



**PROJECT MANUAL FOR:**

**CAPITAL AREA TRANSPORTATION AUTHORITY**

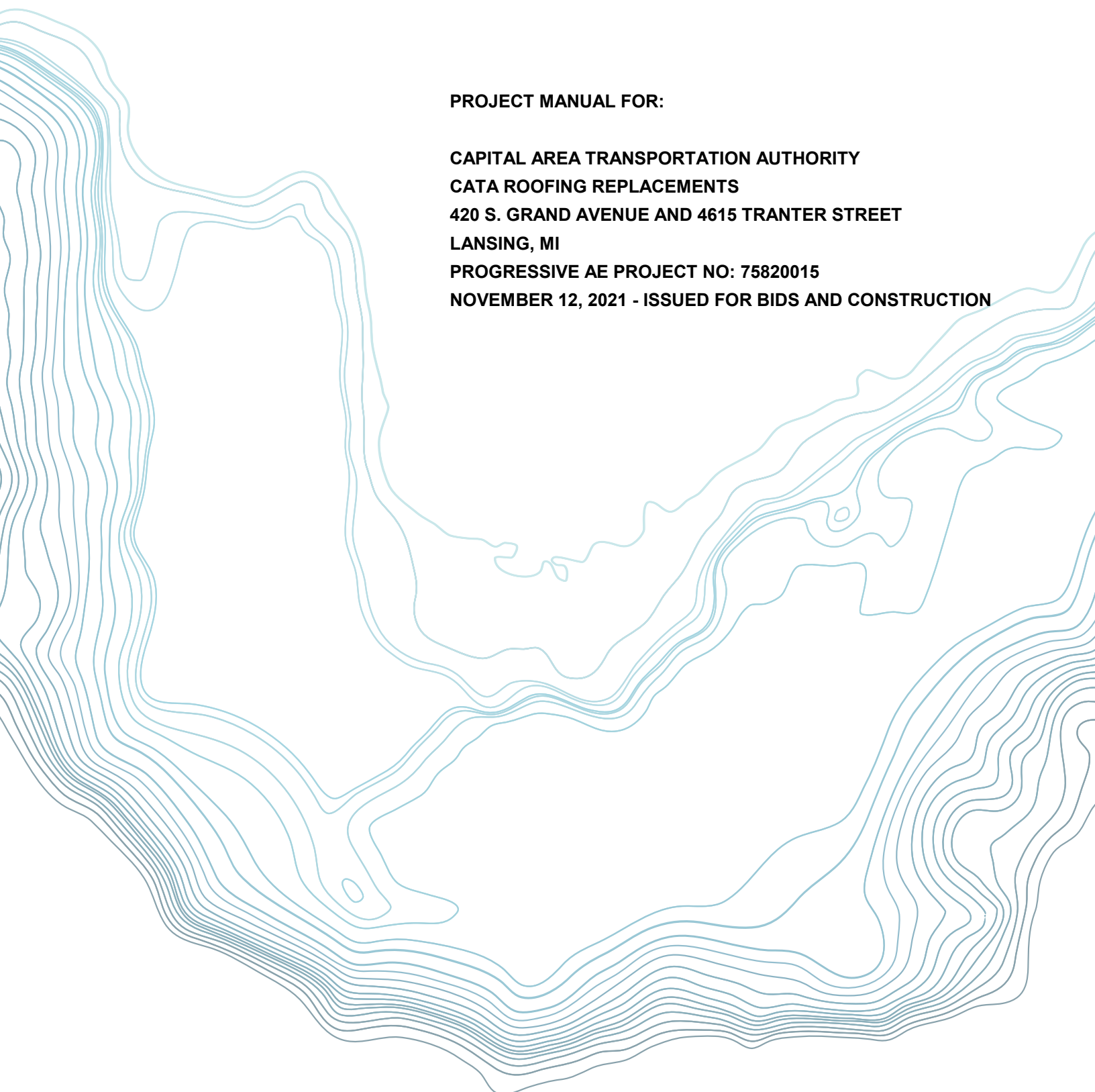
**CATA ROOFING REPLACEMENTS**

**420 S. GRAND AVENUE AND 4615 TRANTER STREET**

**LANSING, MI**

**PROGRESSIVE AE PROJECT NO: 75820015**

**NOVEMBER 12, 2021 - ISSUED FOR BIDS AND CONSTRUCTION**





**PROJECT MANUAL FOR:  
CAPITAL AREA TRANSPORTATION AUTHORITY  
CATA ROOFING REPLACEMENTS  
420 S. GRAND AVENUE AND 4615 TRANTER STREET  
LANSING, MI 48910**

**PREPARED FOR:  
CAPITAL AREA TRANSPORTATION AUTHORITY  
4615 TRANTER STREET AND 420 S. GRAND AVENUE  
LANSING, MI 48910**

**PREPARED BY:  
PROGRESSIVE AE  
1811 4 MILE ROAD, NE  
GRAND RAPIDS, MI 49525-2442  
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PRINTROOM@PROGRESSIVEAE.COM**

**PROJECT NO: 75820015**

**NOVEMBER 12, 2021 - ISSUED FOR BIDS AND CONSTRUCTION**

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**SECTION 00 1113 ADVERTISEMENT FOR BIDS**

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**FROM:**

**1.01 THE OWNER (HEREINAFTER REFERRED TO AS OWNER ):**

- A. Capital Area Transportation Authority
- B. Address:
  - 4615 Tranter Street
  - Lansing, MI, 48910

**1.02 AND THE ARCHITECT (HEREINAFTER REFERRED TO AS ARCHITECT ):**

- A. Progressive AE
- B. Address:
  - 1811 4 Mile Road NE
  - Grand Rapids, MI 49525

**1.03 DATE: TBD**

**1.04 TO: POTENTIAL BIDDERS**

- A. Your firm is invited to submit an offer under seal to Owner for construction of a multiple roofing membranes located at 420 S. Grand Avenue and 4615 Tranter Street before 2:00 pm local standard time on the 7th day of December, 2021, for:
- B. Project: CATA Roofing Replacements
- C. Owner's Project Number: 75820015
- D. Project Description: Partial roofing membrane and insulation replace at 420 S. Grand Avenue and 4615 Tranter Street..
- E. Bid Documents for a Stipulated Sum contract may be obtained from the office of the Design Professional free of charge upon receipt of a deposit, by cash, in the amount of \$0 for one set.
- F. Bidders will be required to provide Bid security in the form of a Bid Bond of a sum no less than 5 percent of the Bid Amount.
- G. Refer to other bidding requirements described in Document 00 2113 - Instructions to Bidders and Document 00 3100 - Available Project Information.
- H. Submit your offer on the Bid Form provided. Bidders may supplement this form as appropriate.
- I. Your offer will be required to be submitted under a condition of irrevocability for a period of 90 days after submission.
- J. The Owner reserves the right to accept or reject any or all offers.

**END OF SECTION**



## **SECTION 00 2113 INSTRUCTIONS TO BIDDERS**

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### **SUMMARY**

#### **1.01 INSTRUCTIONS TO BIDDERS**

#### **1.02 DOCUMENT INCLUDES**

- A. Bid Documents and Contract Documents
  - 1. Definitions
  - 2. Contract Documents Identification
  - 3. Availability
  - 4. Examination
  - 5. Inquiries/Addenda
  - 6. Product/Assembly/System Substitutions
- B. Bid Submission
- C. Bid Enclosures/Requirements
  - 1. Security Deposit
  - 2. Bid Form Requirements
- D. RELATED DOCUMENTS
  - 1. Document 00 4325 - Substitution Request Form (During Procurement)
  - 2. Document 00 7300 - Supplementary Conditions:

### **INVITATION**

#### **2.01 PROPOSAL SUBMISSION**

- A. Proposals signed and under seal, executed, and dated will be received at the office of the Owner at 4615 Tranter Street, Lansing, MI 48910 before 2:00 p.m. local standard time on the 7th day of December, 2021.

#### **2.02 INTENT**

- A. The intent of this bid request is to obtain an offer to perform work to complete CATA Roof Replacements located at 420 S. Grand Avenue, and 4615 Tranter Street for a Stipulated Sum contract, in accordance with the Contract Documents.

#### **2.03 WORK IDENTIFIED IN THE CONTRACT DOCUMENTS**

- A. Work of this proposed Contract comprises roofing demo, insulation replacement, and membrane installation.

#### **2.04 CONTRACT TIME**

- A. Perform the Work in 6 months. The bidder may suggest a revision to the Contract Time with a specific adjustment to the Bid Amount.

### **BID DOCUMENTS AND CONTRACT DOCUMENTS**

#### **3.01 CONTRACT DOCUMENTS IDENTIFICATION**

- A. The Contract Documents are identified as Project Number 75820015, as prepared by the Architect who is located at 1811 4 Mile Road NE, Grand Rapids, MI 49525, and with contents as identified in the Table of Contents.

#### **3.02 AVAILABILITY**

- A. Proposal documents will be available through the office of the Architect, electronically. Contact Seth Horton at hortons@progressiveae.com

#### **3.03 INQUIRIES/ADDENDA**

- A. Addenda may be issued during the proposal period. All Addenda become part of the Contract Documents. Include resultant costs in the Proposal Amount.
- B. Verbal answers are not binding on any party.

#### **3.04 PRODUCT/ASSEMBLY/SYSTEM SUBSTITUTIONS**

- A. When a request to substitute a product is made, Architect may or may not approve the substitution. If it is approved an Addendum will be issued to known bidders.
- B. In submission of substitutions to products specified, bidders shall include in their bid all changes required in the Work and changes to Contract Time and Contract Sum to accommodate such

## **SECTION 00 2113 INSTRUCTIONS TO BIDDERS**

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substitutions. A later claim by the bidder for an addition to the Contract Time or Contract Sum because of changes in work necessitated by use of substitutions shall not be considered.

- C. Provide complete information on required revisions to other work to accommodate each proposed substitution.
- D. Provide products as specified unless substitutions are submitted in this manner and accepted.
- E. See Section 01 6000 - Product Requirements for additional requirements.

### **SITE ASSESSMENT**

#### **4.01 PREBID CONFERENCE**

- A. A proposers conference has been scheduled for 10:00 a.m. on the 19th day of November at the location of 4615 Tranter Ave, Lansing, MI 48910.
- B. Representatives of Architect will be in attendance.
- C. Summarized minutes of this meeting will be circulated to attendees. These minutes will not form part of the Contract Documents.
- D. The pre bid conference is NOT mandatory. However, no site visits will be allowed outside of the scheduled pre bid conference.
- E. Information relevant to the Proposal Documents will be recorded in an Addendum, issued to Bid Document recipients.

### **QUALIFICATIONS**

#### **5.01 EVIDENCE OF QUALIFICATIONS**

- A. To demonstrate qualification for performing the Work of this Contract, bidders may be requested to submit written evidence of financial position, license to perform work in the State of Michigan.

#### **5.02 SUBCONTRACTORS/SUPPLIERS/OTHERS**

- A. Owner reserves the right to reject a proposed subcontractor for reasonable cause.
- B. Refer to General Conditions.

### **BID SUBMISSION**

#### **6.01 SUBMISSION PROCEDURE**

- A. Proposers shall be solely responsible for the delivery of their proposal in the manner and time prescribed.
- B. Submit bid to Seth Horton hortons@progressiveae.com or mail to Progressive AE, 1811 Four Mile Road NE, Grand Rapids, MI 49525. See Construcion IFB for more information.

#### **6.02 BID INELIGIBILITY**

- A. Proposals that are unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations, or irregularities of any kind, may at the discretion of the Owner, be declared unacceptable.

### **PROPOSAL ENCLOSURES/REQUIREMENTS**

#### **7.01 SECURITY DEPOSIT**

- A. Proposals shall be accompanied by a security deposit as follows:
  - 1. Bid Bond of a sum no less than 5 percent of the Bid Amount on AIA A310 Bid Bond Form.
- B. Endorse the Bid Bond in the name of the Owner as obligee, signed and sealed by the principal (Contractor) and surety.
- C. The security deposit will be returned after delivery to the Owner of the required Performance and Payment Bond(s) by the accepted bidder.
- D. After a proposal has been accepted, all securities will be returned to the respective bidders and other requested enclosures.
- E. If no contract is awarded, all security deposits will be returned.

#### **7.02 PERFORMANCE ASSURANCE**

- A. Include the cost of performance assurance bonds as a supplement to the Bid Amount.

## **SECTION 00 2113 INSTRUCTIONS TO BIDDERS**

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### **7.03 ADDITIONAL BID INFORMATION**

- A. The lowest bidder may be requested to complete the Supplements To Bid Forms within 24 hours after submission of bids.
- B. Submit the following Supplements 24 hours after bid submission:
  - 1. Document 00 4336 - Proposed Subcontractors Form: Include the names of all Subcontractors and the portions of the Work they will perform.
  - 2. Document 00 4334 - Proposed Mechanical Products Form.
  - 3. Document 00 4333 - Proposed Products Form.

### **7.04 FEDERAL CERTIFICATES**

- A. Bidders must submit the following with their bid if it is considered to be responsive:
  - 1. Buy America Compliance
  - 2. DBE Participation Form
  - 3. Debarment - Prime Contractor
  - 4. Lobbying
  - 5. Debarment - Lower Tier
  - 6. Iran Linked Business

### **OFFER ACCEPTANCE/REJECTION**

#### **8.01 DURATION OF OFFER**

- A. Proposals shall remain open to acceptance and shall be irrevocable for a period of ninety (90) days after the bid closing date.

#### **8.02 ACCEPTANCE OF OFFER**

- A. Owner reserves the right to accept or reject any or all offers.
- B. After acceptance by Owner, Architect on behalf of Owner, will issue to the successful bidder, a written Bid Acceptance.

**END OF SECTION**

## BUY AMERICA CERTIFICATE

Pursuant to Section 165 of the Surface Transportation Assistance Act of 1982, as amended by Section 337 of the Surface Transportation and Uniform Relocation Assistance Act of 1987, FTA regulations at 49 CFR, Part 661, and at 49 CFR, Part 663, and guidance issued by FTA, all bidders shall submit the following certificate with their bid or proposal. Failure to submit this certificate will automatically disqualify the bidder from consideration of a Contract award for this Project. An exemption from the "Buy America" requirements may be sought by CATA if grounds for an exemption exist.

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**Please check the appropriate box (661.6 or 661.12) then complete remainder of form.**

**§661.6 Certification requirements for procurement of steel or manufactured products.**

If steel, iron, or manufactured products (as defined in §§661.3 and 661.5 of this part) are being procured, the appropriate certificate as set forth below shall be completed and submitted by each bidder or offeror in accordance with the requirement contained in §661.13(b) of this part.

**§661.12 Certification requirement for procurement of buses, other Rolling Stock and associated equipment.**

If buses or other rolling stock (including train control, communication, and traction power equipment) are being procured, the appropriate certificate as set forth below shall be completed and submitted by each bidder in accordance with the requirement contained in §661.13(b) of this part.

### *Certificate of Compliance with Buy America Requirements*

The bidder or offeror hereby certifies that *it will* comply with the requirements of 49 U.S.C. 5323(j)(1), and the applicable regulations in 49 CFR part 661 for Goods or for 49 CFR 661.11 for Rolling Stock.

DATED: \_\_\_\_\_

COMPANY: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

### *Certificate of Non-Compliance with Buy America Requirements*

The bidder or offeror hereby certifies that *it cannot* comply with the requirements of 49 U.S.C. 5323(j), but it may qualify for an exception to the requirement pursuant to 49 U.S.C. 5323(j)(2), as amended, and the applicable regulations in 49 CFR 661.7.

DATED: \_\_\_\_\_

COMPANY: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

**CERTIFICATION OF PRIMARY CONTRACTOR REGARDING DEBARMENT,  
SUSPENSION, AND OTHER RESPONSIBILITY MATTERS**

The Primary Contractor, \_\_\_\_\_, certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three (3) year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or Local) with commission of any of the offense enumerated in paragraph (2) of this certification; and
4. Have not within a three (3) year period preceding this application/proposal had one (1) or more public transactions (Federal, State, or Local) terminated for cause or default.

If the above named Primary Contractor is unable to certify to any of the the statements in this certification, the Primary Contractor shall attach an explanation to this certification.

The Primary Contractor, \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of the contents of the statements submitted on or with this certification and understands that the provision of 31 U.S.C. Section 3801 et seq. are applicable thereto.

\_\_\_\_\_  
***Signature and Title of Authorized Official***

**DBE PARTICIPATION FORM**

Separate information is required for each DBE subcontractor. This form may be duplicated as necessary.

1. DBE Firm Name: \_\_\_\_\_

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

\_\_\_\_\_

2. Dollar amount awarded: \_\_\_\_\_

3. Description of work to be performed : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**4. CONTRACTOR'S COMMITMENT TO USE DBE FIRM**

\_\_\_\_\_ is committed to utilize the DBE  
(Name of Contractor)

contractor to utilize the above named DBE subcontractor/supplier in the manner and amount described on this form.

Dated \_\_\_\_\_  
(Authorized Signature)

**5. DBE'S COMMITMENT TO PARTICIPATE**

\_\_\_\_\_, as a DBE firm, is committed to  
(Name of subcontractor/supplier)

perform the work as described above for the amount specified.

Dated \_\_\_\_\_  
(Authorized Signature)

**6. NO SUBCONTRACT OPPORTUNITIES, AVAILABLE.**

\_\_\_\_\_, has no subcontractor opportunities  
(Name of subcontractor/supplier)

available for work to be performed.

Dated \_\_\_\_\_  
(Authorized Signature)

BLANK forms are NOT acceptable. If DBE subcontractor opportunities are available please fill out sections 1 thru 5. If no subcontractor opportunities available fill out section 6. SIGNATURES ARE REQUIRED.

DBE PARTICIPATION FORM

Separate information is required for each DBE subcontractor. This form may be duplicated as necessary.

1. DBE Firm Name: \_\_\_\_\_ Sub contractor name and address \_\_\_\_\_  
Address: \_\_\_\_\_

2. Dollar amount awarded: \_\_\_\_\_ Amount awarded to Sub contractor \_\_\_\_\_

3. Description of work to be Performed: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Work description. \_\_\_\_\_

4. **CONTRACTOR'S COMMITMENT TO USE DBE** Prime contractor fills out.  
\_\_\_\_\_ is committed to utilize the DBE  
(Name of Contractor)  
contractor to utilize the above named DBE subcontractor/supplier in the manner  
and amount described on this form.  
Dated \_\_\_\_\_ (Authorized Signature)

5. **DBE'S COMMITMENT TO PARTICIPATE** Sub contractor fills out.  
\_\_\_\_\_ as a DBE firm, is committed to  
(Name of subcontractor/supplier)  
perform the work as described above for the amount specified.  
Dated \_\_\_\_\_ (Authorized Signature)

6. **NO SUBCONTRACT OPPORTUNITIES, AVAILABLE.** Prime contractor fills out.  
\_\_\_\_\_, has no subcontractor opportunities  
(Name of subcontractor/supplier)  
available for work to be performed.  
Dated \_\_\_\_\_ (Authorized Signature)

## DBE PARTICIPATION FORM

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Prior to Contract award, the apparent successful bidder shall submit a written assurance of meeting the above goals and shall include names of DBE subcontractors, addresses of contact persons, a description of work to be performed and dollar values of each proposed DBE subcontract. Contact information should be filled out on the DBE Participation Form on the backside of this sheet. The DBE certification (which is a federal requirement) also needs to be filled out with the contract dollar amount, address, etc.

If the goals were not met, the bidder (prime) must demonstrate an honest intent to meet the DBE project goal and shall document the steps he/she has taken to obtain DBE subcontractor participation.

Failure to provide required documentation of good faith efforts may be reason for disqualification of the Bid / Proposal.

Reasonable effort to consider DBE subcontractors will include the following actions.

- a. Soliciting through all reasonable and available means the interest of all certified DBE's who have the capability to perform work under the contract. This shall include attendance at pre-bid meetings, advertising and /or written notices. The bidder shall allow sufficient time to allow the DBE's to respond to the solicitation.
- b. Selecting portions of the work to be performed by DBE's.
- c. Providing interested DBE's with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- d. Negotiations in good faith with interested DBE's. It will be the responsibility of the bidder to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or materials consistent with the available DBE's. **Evidence of negotiations shall include the names, addresses, and telephone numbers of DBE's that were considered and a description of the information provided regarding the plans and specifications for the work selected for subcontractors, and evidence as to why additional agreements could not be reached for DBE's to perform the work.**
- e. Not rejecting DBE's as being unqualified without sound reasons based on a thorough investigation of their capabilities.
- f. Efforts to assist interested DBE's in obtaining bonding, lines of credit, or insurance as required.
- g. Efforts to assist interested DBE's in obtaining necessary equipment, supplies, materials, or related assistance or services.
- h. Use of services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations that provide assistance in the recruitment and placement of DBE's.

