BATTERY CHARGER, 6,12 & 24V DC, 3" X 3", AC/DC PWR INDICATORS	51.51	51.51

This is an estimate of costs only and is based upon our current standard service rates. Actual costs will vary depending on job time & other variables. Service work at your facility is on a T&M basis and is not a guarantee of the reparability of, or current availability of parts for, the equipment to be worked upon. We will require a signed order to proceed. You may use this form for your PO. Please call with any questions.  
 Availably Date - Subtract todays date from above "Projected Date". Add the number of days to your P.O. Date. Terms & Conditions available at [http //secure-tech.com/termsconditions.pdf](http://secure-tech.com/termsconditions.pdf)

Authorized Signature: Dana Brenner PO# \_\_\_\_\_  
 Please Print Name: DANA BRENNER Date: 3/6/19

<b>Subtotal</b>	\$10,127.88
<b>Sales Tax (0.0%)</b>	\$0.00
<b>Total Estimate:</b>	<b>\$10,127.88</b>

**- THIS IS NOT AN INVOICE -**

CALIFORNIA SMALL BUSINESS #52189 - FEMALE OWNED

Estimator's Signature: \_\_\_\_\_

NOTES: Reflects price change 1/1/2010  
 - DISCOUNTED "SERVICE CONTRACT" RATES ARE AVAILABLE - PLEASE SEE OUR ATTACHED RATE SHEET.  
 - ALL INVOICES ARE NET 15 AND ALL PRICES ARE IN U.S. CURRENCY. VISA AND MASTERCARD ACCEPTED FOR YOUR CONVENIENCE.  
 - RECEIPTS WILL BE PROVIDED WHERE THE CHARGE TYPE IS BASED UPON ACTUAL COSTS. (if required)  
 - THIS BID / ESTIMATE IS VALID FOR 45 DAYS UNLESS STATED OTHERWISE ABOVE  
 - IF DROP SHIPPING, PLEASE INCLUDE YOUR CUSTOMER'S PO#, CONTACT NAME & TELEPHONE NUMBER.  
 - MINIMUM FREIGHT CHARGE OF \$20.00 ON ALL SHIPPED ORDERS - IF OVER, ACTUAL WILL BE BILLED  
 - QUOTES FOR SERVICE, MILES, TRAVEL, ETC., ARE ESTIMATED-ACTUAL WILL BE BILLED.

**NEW ACCOUNTS REQUIRE 30% DOWN WITH INITIAL ORDER**



# Etech Controls Corporation

P.O. Box 3218  
Rocklin, CA 95677

Phone # 916-630-1300  
Fax # 916-630-1100  
acctg@etechcontrols.com

# Invoice

Invoice #	2684
Invoice Date	3/19/2019

**Bill To:**

Champaign County Facility Director  
Brookens Administrative Center  
1776 E. Washington Street  
Urbana, IL 61802

**Ship To:**

Downtown Jail  
204 E. Main Street  
Urbana, IL 61802

Terms		Sales O...		P.O. Number		Rep	Tracking #		Ship Date	Ship Via	F.O.B.
Net 30 days		4700		Chris Smith		TT			3/13/2019	Our Tech	Rocklin, CA
L/I	Ordered	Qty Ship...	Bkord	U/M	Item	Description		Price Each	Amount		
1	8	8			Travel Time	Travel time to Champaign, IL (Day 1) Original flight was delayed due to weather, unable to make connecting flight. Changed flight to arrive in Chicago (Midway)		120.00	960.00		
2	4	4			Travel Time	Travel OVERTime to Champaign, IL (Day 1)		180.00	720.00		
3	4	4			Service / Maintenance Services	Service/Maintenance (Day 2 ) Adjusted power supplies and wires. System stable - unable to make system fail. Tested All OK.		190.00	760.00		
4	2	2			Service / Maintenance Services	Received phone call from Chris Smith at 4pm PT stating the panel had issues. Arrived at facility (Day 3) Changed out (2) HC-714 out put boards. Tightened all wires. Attempted to get system to fail. System stable - Tested All Ok		190.00	380.00		
5	6	6			Travel Time	Travel Time from Champaign, IL to Sacramento (Day 3)		120.00	720.00		
6	4	4			Travel Time	Travel OVERTime from Champaign to Sacramento (Day 3)		180.00	720.00		
7	1	1			travel expense	Round trip Flight from Chicago, IL to Sacramento airport \$960.66 + 25%		1,200.83	1,200.83		
8	2	2			Per Diem	Per Diem		95.00	190.00		
9	1	1			travel expense	Lodging \$127.69 + 25%		159.62	159.62		
10	2	2			travel expense	Car Rental \$105.20 + 25% 2 days rental		131.50	263.00		
11	1	1			travel expense	Gas + toll		61.00	61.00		
12	1	1	0	ea	STHC-0715	SERIAL SHIFT REGISTER 32 OUTPUT MOD		345.00	345.00		

Project:

Terms of Payment: Unless otherwise agreed by Etech Controls Corporation, all invoices are due net 30 days from billing date. As a condition of the sales agreement, a monthly service charge of the lesser of 1 1/2% or the maximum permitted by law may be added to all accounts within 30 days after due date.

**Manufacturer of  
Secure-Tech  
Detention Products**  
View Our Catalog at  
[www.secure-tech.com](http://www.secure-tech.com)

Subtotal	\$6,479.45
Sales Tax (0.0%)	\$0.00
<b>Total</b>	<b>\$6,479.45</b>
Payments/Credits	\$0.00
<b>Balance Due</b>	<b>\$6,479.45</b>