

SPECIFICATIONS

(PROJECT MANUAL)

MEADOWLANDS ARENA LOWER ROOF REPLACEMENT

Project No. CN-276

**New Jersey Sports & Exposition Authority
Lyndhurst, New Jersey**

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

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**SECTION 00010
ADVERTISEMENT FOR BIDS**

Notice is hereby given that sealed bids will be received by the New Jersey Sports and Exposition Authority (NJSEA), One DeKorte Park Plaza Lyndhurst, NJ, 07071 for the following:

BID CONTRACT:

Meadowlands Arena Lower Roof Replacement

THE WORK to be performed under this Contract will consist of but not limited to the installation of a new TPO membrane and tapered insulation for the Meadowlands Arena Lower Roof.

BIDS will be received at the above address until **12:00 PM** prevailing time, on **February 3rd, 2023**. At the termination of the time for receipt of bids, the bids received will be opened. Bids will **not** be accepted after **12:00 PM** on that day. Due to COVID, bids will not be opened in a public forum.

CONTRACT DOCUMENTS (specifications and plans) will be available for review at the NJSEA website beginning on **December 28th, 2022, after 2:00 PM**. Copies of the specifications and the plan set may be downloaded from the NJSEA website at www.NJSEA.com.

A mandatory PRE-BID MEETING will be held on **January 19th, 2023, at 10:00 AM** at the NJSEA Meadowlands Arena Employee Entrance (North entrance between Gates B & C across from Lot 27). The pre-bid meeting will consist of a short meeting at the NJSEA offices, followed by a project site visit. All firms who attend the bid walk must submit all questions and concerns to njseabids@njsea.com by **January 27th, 2023 at 3:00 PM**.

THE CONTRACT TIME is 180 consecutive calendar days from the start date given in the Notice-To-Proceed.

A BID DEPOSIT in the amount of five percent of the bid, but not exceeding \$20,000.00, must accompany the Bid. This in the form may be of a bid bond or certified check.

The Contract Documents contain specific requirements for submission of a bid. In conformance with Public Law 1977, Chapter 33, if the bidder is a corporation or partnership, it shall submit with the bid a statement setting forth the names and addresses of all stockholders/partners who have a ten percent or greater interest in the firm.

The attention of all bidders is particularly called to the New Jersey State requirements regarding the conditions of employment to be observed. All bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27, regarding Affirmative Action.

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In accordance with Public Law 2001, Chapter 134, the NJSEA may only enter into contracts with Bidders who provide proof of valid business registration with the Division of Revenue, in the Department of Treasury, of the State of New Jersey. The Contractor, and all subcontractors, must obtain a valid Division of Revenue Business Registration prior to contract award. Registration information can be obtained on the worldwide web at <http://www.state.nj.us/treasury/revenue/busregcert.shtml> or calling 609-292-9292. Online registration is available, and there is no cost to register.

In accordance with the Public Works Contractor Registration Act, the Contractor, all subcontractors, shall provide proof of registration with NJSA 34:11-56.48 et. seq., with the Bid. The registration form can be located online at: http://lwd.dol.state.nj.us/labor/forms_pdfs/lse/lse-2.pdf or by calling 609-292-9464. No Contractor may bid on the Work of this Contract unless he/she is registered pursuant to this act at the time the bid is made. No Contractor shall list a subcontractor in the Bid for the Work of this Contract unless the subcontractor is registered pursuant to this act at the time the bid is made.

In order to insulate the award of state contracts from risk of improper influence, the NJSEA shall only enter into a Contract with a Bidder who complies with Public Law 2005, C. 51 and Executive Order 117. The required forms and instructions are available at the Purchase Bureau website at <http://www.state.nj.us/treasury/purchase/forms.htm> and are also included in the appendix.

The successful bidder is also required to complete Division of Purchase and Property Ownership Disclosure Forms including Disclosure of Investigations, Disclosures of Investment Activities in Iran pursuant to Public Law 2012, c. 25, McBride Principles Form, and Certification of Non-Involvement in Prohibited Activities in Russia or Belarus pursuant to Public Law 2022, c.3.

If accommodations are needed under the Americans with Disabilities Act, contact Ms. Rosanne Sireci, NJSEA Human Resources Manager, at 201-460-3725. If there are any questions regarding these Contract Documents, contact Mr. John Duffy at (201) 842-5115.

Date

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY
Mr. John Duffy, PE
Senior Vice President of Facilities

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**SECTION 00100
INSTRUCTIONS TO BIDDERS**

1.0 DEFINED TERMS:

- 1.1 The terms used in these Instructions to Bidders have the meanings assigned to them in the General Conditions. The term "Successful Bidder" means the lowest, qualified, responsible Bidder to whom the New Jersey Sports & Exposition Authority (NJSEA) makes the award, based on the NJSEA's evaluation of all bids received.

2.0 COPIES OF CONTRACT DOCUMENTS:

- 2.1 Complete sets of the Contract Documents may be obtained as designated in the ADVERTISEMENT FOR BIDS. These Documents shall be used in preparing the bids. The NJSEA assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Contract Documents.

3.0 EXAMINATION OF CONTRACT DOCUMENTS AND WORK SITE:

- 3.1 Before submitting a Bid, each Bidder must: (A) examine the Contract Documents thoroughly; (B) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress, or performance of the work; (C) familiarize himself with Federal, State, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress, or performance of the work; and, (D) study and carefully correlate his own observations with the Contract Documents.
- 3.2 On request, the NJSEA will provide each Bidder access to the site to conduct such investigations and tests, as each Bidder deems necessary for submission of a Bid. At least three days' notice shall be provided. The Bidder may be required to furnish a bond or certified check, payable to the NJSEA, as security to cover possible damages from the above investigations or tests. The Bidder shall fill-in all holes, cleanup, and restore the site to its former state, upon completion of such investigations. The security shall be returned to the Bidder after the site is restored, to the satisfaction of the NJSEA.
- 3.3 The lands upon which the work shall be performed, rights-of-way for access thereto, and other lands designated for use by the Contractor in performing the work, are identified in the Contract Documents.
- 3.4 The submission of a Bid will constitute an incontrovertible representation by the Bidder that it has complied with every requirement of this Article and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.
- 3.5 It is further agreed and understood that the successful Bidder will not use any of the information made available to it, or obtained in any examination made by it, as a basis or ground of a claim or demand of any nature against the NJSEA, arising

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from (or by reason of) any variance which may exist between the information offered and the actual materials or structures encountered during the construction work, except as may otherwise be so provided in the Contract Documents.

4.0 INTERPRETATION AND ADDENDA:

- 4.1 Should a Bidder find discrepancies or omissions in any of the Contract Documents, or should it be in doubt as to their meaning, it shall immediately notify the NJSEA in writing, identify the discrepancies or omissions, and request a clarification of the Document's intent. In order to allow the NJSEA sufficient time to address inquiries regarding the Contract Documents, all inquiries must be RECEIVED by the NJSEA no later than seven (7) working days prior to the receipt of bids.
- 4.2 If the question involves equality of use of products or methods it must be accompanied by drawings specifications or other data in sufficient detail to enable the Engineer to determine the equality or suitability of the product or method. In general, the Engineer will neither approve nor disapprove particular products prior to opening of the bids such products will be considered when offered by the Contractor for incorporation into the work.
- 4.3 If the Bidder, prior to submission of its Bid, fails to call to the attention of the Engineer the existence of any such patent ambiguity, inconsistency, error, discrepancy, omission or doubt in the Contract Documents, its Bid will be conclusively presumed to have been based upon an interpretation of such ambiguity or inconsistency or the like, or upon any directions correcting such error, which may have been subsequently given by the Director.
- 4.4 Unless such action shall have been taken by the bidder and approval obtained, he agrees to use the product or method designated or described in the specifications as may be amended by addenda
- 4.5 No interpretation of the Contract Documents will be made orally. All interpretation and supplemental instructions will be in the form of written addenda to the Contract Documents. Addenda will be emailed to those who attend the pre-bid meeting. The NJSEA reserves the sole right to determine whether or not an extension of the bid date is necessary due to the nature of the inquiries.
- 4.6 Receipt of addenda must be acknowledged in the space provided for that purpose on the Bid Forms. Should a Bidder not acknowledge receipt of all addenda, it shall still be required to comply with said addenda.

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- 4.7 All addenda shall become part of the Contract Documents and shall supersede the original Contract Documents. Subsequent addenda shall supersede previously issued addenda.
- 5.0 BID FORM AND SUBMISSION:**
- 5.1 Bids must be submitted on the prescribed form. Telephone or email bids shall not be accepted. An additional unbound copy of the Bid Forms is provided for that purpose with the Contract Documents. Do not use the Bid Forms bound in the Contract Documents.
- 5.2 The Bid Forms must be completed in ink or by computer. The bid price of each item must be stated in words and numerals. All blank spaces must be completed. Ditto marks shall not be used. Discrepancies between words and numerals will be resolved in favor of the words. Discrepancies in extension of unit prices will be resolved in favor of the unit price. Discrepancies between the indicated sum of a column of figures and the correct sum will be resolved in favor of the correct sum.
- 5.3 All unit prices shall be NET and shall include all incidental work normally required in connection with the particular type of work involved, and shall include (but not necessarily be limited to) the following:
- a. All engineering, including detailing and shop drawings.
 - b. All material costs, including an allowance for waste.
 - c. The provision of all necessary accessories.
 - d. All fabrication and shop costs.
 - e. All shop and field labor, including supervision and engineering layout costs.
 - f. All temporary utilities required, including safety precautions.
 - g. All costs of standby trades during or beyond normal working hours.
 - h. All charges for transportation, freight, insurance, taxes, overhead, profit and any other item, as well as bonding costs, if applicable.
 - i. If unit prices are not deemed fair and reasonable by the NJSEA, Bids may be rejected.
- 5.4 Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The name and title of the signator, the corporate address, and the state of incorporation shall be typed below the signature.
- 5.5 Bids by partnerships must be executed in the partnership name by a general partner, whose name, title, and official partnership address must be typed below the signature.

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- 5.6 The Bid shall contain an acknowledgment of receipt of all addenda (the numbers of which shall be written on the Bid Forms in the appropriate place).
- 5.7 The address and telephone number, to which communications regarding the Bid will be directed, must also be shown.
- 5.8 Each Bidder who is not chartered under the laws of the State of New Jersey but licensed to do business in the State of New Jersey must submit with its Bid a certificate authorizing it to do business in the State of New Jersey. Also see Article 26 of the INSTRUCTIONS TO BIDDERS.
- 5.9 Each Bidder who is a corporation not organized under the laws of the State of New Jersey or is not authorized to do business in the State of New Jersey must obtain a certificate authorizing it to do business in the State of New Jersey prior to the award of the contract.
- 5.10 Per NJSA 52:25-24.2, if the Bidder is a corporation or partnership, the Bidder shall complete the Section 00424; BIDDERS DISCLOSURE FORM, setting forth the names and addresses of all its owners holding a ten (10) percent or greater interest in the corporation or partnership.
- 5.11 See Article 28 of the INSTRUCTIONS TO BIDDERS for requirements of Executive Order 134.
- 5.12 Any Bid may be withdrawn prior to the time for termination of receipt of bids specified in the ADVERTISEMENT FOR BIDS.
- 5.13 Refer to the SPECIFIC PROJECT REQUIREMENTS for additional information regarding the submission of the Bid.
- 6.0 RECEIPT AND OPENING OF BIDS:**
- 6.1 To be considered valid, Bids must be received prior to the time specified in the ADVERTISEMENT FOR BIDS. All valid Bids will then be opened and read aloud.
- 6.2 All Bidders agree the Bids shall remain open for 90 days after the day of opening, but the NJSEA may at its sole discretion, release any Bid and return the bid security prior to that date.
- 6.3 If, within 24 hours after Bids are opened, any Bidder files a duly signed written notice with NJSEA and promptly thereafter demonstrates to the reasonable satisfaction of NJSEA that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the bid security will be returned. Thereafter, that Bidder will be disqualified from further bidding on the Work.

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7.0 BID SECURITY:

- 7.1 Each Bid must be accompanied by a bid security (in the form of a bid bond, issued by a surety licensed in the State of New Jersey; or a certified check, issued by a national bank or trust company) and payable to the order of the NJSEA, in the amount of five percent of the Bid, but not exceeding \$20,000.00. The bid bond must be executed by a company authorized to do business in the State of New Jersey.
- 7.2 The bid security shall be enclosed in the sealed envelope containing the Bid. The bid security will be held by the NJSEA as security for fulfillment of the Bidder's promises set forth in its Bid; that it will not withdraw its Bid while it is being considered, and will execute the Contract and furnish the required bonds, insurance certificates, and other documents, if its Bid is accepted.
- 7.3 The successful Bidder, upon its failure or refusal to execute and deliver the contract, insurance, bonds, and other documents required within the time limits specified, shall forfeit the bid security deposited with its Bid. The forfeited bid security shall be credited towards the damages suffered; which shall be defined as the difference between the amount specified in the successful Bid and the amount for which the NJSEA may contract with another party to perform the work covered by said Bid (if the latter amount be in excess of the former) together with any additional expenses incurred by the NJSEA as a result of such Bidder's failure to enter into the contract; including, but not limited to, the expense for re-advertisement for bids and the processing of such bids. Any amount in excess of such damages shall be returned to the Bidder.
- 7.4 Except as specified above said bid security shall be returned to the Bidder as hereinafter provided. Bid security will be returned to all except the three lowest Bidders within ten working days after the formal opening of Bids, and to the three lowest Bidders within 5 working days after the successful Bidder and the NJSEA have executed the Contract. In the event that the Contract has not been awarded by the NJSEA within 60 days after the opening of the Bids, bid security will be returned promptly upon the demand of any Bidder whose Bid has not been accepted.

8.0 RIGHT TO REJECT, WAIVE, OR ACCEPT:

- 8.1 The NJSEA reserves the right to reject any and/or all non-conforming, non-responsive, or conditional bids; to waive any informalities in any Bid; and to accept any Bid deemed to be in the best interest of the NJSEA.

9.0 EVALUATION OF BIDS:

- 9.1 The NJSEA may make such investigations as it deems necessary to determine the ability of the Bidder to perform the work; and the Bidder shall furnish all such information and data for this purpose as NJSEA may request. The NJSEA reserves

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the right to reject any Bid if the evidence submitted by (or the investigation of) such Bidder fails to satisfy it that such Bidder is properly qualified to carry out the obligations of the Contract, and to complete the work contemplated therein.

- 9.2 Bidders shall be experienced in the kind of work to be performed, have the necessary equipment therefore, and possess sufficient capital to properly execute the work within the time allowed. Bids received from Bidders who have previously failed to complete contracts within the time required, or who have previously performed similar work in an unsatisfactory manner, may be rejected. A Bid may be rejected if the Bidder cannot show that it has the necessary ability, plant, and equipment to commence the work at the time prescribed, and thereafter to prosecute and complete the work at the rate or within the time specified. A Bid may also be rejected if the Bidder is already obligated for the performance of other work that would delay the commencement, prosecution, or completion of the Work.
- 9.3 In evaluating the Bids, the NJSEA shall consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and alternates and unit prices if requested in the Bid Forms. The NJSEA reserves the right to choose any of the alternates described in the Bid Forms. Final determination will be at the sole discretion of the NJSEA and will be made after receipt of Bids.
- 9.4 The NJSEA may consider the qualifications and experience of subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the work. Operating costs, maintenance considerations, performance data, and guarantees of materials and equipment may also be considered.
- 9.5 The NJSEA reserves the right to reject the Bid of any Bidder who does not pass these investigations to the satisfaction of the NJSEA.
- 9.6 If requested by the NJSEA, the three lowest Bidders shall, within 10 days of such request, submit a financial statement prepared by a Certified Public Accountant.
- 10.0 AWARD AND SIGNING OF THE CONTRACT:**
- 10.1 Award of the Contract, if made, will be to the lowest responsive Bidder whose Bid complies with the requirements stated herein, and whose evaluation indicates to the NJSEA that the award will be in the best interests of the NJSEA.
- 10.2 The NJSEA will award the Contract (or reject all bids) within 60 days from the bid opening date. If the NJSEA requests and the Bidders agree, the Bids may be held open for consideration for such longer time as may be agreed.

