



**Request for Bid
For
Ottumwa Maintenance Facility Garage Re-roof
Issued by:**

IOWA DEPARTMENT OF TRANSPORTATION
Purchasing Section
Proposal No. **16115**

Letting Date: April 13, 2016

Must be submitted no later than 1:00 PM Central Time
Bid Responses received after this date will be rejected

***For information about this notice, and during this procurement,
interested persons shall contact only:***

Jody McNaughton
800 Lincoln Way
Ames, Iowa 50010
Phone: 515-239- 1298
Fax: 515-239-1538
E-Mail: jody.mcnaughton@dot.iowa.gov

**Issued addenda and all other correspondence
will be posted to Iowa DOT's website:
<http://www.iowadot.gov/purchasing>**

Procurement Timetable

The following dates are set forth for informational and planning purposes. The Iowa DOT reserves the right to revise the dates as needed. All times listed are Central Time.

Event/Dates	Section Reference	Date/Time
Issue RFB	cover	March 11, 2016
Number of Copies of Bid Responses Required	4.1.3	1
Bidders Conference (Pre-Bid) <input type="checkbox"/> <i>Box will be checked when attendance is mandatory</i> <i>It is highly recommended that contractors attend the scheduled pre-bid meeting. Interested contractors must notify Jody McNaughton by March 21, 2016</i> Location: 2930 North Court Rd. , Ottumwa IA 52501	2.28	March 25, 2018 12:30 p.m.
DOT Response from Bidder's Conference Questions	2.28	March 29, 2016
Bidder Questions, Requests for Clarification, & Changes <i>(no later than)</i>	2.2/2.5	April 1, 2016
DOT Response to Questions Issued <i>(no later than)</i>	2.2/2.5	April 6, 2016
Bid Opening/Proposal Due	2.8/2.9	April 13, 2016
Presentations & Demonstrations "Short list" <i>(by invitation only)</i>	2.22/ 5.3	N/A
Announce Successful Bidder Intent to Award* <i>see note below</i>	2.22	April 15, 2016
Completion of Contract Negotiations & Execution of the Contract	2.22	May 2, 2016
Contract Begin Date	6.2	May 13, 2016
Contract End Date	6.2	August 13, 2016

*Intent to Award - See Section 2.22

It is intended that Bid Responses will be evaluated and a notice of "intent to award" will be issued within thirty (30) days of the bid opening date. Bid Responses prices, terms and conditions must be held firm for a 180-day period from the date of the notice of "intent to award" the contract.



Solicitation Response

		Response Due Date April 13, 2016	Time 1:00 P.M.	Location 800 Lincoln Way, Ames, IA	
Proposal Number 16115	Description Ottumwa Maintenance Facility Garage Re- Roof				
Contract Begin Date May 2, 2016	Contract Completion Date August 13, 2016	Bid Bond (5) % of submitted bid	Performance Bond (Y/N) Y	Liquidated Damages \$75.00 per calendar day	
Purchasing Agent assigned Jody McNaughton	E-mail Address Jody.mcnaughton@dot.iowa.gov	Phone 515-239-1298	Fax 515-239-1538		
RESPONDER INFORMATION					
Company Name			Federal Tax ID		
Street Address		City	State	Zip Code	
Contact Name	E-mail Address	Phone	Fax		
Responder agrees to sell goods/services or both at the same prices, terms and conditions to any other Iowa state agency, Regent or Political Subdivision upon request. Please check Yes or No. <input type="checkbox"/> Yes <input type="checkbox"/> No			Responder is an Iowa Targeted Small Business <input type="checkbox"/> Yes <input type="checkbox"/> No		

GENERAL INFORMATION

This solicitation includes the Solicitation Response cover page, Schedule of Prices, Standard Terms and Conditions, Supplemental terms (if any), Specifications, Plans and Drawings, mailing label and all other information needed to prepare and submit a response to the solicitation. Information in the "Solicitation Response" above must be typed or completed in ink, signed, and returned in a flat style envelope along with any other information required in the solicitation prior to the response due date and time. Please use the furnished mailing label, or label the response as "Iowa Department of Transportation, proposal number and response due date on the outside of the return envelope. Responders may personally deliver, mail, or select a carrier that ensures timely delivery. **Faxed or e-mail responses will not be accepted.**

If required, each response must be accompanied by a bid bond in an accepted form, in the percent amount indicated above. Refer to the Standard Terms and Conditions for the accepted forms in which the bid bond requirement may be fulfilled. **Responses without a required bid bond will not be considered for award.** If the intended awarded responder fails to enter into a formal contract within fifteen (15) days after award is made for any reason on their part, the bid bond may be retained by the State.

The entire contents of this solicitation, Addendums, Schedule of Prices, Specifications, Plans and Drawings, Supplemental Terms and Conditions, Standard Terms and Conditions, shall become part of the contract.

We certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a response; that this response has been independently arrived at without collusion with any other responder, competitor, or potential competitor; and that this response has not been knowingly disclosed prior to the opening of responses to any other responder or competitor.

We certify that all materials, equipment goods and/or services proposed meet or exceed the specifications and will be supplied in accordance with the entire contents of this solicitation including delivery schedules. We promise to complete the contract within the contract period, or pay any liquidated damages, if stipulated, for each calendar day as set forth in the solicitation documents.

Signed _____ Date _____



Iowa Department of Transportation Standard Terms and Conditions

For

Submission of Quotations, Bids or Proposals

-FORMAL-

Formal is the procurement process required by Iowa law when the estimated, aggregate amount of the purchase equals or exceeds \$50,000.

The entire contents of this bid solicitation shall become a part of a contract or purchase order. In case of a discrepancy between the contents of the bid documents, the following items listed by descending order shall prevail:

- Addendums to the bid solicitation
- Bid Solicitation-
 - Schedule of Prices
 - Specifications
 - Plans and Drawings
- Supplemental Terms and Conditions
- Standard Terms and Conditions

(Example - if a statement in the specifications contradicts a statement in the Standard Terms and Conditions, the statement in the specifications shall apply)

Preparation of Bid Response: All bid responses must address all aspects of the solicitation including clearly responding to the contents of the bid solicitation. Bid responses must be typed or completed in ink and submitted on the forms supplied by the Iowa DOT.

Bid responses must be signed and received prior to the bid opening date and time as indicated on the Bid Response cover page or bid opportunity. The signed, submitted quotation or bidder's proposal shall become the official bid response to be considered for award.

No email, fax or web link bid responses will be accepted. Bid Responses must be signed, sealed and delivered in person or by a mail courier that ensures timely delivery.

A. Solicitation

1. **Bid Opening:** Bid openings are made public and conducted at the Iowa DOT, Ames complex unless otherwise specified. Quotations, Bids or Proposals received after the time of the bid opening will be returned unopened and considered non-compliant.
2. **Communications:** Questions concerning this solicitation should be directed to the purchasing agent listed on the bid solicitation. Inquiries can be written, phoned, or faxed. In all cases, written communication will take precedence over verbal communication.
3. **Bid Bond:** If required, the Bid Response page will indicate the dollar amount required to be included in the bid response. A Bid Bond can be supplied in one of the following ways: **(1)** Certified check or credit union certified share draft, cashier's check, or bank draft, drawn on a solvent bank or credit union. Certified checks and certified share drafts shall be drawn and endorsed in the amount indicated. Checks or drafts shall be made payable either to the Iowa Department of Transportation (Iowa DOT) or to the bidder. If payable to the bidder, the check or draft shall be endorsed without qualifications to the Iowa DOT by the bidder or an authorized agent. **(2)** An insurance or surety company may be retained to provide a bond in fulfillment of the Bid Bond requirement. A properly completed and signed copy of the Bid Bond (*Form 131084*) must accompany the bid. **The Iowa DOT's Bid Bond form must be used; no other forms or formats will be accepted.**
4. **Pricing and Discount:** Unit prices shown on the bid/response shall be quoted as the price per unit (e.g., gal., case, each, etc.) as stated in the bid solicitation. If there is a discrepancy between the unit bid prices, extension, or total amount of bid, the unit prices shall prevail. Unless otherwise indicated, prices shall be firm for the duration of the contract or purchase. Discounts for early payment are allowed, but not considered in award of the contract.

5. **Acceptance/Rejection:** The Iowa DOT reserves the right to accept or reject any or all bids and to waive irregularities or technicalities, provided such waiver does not substantially change the offer or provide a competitive advantage to any supplier(s). The Iowa DOT also reserves the right to accept that bid which is deemed to be in the best interests of the state. Any unauthorized changes, additions, or conditional bids including any ties to another Quotation, Bid or Proposal or any reservations about accepting an award or entering into a contract, may result in rejection of the bid. Quotations, Bids or Proposals must remain available for award for thirty (30) days from date of bid opening.
6. **Bid Results & Disclosure:** Bid tabulations will be posted on the Iowa DOT website at www.iowadot.gov/purchasing under the *Bid Award* link referencing the Solicitation number with an award recommendation indicated. At the conclusion of the selection process, the contents of all received bid responses will be placed in the public domain and be open to inspection by interested parties, according to state law. Trade secrets or proprietary information that are recognized as such and are protected by law may be withheld if clearly identified as such in the Bid Response.
7. **Quality:** All material shall be new and of first quality. Items which are used, demonstrators, refurbished, obsolete, seconds, or which have been discontinued are unacceptable without prior written approval by the Iowa DOT.
8. **Recycled Content:** The Iowa Code encourages purchase of products and materials with recycled content, including but not limited to paper products, oils, plastic products, compost materials, aggregate, solvents, and rubber products. Recycled items or alternatives must be noted in the bid response, if known.
9. **Shipping Terms:** Deliveries shall be F.O.B. Destination unless otherwise specified. All deliveries shall be accompanied by a packing slip indicating the Supplier, quantities shipped, and the purchase order number(s). All delivery charges shall be included in the bid price and paid by the Supplier. No collect C.O.D. deliveries shall be accepted. When entering into a contract, the Supplier shall notify the freight company that all freight and delivery charges are to be prepaid by the Supplier. Goods delivered to the Iowa DOT Distribution Center at 800 Lincoln Way, Ames, IA shall be received between the hours of 7:00 a.m. and 3:00 p.m. on any day except Saturday, Sunday, or a holiday. For deliveries to other Iowa DOT locations, the Supplier may contact the destination location for available times to deliver as not all Iowa DOT locations have the same business hours. The Iowa DOT will not be liable for any freight claims or unpaid freight bills arising from contract or purchase order issues.

B. Award

The binding agreement (award) may be issued in the form a purchase order or contract or both depending on the requirements and complexity of the agreement.

1. **Method of Award:** Award shall be made to the responsible, responsive bidder whose Quotation, Bid or Proposal meets the requirements of the solicitation and is the most advantageous to the Iowa DOT. An Iowa bidder will be given preference over an out-of-state bidder when bid responses are equal in all aspects and are tied in price. By virtue of statutory authority preference will be given to products and provisions grown and coal produced within the State of Iowa.
2. **Award Protests:** Protests of award recommendations are to be addressed to the Director of Purchasing, and shall be made in accordance with paragraph 761--20.4(6)"e" of the Iowa Administrative Code.
3. **Contracts:** Successful contractor(s) may be sent either a formal Contract, Notification of Award or Purchase Order as confirmation of acceptance and award. Any of these binding agreements shall be for the term stated in the bid solicitation or on a purchase order and may be renewed for additional period(s) under the same terms and conditions upon mutual agreement as defined. The successful bidder may not assign a contract to another party without written authorization from the Iowa DOT Purchasing Section. The Iowa DOT may offer a contract extension to the Contractor when a scheduled target date cannot be met.
4. **Consumer Price Index (CPI-U):** A CPI may be allowed as specified in the terms of the bid solicitation and at the discretion of the Iowa DOT based on currently posted CPI-U, US City Average, All Items – non seasonally adjusted unless otherwise specified. This applies each of any subsequent renewals, extensions, amendments issued under the contract for the duration of the contract.

5. **Payment Terms:** The Iowa DOT typically pays properly submitted vendor invoices within thirty (30) days of receipt, providing goods and/or services have been successfully delivered, installed or inspected (if required), and accepted. Invoices presented for payment must be only for quantities received by the Iowa DOT and must reference the purchase order number to be submitted for processing.
6. **Default (Supplier):** Failure of the Supplier to adhere to specified delivery schedules or to promptly replace rejected materials shall render the Supplier liable for all costs in excess of the bid price when alternate procurement is necessary. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the binding agreement.
7. **Default (Contractor):** Failure of a Contractor other than a Supplier to meet any specified project completion deadline shall render the Contractor liable for all costs incurred by the Iowa DOT that were: a) necessary to meet said deadline; or b) necessary to complete said project after said deadline. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the agreement.