The prime contractor agrees not to terminate for convenience a DBE subcontractor, and then perform the work of the terminated subcontract with its own forces or those of an affiliate, without CATA prior written consent. When a DBE subcontractor is terminated, or fails to complete its work on the contract for any reason, the prime contractor agrees to make every effort to find another DBE subcontractor to substitute for the original DBE. These efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated.

# DBE PARTICIPATION FORM

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Work Category: \_\_\_\_\_  
Trade Opportunity: \_\_\_\_\_  
DBE Contractor Contacted: Name: \_\_\_\_\_  
Phone: \_\_\_\_\_ Date Contacted \_\_\_/\_\_\_/\_\_\_\_\_  
Qualifications: \_\_\_\_\_  
Decision: \_\_\_\_\_  
\_\_\_\_\_

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Work Category: \_\_\_\_\_  
Trade Opportunity: \_\_\_\_\_  
DBE Contractor Contacted: Name: \_\_\_\_\_  
Phone: \_\_\_\_\_ Date Contacted \_\_\_/\_\_\_/\_\_\_\_\_  
Qualifications: \_\_\_\_\_  
Decision: \_\_\_\_\_  
\_\_\_\_\_

---

Work Category: \_\_\_\_\_  
Trade Opportunity: \_\_\_\_\_  
DBE Contractor Contacted: Name: \_\_\_\_\_  
Phone: \_\_\_\_\_ Date Contacted \_\_\_/\_\_\_/\_\_\_\_\_  
Qualifications: \_\_\_\_\_  
Decision: \_\_\_\_\_  
\_\_\_\_\_

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Work Category: \_\_\_\_\_  
Trade Opportunity: \_\_\_\_\_  
DBE Contractor Contacted: Name: \_\_\_\_\_  
Phone: \_\_\_\_\_ Date Contacted \_\_\_/\_\_\_/\_\_\_\_\_  
Qualifications: \_\_\_\_\_  
Decision: \_\_\_\_\_  
\_\_\_\_\_

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Copy this page as much as required to document intent.

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**APPENDIX D**

**CERTIFICATION REGARDING LOBBYING**

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The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form–LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Contractor, \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official: \_\_\_\_\_

Name and Title of Contractor's Authorized Official: \_\_\_\_\_

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

**THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL**

**CERTIFICATION OF LOWER-TIER PARTICIPANTS (SUBCONTRACTORS) REGARDING  
DEBARMENT, SUSPENSION, AND OTHER INELIGIBILITY AND VOLUNTARY  
EXCLUSION**

The Lower Tier Participant (Subcontractor to the Primary Contractor), \_\_\_\_\_, certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

If the above named Lower Tier Participant (Subcontractor) is unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.

The Lower-Tier participant (Subcontractor), \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of the contents of the statements submitted on or with this certification and understands that the provisions of 31. U.S.C. Sections 3801 et seq. are applicable thereto.

\_\_\_\_\_  
***Signature and Title of Authorized Official***

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**APPENDIX E**  
**IRAN ECONOMIC SANCTIONS ACT CERTIFICATE**

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In accordance with the Iran Economic Sanctions Act, Michigan 2012 PA 517, effective April 1, 2013, (MCL 129.311, *et seq.*), the undersigned certifies in support of its bid or proposal that it is not an Iran linked business as such is defined in the Act.

Bidder: \_\_\_\_\_

Signature: \_\_\_\_\_

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

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

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

**THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL**

"General Decision Number: MI20210084 11/12/2021

Superseded General Decision Number: MI20200084

State: Michigan

Construction Type: Building

County: Ingham County in Michigan.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/01/2021
1	01/29/2021
2	02/05/2021
3	05/14/2021
4	06/25/2021
5	07/02/2021
6	07/16/2021
7	08/13/2021
8	08/20/2021
9	09/10/2021
10	09/17/2021
11	10/22/2021
12	10/29/2021
13	11/12/2021

ASBE0047-002 07/01/2021

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 33.77	18.18

BOIL0169-001 01/01/2021

	Rates	Fringes
BOILERMAKER.....	\$ 35.95	34.52

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BRMI0009-009 08/01/2020

	Rates	Fringes
BRICKLAYER		
Bricklayer.....	\$ 31.57	22.65
Terrazzo and Tile Finisher..	\$ 22.80	17.54
Terrazzo and Tile Setter....	\$ 26.40	20.08

FOOTNOTE:

Paid Holiday: Fourth of July, if the worker was employed by the contractor in any period of seven working days before said holiday within the current calendar year.

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\* CARP1004-004 06/01/2021

	Rates	Fringes
CARPENTER (Soft Floor Layer, Including Carpet & Resilient Flooring).....	\$ 27.39	20.73

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\* CARP1004-018 06/01/2021

	Rates	Fringes
CARPENTER, Includes Acoustical Ceiling Installation, Drywall Hanging, Form Work, and Metal Stud Installation.....	\$ 27.39	20.73

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CARP1102-002 06/01/2020

	Rates	Fringes
MILLWRIGHT.....	\$ 35.30	34.10

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ELEC0252-001 06/01/2021

Townships of Bunker Hill, Leslie, Onodaga & Stockbridge

	Rates	Fringes
ELECTRICIAN		
Alarm Installation & Low Voltage Wiring.....	\$ 32.13	16.42
Excludes Alarm Installation and Low Voltage Wiring.....	\$ 48.48	27%+12.25

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ELEC0665-004 05/31/2021

Townships of Alaiedon, Aurelius, Delhi, Ingham, Lansing, Leroy, Locke, Meridian, Vevay, Wheatfield, White Oak and Williamson

Rates	Fringes
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ELECTRICIAN

Alarm Installation & Low Voltage Wiring.....	\$ 30.00	9.25+5.5%
Excludes Alarm Installation & Low Voltage Wiring.....	\$ 36.90	25.19

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ENGI0324-012 06/01/2021

Rates Fringes

OPERATOR: Power Equipment

GROUP 1.....	\$ 42.38	24.85
GROUP 2.....	\$ 39.08	24.85
GROUP 3.....	\$ 35.63	24.85
GROUP 4.....	\$ 34.72	24.85
GROUP 5.....	\$ 34.72	24.85
GROUP 6.....	\$ 28.86	24.85
GROUP 7.....	\$ 26.38	24.85

FOOTNOTES:

Crane operator with main boom and jib 300' or longer: \$1.50 per hour above the group 1 rate. Crane operator with main boom and jib 400' or longer: \$3.00 per hour above the group 1 rate.

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Crane operator with main boom and jib 400', 300', or 220' or longer.

GROUP 2: Crane operator with main boom and jib 140' or longer, tower crane, gantry crane, whirley derrick

GROUP 3: Concrete Pump; Crane; Highlift; Hoist; Loader; Roller; Scraper; Stiff Leg Derrick; Trencher

GROUP 4: Bobcat/Skid Loader; Broom/Sweeper; Fork Truck (over 20' lift)

GROUP 5: Boom Truck (non-swinging)

GROUP 6: Fork Truck (20' lift and under for masonry work)

GROUP 7: Oiler

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IRON0025-001 06/01/2019

Rates Fringes

IRONWORKER

REINFORCING.....	\$ 29.48	27.74
STRUCTURAL (Excluding Metal Building Erection)....	\$ 36.77	29.03

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\* LAB00499-012 06/01/2021

Rates Fringes

LABORER

Common or General; Grade  
 Checker; Mason Tender -  
 Brick; Mason Tender -  
 Cement/Concrete;  
 Pipelayer; Sandblaster.....\$ 27.56                      12.95

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PAIN0845-001 06/01/2020

	Rates	Fringes
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PAINTER: Brush, Roller, Spray and Paperhanging.....	\$ 23.95	15.14
PAINTER: Drywall Finishing/Taping.....	\$ 27.16	16.13

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PLAS0016-011 04/01/2014

	Rates	Fringes
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CEMENT MASON/CONCRETE FINISHER...	\$ 24.64	12.88
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PLUM0333-006 06/01/2021

	Rates	Fringes
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PIPEFITTER, Includes HVAC Pipe and Unit Installation.....	\$ 40.29	23.83
PLUMBER, Excludes HVAC Pipe and Unit Installation.....	\$ 40.29	23.83

FOOTNOTE:

Paid Holidays: Memorial Day, Independence Day and Labor Day,  
 if the employee works the work day preceding and following  
 the holiday unless proven illness or injury prevents the  
 employee from working.

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ROOF0070-003 06/01/2021

	Rates	Fringes
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ROOFER.....	\$ 30.93	16.18
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SFMI0669-001 04/01/2021

	Rates	Fringes
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SPRINKLER FITTER (Fire Sprinklers).....	\$ 36.97	24.12
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SHEE0007-004 05/01/2018

	Rates	Fringes
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SHEET METAL WORKER (Including HVAC Duct Installation; Excluding HVAC System Installation).....	\$ 32.61	19.66
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SUMI2011-009 02/01/2011

	Rates	Fringes
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IRONWORKER, ORNAMENTAL.....	\$ 18.48	7.93
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LABORER: Landscape & Irrigation.....	\$ 8.00	0.00
METAL BUILDING ERECTOR.....	\$ 16.92	6.32
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 21.34	7.57
OPERATOR: Bulldozer.....	\$ 20.63	8.21
OPERATOR: Grader/Blade.....	\$ 22.00	6.29
OPERATOR: Tractor.....	\$ 19.10	8.48
TRUCK DRIVER: Dump Truck.....	\$ 16.00	7.26
TRUCK DRIVER: Lowboy Truck.....	\$ 14.50	0.44
TRUCK DRIVER: Tractor Haul Truck.....	\$ 13.57	1.18

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

# INSTRUCTION TO BIDDERS

## CONSTRUCTION IFB

### 1) FUNDING

This Project will be funded with the assistance of capital improvement grants from the Federal Government under the Federal Transit Act and the Michigan Department of Transportation (MDOT). The successful bidder will be required to comply with all terms and conditions prescribed for third party contracts in a grant contract between the United States of America and CATA. This grant contract is available for examination by prospective bidders at the CATA offices.

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### 2) PROJECT BUDGET

The budget for this Project will be funded through financial assistance grants from the Federal Transit Administration (FTA) and Michigan Department of Transportation (MDOT). The total Project budget will be determined by the final negotiated price between CATA and the successful bidder.

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### 3) PRE-PROPOSAL CONFERENCE

A Pre-Proposal Conference will be held on November 19, 2021 at 10:00 am, 4615 Tranter Street, Lansing, MI 48910. The pre-proposal conference is not mandatory. No site visits will be permitted outside of the pre-proposal conference.

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### 4) TYPE OF CONTRACT

The Contract for this Project shall be a firm fixed price type.

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### 5) PROJECT NUMBER(S)

All bidders and Contractors will include the FTA Project Number in all correspondence with CATA and with the FTA. The FTA Project Number for this Project is TBD.

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### 6) USE OF "CAPITAL AREA TRANSPORTATION AUTHORITY" NAME IN CONTRACTOR ADVERTISING OR PUBLIC RELATIONS

CATA reserves the right to review and approve any advertising copy related to this Project in any way prior to publication. The successful bidder will not allow such copy to be

published in their advertisements or public relations programs until submitting such copy and receiving prior written approval from CATA. The successful bidder agrees that published information relating to this Project will be factual and in no way imply that CATA endorses the successful bidder's firm, service or product.

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## **7) INTENT OF SPECIFICATIONS**

It is the intent of these specifications to provide completed Project of substantial and durable construction in all respects, which will be most suitable and advantageous for CATA. Experimental or unproven equipment, materials or design will not be accepted without prior review and written acceptance by CATA.

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## **8) APPROVED EQUALS AND DEVIATIONS**

All bids must be in strict compliance with the requirements and provisions of these specifications, including the provisions herein regarding "approvals", "approved equals", and "deviations". Where a feature, component or item is specified by brand name in these specifications, the words "or approved equal" will apply. Where the approval of CATA is specifically required by these specifications in connection with a particular feature, or if the bidder proposes to submit a bid containing "approved equals" or "deviations" from specific requirements of these specifications, the bidder must obtain such approval, confirmed in writing, prior to the date for the bid opening. With respect to "approved equals" or "deviations", the details of same and the reasons and justifications therefor must be submitted to CATA, including a statement whether the bidder has previously furnished or offered to furnish the item in question, is herein specified. Bids may be submitted containing such "approvals", "approved equals", or "deviations", as are specifically approved by CATA, confirmed in writing, prior to the bid opening date. Each bid must be accompanied by documentation regarding any such approvals granted by CATA for the bid. Notice of any such approvals required by and/or granted to a bidder shall be furnished by CATA to other prospective bidders prior to the bid opening date. Any unapproved deviations, exceptions, substitutions, alternates, or conditional qualifications contained in a bid may be cause for its rejection. The decision of CATA, as represented by the Executive Director, shall be final with respect to whether any proposed deviations from the specifications are acceptable. It should be understood that specifying a brand name, components, and/or equipment in this specification shall not relieve the supplier from his responsibility to produce the product in accordance with the performance warranty and contractual requirements. The supplier is responsible for notifying CATA of any inappropriate brand name, component, and/or equipment that may be called for in the specifications, and to propose a suitable substitute for consideration.

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## **9) PROTEST PROCEDURES**

Protest procedures are available online at the CATA website:  
<https://www.cata.org/About/Doing-Business-with-CATA/Procurement-Protest-Procedures>

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### **10) SUBMISSION OF BIDS**

Sealed bids will be accepted until **December 7 at 2:00 pm**, local time. They shall be submitted to:

Nicole Wilson - Purchasing  
Manager  
Capital Area Transportation  
Authority  
4615 Tranter Street  
Lansing, MI 48910

One copy is sufficient.

### **11) SEALED PROPOSAL LABEL**

The bidder should apply a "Sealed Proposal" label and attached it to the envelope containing the bid or proposal. CATA assumes no responsibility for the premature opening of sealed bids or proposals which do not have this label attached to the outside of the envelope.

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### **12) MAILING BIDS/PROPOSALS**

Bids or proposals submitted by mail shall be mailed a minimum of three (3) days prior to the bid opening date or date scheduled for receipt of proposals. Postmarks by the U.S. Postal Service or other mail delivery service is required. Postage meter dates are not acceptable. Bids or proposals which are not mailed in a timely manner and received after the scheduled bid opening or proposal submittal date will not be accepted.

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### **13) DURATION OF OFFER**

All bids or proposals shall remain in effect for a minimum of 90 days from the bid opening date or scheduled date for receipt of proposals. Offers that allow less than 90 days for acceptance by CATA will be considered non-responsive and will be rejected.

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### **14) BID PRICE**

- (a) Bid prices shall be submitted on the forms provided. Prices submitted in any other form may be considered non-responsive and may be rejected.
- (b) Bid prices shall be based on F.O.B. CATA, Lansing, Michigan.
- (c) The price stated in any bid submitted shall include all items of labor, materials, equipment, tools and other costs necessary to fully complete and deliver this Project

pursuant to the specifications. It is the intention of these specifications to provide and require a complete project of the type prescribed. Any item or items omitted from such specifications which are clearly necessary for the completion of such Project and its appurtenances shall be considered a portion of such Project although not directly specified or called for in these specifications.

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#### **15) TAX EXEMPTION**

CATA is exempt from payment of all Federal, State, and local taxes in connection with this Project. **This provision does not relieve the Contractor from the responsibility to pay all applicable taxes for goods, services, and labor acquired in the performance of this Project – Bidder will include sales tax within their bid.**

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#### **16) DISCOUNTS**

Prompt payment discounts will not be considered in the evaluation of proposals or bids. However, any offered discount will form a part of the award, and will be taken if payment is made within the discount period indicated in the offer by the bidder. As an alternative to offering a prompt payment discount in conjunction with the offer, bidders awarded Contracts may include prompt payment discounts on individual invoices.

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#### **17) PAYMENT TERMS**

CATA will make payment within thirty (30) days after delivery and final acceptance of the project. The Contractor may submit invoices to CATA prior to or upon delivery. Payment will not be made without an invoice.

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#### **18) PROJECT COMPLETION DATE**

Bidders shall state in the bid or proposal the earliest possible date offered for completion of the Project.

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#### **19) LATE BIDS, MODIFICATIONS OF BIDS OR WITHDRAWAL OF BIDS**

a) Any bid or modification to a bid received at the CATA office designated in the solicitation after the exact time specified for bid opening will not be considered and will be returned to the bidder unopened.

A bid may be modified or withdrawn in person by a bidder or their authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the modification or withdrawal is made prior to the exact time set for opening of bids.

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## **20) DETERMINATION OF SUCCESSFUL BIDDER**

In determining the successful bidder, consideration is given to bid price, responsiveness of the bidder to the solicitation, and the bidder's responsibility. The Contract award for this Project will be made to the lowest, responsive and responsible bidder.

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## **21) BIDDER QUALIFICATIONS**

In order to be eligible for award, bidders must be responsive and responsible.

- (a) Responsive offers are those complying in all material aspects of the solicitation, both as to the method and timeliness of submission and as to the substance of the resulting Contract. Bids or proposals which do not comply with all the terms and conditions of the solicitation may be rejected as non-responsive.
- (b) Responsible bidders are those prospective Contractors who, at a minimum, must:
  - 1) Have adequate financial resources, as required during performance of the Contract.
  - 2) Are able to comply with the required or proposed delivery or performance schedule, taking into consideration all existing business commitments.
  - 3) Have a satisfactory record of past performance.
  - 4) Have necessary technical capability to perform.
  - 5) Provide evidence satisfactory to CATA that the bidder will comply with the DBE requirements.
  - 6) Certify that they are not on the U.S. Comptroller General's list of ineligible Contractors.
  - 7) Are qualified as a manufacturer or regular dealer of the items being offered.
  - 8) Are otherwise qualified and eligible to receive an award under applicable laws and regulations.

All prospective bidders may be requested to submit written evidence verifying that they meet the minimum criteria necessary to be determined a responsible Contractor. Refusal to provide requested information may cause rejection of the bid or proposal.

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**22) ACCEPTANCE OF BID**

Each bid shall be submitted with the understanding that the acceptance in writing by CATA of the offer to furnish any or all goods or services described therein shall bind the bidder on his part to furnish and deliver at the bid price, in accordance with the condition of said accepted bid and specifications.

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**23) WITHHOLDING AWARD**

This solicitation for bids or proposals does not commit CATA to award a contract, pay any costs incurred in preparation of bid or proposals in response to this solicitation, or to procure or contract for good or services. Bidder shall be responsible for all costs incurred as part of their participation in the pre-award process.

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**24) BID ACCEPTANCE, REJECTION, AND POSTPONEMENT**

The CATA reserves the right to postpone, accepts, or reject any and all bids in whole or in part, on such basis as the CATA Board deems to be in its best interest to do so, subject to the rules and regulations set forth by the U.S. Department of Transportation.

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**25) USDOT/FTA CONCURRENCE FOR CONTRACT AWARD**

The award of a Contract for this Project may be subject to review and concurrence by the U.S. Department of Transportation, Federal Transit Administration

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**26) SINGLE BID RESPONSE**

If only one (1) bid is received in response to the Invitation for Bids, a detailed cost proposal may be requested of the single bidder. A cost/price analysis and evaluation and/or audit may be performed of the cost proposal in order to determine if the price is fair and reasonable.

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**26) DBE PARTICIPATION**

In connection with the performance of this Contract, the successful bidder agrees to cooperate with CATA in meeting its commitments and goals with regard to maximum utilization of Disadvantaged Business Enterprises (DBE). The policy and obligations for maximum utilization of DBE's are herein set forth:

(a) Policy - It is the policy of the Department of Transportation that Disadvantaged Business Enterprises, as defined in 49 CFR, Part 26, shall have the maximum opportunity to participate in the performance of contracts financed in whole or apart with Federal funds under this Agreement. Consequently, the DBE requirements of 49 CFR, Part 26 apply to this Agreement.

(b) DBE Obligation - CATA or its Contractor agrees to ensure that Disadvantaged Business Enterprises, as defined in 49 CFR, Part 26, have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this Agreement. In this regard, CATA or its Contractors shall take all necessary and reasonable steps in accordance with 49 CF, Part 26, to ensure that Disadvantaged Business Enterprises have the maximum opportunity to compete for and to perform contracts. CATA and its Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of DOT assisted contracts.

Requirements and goals for Disadvantaged Business Enterprise participation in this Project are as follows:

A minimum of zero percent (0%) of the total contract price, as awarded. However, the corporate goal for CATA is 2.57%. Compliance with the percentage goal may be fulfilled by DBE's performing as either:

- 1) A member of a joint venture as a prime contractor;
- 2) An approved subcontractor;
- 3) An owner-operator of equipment;
- 4) A renter of equipment to a prime contractor;
- 5) A firm manufacturing and supplying goods used in the project;
- 6) A firm supplying goods used in the project (when supplying goods, only 60 percent (60%) will be counted).

Prior to Contract award, the apparent successful bidder shall submit a written assurance of meeting the above goals and shall include names of DBE subcontractors, addresses of contact persons, a description of work to be performed and dollar values of each proposed DBE subcontract. This information shall be submitted on the attached "DBE Participation Form" furnished with this solicitation.