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- 10.3 The contract shall be extended at the sole discretion of the NJSEA, as deemed to be in its own best interest.
- 10.4 Upon award of the Contract by the NJSEA, three (3) copies of the Contract will be sent to the Successful Bidder. All three copies shall be signed by the Bidder and returned along with the required bonds, insurance certificate and other documents. After acceptance of these documents, the NJSEA will execute the Contract and deliver two (2) fully signed copies of the Contract to the Contractor.
- 11.0 ESTIMATES OF QUANTITIES OF WORK:**
- 11.1 The NJSEA reserves the right to increase or decrease the quantities of any item of Work as may be deemed necessary, or to leave out any item or to add new items, if and when the necessity arises.
- 12.0 TIME FOR COMPLETING THE WORK:**
- 12.1 The number of days within the work is to be completed (the contract time) is set forth in the Contract.
- 12.2 The attention of the Bidder is directed to the SPECIFIC PROJECT REQUIREMENTS regarding damages for failure to complete the work within the time specified.
- 13.0 SUBSTITUTE MATERIALS AND EQUIPMENT:**
- 13.1 The Contract, if awarded, will be on the basis of the materials and equipment described in the Contract Documents without consideration of possible substitute or "or equal" items. The procedure for submittal of any request for such substitution by the Contractor, and consideration by the NJSEA, is set forth in the GENERAL CONDITIONS.
- 14.0 MATERIALS AND EQUIPMENT:**
- 14.1 All materials and equipment for the work shall be furnished by the Contractor unless otherwise specified. They shall conform to the Contract Documents and shall be from an acceptable source.
- 14.2 Where possible, preference shall be given to New Jersey manufacturers and/or suppliers.
- 14.3 All materials and equipment for the work shall be new, except where the use of existing or previously used materials and equipment is specified.
- 15.0 BONDS AND INSURANCE:**
- 15.1 The attention of the Bidder is directed to the SPECIFIC PROJECT REQUIREMENTS regarding the requirements for bonds and insurance.

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16.0 POWER-OF-ATTORNEY:

- 16.1 Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified copy of their power-of-attorney to sign said bonds.

17.0 ASSIGNMENTS:

- 17.1 The Contractor shall not assign the whole or any part of this Contract without prior written notice to and the written consent of the NJSEA. Money due or to become due the Contractor hereunder shall not be assigned for any purposes whatsoever.

18.0 APPLICABLE LAWS AND SAFETY REGULATIONS:

- 18.1 The attention of the Bidders is especially directed to the provisions of Federal, State, County, and Municipal laws, statutes, and regulations that may apply to the work; including particularly all safety regulations. Such provisions refer to obstruction of streets, open burning, maintaining of signals, storing and handling of explosives, etc. Particular note shall also be taken of those provisions affecting the Contractor or its employees in the prosecution of the work or its relation to any political subdivision or person. All pertinent laws, statutes, ordinances, and regulations shall be obeyed and complied with by the Contractor, its subcontractors, and all of its representatives.
- 18.2 The Contractor shall comply with all provisions of Federal and New Jersey State Labor Laws.
- 18.3 The Contractor shall comply with all current requirements of the Federal Department of Labor, Safety, and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596); and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54); and the Superfund Amendments and Reauthorization Act of 1986 (PL 99-499).
- 18.4 The Contractor shall also comply with all current requirements for construction promulgated under the New Jersey Department of Labor and Industry's Bureau of Engineering and Safety regulations, Title 12 of the NJAC.
- 18.5 In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions in, on, or near the job site; including safety of all persons and property affected directly or indirectly by its operations during performance of the work. This requirement will apply continuously 24 hours per day until acceptance of the work by the NJSEA. It shall not be limited to normal working hours.
- 18.6 The duty of the NJSEA, or its authorized representative, to conduct construction review of the Contractor's performance does not include review of the adequacy of the Contractor's safety measures, in, on, or near the construction site.

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19.0 OFFER OF GRATUITIES:

- 19.1 No vendor shall pay, offer to pay, or agree to pay, either directly or indirectly, any fee, commission, compensation, gift, gratuity, or other item of value of any kind to any State officer or employee or special State officer or employee, as defined by NJSA 52:13D-13b. and e., in the Department of the Treasury or any other agency with which such vend or transacts or offers or proposes to transact business, or to any member of the immediate family, as defined by NJSA 52:13D-13i., of any such officer or employee, or any partnership, firm, or corporation with which they are employed or associated, or in which such officer or employee has an interest within the meaning of NJSA 52:13D-13g.
- 19.2 The solicitation of any fee, commission, compensation, gift, gratuity or other item of value by any State officer or employee or special State officer or employee, from any State vendor shall be reported in writing forthwith by the vendor to the Attorney General and the Executive Commission on Ethical Standards.
- 19.3 No vendor may directly or indirectly, undertake any private business, commercial or entrepreneurial relationship with, whether or not pursuant to employment, contract or other agreement, express or implied, or sell any interest in such vendor to, any State officer or employee, having any duties or responsibilities in connection with the purchase, acquisition or sale of any property or services by or to any State agency or any instrumentality thereof, or with any person, firm or entity with which he is employed or associated or in which he has an interest within the meaning of NJSA 52:13D-13g. Any relationships subject to this provision shall be reported in writing forthwith to the Executive Commission on Ethical Standards, which may grant a waiver of this restriction upon application of the State officer or employee or special State officer or employee upon a finding that the present or proposed relationship does not present the potential, actuality or appearance of a conflict of interest.
- 19.4 No vendor shall influence, attempt to influence, or cause to be influenced, any State officer or employee or special State officer or employee in his official capacity in any manner which might tend to impair the objectivity or independence of judgment of said officer or employee.
- 19.5 No vendor shall cause or influence, or attempt to cause or influence, any State officer or employee, or special State officer or employee, to use, or attempt to use, his official position to secure unwarranted privileges or advantages for the vendor or any other person.
- 19.6 The provisions cited above in paragraph 19.1 through 19.5 shall not be construed to prohibit a State officer or employee, or special State officer or employee, from receiving gifts from or contracting with vendors under the same terms and

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conditions as are offered or made available to members of the general public subject to any guidelines the Executive commission on Ethical Standards may promulgate under paragraph 19.3.

20.0 SUBCONTRACTORS:

20.1 A list of proposed subcontractors shall be included with the Bid as required by the Bid Forms. The list shall be accompanied by an experience statement for each subcontractor indicating each subcontractor's qualifications. If the NJSEA, after due investigation, has reasonable objection to any proposed subcontractor, the NJSEA may, before giving the notice of award, request the apparent Successful Bidder to submit an acceptable substitute without an increase in bid price. If the apparent Successful Bidder declines to make any such substitution, the Contract shall not be awarded to said Bidder; but its declining to make such a substitution will not constitute grounds for sacrificing its bid security. Any subcontractor, to whom the NJSEA does not make a written objection prior to the giving of the notice of award, shall be deemed acceptable to the NJSEA.

20.2 No Contractor shall be required to employ any subcontractor against whom it has objection.

21.0 PRE- START CONFERENCE:

21.1 The Contractor shall be prepared to attend a pre-start up conference after execution of the Contract, and prior to the beginning of work, at which representatives of the NJSEA will be present, to discuss performance of the work under this contract. The Contractor's representative must be authorized to speak for the Contractor and to act as an agent of the Contractor.

22.0 CONTRACT DOCUMENTS:

22.1 The information and requirements included as the INSTRUCTIONS TO BIDDERS are neither inclusive nor exclusive, and the Bidder or Contractor shall make no claim for lack of notice because information requirements are stated elsewhere in the Contract Documents, but are not repeated herein.

22.2 The Table of Contents, titles, headings, running headlines, and notes contained in the Contract Documents are solely to facilitate reference to various provisions of the Contract Documents; and in no way affect, limit, or cast light on the interpretation of the provisions to which they refer.

23.0 EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION:

23.1 During the performance of this contract the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to

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affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, up-grading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees places by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity of expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractors' commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to the N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time with the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith effort to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Dept. of LWD, Construction EEO Monitoring Program may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B and C, as long as the Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor

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agrees that a good faith effort shall include compliance with the following procedures:

(A) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et.seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurance from the construction trade union at least five business days prior to the commencement of the construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

(B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

1. To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
2. To notify any minority and women workers who have been listed with its awaiting available vacancies;
3. Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;

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4. To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
5. If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;
6. To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor;
 - (i) The contractor or subcontractor shall interview the referred minority or women worker.
 - (ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractors or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Dept. of LWD, Construction EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.
 - (iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.
 - (iv) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the

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determination in its files, and send a copy to the public agency compliance officer and to the Dept. of LWD, Construction EEO Monitoring Program.

7. To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Division and submitted promptly to the Dept. of LWD, Construction Monitoring Program upon request.

(C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ration established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Dept. of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA201) electronically provided to the public agency by the Division, through its website, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration to his contract to the Dept. of LWD, Construction EEO Monitoring Program, and to the public agency compliance officer.

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for the on-the-job programs for outreach and training of minorities and women.

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(D) The contractor and its subcontractor shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant NJAC 17:27-1.1 et seq.

The Executive Order No. 151 (Corzine, August 28, 2009) and P.L. 2009, Chapter 335 include a provision which require all state agencies, independent authorities and colleges and universities to include additional mandatory equal employment and affirmative action language in its construction contracts. It is important that this language is in addition to and does not replace the mandatory contract language and good faith efforts requirements for construction contracts required by N.J.A.C. 17-27-3.6, 3.7 and 3.8, also known as Exhibit B. The additional mandatory equal employment and affirmative action language is as follows:

It is the policy of the [Reporting Agency] that its contracts should create a workforce that reflects the diversity of the State of New Jersey. Therefore, contractors engaged by the [Reporting Agency] to perform under the construction contract shall put forth a good faith effort to engage in recruitment and employment practices that further the goal of fostering equal opportunities to minorities and women.

The contractor must demonstrate to the [Reporting Agency]'s satisfaction that a good faith effort was made to ensure that minorities and women have been afforded equal opportunity to gain employment under the [Reporting Agency]'s contract with the contractor. Payment may be withheld from a contractor's contract for failure to comply with these provisions.

Evidence of a "good faith effort" includes, but is not limited to:

1. The Contractor shall require prospective employees through the State Job bank website, managed by the Department of Labor and Workforce Development, available online at <http://NJ.gov/JobCentralNJ>;
2. The Contractor shall keep specific records of its efforts, including records of all individuals interviewed and hired, including the specific numbers of minorities and women;
3. The Contractor shall actively solicit and shall provide the [Reporting Agency] with proof of solicitations for employment, including but not limited to advertisements in general circulation media, professional service publications and electronic media; and

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4. The Contractor shall provide evidence of efforts described at 2 above to the [Reporting Agency] no less frequently than once every 12 months.
5. The Contractor shall comply with the requirements set forth at N.J.A.C. 17:27.

To ensure successful implementation of Executive Order and Law, state agencies, independent authorities and colleges and universities must forward an Initial Project Workforce Report (AA201) for any projects funded with ARRA money to the Division of Public Contracts EEO Compliance immediately upon notification of award but prior to execution of the contract.

24. NEW JERSEY EQUAL PAY ACT:

Please be advised that in accordance with P.L. 2018, c. 9, also known as the Diane B. Allen Equal Pay Act, which was signed into law by Governor Phil Murphy on April 24, 2018, a contractor performing “qualifying services” or “public work” to the State or any agency or instrumentality of the State shall provide the Commissioner of Labor and Workforce Development a report regarding the compensation and hours worked by employees categorized by gender, race, ethnicity, and job category. For more information and report templates see <https://nj.gov/labor/equalpay/equalpay.html>.

3. STATE LAW REQUIRING MANDATORY COMPLIANCE BY CONTRACTORS UNDER CIRCUMSTANCES SET FORTH IN LAW OR BASED ON THE TYPE OF CONTRACT:

3.8 DIANE B. ALLEN EQUAL PAY ACT Pursuant to N.J.S.A. 34:11-56.14, a contractor performing “qualifying services” or “public work” to the State or any agency or instrumentality of the State shall provide the Commissioner of Labor and Workforce Development a report regarding the compensation and hours worked by employees categorized by gender, race, ethnicity, and job category. For more information and report templates see <https://nj.gov/labor/equalpay/equalpay.html>

25.0 BUSINESS REGISTRATION CERTIFICATE:

- 25.1 Any Contractor or subcontractor entering into a contract with a State agency shall provide the following:
- A. A Contractor shall provide proof of valid business registration with the Division of Revenue in the Department of the Treasury to any contracting State agency; no contract shall be entered into by any contracting State agency unless the contractor first provides proof of valid business registration.
 - B. A subcontractor under any contract with a contracting State agency shall provide proof of valid business registration with the Division of Revenue to any contractor; verification information shall be forwarded by the contractor to the contracting State agency. No subcontract shall be entered into by any contractor under any contract

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with a contracting State agency unless the subcontractor first provides proof of valid business registration.

- 25.2 The Contractor and any subcontractor providing goods or performing services under this contract, and each of their affiliates, shall, during the term of the contract, collect and remit to the Director of the Division of Taxation in the Department of the Treasury the use tax due pursuant to the "Sales and Use Tax Act, P.L. 1966, c.30 (N.J.S.A. 54:32B-1 et seq.) on all their sales of tangible personal property delivered to the State. Any questions can be directed to the Division of Revenue at (609) 292-1730. Form NJ-REG can be filed online at <http://www.state.nj.us/treasury/revenue/busregcert.htm>
- 25.3 A Contractor's Exemption Purchase Certificate, Form ST-13 of the State of New Jersey, Division of Taxation, Sales Tax Bureau, shall be completed by the Bidder and shall, for Sales and Use Tax exemption purposes under N.J.S.A. 54:32B-8.22, be presented to the sellers of materials, supplies or services purchased by the Bidder for exclusive use in connection with this Project only.
- 26.0 REGISTRATION WITH THE PUBLIC WORKS CONTRACTOR:**
- 26.1 The Contractor and all subcontractors shall provide, with the Bid, proof of registration with the Public Works Contractor Registration Act (NJSA 34:11-56.48 et. seq.). Registration information can be obtained on the worldwide web at <http://www.nj.gov/labor/lse/lspubcon.html> or by calling 609-292-9464.
- 26.2 No Contractor shall bid on the Work of this Contract unless the Contractor is registered pursuant to this act **at the time the Bid is made.**
- 26.3 No Contractor shall list a subcontractor in the Bid for the Work of this Contract unless the subcontractor is registered pursuant to this act **at the time the Bid is made.**
- 26.4 Should a subcontractor be named after the Bid, that subcontractor must be registered pursuant to this Act prior to engaging in the Work of this Contract.
- 27.0 REQUIREMENTS OF PUBLIC LAW 2005, CHAPTER 51:** (to be submitted by all bidders)
- 27.1 Public Law 2005, c. 51 supersedes Executive Order 134. The Executive Order, and the subsequent legislation, contain additional restrictions and reporting requirements that will necessitate a thorough review of the provisions. Chapter 51 can be found on the Purchase Bureau website at <http://www.njleg.state.nj.us/2004/Bills/PL05/51-.PDF>
- 27.2 In order to safeguard the integrity of State government procurement by imposing restrictions to insulate the award of State contracts from political contributions

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that pose the risk of improper influence, purchase of access, or the appearance thereof, Executive Order 134 was signed on September 22, 2004 ("EO 134"). Pursuant to the requirements of EO 134, the terms and conditions set forth in this section are material terms of any contract resulting from this Bid.

27.3 Definitions - For the purpose of this section, the following shall be defined as follows:

- A. Contribution - means a contribution reportable as a recipient under "The New Jersey Campaign Contributions and Expenditures Reporting Act." P.L. 1973, c. 83 (C.10:44A-1 et seq.), and implementing regulations set forth at N.J.A.C. 19:25-7 and N.J.A.C. 19:25- 10.1 et seq. Currently, contributions in excess of \$300 during a reporting period are deemed "reportable" under these laws.
- B. Business Entity - means any natural or legal person, business corporation, professional services corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction. It also includes (i) all principals who own or control more than 10 percent of the profits or assets of a business entity or 10 percent of the stock in the case of a business entity that is a corporation for profit, as appropriate; (ii) any subsidiaries directly or indirectly controlled by the business entity; (iii) any political organization organized under 26 U.S.C.A. 527 that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee; and (iv) if a business entity is a natural person, that person's spouse or child, residing in the same household.