C. General

1. **Administrative Rules:** For Additional details on the rules governing the actions of the Iowa DOT Purchasing Section, refer to 761 IAC, Chapter 20, Iowa Administrative Code, entitled "Procurement of Equipment, Materials, Supplies and Services".
2. **Affirmative Action:** The Contractor (and also subcontractor, vendor or supplier) is prohibited from engaging in discriminatory employment practices forbidden by federal and state law, executive orders and rules of the Iowa Department of Management, pertaining to equal employment opportunity and affirmative action. Contractor may be required to have on file a copy of their affirmative action program, containing goal and time specifications. Contractors doing business with Iowa in excess of \$5,000 annually and employing 50 or more full time employees may be required to file with the Iowa Department of Management a copy of their affirmative action plan. Failure to fulfill these non-discrimination requirements may cause the contract to be canceled and the contractor declared ineligible for future state contracts or subject to other sanctions as provided by law or rule.
3. **Applicable Law:** The contract shall be governed under the laws of the State of Iowa. The contractor shall at all times comply with and observe all federal and state laws, local laws, ordinances, and regulations which are in effect during the period of a contract and which in any manner affect the work or its conduct. Any legal action relating to a contract shall only be commenced in the Story County, Iowa, District Court or the United States District Court for the Southern District of Iowa.
4. **Conflict of Interest:** No state or county official or employee, elective or appointive shall be directly or indirectly interested in any contract issued by the Iowa DOT, see Code of Iowa 314.2.
5. **Debarment and Vendor Suspension:** By submitting a Bid Response, the contractor is certifying that it and its principals and/or subcontractors are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by the State of Iowa or any Federal department or agency.
6. **Equal Opportunity:** Firms submitting bids must be an "Equal Opportunity Employer" as defined in the Civil Rights Act of 1964 and in Iowa Executive Order Number Thirty-four.
7. **Indemnification-Goods:** To the extent the goods are not manufactured in accordance with Iowa DOT's designs, Supplier shall defend, indemnify and hold harmless Iowa DOT, its assignees, and other users of the goods from and against any claim of infringement of any letters patent, trade names, trademarks, copyright or trade secrets by reason of sale or use of any articles purchased. Iowa DOT shall promptly notify Supplier of any such claim.
8. **Infringement:** Goods shall be delivered free of the rightful claim of any third party by way of infringement. Contractor shall indemnify and save harmless the State of Iowa and the Iowa DOT against all claims for infringement of, and/or royalties claimed under, patents or copyrights on materials and equipment furnished under this bid.
9. **Iowa Open Records Law:** All Bid Responses are subject to terms and provisions of Iowa Code Chapter 22 Examination of Public Records (Open Records), specifically 22.7- Confidential Records.

10. **Records Audit:** The contractor agrees that the Auditor of the State of Iowa or any authorized representative of the state, and where federal funds are involved, the Comptroller General of the U.S. Government, shall have access to and the right to examine, audit, excerpt, and transcribe any directly pertinent books, documents, papers, and records of the contractor relating to orders, invoices, or payments of a contract or purchase order.
11. **Targeted Small Businesses:** The Iowa DOT seeks to provide opportunities for women and/or minority small business enterprises. To apply for certification as an Iowa Targeted Small Business, contact the Iowa Department of Inspection and Appeals (515-281-5796). Contractors shall take documented steps to encourage participation from Targeted Small Businesses for the purpose of subcontracting and supplying of goods or services or both.
12. **Taxes:** Prices quoted shall not include state or federal taxes from which the state is exempt. Exemption certificates will be furnished upon request.
13. **Termination:**
 - **Termination Due to Lack of Funds or Change in Law**

The Iowa DOT shall have the right to terminate this Contract without penalty by giving thirty (30) days written notice to the vendor as a result of any of the following:

 - Adequate funds are not appropriated or granted to allow the Iowa DOT to operate as required and to fulfill its obligations under contract.
 - Funds are de-appropriated or not allocated or if funds needed by the Iowa DOT, at the Iowa DOT's sole discretion, are insufficient for any reason.
 - The Iowa DOT's authorization to operate is withdrawn or there is a material alteration in the programs administered by the Iowa DOT.
 - The Iowa DOT's duties are substantially modified.

Following a 30 day written notice, the Iowa DOT may terminate a binding agreement in whole or in part without the payment of any penalty or incurring any further obligation to the Supplier. Following termination upon notice, the Supplier shall be entitled to compensation upon submission of invoices and proper proof of claim for goods and services under contract up to and including the date of termination.

Schedule of Prices

Project Description:

Item No.	Description	Quantity	Unit/Price	Total Bid Amount
1	Contractor to re-roof the Ottumwa Maintenance Facility Garage as per specifications and plans	1	Lump/sum	\$ _____

I hereby certify that this Bid Response meets or exceeds the minimum requirements including specifications and addendums.

Authorized
Signature:

Contact Person:

Company:

(Print Name)

Address:

(City) (State) (Zip Code)

Contractor's
Registration No: _____

Phone No: _____

Email: _____

Fax No.: _____

I acknowledge receipt of addendums: _____

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Section 1 Introduction

1.1 Purpose & Overview of the RFB Process

The purpose of this Request for Bid (RFB) is to solicit Bid Responses from responsible, responsive Bidders to provide the goods and/or services identified on the RFB cover page and described further in Section 3 of this RFB. The Iowa DOT intends to award a contract(s) beginning and ending on the dates listed on the Procurement Timetable. The Iowa DOT may renew the contract(s) for up to the number of annual extensions identified on the Procurement Timetable at the sole discretion of the Iowa DOT. Any contract(s) resulting from the RFB shall not be an exclusive contract.

Bidders will be required to submit Bid Responses according to the Procurement Timetable. The Iowa DOT will evaluate all responsible Bidders that submit timely responsive Bid Responses to be considered for award.

Over View The project consists of the re-roofing the Ottumwa Maintenance Facility Garage as per specifications and plans. Project completion date July 30, 2016.

1.2 Definitions

The terms used in individual sections of this document are intended to be consistent with those commonly used in the application field in question. When responding, use the terms and acronyms used in this document, and define any terms or conditions that require further clarification.

1.2.1 “Bid Response” means the bid document submitted by the bidder in response to the RFB.

1.2.2 “Contract” or “Resulting Contract” means the contract(s) entered into with the successful Bidder(s) as described in section 4.

1.2.3 “Bidder” means individual, company or entity submitting a response in response to the RFB.

1.2.4 “Iowa DOT” means the Iowa Department of Transportation.

1.2.5 “Participating Agency” or “Participating Agencies” means the all state boards, and commissions, and any political subdivisions as identified on the RFB cover sheet as Participating Agencies and any other agency that decides to utilize the executed contract.

1.2.6 “Procurement Timetable” (*on the page immediately following the RFB cover*) provide timeline, event and date information.

1.2.7 “Purchase Order” means the documentation issued by the State to the Contractor for a purchase of goods and/or services in accordance with the terms and conditions of the Contract. It may include an identification of the items to be purchased, the delivery date and location, the address where the supplier should submit the invoices, and any other requirements deemed necessary by the State. Any preprinted contract terms and conditions included on Bidder’s forms or invoices shall be null and void.

1.2.8 “Responsible Bidder” means a bidder that has the capability in all respects to perform the requirements of the Bid Proposal specifications. In determining whether a Bidder is a responsible, responsive Bidder, the Iowa DOT may consider

various factors including, but not limited to, the Bidder's competence and qualifications to provide the goods or services requested, the Bidder's integrity and reliability, the past performance of the Bidder relative to the quality of the goods or services offered by the Bidder, the proposed terms of delivery, and the best interest of the Iowa DOT and Participating Agencies.

1.2.9 "RFB" means Request for Bid and any attachments, exhibits, schedules or addenda hereto. A written response by a Bidder shall be considered a bid and referred to as a Bid Response.

1.2.10 "State" means the Iowa DOT, State of Iowa, and Participating Agencies identified on the title page and all state agencies, boards, and commissions, and any political subdivisions making purchases off of the resulting Contract as permitted by this RFB.

1.2.11 "Subcontractor" Includes every person furnishing material, equipment or performing labor as a sublet of any part of contract.

1.3 General

1.3.1 Owner:

The Owner of these projects is the Iowa Department of Transportation, 800 Lincoln Way, Ames, Iowa 50010.

Project Location: 2930 North Court Rd, Ottumwa, IA 52501

1.4 Bidding Documents

1.4.1 Addenda

- Addenda, if issued, will be posted to the Iowa DOT's website. All addendums must be acknowledged by bidders and included in the Bid Response.
- All addenda so issued shall become part of the contract documents.

1.4.2 Withdrawal Period

Prime Contractors, subcontractors and material suppliers on these projects agree to guarantee their proposal costs and work to be performed for a period of thirty (30) days after the date of receipt of bids.

Section 2 Administrative Information

2.1 Issuing Agent

The Issuing Agent, identified on the cover page is the sole point of contact regarding the RFB from the date of issuance until the notice of intent to award is issued (selection of the successful contractor).

2.2 Restriction on Communication

From the issue date of this RFB until the notice of intent to award is issued (announcement of the successful bidder), bidders may contact only the Issuing Agent.

The Issuing Agent will respond only to questions regarding the procurement process. Questions related to the interpretation of this RFB must be submitted in writing to the Issuing Officer by the deadline found in the Procurement Timetable listed immediately after the cover sheet. Verbal questions related to the interpretation of this RFB will not be accepted. Questions related to the interpretation of this RFB must be submitted as provided in section 2.5. Contractors may be disqualified if they contact any state employee other than the Issuing Agent. *Exception: Contractors may contact the State Targeted Small Business Office on issues related to the preference for Targeted Small Businesses.*

In NO CASE shall verbal communication override written communications. Only written communications are binding on the State.

The Iowa DOT assumes no responsibility for representations concerning conditions made by its officers or employees prior to the execution of a contract, unless such representations are specifically incorporated into this RFB. Verbal discussions pertaining to modifications or clarifications of this RFB shall not be considered part of the RFB unless confirmed in writing. All such requests for clarification shall be submitted in writing. Any information provided by the Contractor verbally shall not be considered part of that Contractor's proposal. Only written communications from the Contractor and received by the Department shall be accepted.

With the exception of the written Bid Response which must be submitted by Contractors in accordance with Section 2 herein, communications between the Issuing Agent and Contractors may be conducted by regular prepaid US mail, courier service, e-mail or facsimile transmission.

2.3 Downloading the RFB from the Internet

All correspondence for this Bid Proposal will be posted on the Iowa DOT's website at www.iowadot.gov/purchasing/lettingschedule. **Bidders are required** to visit the Iowa DOT's home page periodically for any and all addendums or other pertinent information regarding this bid opportunity.

2.4 Procurement Timetable

The dates listed in the Procurement Timetable (on the page immediately following the RFB cover) are set forth for informational and planning purposes; however, the Iowa DOT reserves the right to change the dates. If a change is made to any of the deadlines for Contractor submission, the Iowa DOT will issue an addendum to the RFB. All times listed are Central Times.

2.5 Questions, Requests for Clarification, and Suggested Changes

Contractors are invited to submit written questions and requests for clarifications regarding the RFB during the time indicated in the Procurement Timetable. Contractors may also submit suggestions for changes to the requirements of this RFB. The questions, requests for clarifications or suggestions must be in writing and received by the Issuing Agent on or before the deadline stated in the Procurement Timetable. Oral questions will not be permitted. If the questions, requests for clarifications, or suggestions pertain to a specific section of the RFB must be referenced.

Written responses to questions, requests for clarifications or suggestions will be posted on or before the deadline stated in the Procurement Timetable and posted on the Iowa DOT's website (see Section 2.3) If the Iowa DOT decides to adopt a suggestion, the Iowa DOT will issue an addendum to the RFB.

The Iowa DOT assumes no responsibility for verbal representations made by its officers or employees unless such representations are confirmed in writing and incorporated into the RFB.

Each bidder must inform themselves fully of the conditions relating to the proposal. Failure to do so will not relieve a successful bidder of their obligation to furnish all services required to carry out the provisions of his contract. Insofar, as possible, the Contractor, in carrying out the work, must employ such methods or means as will not cause any interruption of, or interference with the work of any other contractor.

If a bidder discovers any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in this RFB, the bidder should immediately notify the Issuing Agent in writing of such error and request modification or clarification of the RFB document.

2.6 Revisions to Contractor Bid Response

Contractors who submit Bid Proposals in advance of the bid opening date may withdraw, modify, and resubmit Bid Proposals at any time until the bid opening date and time. Contractors must notify the Issuing Agent in writing if they wish to withdraw their Bid Response. A Contractor shall not withdraw its Bid Response or its prices prior to the end of the one hundred and eighty (180) day period immediately following the notice of intent to award a contract.