If the goals were not met, the bidder must demonstrate that sufficient good faith efforts were made to meet the DBE contract goals and shall document the steps he has taken to obtain DBE participation.

Failure to provide required documentation of good faith efforts may be reason for disqualification of the Bid / Proposal.

Bidders good faith efforts will include the following actions.

Soliciting through all reasonable and available means the interest of all certified DBE's who have the capability to perform work under the contract. This shall include attendance at pre-bid meetings, advertising and /or written notices. the bidder shall allow sufficient time to allow the DBE's to respond to the solicitation.

Selecting portions of the work to be performed by DBE's.

Providing interested DBE's with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

Negotiations in good faith with interested DBE's. It will be the responsibility of the bidder to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or materials consistent with the available DBE's. Evidence of negotiations shall include the names, addresses, and telephone numbers of DBE's that were considered and a description of the information provided regarding the plans and specifications for the work selected for subcontractors, and evidence as to why additional agreements could not be reached for DBE's to perform the work. Not rejecting DBE's as being unqualified without sound reasons based on a thorough investigation of their capabilities.

Efforts to assist interested DBE's in obtaining bonding, lines of credit, or insurance as required.

Efforts to assist interested DBE's in obtaining necessary equipment, supplies, materials, or related assistance or services.

Use of services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations that provide assistance in the recruitment and placement of DBE's.

The prime contractor agrees not to terminate for convenience a DBE subcontractor, and then perform the work of the terminated subcontract with its own forces or those of an affiliate, without CATA's prior written consent. When a DBE subcontractor is terminated, or fails to complete its work on the contract for any reason, the prime contractor agrees to find another DBE subcontractor to substitute for the original DBE. These good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated.

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## **27) DEBARMENT AND SUSPENSION**

Bidders shall complete and submit as part of their bid, the Certification of Primary Contractor Regarding Debarment, Suspension, And Other Responsibility Matters for all projects when the total aggregate value of the contract exceeds \$25,000. The bidder shall also submit a list of subcontracts and subcontractors which will have a financial interest in this Project which exceeds \$25,000 or will have a critical influence on or a substantive control over the Project. A Certification Of Lower-Tier Participants Regarding Debarment, Suspension, And Other Ineligibility And Voluntary Exclusions shall be submitted by the bidder to CATA for each listed subcontractor prior to contract award.

During the term of the Contract the successful bidder will be required to immediately notify CATA of 1) any potential subcontractor that is subject to this provision and to submit the appropriate certification prior to award of a subcontract, 2) any information that its certification or certification of its subcontractors was erroneous when submitted, 3) any information that certifications have become erroneous by reason of changed circumstances.

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### **28) LOBBYING CERTIFICATION**

Bidders shall complete and submit as part of their bid the Certification of Restrictions on Lobbying for all projects when the total aggregate value of the contract exceeds \$100,000. The Contractor shall also submit a list of subcontracts and subcontractors which will exceed \$100,000. A Certification of Restrictions on Lobbying shall be submitted by the bidder to CATA for each listed subcontractor prior to contract award.

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### **29) PRODUCT DESCRIPTION**

Bids or proposals must be accompanied by a comprehensive description of bidder's product. This description shall include drawings, overall dimensions and photographs which show the construction characteristics and explain the operation of the bidder's product. The descriptive literature shall also include information on design details, components, performance characteristics, methods of manufacture and assembly. The descriptive literature is required for the purpose of evaluation and award. Failure of the descriptive literature to show that the product proposed conforms to the specifications and other requirements of this solicitation may result in rejection of the bid or proposal. Additionally, failure to submit the descriptive literature will require rejection of the bid or proposal. The quality of standard components not covered by the language of these specifications will be a factor in determining an award. No advantage shall be taken by the bidder or manufacturer in the omission of any part or detail which goes to make the product complete and ready for service, even though such part is not mentioned in this specification. All units or parts not specified shall be Contractor's standard units or parts and shall conform in materials, design and workmanship to the best practices known in the industry. All parts will be new and in no case will used, reconditioned, or obsolete parts be accepted without prior review and written acceptance by CATA.

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### **30) DEMONSTRATION**

Bidder may be requested to demonstrate to CATA the capability of their proposed product to perform and function as herein called for by this specification. The demonstration shall be at no expense to CATA in compliance with provisions outlined in the technical specifications contained herein.

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### **31) BID BOND**

As security for the acceptance of the Contract, each bid shall be accompanied by a bidder's bond or certified check in the amount of five percent (5%) of the bid drawn payable to CATA. Such bid deposits of all bidders will be held by CATA until all bids submitted shall have been canvassed, and the bids have either been rejected in whole or in part, or the award of the Contract or Contracts has been made. The bid deposit of the successful bidder will be held until the Contract is duly executed. Bid deposits will be returned to unsuccessful bidder(s) upon award of the Contract. If the successful bidder to whom the Contract has been awarded refuses to execute the Contract within ten (10) calendar days, after Contract award, the amount of its bid deposit shall be forfeited to and retained by CATA as liquidated damages for such neglect or refusal, and CATA may proceed to place the order with another company.

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### **32) PERFORMANCE & PAYMENT BONDS**

The successful bidder shall furnish at its own expense performance and payments bonds. These bonds shall be furnished to CATA within ten (10) calendar days after contract award. Bond requirements are as follows:

\* A performance bond shall be payable to CATA in the amount of 100 percent (100%) of the full contract amount as a guarantee of good faith on behalf of the Contractor that the Contractor will perform all of its obligations under the contract.

A payment bond shall be payable to CATA in the amount of 100 percent (100%) of the full contract amount to assure payment as required by law of all persons supplying labor and material in the execution of work provided for in the contract.

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### **33) PAYMENT TERMS**

CATA will make payment in accordance with the following payment schedule, unless specified elsewhere. By month on a percent complete basis. Pay application with certified payroll shall be submitted to the office of the Architect for certification. Partial payments do not constitute acceptance.

The CATA Project Manager shall have the power to withhold payment or nullify the whole or a part of any payment, to such extent as may be reasonably necessary to protect CATA from loss on account of:

- (a) Defective work not remedied.
- (b) Claims filed or reasonable evidence indicating probable filing of claims.
- (c) Failure of the Contractor to make payments properly to subcontractors for material or labor.
- (d) A reasonable doubt that the Contract can be completed for the balance then unpaid.
- (e) Damage to another Contractor.

When the above grounds are removed, payment shall be made for amounts withheld to another Contractor.

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**34) EQUAL EMPLOYMENT OPPORTUNITY NOTICE FOR GOALS**

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE  
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER NO. 11246)

(1) The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

(2) (a) The goals and the timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for Minority Participation in Each Trade	Goals for Female Participation In Each Trade
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0.0%	0.0%
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(b) These goals are applicable to all the Contractor's construction work (whether or not it is federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed with regard to this second area, the Contractor also is subject to the goals for both its federally involved and non federally involved construction.

(c) The Contractor's compliance with the Executive Order and the regulations at 41 CFR Part 60-4 shall be based on its implementation of the Equal

Opportunity Clause, specific Affirmative Action obligations required by the specifications set forth at 41 CFR § 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall made a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in at 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

(3) The Contractor shall provide written notification to the Director Of The Office Of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

(4) As used in this notice, and in the contract resulting from this solicitation, the "Covered Area" is Ingham County, Michigan.

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### **35) WAGE RATES**

For construction project utilizing Davis – Bacon Wages Rates, please refer to the following link:

<https://sam.gov/wage-determination/MI20210084/8>

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**STANDARD TERMS AND CONDITIONS OF PROCUREMENT****A. THE FOLLOWING TERMS AND CONDITIONS WILL BE A PART OF THE CONTRACT AWARDED.**

1. **CHANGES.** CATA, at any time, by a written order, and without notice to the sureties, may make changes within the general scope of this contract, in (a) drawings, designs or specifications where the supplies to be furnished are specifically manufactured for CATA in accordance therewith; (b) method of shipment or packing; and (c) place of delivery. If any such change causes an increase or decrease in the cost of, or the time required for performance of this contract, whether changed or not changed by such order, an equitable adjustment shall be made by written modification of the contract. Any claim by the Contractor for adjustment under this clause must be asserted within thirty (30) days from the date of receipt by the Contractor of the notification of change; provided that CATA, if it decides that the facts justify the action, may receive and act upon any such claim if asserted prior to dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.
2. **TERMINATION FOR DEFAULT.** CATA, by written notice, may terminate the contract awarded on the basis of this proposal, in whole or in part, for failure of the Contractor to perform any of the provisions hereof. In such event, the Contractor shall be liable for damages, including the excess cost of reprocurring similar supplies or services, provided, that if (a) it is determined for any reason that the contract was not in default or, (b) the Contractor's failure to perform is without his control, fault or negligence, the termination shall be deemed to be a termination for convenience under the following Paragraph 3.
3. **TERMINATION FOR CONVENIENCE.** CATA, by written notice, may terminate the contract, awarded on the basis of this proposal, in whole or in part, when it determines it is in the best interest of CATA. If this contract is for supplies and is so terminated, the Contractor shall be compensated in accordance with its auditable cost incurred at the time of notification of termination. To the extent that the contract is for services and is so terminated, CATA shall be liable only for payment in accordance with the payment provisions of the contract for services rendered to the effective date of termination.
4. **ADDITIONAL INFORMATION.** The Contractor shall promptly furnish any additional information requested by CATA relative to the equipment it proposes.
5. **SUPPLIER RESPONSIBILITY.** No advantage shall be taken by the Contractor or its Subcontractor in the omission of any part or detail which goes to make the equipment complete and operable for use by CATA. In case of any variance, this specification shall overrule Contractor or Subcontractor specifications. The Contractor shall assume responsibility for all materials used whether the same is manufactured by the Contractor or purchased ready made from a source outside Contractor's company. In the case of the replacement of a Subcontractor, the Contractor must, within five (5) working days, notify CATA in writing of the replacement and provide name, address, telephone number, and the type of service.
6. **DELIVERY.** Service and/or equipment will be delivered to Capital Area Transportation Authority, 4615 Tranter Street, Lansing, Michigan 48910. The Authority will assume custody of all property at one of its other locations, if so directed, in writing by CATA. Invoices shall be furnished with the delivery of each item. CATA reserves the right to inspect all deliveries or services before acceptance.
7. **BREACH OF CONTRACT.** If the Contractor shall fail, refuse or neglect to comply with the terms of these contract conditions, such failure shall be deemed a total breach of contract. Contractor shall be subject to all legal remedies that CATA may have and CATA may recover,

in addition to any damages or costs relating to failure to comply, its reasonable attorneys' fees resulting from Contractor's breach.

8. DISPUTES (AFTER BID AWARD). Except as otherwise provided in the contract, any dispute concerning a question of fact arising under the contract which is not disposed of by agreement between CATA and Contractor shall be decided by CATA's Program Manager in writing, with a copy mailed or otherwise furnished to the Contractor. The decision of CATA shall be final and conclusive unless within ten (10) days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to CATA a written appeal addressed to CATA's Chief Executive Officer for the determination of such appeal, which shall be final and conclusive, unless determined by a court of competent jurisdiction to have been fraudulent or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this clause, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. Pending a final decision of the dispute, the Contractor shall proceed diligently with the performance of the contract and in accordance with CATA's decision.
9. DELIVERY EXTENSION AND DELAYS. CATA reserves the right to extend, postpone or reschedule delivery in case the delivery of service equipment, under this contract, shall be necessarily delayed because of strike, injunction, civil disturbance, government controls, or by reason of any cause or circumstance beyond the control of the Contractor, as detailed in writing by the Contractor, the time of completion or a delivery shall be extended by a number of days to be determined in each instance by CATA.
10. INSTALLATION. If specified, the Contractor shall install and place in operation, subject to approval by CATA, the equipment at the Contractor's expense within thirty (30) days from issuance of a notice to install issued by CATA.
11. INSTALLATION EXTENSION AND DELAYS. CATA reserves the right to extend, postpone, or reschedule installation in case the installation of equipment under this contract shall be necessarily delayed because of strike, injunction, civil disturbance, government controls, or by reason or cause or circumstances beyond the control of the Contractor. The time of completion or installation shall be extended by a number of days to be determined in each instance by CATA.
12. ASSEMBLY. If required, the Contractor shall assemble the equipment at its expense prior to installation.
13. ACCESSORIES. The Contractor shall furnish, without additional cost, all accessories required to permit CATA to operate any equipment being provided.
14. TRAINING. The Contractor, without additional cost, shall properly train CATA personnel in the operation and maintenance of the equipment provided.
15. SERVICE MANUAL AND WIRING SCHEMATIC. If specified, the Contractor will provide at least one copy of a service manual and at least one copy of a wiring schematic for individual components and other schematics and drawings.
16. WARRANTY. The Contractor shall describe its policy or warranty(s) both on workmanship and material as applying to the equipment, along with the method or adjustment, and shall be further subject to warranty requirements of CATA as set forth in the following Paragraph 17.
17. CATA WARRANTY. The Contractor agrees that the supplies or services furnished under this contract shall be covered by the most favorable warranties the Contractor gives any customer for such equipment and that the rights and remedies provided herein are in addition to and do not limit any rights afforded to CATA by any other clause of this contract. The Contractor shall state the warranty and supply with its bid.

18. **INSURANCE.** The Contractor shall place and maintain with responsible insurance carriers the following insurance. The Contractor shall deliver to CATA, upon request, certificates of insurance which shall provide thirty (30) days' written notice to be given to CATA in the event of cancellation. Contractor shall require all Subcontractors to maintain adequate insurance coverage.
- (a) Workers' Compensation and Employer's Liability Insurance.
    - (1) Workers' Compensation in compliance with the applicable state and federal laws.
    - (2) Employer's Liability. Limit \$1,000,000.
  - (b) Commercial General Liability Insurance, including Professional Liability, Blanket contractual, XCU Hazards, Broad Form Property Damage, Completed Operations, and Independent Contractor's Liability, all applicable to Personal Injury, Bodily Injury and Property Damage to a combined single limit of \$1,000,000 each occurrence/claim, subject to a \$2,000,000 annual aggregate for Professional Liability, Completed Operations and Personal Injury other than Bodily Injury.
  - (c) Automobile Liability Insurance, including owned, hired and non-owned automobiles, Bodily Injury and Property Damage, to a combined single limit of \$1,000,000 each occurrence.
19. **INDEMNIFICATION.** In addition to the protection afforded by any policy of insurance, the Contractor agrees to indemnify and save harmless CATA, the Michigan Department of Transportation ("MDOT"), the Federal Transit Administration ("FTA"), and all officers, agents, and employees thereof:
- (a) From any and all claims by persons, firms, or corporations for labor, materials, supplies, or services provided to the Contractor in connection with the Contractor's performance of the contract; and
  - (b) From any and all claims for injuries to or death of any and all persons, for loss of or damage to property, for environmental damage, degradation and response, and cleanup costs, and for attorney fees and related costs arising out of, under, or by reason of the Contractor's negligent performance of the contract.
- CATA will not be subject to any obligations or liabilities by Subcontractors of the Contractor or their Subcontractors or any other person not a party to this contract without its specific consent and notwithstanding its concurrence in or approval of the award of any contract or subcontract or the solicitation thereof.
20. **ACCEPTANCE OF MATERIAL - NO RELEASE.** Unless CATA otherwise agrees in writing, acceptance of any portion of the material prior to final acceptance shall not release the Contractor from liability for faulty workmanship or materials or for failure to fully comply with all of the terms of this contract. CATA reserves the right and shall be at liberty to inspect all materials and workmanship at any time during the manufacturing process, and shall have the right to reject all materials and workmanship which do not conform with the contract requirements and specifications; provided, however, that CATA is under no duty to make such inspection and no inspection so made shall relieve Contractor from any obligation to furnish materials and workmanship in accordance with the contract requirements and specifications.
21. **FINAL ACCEPTANCE.** Upon final acceptance by CATA of all work to be performed by the Contractor, CATA will so notify the Contractor in writing. The date of final acceptance shall commence the warranty period.
22. **LIQUIDATED DAMAGES.** N/A

23. NO ASSIGNMENT OF CONTRACT. Contractor may not assign or transfer any interest in the contract without the prior written consent of CATA.
24. DEFECTIVE WORKMANSHIP AND MATERIAL. When and as often as CATA determines that the work done or being done under the contract or the kind of quality or materials supplied in connection therewith are not fully and completely in accordance with any requirement of the contract documents, it may give notice of such noncompliance to the Contractor in writing and the Contractor shall immediately upon receipt of such notice do all things required to remedy such noncompliance without additional cost to CATA. If the Contractor fails to comply with such written notice, then CATA, upon written notice to the Contractor, shall deduct the cost of repair, replacement or correction of defective or damaged work from the compensation due or to become due to the Contractor.
25. WAIVER OF BREACH. The waiver by either party hereto or any breach of any provision of this contract by the other party shall not operate or be construed as a waiver of any subsequent breach of the same or any other provision of this contract by either party hereto.
26. OWNERSHIP OF DOCUMENTS. All original documents, calculations, and work product produced by CONTRACTOR, whether produced on paper or electronic media or otherwise in performance of this Agreement, shall be the property of CATA. CONTRACTOR shall have the right to retain a copy of such documents, calculations, and work product. CONTRACTOR shall make available to CATA copies of all CONTRACTOR correspondence, notes, and other papers relating to the work, upon request of CATA. All works of original authorship created in the scope of this Agreement are "works made for hire", as that term is used in connection with the U.S. Copyright Act. To the extent that by operation of law CONTRACTOR retains any intellectual property rights to any work product, CONTRACTOR hereby irrevocably assigns and licenses to CATA all right, title, and interest in such work product, including copyrights and patents, and agrees to execute such assignments and licenses as may be required in the opinion of CATA's legal counsel to confirm this provision. The work product produced by CONTRACTOR in the performance of services under this Agreement is intended for use by CATA solely for the purpose intended. Any use or reuse of such work product by CATA for any purpose other than its intended purpose shall be at the sole risk of CATA and without any liability or responsibility of CONTRACTOR. To the extent that the work product produced by CONTRACTOR contains standard design or construction details or other standardized material previously developed by CONTRACTOR in its professional architectural, engineering, and planning practices, then CONTRACTOR shall have the right to reuse any such material on other projects for other clients or persons without the prior knowledge or permission of CATA and without the payment of any compensation to CATA, provided that the reuse or continued use of such material contains no CATA identifying information or confidential information.
27. EXCUSES FOR FAILURE TO PERFORM OR DELAYS. The Contractor will not be in default by reason of any failure in the performance of this contract, if such failure arises out of causes beyond the control and without the fault or negligence of Contractor. Such causes may include, but are not limited to, acts of God or the public enemy, acts of the government either in its sovereign or contractual capacity, fires, floods, and strikes. But in every case, a failure to perform must be beyond the control and without the fault or negligence of the Contractor or its Subcontractors. An excusable delay will permit the Contractor an extension of time for such reasonable period as may be mutually agreed upon between the parties.
28. COMPUTATION OF TIME. In computing a period of time prescribed by these conditions, the following rules apply:
  - (a) "Day" means days of the week (e.g., Monday through Friday), not business days.
  - (b) The day of the act or event after which the designated period of time begins is not included.
  - (c) The last day of the period is included, unless it is a Saturday, Sunday, or legal holiday. In that event, the period runs until the end of the next day that is not a Saturday, Sunday or legal holiday.

29. NOTICE. All notices and other communications required under this Contract shall be given in writing, signed by an authorized representative, and be personally delivered or delivered by overnight courier, or certified mail (return receipt requested) to the addresses set forth below:

To CATA: Chief Executive Officer  
Capital Area Transportation Authority  
4615 Tranter Street  
Lansing, MI 48910

To Contractor: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

With a copy to: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

30. JURISDICTION. This Contract will be governed by the internal laws of the State of Michigan without reference to its choice of law rules. Exclusive jurisdiction and venue of any suit, action or claim relating to this contract will be in the Ingham County Circuit Court or the Federal District Court for the Western District of Michigan.

31. This contract constitutes the entire contract between the parties and supercedes all negotiations, commitments, and previous contracts and may be modified only by a further written contract which is executed by a duly authorized officer of each of the parties.

32. COST COMPUTATION. The Federal Acquisition Regulation, 48 CFR, Chapter 1, Part 31.2, shall be used, in all instances, to determine the amount of costs incurred by Contractor that CATA shall be required to pay, or reimburse, to Contractor, including, without limitation, where this Agreement requires CATA to pay Contractor's costs as part of the contract price, where the contract price is adjusted resulting from changes to the requirements of Agreement, and when calculating the amount due Contractor pursuant to Termination for Convenience clause.

33. TRAVEL EXPENSES. CATA shall not reimburse Contractor for travel costs, including accommodations, meals, transportation and fuel costs, unless the travel activity and the travel costs have been approved in advance by an authorized representative of CATA. All travel costs to be paid by CATA shall not exceed amounts determined in conformance with the Federal Acquisition Regulation, 48 CFR Section 31.205-46, Travel Costs.