27.4 Breach of Terms of Executive Order 134 Deemed Breach of Contract - It shall be a breach of the terms of the contract for the Business Entity to (i) make or solicit a contribution in violation of this Order, (ii) knowingly conceal or misrepresent a contribution given or received; (iii) make or solicit contributions through intermediaries for the purpose of concealing or misrepresenting the source of the contribution; (iv) make or solicit any contribution on the condition or with the agreement that it will be contributed to a campaign committee or any candidate of holder of the public office of Governor, or to any State or county party committee; (v) engage or employ a lobbyist or consultant with the intent or understanding that such lobbyist or consultant would make or solicit any contribution, which if made or solicited by the business entity itself, would subject that entity to the restrictions of EO 134; (vi) fund contributions made by third parties, including consultants, attorneys, family members, and employees; (vii) engage in any exchange of contributions to circumvent the intent of EO 134; or (viii) directly or indirectly through or by any other person or means, do any act which would subject that entity to the restrictions of EO 134.

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27.5 Certification and Disclosure Requirements

- A. The State shall not enter into a contract to procure from any Business Entity services or any material, supplies or equipment, or to acquire, sell or lease any land or building, where the value of the transaction exceeds \$17,500, if that Business Entity has solicited or made any contribution of money, or pledge of contribution, including in-kind contributions to a candidate committee and/or election fund of any candidate for or holder of the public office of Governor, or to any State or county political party committee during certain specified time periods.
- B. Prior to awarding any contract or agreement to any Business Entity, the Business Entity proposed as the intended awardee of the contract shall submit the Certification and Disclosure form, certifying that no contributions prohibited by Executive Order 134 have been made by the Business Entity and reporting all contributions the Business Entity made during the preceding four years to any political organization organized under 26 U.S.C.527 of the Internal Revenue Code that also meets the definition of a “continuing political committee” within the mean of N.J.S.A. 19:44A-3(n) and N.J.A.C. 19:25-1.7. The required form and instructions, available for review on the Purchase Bureau website at <http://www.state.nj.us/treasury/purchase/forms.shtml> shall be provided to the intended awardee for completion and submission to the Purchase Bureau with the Notice of Intent to Award. Upon receipt of a Notice of Intent to Award a Contract, the intended awardee shall submit to the Division, in care of the Purchase Bureau Buyer, the Certification and Disclosure(s) within five (5) business days of the State’s request. Failure to submit the required forms will preclude award of a contract under this Bid, as well as future contract opportunities. Instructions and sample copies of the required forms are included in the Appendices at the end of these INSTRUCTIONS TO BIDDERS.
- C. Further, the Contractor is required, on a continuing basis, to report any contributions it makes during the term of the contract, and any extension(s) thereof, at the time any such contribution is made. The required form and instructions, available for review on the Purchase Bureau website at <http://www.state.nj.us/treasury/purchase/forms.shtml> shall be provided to the intended awardee with the Notice of Intent to Award.
- 27.6 State Treasurer Review - The State Treasurer or his designee shall review the Disclosures submitted pursuant to this section, as well as any other pertinent information concerning the contributions or reports thereof by the intended awardee, prior to award, or during the term of the contract, by the contractor. If the State Treasurer determines that any contribution or action by the contractor constitutes a breach of contract that poses a conflict of interest in the awarding of the contract under this solicitation, the State Treasurer shall disqualify the Business Entity from award of such contract.

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28.0 EXECUTIVE ORDER 117:

28.1 Executive Order No. 117 builds on the provisions of P.L. 2005, c. 51 ("Chapter 51"), which limits contributions to certain political candidates and committees by for-profit business entities that are, or seek to become, State government vendors.

Executive Order No. 117 extends the provisions of Chapter 51 in two ways:

- A. The definition of "business entity" is revised and expanded so that contributions by the following individuals also are considered contributions attributable to the business entity:
1. Officers of corporations and professional services corporations, with the term "officer" being defined in the same manner as in the regulations of the Election Law Enforcement Commission regarding vendor disclosure requirements (N.J.A.C. 19:25-26.1), with the exception of officers of non-profit entities;
 2. Partners of general partnerships, limited partnerships, and limited liability partnerships and members of limited liability companies (LLCs), with the term "partner" being defined in the same manner as in the regulations of the Election Law Enforcement Commission regarding vendor disclosure requirements (N.J.A.C. 19:25-26.1); and
 3. Spouses, civil union partners, and resident children of officers, partners, LLC members and persons owning or controlling 10% or more of a corporation's stock are included within the new definition, except for contributions by spouses, civil union partners, or resident children to a candidate for whom the contributor is eligible to vote or to a political party committee within whose jurisdiction the contributor resides.
- B. Reportable contributions (those over \$300.00 in the aggregate) to legislative leadership committees, municipal political party committees, and candidate committees or election funds for Lieutenant Governor are disqualifying contributions in the same manner as reportable contributions to State and county political party committees and candidate committees or election funds for Governor have been disqualifying contributions under Chapter 51.

29.0 NEW JERSEY PREVAILING WAGE ACT:

The New Jersey Prevailing Wage Act, P.L. 1963, Chapter 150, is hereby made a part of every contract entered into by the Authority, except those contracts which are not within the contemplation of the Act. The Proposer's submission of its Proposal is its guarantee that neither it nor any subcontractors might employ to perform the work

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covered by this bid are listed or are on record in the Office of the Commissioner of the Department of Labor and Industry as one who has failed to pay prevailing wages in accordance with the provisions of the Act.

Attention is directed to the Prevailing Wage Rate List and to the applicable provisions of "The New Jersey Prevailing Wage Act" Chapter 150 of the Laws of 1963 governing the prevailing rates of wage for workers who are employed in this project. All provisions of said Wage Act and amendments thereto, shall be considered part of the Contract and made part thereof.

The Proposer, by submitting the Proposal, declares to the Authority that it is aware of the provisions of said Wage Act with relation to prevailing rates of wages for workers to be employed on this project.

FORMS AND INSTRUCTIONS ARE INCLUDED IN THE APPENDIX

30.0 NOTICE OF SETOFF FOR STATE TAXES:

30.1 Pursuant to N.J.S.A. 54:49-19, if the Contractor is entitled to payment under the Contract at the same time as it is indebted for any State tax (or is otherwise indebted to the State), the NJSEA may set off that payment by the amount owed.

30.2 The Bidder shall certify acknowledgement of this by completing the form contained in the BID FORMS.

31.0 NEW JERSEY PROMPT PAYMENT ACT:

31.1 The New Jersey prompt Payment Act (N.J.S.A. 52:32-32 et seq.) requires state agencies to pay for goods and services within sixty (60) days of the agency's receipt of a properly executed State Payment Voucher or within sixty (60) of receipt and acceptance of goods and services, whichever is later. Properly executed performance security, when required, must be received by the state prior to processing any payments for goods and services accepted by state agencies. Interest will be paid on delinquent accounts at a rate established by the State Treasurer. Interest will not be paid until it exceeds \$5.00 per properly executed invoice.

32.0 CORPORATE RESOLUTION FORM

32.1 Bidders to complete a corporate resolution form per **SECTION 00486**.

32.0 OWNER DISCLOSURE FORM and MacBRIDE PRINCIPLES: (to be completed by successful bidder)

32.1 The successful bidder is required to complete Division of Purchase and Property Ownership Disclosure Forms (N.J.S.A. 52:25-24.2 et seq.) including Disclosure of Investigations, Disclosures of Investment Activities in Iran pursuant to Public Law 2012, c. 25, McBride Principles Form pursuant to Public Law 1995, c. 134, and Certification of Non-Involvement in Prohibited Activities in Russia or Belarus pursuant to Public Law 2022, c.3.

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32.2 Forms and Instructions are included in the Appendix.

33.0 PROOF OF COMPETENCY OF BIDDERS

33.1 Any Bidder may be required to furnish evidence satisfactory to the NJSEA that the Bidder and his proposed Subcontractors have sufficient means and experience in the types of work called for to assure completion of the Contract in a satisfactory manner. In particular, the Contractor must have the appropriate licenses to perform the required remediations.

33.2 The NJSEA reserves the right to reject any Bid if the evidence submitted fails to satisfy the NJSEA that the Bidder and/or Bidder's proposed Subcontractors are qualified to carry out and complete the Contract.

34.0 ANTI-KICKBACK ACT

34.1 The Contractor shall comply with the applicable regulations of the Secretary of Labor, United States Department of Labor, promulgated pursuant to the so-called "Anti-Kickback Act" of June 13, 1934 (48 Stat. 863: Title 18 U.S.C., Sec. 874, and Title 40 U.S.C., Sec. 276c), and any amendments or modifications thereof, and shall cause appropriate provisions to be inserted in Subcontracts to insure compliance therewith by all Subcontractors.

35.0 BUY AMERICAN

34.1 Only manufactured and farm products of the United States, wherever available, shall be used under this Contract, pursuant to N.J.S.A. 40A:11-18.

36.0 LAWS, ORDINANCES, CODES AND REGULATIONS

36.1 All "work" to be provided for this project shall conform to the following and subsequent revisions thereto:

- A. The State Uniform Construction Code Act (N.J.S.A. 52:27D-119 et seq.); and the Uniform Construction Code and all applicable Subcodes thereof.
- B. All applicable published communications by the Department of Community Affairs (DCA) including but not limited to the following:
 - 1. DCA Interpretations
 - 2. DCA Formal Technical Opinions
 - 3. DCA Bulletins
 - 4. Related Regulations
 - 5. Miscellaneous
- C. The Americans with Disabilities Act of 1990.
- D. NJDOT Standard Specifications and details except as outlined otherwise.

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- 36.2** The Specifications make reference to certain laws, ordinances, codes and regulations, whether they be by Federal, State, County and/or Municipal Governments. This is done to alert those involved with the Project of unique requirements that pertain to building construction work for the NJSEA. This is not intended as a limitation of the Contractor's responsibility to comply with any and all other Federal, State and Local building codes and ordinances that relate to this project.

37.0 STOCKHOLDER DISCLOSURE:

All corporations and partnerships submitting a bid are required to enclose a list of the names and addresses of all stockholders owning 10% or more of their stock or 10% or more of the stock of their corporate stockholders or in the case of a partnership, the names and addresses of those owning a 10% or greater interest therein.

38.0 WITHDRAWAL OF BIDS

- 38.1** Upon proper request and identification a bidder may withdraw his bid prior to the scheduled time for the opening thereof. However, no bid may be withdrawn after the first bid has been opened and thereafter not for a period of 60 days after the date of the opening thereof.

39.0 LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

- 39.1** The successful bidder upon his failure or refusal to execute and deliver the Contract and Contract Bond required within 5 days after he has received notice of the acceptance of his bid shall forfeit to the Owner as liquidated damages for such failure or refusal the security deposited with his bid.

40.0 PENALTIES FOR FALSE STATEMENTS

- 40.1** Any person who makes or causes to be made a false deceptive or fraudulent statement in the statement or answers in response to the questionnaire, or in the course of any hearing hereunder, shall be guilty of a misdemeanor, and upon conviction shall be punishable by a fine of not less than \$ 100.00 no more than \$1,000.00, and shall be permanently disqualified from bidding all public work or contracts of the contracting unit which submitted the questionnaire; or in the case of an individual or an officer or employee charged with the duty of responding to the questionnaire for a person, firm, co partnership, association or corporation, by such fine or by imprisonment, not exceeding-6 months, or both (40A: 11-34).

END OF SECTION 00100

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SECTION 00300

**STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY**

BID SHEET: PROJECT CN-276

TO: The New Jersey Sports and Exposition Authority (NJSEA)

RE: NJSEA MEADOWLANDS ARENA LOWER ROOF REPLACEMENT

This bid will not be accepted after 12:00 PM prevailing local time on, February 3rd, 2023. There will not be a public bid opening due to COVID. The bidder agrees that this bid will not be withdrawn for a period of 60 calendar days after the closing time for receipt of bids.

(Name of Firm Submitting Bid)

The undersigned hereby acknowledges receipt of the following addenda:

ADDENDUM NO.

DATE

The following documents are included with this bid:

1. Bid Security (including Power of Attorney if bid security is in the form of a bond)
2. Consent of Surety
3. Bidder's Experience Affidavit
4. Bidder's Disclosure Form
5. Bidder's Affidavit of Authorization
6. Moral Integrity Affidavit
7. Non-Collusion Affidavit
8. Subcontractor Use Form
9. Proof of Registration in accordance with the Public Works Contractor Registration Act (For Contractor and all listed subcontractors)
10. Notice to All Bidders of Set-Off for State Tax
11. Corporate Resolution Form
12. Two-Year Chapter 51/Executive Order 117 Vendor Certification And Disclosure Of Political Contributions
13. Iran Certification Form

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14. Certification Of Non-Debarment For Federal Government Contracts [N.J.S.A. 52:32-44.1 (P.L. 2019, C.406)]
15. MacBride Principles Form
16. Certification of Non-Involvement in Prohibited Activities in Russia or Belarus

The following Bid is hereby made to the New Jersey Sports and Exposition Authority.

The undersigned hereby proposes and agrees to furnish all the labor, materials, equipment, tools, and services necessary for the work specified for the above referenced Contract.

The undersigned has examined the location of the proposed Work, the Drawings, Specifications and all other Contract Documents, and is familiar with the local conditions at the place where the work is to be performed. The bidder understands that information relative to any existing structures, apparent and latent conditions, and natural phenomena as furnished in the Contract Documents or by the NJSEA, carries no guarantee expressed or implied as to its completeness or accuracy, and has made all due allowances therefore.

The undersigned Bidder declares that this Bid is made without connection to any other person or persons making Bids for the same work and is in all respects fair and without collusion or fraud.

The undersigned Bidder has determined the quantity and quality of equipment and materials required; has investigated the location and determined the sources of supply of the materials required; has investigated labor conditions; and has arranged for the continuous prosecution of the work herein described.

The undersigned Bidder agrees that the price bid shall apply to actual quantities required, approved and used during construction of the work, including Addenda. It further agrees to complete the entire work of the Contract within the time specified, starting on the date specified in the Notice-to-Proceed.

The undersigned Bidder hereby agrees to be bound by the award of the Contract, and if awarded the Contract on this Bid, to execute the Contract, to furnish the required Bonds and Insurance Certificates and Affirmative Action documentation, and to furnish all other information required by the Contract Documents within the time limits specified.

The undersigned understands that the NJSEA reserves the right to reject any or all Bids or to waive any informality or technicality of any Bid in the interest of the NJSEA. The Bidder agrees to perform all the work described in the Contract Documents, provide all plant, labor, equipment, materials, tools, and services necessary for the completion of

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

the Contract all as specified and shown complete to a fully acceptable condition for the prices shown. The prices shall be printed and written on the following Schedule of Bid

SCHEDULE OF BID PRICES

NJSEA Meadowlands Arena Lower Roof Replacement.

I (we) her in propose to furnish and install all work associated with the work described in these Bid Documents for the **MEADOWLANDS ARENA LOWER ROOF REPLACEMENT**

(\$ _____)
Lump Sum - *in words*

(\$ _____)
Lump Sum - *in figures*

I, or We, hereby commit to complete this **Project within:**

Number of Calendar Days to Complete

Contractor Signature

If this Bid shall be accepted by the NJSEA, and the undersigned shall fail to contract as aforesaid, the NJSEA shall be entitled to recover from the Bidder those moneys as specified in Article 7.0 of the **INSTRUCTIONS TO BIDDERS**.

If a Corporation:

Name of Company _____

Business Address _____

Business Telephone Number _____

Incorporated under the laws of the State of _____

Meadowlands Arena Lower Roof Replacement
PROJECT CN-276

Signature and Title of Bidder _____
(Signature)

(Typed Name)

(Typed Title)

Name of President _____

Name of Secretary _____

Name of Treasurer _____

Date _____

(Affix Corporate Seal Here)

Meadowlands Arena Lower Roof Replacement
PROJECT CN-276

If a Partnership, Individual, or Non-Incorporated Organization:

Name of Company _____

Business Address _____

Business Telephone Number _____

Signature and Title of Bidder _____
(Signature)

(Typed Name)

(Typed Title)

Dated _____

Typed Names and Addresses of Company Members:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Use Additional Sheets if Necessary)

END OF SECTION 00300

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

**SECTION 00410
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY**

BID BOND FOR PROJECT CN-276

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____ as Principal, and _____ as Surety, are hereby held and firmly bound unto the NEW JERSEY SPORTS AND EXPOSITION AUTHORITY (NJSEA) for the penal sum of \$_____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns; effective on the latest date of signature at the end of the above referenced Contract.