2.7 Submission of Bid Responses

The Iowa DOT must receive Bid Responses addressed to the Department of Transportation, Purchasing Section, 800 Lincoln Way, Ames, Iowa 50010 before the deadline stated in the Procurement Timetable. **This is a mandatory requirement and will not be waived by the Iowa DOT.** Any Bid Response received after this deadline will be rejected and returned unopened to the contractor.

Contractors mailing Bid Responses must allow ample mail delivery time to ensure receipt by the Iowa DOT on or before the due date. Postmarking by the due date will not substitute for actual receipt of the Bid Response.

Electronic mail and faxed Bid Responses will not be accepted.

Contractors must furnish all information necessary to evaluate the Bid Response. Bid Responses that fail to meet the mandatory requirements of the RFB will be disqualified. Verbal information provided by the Contractor shall not be considered part of the Contractor's Bid Response.

2.8 Bid Response Opening

The Iowa DOT will open Bid Responses on the date and time stated in the Procurement Timetable. Bid Responses will remain confidential until a bid tabulation has been posted on the Iowa DOT's website for all bidders to view the results in the form of "Intent to Award" See Iowa Code Section 72.3.

The names of the Contractors who submit compliant Bid Responses within the time frame permitted will be available for public review after the contract has been awarded.

2.9 Costs of Preparing the Bid Response

The costs of preparation and delivery of a Bid Response are solely the responsibility of the Contractor.

No payments shall be made by the State to cover costs incurred by any Contractor in the preparation of or the submission of this RFB or any other associated costs.

2.10 Reasonable Accommodations

Upon request, the Iowa DOT will provide reasonable accommodations, including the provision of informational material in an alternative format, for individuals with disabilities. If accommodations are required at time of a bid opening, contact the Issuing Agent designated on the cover page.

2.11 Rejection of Bid Responses

The Iowa DOT reserves the right to reject any or all Bid Responses, in whole or in part, received in response to this RFB at any time prior to the execution of a written contract. Issuance of this RFB in no way constitutes a commitment by the Iowa DOT to award a contract. This RFB is designed to provide Contractors with the information necessary to prepare a competitive Bid Response. This RFB process is for the Iowa DOT benefit and is intended to provide the Iowa DOT with competitive information to assist in the selection of a Contractor to provide services.

It is not intended to be comprehensive and each Contractor is responsible for determining all factors necessary for submission of a comprehensive Bid Response.

The Iowa DOT reserves the right to negotiate the terms of the contract, including the award amount, with the awarded Contractor prior to entering into a contract. If contract negotiations cannot be concluded successfully, the Iowa DOT reserves the right to negotiate a contract with the next lowest Bidder.

2.12 Disqualification

The Iowa DOT may reject outright and shall not evaluate proposals for any one of the following reasons:

2.12.1 The Contractor states that a requirement of the RFB cannot be met.

2.12.2 The Contractor's Bid Response materially changes a requirement of the RFB or the Bid Response is not compliant with the requirements of the RFB.

2.12.3 The Contractor's response limits the rights of the Iowa DOT.

2.12.4 The Contractor fails to include a *Bid Bond*, also or bid security, *if required*. See Bid Response cover page and **Section 2.33**.

2.12.5 The Contractor fails to include any signature, certification, authorization, stipulation, disclosure or guarantee (if required).

2.12.6 The Contractor presents the information requested by this RFB in a format inconsistent with the instructions of the RFB or otherwise fails to comply with the requirements of this RFB.

2.12.7 The Contractor initiates unauthorized contact regarding the RFB with state employees.

2.12.8 The Contractor provides misleading or inaccurate responses.

2.12.9 The Contractor fails to attend the mandatory Contractors Conference or Pre-Bid meeting.

2.12.10 The Contractor's Bid Response is materially unbalanced.

2.12.11 There is insufficient evidence (including evidence submitted by the Contractor and evidence obtained by the Iowa DOT from other sources) to satisfy the Iowa DOT that the Contractor is a "Responsible Contractor".

2.12.12 The Contractor alters the Bid Proposal language in any way.

2.13 Nonmaterial and Material Variances

The Iowa DOT reserves the right to waive or permit cure of nonmaterial variances in the Bidder's Bid Response if, in the judgment of the Iowa DOT, it is in the Iowa DOT best interest to do so. Nonmaterial variances include minor informalities that do not affect responsiveness; that are merely a matter of form or format; that do not change the relative standing or otherwise prejudice other Contractors; that do not change the meaning or scope of the RFB; or that do not reflect a material change in the services. In the event the Iowa DOT waives or permits cure of nonmaterial variances, such waiver or cure will not modify the RFB requirements or excuse the Contractor from full compliance with RFB specifications or other contract requirements if the Contractor is awarded the contract. The determination of materiality is in the sole discretion of the Iowa DOT.

2.14 Reference Checks

The Iowa DOT reserves the right to contact any reference to assist in the evaluation of the Bid Response, to verify information contained in the Bid Response and to discuss the Contractor's qualifications and the qualifications of any subcontractor identified in the bidders Bid Response.

2.15 Information From Other Sources

The Iowa DOT reserves the right to obtain and consider information from other sources concerning a Contractor, such as the Contractor's capability and performance under other contracts, the qualifications of any subcontractor identified in the Contractor's Bid Response, specifically, the Contractor's financial stability, past or pending litigation, and publicly available information.

2.16 Verification of Bid Response Contents

The content of a Bid Response submitted by a Contractor is subject to verification. Misleading or inaccurate responses shall result in disqualification and rejection of the Bid Response.

2.17 Criminal History and Background Investigation

The Contractor hereby explicitly authorizes the Iowa DOT to conduct criminal history and/or other background investigation(s) of the Contractor, its officers, directors, shareholders, partners and managerial and supervisory personnel retained by the Contractor for the performance of the contract.

2.18 Bid Response Clarification Process The Iowa DOT reserves the right to contact a Contractor after the submission of Bid Response for the purpose of clarification to ensure mutual understanding.

This contact may include written questions, interviews, site visits, a review of past performance if the Contractor has provided goods or services to the Iowa DOT or any other political subdivision wherever located, or requests for corrective pages in the Contractor's Bid Response. The Iowa DOT will not consider information received if the information materially alters the content of this Bid Proposal or alters the type of goods and services the Contractor is offering to the Iowa DOT. An individual authorized to legally bind the Contractor shall sign responses to any request for clarification. Responses shall be submitted to the Iowa DOT within the time specified in the Iowa DOT request. Failure to comply with requests for additional information may result in rejection of the Bid Response as non-compliant.

2.19 Disposition of Bid Responses

At the conclusion of the selection process, the contents of all Bid Responses will be in the public domain and be open to inspection by interested parties except for information for which Contractor properly requests confidential treatment or is subject to exceptions provided in Iowa Code Chapter 22 or other applicable law.

2.20 Public Records and Requests for Confidential Treatment

The Iowa DOT may treat all information submitted by a Contractor as public information following the conclusion of the Intent to Award. Iowa DOT release of information is governed by Iowa Code chapter 22. Contractors are encouraged to familiarize themselves with chapter 22 before submitting a Bid Response. The Iowa DOT will copy and produce public records as required to comply with the public records laws.

2.21 Release of Claims

By submitting a Bid Response, the Contractor agrees that it will not bring any claim or cause of action against the Iowa DOT based on any misunderstanding concerning the information provided herein or concerning the Iowa DOT failure, negligent or otherwise, to provide the Contractor with pertinent information as intended by this RFB.

2.22 Award Notice and Acceptance Period

Notice of intent to award will be posted on the Iowa DOT's website at www.iowadot.gov/purchasing/bidaward. Final negotiation and execution of the contract(s) shall be completed no later than thirty (30) days from the date of the Notice of Intent to Award or such other time as designated by the Iowa DOT.

If the successful Contractor fails to negotiate and deliver an executed contract by that date, the Iowa DOT in its sole discretion may cancel the award and redirect the contract to the next lowest bidder meeting the specifications.

2.23 No Contract Rights until Execution

The full execution of a written contract shall constitute the making of a contract for services and no Contractor shall acquire any legal or equitable rights relative to the contract services until the contract has been fully executed by the successful Contractor and the Iowa DOT.

2.24 Restrictions on Gifts and Activities

Iowa Code Chapter 68B restricts gifts which may be given or received by state employees and requires certain individuals to disclose information concerning their activities with state government. Contractors are responsible to determine the applicability of this Chapter to their activities and to comply with the requirements. In addition, pursuant to Iowa Code section 722.1, it is a felony offense to bribe or attempt to bribe a public official.

The laws of Iowa provide that it is a felony to offer, promise, or give anything of value or benefit to a state employee with the intent to influence that employee's acts, opinion, judgment or exercise of discretion with respect to that employee's duties. Evidence of violations of this statute will be submitted to the proper prosecuting attorney.

2.25 No Minimum Guaranteed

The Iowa DOT anticipates that the selected Contractor will provide services as requested by the Iowa DOT. The Iowa DOT will not guarantee any minimum compensation will be paid to the Contractor or any minimum usage of the Contractor's services.

2.26 Conflicts Between Terms

The Iowa DOT reserves the right to accept or reject any exception taken by the Contractor to the terms and conditions contained in this RFB. Should the Contractor take exception to the terms and conditions required by the Iowa DOT, the Contractor's exceptions may be rejected and the entire proposal declared nonresponsive. The Iowa DOT may elect to negotiate with the Contractor regarding contract terms that do not materially alter the substantive requirements of the request for proposals or the contents of the Contractor's Bid Response.

2.27 News Releases

No news releases or other materials pertaining to this procurement, or any part of this proposal, will be made available to the media or the public, the Contractor's clients or potential clients without the prior written approval of the Iowa DOT.

2.28 Pre-Bid Conference

If the Procurement Timetable indicates a Contractor's Pre-Bid Conference will be held in conjunction with this RFB, it will be held at the date, time, and location listed on the Procurement Timetable immediately following the cover page. If Attendance at the Contractor's Pre-Bid Conference is a mandatory requirement to submit a Bid Response, it will be indicated on the Procurement Timetable. The purpose of the Pre-Bid conference is to discuss with prospective Contractors the work to be performed and allow prospective Contractors an opportunity to ask questions regarding the RFB. Verbal discussions at the Pre-Bid conference shall not be considered part of the RFB unless confirmed in writing by the Iowa DOT and incorporated into this RFB. The conference may be recorded. Questions asked at the conference that cannot be adequately answered during the conference may be deferred.

A copy of the questions and answers will be posted on the DOT website for viewing.

In an effort to seek competitive bids the DOT reserves the right to schedule a second pre-bid meeting in the event only one or no vendors are in attendance at the scheduled mandatory pre-bid. The Potential bidder in attendance at the scheduled pre-bid will not be required, but is welcome to attend the second pre-bid if they choose.

2.29 Contractors Responsibilities

2.29.1 Codes, Laws and Regulations

The laws of the State of Iowa in relation to and pertaining to public improvements shall apply to these projects. All construction, materials and methods shall comply with the State and Local Building Codes and with Local Ordinances, except where plans and specifications establish a higher standard.

2.29.2 Licenses, Permits and Inspections

The Bidders shall comply with all codes, laws, ordinances, rules and regulations of any public authority having jurisdiction that bears on the performance of its work. Bidders shall pay for all licenses, permits and inspection fees required for its work. Bidders must furnish copies of all approved inspection certificates and approvals from authorities having jurisdiction in a timely fashion upon completion of the work.

2.30 Consideration of Bids

2.30.1 Rejection of Bids

The Iowa DOT reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Iowa DOT that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein. Conditional bids will not be accepted.

2.30.2 Qualification of Bidder

The Iowa DOT may make such investigations as they deem necessary to determine the ability of the Bidder to perform the required work, and the bidder shall furnish to the Iowa DOT all such information and data for this purpose as the Iowa DOT may request.

2.31 Performance and Payment Bonds

2.31.1 Bonds

If the contracted estimated value is \$25,000 or more, the successful Bidder shall furnish bonds covering the faithful performance of 100% of the Contract and the payment of all obligations arising thereunder. One copy of the bond shall be submitted on Iowa Department of Transportation **Form 131070**. All items must be properly filled in, including Bidder's signature. Resident commission agent or attorney-in-fact must file a copy of the power of attorney.

2.31.2 Power of Attorney

Attorney-in-fact who signs the Bid Bond, Performance Bond, and Labor and Material Payment Bond must file with each bond a certified and effectively dated copy of the Power of Attorney.