B. TERMS INCLUDED IN CONTRACTS FUNDED IN WHOLE OR PART BY FTA, MDOT, OR OTHER GOVERNMENTAL AGENCY.

1. NONDISCRIMINATION.

(a) Compliance with Regulations. Contractor shall comply with Federal Regulations relative to nondiscrimination of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, and Title 23, Code of Federal Regulations, Part 710.405(b), as they may be amended from time to time (hereinafter referred to as the Regulations), and with Executive Order 11246 titled Equal Employment opportunity, as amended by Executive Order 11375, and as supplemented by Department of Labor Regulation (41 CFR 60) which are herein incorporated by reference and made a part of this contract. Contractor agrees that it will comply with

the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR Part 1630, pertaining to employment of persons with disabilities. In addition, Contractor agrees to comply with any implementing requirements FTA may issue.

- (b) Nondiscrimination. With regard to the work performed by it during this contract, Contractor shall not discriminate on the grounds of race, color, sex, disability, religion, age, or national origin against any employee or applicant for employment or in the selection and retention of Subcontractors, including procurement of materials and leases of equipment. Contractor shall not participate either directly or indirectly in discrimination prohibited by Section 21.5 and Part 710.405(b) of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- (c) In connection with the performance of services under this contract, Contractor agrees to comply with the State of Michigan provisions for "prohibition of discrimination in state contracts" as set forth in Appendix A dated March 19, 1998, a copy of which is attached hereto and made a part hereof.
- (d) ADA Access. All work performed and all services provided pursuant to this contract shall be in compliance with Federal policy to ensure that elderly individuals and individuals with disabilities have an equal right to use of public transportation services and facilities. To the extent this Contract requires planning and design of services and facilities, special efforts shall be made to implement the transportation and accessibility rights of elderly individuals and individuals with disabilities. The work performed and services provided in this Contract shall be in compliance with all State and Federal statutes and laws ensuring equal access of transportation services and facilities for the elderly and individuals with disabilities, including 49 USC § 5301(d), § 504 of the Rehabilitation Act of 1973, as amended, 29 USC § 794, The Americans with Disabilities Act of 1990, as amended, 42 USC § 12101 et seq, and the Architectural Barriers Act of 1968, as amended, 42 USC § 4151 et seq, and any applicable implementing Federal regulations or directives as they may from time to time be promulgated or amended.
- (e) This provision B.1 (a)-(e) will be included in all subcontracts relating to this contract. Further, each contract which Contractor signs with a Subcontractor must include the following assurance:

The Contractor, Subrecipient, or Subcontractor shall not discriminate on the basis of race, color, national origin, creed, disability, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of US DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

## 2. DBE REQUIREMENTS.

- (a) Contractor will carry out the applicable requirements of the Michigan Department of Transportation's Disadvantaged Business Enterprise ("DBE") program and 49 CFR 26, including, but not limited to those requirements set forth in Appendix B, attached hereto and made a part hereof. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as CATA deems appropriate, which may include, but is not limited to, withholding monthly progress payments, assessing sanctions, liquidated damages and/or disqualifying the Contractor from future bidding as non-responsible.

- (b) Contractor shall pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than thirty (30) days after the Contractor's receipt of payment for that work from CATA. In addition, Contractor shall return any retainage payments to those subcontractors within thirty (30) days after the subcontractor's work related to this contract is satisfactorily completed. Contractor must promptly notify CATA whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete the work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The Contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of CATA.
3. CONTINGENT FEES. The Contractor warrants that it has not employed or retained any company or person, other than a bonafide employee working solely for the Contractor, to solicit or secure this contract and that it has not paid or agreed to pay any company or person, other than a bonafide employee working solely for the Contractor, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty, CATA shall have the right to annul this contract without liability.
4. RECORDS/AUDITS. The Contractor shall maintain and retain, and shall require all its subcontractors to maintain and retain, complete and accurate books, documents, papers, accounting records, contracts, and other evidence with respect to allowable costs incurred and manpower expended under this contract. All such records shall be maintained on the basis of generally-accepted accounting principles and shall be clearly identified and readily accessible. The Contractor shall provide during regular business hours to the U.S. Secretary of Transportation, the FTA Administrator, the Comptroller General of the United States, and CATA, or their duly authorized representatives, access to such data and records, and the right to inspect and audit all data and records of the Contractor relating to its performance under the contract, and to make transcripts therefrom as necessary. Contractor shall retain all work data, documents, records, accounts and reports related to this contract for a period of three (3) years from the date of final payment under this contract or from expiration or other termination of this contract. In the event of a dispute as to allowable costs or any other issue under this contract, Contractor will thereafter continue to maintain such records until the dispute has been resolved.
5. CONFLICT OF INTEREST. The Contractor certifies that, to the best of its knowledge, no CATA employee or office of any public agency interested in this contract has any pecuniary interest in the business of the Contractor and that no person associated with the Contractor has any interest that would conflict in any manner or degree with the performance of this contract.
6. INTEREST OF MEMBER OF CONGRESS OR DELEGATES TO CONGRESS. No member of Congress or delegates to the Congress of the United States shall be admitted to any share or part of the contract, or to any benefit arising therefrom. This shall not be construed to prevent any such person from owning stock in a publicly owned corporation.
7. DEBARMENT AND SUSPENSION. Contractor must comply with U.S. DOT regulations "Nonprocurement Suspension and Debarment", 2 CFR Part 1200, which adopt and supplement the U.S. Office of Management and Budget ("U.S. OMB") "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," 2 CFR Part 180. Contractor will not make any contract, subcontract, or lease for the project without first confirming that its proposed contractor, subcontractor, or lessee is not listed as barred or excluded from participating in government contracts in the System for Award Management (SAM) at [www.sam.gov](http://www.sam.gov).

Contractor agrees to comply with federal debarment and suspension regulations and guidelines when administering any contract or subcontract of \$25,000 or more, regardless of tier. A contract or subcontract award may not be made to a prospective contractor or subcontractor if that contractor is excluded or disqualified under the standards of the U.S.

DOT regulations in the U.S. OMB Guidelines, unless the federal government has provided an exception as permitted under those regulations and guidelines. In addition, contracts of any amount for federally required audit services or for contracts which require the consent of a federal official are also covered by these DOT regulations and U.S. OMB Guidelines. Contractor must obtain the compliance of lower tier contractors, subcontractors, and lessees with the U.S. DOT debarment and suspension regulations and the U.S. OMB Guidelines that apply to them. The Contractor further agrees to include provisions requiring compliance as set forth above in lower tier covered transactions.

8. **MDOT AND FTA TERMS.** All contractual provisions that the Michigan Department of Transportation ("MDOT") or the Federal Transit Administration ("FTA"), by law or regulation, require to be included in contracts supported by state or federal financial assistance, including the requirements set forth in FTA Circular 4220.1F, as updated and amended, and the Master Agreement between CATA and FTA as it may be amended, are hereby incorporated by reference. FTA required terms and MDOT required terms shall be deemed to control in the event of a conflict with other provisions contained in this contract. Contractor shall not refuse to comply with any CATA request to conform this contract to include MDOT or FTA required contractual provisions. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any CATA requests which would cause CATA to be in violation of the FTA mandated contractual provisions.
9. **COMPLIANCE WITH LAWS.** The Contractor shall at all times observe and comply with all laws, ordinances, and regulations of the state, federal, local, and city government which may, in any manner, affect the performance of the contract.
10. **CLEAN AIR.** The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. If state or local air pollution regulations are in force, the more restrictive criteria shall govern. The Contractor and any subcontractors or suppliers must submit evidence to CATA that the governing air pollution criteria will be met. The Contractor agrees to report each violation to CATA and understands and agrees that CATA will, in turn, report each violation as required to FTA and the appropriate EPA Regional Office. The Contractor also agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FTA.
11. **BUY AMERICA PROVISIONS.** Contractor agrees to comply with 49 U.S.C. 5323(j) and FTA's Buy America Regulations in 49 CFR Part 661. These require that iron, steel, and manufactured products used in FTA funded projects be produced in the United States, with specific provisions that apply to rolling stock procurements, unless a waiver has been granted by FTA or the product is subject to a general waiver. The continued accuracy of the certificate, attached as Appendix C, entitled "Buy America Certification", submitted with Contractor's proposal/bid is a term and condition of this Agreement.
12. **CERTIFICATION REGARDING LOBBYING.** This procurement is subject to the Federal Transportation Administration Lobbying requirements. The attached certificate, entitled Certificate Regarding Lobbying (Appendix D), must be signed and returned as a term and condition of the procurement.
13. **FEDERAL WAGE REQUIREMENTS FOR CONSTRUCTION CONTRACTS.**
  - (a) This procurement is subject to the Davis-Bacon Act, 40 USC § 3141, et seq, and to the Copeland Anti-Kickback Act, 18 USC § 874, and to Contract Work Hours and Safety Standards Act, 40 USC § 3701, et seq, and to the regulations promulgated thereunder ("the Acts"). As required by federal regulations promulgated under the Acts, the following provisions set forth in Paragraph 13(b) and (c) are incorporated into the Agreement, with the understanding that the term "contracting officer" refers to the appointed representative of CATA.
  - (b) **Davis-Bacon and Copeland Anti-Kickback Acts**

(1) **Minimum wages**

(i) All laborers and mechanics employed or working under the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) Except with respect to helpers as defined as 29 CFR 5.2(n)(4), the work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) With respect to helpers as defined in 29 CFR 5.2(n)(4), such a classification prevails in the area in which the work is performed.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (v) (A) The contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination with 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(v) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(2) **Withholding** - Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, Owner may, after written notice to the Contractor, sponsor, applicant, or agency, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) **Payrolls and basic records**

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractor's employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii) (A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to Owner for transmission to the Federal Transit Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

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

(1) That the payroll for the payroll period contains the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5 and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

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

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

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

(4) **Apprentices and trainees**

(i) Apprentices - Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid

fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division of the U.S. Department of Labor determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees - Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity - The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) **Compliance with Copeland Act requirements** - The Contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) **Subcontracts** - The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Federal Transit Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) **Contract termination: debarment** - A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a subcontractor as provided in 29 CFR 5.12.

(8) **Compliance with Davis-Bacon and Related Act requirements** - All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) **Disputes concerning labor standards** - Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) **Certification of eligibility**

(i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(c) **Contract Work Hours and Safety Standards Act**

(1) **Overtime requirements** - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages** - In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) **Withholding for unpaid wages and liquidated damages** - Capital Area Transportation Authority shall upon its own action or upon written request of an

authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) **Subcontracts** - The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

14. **BID BOND.** A bid bond must be included with all bid documents as set forth in CATA's bid requests.
15. **PROTESTS.** Any protests shall be filed timely in accordance with the CATA Procurement Protest Procedures. These Procedures are available from the CATA Purchasing & Contracts Manager and the CATA CEO/Executive Director, at the following address: Capital Area Transportation Authority, 4615 Tranter Street, Lansing, MI 48910.
16. **PERFORMANCE & PAYMENT BONDS.** The successful bidder on a construction contract shall furnish at its own expense performance and payments bonds. These bonds shall be furnished to CATA within ten (10) calendar days after contract award. Bond requirements are as follows:
  - (a) A performance bond for construction contracts shall be payable to CATA in the amount of 100 percent (100%) of the full contract amount as a guarantee of good faith on behalf of the Contractor that the Contractor will perform all of its obligations under the contract.
  - (b) A payment bond shall be payable to CATA in the amount of 100 percent (100%) of the full amount of any construction contract to assure payment as required by law of all persons supplying labor and material in the execution of work provided for in the contract.
17. **FEDERAL CHANGES.** Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between CATA and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor shall not, by action or by inaction, cause CATA to be in violation of FTA regulations, policies, procedures, or directives. Contractor's failure to comply with this paragraph shall constitute a material breach of this contract.
18. **NO GOVERNMENT OBLIGATION.** Notwithstanding any concurrence by the Federal Government or MDOT in, or approval of, the solicitation or award of this Agreement, absent the express written consent by the Federal Government or by MDOT, neither the Federal Government nor the State of Michigan is a party to this Agreement, and neither shall be subject to any obligations or liabilities to CATA, the Contractor or any other party (whether or not a party to this Agreement) pertaining to any matter resulting from this Agreement. The Contractor agrees to include this clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

19. CLEAN WATER. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 *et seq.* The Contractor agrees to report each violation to CATA and understands and agrees that CATA will, in turn, report each violation as required to FTA and the appropriate EPA Regional Office. The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.
20. SEISMIC SAFETY. The Contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations 49 CFR Part 41 and will certify to compliance to the extent required by the regulation. The Contractor also agrees to ensure that all work performed under this Contract including work performed by a subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.
21. ENERGY CONSERVATION. The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.
22. RECOVERED MATERIALS. The Contractor agrees to comply with all requirements of Section 6002 of the Resource Conservation and Recovery Act ("RCRA"), as amended (42 USC 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in subpart B of 40 CFR Part 247.
23. FLY AMERICA REQUIREMENTS. Contractor agrees to comply with 49 U.S.C. 40118 ("Fly America Act") in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and subrecipients of federal funds and their contractors are required to use United States Flag air carriers for U.S. Government financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a United States Flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.
24. CARGO PREFERENCE. The Contractor agrees (a) to use privately owned United States Flag commercial vessels to ship at least 50% of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States Flag commercial vessels; (b) to furnish within twenty (20) working days following the date of loading of shipments originating within the United States or within thirty (30) working days following the date of loading for shipments originating outside the United States, a legible copy of the rated, "on-board" commercial ocean bill of lading, in English, for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, D.C., 20590. CATA (through the Contractor in the case of a subcontractor's bill of lading); and (c) to include these requirements in all subcontracts issued pursuant to this contract where the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.
25. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS.
  - (a) The Contractor acknowledges that the provisions of the Program Fraud Civil Rights Act of 1986, as amended, 31 U.S.C. § 3801 *et seq.* and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes,

or may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

- (b) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under authority of 49 U.S.C. § 5307, the Federal Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, or the applicable Federal law to the extent the Federal Government deems appropriate.
- (c) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

26. SAFE OPERATION OF MOTOR VEHICLES

- (1) Seat Belt Use - Contractor is encouraged to adopt and promote on-the-job seat belt use policies and programs for its employees and other personnel that operate company-owned vehicles, company-rented vehicles, or personally operated vehicles. The terms "company-owned" and "company-leased" refer to vehicles owned or leased either by the Contractor or CATA.
- (2) Distracted Driving - Contractor agrees to adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers, including policies to ban text messaging while using an electronic device supplied by an employer and driving a vehicle the driver owns or rents, a vehicle either Contractor or CATA owns, leases, or rents, or a privately-owned vehicle when on official business in connection with the work performed under this agreement.

27. VETERANS EMPLOYMENT. Contractors working on a federally funded project give a hiring preference, to the extent practicable, to veterans (as defined in 5 USC §2108) who have the requisite skills and abilities to perform the construction work required under the contract. This provision shall not be understood, construed, or enforced in any manner that would require an employer to give preference to any veteran over any equally qualified applicant who is a member any racial or ethnic minority, female, an individual with a disability, or former employee.

## APPENDIX A

### **PROHIBITION OF DISCRIMINATION IN STATE CONTRACTS**

In connection with the performance of work under this contract, Contractor agrees as follows:

1. In accordance with Act 453, Public Acts of 1976, Contractor hereby agrees not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or as a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, or marital status. Further, in accordance with Act No. 220, Public Acts of 1976 as amended by Act No. 478, Public Acts of 1980, Contractor hereby agrees not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. A breach of the above covenants shall be regarded as a material breach of this contract.
2. Contractor hereby agrees that any and all subcontracts to this contract, whereby a portion of the work set forth in this contract is to be performed, shall contain a covenant the same as hereinabove set forth in Section 1 of this Appendix.
3. Contractor will take affirmative action to insure that applicants for employment and employees are treated without regard to their race, color, religion, national origin, age, sex, height, weight, marital status or a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
4. Contractor will, in all solicitations or advertisements for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status or disability that is unrelated to the individual's ability to perform the duties of a particular job or position.
5. Contractor or its collective bargaining representative will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representative of the Contractor's commitments under this appendix.
6. Contractor will comply with all relevant published rules, regulations, directives, and orders of the Michigan Civil Rights Commission which may be in effect prior to the taking of bids for any individual state project.
7. Contractor will furnish and file compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission, said forms may also elicit information as to the practices, policies, program, and employment statistics of each subcontractor as well as Contractor itself, and said Contractor will permit access to its books, records, and accounts by the Michigan Civil Rights Commission and/or its agent, for purposes of investigation to ascertain compliance with this contract and relevant with rules, regulations, and orders of the Michigan Civil Rights Commission.
8. In the event that the Civil Rights Commission finds, after a hearing held pursuant to its rules, that Contractor has not complied with the contractual obligations under this Agreement, the Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the Administrative Board of the State of Michigan, which Administrative Board may order the cancellation of the contract found to have been violated and/or declare Contractor ineligible for future contracts with the state and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until Contractor complies with said order of the Civil Rights Commission. Notice of said declaration of future ineligibility may be given to any or all of the persons with whom Contractor is declared ineligible to contract as a contracting party in future contracts. In any case before the Civil Rights Commission in which cancellation of an existing contract is a possibility, the contracting agency shall be notified of such possible remedy and shall be given the option by the Civil Rights Commission to participate in such proceedings.
9. Contractor will include, or incorporate by reference, the provisions of the foregoing paragraphs (1) through (8) in every subcontract or purchase order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or purchase order that said provisions will be binding upon each subcontractor or seller.

## APPENDIX B

### **ASSURANCES THAT CONTRACTORS AND SUBCONTRACTORS MUST MAKE PURSUANT TO US DOT REGULATION 49 CFR § 26, et seq**

- A. Contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex, in the performance of this contract. Contractor shall carry out applicable requirements of 49 CFR § 26 in the award and administration of DOT-assisted contracts. Failure of the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
1. Withholding monthly progress payments;
  2. Assessing sanctions;
  3. Liquidated damages; and/or
  4. Disqualifying the Contractor from further bidding as non-responsible.
- B. Each contract Contractor signs with a subcontractor must include the preceding assurance.



**SECTION 00 3100 AVAILABLE PROJECT INFORMATION**

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**PART 1 GENERAL**

**1.01 EXISTING CONDITIONS**

- A. Certain information relating to existing surface and subsurface conditions and structures is available to bidders but will not be part of Contract Documents, as follows:
- B. Existing Conditions Surveys: Entitled Roofing Field Report, dated 10/15/2021.

**PART 2 PRODUCTS (NOT USED)**

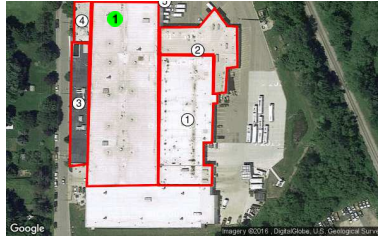
**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**



**Property:**  
 C.A.T.A.  
 4615 Tranter Street  
 Lansing, MI 48910

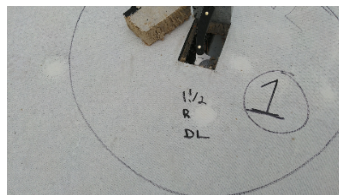
**INVOICE # 1448299**  
 Capitol Area Transportation Authority  
 (C.A.T.A.)  
 4615 Tranter Street  
 Lansing, MI 48910



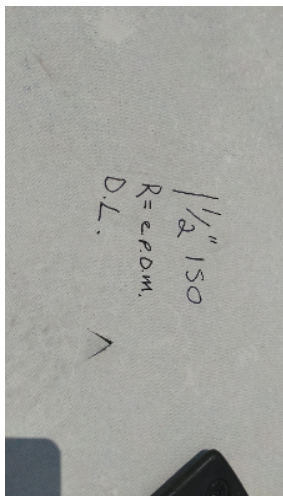
Distributed By: Superior Services R.S.H., Inc.  
 Date dispatched: 07/06/2021  
 Time dispatched: 03:29 PMEST

Acknowledged: 07/21/2021 02:24 PM  
 Signed: Joe

**1 Problem:**



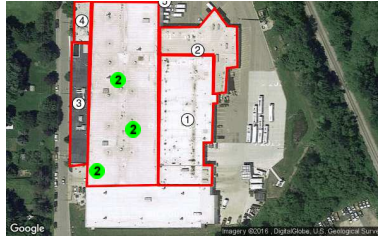
**1 Corrective Action:**





**Property:**  
C.A.T.A.  
4615 Tranter Street  
Lansing, MI 48910

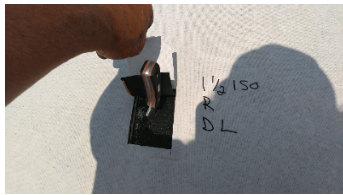
**INVOICE # 1448299**  
Capitol Area Transportation Authority  
(C.A.T.A.)  
4615 Tranter Street  
Lansing, MI 48910



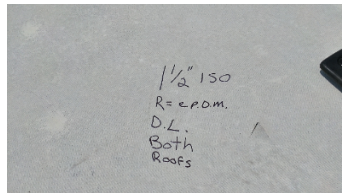
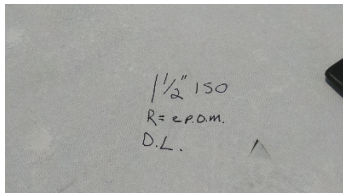
Distributed By: Superior Services R.S.H., Inc.  
Date dispatched: 07/06/2021  
Time dispatched: 03:29 PMEST

Acknowledged: 07/21/2021 02:24 PM  
Signed: Joe

**2 Problem:**



**2 Corrective Action:**





**SECTION 00 4100 BID FORM**

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**THE PROJECT AND THE PARTIES**

**1.01 FOR: CATA ROOFING REPLACEMENTS**

**1.02 DATE:** \_\_\_\_\_ (BIDDER TO ENTER DATE)

**1.03 SUBMITTED BY: (BIDDER TO ENTER NAME AND ADDRESS)**

- A. Bidder's Full Name \_\_\_\_\_
  - 1. Address \_\_\_\_\_
  - 2. City, State, Zip \_\_\_\_\_

**1.04 OFFER**

- A. Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by Progressive AE for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:
- B. \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.
- C. We have included the required security deposit as required by the Instruction to Bidders.
- D. The performance assurance bonds are not included in the Bid Amount. The cost of the performance assurance bonds are a sum of:
- E. \_\_\_\_\_ dollars (\$ \_\_\_\_\_)
- F. All applicable federal taxes are included and State of Michigan taxes are included in the Bid Sum.