The condition of the above obligations is such that whereas the Principal attached hereto and hereby made a part hereof to enter into the above referenced Contract.

NOW THEREFORE:

- If said Bid shall be rejected; or in the alternate,
- If said Bid shall be accepted and the Principal shall execute and deliver a contract on the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for the faithful performance of said Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by an extension of the time within which the NJSEA may accept such Bid; and said Surety does hereby waive notice of any such extension.

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

SECTION 00411

STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

CONSENT OF SURETY FOR PROJECT CN-276

KNOW ALL MEN BY THESE PRESENTS, that for and in consideration of the sum of \$1.00, lawful money of the United States, the receipt whereof is hereby acknowledged, paid the undersigned corporation, and for other valuable consideration, _____
_____(Name of Surety Company), a corporation organized and existing under the laws of the State of _____ and licensed to do business in the State of New Jersey, certifies and agrees, that if this Contract is awarded to _____(Name of Bidder) the undersigned corporation will execute the bond or bonds as required by the Contract Documents, and will become Surety in the full amounts set forth in the Contract Documents, for the faithful performance of all obligations of the Contractor.

(Surety)

(Must be accompanied by the usual proof of authority of surety company officers to execute the same).

END OF SECTION 00411

Meadowlands Arena Lower Roof Replacement
PROJECT CN-276

SECTION 00420
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

BIDDERS EXPERIENCE AFFIDAVIT: PROJECT CN-276

Any businesses incorporated outside the State of New Jersey shall furnish a certificate proving they are authorized by the Secretary of the State of New Jersey to do business in the State of New Jersey prior to contract award.

The **BIDDER** shall document their experience by completing the form below, or on sheets to be attached. The list shall include **AT LEAST THREE PROJECTS COMPLETED WITHIN THE LAST FIVE YEARS**, which are similar in scope and size to that proposed in this Contract.

All listed subcontractors refer to the individual specifications for qualification requirements to be submitted.

<u>Project Name & Address</u>	<u>Name and # of Contact</u>	<u>Completion Date</u>	<u>Description of Work</u>	<u>Contract Amount</u>
<u>1.</u>				
<u>2.</u>				
<u>3.</u>				

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

This information will assist the NJSEA to judge the bidder's experience, skill, and business standing. **Bidders failing to furnish all the required information may be disqualified.**

The undersigned is (an Individual) (a Partnership) (a Corporation) under the laws of the State of _____, having principal offices at _____

_____.

(Signature)

(Typed Name)

Date: _____

(Typed Address)

END OF SECTION 00420



OWNERSHIP DISCLOSURE FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

BID SOLICITATION # AND TITLE: _____

VENDOR NAME: _____

PURSUANT TO N.J.S.A. 52:25-24.2, ALL PARTIES ENTERING INTO A CONTRACT WITH THE STATE ARE REQUIRED TO PROVIDE A STATEMENT OF OWNERSHIP.

YES NO

1. The vendor is a **Non-Profit Entity**; and therefore, no disclosure is necessary.
2. The vendor is a **Sole Proprietor**; and therefore, no other disclosure is necessary.
A Sole Proprietor is a person who owns an unincorporated business by himself or her-self.
A limited liability company with a single member is not a Sole Proprietor.
3. The vendor is a **corporation, partnership, or limited liability company**.

If you answered **YES** to Question 3, you must disclose the following: **(a)** the names and addresses of all stockholders in the corporation who own 10% or more of its stock, of any class; **(b)** all individual partners in the partnership who own a 10% or greater interest therein; or, **(c)** all members in the limited liability company who own a 10% or greater interest therein.*

NAME	_____		
ADDRESS	_____		
ADDRESS	_____		
CITY	STATE	ZIP	

NAME	_____		
ADDRESS	_____		
ADDRESS	_____		
CITY	STATE	ZIP	

NAME	_____		
ADDRESS	_____		
ADDRESS	_____		
CITY	STATE	ZIP	

NAME	_____		
ADDRESS	_____		
ADDRESS	_____		
CITY	STATE	ZIP	

YES NO

4. For each of the corporations, partnerships, or limited liability companies identified above, are there any individuals, partners, members, stockholders, corporations, partnerships, or limited liability companies owning a 10% or greater interest of those listed business entities?

If you answered **YES** to Question 4, you must disclose the following: **(a)** the names and addresses of all stockholders in the corporation who own 10% or more of its stock, of any class; **(b)** all individual partners in the partnership who own a 10% or greater interest therein; or, **(c)** all members in the limited liability company who own a 10% or greater interest therein. The disclosure(s) shall be continued until the names and addresses of every non-corporate stockholder, individual partner, and/or member a 10% or greater interest has been identified.*

NAME	_____		
ADDRESS	_____		
ADDRESS	_____		
CITY	STATE	ZIP	

NAME	_____		
ADDRESS	_____		
ADDRESS	_____		
CITY	STATE	ZIP	

NAME	_____		
ADDRESS	_____		
ADDRESS	_____		
CITY	STATE	ZIP	

NAME	_____		
ADDRESS	_____		
ADDRESS	_____		
CITY	STATE	ZIP	

5. As an alternative to completing this form, a Vendor with any direct or indirect parent entity which is publicly traded, may submit the name and address of each publicly traded entity and the name and address of each person that holds a 10% or greater beneficial interest in the publicly traded entity as of the last annual filing with the federal Securities and Exchange Commission or the foreign equivalent, and, if there is any person that holds a 10% or greater beneficial interest, also shall submit links to the websites containing the last annual filings with the federal Securities and Exchange Commission or the foreign equivalent and the relevant page numbers of the filings that contain the information on each person that holds a 10% or greater beneficial interest.*

* Attach additional sheets if necessary

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

**SECTION 00426
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY**

BIDDER'S AFFIDAVIT OF AUTHORIZATION: PROJECT CN-276

State of _____

ss:

County of _____

_____ (Name of Bidder), being duly sworn, deposes and says that:

- he/she resides at _____;
- he/she is the _____ (Title) who signed the Bid Forms for this Contract;
- he/she is duly authorized to sign, and that the Bid is a true offer of the Bidder, and the seal attached is the seal of the Bidder; and,
- all the declarations and statements contained in the Bid are true to the best of his/her knowledge and belief.

(Signature)

(Typed Name)

Subscribed and sworn to
before me this _____ day

of _____ 20_____.

(Notary Public)

My commission expires _____, 20_____

END OF SECTION 00426

Meadowlands Arena Lower Roof Replacement
PROJECT CN-276

SECTION 00427
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

CORPORATE RESOLUTION FORM FOR PROJECT CN-276

BE IT RESOLVED, By the Board of Directors of _____
that the president (_____) be and hereby is authorized to make,
execute and deliver a contract for _____
with the New Jersey Sports & Exposition Authority; and that the Secretary
(_____) be and hereby is authorized to attest to the execution of
the same and affix the corporate seal thereto.

BOARD OF DIRECTORS

SECRETARY

(SEAL)

I HEREBY CERTIFY that the foregoing is an exact copy of a Resolution by the BOARD
of Directors of

(_____) adopted at a (_____) , meeting held
on _____
_____ at which quorum was present.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of

(_____)

this _____ day of _____ 20____.

SECRETARY

(SEAL)

END OF SECTION 00427

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

**SECTION 00428
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY**

MORAL INTEGRITY AFFIDAVIT: PROJECT CN-276

State of _____

ss:

County of _____

I, _____ (Name), the _____ (Title)

of _____ (Company), being first duly sworn, depose
and say that:

1. the above named company has submitted a bid regarding this Contract to the New Jersey Sports and Exposition Authority;
2. the above named company wishes to demonstrate moral integrity to the satisfaction of the New Jersey Sports and Exposition Authority;
3. as of the day of signing this Affidavit, neither the above named company nor any of its owners, officers, or directors are involved in any Federal, State, or other governmental investigations concerning criminal or quasi-criminal violations, except as follows (If none, so state): _____
4. neither the Company nor any of its owners, officers, or directors have ever committed any violation of a Federal or State criminal or quasi-criminal statute, except as follows (If none, so state): _____
5. neither the Company nor any of its owners, officers or directors have ever been suspended, disbarred or otherwise declared ineligible by any agency or government from bidding or contracting to provide services, labor, material or supplies except as follows (If none, so state): _____
6. neither the Company nor any of its owners, officers or directors have ever been involved in any investigation, litigation, including administrative complaints or other administrative proceedings, involving any public sector clients during the past five years except as follows (if applicable set forth the nature and status of the investigation and, for any litigation, the caption of the action, a brief description of the action, date of inception, current status and, if applicable, disposition (If none, so state): _____

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

7. the company is incorporation in the State of: _____
8. if the answer to the above question is a state other than New Jersey, that the company has received from the Secretary of State of New Jersey a certificate authorizing it to conduct business in New Jersey, and a copy of the certificate is enclosed with the Bid.
9. he/she is personally acquainted with the operations of the company, has full knowledge of the factual basis comprising the contents of this Affidavit, and that the contents are true.
10. the names and home addresses of the principals, shareholders, and officers of the company and their ownership interest (shares owned or % of partnership) are as follows:

(Use additional sheet if required)

11. this Affidavit is made to the New Jersey Sports and Exposition Authority to accept the bid for the above referenced Contract, knowing that the New Jersey Sports and Exposition Authority relies upon the truth of the statements contained herein.

The undersigned acknowledges that there is a continuing obligation from the date of this affidavit to notify the NJSEA of any changes to the answers or information contained herein.

I acknowledge that I am aware that it is a criminal offense to make a false statement in this Affidavit, and if I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my agreement with the NJSEA and that the NJSEA may declare any contract(s) resulting from this certification void and unenforceable.

(Signature)

(Typed Name)

Subscribed and sworn to
before me this ____ day
of _____ 20_____.

(Notary Public)

My commission expires _____, 20_____

END OF SECTION 00428

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

**SECTION 00480
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY**

NON-COLLUSION AFFIDAVIT: PROJECT CN-276

State of _____

ss:

County of _____

I, _____ (Name), of the municipality of _____
in the County of _____ and the State of _____ being
first duly sworn, depose and say that:

- I am the _____ (Title) of the firm _____
the Bidder making the Bid for this Contract.
- I execute the Bid with the full authority to do so.
- Said Bidder has not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above named Project.
- All statements contained in said Bid and in this affidavit are true and correct, and made with full knowledge that the New Jersey Sport and Exposition Authority relies upon the truth of the statements contained in the Bid and this affidavit in awarding this Contract.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees, or commercial or selling agencies maintained by the Bidder.

Subscribed and sworn to
before me this _____ day
of _____ 20__.

(Type or print name under signature)

(Notary Public)

My commission expires _____, 20_____

END OF SECTION 00480

SECTION 00482
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

BID DOCUMENTS - Section 00400 - 12

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

**SECTION 00483
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY**

**PROOF OF VALID BUSINESS REGISTRATION CERTIFICATE FOR STATE
AGENCY AND CASINO SERVICE CONTRACTS - DEPARTMENT OF TREASURY
DIVISION OF REVENUE: PROJECT CN-276**

The Bidder shall provide proof of valid business registration with the Division of Revenue. A copy of the registration for the Bidder and for all listed subcontractors shall be attached to this form.

END OF SECTION 00483

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

SECTION 00484
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

**PROOF OF REGISTRATION WITH THE PUBLIC WORKS CONTRACTOR
REGISTRATION ACT - DEPARTMENT OF LABOR - PROJECT CN-276**

The Bidder shall provide proof of valid registration with the Public Works Contractor Registration Act. A copy of the registration for the Bidder and for all listed subcontractors shall be attached to this form.

END OF SECTION 00484

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

**SECTION 00485
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY**

NOTICE TO ALL BIDDERS OF SET-OFF FOR STATE TAX: PROJECT CN-276

Please be advised that, pursuant to L. 1995, c. 159, effective January 1, 1996, and codified at N.J.S.A. 59:49-19 and N.J.S.A. 59:49-20, and notwithstanding any provision of the law to the contrary, whenever any taxpayer, partnership or S corporation under contract to provide goods or services or construction projects to the state of New Jersey or its agencies or instrumentalities, including the legislative and judicial branches of State government, is entitled to payment for those goods and services or construction projects, at the same time a taxpayer, partner or shareholder of that entity is indebted for any State tax, the Director of the Division of Taxation shall seek to set off that taxpayer's, partner's or shareholder's share of the payment of that indebtedness. The amount set off shall not allow for the deduction of any expenses or other deductions which might be attributable to the taxpayer, partner or shareholder subject to set-off.

The Division of Taxation may initiate procedures to set off the tax debt of a specific vendor upon the expiration of ninety (90) days after either the issuance by the Division of a notice and demand for payment of any state tax owed by the taxpayer or the issuance by the Division of a final determination on any protest filed by the taxpayer against an assessment or final audit determination. A set-off reduces the contract payment due to a vendor by the amount of that vendor's state tax indebtedness or, in the case of a vendor-partnership or vendor-S corporation, by the amount of state tax indebtedness of any member-partner or shareholder of the partnership or S-corporation, respectively. N.J.A.C. 18:2-8.3.

The Director of the Division of Taxation shall give notice of the set-off to the taxpayer, partner or shareholder and shall provide an opportunity for a hearing within 30 days of such notice under the procedures for protest established under N.J.S.A. 54:49-18. No requests for conference, protest, or subsequent appeal to the Tax Court from any protest under N.J.S.A. 59:49-19 shall stay the collection of the indebtedness. Interest that may be payable by the State to the taxpayer, pursuant to L. 1987, c. 184 (N.J.S.A. 52:32-35) shall be stayed.

"I HAVE BEEN ADVISED OF THIS NOTICE"

Company: _____

Signature: _____

Print or Type Name of Signer: _____

Print or Type Title of Signer: _____

Date: _____

END OF SECTION 00485

Meadowlands Arena Lower Roof Replacement
PROJECT CN-276

SECTION 00486
STATE OF NEW JERSEY
NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

CORPORATE RESOLUTION FORM FOR CONTRACT: PROJECT CN-276

BE IT RESOLVED, By the Board of Directors of _____

that the president (_____) be and hereby is authorized to make,

execute and deliver a contract FOR: with the New Jersey Sports and Exposition
Authority

and that the Secretary (_____)

be and hereby is authorized to attest to the execution of the same and affix the corporate
seal thereto.

BOARD OF DIRECTORS

SECRETARY

(SEAL)

I HEREBY CERTIFY that the foregoing is an exact copy of a Resolution by the BOARD
of Directors of

(_____) adopted at a (_____) , meeting held
on

_____ at which quorum was present.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of

(_____)

this _____ day of _____ 20____.

SECRETARY

(SEAL)

END OF SECTION 00486

INFORMATION AND INSTRUCTIONS

For Completing the “Two-Year Vendor Certification and Disclosure of Political Contributions” Chapter 51 Form

Background Information

On September 22, 2004, then-Governor James E. McGreevey issued E.O. 134, the purpose of which was to insulate the negotiation and award of State contracts from political contributions that posed a risk of improper influence, purchase of access or the appearance thereof. To this end, E.O. 134 prohibited State departments, agencies and authorities from entering into contracts exceeding \$17,500 with individuals or entities that made certain political contributions. E.O. 134 was superseded by Public Law 2005, c. 51, signed into law on March 22, 2005 (“Chapter 51”).

On September 24, 2008, Governor Jon S. Corzine issued E.O. 117 which is designed to enhance New Jersey’s efforts to protect the integrity of procurement decisions and increase the public’s confidence in government. The Executive Order builds upon the provisions of Chapter 51.

Two-Year Certification Process

Upon approval by the State Chapter 51 Review Unit, the Certification and Disclosure of Political Contributions form is valid for a two (2) year period. Thus, if a vendor receives approval on January 1, 2014, the certification expiration date would be December 31, 2015. Any change in the vendor’s ownership status and/or political contributions during the two-year period will require the submission of new Chapter 51/Executive Order 117 forms to the State Review Unit. **Please note that it is the vendor’s responsibility to file new forms with the State should these changes occur.**

State Agency Instructions: Prior to the awarding of a contract, the State Agency should first use NJSTART () to check the status of a vendor’s Chapter 51 certification before contacting the Review Unit’s mailbox at . If the State Agency does not find any Chapter 51 Certification information in NJSTART and/or the vendor is not registered in NJSTART, then the State Agency should send an e-mail to to verify the certification status of the vendor. If the response is that the vendor is NOT within an approved two-year period, then forms must be obtained from the vendor and forwarded for review. If the response is that the vendor is within an approved two-year period, then the response so stating should be placed with the bid/contract documentation for the subject project.