2.32 Labor Regulations

All Bidders, before entering into a contract with the Department, must be registered with the Division of Labor in the Iowa Department of Workforce Development (515-281-3606) according to chapter 91C, Code of Iowa 2015. This pertains to

contractor's who engage in the business of construction.

2.33 Bid Bond

If required each bid must be supported by a Bid Bond in the sum indicated on the Bid Response cover page. See Standard Terms and Conditions included in the Bid Bond section A-3.

Certified checks and credit union share drafts shall be certified, or the cashier's check shall be drawn and endorsed, in an amount not less than indicated in the Bid Proposal. If a Bid Bond is submitted, it must be submitted on **Iowa DOT Form No. 131084 or bid will be rejected.**

The Bid Bond from the qualified responsive low bidder will be retained until a contract is entered into and the required Bonds and Insurance Certificates are filed. All other bid securities will be returned after the award has been made.

Section 3 General Requirements

3.1 Scope of Work

Successful Bidder shall be required to provide all materials, labor, and equipment necessary for re-roofing of the Ottumwa Maintenance Facility Garage as per specifications and plans.

Contractor to field verify all dimensions, roof slopes and locations of the roof system.

Work is to only occur at areas indicated.

Roof Height +15'0" to +18' 0" typical

Existing built up roofing to remain, remove existing loose gravel off roof.

Contractor to fix, patch, reinforce and prepare existing roof prior to installation of new 1" re-cover board on entire roof.

Roof Blisters and bubbles to be cut out and repaired prior to application

Install cover board and rigid insulation over existing, total r-value for new and existing insulation to be R-30, stagger all joints

Furnish and install TPO membrane roof systems

Coat flashing and curbs as recommended by TPO membrane roof manufacturer

Contractor is required to have a contractor number as indicated in section 2.32

Liquidated damages will apply at a rate of \$75.00 per calendar day.

Additional required specifications are included after section 4.7 of this proposal.

3.2 Adoption of General Conditions

3.2.1 The General Requirements of this Contract shall include the "General Conditions", "Plans and Specifications" and any and all requirements of this RFB, as herein stated.

3.2.2 "THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", A.I.A. FORM #A-201, LATEST EDITION AND A.I.A. DOCUMENT, "INSTRUCTIONS TO BIDDERS", FORM #A-701, LATEST EDITION, SHALL BE INCLUDED, AS MODIFIED IN THE "SUPPLEMENTARY INSTRUCTIONS TO BIDDERS" AND "SUPPLEMENTARY GENERAL CONDITIONS", AND BOUND WITH THE STANDARD FORM OF AGREEMENT BETWEEN THE CONTRACTOR AND OWNER", A.I.A. FORM #101, LATEST EDITION, AS A PART OF THIS CONTRACT SPECIFICATION.

3.2.3 All bidder information and conditions, bid check lists and similar documents included in the specifications issued by the Iowa DOT, Ames, Iowa are hereby made a part of the General Conditions.

3.3 Contractor Response

3.3.1 Guidelines

- Contractors shall comply with Iowa Occupational Safety and Health Standards as found in 29 C FR Parts 1910 and 1926. Of particular importance are those standards referring to the use of personal protective equipment (PPE), fall protection and ventilation.
- Contractor may be required to make available to the Iowa DOT all Safety

Data Sheets (SDS) for all products provided at time the apparent low bidder has been determined. SDS shall be sent to the Issuing Agent (when applicable) prior to issuance of the contract.

3.3.2 Guarantee

The Contractor shall guarantee all work executed under this contract, both as the workmanship and materials, for a period of twelve (12) months after the substantial completion date. Neither the final payment nor any provision of the contract documents shall relieve the Contractor of responsibility for faulty materials or workmanship. The Contractor shall remedy any defect thereto and pay for any damage to other work resulting therefrom, which shall appear within a period of one (1) year from the date of the final acceptance. With one month remaining in the guarantee period, the Contractor shall notify the Iowa DOT and set up a complete walk-through inspection.

- All materials, items of equipment, and workmanship furnished under this division of the specifications shall carry the standard warranty against all defects in material and workmanship. Any fault due to defective or improper material, equipment, or workmanship which may develop, shall be made good, forthwith.
- The Guarantee shall include, but not be limited to the following elements and services:
 - a. Repair or replace defective materials, equipment, workmanship and installation that develops within the guarantee period, promptly and to Iowa DOT's satisfaction and correct damage caused in making necessary repairs and replacements, including all other damage done to areas, materials, and other systems resulting from the failure or defect, under guarantee by and at the expense of the Contractor.
 - b. Replace material or equipment that requires excessive service during guarantee period, as defined and as directed by the Iowa DOT.
 - c. Make all service calls, replacements, repairs and adjustments during the guarantee period without cost to the Iowa DOT.

3.3.3 Use of Premises

- All Contractors shall confine all apparatus, storage of materials and construction to areas as directed by the Iowa DOT and shall not encumber the premises with materials.
- Notwithstanding any approvals or instructions which must be obtained by the Contractors from the Iowa DOT in connection with use of premises, the responsibility for the safe working conditions at the site shall remain that of the Contractors.

3.3.4 Verifying Work of Other Contractors

- When a Contractor's work depends on proper execution of work by other contractors, such Contractor shall promptly report to the Iowa DOT project lead any defects in such work and/or discrepancies between executed work plans, drawings or specifications.
- Contractors shall employ such methods and means in carrying out work as will not cause interruption or interference with any other Contractor. General Contractors shall give other Contractors sufficient notice to permit installation of sleeves, piping, conduit, and other items, prior to placing

concrete or laying masonry. Any Contractor failing to comply with above shall be responsible for expense caused by such failure.

3.4 Sub-Contractors

- Specific attention shall be given by the Contractor to Article 5 of the A.I.A. Document A-201, "The General Conditions of the Contract for Construction".
- The Successful Bidder for the project shall furnish the Iowa DOT with a complete list of subcontractors, schedule of values, and major material suppliers at the pre-construction meeting.
- The Iowa DOT shall approve and maintain the list of subcontractors and major suppliers and issue a general approval of same after official award of the contract, subject to the specific requirements of the Plans, Specifications and the "General Conditions of the Contract, and of these supplementary Conditions," "Special Provisions," and elsewhere with contract documents, as applicable. Deviations from the list of subcontractors and material suppliers shall be made only with the specific approval of, or at the request of the Iowa DOT.

3.5 Protection of Persons and Property

3.5.1 Safety and Health Regulations

The Contractor, serving in the role of the employer for the project, shall exercise at all times the protection of all persons and property. Contractor shall comply with all requirements of the Occupational Safety and Health Act of 1970, Iowa Bureau of Labor and all applicable state and municipal laws, as well as building and construction codes. It is the Contractor's responsibility to enforce all regulations that apply to these projects.

3.5.2 Protection of Site

The Contractor shall furnish all permanent and temporary guards, signs, fencing, shoring, and underpinning and other protection necessary in the performance of the contract and for the necessary protection of all public and private property and shall be responsible for any damage caused by failure to comply with this requirement.

- After building operations are completed, the Contractor shall replace or satisfactorily repair all damaged walks or pavements which shall have become damaged due to operations of these projects.
- The Contractor shall take care of all underground pipes, conduits, etc., encountered in the excavations, and protect same from damage until such time as they can be permanently disposed of.
- The Contractor shall continuously maintain adequate protection of all work from damage and shall protect the Owner's property and adjacent property from damage arising in connection with this contract.

3.6 Miscellaneous Provisions

3.6.1 Iowa State Building Code

- All construction under this section shall conform to the requirements of the Iowa State Building Code. The provisions of the Iowa State Building Code

will be strictly adhered to, and will take precedence over any local Governmental Body Regulations. Work not regulated by the Iowa State Building Code shall be performed in accordance with local Governmental Body Regulations.

3.6.2 Discriminatory Practices

- All Contractors or subcontractors working under the terms of these projects are prohibited from engaging in discriminatory employment practices as forbidden by the Iowa Civil Rights Act of 1965. These provisions shall be fully enforced, as directed through Executive Order Number 34 dated July 22, 1988. Any breach of the provisions contained in the Iowa Civil Rights Acts of 1965 shall be regarded as a material breach of contract.
- Bidder agrees that if awarded a contract to construct and/or remodel any portion of the project described in these Specifications, neither the Contractor nor any subcontractors will engage in any discriminatory employment practices based on race, color, creed, religion of natural origin and that they will in all contracts comply with all statutes of the State of Iowa against discrimination. Failure to do so could be deemed a material breach of contract.

3.7.1 Pre- bid / Site Visit Put an X in the applicable box.

- Mandatory Pre-bid with site visit is required. Prospective bidders must attend this meeting if they are interested in participating in this bid proposal.
- Non- Required Pre- bid meeting with site visit. This is not a mandatory meeting but is **highly recommended** that prospective bidders attend the following scheduled meeting where DOT staff will be available. To address any questions or concerns regarding the project.
Pre-bid Date: March 25, 2016 Time: 12:30p.m. Location: 2930 North Court Rd. Ottumwa, IA 52501
Contractors interested in attending the pre-bid are to contact Jody McNaughton by **March 21, 2016** to register.
- No Pre-bid meeting is scheduled
- Site Visit Only- Any prospective bidder interested in visiting a DOT site MUST seek prior approval through the project manager. . (insert Name & Phone #)
- No considerations or revision in the contract price or scope of the project will be considered by the Iowa DOT for any item which could have been revealed by a thorough on-site inspection and examination or pre- bid meeting.

3.7.2 Conditions of Work

Bidders must inform themselves fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do

so will not relieve successful bidders of their obligation to furnish all material and labor necessary to carry out the provisions of this contract. Insofar as possible, the Contractor, in carrying out the work, must employ such methods or means as will not cause any interruption of, or interference with the work of any other Contractor.

3.7.3 Obligation

At the time of the bid opening, each bidder will be presumed to have read and become thoroughly familiar with the drawings, specifications, and other contract documents, including all addenda.

Bidders are responsible for the proper submission of bids. Omissions by a bidder to examine a form, instrument, or document shall in no way relieve that bidder from any obligations in respect to their bid.

3.8 Bid Proposal Documents

3.8.1 Plans and Specifications

Electronic Plans and specifications are available on the Iowa DOT's website, www.iowadot.gov/purchasing. The Bidder is responsible for all copies of plans and specifications necessary for the execution of the work.

In the event of a conflict between the specifications and the drawings, the specifications shall take precedence.

3.8.2 Alternates or Exceptions

Alternates or exceptions must be evaluated prior to the letting date listed in this proposal.

3.8.2.1 Substitutions will be review until 7 days before bid date

Section 4 Contract Terms & Conditions

4.1 Contract Award

Award will be based on the total lump sum amount of bid price shown on the Schedule of Prices. The DOT will award to the lowest, most responsive, responsible bidder. The Iowa DOT reserves the right to accept the bid(s) which best serves the interest of the State.

Bid price will include all requirements listed in Section 3 to complete this proposed project. The Prime Contractor shall be responsible for taking all sub-bids and for all coordination between trades.

A "Prime" contract shall be awarded for each project for all work shown on the Drawings and described in the Specifications including Site work, General construction, Demolition, Plumbing, Mechanical, Energy management and control and Electrical work. The Prime Contractor shall be responsible for taking all sub-bids and for all coordination between trades.

Protests of award recommendations shall be made in accordance with Paragraph 761--20.4(6)"e", Iowa Administrative Code.

4.2 Contract Period

See Bid Proposal timeline for dates. The date of completion shall be stated in calendar days on the Bidder's Bid Response, and if necessary, adjusted by mutual agreement between the Iowa DOT and successful bidder prior to executing the contract documents.

The Iowa DOT realizes that deliveries and site conditions have a definite bearing on the completion date. The Iowa DOT will demand diligence in the prosecution of the work, but with good cause and satisfactory past performance by the Contractor, the Iowa DOT may revise the completion date to another mutually-acceptable date, when requested in writing and in good faith by the Contractor.

4.3 Liquidated Damages

Time is an essential component of the contract, and it is important that the work be completed on the or before the dates listed on the Procurement Timetable. For each calendar day that any work shall remain uncompleted beyond the substantial completion date and beyond the final completion date or any extension granted under Extension of Contract Period, the amount per calendar day specified in the Bid Response cover page will be assessed, not as a penalty but as predetermined and agreed upon liquidated damages. If work remains uncompleted on more than one portion for which calendar days and liquidated damages have

been specified, the liquidated damages assessed will be the total of the damages per day listed for each uncompleted portion. The Iowa DOT shall prepare and forward to the Contractor an invoice or credit change order for such liquidated damages. The final payment shall be withheld until payment of the invoice has been made or the credit change order has been agreed upon.