**1.05 ACCEPTANCE**

- A. This offer shall be open to acceptance and is irrevocable for 90 days from the bid closing date.
- B. In the event our bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

**1.06 CONTRACT TIME**

- A. If this Bid is accepted, we will complete the project within nine months award date.

**1.07 CHANGES TO THE WORK**

- A. When Architect establishes that the method of valuation for Changes in the Work will be net cost plus a percentage fee in accordance with General Conditions, our percentage fee will be:
  - 1. \_\_\_10\_\_\_ percent overhead and profit on the net cost of our own Work;
  - 2. \_\_\_5\_\_\_ percent on the cost of work done by any Subcontractor.
- B. On work deleted from the Contract, our credit to Owner shall be Architect-approved net cost plus \_\_\_0\_\_\_ of the overhead and profit percentage noted above.

**1.08 ADDENDA**

- A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.
  - 1. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.
  - 2. Addendum # \_\_\_\_\_ Dated \_\_\_\_\_.

**1.09 BID FORM SIGNATURE(S)**

- A. The Corporate Seal of
- B. \_\_\_\_\_
- C. (Bidder - print the full name of your firm)
- D. was hereunto affixed in the presence of:
- E. \_\_\_\_\_
- F. (Authorized signing officer, Title)
- G. (Seal)

**SECTION 00 4100 BID FORM**

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H. \_\_\_\_\_

I. (Authorized signing officer, Title)

**1.10 IF THE BID IS A JOINT VENTURE OR PARTNERSHIP, ADD ADDITIONAL FORMS OF EXECUTION FOR EACH MEMBER OF THE JOINT VENTURE IN THE APPROPRIATE FORM OR FORMS AS ABOVE.**

**END OF BID FORM**

**SECTION 00 4322 UNIT PRICES FORM**

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**PARTICULARS**

1.01 THE FOLLOWING IS THE LIST OF UNIT PRICES REFERENCED IN THE BID SUBMITTED BY:

1.02 (BIDDER) \_\_\_\_\_

1.03 TO (OWNER ): \_\_\_\_\_

1.04 DATED \_\_\_\_\_ AND WHICH IS AN INTEGRAL PART OF THE BID FORM.

1.05 THE FOLLOWING ARE UNIT PRICES FOR SPECIFIC PORTIONS OF THE WORK AS LISTED, AND ARE APPLICABLE TO AUTHORIZED VARIATIONS FROM THE CONTRACT DOCUMENTS.

**UNIT PRICE LIST**

ITEM DESCRIPTION	QUANTITY	UNIT VALUE
A. _____	_____	_____

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**END OF SECTION**



**SECTION 00 4323 ALTERNATES FORM**

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**PARTICULARS**

**THE FOLLOWING IS THE LIST OF ALTERNATES REFERENCED IN THE BID SUBMITTED BY:**

**(BIDDER) \_\_\_\_\_**

**TO (OWNER ): \_\_\_\_\_**

**DATED \_\_\_\_\_ AND WHICH IS AN INTEGRAL PART OF THE BID FORM.**

**ALTERNATES LIST**

**THE FOLLOWING AMOUNTS SHALL BE ADDED TO OR DEDUCTED FROM THE BID AMOUNT. REFER TO SECTION 01 2300 - ALTERNATES.**

**ALTERNATE # 1: ADD / (DEDUCT) \$ \_\_\_\_\_**

**END OF SECTION**



**SECTION 00 4325 SUBSTITUTION REQUEST FORM - DURING PROCUREMENT**

**PROJECT: CATA ROOFING REPLACEMENTS**

**PROJECT NO. : 75820015**

To: Progressive AE; Attention: Seth Horton; hortons@progressiveae.com

Re: \_\_\_\_\_

From: \_\_\_\_\_

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

**DESCRIPTION:**

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

Section No.: \_\_\_\_\_

Page: \_\_\_\_\_

Article/Paragraph: \_\_\_\_\_

Proposed Substitution: \_\_\_\_\_

Manufacturer: \_\_\_\_\_

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

Model No.: \_\_\_\_\_

Web Site: \_\_\_\_\_

**SUPPORTING DATA ATTACHED:**

- Attached data to include product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are to be clearly identified.

- Attached data to also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

( ) Drawings ( ) Product Data ( ) Samples ( ) Tests ( ) Reports ( ) \_\_\_\_\_

**THE UNDERSIGNED CERTIFIES:**

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.

- Same warranty will be furnished for proposed substitution as for specified product.

- Same maintenance service and source of replacement parts, as applicable, is available.

- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.

- Proposed substitution does not affect dimensions and functional clearances.

- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Signed by: (printed) \_\_\_\_\_

(signature) \_\_\_\_\_

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

Email: \_\_\_\_\_

**A/E'S REVIEW AND ACTION:**

( ) Substitution approved - Make submittals in accordance with Specification Section 01 6000 - Product Requirements, Substitution Procedures.

( ) Substitution approved as noted - Make submittals in accordance with Specification Section 01 6000, Substitution Procedures.

( ) Substitution rejected - Use specified materials.

( ) Substitution request received too late - Use specified materials.

Remarks \_\_\_\_\_

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

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

**END OF SECTION**



## **SECTION 00 7200 GENERAL CONDITIONS**

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### **FORM OF GENERAL CONDITIONS**

#### **1.01 GENERAL CONDITIONS**

- A. The General Conditions of the contract for Construction (AIA Document A201, 1997) Articles 1 through 14, as published by the American Institute of Architects, are herewith made part of the specifications.
- B. Reference to the General Conditions can be made at the Architect's office, or copies may be obtained from the American Institute of Architects, 1735 New York Avenue, NW, Washington DC 20006.
- C. The General conditions are modified in certain particulars. See Section 00 7300 - Supplementary conditions.

#### **1.02 RELATED REQUIREMENTS**

- A. SECTION 00 7300 - Supplementary Conditions.

#### **1.03 SUPPLEMENTARY CONDITIONS**

- A. REFER TO DOCUMENT 00 7300 - Supplementary Conditions FOR AMENDMENTS TO THESE GENERAL CONDITIONS.

**END OF SECTION**



## SECTION 00 7300 SUPPLEMENTARY CONDITIONS

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### PART 1 GENERAL

#### 1.01 SUMMARY

- A. These Supplementary Conditions amend and supplement the General Conditions defined in Document 00 7200 - General Conditions and other provisions of the Contract Documents as indicated below. Provisions that are not so amended or supplemented remain in full force and effect.
- B. The terms used in these Supplementary Conditions that are defined in the General Conditions have the meanings assigned to them in the General Conditions.

#### 1.02 RELATED SECTIONS

- A. Section 01 4216 - Definitions.

#### 1.03 MODIFICATIONS TO GENERAL CONDITIONS

- A. General Conditions of Contract for Construction (American Institute of Architects, Document A201, 2007 edition, Articles 1 through 15 inclusive) as modified hereinafter are hereby made part of these specifications to same extent as if bound herein and shall apply to all Contractors, separate Contractors, and/or subcontractors.
- B. The following supplements shall modify, delete, and/or add to the General Conditions. Where any article or paragraph in the General Conditions is supplemented by one of the following paragraphs, the provisions of such article, paragraph, or subparagraph shall remain in effect, and the supplemental provisions shall be considered as added thereto. Where any article, paragraph, or subparagraph in the General Conditions is amended, voided, or superseded by any of the following paragraphs, the provisions of such article, paragraph, or subparagraph not so amended, voided, or superseded shall remain in effect.
- C. ARTICLE 1 - GENERAL PROVISIONS
  - 1. CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS
    - a. Add "and to make all working systems operational" to the first sentence of 1.2.1.
    - b. Add 1.2.1.1 and 1.2.1.2 as follows:
    - c. "1.2.1.1 Figures given on the drawings govern scale measurements, and large scale governs small scale. Discrepancies shall be brought to the attention of the Architect for interpretation; and the Architect's decision, in writing, shall govern."
    - d. "1.2.1.2 If the drawings and specifications disagree in themselves or with each other, estimate on and furnish the greater quantity or better quality unless otherwise instructed in writing by the Architect."
  - 2. INTERPRETATION
    - a. Add 1.4.2 as follows:
    - b. Request for Interpretation: Contractor shall utilize the following procedure to procure specific written interpretation of an item in the contract documents.
      - 1) The Request for Interpretation form included herein must be faxed or e-mailed to the Architect. Responses will be forwarded back to the Contractor promptly or, in special exceptions where a prompt answer is not possible, a fax or e-mail will be returned promptly stating that the issue is being reviewed and a response will be available by the date stated. The Contractor will complete the following items on the form:
        - (a) RFI inquiry number (assigned by Contractor),
        - (b) Check the type of question (architectural, civil, structural, mechanical, electrical).
        - (c) Drawing and specification reference numbers.
        - (d) Advise of any potential cost/schedule impacts.
        - (e) Describe the question.
        - (f) Contractor recommendation considering field conditions.
      - 2) Fax or e-mail to Architect.
      - 3) All questions will be handled by fax or e-mail as stated above. No telephone/verbal responses will be provided except in extreme emergencies. In such instances, an RFI confirming the verbal communication must be submitted by the Contractor for record purposes, as reasonably practical within 5 business days.

## SECTION 00 7300 SUPPLEMENTARY CONDITIONS

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- 4) All questions and responses given by the Architect during field visits will be documented in Field Reports. The Contractor should not wait for the Architect's visit to the site to obtain responses, but questions should be faxed or e-mailed to the Architect as they occur."
  3. OWNERSHIP AND USE OF ARCHITECT'S DRAWINGS, SPECIFICATIONS, AND OTHER INSTRUMENTS OF SERVICE
    - a. Add 1.5.3 as follows:
    - b. Electronic media copies of the documents are available upon written request. Requesting party shall utilize "Agreement for Use of Electronic Media" form included herein, fill out completely, and e-mail to Architect for approval. Payment must be received by Progressive AE before electronic media can be released.
      - 1) List all documents requested.
        - (a) Indicate CAD format/version requested.
        - (b) Clearly identify purpose for request.
        - (c) Submit check payable to "Progressive AE" in the correct amount. Identify on the check the Project Name and Number, and reference "Electronic Media."
        - (d) Sign form as indicated, including e-mail address and telephone number, and submit accordingly to Progressive AE."
- D. ARTICLE 3 - CONTRACTOR
1. REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR
    - a. Delete Subparagraph 3.2.2 and substitute the following:
    - b. 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 2.2.3. The Contractor shall take field measurements and verify field conditions and other information known to the Contractor with the contract documents before commencing activities. Errors, inconsistencies or omissions discovered or made known to the Contractor shall be reported to the Architect promptly as a request for information in such form as the Architect may require."
  2. WARRANTY
    - a. Add to 3.5.2 as follows:
    - b. "The Contractors shall guarantee their work for a period of 1 year from the date of Substantial Completion and shall leave the work in perfect order at completion. Neither the final certificate of payment nor any provision in the contract documents shall relieve the Contractor of the responsibility for negligence or faulty material or workmanship within the extent and period provided by law. Upon written notice, he/she shall remedy the defects due thereto and shall pay all expenses for any damage to other work resulting therefrom. Any material or system specifically specified to have a longer guarantee period shall be guaranteed for the length of the specified time."
  3. CUTTING AND PATCHING OF WORK
    - a. Add 3.14.3 as follows:
    - b. "3.14.3 Permission to patch any areas or items of work does not imply a waiver of the Architect's right to require complete removal and replacement if, in Architect's opinion, said patching does not satisfactorily restore the quality and appearance of the work."
  4. CLEANING UP
    - a. Add 3.15.3 as follows:
    - b. "3.15.3 Contractor shall also clean and remove all broken or scratched glass and replace it with new glass meeting the requirements of the specifications; shall remove all paint droppings, spots, stains, and dirt from finished surfaces; and shall thoroughly clean all plumbing fixtures, hardware, and floors. Carpet shall be vacuum cleaned. To the maximum extent that is reasonably possible, each Contractor shall keep the interior of the building free from waste combustible material and debris at all times."

## E. ARTICLE 4 - ADMINISTRATION OF THE CONTRACT

## SECTION 00 7300 SUPPLEMENTARY CONDITIONS

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### 1. ARCHITECT'S ADMINISTRATION OF THE CONTRACT

- a. Add 4.2.7.1 as follows:
- b. "4.2.7.1 Architect's Action: General: Except for submittals for the record and similar purposes, where action and return on submittals are required or requested, the Architect will review each submittal and mark with appropriate "action" with reasonable promptness. Where the submittal must be held for coordination, the Architect will so advise the Contractor without delay. The Architect's review of a specific item shall not indicate review of an assembly of which the item is a component.
  - 1) Architect's Action Stamp: The Architect will stamp each submittal to be returned with a uniform, self explanatory action stamp, appropriately marked and executed. It shall read as follows:
    - (a) "Corrections or comments made on the shop drawings during this review do not relieve Contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor is responsible for confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his/her work with that of all other trades, and performing his/her work in a safe and satisfactory manner.
    - (b) Marking X Reviewed
      - (1) Final unrestricted release. Where the submittals are marked as above, the work covered by the submittal may proceed, provided it complies with the requirements of the contract documents; acceptance of the work will depend upon that compliance.
    - (c) Marking X Furnish as Corrected
      - (1) Final but restricted release. When submittals are marked as above, work covered by submittal may proceed, provided it complies with both Architect's notations or corrections on the submittal and with the requirements of the contract documents; acceptance of the work will depend on that compliance.
    - (d) Marking X Revise and Resubmit
      - (1) Returned for resubmittal. When submittal is marked as above, revise or prepare new submittal in accordance with Architect's notations stating reasons for returning submittal; cloud all revisions to expedite review; resubmit submittal without delay. Repeat if necessary to obtain a different action marking. Do not permit submittals with the above marking to be used at the project site or elsewhere where work is in progress.
    - (e) Marking X Rejected
      - (1) Returned for resubmittal. When the submittal is marked as above, do not proceed with the work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise the submittal, or prepare a new submittal in accordance with the Architect's notations stating the reasons for returning the submittal. Resubmit the submittal without delay. Repeat if necessary to obtain a different action marking. Do not permit submittals with the above marking to be used at the project site or elsewhere where work is in progress."

### F. ARTICLE 9 - PAYMENTS AND COMPLETION

#### 1. SUBSTANTIAL COMPLETION

- a. Add 9.8.4 as follows:
- b. "9.8.4. The Contractor is obligated to complete the punch list items of the work within 60 days after the issuance of the Certificate of Substantial Completion unless otherwise noted in said Certificate. In the event the Contractor fails to complete the punch list items to the satisfaction of the Owner and within the time specified, the Owner may elect to give notice and complete the work in accordance with Article 2.4."

### G. ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

## SECTION 00 7300 SUPPLEMENTARY CONDITIONS

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### 1. SAFETY OF PERSONS AND PROPERTY

- a. Add 10.2.1.4 as follows:
- b. "10.2.1.4 The Contractor shall assume the responsibility for the protection of all finished construction under his/her contract and shall repair and restore any and all damage to his/her finished construction to its original state."

### H. ARTICLE 11 - INSURANCE AND BONDS

#### 1. CONTRACTOR'S LIABILITY INSURANCE

- a. Revise 11.1.1: In the first line, following the word "business," insert the following: ". . . and acceptable to the Owner . . . ."
- b. Add to 11.1.2 as follows:
- c. "The insurance required by Subparagraph 11.1.1 shall be written for not less than any limits of liability required by law or by those shown below and shall include contractual liability insurance as applicable to the Contractor's obligations under Paragraph 3.18:
- d. Workmen's Compensation: Statutory
- e. Employer's Liability: \$500,000--Each Accident
  - 1) \$500,000--Disease, Policy Limit
    - (a) \$500,000--Disease, Each Employee
- f. General Liability (Including Premises - Operations, Independent Contractors' Protective, Products and Completed Operations, Broad Form Property Damage):
  - 1) Bodily Injury: \$1,000,000--Each Occurrence
    - (a) \$2,000,000--Aggregate or Combined Single Limit
  - 2) Property Damage: \$1,000,000--Each Occurrence
    - (a) \$2,000,000--Aggregate or Combined Single Limit
  - 3) Products and completed operations insurance shall be maintained for a minimum of 2 years after final payment with evidence of such coverage being provided on an annual basis.
  - 4) Property damage liability insurance shall include coverage for explosion, collapse, and underground hazards.
  - 5) Contractual Liability (Hold Harmless):
    - (a) Bodily Injury: \$1,000,000--Each Occurrence
    - (b) Property Damage: \$1,000,000--Each Occurrence
      - (1) \$1,000,000--Aggregate
  - 6) If the general liability policy includes a general aggregate, such general aggregate shall not be less than \$2,000,000.
- g. Umbrella Excess Liability:
  - 1) Over Primary Insurance: \$ 1,000,000
  - 2) Maximum Retention: \$ 10,000
- h. Automobile Liability (Owned, Nonowned, Hired):
  - 1) Bodily Injury: \$1,000,000--Each Person
    - (a) \$1,000,000--Each Accident
  - 2) Property Damage: \$ 500,000--Each Occurrence
- i. Certificates of Insurance: Before commencing the work, the Contractor shall furnish the Owner with certificates of insurance showing the companies carrying the previously named coverages with the effective dates and expiration dates of each policy. The Owner and Architect shall be named additional insured with respect to comprehensive general liability and automobile coverages. The certificates shall provide that the policies may not be changed or terminated during the term mentioned except upon not less than 30 days' written notice to the Owner. Contractors shall, if requested, exhibit policies to the Owner.
- j. Fire Insurance and Certain Other Risks: The Contractor shall assume the risk of loss/damage to its machinery, tools/equipment, and field offices (including contents). The Contractor shall also assume the risk of loss/damage to its employees' tools and effects. The Owner shall in no event be liable for any such loss/damage to such property, nor shall the Owner be liable for any such loss/damage to any property of subcontractors.
- k. Contractor's Responsibility for Personal Injury and Property Damage: Except where due to Owner's sole negligence, Contractor agrees to indemnify Owner against all liability, loss, and damage arising out of injury to persons or properties (including

## **SECTION 00 7300 SUPPLEMENTARY CONDITIONS**

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Contractor's employees or properties) caused by the Contractor or his employees and agents."

I. **ARTICLE 12 - UNCOVERING AND CORRECTION OF WORK**

1. **CORRECTION OF WORK**

- a. Revise the second to the last sentence in 12.2.2.1 as follows:
- b. "During the one-year period for correction of the Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the right to make a claim for breach of warranty."

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF DOCUMENT**



## **SECTION 01 1000 SUMMARY**

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### **PART 1 GENERAL**

#### **1.01 PROJECT**

- A. Project Name: CATA Roofing Replacements
- B. The Project consists of the roofing membrane and insulation replacement of both the CTC and the Tranter Street Facility.

#### **1.02 CONTRACT DESCRIPTION**

- A. Contract Type: A single prime contract based on a Stipulated Price.

#### **1.03 OWNER OCCUPANCY**

- A. Owner intends to occupy the Project while work is ongoing.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

#### **1.04 CONTRACTOR USE OF SITE AND PREMISES**

- A. Arrange use of site and premises to allow:
  - 1. Owner occupancy.
  - 2. Use of site and premises by the public.
- B. Provide access to and from site as required by law and by Owner:
  - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
  - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.