Instructions for Completing the Form

Part 1: BUSINESS ENTITY INFORMATION

Business Name – Enter the full legal name of the vendor, including trade name if applicable.

Address, City, State, Zip and Phone Number -- Enter the vendor's street address, city, state, zip code and telephone number.

Vendor Email – Enter the vendor’s primary email address.

Vendor FEIN – Please enter the vendor’s Federal Employment Identification Number.

Business Type - Check the appropriate box that represents the vendor's type of business formation.

Listing of officers, shareholders, partners or members - Based on the box checked for the business type, provide the corresponding information. (A complete list must be provided.)

Part 2: DISCLOSURE OF CONTRIBUTIONS

Read the three types of political contributions that require disclosure and, if applicable, provide the recipient's information. The definition of "Business Entity/Vendor" and "Contribution" can be found on pages 3 and 4 of this form.

Name of Recipient - Enter the full legal name of the recipient.

Address of Recipient - Enter the recipient's street address.

Date of Contribution - Indicate the date the contribution was given.

Amount of Contribution - Enter the dollar amount of the contribution.

Type of Contribution - Select the type of contribution from the examples given.

Contributor's Name - Enter the full name of the contributor.

Relationship of the Contributor to the Vendor - Indicate the relationship of the contributor to the vendor. (e.g. officer or shareholder of the company, partner, member, parent company of the vendor, subsidiary of the vendor, etc.)

NOTE: If form is being completed electronically, click "Add a Contribution" to enter additional contributions. Otherwise, please attach additional pages as necessary.

Check the box under the recipient information if no reportable contributions have been solicited or made by the business entity. **This box must be checked if there are no contributions to report.**

Part 3: CERTIFICATION

Check Box A if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity.

(No additional Certification and Disclosure forms are required if BOX A is checked.)

Check Box B if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity with the exception of those individuals and/or entities that submit their own separate form. For example, the representative is not signing on behalf of the vice president of a corporation, but all others. The vice president completes a separate Certification and Disclosure form. **(Additional Certification and Disclosure forms are required from those individuals and/or entities that the representative is not signing on behalf of and are included with the business entity's submittal.)**

Check Box C if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity only. **(Additional Certification and Disclosure forms are required from all individuals and/or entities whose contributions are attributable to the business entity and must be included with the business entity submittal.)**

Check Box D when a sole proprietor is completing the Certification and Disclosure form or when an individual or entity whose contributions are attributable to the business entity is completing a separate Certification and Disclosure form.

Read the five statements of certification prior to signing.

The representative authorized to complete the Certification and Disclosure form must sign and print her/his name, title or position and enter the date.

State Agency Procedure for Submitting Form(s)

The State Agency should submit the completed and signed Two-Year Vendor Certification and Disclosure forms either electronically to: cd134@treas.nj.gov or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625-0230. Original forms should remain with the State Agency and copies should be sent to the Chapter 51 Review Unit.

Business Entity Procedure for Submitting Form(s)

The business entity should return this form to the contracting State Agency.

The business entity can submit the Certification and Disclosure form directly to the Chapter 51 Review Unit only when:

- The business entity is approaching its two-year certification expiration date and is seeking certification renewal;
- The business entity had a change in its ownership structure; OR
- The business entity made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Questions & Information

Questions regarding Public Law 2005, Chapter 51 (N.J.S.A. 19:44A-20.13) or E.O. 117 (2008) may be submitted electronically through the Division of Purchase and Property website at: .

Reference materials and forms are posted on the Political Contributions Compliance website at: .



State of New Jersey
Department of the Treasury

Division of Purchase and Property

Two-Year Chapter 51/Executive Order 117 Vendor Certification and
Disclosure of Political Contributions

FOR STATE USE ONLY

Solicitation, RFP, or Contract No. _____ Award Amount _____

Description of Services _____

State Agency Name _____ Contact Person _____

Phone Number _____ Contact Email _____

☐ Check if the Contract / Agreement is Being Funded Using FHWA Funds

**Please check if requesting
recertification ☐**

Part 1: Business Entity Information

Full Legal Business Name _____
(Including trade name if applicable)

Address _____

City _____ State _____ Zip _____ Phone _____

Vendor Email _____ Vendor FEIN (SS# if sole proprietor/natural person) _____

**Check off the business type and list below the required information for the type of business selected.
MUST BE COMPLETED IN FULL**

- ☐ Corporation: LIST ALL OFFICERS and any 10% and greater shareholder (If the corporation only has one officer, please write
- ☐ Professional Corporation: LIST ALL OFFICERS and ALL SHAREHOLDERS "sole officer" after the officer's name.)
- ☐ Partnership: LIST ALL PARTNERS with any equity interest
- ☐ Limited Liability Company: LIST ALL MEMBERS with any equity interest
- ☐ Sole Proprietor

Note: "Officers" means President, Vice President with senior management responsibility, Secretary, Treasurer, Chief Executive Officer or Chief Financial Officer of a corporation, or any person routinely performing such functions for a corporation.

Also Note: "N/A will not be accepted as a valid response. Where applicable, indicate "None."

All Officers of a Corporation or PC

**10% and greater shareholders of a corporation
or all shareholders of a PC**

All Equity partners of a Partnership

All Equity members of a LLC

If you need additional space for listing of Officers, Shareholders, Partners or Members, please attach separate page.

Part 2: Disclosure of Contributions by the business entity or any person or entity whose contributions are attributable to the business entity.

- 1. Report below all contributions solicited or made during the 4 years immediately preceding the commencement of negotiations or submission of a proposal to any:**

Political organization organized under Section 527 of the Internal Revenue Code and which also meets the definition of a continuing political committee as defined in N.J.S.A. 19:44A-3(n)

- 2. Report below all contributions solicited or made during the 5 ½ years immediately preceding the commencement of negotiations or submission of a proposal to any:**

Candidate Committee for or Election Fund of any Gubernatorial or Lieutenant Gubernatorial candidate
State Political Party Committee
County Political Party Committee

- 3. Report below all contributions solicited or made during the 18 months immediately preceding the commencement of negotiations or submission of a proposal to any:**

Municipal Political Party Committee
Legislative Leadership Committee

Full Legal Name of Recipient _____

Address of Recipient _____

Date of Contribution _____ Amount of Contribution _____

Type of Contribution (i.e. currency, check, loan, in-kind) _____

Contributor Name _____

Relationship of Contributor to the Vendor _____

**If this form is not being completed electronically, please attach additional contributions on separate page.
Click the "Add a Contribution" tab to enter additional contributions.**

Remove Contribution

Add a Contribution

☐ **Check this box only if no political contributions have been solicited or made by the business entity or any person or entity whose contributions are attributable to the business entity.**

Part 3: Certification (Check one box only)

- (A) ☐ I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information**.
- (B) ☐ I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information**, except for the individuals and/or entities who are submitting separate Certification and Disclosure forms which are included with this submittal.
- (C) ☐ I am certifying on behalf of the business entity only; any remaining persons or entities whose contributions are attributable to the business entity (as listed on Page 1) have completed separate Certification and Disclosure forms which are included with this submittal.
- (D) ☐ I am certifying as an individual or entity whose contributions are attributable to the business entity.

I hereby certify as follows:

- 1. I have read the Information and Instructions accompanying this form prior to completing the certification on behalf of the business entity.**
- 2. All reportable contributions made by or attributable to the business entity have been listed above.**

3. The business entity has not knowingly solicited or made any contribution of money, pledge of contribution, including in-kind contributions, that would bar the award of a contract to the business entity unless otherwise disclosed above:

- a) Within the 18 months immediately preceding the commencement of negotiations or submission of a proposal for the contract or agreement to:
- (i) A candidate committee or election fund of any candidate for the public office of Governor or Lieutenant Governor or to a campaign committee or election fund of holder of public office of Governor or Lieutenant Governor; OR
 - (ii) Any State, County or Municipal political party committee; OR
 - (iii) Any Legislative Leadership committee.
- b) During the term of office of the current Governor or Lieutenant Governor to:
- (i) A candidate committee or election fund of a holder of the public office of Governor or Lieutenant Governor; OR
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
- c) Within the 18 months immediately preceding the last day of the sitting Governor or Lieutenant Governor's first term of office to:
- (i) A candidate committee or election fund of the incumbent Governor or Lieutenant Governor; OR
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.

4. During the term of the contract/agreement the business entity has a continuing responsibility to report, by submitting a new Certification and Disclosure form, any contribution it solicits or makes to:

- (a) Any candidate committee or election fund of any candidate or holder of the public office of Governor or Lieutenant Governor; OR
- (b) Any State, County or Municipal political party committee; OR
- (c) Any Legislative Leadership committee.

The business entity further acknowledges that contributions solicited or made during the term of the contract/agreement may be determined to be a material breach of the contract/agreement.

5. During the two-year certification period the business entity will report any changes in its ownership structure (including the appointment of an officer within a corporation) by submitting a new Certification and Disclosure form indicating the new owner(s) and reporting said owner(s) contributions.

I certify that the foregoing statements in Parts 1, 2 and 3 are true. I am aware that if any of the statements are willfully false, I may be subject to punishment.

Signed Name _____ Print Name _____

Title/Position _____ Date _____

Procedure for Submitting Form(s)

The contracting State Agency should submit this form to the Chapter 51 Review Unit when it has been required as part of a contracting process. The contracting State Agency should submit a copy of the completed and signed form(s), to the Chapter 51 Unit and retain the original for their records.

The business entity should return this form to the contracting State Agency. The business entity can submit this form directly to the Chapter 51 Review Unit only when it -

- Is approaching its two-year certification expiration date and wishes to renew certification;
- Had a change in its ownership structure; OR
- Made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Forms should be submitted either electronically to: cd134@treas.nj.gov , or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625.



**STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF PURCHASE AND PROPERTY**

**33 WEST STATE STREET, P.O. BOX 0230
TRENTON, NEW JERSEY 08625-0230**

**VENDOR/BIDDER CERTIFICATION AND POLITICAL CONTRIBUTION DISCLOSURE FORM
PUBLIC LAW 2005, CHAPTER 271**

CONTRACT #: _____ **VENDOR/BIDDER:** _____

At least ten (10) days prior to entering into the above-referenced Contract, the Vendor/Bidder must complete this Certification and Political Contribution Disclosure Form in accordance with the directions below and submit it to the State contact for the referenced Contract.

NOTE that the disclosure requirements under Public Law 2005, Chapter 271 are separate and different from the disclosure requirements under Public Law 2005, Chapter 51 (formerly Executive Order 134). Although no Vendor/Bidder will be precluded from entering into a contract by any information submitted on this form, a Vendor's/Bidder's failure to fully, accurately and truthfully complete this form and submit it to the appropriate State agency may result in the imposition of fines by the New Jersey Election Law Enforcement Commission.

DISCLOSURE

The following is the required Vendor/Bidder Disclosure of all Reportable Contributions made in the twelve (12) months prior to and including the date of signing of this Certification and Disclosure to: (i) any State, county, or municipal committee of a political party, legislative leadership committee, candidate committee of a candidate for, or holder of, a State elective office, or (ii) any entity that is also defined as a "continuing political committee" under N.J.S.A. 19:44A-3(n) and N.J.A.C. 19:25-1.

The Vendor/Bidder is required to disclose Reportable Contributions by: the Vendor/Bidder itself; all persons or other business entities owning or controlling more than 10% of the profits of the Vendor/Bidder or more than 10% of the stock of the Vendor/Bidder, if the Vendor/Bidder is a corporation for profit; a spouse or child living with a natural person that is a Vendor/Bidder; all of the principals, partners, officers or directors of the Vendor/Contractor and all of their spouses; any subsidiaries directly or indirectly controlled by the Vendor/Bidder; and any political organization organized under section 527 of the Internal Revenue Code that is directly or indirectly controlled by the Vendor/Bidder, other than a candidate committee, election fund, or political party committee.

"Reportable Contributions" are those contributions that are required to be reported by the recipient under the "New Jersey Campaign Contributions and Expenditures Reporting Act," P.L. 1973, c.83 (C.19:44A-1 et seq.), and implementing regulations set forth at N.J.A.C. 19:25-10.1 et seq. As of January 1, 2005, contributions in excess of \$300 during a reporting period are deemed "reportable."

Name and Address of Committee to which a Reportable Contribution was made	Date of Reportable Contribution	Amount of Reportable Contribution	Contributor's Name
<i>Indicate "NONE" if no Reportable Contribution was made.</i>			
		\$	
		\$	
		\$	
		\$	
<i>Attach additional sheets if necessary</i>			

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of **my** agreement(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.

Signature

Date

Print Name and Title



DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

BID SOLICITATION # AND TITLE: _____

VENDOR/BIDDER NAME: _____

Pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.25 and P.L. 2021, c.4) any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must certify that neither the person nor entity, nor any of its parents, subsidiaries, or affiliates, is identified on the New Jersey Department of the Treasury's Chapter 25 List as a person or entity engaged in investment activities in Iran. The Chapter 25 list is found on the Division's website at <https://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. Vendors/Bidders must review this list prior to completing the below certification. If the Director of the Division of Purchase and Property finds a person or entity to be in violation of the law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

CHECK THE APPROPRIATE BOX

I certify, pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.25 and P.L. 2021, c.4), that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of the Treasury's Chapter 25 List of entities determined to be engaged in prohibited activities in Iran.

OR

I am unable to certify as above because the Vendor/Bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of the Treasury's Chapter 25 List. I will provide a detailed, accurate and precise description of the activities of the Vendor/Bidder, or one of its parents, subsidiaries or affiliates, has engaged in regarding investment activities in Iran by completing the information requested below.

Entity Engaged in Investment Activities
Relationship to Vendor/ Bidder
Description of Activities

Duration of Engagement
Anticipated Cessation Date

Attach Additional Sheets If Necessary.

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of my agreement(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.

Signature

Date

Print Name and Title

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

FEDERAL NON-DEBARMENT CERTIFICATION

STANDARD BID DOCUMENT REFERENCE	
Name of Form:	FEDERAL NON-DEBARMENT CERTIFICATION
Statutory Reference:	N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)
Description:	Meets statutory criteria for certification of non-debarment by a federal government agency.

Summary of the Certification Requirements under N.J.S.A. 52:32-44.1

Pursuant to state law any natural person, company, firm, association, corporation, or other entity prohibited, or “debarred,” from contracting with the federal government agencies, shall also be prohibited from contracting for public work in the state of New Jersey. This prohibition also extends to any affiliate organization(s) held by or subject to the control of an entity of that prohibited person or entity.

Prior to awarding a contract for public work a local units must obtain written certification from the contracting person or entity through the form below, attesting to their non-debarment from contracting with federal government agencies. Contracting units are reminded that they must fill-in the boilerplate information in the certification sections of Parts II through IV regarding their name and type of contracting unit before using the form.

Meadowlands Arena Lower Roof Replacement
PROJECT CN-276

**CERTIFICATION OF NON-DEBARMENT
FOR FEDERAL GOVERNMENT CONTRACTS**

N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)

This certification shall be completed, certified to, and submitted to the contracting unit prior to contract award, except for emergency contracts where submission is required prior to payment.