Assessment of liquidated damages will be based only on the number of calendar days required to complete the contract beyond the contract completion date, plus authorized extensions.

The provision for the assessment of liquidated damages for failure to complete work within the contract period does not constitute a waiver of the Iowa DOT's right to collect any additional damages other than time delays, which the Iowa DOT may sustain by the failure of the Contractor to carry out the terms of the contract.

4.4 Immunity of Iowa Department of Transportation

The Contractor shall defend, indemnify and hold harmless the Iowa DOT and its officials and employees from liability arising out of or resulting from the Contractor's activities at the designated work site, its performance or attempted performance of the contract, as well as the Contractor's activities with Sub-Contractors and all other third parties.

4.5 Payments and Completion of Contract

4.5.1 At the Pre-Construction Conference, the contractor shall submit a schedule of values of the various parts of the work, aggregating the total sum of the contract, made out in such form as the Iowa DOT may direct and, if required, supported by evidence as to its correctness. This schedule, when approved by the Iowa DOT, shall be used as a basis for requests for payment.

4.5.2 Final payment shall be authorized not later than thirty (30) days following the completion and final acceptance of the contract, provided that the provisions herein and all other contract requirements have been fulfilled, accepted and approved, where no claims have been filed or following adjudication or release of claims as provided in Chapter 573 of the Code of Iowa.

4.5.3 No notification of payment being processed, no payment made to the Contractor, no partial payment, nor the entire use or occupancy of the work by the Iowa DOT shall be held to constitute an acceptance, in whole or in part, by the Iowa DOT prior to making the final payment and acceptance in full completion of the contract.

4.6 Insurance Requirements

Contractor's Insurance

- It shall be the Contractor's responsibility to have liability insurance covering all of the project operations incident to contract completion and the Contractor(s) must have on file with the Contracting Authority a current "Certificate of Insurance" prior to award of contract. The certificate shall identify the insurance company firm name and address, contractor firm name, policy

period, type of policy, limits of coverage, and scope of work covered (single contract or statewide). This requirement shall apply with equal force, whether the work is performed by persons employed directly by the Contractor(s) including a subcontractor, persons employed by a subcontractor(s), or by an independent contractor(s).

- In addition to the above, the Iowa DOT shall be included as an insured party, or a separate owner's protective policy shall be filed showing the Iowa DOT as an insured party.
- The liability insurance shall be written by an insurance company (or companies) qualified to do business in Iowa. For independent contractors engaged solely in the transportation of materials, the minimum coverage provided by such insurance shall be not less than that required by Chapter 325A, Code of Iowa, for such truck operators or contract carriers as defined therein. For all other contractors, subcontractors, independent contractors, and the Contracting Authority, the minimum coverage by such insurance shall be as follows:
 - Commercial General Liability including Contractual Liability;
 - Damage; Occurrence Basis Bodily Injury; Broad Form Personal Injury; Broad Form Property Damage.

Bodily Injury

The contractor will purchase and maintain throughout the term of this contract the following minimum limits and coverage:

- Each person \$750,000
- Each accident/occurrence \$750,000
- Workers Compensation \$750,000
- Statutory Limits \$750,000
- Employer's liability \$750,000
- Occupation Disease \$750,000

Operations

- Property Damage \$250,000 each occurrence

Builders Risk Insurance

- Each Contractor holding a valid contract with the Iowa DOT shall furnish and pay for builder's risk insurance, providing coverage for at least the following losses: fire, extended coverage, vandalism and malicious damage to materials incorporated in the project, and materials purchased to be incorporated in the project, either stored on or off the permanent job site. If this insurance coverage is not provided, the Contractor shall assume all responsibility for the perils outlined above which may occur prior to project completion and acceptance.
- Failure on the part of the Contractor(s) to comply with the requirements

of this Article will be considered sufficient cause to suspend the work, withhold estimates, and to deny the Contractor(s) any further contract awards, as provided in Article 1103.01.

- The Contractor(s) shall require all subcontractor(s) meet the above insurance requirements.

The Certificate of Insurance must include the following

- Iowa Department of Transportation must be listed as an additional insured
- Proposal Number
- Proposal Description
- Letting Date
- Contract Period

4.7 Public Contract Termination

The provisions of Iowa law as contained in Chapter 573A of the Code of Iowa, an Act to provide for termination of contracts for the construction of public improvements when construction or work thereon is stopped because of national emergency, shall apply to and be a part of this Contract, and shall be binding upon all parties hereto, including sub-contractors and sureties upon any bond given or filed in connection herewith.

**SECTION 00 0101
PROJECT TITLE PAGE**

OTTUMWA MAINTENANCE GARAGE ROOF RESTORATION

**2930 NORTH COURT ROAD
OTTUMWA, IA 52501**

**PROJECT MANUAL
BUILDING SPECIFICATIONS FOR OTTUMWA GARAGE ROOF RESTORATION
DATE: 25 FEBRUARY 2016
PROJECT NUMBER: BG-2T11(009)-80-90**

END OF PROJECT TITLE PAGE

SECTION 00 0110
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PROCUREMENT AND CONTRACTING REQUIREMENTS

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- B. 00 0110 - Table of Contents
- C. 00 0115 - List of Drawing Sheets

SPECIFICATIONS

2.01 DIVISION 01 -- GENERAL REQUIREMENTS

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- B. 01 2000 - Price and Payment Procedures
- C. 01 3000 - Administrative Requirements
- D. 01 4000 - Quality Requirements
- E. 01 5000 - Temporary Facilities and Controls
- F. 01 6000 - Product Requirements
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- A. 07 4213 - Metal Wall Panels (Soffits)
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END OF SECTION

**SECTION 00 0115
LIST OF DRAWING SHEETS**

A-1 ROOF PLAN AND DETAILS

END OF SECTION

SECTION 01 1000
SUMMARY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Contract description.
- B. Owner supplied products.
- C. Contractor's use of site and premises.
- D. Owner occupancy.
- E. Specification Conventions.

1.02 PROJECT

- A. Project Name: Ottumwa Maintenance Facility Re-Roof.
- B. Owner Name: Iowa Department of Transportation.
- C. The Project consists of the removal of existing roofing; replacing water damaged sheathing; and installing a new TPO roofing system.

1.03 CONTRACT DESCRIPTION

- A. Contract Type: Stipulated price as described in Standard form of Agreement Between the Contractor and Owner, AIA Form A101, latest Edition.

1.04 OWNER SUPPLIED PRODUCTS

- A. Owner's Responsibilities:
 - 1. Arrange for and deliver Owner-reviewed Shop Drawings, Product Data, and Samples, to Contractor.
 - 2. Arrange and pay for delivery to site.
 - 3. On delivery, inspect products jointly with Contractor.
 - 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
 - 5. Arrange for manufacturers' warranties, inspections, and service.
- B. Contractor's Responsibilities:
 - 1. Review Owner-reviewed Shop Drawings, Product Data, and Samples.
 - 2. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
 - 3. Handle, store, install and finish products.
 - 4. Repair or replace items damaged after receipt.

1.05 DESCRIPTION OF ALTERATIONS WORK

- A. Scope of demolition and removal work is shown on drawings.
- B. Carefully remove gutters and downspouts on Garage. Re-install gutters and downspouts on Garage after installation of new roof.

1.06 OWNER OCCUPANCY

- A. Construction, including punch list items, must be completed no later than the following date:90 calendar days after start of contract.
 - 1. The Contractor has the option to start construction and complete construction within the 90 day window.
 - a. Once Contractor begins construction, the work must proceed without delay until project is completed.
 - 2. No extensions or additional payments will be allowed when Contractor delayed starting project 60 calendar days after start of contract.
- B. Owner intends to occupy the Project during construction and conduct normal operations.
- C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.

- D. Schedule the Work to accommodate Owner occupancy.

1.07 CONTRACTOR USE OF SITE

- A. Arrange use of site and premises to allow:
 - 1. Owner occupancy.
 - 2. Work by Others.
 - 3. Work by Owner.
 - 4. 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.
- C. Existing building spaces may not be used for storage.
- D. Time Restrictions:
 - 1. Contractor may perform construction operations any day of the week and at any time of the day, but must have a representative present during any Sub-Contractor work.
- E. Utility Outages and Shutdown:
 - 1. Limit disruption of utility services to hours the building is unoccupied.
 - 2. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days notice to Owner and authorities having jurisdiction.
 - 3. Limit shutdown of utility services to 2 hours at a time, arranged at least 24 hours in advance with Owner.
 - 4. Prevent accidental disruption of utility services to other facilities.

1.08 SPECIFICATION CONVENTIONS

- A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.
- B. The following terms are used throughout the specifications and defined as follows:
 - 1. Contractor: General Contractor or contractor responsible for Work of specified section
 - 2. Owner: Representative of building occupants.
 - 3. Architect/Engineer: Representative of Facilities Support.

1.09 SPECIFICATION SECTIONS APPLICABLE TO ALL CONTRACTS

- A. Unless otherwise noted, all provisions of the sections listed below apply to all contracts. Specific items of work listed under individual contract descriptions constitute exceptions.
- B. Section 01 3000 - Administrative Requirements.
- C. Section 01 4000 - Quality Requirements.
- D. Section 01 6000 - Product Requirements.
- E. Section 01 7000 - Execution and Closeout Requirements.
- F. Section 01 7419 - Construction Waste Management and Disposal.
- G. Section 01 7800 - Closeout Submittals.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 2000
PRICE AND PAYMENT PROCEDURES

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 SCHEDULE OF VALUES

- A. Form to be used: AIA G702 - Application and Certificate of Payment, AIA G703 - Continuation Sheet..
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- C. Forms filled out by hand will not be accepted.
- D. Submit Schedule of Values in duplicate within 15 days after date of Owner-Contractor Agreement.
- E. 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.
- F. 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.
- G. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- H. Revise schedule to list approved Change Orders, with each Application For Payment.

1.03 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Form to be used: AIA G702 - Application and Certificate of Payment and AIA G703 - Continuation Sheet..
- C. Forms filled out by hand will not be accepted.
- D. For each item, provide a column for listing each of the following:
 - 1. Item Number.
 - 2. Description of work.
 - 3. Scheduled Values.
 - 4. Previous Applications.
 - 5. Work in Place and Stored Materials under this Application.
 - 6. Authorized Change Orders.
 - 7. Total Completed and Stored to Date of Application.
 - 8. Percentage of Completion.
 - 9. Balance to Finish.
 - 10. Retainage.
- 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. Submit three copies of each Application for Payment.
- H. Include the following with the application:
 - 1. Construction progress schedule, revised and current as specified in Section 01 3000.

1.04 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.
 - 3. Contractor will not begin work prior to signature and approval of Change Order by Architect, IDOT, and Contractor. If work is done prior to approval of Change Order by all parties, the contractor will not receive remuneration and may be required to change the project back per the original plans at the behest of the Architect.
- 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 7 days.
- D. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01 6000.
- E. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
 - 1. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Architect.
- F. Substantiation of Costs: Provide full information required for evaluation.
 - 1. On request, provide the following data:
 - a. Quantities of products, labor, and equipment.
 - b. Overhead and profit.
 - c. Credit for deletions from Contract, similarly documented.
- G. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- H. 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.
- I. 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.

1.05 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. All punchlist items have been completed..

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Progress meetings.
- C. Construction progress schedule.
- D. Coordination drawings.
- E. Submittals for review, information, and project closeout.
- F. Number of copies of submittals.
- G. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Section 01 7000 - Execution and Closeout Requirements: Additional coordination requirements.
- B. Section 01 7800 - Closeout Submittals: Project record documents.

1.03 PROJECT COORDINATION

- A. Project Coordinator: Construction Manager.
- B. Cooperate with the Project Coordinator in allocation of mobilization areas of site; for field offices and sheds, for site access, traffic, and parking facilities.
- C. During construction, coordinate use of site and facilities through the Project Coordinator.
- D. Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- E. Comply with instructions of the Project Coordinator for use of temporary utilities and construction facilities.
- F. Coordinate field engineering and layout work under instructions of the Project Coordinator.
- G. Make the following types of submittals to Architect through the Project Coordinator:
 - 1. Requests for interpretation.
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Design data.
 - 6. Manufacturer's instructions and field reports.
 - 7. Applications for payment and change order requests.
 - 8. Progress schedules.
 - 9. Coordination drawings.
 - 10. Correction Punch List and Final Correction Punch List for Substantial Completion.
 - 11. Closeout submittals.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRECONSTRUCTION MEETING

- A. Owner will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Owner.
 - 2. Architect.
 - 3. Contractor.
- C. Agenda:

1. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 2. Designation of personnel representing the parties to Contract, Owner and Architect.
 3. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 4. Scheduling.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.02 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required:
1. Contractor.
 2. Owner.
 3. Architect.
 4. Contractor's Superintendent.
 5. Major Subcontractors.
- D. Agenda:
1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems that impede, or will impede, planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Maintenance of progress schedule.
 7. Corrective measures to regain projected schedules.
 8. Planned progress during succeeding work period.
 9. Maintenance of quality and work standards.
 10. Effect of proposed changes on progress schedule and coordination.
 11. Other business relating to Work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.03 CONSTRUCTION PROGRESS SCHEDULE

- A. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- B. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- C. Within 10 days after joint review, submit complete schedule.
- D. Submit updated schedule with each Application for Payment.