**END OF SECTION**



## **SECTION 01 2000 PRICE AND PAYMENT PROCEDURES**

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### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Correlation of Contractor submittals based on changes.
- E. Procedures for preparation and submittal of application for final payment.

#### **1.02 RELATED REQUIREMENTS**

- A. Section 00 5000 - Contracting Forms and Supplements: Forms to be used.
- B. Section 00 7200 - General Conditions and Document 00 7300 - Supplementary Conditions: Additional requirements for progress payments, final payment, changes in the Work.
- C. Section 00 7300 - Supplementary Conditions: Percentage allowances for Contractor's overhead and profit.
- D. Section 01 2100 - Allowances: Payment procedures relating to allowances.
- E. Section 01 2200 - Unit Prices: Monetary values of unit prices; Payment and modification procedures relating to unit prices.

#### **1.03 SCHEDULE OF VALUES**

- A. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- B. Forms filled out by hand will not be accepted.
- C. Submit Schedule of Values in duplicate within 15 days after date of Owner-Contractor Agreement.
- D. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification section. Identify site mobilization.
- E. Include in each line item, the amount of Allowances specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by the unit cost to achieve the total for the item.
- F. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- G. Revise schedule to list approved Change Orders, with each Application For Payment.

#### **1.04 APPLICATIONS FOR PROGRESS PAYMENTS**

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- D. Forms filled out by hand will not be accepted.
- E. Execute certification by signature of authorized officer.
- F. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- G. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.
- H. Submit one electronic and three hard-copies of each Application for Payment.
- I. Include the following with the application:
  - 1. Transmittal letter as specified for submittals in Section 01 3000.
  - 2. Construction progress schedule, revised and current as specified in Section 01 3000.
  - 3. Current construction photographs specified in Section 01 3000.
  - 4. Partial release of liens from Subcontractors and vendors.
  - 5. Affidavits attesting to off-site stored products.

## **SECTION 01 2000 PRICE AND PAYMENT PROCEDURES**

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- 6. Retainage: 10 percent through substantial completion and 5 percent thereafter until final payment.
- J. When Architect requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

### **1.05 MODIFICATION PROCEDURES**

- A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect will issue instructions directly to Contractor.
- B. For other required changes, Architect will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
  - 1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
  - 2. Promptly execute the change.
- C. For changes for which advance pricing is desired, Architect will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 10 days.
- D. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
  - 1. For change requested by Architect for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
  - 2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Architect.
  - 3. For pre-determined unit prices and quantities, the amount will be based on the fixed unit prices.
  - 4. For change ordered by Architect without a quotation from Contractor, the amount will be determined by Architect based on the Contractor's substantiation of costs as specified for Time and Material work.
- E. Substantiation of Costs: Provide full information required for evaluation.
  - 1. On request, provide the following data:
    - a. Quantities of products, labor, and equipment.
    - b. Taxes, insurance, and bonds.
    - c. Overhead and profit.
    - d. Justification for any change in Contract Time.
    - e. Credit for deletions from Contract, similarly documented.
  - 2. Support each claim for additional costs with additional information:
    - a. Origin and date of claim.
    - b. Dates and times work was performed, and by whom.
    - c. Time records and wage rates paid.
    - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
  - 3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
- F. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- G. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- H. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- I. Promptly enter changes in Project Record Documents.

## **SECTION 01 2000 PRICE AND PAYMENT PROCEDURES**

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### **1.06 APPLICATION FOR FINAL PAYMENT**

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
  - 1. All closeout procedures specified in Section 01 7000.
  - 2. Requirements of Owner - Contractor Agreement.
  - 3. Requirements of General and Supplementary General Conditions.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**



## **SECTION 01 2200 UNIT PRICES**

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### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. List of unit prices, for use in preparing Bids for Alternate #1.
- B. Measurement and payment criteria applicable to Work performed under a unit price payment method.
- C. Defect assessment and non-payment for rejected work.

#### **1.02 RELATED REQUIREMENTS**

- A. Document 00 4322 - Unit Prices Form: List of Unit Prices as supplement to Bid Form.
- B. Section 01 2200 - Alternates: Alternate #1.

#### **1.03 COSTS INCLUDED**

- A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

#### **1.04 UNIT QUANTITIES SPECIFIED**

- A. Quantities indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements of actual Work will determine the payment amount.

#### **1.05 MEASUREMENT OF QUANTITIES**

- A. Measurement methods delineated in the individual specification sections complement the criteria of this section. In the event of conflict, the requirements of the individual specification section govern.
- B. Take all measurements and compute quantities. Measurements and quantities will be verified by Architect.
- C. Assist by providing necessary equipment, workers, and survey personnel as required.

#### **1.06 PAYMENT**

- A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work that is incorporated in or made necessary by the Work and accepted by the Architect, multiplied by the unit price.
- B. Payment will not be made for any of the following:
  - 1. Products wasted or disposed of in a manner that is not acceptable.
  - 2. Products determined as unacceptable before or after placement.
  - 3. Products not completely unloaded from the transporting vehicle.
  - 4. Products placed beyond the lines and levels of the required Work.
  - 5. Products remaining on hand after completion of the Work.
  - 6. Loading, hauling, and disposing of rejected Products.

#### **1.07 DEFECT ASSESSMENT**

- A. Replace Work, or portions of the Work, not complying with specified requirements.
- B. If, in the opinion of Architect, it is not practical to remove and replace the Work, Architect will direct one of the following remedies:
  - 1. The defective Work may remain, but the unit price will be adjusted to a new unit price at the discretion of Architect.
  - 2. The defective Work will be partially repaired to the instructions of the Architect, and the unit price will be adjusted to a new unit price at the discretion of Architect.
- C. The individual specification sections may modify these options or may identify a specific formula or percentage price reduction.
- D. The authority of Architect to assess the defect and identify payment adjustment is final.

#### **1.08 SCHEDULE OF UNIT PRICES**

- A. Item: Partial Roof Replacement; Section 07 0150.19.

**SECTION 01 2200 UNIT PRICES**

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**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

## **SECTION 01 2300 ALTERNATES**

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### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Description of Alternates.
- B. Procedures for pricing Alternates.
- C. Documentation of changes to Contract Sum and Contract Time.

#### **1.02 RELATED REQUIREMENTS**

- A. Document 00 2113 - Instructions to Bidders: Instructions for preparation of pricing for Alternates.
- B. Document 00 4323 - Alternates Form: List of Alternates as supplement to Bid Form.
- C. Document 00 5200 - Agreement Form: Incorporating monetary value of accepted Alternates.

#### **1.03 ACCEPTANCE OF ALTERNATES**

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

#### **1.04 SCHEDULE OF ALTERNATES**

- A. Alternate No. 1 - Roof Rehabilitation:
  - 1. Base Bid Item: Section 07 5400 and Drawing numbers A101 and A102 including Full Roof System Replacement.
  - 2. Alternate Item: Sections 07 0150.16, 07 0150.19 and 07 0150.74 and Drawing numbers A101 and A102 including Description of Alternate #1.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION - NOT USED**

**END OF SECTION**



## **SECTION 01 2500 SUBSTITUTION PROCEDURES**

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### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Procedural requirements for proposed substitutions.

#### **1.02 RELATED REQUIREMENTS**

- A. Section 00 4325 - Substitution Request Form - During Procurement: Required form for substitution requests made prior to award of contract (During procurement).
- B. Section 00 6325 - Substitution Request Form - During Construction: Required form for substitution requests made after award of contract (During construction).
- C. Section 01 6000 - Product Requirements: Fundamental product requirements, product options, delivery, storage, and handling.

#### **1.03 DEFINITIONS**

- A. Substitutions: Changes from Contract Documents requirements proposed by Contractor to materials, products, assemblies, and equipment.
  - 1. Substitutions for Cause: Proposed due to changed Project circumstances beyond Contractor's control.
    - a. Unavailability.
    - b. Regulatory changes.
  - 2. Substitutions for Convenience: Proposed due to possibility of offering substantial advantage to the Project.
    - a. Substitution requests offering advantages solely to the Contractor will not be considered.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION**

#### **3.01 GENERAL REQUIREMENTS**

- A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
  - 2. Agrees to provide the same warranty for the substitution as for the specified product.
  - 3. Agrees to provide same or equivalent maintenance service and source of replacement parts, as applicable.
  - 4. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.
  - 5. Waives claims for additional costs or time extension that may subsequently become apparent.
  - 6. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.
  - 1. Note explicitly any non-compliant characteristics.
- C. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
  - 1. Forms included in the Project Manual are adequate for this purpose, and must be used.
- D. Limit each request to a single proposed substitution item.

#### **3.02 SUBSTITUTION PROCEDURES DURING PROCUREMENT**

- A. Submittal Time Restrictions:
- B. Submittal Form (before award of contract):
  - 1. Submit substitution requests by completing the form in Section 00 4325; see this section for additional information and instructions. Use only this form; other forms of submission are unacceptable.

#### **3.03 SUBSTITUTION PROCEDURES DURING CONSTRUCTION**

- A. Submittal Form (after award of contract):

## **SECTION 01 2500 SUBSTITUTION PROCEDURES**

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1. Submit substitution requests by completing the form in Section 00 6325; see this section for additional information and instructions. Use only this form; other forms of submission are unacceptable.
- B. Submit request for Substitution for Cause within 14 days of discovery of need for substitution, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
- C. Substitutions will not be considered under one or more of the following circumstances:
  1. When they are indicated or implied on shop drawing or product data submittals, without having received prior approval.
  2. Without a separate written request.
  3. When acceptance will require revisions to Contract Documents.

### **3.04 RESOLUTION**

- A. Architect may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.
- B. Architect will notify Contractor in writing of decision to accept or reject request.
  1. Architect's decision following review of proposed substitution will be noted on the submitted form.

### **3.05 ACCEPTANCE**

- A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

### **3.06 CLOSEOUT ACTIVITIES**

- A. See Section 01 7800 - Closeout Submittals, for closeout submittals.
- B. Include completed Substitution Request Forms as part of the Project record. Include both approved and rejected Requests.

**END OF SECTION**

## **SECTION 01 4000 QUALITY REQUIREMENTS**

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### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Submittals.
- B. Quality assurance.
- C. References and standards.
- D. Testing and inspection agencies and services.
- E. Contractor's design-related professional design services.
- F. Control of installation.
- G. Mock-ups.
- H. Tolerances.
- I. Manufacturers' field services.
- J. Defect Assessment.

#### **1.02 RELATED REQUIREMENTS**

- A. Document 00 3100 - Available Project Information: Soil investigation data.
- B. Section 01 3000 - Administrative Requirements: Submittal procedures.
- C. Section 01 4216 - Definitions.
- D. Section 01 6000 - Product Requirements: Requirements for material and product quality.

#### **1.03 REFERENCE STANDARDS**

- A. ASTM C1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2008 (Reapproved 2014).
- B. ASTM C1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation; 2014.
- C. ASTM C1093 - Standard Practice for Accreditation of Testing Agencies for Masonry; 2013.
- D. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2012a.
- E. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection; 2018.
- F. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing; 2015.
- G. ASTM E699 - Standard Specification for Agencies Involved in Testing, Quality Assurance, and Evaluating of Manufactured Building Components; 2016.
- H. IAS AC89 - Accreditation Criteria for Testing Laboratories; 2017.

#### **1.04 DEFINITIONS**

- A. Contractor's Professional Design Services: Design of some aspect or portion of the project by party other than the design professional of record. Provide these services as part of the Contract for Construction.
  - 1. Design Services Types Required:
    - a. Design-Related: Design services explicitly required to be performed by another design professional due to highly-technical and/or specialized nature of a portion of the project. Services primarily involve engineering analysis, calculations, and design, and are not intended to alter the aesthetic aspects of the design.
- B. Design Data: Design-related, signed and sealed drawings, calculations, specifications, certifications, shop drawings and other submittals provided by Contractor, and prepared directly by, or under direct supervision of, appropriately licensed design professional.

#### **1.05 CONTRACTOR'S DESIGN-RELATED PROFESSIONAL DESIGN SERVICES**

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
- B. Base design on performance and/or design criteria indicated in individual specification sections.

## SECTION 01 4000 QUALITY REQUIREMENTS

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- C. Scope of Contractor's Professional Design Services: Provide for the following items of work:
1. Structural Design of Formwork: As described in Section 03 1000 - Concrete Forming and Accessories.
  2. Concrete Mix Design: As described in Section 03 3000 - Cast-in-Place Concrete. No specific designer qualifications are required.
  3. Structural Design of Steel Connections: As described in Section 05 1200 - Structural Steel Framing.
  4. Structural Design of Steel Connections: As described in Section 05 2100 - Steel Joist Framing.
  5. Structural Design of Steel Decking: As described in Section 05 3100 - Steel Decking.
  6. Structural Design of Metal Framing: As described in Section 05 4000 - Cold-Formed Metal Framing.
  7. Structural Design of Metal Fabrications: As described in Section 05 5000 - Metal Fabrications.
  8. Structural Design of Stairs: As described in Section 05 5100 - Metal Stairs.
  9. Structural Design of Railings: As described in Section 05 5213 - Pipe and Tube Railings.
  10. Structural Design of Wood Trusses: As described in Section 06 1753 - Shop-Fabricated Wood Trusses
  11. Structural Design: Include physical characteristics, engineering calculations, and resulting dimensional limitations as described in Section 08 4313 - Aluminum-Framed Storefronts.
  12. Structural Design: Include calculations for resisting wind loads, anchor locations, loads at points of attachment to building structure, physical characteristics, resulting dimensional limitations as described in Section 08 4413 - Glazed Aluminum Curtain Walls.
  13. Structural Design: Include calculations for resisting wind loads, physical characteristics, resulting dimensional limitations as described in Section 08 4500 - Translucent Wall and Roof Assemblies.
  14. Structural Design of Floor System: As described in Section 09 6900 - Access Flooring.
  15. Structural Design and Calculations: As described in Section 10 7113.43 - Fixed Sun Screens.
  16. Structural Design of Foundation: As described in Section 10 7500 - Flagpoles.
  17. Design of Structural Components: Include development of shop drawings, and performing shop and site work, as described in Section 13 3419 - Metal Building Systems.
  18. Design of Structural Components: As described in Section 14 2100 - Electric Traction Elevators.
  19. Design of Structural Components: As described in Section 14 2400 - Hydraulic Elevators.
  20. Sprinkler Layout: Coordinate with ceiling installation, detailed pipe layout, and hydraulic calculations as described in Section 21 1300 - Fire-Suppression Sprinkler Systems.
  21. Design of Structural Fill: As described in Section 31 2323 - Fill.
  22. Design of Geofoam Fill: As described in Section 31 2323.43 - Geofoam.
  23. Design of Piles: As described in Section 31 6316 - Auger Cast Grout Piles.
  24. Structural Calculations and Design: As described in Section 32 3223 - Segmental Retaining Walls

### 1.06 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Designer's Qualification Statement: Submit for Architect's knowledge as contract administrator, or for Owner's information.
1. Include information for each individual professional responsible for producing, or supervising production of, design-related professional services provided by Contractor.
    - a. Full name.
    - b. Professional licensure information.
    - c. Statement addressing extent and depth of experience specifically relevant to design of items assigned to Contractor.
- C. Design Data: Submit for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.

## **SECTION 01 4000 QUALITY REQUIREMENTS**

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1. Include calculations that have been used to demonstrate compliance to performance and regulatory criteria provided, and to determine design solutions.
  2. Include required product data and shop drawings.
  3. Include a statement or certification attesting that design data complies with criteria indicated, such as building codes, loads, functional, and similar engineering requirements.
  4. Include signature and seal of design professional responsible for allocated design services on calculations and drawings.
- D. Test Reports: After each test/inspection, promptly submit two copies of report to Architect and to Contractor.
1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of inspector.
    - d. Date and time of sampling or inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - g. Type of test/inspection.
    - h. Date of test/inspection.
    - i. Results of test/inspection.
    - j. Compliance with Contract Documents.
    - k. When requested by Architect, provide interpretation of results.
  2. Test report submittals are for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.
- E. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
  2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.
- F. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- G. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for Owner.
1. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.
- H. Erection Drawings: Submit drawings for Architect's benefit as contract administrator or for Owner.
1. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.
  2. Data indicating inappropriate or unacceptable Work may be subject to action by Architect or Owner.

### **1.07 QUALITY ASSURANCE**

- A. Testing Agency Qualifications:
1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
  2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
  3. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.
- B. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a

## **SECTION 01 4000 QUALITY REQUIREMENTS**

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Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

### **1.08 REFERENCES AND STANDARDS**

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Comply with reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

### **1.09 TESTING AND INSPECTION AGENCIES AND SERVICES**

- A. Contractor shall employ and pay for services of an independent testing agency to perform other specified testing.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- C. Contractor Employed Agency:
  - 1. Testing agency: Comply with requirements of ASTM E329, ASTM E543, ASTM E699, ASTM C1021, ASTM C1077, ASTM C1093, and ASTM D3740.
  - 2. Inspection agency: Comply with requirements of ASTM D3740 and ASTM E329.
  - 3. Laboratory: Authorized to operate in the State in which the Project is located.
  - 4. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
  - 5. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION**

### **3.01 CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

### **3.02 TOLERANCES**

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

## **SECTION 01 4000 QUALITY REQUIREMENTS**

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- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

### **3.03 TESTING AND INSPECTION**

- A. Testing Agency Duties:
  - 1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
  - 2. Perform specified sampling and testing of products in accordance with specified standards.
  - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
  - 4. Promptly notify Architect and Contractor of observed irregularities or non-compliance of Work or products.
  - 5. Perform additional tests and inspections required by Architect.
  - 6. Submit reports of all tests/inspections specified.
- B. Limits on Testing/Inspection Agency Authority:
  - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  - 2. Agency may not approve or accept any portion of the Work.
  - 3. Agency may not assume any duties of Contractor.
  - 4. Agency has no authority to stop the Work.
- C. Contractor Responsibilities:
  - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
  - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
  - 3. Provide incidental labor and facilities:
    - a. To provide access to Work to be tested/inspected.
    - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
    - c. To facilitate tests/inspections.
    - d. To provide storage and curing of test samples.
  - 4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
  - 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
  - 6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- D. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Architect.
- E. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

### **3.04 MANUFACTURERS' FIELD SERVICES**

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance equipment as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

### **3.05 DEFECT ASSESSMENT**

- A. Replace Work or portions of the Work not complying with specified requirements.

**END OF SECTION**



## **SECTION 01 4100 REGULATORY REQUIREMENTS**

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### **PART 1 GENERAL**

#### **1.01 SUMMARY OF REFERENCE STANDARDS**

- A. Regulatory requirements applicable to this project are the following:
1. 28 CFR 36 - Nondiscrimination by Public Accommodations and in Commercial Facilities; Final Rule; Department of Justice; current edition.
  2. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines; current edition.
  3. 29 CFR 1910 - Occupational Safety and Health Standards; current edition.
  4. ICC (IFC) - International Fire Code; 2012.
  5. NFPA 101 - Life Safety Code; 2015.
  6. Building Code: Michigan Building Code 2015.
  7. Plumbing Code: Michigan Plumbing Code 2015.
  8. Mechanical Code: Michigan Mechanical Code 2015.
  9. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
  10. Electrical Code: NEC 2014 (State of Michigan Electrical Code) 2014 National Electrical Code with Part 8 amendments 2015.
  11. Electrical Residential Code (1 and 2 family dwellings and townhouses): Michigan Residential Code 2015.
  12. Energy Code: Michigan Uniform Energy Code 2015.
  13. Residential Energy Code: Michigan Residential Code 2015 - Chapter 11
  14. Erosion and Sedimentation Control Regulations: \_\_\_\_\_.
  15. Wetland Protection: Goemare-Anderson Wetland Protection Act 203, 1979, and all subsequent amendments.
  16. Inland Lakes and Streams: Inland Lakes and Streams Act 346, 1972, and all subsequent amendments.
  17. Construction Lien Laws:
  18. Wage Rates: <https://sam.gov/wage-determination/MI20210084/8>
  19. Equal Opportunity for Employment (Michigan): comply with all applicable provisions of the Federal Civil rights Act and the Michigan Fair Employment Practices Act.

#### **1.02 RELATED REQUIREMENTS**

- A. Section 01 4000 - Quality Requirements.

#### **1.03 PERMITS, FEES, AND NOTICES**

- A. Contractor(s) responsibilities shall be in accordance with Article 3.7 of the General Conditions of the Contract [except as noted below].

#### **1.04 QUALITY ASSURANCE**

- A. Contractor's Designer Qualifications: Refer to Section - 01 4000 - Quality Requirements.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION - NOT USED**

**END OF SECTION**



## SECTION 01 4216 DEFINITIONS

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### PART 1 GENERAL

#### 1.01 SUMMARY

- A. Other definitions are included in individual specification sections.