PART I: VENDOR INFORMATION	
Individual or Organization Name	
Address of Individual or Organization	
DUNS Code (if applicable)	
CAGE Code (if applicable)	
Check the box that represents the type of business organization:	

- ☐ Sole Proprietorship (skip Parts III and IV) ☐ Non-Profit Corporation (skip Parts III and IV)
- ☐ For-Profit Corporation (any type) ☐ Limited Liability Company (LLC) ☐ Partnership
- ☐ Limited Partnership ☐ Limited Liability Partnership (LLP)
- ☐ Other (be specific): _____

PART II – CERTIFICATION OF NON-DEBARMENT: Individual or Organization			
I hereby certify that the individual or organization listed above in Part I is not debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the New Jersey Sports and Exposition Authority is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the municipality to notify the municipality in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the municipality , permitting the municipality to declare any contract(s) resulting from this certification void and unenforceable.			
Full Name (Print):		Title:	
Signature:		Date:	

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

PART III – CERTIFICATION OF NON-DEBARMENT: Individual or Entity Owning Greater than 50 Percent of Organization	
Section A (Check the Box that applies)	
<input type="checkbox"/>	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of its voting stock, or of the partner in the partnership who owns more than 50 percent interest therein, or of the member of the limited liability company owning more than 50 percent interest therein, as the case may be.
Name of Individual or Organization	
Home Address (for Individual) or Business Address	
OR	
<input type="checkbox"/>	No one stockholder in the corporation owns more than 50 percent of its voting stock, or no partner in the partnership owns more than 50 percent interest therein, or no member in the limited liability company owns more than 50 percent interest therein, as the case may be.
Section B (Skip if no Business entity is listed in Section A above)	
<input type="checkbox"/>	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of the voting stock of the organization's parent entity, or of the partner in the partnership who owns more than 50 percent interest in the organization's parent entity, or of the member of the limited liability company owning more than 50 percent interest in organization's parent entity, as the case may be.
Stockholder/Partner/Member Owning Greater Than 50 Percent of Parent Entity	
Home Address (for Individual) or Business Address	
OR	
<input type="checkbox"/>	No one stockholder in the parent entity corporation owns more than 50 percent of its voting stock, no partner in the parent entity partnership owns more than 50 percent interest therein, or no member in the parent entity limited liability company owns more than 50 percent interest therein, as the case may be.
Section C – Part III Certification	

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

I hereby certify that no individual or organization that is debarred by the federal government from contracting with a federal agency owns greater than 50 percent of the **Organization listed above in Part I** or, if applicable, owns greater than 50 percent of a parent entity of _____. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the **New Jersey Sports and Exposition Authority** is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award **the municipality** to notify the **municipality** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the **municipality**, permitting the **municipality** to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

Part IV – CERTIFICATION OF NON-DEBARMENT: Contractor – Controlled Entities

Section A

☐

Below is the name and address of the corporation(s) in which the **Organization listed in Part I** owns more than 50 percent of voting stock, or of the partnership(s) in which the **Organization listed in Part I** owns more than 50 percent interest therein, or of the limited liability company or companies in which the **Organization listed above in Part I** owns more than 50 percent interest therein, as the case may be.

Name of Business Entity

Business Address

****Add additional sheets if necessary****

OR

☐

The **Organization listed above in Part I** does not own greater than 50 percent of the voting stock in any corporation and does not own greater than 50 percent interest in any partnership or any limited liability company.

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

Section B (skip if no business entities are listed in Section A of Part IV)			
<input type="checkbox"/>	Below are the names and addresses of any entities in which an entity listed in Part III A owns greater than 50 percent of the voting stock (corporation) or owns greater than 50 percent interest (partnership or limited liability company).		
Name of Business Entity Controlled by Entity Listed in Section A of Part IV		Business Address	
Add additional Sheets if necessary			
OR			
<input type="checkbox"/>	No entity listed in Part III A owns greater than 50 percent of the voting stock in any corporation or owns greater than 50 percent interest in any partnership or limited liability company.		
Section C – Part IV Certification			
<p>I hereby certify that the Organization listed above in Part I does not own greater than 50 percent of any entity that that is debarred by the federal government from contracting with a federal agency and, if applicable, does not own greater than 50 percent of any entity that in turns owns greater than 50 percent of any entity debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the New Jersey Sports and Exposition Authority is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the municipality to notify the municipality in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the municipality, permitting the municipality to declare any contract(s) resulting from this certification void and unenforceable.</p>			
Full Name (Print):		Title:	
Signature:		Date:	



MACBRIDE PRINCIPLES FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

BID SOLICITATION # AND TITLE: _____

VENDOR NAME: _____

Pursuant to Public Law 1995, c. 134, a responsible Vendor/Bidder is required to provide a certification in compliance with the MacBride Principles and Northern Ireland Act of 1989. Pursuant to N.J.S.A. 52:34-12.2, Vendor/Bidder must complete the certification below by checking one of the two options listed below and signing where indicated. If a Vendor/Bidder that would otherwise be awarded a purchase, contract or agreement does not complete the certification, then the Director may determine, in accordance with applicable law and rules, that it is in the best interest of the State to award the purchase, contract or agreement to another Vendor/Bidder that has completed the certification and has submitted a bid within five (5) percent of the most advantageous bid. If the Director finds contractors to be in violation of the principles that are the subject of this law, he/she shall take such action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

I, the undersigned, on behalf the Vendor/Bidder, certify pursuant to N.J.S.A. 52:34-12.2 that:

CHECK THE APPROPRIATE BOX

The Vendor/Bidder has no business operations in Northern Ireland; or

OR

The Vendor/Bidder will take lawful steps in good faith to conduct any business operations it has in Northern Ireland in accordance with the MacBride principles of nondiscrimination in employment as set forth in section 2 of P.L. 1987, c. 177 (N.J.S.A. 52:18A-89.5) and in conformance with the United Kingdom's Fair Employment (Northern Ireland) Act of 1989, and permit independent monitoring of its compliance with those principles.

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I may be subject to criminal prosecution under the law, and it will constitute a material breach of my contract(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.

Signature

Date

Print Name and Title



**CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES
IN RUSSIA OR BELARUS PURSUANT TO P.L.2022, c.3**

CONTRACT / BID SOLICITATION TITLE _____

CONTRACT / BID SOLICITATION No. _____

CHECK THE APPROPRIATE BOX

I, the undersigned, am authorized by the person or entity seeking to enter into or renew the contract identified above, to certify that the Vendor/Bidder is not engaged in prohibited activities in Russia or Belarus as such term is defined in [P.L.2022, c.3](#),¹ section 1.e, except as permitted by federal law.

I understand that if this statement is willfully false, I may be subject to penalty, as set forth in P.L.2022, c.3, section 1.d.

OR

I, the undersigned am unable to certify above because the person or entity seeking to enter into or renew the contract identified above, or one of its parents, subsidiaries, or affiliates may have engaged in prohibited activities in Russia or Belarus. A detailed, accurate and precise description of the activities is provided below.

Failure to provide such description will result in the Quote being rendered as non-responsive, and the Department/Division will not be permitted to contract with such person or entity, and if a Quote is accepted or contract is entered into without delivery of the certification, appropriate penalties, fines and/or sanctions will be assessed as provided by law.

Description of Prohibited Activity

Attach Additional Sheets If Necessary.

If you certify that the bidder is engaged in activities prohibited by P.L. 2022, c. 3, the bidder shall have 90 days to cease engaging in any prohibited activities and on or before the 90th day after this certification, shall provide an updated certification. If the bidder does not provide the updated certification or at that time cannot certify on behalf of the entity that it is not engaged in prohibited activities, the State shall not award the business entity any contracts, renew any contracts, and shall be required to terminate any contract(s) the business entity holds with the State that were issued on or after the effective date of P.L. 2022, c. 3.

Signature of Authorized Representative

Date

Print Name and Title of Authorized Representative

Vendor Name

¹ Engaged in prohibited activities in Russia or Belarus" means (1) companies in which the Government of Russia or Belarus has any direct equity share; (2) having any business operations commencing after the effective date of this act that involve contracts with or the provision of goods or services to the Government of Russia or Belarus; (3) being headquartered in Russia or having its principal place of business in Russia or Belarus, or (4) supporting, assisting or facilitating the Government of Russia or Belarus in their campaigns to invade the sovereign country of Ukraine, either through in-kind support or for profit.

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

SECTION 00500

**STATE OF NEW JERSEY
NEW JERSEY SPORTS & EXPOSITION AUTHORITY**

CONTRACT for PROJECT CN-276

This Contract, effective on the latest date of signature at the last page, by and between the New Jersey Sports & Exposition Authority, One DeKorte Park Plaza, Lyndhurst, New Jersey, 07071, hereinafter called the NJSEA, the party of the first part, and:

hereinafter called the Contractor, the party of the second part.

WITNESSETH, that whereas the NJSEA intends to execute the Contract for NJSEA Meadowlands Arena Lower Roof Replacement hereinafter called the Project or the Work, in accordance with Specifications, and other Contract Documents.

1.0 PARTS OF CONTRACT:

1.1 The parties agree that the conditions contained in the following documents which comprise and are hereinafter called the Contract Documents are made part of this Contract and are binding on both parties as if all conditions contained in the Contract Documents were set forth in this Contract:

- 00010 Advertisement for Bids
- 00100 Instructions to Bidders
- 00300 Bid
- 00400 Bid Forms
- 00500 Contract
- 00700 General Conditions
- 00800 Specific Project Requirements
- 00900 Environmental Requirements
- 01000 General Requirements
- 02000 Technical Specifications
 - Photos and Drawings
 - Addenda
 - Change Orders

2.0 TIME FOR COMPLETION:

2.1 Work under this Contract shall be completed within 180 consecutive calendar days from the date specified from the Notice-To-Proceed

2.2 **The Contractor shall pay to the NJSEA for each and every calendar day that they shall be in default in completing the work within the time stipulated, liquidated**

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

damages in the sum of five hundred (\$500) per day. Please note that there is no substantial completion for this work. All final submittals (as built, subcontractor releases) as well as all work must be completed within the 180 days.

WITNESSETH, that the said CONTRACTOR, for and in consideration of the payments specified hereinafter and agreed to be made by the NJSEA, hereby covenants and agrees to furnish and deliver all the materials and perform all the work required to be furnished in and about the described premises in strict and entire conformance with all of the Contract Documents.

3.0 SUBCONTRACTORS:

3.1 The Contractor agrees to bind every subcontractor by the terms of the Contract Documents. The Contract Documents shall not be construed as creating any contractual relations between any subcontractor and the NJSEA. Relations between the Contractor and subcontractors are further defined in the GENERAL CONDITIONS.

4.0 WORK:

4.1 The Contractor agrees to furnish all the necessary labor, materials, equipment, tools, and services necessary to perform and complete all work required for the construction of the Project, in strict compliance with the Contract Documents herein mentioned, which are hereby made a part of the Contract, including the following Addenda:

ADDENDUM No.

DATE

5.0 PRICES FOR WORK:

5.1 The NJSEA shall pay based on the prices in the bid, and the Contractor shall receive the prices stipulated in the bid as full compensation for everything furnished and performed by the Contractor under this Contract, including all work required but not specifically mentioned, and also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all risks of every description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the work as herein specified, and for well and faithfully completing the work and the whole thereof, as herein provided.

**Meadowlands Arena Lower Roof Replacement
PROJECT CN-276**

6.0 PAYMENTS:

6.1 Payments will be made in accordance with the GENERAL CONDITIONS

6.2 In consideration of the covenants contained herein, the NJSEA hereby agrees to pay the CONTRACTOR for said work.

The cost for the Work of this Contract shall not exceed \$_____.

\$ _____
(Amount in Words)

7.0 WAIVERS:

7.1 Neither the inspection by the NJSEA nor any of its agents, nor any orders, measurements of certificate by the Project Representative, nor any order by the NJSEA for the payment of money nor payment for, nor acceptance of, the whole nor any part of the work by the NJSEA nor any extension of time nor any possession taken by the NJSEA or its employees, shall operate as a waiver of any provision of this Contract, or of any power herein reserved to the NJSEA, or any right to damages herein provided, nor shall any waiver of any breach of this Contract be held to be a waiver of any other or subsequent breach. Any remedy provided in this Contract shall be taken and construed as cumulative, that is, in addition to each and every other remedy herein provided, and in addition to all other suits, actions, or legal proceedings, the NJSEA shall also be entitled as of right to writ of injunction against any breach of any of the provisions of this Contract.

8.0 INDEMNIFICATION:

8.1 The Contractor shall assume all risk of, and responsibility for, and agrees to indemnify, defend, and save harmless the NJSEA, the project Representative and their employees from and against any and all claims, demands, suits, actions, recoveries, judgments and costs and expenses in connection therewith on account of the loss of life, property, injury, or damage to the person, body or property of any person or persons whatsoever, which shall arise from or result directly or indirectly from the work and/or materials supplied under this Contract. This indemnification obligation is not limited by, but is in addition to, the insurance obligations contained in this Contract.

9.0 PROJECT REPRESENTATIVE'S STATUS DURING THE PROJECT:

9.1 All work under this Contract shall be done under the observation of the Project Representative. The Project Representative shall decide any and all questions that may arise as to the quality and acceptability of materials furnished, work performed, rate of progress of work, interpretation of Plans and Specifications, and all questions as to the acceptable fulfillment of the Contract on the part of the Contractor.

Meadowlands Arena Lower Roof Replacement
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- 9.2 The Project Representative shall be an employee or agent of NJSEA. In addition, the Project Representative may designate additional individuals to act on his/her behalf on a temporary basis, depending on the type of work occurring at the Project Site. At all times, these individuals shall have the same responsibilities and authority as the Project Representative. In addition, throughout the Contract Documents, the term "Project Representative" refers to the Project Representative and his/her designates.
- 9.3 The Project Representative shall make visits to the site to observe the progress and quality of the executed Work and to determine if it is proceeding in accordance with the Contract Documents. On the basis of such visits and observations, the Project Representative will keep the NJSEA informed of the quality and progress of the Work.
- 9.4 The Project Representative may authorize minor variations in the Work, which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. If the Contractor believes that a variation issued as minor justifies an increase in the Contract Price and/or an extension of the Contract Time, the Contractor may make a claim therefore.
- 9.5 The Project Representative may reject Work believed to be defective. The Project Representative also has the authority to require special inspection and testing of the Work, whether or not it has been fabricated, installed or completed.
- 9.6 The Project Representative shall not be responsible for the means, methods, techniques, sequences or procedures of the Contractor's performance of the Work, or the safety programs and precautions incident thereto. The Project Representative will not be responsible for the failure of the Contractor to furnish or perform the Work in accordance with the Contract Documents.
- 9.7 The Project Representative will not be responsible for acts of omission by the Contractor or any of his subcontractors or suppliers furnishing or performing any of the Work.
- 10.0 CONTRACTOR'S BANKRUPTCY:**
- 10.1 In the event of bankruptcy of the Contractor, the NJSEA shall use the Performance and Payment Bond to complete the project. The Performance and Payment Bond shall specifically include coverage and protection against bankruptcy of the Contractor.

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11.0 SUCCESSORS AND ASSIGNS:

11.1 This Contract and all of the covenants hereof shall inure to the benefit of and be binding upon the NJSEA and the Contractor respectively and partners, successors, assigns and legal representatives. Neither the NJSEA nor the Contractor shall have the right to assign, transfer or sublet his interests or obligations hereunder without notice to and written consent of the other party.

IN WITNESS THEREOF, _____
and the NJSEA have executed this Contract at the place and on the date immediately adjacent to their respective signatures.

FOR THE CONTRACTOR:

(Witness)

(Typed Name of Firm)

(Date)

(Signature of Bidder)

(Typed Name of Bidder)

(Typed Title of Bidder)

FOR THE NJSEA:

(Witness)

Vincent Prieto,
President and Chief Executive Officer

(Date)

END OF SECTION 00500

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SECTION 00700

GENERAL CONDITIONS

1.0 DEFINITIONS:

- 1.1 Whenever used in these Contract Documents, the following terms and abbreviations have the meanings indicated, which are applicable to both the singular and plural thereof:

Addendum(a) - Written instructions issued prior to the opening of Bids which clarify, correct or change the bidding requirements or the Contract Documents.

Bid - The proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

Bidder - Any corporation, partnership, or individual who submits a bid for the Work.

Change Order - A document recommended by the Project Representative, signed by the Contractor and the NJSEA, authorizing an addition, deletion or revision in the Work, an adjustment in the Contract Price, Time, and/or Conditions, and issued on or after the Effective Date of the Contract.

Contract - The written Contract between the NJSEA and the Contractor covering the Work to be performed. Other Contract Documents are attached to it and made a part thereof, as provided in the Contract.

Contractor - The company to whom the Contract has been awarded and who is responsible for performing the Work.

Day - A calendar period of twenty-four (24) hours, beginning with midnight and ending just before the following midnight, shall constitute a day. When unmodified, it shall mean a calendar day, and not a working day.

NJSEA - The New Jersey Sports & Exposition Authority.

NJDEP or DEP - New Jersey Department of Environmental Protection

Project - The total construction or obligation under the Contract, of which the Work to be provided may be the whole or a part, as indicated elsewhere in the Contract Documents.

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Project Representative - The person, firm, or corporation named by the NJSEA to be its representative for the Project.

Successful Bidder - The Contractor, the lowest qualified, responsible bidder to whom the NJSEA awarded the Contract.