3.04 COORDINATION DRAWINGS

- A. Provide information required by Project Coordinator for preparation of coordination drawings.
- B. Review drawings prior to submission to Architect.

3.05 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
1. Product data.
 2. Shop drawings.
 3. Samples for selection.

- 4. Samples for verification.
- B. Submit to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 7800 - Closeout Submittals.

3.06 SUBMITTALS FOR INFORMATION

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

3.07 SUBMITTALS FOR PROJECT CLOSEOUT

- A. Submit Correction Punch List for Substantial Completion.
- B. Submit Final Correction Punch List for Substantial Completion.
- C. When the following are specified in individual sections, submit them at project closeout:
 - 1. Project record documents.
 - 2. Operation and maintenance data.
 - 3. Warranties.
 - 4. Bonds.
 - 5. Other types as indicated.
- D. Submit for Owner's benefit during and after project completion.

3.08 NUMBER OF COPIES OF SUBMITTALS

- A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- B. Documents for Information: Submit two copies.
- C. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.
 - 1. After review, produce duplicates.
 - 2. Retained samples will not be returned to Contractor unless specifically so stated.

3.09 SUBMITTAL PROCEDURES

- A. Shop Drawing Procedures:
 - 1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting the Contract Documents and coordinating related Work.
 - 2. Generic, non-project specific information submitted as shop drawings do not meet the requirements for shop drawings.
- B. Transmit each submittal with a copy of submittal form.
- C. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- D. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.

- E. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- F. Deliver submittals to Owner at business address.
- G. Schedule submittals to expedite the Project, and coordinate submission of related items.
- H. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- I. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- J. Provide space for Contractor and Architect review stamps.
- K. When revised for resubmission, identify all changes made since previous submission.
- L. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- M. Submittals not requested will not be recognized or processed.

END OF SECTION

SECTION 01 4000
QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. References and standards.
- B. Submittals.
- C. Control of installation.
- D. Tolerances.
- E. Testing and inspection agencies and services.
- F. Control of installation.
- G. Tolerances.
- H. Manufacturers' field services.
- I. Defect Assessment.

1.02 RELATED REQUIREMENTS

- A. 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 E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection; 2014a.
- C. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing; 2013.
- D. IAS AC89 - Accreditation Criteria for Testing Laboratories; 2010.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Design Data: Submit for Architect's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Owner's information.
- C. 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 conforms to 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.
- D. 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.

1.05 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. Conform to 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 the Contract Documents by mention or inference otherwise in any reference document.

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

3.03 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements.
- B. If, in the opinion of Architect, it is not practical to remove and replace the Work, Architect will direct an appropriate remedy or adjust payment.

END OF SECTION

SECTION 01 5000
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary utilities.
- B. Temporary sanitary facilities.
- C. Security requirements.
- D. Vehicular access and parking.
- E. Waste removal facilities and services.

1.02 TEMPORARY UTILITIES

- A. Owner will provide the following:
 - 1. Electrical power and metering, consisting of connection to existing facilities.
 - 2. Water supply, consisting of connection to existing facilities.

1.03 TEMPORARY SANITARY FACILITIES

- A. Use of existing facilities located at Garage is permitted.
- B. Maintain daily in clean and sanitary condition.
- C. At end of construction, return facilities to same or better condition as originally found.

1.04 BARRIERS

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

1.05 SECURITY

- A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

1.06 VEHICULAR ACCESS AND PARKING

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and Owner.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Existing parking areas located at Garage may be used for construction parking.

1.07 WASTE REMOVAL

- A. See Section 01 7419 - Construction Waste Management and Disposal, for additional requirements.
- B. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- C. Provide containers with lids. Remove trash from site periodically.
- D. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.

- E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.08 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
- B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 6000
PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

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

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: Lists of products to be removed from existing building.
- B. Section 01 4000 - Quality Requirements: Product quality monitoring.
- C. Section 01 7419 - Construction Waste Management and Disposal: Waste disposal requirements potentially affecting packaging and substitutions.

1.03 REFERENCE STANDARDS

- A. 16 CFR 260.13 - Guides for the Use of Environmental Marketing Claims; Federal Trade Commission; Recycled Content; current edition.

1.04 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.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by the Contract Documents.
- B. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.
- C. Specific Products to be Reused: The reuse of certain materials and equipment already existing on the project site is required.
 - 1. See Section 01 1000 for list of items required to be salvaged for reuse and relocation.
 - 2. If reuse of other existing materials or equipment is desired, submit substitution request.

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. DO NOT USE products having any of the following characteristics:
 - 1. Made using or containing CFC's or HCFC's.

2.03 PRODUCT OPTIONS

- A. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

2.04 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 PROCEDURES

- A. Substitutions will not be considered when a product becomes unavailable through no fault of the Contractor.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- C. A request for substitution 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.
 - 2. Agrees to provide the same warranty for the substitution as for the specified product.
 - 3. 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.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 - 5. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.
- D. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- E. Substitution Submittal Procedure (after contract award):
 - 1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 - 3. The Architect will notify Contractor in writing of decision to accept or reject request.

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.
- 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.

- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- G. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- H. Comply with manufacturer's warranty conditions, if any.
- I. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- J. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- K. Prevent contact with material that may cause corrosion, discoloration, or staining.
- L. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- M. 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 7000
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition, except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Pre-installation meetings.
- D. Cutting and patching.
- E. Surveying for laying out the work.
- F. Cleaning and protection.
- G. Starting of systems and equipment.
- H. Demonstration and instruction of Owner personnel.
- I. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- J. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- B. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
- C. Section 01 7419 - Construction Waste Management and Disposal: Additional procedures for trash/waste removal, recycling, salvage, and reuse.
- D. Section 01 7800 - Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.

1.03 REFERENCE STANDARDS

- A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Include in request:
 - a. Identification of Project.
 - b. Location and description of affected work.
 - c. Necessity for cutting or alteration.
 - d. Description of proposed work and products to be used.
 - e. Effect on work of Owner or separate Contractor.
 - f. Written permission of affected separate Contractor.
 - g. Date and time work will be executed.
- C. Project Record Documents: Accurately record actual locations of capped and active utilities.

1.05 QUALIFICATIONS

- A. For field engineering, employ a professional engineer of the discipline required for specific service on Project, licensed in the State in which the Project is located.

1.06 PROJECT CONDITIONS

- A. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
 - 1. At All Times: Excessively noisy tools and operations will not be tolerated inside the building at any time of day; excessively noisy includes jackhammers.
 - 2. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.
 - 3. Indoors: Limit conduct of especially noisy interior work to the hours of 6 pm to 7 am.
- B. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- C. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.
- D. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.07 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Coordinate completion and clean-up of work of separate sections.
- D. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.04 GENERAL INSTALLATION REQUIREMENTS

- A. In addition to compliance with regulatory requirements, conduct construction operations in compliance with NFPA 241, including applicable recommendations in Appendix A.
- B. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- C. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- D. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- E. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- F. Make neat transitions between different surfaces, maintaining texture and appearance.

3.05 ALTERATIONS

- A. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
 - 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
 - 2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- B. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
 - 2. Relocate items indicated on drawings.
 - 3. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
 - 4. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- C. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- D. Comply with all other applicable requirements of this section.

3.06 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.

2. Fit products together to integrate with other work.
 3. Repair areas adjacent to cuts to required condition.
 4. Repair new work damaged by subsequent work.
 5. Remove and replace defective and non-conforming work.
- C. Patching:
1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 2. Match color, texture, and appearance.
 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.07 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.08 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

3.09 FINAL CLEANING

- A. Execute final cleaning prior to Substantial Completion.
- B. Use cleaning materials that are nonhazardous.
- C. Clean debris from roofs, gutters, and downspouts.
- D. Clean site; sweep paved areas, rake clean landscaped surfaces.
- E. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.10 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 1. Provide copies to Architect and Owner.
- B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
- C. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
- D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.
- E. Owner will occupy all of the building as specified in Section 01 1000.
- F. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.

- G. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- H. Accompany Project Coordinator on Contractor's preliminary final inspection.
- I. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
- J. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

3.11 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.

END OF SECTION

SECTION 01 7419

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.01 WASTE MANAGEMENT REQUIREMENTS

- A. Owner requires that this project generate the least amount of trash and waste possible.
- B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- D. Required Recycling, Salvage, and Reuse: The following may not be disposed of in landfills or by incineration:
 - 1. Aluminum and plastic beverage containers.
 - 2. Corrugated cardboard.
 - 3. Wood pallets.
 - 4. Clean dimensional wood: May be used as blocking or furring.
 - 5. Metals, including packaging banding, metal studs, sheet metal, structural steel, piping, reinforcing bars, door frames, and other items made of steel, iron, galvanized steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
 - 6. Paint.
- E. Methods of trash/waste disposal that are not acceptable are:
 - 1. Burning on the project site.
 - 2. Burying on the project site.
 - 3. Dumping or burying on other property, public or private.
 - 4. Other illegal dumping or burying.
 - 5. Incineration, either on- or off-site.
- F. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

1.02 DEFINITIONS

- A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
- B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- C. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.
- D. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.
- E. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- F. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- G. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.
- H. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- I. Return: To give back reusable items or unused products to vendors for credit.
- J. Reuse: To reuse a construction waste material in some manner on the project site.

- K. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- L. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
- M. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- N. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- O. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- P. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

PART 2 PRODUCTS

2.01 PRODUCT SUBSTITUTIONS

- A. See Section 01 6000 - Product Requirements for substitution submission procedures.
- B. For each proposed product substitution, submit the following information in addition to requirements specified in Section 01 6000:
 - 1. Relative amount of waste produced, compared to specified product.
 - 2. Cost savings on waste disposal, compared to specified product, to be deducted from the Contract Sum.
 - 3. Proposed disposal method for waste product.
 - 4. Markets for recycled waste product.

PART 3 EXECUTION

3.01 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: Designate an on-site person or persons responsible for instructing workers on waste disposal.
- B. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- C. Meetings: Discuss trash/waste management goals and issues at regular job site meetings
- D. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
 - 1. Locate enclosures out of the way of Iowa Department of Transportation traffic.
 - 2. Provide adequate space for pick-up and delivery and convenience to subcontractors.
 - 3. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- E. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- F. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- G. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.

END OF SECTION

**SECTION 01 7800
CLOSEOUT SUBMITTALS**

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 7000 - Execution and Closeout Requirements: Contract closeout procedures.

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. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 2. 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. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:

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

3.04 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.
- E. Include originals of each in operation and maintenance manuals, indexed separately on Table of Contents.

END OF SECTION

SECTION 07 5423
THERMOPLASTIC-POLYOLEFIN ROOFING (TPO)

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Thermoplastic membrane roofing system, including all components specified.
- B. Comply with the published recommendations and instructions of the roofing membrane manufacturer, at <http://manual.fsbp.com>.
- C. Commencement of work by Contractor shall constitute acknowledgement by Contractor that this specification can be satisfactorily executed, under the project conditions and with all necessary prerequisites for warranty acceptance by roofing membrane manufacturer. No modification of the Contract Sum will be made for failure to adequately examine the Contract Documents or the project conditions.

1.02 RELATED REQUIREMENTS

- A. Section 07 6200 - Sheet Metal Flashing and Trim: Formed metal flashing and trim items associated with roofing.

1.03 REFERENCE STANDARDS

- A. ASTM C177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus; 2013.
- B. ASTM C518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus; 2010.
- C. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2014.
- D. ASTM C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer; 2009 (Reapproved 2014).
- E. ASTM D638 - Standard Test Method for Tensile Properties of Plastics; 2014.
- F. ASTM D1004 - Standard Test Method for Tear Resistance (Graves Tear) of Plastic Film and Sheeting; 2013.
- G. ASTM D1621 - Standard Test Method for Compressive Properties Of Rigid Cellular Plastics; 2010.
- H. ASTM D1622/D1622M - Standard Test Method for Apparent Density of Rigid Cellular Plastics; 2014.
- I. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2012.
- J. ASTM D6878/D6878M - Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing; 2013.
- K. PS 1 - Structural Plywood; 2009.
- L. PS 20 - American Softwood Lumber Standard; 2010.
- M. SPRI ES-1 - Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems; 2011. (ANSI/SPRI/FM 4435/ES-1)

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data:
 - 1. Provide membrane manufacturer's printed data sufficient to show that all components of roofing system, including insulation and fasteners, comply with the specified requirements and with the membrane manufacturer's requirements and recommendations for the system type specified; include data for each product used in conjunction with roofing membrane.