#### 1.02 DEFINITIONS

- A. Furnish: To supply, deliver, unload, and inspect for damage.
- B. Install: To unpack, assemble, erect, apply, place, finish, cure, protect, clean, start up, and make ready for use.
- C. Product: Material, machinery, components, equipment, fixtures, and systems forming the work result. Not materials or equipment used for preparation, fabrication, conveying, or erection and not incorporated into the work result. Products may be new, never before used, or re-used materials or equipment.
- D. Provide: To furnish and install.
- E. Supply: Same as Furnish.

**Specifier note: Use the following if you are using the AIA A201 - General Conditions of the Contract. Verify terms used in other versions of a General Conditions or terms and conditions.**

#### 1.03 THE FOLLOWING TERMS ARE DEFINED IN THE GENERAL CONDITIONS OF THE CONTRACT:

- A. Architect.
- B. Change Order.
- C. Claim.
- D. Construction Change Directive.
- E. Contract.
- F. Contract Document.
- G. Contract Sum.
- H. Contract Time.
- I. Contractor.
- J. Date of Commencement of the Work.
- K. Day.
- L. Defective.
- M. Drawings.
- N. Instruments of Service.
- O. Modification.
- P. Owner.
- Q. Product Data.
- R. Project.
- S. Samples.
- T. Separate Contractor.
- U. Shop Drawings.
- V. Specifications.
- W. Subcontractor.
- X. (Date of) Substantial Completion.
- Y. Sub-subcontractor.
- Z. Work.

**SECTION 01 4216 DEFINITIONS**

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**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

## **SECTION 01 6000 PRODUCT REQUIREMENTS**

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### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. General product requirements.
- B. Transportation, handling, storage and protection.
- C. Product option requirements.
- D. Substitution limitations.
- E. Maintenance materials, including extra materials, spare parts, tools, and software.

#### **1.02 RELATED REQUIREMENTS**

- A. Section 01 2500 - Substitution Procedures: Substitutions made during procurement and/or construction phases.
- B. Section 01 7419 - Construction Waste Management and Disposal: Waste disposal requirements potentially affecting product selection, packaging and substitutions.

#### **1.03 SUBMITTALS**

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
  - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

### **PART 2 PRODUCTS**

#### **2.01 NEW PRODUCTS**

- A. Provide new products unless specifically required or permitted by Contract Documents.
- B. Use of products having any of the following characteristics is not permitted:
  - 1. Made using or containing CFC's or HCFC's used in the manufacturing process.
  - 2. Containing lead, cadmium, or asbestos.

#### **2.02 PRODUCT OPTIONS**

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

#### **2.03 MAINTENANCE MATERIALS**

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

### **PART 3 EXECUTION**

#### **3.01 SUBSTITUTION LIMITATIONS**

- A. See Section 01 2500 - Substitution Procedures.

#### **3.02 TRANSPORTATION AND HANDLING**

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.

## **SECTION 01 6000 PRODUCT REQUIREMENTS**

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

### **3.03 STORAGE AND PROTECTION**

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. See Section 01 7419.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**END OF SECTION**

## **SECTION 01 7800 CLOSEOUT SUBMITTALS**

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### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Project record documents.
- B. Operation and maintenance data.
- C. Warranties and bonds.

#### **1.02 RELATED REQUIREMENTS**

- A. Section 01 3000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Section 01 7000 - Execution and Closeout Requirements: Contract closeout procedures.
- C. Individual Product Sections: Specific requirements for operation and maintenance data.
- D. Individual Product Sections: Warranties required for specific products or Work.

#### **1.03 SUBMITTALS**

- A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.
- B. Operation and Maintenance Data:
  - 1. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and return one copy with comments.
  - 2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
  - 3. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
  - 4. Submit two sets of revised final documents in final form within 10 days after final inspection.
- C. Warranties and Bonds:
  - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
  - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
  - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION**

#### **3.01 PROJECT RECORD DOCUMENTS**

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
  - 1. Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other modifications to the Contract.
  - 5. Reviewed shop drawings, product data, and samples.
  - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
  - 1. Manufacturer's name and product model and number.
  - 2. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:

## **SECTION 01 7800 CLOSEOUT SUBMITTALS**

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1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
2. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
3. Field changes of dimension and detail.
4. Details not on original Contract drawings.

### **3.02 OPERATION AND MAINTENANCE DATA**

- A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

### **3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES**

- A. For Each Product, Applied Material, and Finish:
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Additional information as specified in individual product specification sections.
- D. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

### **3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS**

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

## **SECTION 01 7800 CLOSEOUT SUBMITTALS**

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### **3.05 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS**

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
- F. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- G. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- H. Text: Manufacturer's printed data, or typewritten data on 24 pound paper.
- I. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

### **3.06 WARRANTIES AND BONDS**

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

**END OF SECTION**



**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Pressure washing of roof membrane including membrane flashings, with full water reclamation prior to applicaiton of fluid applied coating.

**1.02 RELATED REQUIREMENTS**

- A. Section 00 3100 - Available Project Information: Roofing Field Reports.
- B. Section 01 2300 - Alternates: Alternate #1.
- C. Section 07 0150.19 - Preparation for Re-Roofing
- D. Section 07 0150.74 - Rehilitation of Single Ply Roofing: Roofing rehabilitation section for repair and restoration coating of roofing membrane.

**1.03 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's data for cleaning compounds.
- C. Work Plan: For maintenance cleaning, including description of means and methods for water reclamation.
  - 1. Information only.
- D. Cleaning System Operator Qualification Statement.
  - 1. Information only.

**1.04 QUALITY ASSURANCE**

- A. Operator Qualifications: Trained and approved by manufacturer of cleaning equipment, with a record of successful roofing membrane cleaning.
- B. Regulatory Requirements: Comply with governing EPA regulations. Comply with hauling and disposal regulations of authorities having jurisdiction.

**1.05 FIELD CONDITIONS**

- A. Owner will occupy portions of building immediately below roof area to be maintained. Conduct operations so Owner's operations are not disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.
- B. Protect building to be cleaned, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from maintenance operations.
- C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.

**PART 2 PRODUCTS**

**2.01 MATERIALS**

- A. Pre-cleaning Treatment: Detergent-free.
  - 1. Basis of Design: Product: Tremco, Inc., RoofTec PREKLEEN.
  - 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Pressure Wash Cleaning Solution: VOC, detergent, phosphate, and surfactant free.
  - 1. Basis of Design: Product: Tremco, Inc., RoofTec RENEW Cleaner.
  - 2. Substitutions: See Section 01 6000 - Product Requirements.

**2.02 PERFORMANCE REQUIREMENTS**

- A. Water Reclamation: Provide maintenance cleaning of membrane roofing that provides 100 percent reclamation of cleaning water and complies with applicable provisions of the US EPA National Pollutant Discharge Elimination System (NPDES) program and requirements of local authorities having jurisdiction.

**PART 3 EXECUTION**

**3.01 PREPARATION**

- A. Comply with warranty requirements of existing roof membrane manufacturer.
- B. Shut off rooftop utilities and service piping before beginning the Work.

## **SECTION 07 0150.16 MAINTENANCE CLEANING OF MEMBRANE ROOFING - ALTERNATE #1**

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- C. Test existing roof drains to verify that they are not blocked or restricted. Immediately notify Owner of any blockages or restrictions.
- D. Coordinate with Owner to shut down air-intake equipment in the vicinity of the Work. Cover air-intake louvers before proceeding with maintenance cleaning work that could affect indoor air quality or activate smoke detectors in the ductwork.
- E. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors.

### **3.02 MAINTENANCE CLEANING OF ROOF MEMBRANE**

- A. Pretreat membrane and flashings when recommended by cleaning equipment manufacturer based upon site assessment of membrane condition.
- B. Apply pressure wash cleaning solution onto membrane and flashing surfaces.
- C. Pressure wash membrane and flashings using equipment and methods recommended in writing by cleaning equipment manufacturer for specific application. Utilize rotating wash head equipment operated at not less than 2,000 psi. Use equipment utilizing vacuum removal of wash water and residues.

### **3.03 DISPOSAL**

- A. Collect cleaning water and associated cleaning compounds and residual material and process to meet US EPA and local environmental requirements for legal discharge.

**END OF SECTION**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Partial replacement, patching and flashing of existing roofing system in preparation for fluid applied coating system in designated areas as indicated on drawings.
- B. PVC roofing membrane, mechanically fastened conventional application.
- C. Insulation, flat and tapered.
- D. Flashings.
- E. Roofing stack boots.
- F. Temporary roofing protection.

**1.02 RELATED REQUIREMENTS**

- A. Section 00 3100 - Available Project Information: Roofing Field Reports.
- B. Section 01 2200 - Unit Prices: Unit Price for Partial Roofing Replacement as part of Alternate #1.
- C. Section 01 2300: Alternates: Alternate #1.
- D. Section 07 0150.74 - Rehabilitation of Single Ply Roofing: Alternate #1.

**1.03 REFERENCE STANDARDS**

- A. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2016.

**1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Coordinate with affected mechanical and electrical work associated with roof penetrations.
- B. Schedule work to coincide with commencement of installation of new roofing system.

**1.05 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Submit for each type of material.
- C. Installer's Qualification Statement.

**1.06 QUALITY ASSURANCE**

- A. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.
  - 1. When same installer as new roofing system, comply with related requirements of section indicated for new roofing system.

**1.07 FIELD CONDITIONS**

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

**1.08 WARRANTY**

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Existing Warranties: Perform this work using methods and materials that will maintain existing roof system warranties.

## **SECTION 07 0150.19 PREPARATION FOR RE-ROOFING - ALTERNATE #1**

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1. Notify existing roof system warrantor prior to starting this work and obtain written instructions for procedures necessary to maintain this existing warranty.
2. Upon completion of this work, notify warrantor of reroofing completion and obtain documentation to verify that existing roofing system has been inspected and warranty is still in effect.
  - a. Submit documentation upon project closeout.

### **PART 2 PRODUCTS**

#### **2.01 ROOFING**

- A. PVC Membrane Roofing: One ply membrane, mechanically fastened, over insulation.

#### **2.02 MATERIALS**

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

#### **2.03 POLYISOCYANURATE (ISO) BOARD INSULATION: RIGID CELLULAR FOAM, COMPLYING WITH ASTM C1289.**

- A. Classifications:
  1. Type II:
    - a. Class 2 - Faced with coated polymer-bonded glass fiber mat facers on both major surfaces of core foam.
    - b. Compressive Strength: Classes 1-2-3, Grade 2 - 20 psi (138 kPa), minimum.
    - c. Thermal Resistance, R-value: At 1-1/2 inch thick; Class 1, Grades 1-2-3 - 8.4 (1.48) at 75 degrees F.
  2. Tapered Board: Same classification as flat insulation. Slope as indicated; minimum thickness .5 inch; fabricate of fewest layers possible.

#### **2.04 ACCESSORIES**

- A. Fasteners: Type and size as required and compatible with existing and new roofing system to resist local wind uplift.

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

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

#### **3.02 PREPARATION**

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

#### **3.03 MATERIAL REMOVAL**

- A. Remove only existing roofing materials that can be replaced with new materials the same day.
- B. Remove damaged insulation and fasteners, cant strips, blocking.

#### **3.04 INSTALLATION**

- A. Coordinate scope of this work with requirements for installation of new roof coating system, mechanical and structural work.

#### **3.05 PROTECTION**

- A. Provide protection of existing roofing system that is not having work performed on it.
- B. Provide temporary protective sheeting over uncovered deck surfaces.
- C. Install recover board over existing membrane.

**END OF SECTION**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Wet area removal and infill at indicated wet areas.
- B. Miscellaneous repairs and remedial work as required by manufacturer.
- C. Preparation of roof membrane for fluid applied system application.
- D. Application of reinforced fluid-applied roof membrane and flashings over existing mechanically attached PVC membrane roof.

**1.02 RELATED REQUIREMENTS**

- A. Section 00 3100 - Available Project Information: Roofing Field Reports.
- B. Section 01 2300 - Alternates: Alternate #1.
- C. Section 07 0150.16 - Maintenance Cleaning of Membrane Roofing: Reclaimed water cleaning system for preparation of existing roof substrate.
- D. Section 07 0150.19 - Preparation for Re-Roofing:

**1.03 REFERENCE STANDARDS**

- A. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.
- B. ASTM D3960 - Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings; 2005 (Reapproved 2018).
- C. ASTM D2697 - Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings
- D. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings; 2020a.
- E. ASTM G152 - Standard Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials
- F. ASTM G154 - Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials; 2016.
- G. ASTM G155 - Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Nonmetallic Materials; 2013.

**1.04 ROOFING CONFERENCES**

- A. Roofing Rehabilitation Preinstallation Conference: Conduct conference at Project site. Review methods and procedures related to roofing system.
  - 1. Meet with Architect and Owner; roofing coating materials manufacturer's representative; roofing rehabilitation installer including project manager and foreman; and installers whose work interfaces with or affects rehabilitation including installers of roof accessories and roof-mounted equipment requiring removal and replacement as part of the Work.
  - 2. Review temporary protection requirements for existing roofing system that is to remain uncoated, during and after installation.
  - 3. Review methods and procedures related to re-coating preparation, including coating manufacturer's written instructions.
  - 4. Review roof drainage during each stage of coating and review roof drain plugging and plug removal procedures.
  - 5. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - 6. Review base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect coating.
  - 7. Review HVAC shutdown and sealing of air intakes.
  - 8. Review shutdown of fire-suppression, fire-protection, fire-alarm and fire-detection systems.
  - 9. Review procedures for asbestos removal or unexpected discovery of asbestos-containing materials.
  - 10. Review governing regulations and requirements for insurance and certificates if applicable.
  - 11. Review existing conditions that may require notification of Owner before proceeding.

**1.05 DEFINITIONS**

- A. Roofing Terminology: Refer to ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.
- B. Roofing Coating Preparation: Existing roofing that is to remain and be prepared to accept restorative coating application.
- C. Patching: Removal of a portion of existing membrane roofing system from deck or removal of selected components and accessories from existing membrane roofing system and replacement with similar materials.
- D. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and reinstalled.
- E. Existing to Remain: Existing items of construction that are not indicated to be removed.

**1.06 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data indicating coating membrane materials, flashing materials, insulation, and fasteners.
- C. Shop Drawings: Indicate joint or termination detail conditions and conditions of interface with other materials.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Manufacturer's Installation Instructions: Include standard installation instructions, acceptable installation temperature range, and procedures for unusual perimeter conditions.
- F. Installer's Qualification Statement.
- G. Roofing Inspector Qualifications.
- H. Field Quality Control Test Report.
- I. Inspection Reports: Daily reports of Roofing Inspector. Include weather conditions, description of work performed, tests performed, defective work observed, and corrective actions required and carried out.
- J. Maintenance Data: To include in maintenance manuals.
- K. Warranty: Unexecuted sample copies of manufacturer and installer warranties.
- L. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

**1.07 QUALITY ASSURANCE**

- A. Installer Qualifications: An employer of workers trained and certified by manufacturer, including a daily on-site supervisor with a minimum of three years' experience installing products similar to those specified, able to communicate verbally with Contractor, Architect, and employees, and the following:
  - 1. Qualified by the manufacturer to install manufacturer's product and furnish warranty of type specified.
- B. Roofing Inspector Qualifications: A technical representative of manufacturer not engaged in the sale of products and experienced in the installation and maintenance of the specified roofing system, qualified to perform roofing observation and inspection specified in Part 3, Field Quality Control Article, to determine Installer's compliance with the requirements of this Project, and approved by the manufacturer to issue warranty certification. Roofing Inspector to be one of the following:
  - 1. An authorized full-time technical employee of the manufacturer.
  - 2. An independent party certified as a Registered Roof Observer by the Roof Consultants Institute, retained by the Contractor or the Manufacturer and approved by the Manufacturer.

**1.08 PROJECT CONDITIONS**

- A. Weather Limitations: Proceed with rehabilitation work only when existing and forecasted weather conditions permit Work to proceed without water entering into existing roofing system or building.

## **SECTION 07 0150.74 REHABILITATION OF SINGLE PLY ROOFING - ALTERNATE #1**

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1. Store all materials prior to application at temperatures recommended by manufacturer.
  2. Apply coatings within range of ambient and substrate temperatures recommended by manufacturer.
  3. Do not apply roofing in snow, rain, fog, or mist.
  4. Do not apply roofing during moderate to high winds.
- B. Protect building to be rehabilitated, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from rehabilitation operations.
- C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- D. Daily Protection: Coordinate installation of roofing so insulation and other components of roofing system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.
- E. Owner will occupy portions of building immediately below re-coating area. Conduct re-coating so Owner's operations will not be disrupted. Provide Owner with not less than 72 hours notice of activities that may affect Owner's operations.

### **1.09 WARRANTY**

- A. Manufacturer: Manufacturer's standard NDL warranty form, covering work of this Section, in which manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within warranty period.
1. Warranty Period: 20 years from date of completion.
  2. Warranty must run for a continuous 20 years without need for renewal.
- B. Installer Warranty: Installer's warranty signed by Installer, covering the Work of this Section, on form acceptable to Roofing Manufacturer and Owner.
1. Warranty Period: 2 years from date of completion.
- C. Manufacturer Inspection Services: Coordinated by manufacturer and performed by manufacturer's technical representative. Inspection will result in a report of maintenance responsibilities necessary for preservation of Owner's warranty rights. The cost of manufacturer's inspections is included in the base bid. Resulting maintenance requirements is the responsibility of the Owner.
1. Inspections to occur in following years: 2, 5, 10, and 15 following substantial completion.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Basis of Design: Tremco, Inc; AlphaGuard BIO BC (base coat) and AlphaGuard BIO (top coat): [www.tremcoroofing.com](http://www.tremcoroofing.com)
- B. Sika USA; Sikalastic - 641 BC (base coat) and Sikalastic - 641 TC (top coat): [www.usa.sika.com](http://www.usa.sika.com)
- C. Substitutions: See Section 01 6000 - Product Requirements.

### **2.02 PERFORMANCE REQUIREMENTS**

- A. General Performance: Rehabilitated roofing to withstand exposure to weather without failure or leaks due to defective manufacture or installation.
1. Accelerated Weathering: Roofing system to withstand 5000 hours of exposure when tested according to **ASTM G 152**, ASTM G154, or ASTM G155.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.
- C. Exterior Fire-Test Exposure: Roofing system exterior fire-test exposure performance following application of rehabilitation coating shall be not be less than that of the prerenhilitated roof performance when tested in accordance with ASTM E108, based upon manufacturer's tests of identical applications.

### **2.03 MATERIALS, GENERAL**

- A. General: Rehabilitation materials recommended by roofing system manufacturer for intended use and compatible with components of existing membrane roofing system.

## SECTION 07 0150.74 REHABILITATION OF SINGLE PLY ROOFING - ALTERNATE #1

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- B. Infill Materials: Where required to replace test cores and to patch existing roofing, use infill materials matching existing membrane roofing system materials, unless otherwise indicated.
- C. Temporary Roof Drainage: Design and selection of materials for temporary roof drainage are responsibilities of the Contractor.

### 2.04 FLUID-APPLIED ROOFING MEMBRANE COATING

- A. Polyurethane Elastomeric Fluid-Applied System: Two-coat fluid-applied roofing membrane formulated for application over prepared existing roofing substrate.
  - 1. Polyurethane roof coating system base coat, bio-based, low-odor low-VOC two-part, for use with a compatible top coat.
    - a. Basis of Design: Tremco, AlphaGuard BIO Base Coat.
    - b. Minimum Thickness, Base Coat non-reinforced over PVC Roofing: 32 mils (0.81 mm) dry.
  - 2. Polyurethane roof coating system top coat, bio-based low-odor low-VOC two-part, for application over compatible base coat.
    - a. Basis of Design: Tremco, AlphaGuard BIO Top Coat.
    - b. Minimum Thickness: 32 mils (0.81 mm) dry.
    - c. Color: White
  - 3. Primer for Asphaltic and Single-Ply Membranes: Water-based, polymer-modified quick-dry low odor primer.
    - a. Basis of Design: Tremco, AlphaGuard WB Primer.
  - 4. Primer for Non-Porous Surfaces: Single-part, water based primer to promote adhesion of urethanes to metals, PVC vent stack and other non-porous surfaces.
    - a. Basis of Design: Tremco, AlphaGuard M-Prime.
  - 5. Primer for Intercoat and Substrate Adhesion: Single-part, quick-drying primer to promote adhesion of urethane products to previous urethane coats and to other approved surfaces.
    - a. Basis of Design: Tremco, Geogard Primer.
    - b. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 5 g/L.
    - c. Coverage Rate, 400 sq. ft/ gal.: 4 mils (0.10 mm) wet.
- B. Fluid-Applied Roofing Reinforcing Fabric:
  - 1. Polyester Reinforcing and Protection Fabric: 100 percent stitch-bonded .