Work - The entire completed construction, or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

Working Day - A day on which the NJSEA is open for business.

SCHEDULED HOLIDAYS

Monday, January 2, 2023 (Observed)	New Year's Day
Monday, January 16, 2023	Martin Luther King, Jr. Day
Monday, February 20, 2023	President's Day
Friday, April 7, 2023	Good Friday
Monday, May 29, 2023	Memorial Day
Monday, June 19, 2023	Juneteenth
Tuesday, July 4, 2023	Independence Day
Monday, September 4, 2023	Labor Day
Monday, October 9, 2023	Columbus Day
Tuesday, November 7, 2023	Election Day
Friday, November 10, 2023 (Observed)	Veteran's Day
Thursday, November 23, 2023	Thanksgiving Day
Monday, December 25, 2023	Christmas Day

2.0 PRELIMINARY MATTERS:

- 2.1 The Contractor shall deliver the executed Contracts bonds, insurance certificates, and other documents as the Contractor may be required to furnish at the times required by the Contract Documents.
- 2.2 The NJSEA shall furnish the Contractor a maximum of six copies of the Contract Documents for his use in the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.
- 2.3 The Contract Time will commence to run on the starting date given in the Notice-To-Proceed. A Notice-To-Proceed may be issued any time within thirty (30) days after the Contract is fully executed.

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- 2.4 The Contractor shall start to perform the Work on the date when the Contract Time commences to run. No Work shall be performed at the site prior to that date.
- 2.5 Before undertaking each part of the Work, the Contractor shall carefully study and compare the Contract Documents and the field conditions, checking and verifying pertinent figures shown in the Documents with applicable field measurements. The Contractor shall promptly report in writing to the Project Representative any conflict, error, or discrepancy that he may discover; and shall obtain a written interpretation or clarification from the Project Representative before proceeding with any Work affected thereby. However, the Contractor shall not be liable to the NJSEA or the Project Representative for failure to report any conflict, error, or discrepancy in the Contract Documents; unless the Contractor had actual knowledge, or should reasonably have known thereof.
- 2.6 The progress schedule will be accepted by the Project Representative as providing an orderly progression of the Work to completion, and a workable arrangement for reviewing and processing the required submittals. Such acceptance will not impose on the Project Representative any responsibility for the sequencing, scheduling, or progress of the Work; or relieve the Contractor of his full responsibility therefore.
- 2.7 Except where the Contract Documents specifically allow the reuse of existing materials, all materials and equipment provided by the Contractor shall be new and of good quality. They shall be applied, erected, installed, connected, tested, cleaned, and conditioned in accordance with the instructions of the applicable suppliers, unless otherwise specified in the Contract Documents.
- 2.8 Whenever materials or equipment are specified by using the name of a particular manufacturer, supplier, or proprietary item; the naming is intended to establish the type, function, and quality required. Unless the name is followed by words indicating no substitution will be permitted, substitute materials or equipment may be acceptable. If the Contractor wishes to furnish or use substitute materials or equipment, he shall make a written application to the Project Representative for acceptance thereof; certifying that the proposed substitutes will perform their functions adequately and achieve the results desired by the Contract Documents. The application shall also state that the evaluation and acceptance of the proposed substitutes will not prejudice the Contractor's achievement of on-time completion of the Work; regardless of any needed changes to the Contract Documents, or any other problems directly or indirectly associated with acceptance of the substitutes (including payment of any license fee or royalty). All variations from the Contract Documents must be identified in the application, along with the availability of spare parts, maintenance, repair, and

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replacement services. The application shall also contain an itemized list of all additional direct and indirect costs due to the acceptance of such substitutes. All of the above will be considered by the Project Representative in evaluating each application. The Project Representative may require the Contractor to furnish additional data about the proposed substitutes at the Contractor's expense.

- 2.9 Except in connection with safety or protection of the Work, property, or persons at the site or adjacent thereto; all work shall be performed during regular working hours. The Contractor shall not permit overtime work, or the performance of work on Saturdays, Sundays, or any NJSEA holidays without written approval from the NJSEA.
 - 2.10 Although it is understood that the Contractor must be permitted to select the equipment that will provide him with the most economical rate of production, and to devise his work methods and schedules to expedite the completion of the Work; it is not intended that the Contractor will be permitted to use equipment or methods which may damage any part of the site or nearby properties, or conflict with any state or local laws.
 - 2.11 The duties and obligations imposed by this Section (and the rights and remedies available hereunder to the parties hereto) are in addition to any rights and remedies available to the parties; whether imposed or available by applicable regulations or laws, or by special warranties, guarantees, or other provisions of the Contract Documents. This Section is not to be construed as limiting in any way the other rights and remedies outlined above. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply. All representations, warranties, and guarantees made in the Contract Documents will survive completion, final payment, and termination of the Contract.
- 3.0 CONTRACT DOCUMENTS: INTENT, AMENDMENT, AND RE-USE:**
- 3.1 The Contract Documents comprise the entire Contract between the NJSEA and the Contractor concerning the Work. The Contract Documents are complementary (what is called for by one is as binding as if called for by all). The Contract Documents will be construed in accordance with the law of the place of the Project.
 - 3.2 It is the intent of the Contract Documents to describe a functionally complete Project to be performed in accordance with the Contract Documents. Any Work, materials, or equipment that may reasonably be inferred as being necessary to produce the intended result shall be supplied, whether or not specifically mentioned in the Documents. When words or phrases having a well-known

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technical or trade meaning are used to describe work, materials, or equipment; such words shall be interpreted in accordance with that meaning. Clarifications and interpretations of the Contract Documents shall be issued by the Project Representative as needed, in accordance with paragraph 8.3.

- 3.3 Reference to standards, specifications, manuals, and/or codes of any technical society, organization, or association, or to the laws or regulations of any governmental authority (whether such reference be specific or implied), shall mean the latest standards, specifications, manuals, codes, laws, or regulations in effect at the time of bid opening, unless specifically stated otherwise in the Contract Documents. If the Contractor finds a conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any of the above references, during the performance of the Work; he shall immediately report it to the Project Representative in writing. Before proceeding with affected work, the Contractor shall obtain a written interpretation or clarification from the Project Representative (except for an emergency authorized in accordance with paragraph 6.16). The Contractor shall not be liable to the NJSEA or the Project Representative for failure to report any such conflict, error, ambiguity, or discrepancy; unless he knew or should reasonably have known thereof.
- 3.4 Except as otherwise specifically stated therein, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
- A. The provision of any such standard, specification, manual or code.
 - B. The provision of any such laws or regulations applicable to the performance of the Work (unless such an interpretation would result in a violation of such law or regulation).
- 3.5 No provision of any such standard, specification, manual or code shall change the duties and responsibilities of the NJSEA, the Contractor, or the Project Representative, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision shall be effective to assign to the NJSEA, the Project Representative, or any of the Project Representative's consultants, agents, or employees any duty or authority to supervise or direct the furnishing or performance of the Work, or any duty or authority to undertake responsibilities inconsistent with any other provision of the Contract Documents.
- 3.6 Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as approved" or terms of like effect or import, or the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory" or

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adjectives of like effect or import, are used to describe a requirement, direction, review, or judgment of the Project Representative regarding the Work; it is intended that such requirement, direction, review or judgment will be solely to generally evaluate the completed Work for compliance with the Contract Documents and conformance with the design concept of the completed Project. The use of any such terms or adjectives shall not assign to the Project Representative any duty or authority to supervise or direct the furnishing or performance of the Work; or any duty or authority to undertake responsibilities contrary to any other provision of the Contract Documents.

3.7 The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work, or to modify the terms and conditions thereof, by a Change Order.

3.8 Neither the Contractor, nor any subcontractor, supplier, organization, or other person performing or furnishing any of the Work, shall have or acquire any title to, or ownership rights in, any of the Contract Documents or copies thereof. They shall not reuse them on extensions of this, or any other project without the written consent of the NJSEA and the Project Representative, and without the specific written verification or adaptation by the Project Representative.

4.0 AVAILABILITY OF LANDS, REFERENCE POINTS, SUBSURFACE AND PHYSICAL CONDITIONS:

4.1 The NJSEA shall furnish, as indicated in the Contract Documents, the lands upon which the Work shall be performed, rights-of-way and easements for access thereto, and such other lands designated for the use of the Contractor. Easements for permanent structures or permanent changes to the existing facilities will be obtained and paid for by the NJSEA, unless otherwise noted in the Contract Documents. The Contractor shall provide for all additional lands, and access thereto, that may be required for any temporary construction facilities, or the storage of materials and equipment.

4.2 The NJSEA shall furnish, as indicated on the Contract Drawings, reference points so the Contractor can properly proceed with the Work. The Contractor shall be responsible for laying out the Work. The Contractor shall protect and preserve the established reference points and shall not change or relocate the reference points without written approval of the NJSEA. The Contractor shall report to the Project Representative whenever any reference point is lost, damaged or destroyed and shall pay for the reestablishment of all lost, damaged or destroyed reference points. The reference points shall be reestablished by a surveyor licensed in the State of New Jersey.

4.3 The information shown and/or described in the Contract Documents with respect to existing underground facilities at or contiguous to the site is based on

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the best available data. The NJSEA and the Project Representative shall not be responsible for the accuracy or completeness of any such information. The Contractor shall review and check all such information, and determine the exact location of all underground facilities in the field. The Contractor shall be responsible for the safety and protection of underground facilities during construction, and shall repair any damage thereto resulting from the Work.

- 4.4 If an underground facility, which was not shown in the Contract Documents, is uncovered or revealed at or contiguous to the site; the Contractor shall promptly identify the owner of the facility, and give written notice to the owner of that facility, the NJSEA, and the Project Representative. The Contractor will cease work in the area, except in the case of an emergency. The Project Representative shall promptly review the location of the underground facility in relation to the contractual work in the area, and determine what change, if any, is required to the Contract Documents.
- 4.5 If the Contractor believes that any physical condition uncovered or revealed at the site differs materially from that shown in the Contract Documents; he shall immediately notify the Project Representative in writing. Before proceeding with affected work, the Contractor shall obtain a written interpretation or clarification from the Project Representative.
- 4.6 The Project Representative will review the Contractor's findings, determine the necessity of obtaining any additional explorations or tests with respect thereto; and advise the NJSEA and the Contractor of the Project Representative's conclusions in writing within a reasonable amount of time.
- 4.7 If the Project Representative concludes that there is a material difference between the conditions shown in the Contract Documents and those in the field; a Change Order will be issued to document the increase or decrease in the Contract Price, and/or an extension or reduction of the Contract Time, attributable to the difference in the conditions.

5.0 BONDS AND INSURANCE:

- 5.1 Refer to the SPECIFIC PROJECT REQUIREMENTS for information regarding bonds and insurance.

6.0 CONTRACTOR'S RESPONSIBILITIES:

- 6.1 The Contractor shall be responsible for obtaining and paying all construction permits and licenses; and shall pay all inspection fees associated with the prosecution of the Work. The Contractor shall also schedule and pay for all utility connections required for the Work.

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- 6.2 The Contractor shall perform the Work in accordance with the Contract Documents. The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of his work. The Contractor shall be responsible for the finished Work complying accurately with the Contract Documents.
- 6.3 The Contractor shall provide someone on staff that is available to the NJSEA to resolve contractual items that the foreman cannot, for example, scheduling of equipment or crew. There is no separate pay for any other personnel.
- 6.4 The Contractor shall be responsible for providing competent, suitably qualified personnel to survey, layout, and perform the Work required by the Contract Documents. The Contractor shall maintain good discipline and order at the site. The Contractor shall be responsible for removing any person from the site who appears to be incompetent, unfaithful, disorderly, or otherwise unsatisfactory. Said person shall not again be employed at the site without the written consent of the NJSEA.
- 6.5 The Contractor shall be responsible for compliance with the provisions of the Contract Work Hours and Safety Standards Act, Public Law 87-581.
- 6.6 The Contractor and his subcontractors shall give preference in the hiring of workers to qualified local residents, with first preference being given to citizens of the United States who have served in the armed forces of the United States, and have been honorably discharged and from active duty.
- 6.7 The Contractor shall be responsible for the proper and timely submittal of the required documents for all equipment and materials so as to not delay the progress of the Work. The Contractor shall determine delivery availability for all items to be furnished and shall order all long-lead items as soon as possible after the award of the contract, to ensure delivery in time to complete the work in the time available.
- 6.8 The Contractor shall be fully responsible to the NJSEA and the Project Representative for all acts and omissions of his subcontractors, suppliers, organizations, and other persons performing or furnishing any of the Work. Nothing in the Contract Documents shall create any contractual relationship between the NJSEA or the Project Representative, and any such subcontractor, supplier, organization, or other person.
- 6.9 The Contractor shall give all notices and comply with all laws and regulations applicable to furnishing and performing the Work. If the Contractor performs any work that is contrary to such laws and/or regulations, he shall be

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responsible for all costs arising there from. If the Contractor observes that the Contract Documents are at variance with these laws and/or regulations, he shall promptly notify the Project Representative, in writing. Any necessary changes to the Work will be authorized by a Change Order.

- 6.10 If the Contractor elects to remove, replace, or relocate any poles, utilities, or structures during the performance of the Work; he shall be responsible for making all the necessary arrangements and obtaining all the necessary permits and approvals without the involvement of the NJSEA or the Project Representative.
- 6.11 The Contractor shall be responsible for all damages resulting from the performance of the Work. Should any claim be made against the NJSEA and/or the Project Representative as a result of the performance of the Work; the Contractor shall attempt to promptly settle with such other party.
- 6.12 The Contractor shall not load any part of the Work in a manner that will endanger the Work. The Contractor shall be responsible for damage caused to the Work and to adjacent property, subject to said dangerous stresses or pressures.
- 6.13 The Contractor shall be responsible for initiating, maintaining, and supervising all safety programs and precautions regarding the Work. The Contractor shall comply with all applicable laws and regulations for the safety and protection of persons and property; and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall remedy all damage, injury, or loss to any persons or property caused by the Contractor, or any of his subcontractors, suppliers, organizations, or other persons directly or indirectly employed by any of them. The Contractor's duties and responsibilities for safety and protection shall continue until the Project Representative has issued a notice to the NJSEA and the Contractor that the Work has been completed and is acceptable.
- 6.14 The Contractor shall be responsible for repairing any damage caused by his operations that could affect public health and safety, within four hours; or the NJSEA may have the repairs made by others at the expense of the Contractor. The Contractor shall repair all other damage expeditiously. Until such time as said other damage is repaired by the Contractor and approved by the NJSEA, twice the amount of the Project Representative's cost estimate for the repairs will be withheld from the Contractor's progress payment.
- 6.15 In the event of an emergency affecting the safety or protection of persons, the Work, the site, or adjacent property; the Contractor shall be responsible to act to

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prevent threatened damage, injury, or loss without special instruction or approval from the Project Representative or the NJSEA.

- 6.16 The Contractor and his subcontractors shall protect the Work against any damage caused by the weather. If the Project Representative determines that any portion of Work has been damaged or injured by a failure on the part of the Contractor or his subcontractors to protect the Work; it shall be repaired, or removed and replaced, at the expense of the Contractor.
- 6.17 The Contractor shall be responsible for proceeding with the Work and adhering to the progress schedule during all disputes or disagreements with the NJSEA. No Work shall be delayed or postponed pending resolution of any disputes or disagreements.
- 6.18 If the Work is defective, or the Contractor fails to supply sufficiently skilled workers, suitable materials or equipment, or fails to furnish or perform the Work in a manner, which will guarantee conformance with the Contract Documents; the NJSEA or the Project Representative may order the Contractor to stop the Work until the cause for such order has been eliminated. However, this right of the NJSEA and the Project Representative to stop the Work shall not give rise to any duty on the part of either to exercise this right for the benefit of the Contractor, or any other party.
- 6.19 The Contractor and his subcontractors shall comply with the New Jersey Prevailing Wage Act and all amendments thereto. This Act is hereby made part of these Contract Documents as if it were included herein, in its entirety.
- 6.20 The Contractor shall maintain books, records, and other documents pertinent to the performance of the Work, in accordance with accepted accounting procedures and practices. The New Jersey Department of Labor, the NJSEA, and/or any of their duly authorized representatives shall have access to such books, records, and other documents for the purpose of inspection, auditing, and copying. The Contractor shall provide proper facilities for such access and inspection, and agrees to the disclosure of all information and reports resulting from access of the above records to any of the above agencies. Records shall be maintained and made available until three years from the date of final payment for the Project. Records which relate to any dispute, appeal, litigation, or settlement of claims arising out of such performance (or costs or items to which an audit exception has been taken); shall be maintained and made available until three years after the date of the resolution of each dispute, appeal, litigation, claim, or exception.