- C. Samples: Submit samples of each product to be used.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in manufacturer's original containers, dry and undamaged, with seals and labels intact and legible.
- B. Store materials clear of ground and moisture with weather protective covering.
- C. Keep combustible materials away from ignition sources.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturer - Roofing System: Firestone Building Products LLC, Carmel, IN: www.firestonebpc.com.
 - 1. Roofing systems manufactured by others are acceptable provided the roofing system is completely equivalent in materials and warranty conditions and the manufacturer meets the following qualifications:
 - a. Specializing in manufacturing the roofing system to be provided.
 - b. Minimum ten years of experience manufacturing the roofing system to be provided.
 - c. Able to provide a no dollar limit, single source roof system warranty that is backed by corporate assets in excess of one billion dollars.
 - d. ISO 9002 certified.
 - e. Roofing systems manufactured by the companies listed below are acceptable provided they are completely equivalent in materials and warranty conditions:
 - 1) Carlisle; Sure-Weld TPO: www.carlisesyntec.com.
 - 2) Versico; Versiweld TPO: www.versico.com.

2.02 ROOFING SYSTEM DESCRIPTION

- A. Roofing System: Thermoplastic polyolefin (TPO) single-ply membrane.
 - 1. Membrane Attachment: Mechanically fastened.
 - 2. Comply with applicable local building code requirements.
- B. Roofing System Components: Listed in order from the top of the roof down:
 - 1. Membrane: Thickness as specified.
 - 2. Base Sheet Over Insulation: Cold adhesive attached.
 - 3. Insulation Cover Board: High density polyisocyanurate; mechanically attached
 - 4. Insulation:
 - a. Maximum Board Thickness: 3 inches; use as many layers as necessary; stagger joints in adjacent layers.
 - b. Total R-value of 30, average
 - c. Top Layer: Polyisocyanurate foam board, non-composite; mechanically fastened.
 - d. Intermediate Layer(s), If Any: Polyisocyanurate foam board, non-composite; loose-laid, no attachment.
 - e. Bottom Layer: Polyisocyanurate foam board, non-composite; mechanically fastened.
 - f. Crickets: Tapered insulation of same type as specified for top layer; slope as indicated.

2.03 MEMBRANE MATERIALS

- A. Membrane: Flexible, heat weldable sheet composed of thermoplastic polyolefin polymer and ethylene propylene rubber; complying with ASTM D6878/D6878M, with polyester weft inserted reinforcement and the following additional characteristics:
 - 1. Thickness: 0.060 inch plus/minus 10 percent, with coating thickness over reinforcement of 0.024 inch plus/minus 10 percent.
 - 2. Sheet Width: Provide the widest available sheets to minimize field seaming.
 - 3. Puncture Resistance: 265 lbf, minimum, when tested in accordance FTM 101C Method 2031.
 - 4. Solar Reflectance: 0.79, minimum, when tested in accordance with ASTM C1549.

5. Color: White.
- B. Membrane Fasteners: Type and size as required by roof membrane manufacturer for roofing system and warranty to be provided; use only fasteners furnished by roof membrane manufacturer.
- C. Curb and Parapet Flashing: Same material as membrane, with encapsulated edge which eliminates need for seam sealing the flashing-to-roof splice; precut to 18 inches wide.
- D. Formable Flashing: Non-reinforced, flexible, heat weldable sheet, composed of thermoplastic polyolefin polymer and ethylene propylene rubber.
 1. Thickness: 0.060 inch plus/minus 10 percent.
 2. Tensile Strength: 1550 psi, minimum, when tested in accordance with ASTM D638 after heat aging.
 3. Elongation at Break: 650 percent, minimum, when tested in accordance with ASTM D638 after heat aging.
 4. Tearing Strength: 12 lbf, minimum, when tested in accordance with ASTM D1004 after heat aging.
 5. Color: White.
- E. Tape Flashing: 5-1/2 inch nominal wide TPO membrane laminated to cured rubber polymer seaming tape, overall thickness 0.065 inch nominal; per manufacturer's recommendations.
- F. Pourable Sealer: Two-part polyurethane, two-color for reliable mixing.
- G. Seam Plates: Steel with barbs and Galvalume coating; corrosion-resistance complying with FM 4470.
- H. Termination Bars: Aluminum bars with integral caulk ledge; 1.3 inches wide by 0.10 inch thick; Firestone Termination Bar by Firestone.
- I. Cut Edge Sealant: Synthetic rubber-based, for use where membrane reinforcement is exposed.
- J. General Purpose Sealant: EPDM-based, one part, white general purpose sealant.
- K. Molded Flashing Accessories: Unreinforced TPO membrane pre-molded to suit a variety of flashing details, including pipe boots, inside corners, outside corners, etc.

2.04 ROOF INSULATION AND COVER BOARDS

- A. Polyisocyanurate Board Insulation: Closed cell polyisocyanurate foam with black glass reinforced mat laminated to faces, complying with ASTM C1289-11A Type II Class 1, with the following additional characteristics:
 1. Thickness: As indicated elsewhere.
 2. Size: 48 inches by 96 inches, nominal.
 - a. Exception: Insulation to be attached using adhesive or asphalt may be no larger than 48 inches by 48 inches, nominal.
 3. R-value (LTTR):
 - a. 2.0 inch Thickness: 12.1 [2014 value: 11.4], minimum per layer.
 4. Compressive Strength: 20 psi when tested in accordance with ASTM C1289.
 5. Ozone Depletion Potential: Zero; made without CFC or HCFC blowing agents.
 6. Recycled Content: 19 percent post-consumer and 15 percent post-industrial, average.
- B. High Density Polyisocyanurate Cover Board: Non-combustible, water resistant, high density closed cell polyisocyanurate core with coated glass mat facers, with the following characteristics:
 1. Size: 48 inches by 96 inches, nominal.
 2. Thickness: 1/2 inch.
 3. Thermal Value: R-value of 2.5, when tested in accordance with ASTM C518 and ASTM C177.
 4. Surface Water Absorption: 3 percent, maximum, when tested in accordance with ASTM C209.
 5. Compressive Strength: 120 psi, when tested in accordance with ASTM D1621.
 6. Density: 5 pcf, when tested in accordance with ASTM D1622/D1622M.

7. Factory Mutual approved for use with FM 1-60 and 1-90 rated roofing assemblies.
 8. Mold Growth Resistance: Passing ASTM D3273.
- C. Insulation Fasteners: Type and size as required by roof membrane manufacturer for roofing system and warranty to be provided; use only fasteners furnished by roof membrane manufacturer.

2.05 METAL ACCESSORIES

- A. Metal Roof Edging and Fascia: Continuous metal edge member serving as termination of roof membrane and retainer for metal fascia; watertight with no exposed fasteners; mounted to roof edge nailer.
1. Wind Performance:
 - a. Membrane Pull-Off Resistance: 100 lbs/ft, minimum, when tested in accordance with ANSI/SPRI/FM 4435/ES-1 Test Method RE-1, current edition.
 - b. Fascia Pull-Off Resistance: At least the minimum required when tested in accordance with ANSI/SPRI/FM 4435/ES-1 Test Method RE-2, current edition.
 - c. Provide product listed in current Factory Mutual Research Corporation Approval Guide with at least FM 1-270 rating.
 2. Fascia Face Height: 13 inches.
 3. Edge Member Height Above Nailers: 1-1/4 inches.
 4. Fascia Material and Finish: 0.040 inch thick formed aluminum, natural mill finish; matching concealed joint splice plates; factory-installed protective plastic film.
 5. Length: 144 inches.
 6. Functional Characteristics: Fascia retainer and cleat support fascia while allowing for free thermal cycling.
 7. Aluminum Bar: Continuous 6063-T6 alloy aluminum extrusion with pre-punched slotted holes; miters welded; injection molded EPDM splices to allow thermal expansion.
 8. Anchor Bar Cleat: 20 gage, 0.036 inch G90 coated commercial type galvanized steel with pre-punched holes.
 9. Fasteners: Factory-provided corrosion resistant fasteners, with drivers; no exposed fasteners permitted.
 10. Special Shaped Components: Provide factory-fabricated pieces necessary for complete installation, including miters, scuppers, and end caps; minimum 14 inch long legs on corner pieces.

2.06 ACCESSORY MATERIALS

- A. Wood Nailers: PS 20 dimension lumber, Structural Grade No. 2 or better Southern Pine, Douglas Fir; or PS 1, APA Exterior Grade plywood; pressure preservative treated.
1. Width: 5-1/2 inches, nominal minimum, or as wide as the nailing flange of the roof accessory to be attached to it.
 2. Thickness: Same as thickness of roof insulation.
- B. Cant Strips and Tapered Edge Strips: 45 degree face slope and minimum 5 inch face dimension; provide at all angle changes between vertical and horizontal planes that exceed 45 degrees.
1. Install using hot asphalt (Type IV), roofing mastic, or mechanically fastened using fasteners and plates approved by roofing manufacturer.

PART 3 INSTALLATION

3.01 GENERAL

- A. Install roofing, insulation, flashings, and accessories in accordance with roofing manufacturer's published instructions and recommendations for the specified roofing system. Where manufacturer provides no instructions or recommendations, follow good roofing practices and industry standards. Comply with federal, state, and local regulations.
- B. Obtain all relevant instructions and maintain copies at project site for duration of installation period.

- C. Do not start work until Pre-Installation Notice has been submitted to manufacturer as notification that this project requires a manufacturer's warranty.
- D. Perform work using competent and properly equipped personnel.
- E. Temporary closures, which ensure that moisture does not damage any completed section of the new roofing system, are the responsibility of the applicator. Completion of flashings, terminations, and temporary closures shall be completed as required to provide a watertight condition.
- F. Install roofing membrane only when surfaces are clean, dry, smooth and free of snow or ice; do not apply roofing membrane during inclement weather or when ambient conditions will not allow proper application; consult manufacturer for recommended procedures during cold weather. Do not work with sealants and adhesives when material temperature is outside the range of 60 to 80 degrees F.
- G. Protect adjacent construction, property, vehicles, and persons from damage related to roofing work; repair or restore damage caused by roofing work.
 - 1. Protect from spills and overspray from bitumen, adhesives, sealants and coatings.
 - 2. Particularly protect metal, glass, plastic, and painted surfaces from bitumen, adhesives, and sealants within the range of wind-borne overspray.
 - 3. Protect finished areas of the roofing system from roofing related work traffic and traffic by other trades.
- H. Until ready for use, keep materials in their original containers as labeled by the manufacturer.
- I. Consult membrane manufacturer's instructions, container labels, and Material Safety Data Sheets (MSDS) for specific safety instructions. Keep all adhesives, sealants, primers and cleaning materials away from all sources of ignition.

3.02 EXAMINATION

- A. Examine roof deck to determine that it is sufficiently rigid to support installers and their mechanical equipment and that deflection will not strain or rupture roof components or deform deck.
- B. Verify that surfaces and site conditions are ready to receive work. Correct defects in the substrate before commencing with roofing work.
- C. Examine roof substrate to verify that it is properly sloped to drains.
- D. Verify that the specifications and drawing details are workable and not in conflict with the roofing manufacturer's recommendations and instructions; start of work constitutes acceptance of project conditions and requirements.

3.03 PREPARATION

- A. Take appropriate measures to ensure that fumes from adhesive solvents are not drawn into the building through air intakes.
- B. Prior to proceeding, prepare roof surface so that it is clean, dry, and smooth, and free of sharp edges, fins, roughened surfaces, loose or foreign materials, oil, grease and other materials that may damage the membrane.
- C. Fill all surface voids in the immediate substrate that are greater than 1/4 inch wide with fill material acceptable insulation to membrane manufacturer.
- D. Seal, grout, or tape deck joints, where needed, to prevent bitumen seepage into building.
- E. Wood Nailers: Provide wood nailers at all perimeters and other locations where indicated on the drawings, of total height matching the total thickness of insulation being used.
 - 1. Install with 1/8 inch gap between each length and at each change of direction.
 - 2. Mechanically fasten to deck to resist force of 200 lbf per linear foot.

3.04 INSULATION AND COVER BOARD INSTALLATION

- A. Install insulation in configuration and with attachment method(s) specified in PART 2, under Roofing System.