### 2.05 AUXILIARY ROOFING REHABILITATION MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with existing roofing system and roofing coating system.
- B. Seam Reinforcing Fabric:
  - 1. Polyester Reinforcing and Protection Fabric: 100 percent stitch-bonded mildew-resistant polyester fabric intended for reinforcement of compatible fluid-applied membranes and flashings.
    - a. Basis of Design: Tremco, Permafab.
    - b. Weight: 3 oz./sq. yd (102 g/sq. m).
- C. Joint Sealant: Elastomeric joint sealant compatible with applied coating, with movement capability appropriate for application.
  - 1. Joint Sealant, Polyurethane: ASTM C920, Type S, Grade NS, Class 50 single-component moisture curing sealant, formulated for compatibility and use in dynamic and static joints; paintable.
- D. Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer.

### 2.06 WALKWAYS

- A. Slip Resistant Product for Fluid-Applied Walkways:
  - 1. Full reinforcement fabric in areas of walkways indicated on drawings.
  - 2. Aggregate, Slip Resistant Silica Sand: Silica sand, broadcast into fluid-applied roof coating products for use as aggregate fill for slip-resistant, abrasion-resistant coating applications.
    - a. Aggregate: Slip Resistant Silica Sand.
    - b. Size: 20 - 40 mesh.
    - c. Application Rate: Minimum 20 lb/100 sq ft (1 k/m<sup>2</sup>).

3. Provide in contrasting color to top coat to identify areas of extra protection and slip resistance..

**PART 3 EXECUTION**

**3.01 EXAMINATION**

- A. Examine existing roofing substrates, with Installer present, for compliance with requirements and for other conditions affecting application and performance of roof coatings.
  1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance.
  2. Verify compatibility with and suitability of substrates.
  3. Verify that substrates are visibly dry and free of moisture.
  4. Verify that existing roofing membrane surfaces have adequately aged to enable proper bond with base coat.
  5. Verify that existing roofing membrane is free of blisters, splits, open laps, indications of shrinkage, and puncture damage or other indications of impending roof system failure.
  6. Commencing application of coatings indicates acceptance of surfaces and conditions.

**3.02 PREPARATION**

- A. Shut down air intake equipment in vicinity of Work in coordination with Owner. Cover air intake louvers before proceeding with coating work that may affect indoor air quality or activate smoke detectors in the ductwork.
  1. Verify rooftop utilities and service piping affected by the Work have been shut off before commencing Work.
- B. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
  1. Do not permit water to enter into or under existing membrane roofing system components that are to remain.

**3.03 ROOFING COATING PREPARATION**

- A. Removal of Wet Insulation: Remove portions of roofing membrane with underlying wet insulation. Remove wet insulation, fill in tear-off areas to match existing insulation and membrane, and prepare patched membrane for application of roof coating.
- B. Repair of Ponding Areas: Repair areas indicated as ponding areas or areas of inadequate drainage by removing roof membrane, adding additional insulation as required to provide minimum slopes to drain required by roofing rehabilitation coating manufacturer, and replace membrane with material matching existing. Submit photographic report indicating compliance.
  1. Refer to drawings for drain locations and tapered saddles.
- C. Membrane Surface Preparation:
  1. Remove walkway pads from existing roofing membrane.
  2. Remove blisters, ridges, buckles, roofing membrane fastener buttons projecting above the membrane, and other substrate irregularities from existing roofing membrane that would inhibit application of uniform, waterproof coating.
  3. Substrate Cleaning: Clean substrate in accordance with requirements of Section 070150.16 - Maintenance Cleaning of Membrane Roofing.
  4. Verify existing substrate is dry before proceeding with application of coating. Spot check substrates with an electrical capacitance moisture-detection meter.
  5. Verify adhesion of new products.
- D. Existing Flashing and Detail Preparation: Repair flashings, gravel stops, copings, and other roof-related sheet metal and trim elements. Reseal joints, replace loose or missing fasteners, and replace components where required to leave in a watertight condition.
  1. Do not damage metal counterflashings that are to remain. Replace metal counterflashings damaged during removal with counterflashings of same metal, weight or thickness, and finish.
  2. Roof Drains: Remove drain strainer and clamping ring. Grind metal surfaces down to clean, bare, metal.

## **SECTION 07 0150.74 REHABILITATION OF SINGLE PLY ROOFING - ALTERNATE #1**

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- E. Surface Priming: Prime surfaces to receive fluid-applied coating using coating manufacturer's recommended product for surface material. Apply at application rate recommended by manufacturer.
  - 1. Ensure primer does not puddle and substrate has complete coverage.
  - 2. Allow to cure completely prior to application of base coating.
- F. Membrane Repair: Repair membrane at locations with irregularities using seam sealer mastic and reinforcing fabric.
- G. Membrane Seam Reinforcement: Reinforce membrane seams using seam sealer mastic and reinforcing fabric of width specified; center reinforcing fabric on seam.

### **3.04 FLUID-APPLIED FLASHING APPLICATION**

- A. Fluid-Applied Flashing and Detail Base Coat Application: Complete base coat and fabric reinforcement at parapets, curbs, penetrations, and drains prior to application of field of fluid-applied membrane. Apply base coat in accordance with manufacturer's written instructions.
  - 1. Apply base coat on prepared and primed surfaces and spread coating evenly. Extend coating minimum of 8 inches up vertical surfaces and 4 inches onto horizontal surfaces.
  - 2. Back roll to achieve minimum coating thickness indicated in Part 2 - PRODUCTS, unless greater thickness is recommended by manufacturer; verify thickness of base coat as work progresses.
  - 3. Reinforcing Fabric: Embed fabric reinforcement into wet base coat. Lap adjacent flashing pieces of fabric minimum 3 inches along edges and 6 inches at end laps.
    - a. Roll surface of fabric reinforcing to completely embed and saturate fabric. Leave finished base coat with fabric free of pin holes, voids, or openings.
  - 4. Roof Drains: Install base coat onto surrounding membrane surface and metal drain bowl flange. Install target piece of fabric reinforcement immediately into wet base coat and roll to fully embed and saturate fabric. Reinstall clamping ring and strainer following application of top coat. Replace broken drain ring clamping bolts.

### **3.05 FLUID-APPLIED MEMBRANE APPLICATION**

- A. Fluid-Applied Membrane Base Coat: Apply base coat to field of membrane in accordance with manufacturer's written instructions.
  - 1. Apply base coat on prepared and primed surfaces and spread coating evenly.
  - 2. Back roll to achieve minimum coating thickness indicated in Part 2 - PRODUCTS, unless greater thickness is recommended by manufacturer; verify thickness of base coat as work progresses.
- B. Fluid-Applied Membrane Top Coat: Apply top coat to field of membrane and flashings uniformly in a complete, continuous installation.
  - 1. Allow base coat to cure prior to application of top coat.
  - 2. Following curing of base coat and prior to application of top coat, sand raised or exposed edges of fabric reinforcement.
  - 3. Prime base coat prior to application of top coat if top coat is not applied within 72 hours of the base coat application, using manufacturer's recommended primer.
  - 4. Apply top coat extending coating up vertical surfaces and out onto horizontal surfaces. Install top coat over field base coat and spread coating evenly.
  - 5. Back roll to achieve minimum coating thickness indicated in Part 2 - PRODUCTS, unless greater thickness is recommended by manufacturer; verify thickness of base coat as work progresses.
  - 6. Avoid foot traffic on new fluid-applied membrane for a minimum of 24 hours.
- C. Slip-Resistant Walkway Topcoat: Apply walkway second topcoat following application and curing of top coat. Locate as indicated on Drawings.
  - 1. Mask walkway location with tape.
  - 2. Prime first top coat prior to application of walkway top coat if walkway top coat is not applied within 72 hours of the first top coat application, using manufacturer's recommended primer.
  - 3. Apply walkway topcoat and back roll to achieve minimum coating thickness indicated in Part 2 - PRODUCTS, unless greater thickness is recommended by manufacturer; verify thickness of base coat as work progresses. Provided in contrasting color to original top coat.

## **SECTION 07 0150.74 REHABILITATION OF SINGLE PLY ROOFING - ALTERNATE #1**

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4. Broadcast Slip-Resistant Top Coat Aggregate in wet top coat at rate indicated in Part 2 - PRODUCTS listing or as otherwise recommended by coating manufacturer.
  - a. Back roll sand and top coat creating even dispersal of sand. Remove masking immediately.

### **3.06 FIELD QUALITY CONTROL**

- A. Roof Inspection: Contractor shall engage roofing system manufacturer's technical personnel to inspect roofing installation, and submit report to the Architect and Owner. Notify Architect and Owner 48 hours in advance of dates and times of inspections. Inspect work as follows:
  1. Upon completion of preparation of first component of work, prior to application of re-coating materials.
  2. Following application of re-coating to flashings and application of base coat to field of roof.
  3. Upon completion of re-coating but prior to re-installation of other roofing components.
- B. Repair fluid-applied membrane where test inspections indicate that they do not comply with specified requirements.
- C. Arrange for additional inspections, at Contractor's expense, to verify compliance of replaced or additional work with specified requirements.

### **3.07 PROTECTING AND CLEANING**

- A. Demolished materials to be removed from Project site.
- B. Protect roofing system from damage and wear during remainder of construction period.
- C. Correct deficiencies in or remove coating that does not comply with requirements, repair substrates, and reapply coating.
- D. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

**END OF SECTION**



**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Adhered system with thermoplastic roofing membrane.
- B. Insulation, flat and tapered.
- C. Deck sheathing.
- D. Cover boards.
- E. Parapet sheathing.
- F. Flashings.
- G. Roofing cant strips, stack boots, roofing expansion joints, and walkway pads.

**1.02 REFERENCE STANDARDS**

- A. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2013.
- B. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2016.
- C. ASTM D4434/D4434M - Standard Specification for Poly(Vinyl Chloride) Sheet Roofing; 2012.
- D. FM DS 1-28 - Wind Design; 2007.
- E. NRCA (RM) - The NRCA Roofing Manual; 2017.
- F. NRCA (WM) - The NRCA Waterproofing Manual; 2005.
- G. UL (DIR) - Online Certifications Directory; Current Edition.
- H. UL (FRD) - Fire Resistance Directory; current edition.

**1.03 ADMINISTRATIVE REQUIREMENTS**

- A. Preinstallation Meeting: Convene one week before starting work of this section.
  - 1. Review preparation and installation procedures and coordinating and scheduling required with related work.

**1.04 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide data indicating membrane materials, flashing materials, insulation, and fasteners.
- C. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, and setting plan for tapered insulation.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Manufacturer's Installation Instructions: Indicate membrane seaming precautions and perimeter conditions requiring special attention.
- F. Manufacturer's qualification statement.
- G. Installer's qualification statement.
- H. Warranty Documentation:
  - 1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
  - 2. Submit installer's certification that installation complies with warranty conditions for waterproof membrane.

**1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum ten years of documented experience.
- B. Installer Qualifications: Company specializing in performing work of this section with at least five years of documented experience.
- C. Single-Source Responsibility for Vegetated Roof Assemblies Over Waterproofing: Provide and install products from a single source.

## SECTION 07 5400 THERMOPLASTIC MEMBRANE ROOFING

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### 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original containers, dry and undamaged, with seals and labels intact.
- B. Store materials in weather protected environment, clear of ground and moisture.
- C. Ensure storage and staging of materials does not exceed static and dynamic load-bearing capacities of roof decking.
- D. Protect foam insulation from direct exposure to sunlight.

### 1.07 FIELD CONDITIONS

- A. Do not apply roofing membrane during unsuitable weather.
- B. Do not apply roofing membrane when ambient temperature is below 40 degrees F or above 120 degrees F.
- C. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
- D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.
- E. Schedule applications so that no partially completed sections of roof are left exposed at end of workday.

### 1.08 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Comply with all warranty procedures required by manufacturer, including notifications, scheduling, and inspections.
- C. System Warranty: Provide manufacturer's system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
  - 1. Warranty Term: 20 years.
  - 2. Limit of Liability: No dollar limitation.
  - 3. Scope of Coverage: Repair leaks in the roofing system caused by:
    - a. Ordinary wear and tear of the elements.
    - b. Manufacturing defect in materials.
    - c. Defective workmanship used to install these materials.
    - d. Damage due to winds up to 72 mph.
  - 4. Not Covered:
    - a. Damage due to winds in excess of 72 mph.
    - b. Damage due hurricanes or tornadoes.
    - c. Hail.
    - d. Intentional damage.
    - e. Unintentional damage due to normal rooftop inspections, maintenance, or service.
  - 5. For repair and replacement include costs of both material and labor in warranty.
- D. Metal Roof Edging: Full-system warranty for roof edge system, covering blow-off from winds up to 72 mph.

## PART 2 PRODUCTS

### 2.01 MANUFACTURERS

- A. Thermoplastic Polyvinyl Chloride (PVC) Membrane Roofing Materials:
  - 1. Carlisle Roofing Systems, Inc: [www.carlisle-syntec.com/#sle](http://www.carlisle-syntec.com/#sle).
  - 2. IB Roof Systems: [www.ibroof.com/#sle](http://www.ibroof.com/#sle).
  - 3. Johns Manville: [www.jm.com/#sle](http://www.jm.com/#sle).
  - 4. Sika Corporation Roofing; Sikaplan PVC: [usa.sika.com/sarnafil/#sle](http://usa.sika.com/sarnafil/#sle).
  - 5. Duro-last Inc.: [www.duro-last.com](http://www.duro-last.com).; Basis of Design
  - 6. Substitutions: Not permitted.
- B. Insulation:
  - 1. Single source approved by roof system manufacturer.

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### 2.02 ROOFING

- A. Thermoplastic Membrane Roofing: One ply membrane, fully adhered, over insulation.
- B. Roofing Assembly Requirements:
  - 1. Roof Covering External Fire Resistance Classification: UL (DIR) or UL (FRD) Class A.
  - 2. Factory Mutual Classification: Class I and windstorm resistance of I-75, in accordance with FM DS 1-28.
  - 3. Insulation Thermal Value (R), minimum: 30; provide insulation of thickness required.
- C. Acceptable Insulation Types - Constant Thickness Application:
  - 1. Minimum 2 layers of polyisocyanurate board.
  - 2. Bottom layer of polyisocyanurate board covered with single layer of polyisocyanurate board.
- D. Acceptable Insulation Types - Tapered Application:
  - 1. Tapered polyisocyanurate board.
    - a. Tapered polyisocyanurate board can be used as the second layer over the constant thickness bottom layer of polyisocyanurate board.
- E. Acceptable Insulation Types - Tapered Application: Saddles and Crickets.
  - 1. Tapered polyisocyanurate board.
    - a. See drawings for saddle locations and proportions. Use 2 to 1 length to width ratio (27 degree angle) and 3 to 1 length to width ratio (19 degree angle).

### 2.03 MEMBRANE ROOFING AND ASSOCIATED MATERIALS

- A. Membrane Roofing Materials:
  - 1. PVC: Polyvinyl chloride (PVC) complying with ASTM D4434/D4434M, Type III, sheet contains reinforcing fibers or reinforcing fabrics.
    - a. Thickness: 60 mil, 0.060 inch, minimum.
  - 2. Sheet Width: Factory fabricated into widest possible sheets.
  - 3. Solar Reflectance: 0.75, minimum, initial, and 0.65, minimum, 3-year, certified by Cool Roof Rating Council.
  - 4. Thermal Emissivity: 0.80, minimum, initial, and 0.79, minimum, 3-year, certified by Cool Roof Rating Council.
  - 5. Color: Gray.
- B. Seaming Materials: As recommended by membrane manufacturer.
- C. Membrane Fasteners: As recommended and approved by membrane manufacturer.
  - 1. Disc Washers and Screws: for base tie-in at parapet walls and roof top units.
- D. Flexible Flashing Material: Same material as membrane.

### 2.04 DECK SHEATHING

### 2.05 COVER BOARDS / PARAPET SHEATHING

- A. Cover Boards / Parapet Sheathing: Glass-mat faced gypsum panels complying with ASTM C1177/C1177M.
  - 1. Application: As indicated on drawings and patching purposes.
  - 2. Thickness at field of roof: 1/4 inch, fire-resistant or match existing.
  - 3. Thickness at parapet: 1/2 inch, fire-resistant or match existing.
  - 4. Products:
    - a. Georgia-Pacific; DensDeck Prime with EONIC Technology: [www.densdeck.com/#sle](http://www.densdeck.com/#sle).
    - b. National Gypsum Company; DEXcell FA Glass Mat Roof Board: [www.nationalgypsum.com/#sle](http://www.nationalgypsum.com/#sle).
    - c. USG Corporation; Securock Ultralight Coated Glass-Mat Roof Board: [www.usg.com/#sle](http://www.usg.com/#sle).
    - d. Substitutions: Not permitted.
- B. Cover Board: High compressive strength polyisocyanurate (ISO) board insulation complying with ASTM C1289, and the following characteristics:
  - 1. Application: As indicated on drawings.
  - 2. Classification: Type II, Class 4 - Faced with coated or uncoated polymer-bonded glass fiber mat facers on both major surfaces of the core foam.

## SECTION 07 5400 THERMOPLASTIC MEMBRANE ROOFING

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3. Grade and Compressive Strength: Grade 2, 110 psi
4. Board Size: 48 by 48 inches.
5. Board Thickness: 1/2 inch.
6. Thermal Resistance: R-value of 2.0, minimum, at 1/2 inch thick and 75 degrees F mean temperature.

### 2.06 INSULATION

- A. Polyisocyanurate (ISO) Board Insulation: Rigid cellular foam, complying with ASTM C1289.
  1. Classifications:
    - a. Type II:
      - 1) Class 2 - Faced with coated polymer-bonded glass fiber mat facers on both major surfaces of core foam.
      - 2) Compressive Strength: Classes 1-2-3, Grade 2 - 20 psi (138 kPa), minimum.
      - 3) Thermal Resistance, R-value: At 1-1/2 inches thick; Class 1, Grades 1-2-3, 8.4 (1.48), minimum, at 75 degrees F.
  1. Board Size: 48 by 96 inches.
  2. Board Thickness: 2.5 inch.
  3. Tapered Board: Slope as indicated; minimum thickness .5 inch; fabricate of fewest layers possible.
  4. Board Edges: Square.

### 2.07 ACCESSORIES

- A. Prefabricated Roofing Expansion Joint Flashing: Sheet butyl over closed-cell foam backing seamed to galvanized steel flanges.
- B. Stack Boots: Prefabricated flexible boot and collar for pipe stacks through membrane; same material as membrane.
- C. Cant Strips: Wood; pressure preservative treated.
- D. Insulation Fasteners: Appropriate for purpose intended and approved by roofing manufacturer.
  1. Length as required for thickness of insulation material and penetration of deck substrate, with metal washers.
- E. Membrane Adhesive: As recommended by membrane manufacturer.
- F. Insulation Adhesive: As recommended by insulation manufacturer.
- G. Strip Reglet Devices: Galvanized steel, maximum possible lengths per location, with attachment flanges.
- H. Sealants: As recommended by membrane manufacturer.
- I. Walkway Pads: Suitable for maintenance traffic, contrasting color or otherwise visually distinctive from roof membrane.
  1. Composition: Roofing membrane manufacturer's standard.
  2. Surface Color: White or Yellow.

## PART 3 EXECUTION

### 3.01 EXAMINATION

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

### 3.02 INSTALLATION, GENERAL

- A. Perform work in accordance with manufacturer's instructions, NRCA (RM), and NRCA (WM) applicable requirements.
- B. Do not apply roofing membrane during cold or wet weather conditions.

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- C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.
- D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
- E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

### **3.03 INSTALLATION - MEMBRANE**

- A. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.
- B. Shingle joints on sloped substrate in direction of drainage.
- C. Overlap edges and ends and seal seams by heat welding, minimum 3 inches. Seal permanently waterproof. Apply uniform bead of sealant to joint edge.
- D. Mechanical Attachment: Install membrane and mechanical attachment devices in accordance with manufacturer's instructions.
- E. At intersections with vertical surfaces:
  - 1. Extend membrane up a minimum of 8 inches onto vertical surfaces.
  - 2. Fully adhere flexible flashing over membrane and up to reglets.
  - 3. Insert flashing into reglets and secure.
- F. At gravel stops or copings, extend membrane under gravel stop or coping and to the outside face of the wall. Cover nailers a minimum of 1/2 inch.
- G. Around roof penetrations, seal flanges and flashings with flexible flashing.
- H. Install roofing expansion joints where indicated. Make joints watertight.
  - 1. Install prefabricated joint components in accordance with manufacturer's instructions.
- I. Coordinate installation of roof drains and sumps and related flashings.

### **3.04 FIELD QUALITY CONTROL**

- A. See Section 01 4000 - Quality Requirements for additional requirements.
- B. Owner will provide testing services in accordance with Section 01 4000 - Quality Requirements. Contractor to provide temporary construction and materials for testing.
- C. Provide daily on-site attendance of roofing and insulation manufacturer's representative during installation of this work.

### **3.05 CLEANING**

- A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.
- B. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and comply with their documented instructions.
- C. Repair or replace defaced or damaged finishes caused by work of this section.

### **3.06 PROTECTION**

- A. Protect installed roofing and flashings from construction operations.
- B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

**END OF SECTION**