- B. Install only as much insulation as can be covered with the completed roofing system before the end of the day's work or before the onset of inclement weather.
- C. Lay roof insulation in courses parallel to roof edges.
- D. Neatly and tightly fit insulation to all penetrations, projections, and nailers, with gaps not greater than 1/4 inch. Fill gaps greater than 1/4 inch with acceptable insulation. Do not leave the roofing membrane unsupported over a space greater than 1/4 inch.
- E. Mechanical Fastening: Using specified fasteners and insulation plates engage fasteners through insulation into deck to depth and in pattern required by membrane manufacturer.

3.05 SINGLE-PLY MEMBRANE INSTALLATION

- A. Beginning at low point of roof, place membrane without stretching over substrate and allow to relax at least 30 minutes before attachment or splicing; in colder weather allow for longer relax time.
- B. Lay out the membrane pieces so that field and flashing splices are installed to shed water.
- C. Install membrane without wrinkles and without gaps or fishmouths in seams; bond and test seams and laps in accordance with membrane manufacturer's instructions and details.
- D. Install membrane mechanically attached to the substrate using seam battens, fasteners, and edge securement as specified and as required by membrane manufacturers.
- E. Battens in the Seam: Install batten strips continuously within the side seams, covered by membrane lap.
 - 1. Lay out fasteners as recommended by membrane manufacturer.
 - 2. Fasten batten strips with membrane manufacturer's fasteners, properly engaged in the deck with head flush with the batten strip surface.
- F. Mechanical Attachment: Install fasteners in the seams, covered by membrane.
 - 1. Lay out fasteners in compliance with FM Class specified in PART 2, as recommended by membrane manufacturer, and as indicated, whichever is most stringent.
 - 2. Properly engage fasteners in the deck with head flush with the countersunk portion of seam plate.
- G. Edge Securement: Secure membrane at all locations where membrane terminates or goes through an angle change greater than 2 in 12 inches using mechanically fastened reinforced perimeter fastening strips, plates, or metal edging as indicated or as recommended by roofing manufacturer.
 - 1. Exceptions: Round pipe penetrations less than 18 inches in diameter and square penetrations less than 4 inches square.
 - 2. Metal edging is not merely decorative; ensure anchorage of membrane as intended by roofing manufacturer.

3.06 FLASHING AND ACCESSORIES INSTALLATION

- A. Install flashings, including laps, splices, joints, bonding, adhesion, and attachment, as required by membrane manufacturer's recommendations and details.
- B. Metal Accessories: Install metal edgings, gravel stops, and copings in locations indicated on the drawings, with horizontal leg of edge member over membrane and flashing over metal onto membrane.
 - 1. Follow roofing manufacturer's instructions.
 - 2. Remove protective plastic surface film immediately before installation.
 - 3. Install water block sealant under the membrane anchorage leg.
 - 4. Flash with manufacturer's recommended flashing sheet unless otherwise indicated.
 - 5. Where single application of flashing will not completely cover the metal flange, install additional piece of flashing to cover the metal edge.
 - 6. If the roof edge includes a gravel stop and sealant is not applied between the laps in the metal edging, install an additional piece of self-adhesive flashing membrane over the metal

lap to the top of the gravel stop; apply seam edge treatment at the intersections of the two flashing sections.

7. When the roof slope is greater than 1:12, apply seam edge treatment along the back edge of the flashing.
- C. Flashing at Walls, Curbs, and Other Vertical and Sloped Surfaces: Install weathertight flashing at all walls, curbs, parapets, curbs, skylights, and other vertical and sloped surfaces that the roofing membrane abuts to; extend flashing at least 8 inches high above membrane surface.
 1. Use the longest practical flashing pieces.
 2. Evaluate the substrate and overlay and adjust installation procedure in accordance with membrane manufacturer's recommendations.
 3. Complete the splice between flashing and the main roof sheet with specified splice adhesive before adhering flashing to the vertical surface.
 4. Provide termination directly to the vertical substrate as shown on roof drawings.
 - D. Flashing at Penetrations: Flash all penetrations passing through the membrane; make flashing seals directly to the penetration.
 1. Pipes, Round Supports, and Similar Items: Flash with specified pre-molded pipe flashings wherever practical; otherwise use specified self-curing elastomeric flashing.

3.07 FIELD QUALITY CONTROL

- A. Inspection by Manufacturer: Provide final inspection of the roofing system by a Technical Representative employed by roofing system manufacturer specifically to inspect installation for warranty purposes (i.e. not a sales person).
- B. Perform all corrections necessary for issuance of warranty.

3.08 CLEANING

- A. Clean all contaminants generated by roofing work from building and surrounding areas, including bitumen, adhesives, sealants, and coatings.
- B. Repair or replace building components and finished surfaces damaged or defaced due to the work of this section; comply with recommendations of manufacturers of components and surfaces.
- C. Remove leftover materials, trash, debris, equipment from project site and surrounding areas.

3.09 PROTECTION

- A. Where construction traffic must continue over finished roof membrane, provide durable protection and replace or repair damaged roofing to original condition.

END OF SECTION

SECTION 07 6200
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fabricated sheet metal items, including flashings and counterflashings.

1.02 RELATED REQUIREMENTS

- A. Section 07 5423: Roofing system.
- B. Section 07 7123 - Manufactured Gutters and Downspouts.

1.03 REFERENCE STANDARDS

- A. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels; 2013.
- B. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels; 2013.
- C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- D. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.
- E. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement, Asbestos-Free; 2007 (Reapproved 2012)e1.
- F. SMACNA (ASMM) - Architectural Sheet Metal Manual; Sheet Metal and Air Conditioning Contractors' National Association; 2012.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.
- B. Fabricator and Installer Qualifications: Company specializing in sheet metal work with 3 years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

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

PART 2 PRODUCTS

2.01 SHEET MATERIALS

- A. Pre-Finished Aluminum: ASTM B209 (ASTM B209M); 20 gage (0.032 inch) thick; plain finish shop pre-coated with modified silicone coating.
 - 1. Modified Silicone Polyester Coating: Pigmented Organic Coating System, AAMA 2603; baked enamel finish system.
 - 2. Color: As selected by Architect from manufacturer's standard colors.

2.02 ACCESSORIES

- A. Fasteners: Galvanized steel.
- B. Sealant to be Concealed in Completed Work: Non-curing butyl sealant.

- C. Sealant to be Exposed in Completed Work: ASTM C920; elastomeric sealant, 100 percent silicone with minimum movement capability of plus/minus 25 percent and recommended by manufacturer for substrates to be sealed; clear.

2.03 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Form pieces in longest possible lengths.
- C. Hem exposed edges on underside 1/2 inch; miter and seam corners.
- D. Form material with flat lock seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- E. Fabricate corners from one piece with minimum 18 inch long legs; seam for rigidity, seal with sealant.
- F. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.

PART 3 EXECUTION

3.01 EXAMINATION

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

3.02 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Install surface mounted reglets true to lines and levels. Seal top of reglets with sealant.
- C. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil.

3.03 INSTALLATION

- A. Insert flashings into reglets to form tight fit. Secure in place with lead wedges. Pack remaining spaces with lead wool. Seal flashings into reglets with sealant.
- B. Secure flashings in place using concealed fasteners. Use exposed fasteners only where permitted.
- C. Apply plastic cement compound between metal flashings and felt flashings.
- D. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- E. Seal metal joints watertight.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for field inspection requirements.
- B. Inspection will involve surveillance of work during installation to ascertain compliance with specified requirements.

3.05 SCHEDULE

- A. New Fascia and Drip Edge:
- B. Roofing Penetration Flashings, for Pipes, Structural Steel, and Equipment Supports:

END OF SECTION

**SECTION 07 9005
JOINT SEALERS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Sealants and joint backing.

1.02 REFERENCE STANDARDS

- A. ASTM C834 - Standard Specification for Latex Sealants; 2014.
- B. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.
- C. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2013.
- D. SCAQMD 1168 - South Coast Air Quality Management District Rule No.1168; current edition; www.aqmd.gov.

1.03 ADMINISTRATIVE REQUIREMENTS

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

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.
- C. Manufacturer's Installation Instructions: Indicate special procedures.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
- B. Applicator Qualifications: Company specializing in performing the work of this section with minimum three years documented experience and approved by manufacturer.

1.06 FIELD CONDITIONS

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

1.07 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective work within a five year period after Date of Substantial Completion.
- C. Warranty: Include coverage for installed sealants and accessories which fail to achieve airtight seal, exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 SEALANTS

- A. Sealants and Primers - General: Provide only products having lower volatile organic compound (VOC) content than required by South Coast Air Quality Management District Rule No.1168.
- B. Type 1 - General Purpose Exterior Sealant: Polyurethane; ASTM C920, Grade NS, Class 25 minimum; Uses M, G, and A; single component.
 - 1. Color: To be selected by Architect from manufacturer's standard range.
 - 2. Polyurethane Products:
 - a. BASF Construction Chemicals-Building Systems; Sonolastic NP-2: www.buildingsystems.basf.com.
 - b. Substitutions: See Section 01 6000 - Product Requirements.
- C. Type 2 - Exterior Metal Lap Joint Sealant: Butyl or polyisobutylene, nondrying, nonskinning, noncuring.
 - 1. Products:

- a. Tremco; Butyl Sealant: www.tremcosealants.com.
- b. Substitutions: See Section 01 6000 - Product Requirements.

2.02 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint Backing: Round foam rod compatible with sealant; ASTM D 1667, closed cell PVC; oversized 30 to 50 percent larger than joint width.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that substrate surfaces are ready to receive work.
- B. Verify that joint backing and release tapes are compatible with sealant.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Protect elements surrounding the work of this section from damage or disfigurement.

3.03 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C1193.
- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- D. Install bond breaker where joint backing is not used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- F. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- G. Tool joints concave.

3.04 CLEANING

- A. Clean adjacent soiled surfaces.

3.05 PROTECTION

- A. Protect sealants until cured.

3.06 SCHEDULE

- A. Exterior Joints for Which No Other Sealant Type is Indicated: Type 1 .
- B. Lap Joints in Exterior Sheet Metal Work: Type 2.

END OF SECTION



BID BOND

KNOW ALL PERSONS BY THESE PRESENTS: That we, _____ (Bidder's Name)

_____ of _____ (City,State)

as principal, and the _____ (Surety)

of _____ (Address) as Surety, are held and firmly bound unto the Iowa Department of

Transportation and to the State of Iowa, or Municipality as defined in Iowa Code, Section 73A.1 as applicable, hereinafter defined as Obligee, in the penal sum as shown in the contract documents of the specified project, for which payment said principal and surety bind themselves, their heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

WHEREAS, the principal is herewith submitting his/her or its sealed proposal for:

County _____

Type of Work _____

Date of Letting _____, 20 ____ .

NOW THEREFORE, if the said bid or proposal submitted by said principal be accepted, and the principal be awarded a contract with the Obligee in accordance with the terms of such bid solicitation, and give such bond as may be specified in the bidding or contract documents with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, then this obligation shall become null and void or in the event of the failure of the principal to enter such contract and give such bond, the principal shall pay to the Obligee the full amount of the bid bond, together with court costs, attorney's fees, and any other expense of recovery.

IN WITNESS WHEREOF, the principal and surety have caused these presents to be signed this _____ day of _____, 20 ____ .

Principal
(Bidder's Name)

By _____
Bidder's Signature

Address

Surety

By _____
Authorized Surety Representative



Bidders Request for Alternatives or Exceptions (BRAE)

Letting Date: April 13, 2016

Proposal No.: 16115

BRAE form due on or before: April 6, 2016

Item: _____

Spec. No.: _____

Request: _____

Bidder Proposes to furnish in lieu of above: _____

NOTE: The determination of acceptance of this BRAE request is only valid for the bid for which it was submitted. BRAE approvals received for this bid do not determine or set a precedent for what is acceptable in any other bid posted by the State of Iowa.

Email/Fax to:

Iowa Department of Transportation
Purchasing Section
Attention: Jody McNaughton
Email: jody.mcnaughton@dot.iowa.gov

Fax No.: 515-239-1538

Submitted By _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone No. _____

Fax No. _____

=====

DOT USE ONLY

Approved _____

Disapproved _____

Reason _____

Signature: _____

Date: _____

Bidder _____

SEALED BID

LETTING DATE: April 13, 2016
PROPOSAL NO: 16115
PROPOSAL DESCRIPTION: Ottumwa Maintenance Garage Roof
Restoration

**Iowa Department of Transportation
PURCHASING - SEALED BID PROPOSAL
800 Lincoln Way
Ames, IA 50010**