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- 6.21 The Contractor shall constantly give his personal attention to the faithful prosecution of the Work; and shall keep the Work under his personal control. The Contractor shall not sublet the Work as a whole or substantial part of the whole, without the previous written consent of the NJSEA. The Contractor shall not assign any of the Work, or any monies payable under this Contract (or his claim thereto), without the written consent of the NJSEA and the surety on the bond.
- 6.22 The Contractor shall pay to the NJSEA, and the NJSEA shall have the right to deduct the full amount of all expenses, losses, damages and costs from all monies due, or to become due, the Contractor as detailed in the SPECIFIC PROJECT REQUIREMENTS.
- 6.23 The Contractor shall take all necessary precautions to protect and preserve existing utilities, and improvements during all phases of the Work. The Contractor shall be solely responsible for any damage or disturbance of any existing utilities and improvements, and shall restore them to their original condition, at no cost to the NJSEA.
- 6.24 While performing the Work, the Contractor shall not encumber the premises with materials or equipment; and shall keep the premises free from accumulations of waste materials. At the completion of the Work, the Contractor shall remove all waste and surplus materials, tools, equipment, and machinery; and shall restore to original condition all property not designated for alteration by the Contract Documents.
- 6.25 The Contractor warrants and guarantees to the NJSEA and the Project Representative that all Work will be performed in accordance with the Contract Documents; and that the completed Project will not be defectively or improperly installed. The Contractor agrees that all work improperly performed shall be remedied, all defective Work shall be repaired or replaced, and all improperly installed Work shall be reinstalled correctly in accordance with the Contract Documents.
- 7.0 OTHER WORK:**
- 7.1 The NJSEA may perform other work by its own forces, have other work performed by utility owners, or let other direct contracts for other work at the site.
- 7.2 The Contractor shall afford the NJSEA, each utility owner, and other contractors, a reasonable opportunity for the introduction and storage of materials and equipment, and proper and safe access to the site for execution of such work. The Contractor shall properly connect and coordinate the work of others with

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the Work, as necessary. The Contractor shall not endanger any work of others; and will only alter the work of others with the written consent of the Project Representative and those who performed the work.

8.0 PROJECT REPRESENTATIVE'S STATUS DURING THE PROJECT:

- 8.1 The Project Representative shall be the NJSEA's representative for this Project. The Project Representative shall be the initial interpreter of the Contract Document requirements and judge of the acceptability of the Work thereunder. Any claims, disputes, and/or other matters relating to the above, or to changes in the Contract Price or Time, will initially be referred to the Project Representative, in writing. The Project Representative will render a decision, in writing, within a reasonable period of time.
- 8.2 The Project Representative shall make visits to the site to observe the progress and quality of the executed Work and to determine if it is proceeding in accordance with the Contract Documents. On the basis of such visits and observations, the Project Representative will keep the NJSEA informed of the quality and progress of the Work.
- 8.3 The Project Representative will issue with reasonable promptness such written clarifications or interpretations of the Contract Documents as are determined necessary. If the Contractor believes that a written clarification or interpretation justifies an increase in the Contract Price, and/or an extension of the Contract Time, the Contractor may make a claim therefore.
- 8.4 The Project Representative may authorize minor variations in the Work, which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. If the Contractor believes that a variation issued as minor justifies an increase in the Contract Price and/or an extension of the Contract Time, the Contractor may make a claim therefore.
- 8.5 The Project Representative may reject Work believed to be defective. The Project Representative also has the authority to require special inspection and testing of the Work, whether or not it has been fabricated, installed, or completed.
- 8.6 The Project Representative shall not be responsible for the means, methods, techniques, sequences, or procedures of the Contractor's performance of the Work, or the safety programs and precautions incident thereto. The Project Representative will not be responsible for the failure of the Contractor to furnish or perform the Work in accordance with the Contract Documents.

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- 8.7 The Project Representative will not be responsible for acts of omission by the Contractor, or any of his subcontractors or suppliers furnishing or performing any of the Work.
- 9.0 CHANGES IN THE WORK:**
- 9.1 Without invalidating the Contract, and without notice to any surety, the NJSEA may order revisions in the Work. These revisions shall be authorized by Change Orders. Upon receipt of such a document, the Contractor shall promptly proceed with the work involved, in accordance with the applicable conditions of the Contract Documents.
- 9.2 The Contractor shall not be entitled to an increase in the Contract Price, or an extension of the Contract Time, for any work not required by the Contract Documents and performed without a Change Order, except for an emergency.
- 10.0 CHANGE OF CONTRACT PRICE:**
- 10.1 The Contract Price may only be changed by a Change Order. Any claim for a change in the Contract Price shall be based on written notice delivered by the party making the claim, to the other party and the Project Representative, no later than ten days after the occurrence of the event giving rise to the claim. The amount of the claim, with supporting data, shall be delivered within twenty days of such notice; and shall be accompanied by a written statement that the amount claimed covers all known costs to which the claimant is entitled. The validity of all claims shall be determined by the Project Representative.
- 10.2 Where the Contract Documents provide that all or part of the Work shall be on a unit price basis, the initial Contract Price will be deemed to include an amount equal to the sum of each unit price, multiplied by the estimated quantity of each item, as indicated in the Bid Forms. Each unit price will be deemed to include an amount adequate to cover the Contractor's overhead and profit for each separately identified item. The estimated quantities of unit price items of work are not guaranteed, but are solely for the purposes of bid comparison and determining the initial Contract Price. Classification of the unit price Work, and the actual quantity determinations, shall be made by the Project Representative. Incorporation of the actual classified quantities into the Contract Price, if different than the amount given with the Bid, shall be accomplished by Change Order(s).
- 10.3 The value of a Change Order shall be determined in one of the following ways:
- A. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of said unit prices to the additional or reduced quantities of the items involved.

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B. By mutual acceptance of a lump sum.

11.0 CHANGE OF CONTRACT TIME:

- 11.1 The Contract Time may only be changed by a Change Order. Any claim for a change to the Contract Time shall be based on written notice delivered by the party making the claim, to the other party and to the Project Representative no later than ten days after the occurrence of the event giving rise to the claim. The extent of the claim with supporting data shall be delivered within ten days of the notice, and shall be accompanied by a written statement that the time claimed is the total time to which the claimant is entitled. The Project Representative shall determine the validity of all claims for adjustment to the Contract Time.
- 11.2 The Contract Time shall be extended an amount equal to the time lost due to delays beyond the control of the Contractor, if a claim is made therefore. Said delays shall include, but not be limited to; labor disputes, fires, floods, epidemics, abnormal weather conditions, other acts of God, and acts of NJSEA neglect.
- 11.3 All time limits stated in the Contract Documents are of the essence of the Contract. The provisions of this Article shall not exclude the recovery of damages by either party due to delay.

12.0 PAYMENTS TO CONTRACTOR; INSPECTION AND COMPLETION:

- 12.1 Payment Schedule: Please refer to Technical Specifications
- 12.2 It is agreed that this Project is one contract for the whole and complete Work. No partial payments on account by the NJSEA, or its use of parts of the Project; shall constitute the acceptance of any part of the Work before final inspection, acceptance, and final payment.
- 12.3 The Total Contract Amount shall be the total compensation paid to the Contractor for performing the Work. All duties, responsibilities, and obligations assigned to, or undertaken by the Contractor in the performance of the Work, shall be at his own expense, without change to the Total Contract Amount.
- 12.4 The Project Representative may refuse to recommend payment of the whole or any part of any application, if in Project Representative's opinion; it would be incorrect to make such representations to the NJSEA. The Project Representative may also refuse to recommend any such payment (or because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended) to such extent as may be necessary, in the Project Representative's opinion, to protect the NJSEA from loss. Reasons for refusing to recommend payment, or for nullifying payments previously made, include but are not limited to the following:

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- A. Unacceptable Work not remedied.
- B. Failure of the Contractor to make payments properly to subcontractors, manufacturers, or suppliers.
- C. A reasonable doubt that the Contract can be completed for the balance unpaid.
- D. Damage to another contractor.
- E. Failure of the Contractor to keep his work progressing in accordance with his progress schedule.
- F. Failure to submit certified payrolls (including subcontractor's payrolls) corresponding to the time period covered by the payment application.
- G. Failure to satisfactorily prosecute the Work in accordance with the Contract Documents.
- H. Failure to comply with Affirmative Action goals and objectives in accordance with PL1975, c127.
- I. Failure to submit any items required by the Contract Documents in the time frame specified.
- J. Failure to maintain insurance and/or to provide proof of insurance.

13.0 SUSPENSION OF WORK AND TERMINATION:

- 13.1 The NJSEA may, at any time and without cause, suspend the Work, or any portion thereof, for a period of not more than ninety (90) days by notice in writing to the Contractor and the Project Representative. The written notice shall establish the date on which the Work will be resumed. The Contractor shall resume work on the established date. The Contractor shall be allowed an increase in the Contract Price and/or an extension of the Contract Time attributable to the suspension; if the Contractor makes a claim therefore, and it is approved.
- 13.2 The NJSEA may terminate the services of the Contractor after giving him and the surety seven days written notice, upon the occurrence of any one or more of the following events. In such case, the Contractor shall not be entitled to receive any further payment. Where the Contractor's services have been so terminated by the NJSEA, said termination shall not affect any rights or remedies of the NJSEA against the Contractor existing at the time, or which may thereafter accrue.
- A. If the Contractor commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code) now or hereafter in effect.
 - B. If the Contractor takes any equivalent or similar action by filing a petition or other notice under any other federal or state law in effect at such time relating to bankruptcy or insolvency.
 - C. If a petition is filed against the Contractor under any chapter of the Bankruptcy Code now or hereafter in effect at the time of filing.

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- D. If a petition is filed seeking any such equivalent or similar relief against the Contractor under any other federal or state law in effect at the time relating to bankruptcy or insolvency.
- E. If the Contractor makes a general assignment for the benefit of creditors.
- F. If a trustee, receiver, custodian, or agent of the Contractor is appointed under applicable law or contract, whose appointment or authority to take charge of the Contractor's property is for the purpose of enforcing a lien against such property, or for the purpose of general administration of such property for the benefit of the Contractor's creditors.
- G. If the Contractor admits in writing an inability to pay his debts as they become due.
- H. If the Contractor persistently fails to perform the Work in accordance with the Contract Documents: including but not limited to, failure to supply sufficiently skilled workers, suitable materials, or equipment, or the failure to adhere to the progress schedule.
- I. If the Contractor disregards any applicable laws or regulations.
- J. If the Work to be performed under this Contract shall be abandoned by the Contractor. Abandonment shall mean that the Contractor has failed to perform any work on the Contract for a period of thirty consecutive calendar days.
- K. If this Contract or any part thereof shall be assigned, transferred, or sublet without the previous notice to and written consent of the NJSEA.
- L. If the Contract or any claim thereunder shall be assigned by the Contractor other than as herein specified.
- M. If the Contractor fails to maintain insurance during the entire Contract term and until the NJSEA accepts the Contract Work and the Contract is ended or fails to provide the NJSEA with proof of insurance upon request of the NJSEA.
- N. If the Contractor otherwise violates in any substantial way any provisions of the Contract Documents.

13.3 Upon seven days' written notice to the Contractor, the NJSEA may elect to abandon the Work and terminate the Contract without cause and without prejudice to any other right or remedy. In such case, the Contractor shall be paid for all completed Work, plus reasonable termination expenses.

14.0 MISCELLANEOUS ITEMS:

14.1 The address given on the Bid Form upon which this Contract is founded is hereby designated as the place to which notices, letters, and other communications to the Contractor shall be certified, mailed, or delivered. The delivering to said address or the depositing (in a postpaid wrapper with said address) in any mail box regularly maintained by the United States Postal Service of any notice, letter, or other communication to the Contractor shall be deemed

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sufficient service thereof upon the Contractor. The date of said service shall be the date of such delivery or mailing. The above-named address may be changed at any time by a written notice delivered to the NJSEA and the Project Representative. Nothing herein contained shall be deemed to preclude or render inoperative, the service of any notice, letter, or other written communication upon the Contractor personally.

- 14.2 When any period of time is referenced in the Contract Documents by days, it will be computed to exclude the first, and include the last day of said period. If the last day of said period falls on a Saturday, Sunday, or a legal holiday observed by the NJSEA, it shall be omitted from the computation.
- 14.3 Should the NJSEA or the Contractor suffer injury or damage to persons or property, respectively, because of any error, omission, or act of the other party (or others for whose acts the other party is legally liable), a claim shall be made in writing to the other party within a reasonable time of the first observance of said injury or damage.

END OF SECTION 00700

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**SECTION 00800
SPECIFIC PROJECT REQUIREMENTS**

1.0 LOCATION OF THE WORK:

- 1.1 The Work of this Contract shall be performed at the NJSEA Arena, 50 State Route 120, East Rutherford, Bergen County, New Jersey.

2.0 SUMMARY OF WORK:

- 2.1 The services described herein shall be provided for New Jersey Sports and Exposition Authority's Facility.
- 2.2 Contractor shall perform all work as outlined in these specifications unless otherwise directed by the Project Representative. NJSEA reserves the right to redirect the efforts of the Contractor in response to current circumstances. All work shall be done under the direction of the Project Representative.

3.0 ADDENDA:

- 3.1 Only addenda signed by John J. Duffy, P.E., Senior Vice President of Facilities, are valid addenda for this Project.

4.0 PRE-BID MEETING:

- 4.1 A pre-bid meeting will be held at 10:00 AM on January 19th, 2023. The meeting will be held at the NJSEA Meadowlands Arena Employee Entrance (North entrance between Gates B & C across from Lot 27), and will include a tour of the site specified in the Contract Documents.

5.0 BID SUBMISSION:

- 5.1 Each Bid must be submitted with two (2) copies in a sealed envelope with the Bidder's name, address, and telephone number clearly indicated on the outside of the envelope.
- 5.2 The envelope shall also be clearly marked, in large letters, as follows:

**BID DOCUMENTS - PROJECT CN-276
MEADOWLANDS ARENA
LOWER ROOF REPLACEMENT
For New Jersey Sports and Exposition Authority Facility
DO NOT OPEN
DELIVER TO JOHN J. DUFFY**

- 5.3 All the documents listed in the Bid Forms shall be enclosed in the sealed envelope with the Bid.

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- 5.4 If a carrier service (such as Federal Express) is used to deliver the Bid; the sealed envelope containing the Bid shall be completed as noted above, and shall be placed into the carrier's envelope.
- 6.0 BONDS AND INSURANCE:**
- 6.1 BONDS: A performance and payment bond will be required for the faithful performance of the Contract, for payment of all labor and materials, and for the guarantee and maintenance of the Work. The bonds shall be duly executed by the Contractor, as Principal, and by a surety company satisfactory to the NJSEA and licensed to do business under the laws of the State of New Jersey.
- 6.2 All bonds shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as Published in circular 570 (amended) by the Audit Staff, Bureau of Government Financial Operations, United States Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.
- 6.3 If the surety on any bond furnished by the Contractor is declared bankrupt, becomes insolvent, its right to do business is terminated, or it ceases to meet the requirements of paragraph 5.1; the Contractor shall substitute another bond and surety acceptable to the NJSEA within ten working days of such declaration of insolvency, termination, or failure to meet the requirements of paragraph 5.1.
- 6.4 The performance and payment bond shall be for the full one - year Contract amount. It must be furnished with the executed Contract(s) and shall remain in effect until completion and acceptance of the Project. The bond shall specifically protect the NJSEA should the Contractor go bankrupt or be declared insolvent. Each year the Contractor shall resubmit to NJSEA a new performance bond in the amount of the single year contracted price for the specific year. (See Section 00300)
- 6.5 INSURANCE: The Contractor shall furnish the NJSEA with satisfactory proof that he has obtained the insurance described below from insurance companies or underwriters satisfactory to the NJSEA. The Contractor shall keep such insurance in force until each and every obligation assumed under the Contract shall be fully and satisfactorily performed. The NJSEA and the Project Representative shall be named as additional insured under all the policies, except the Compensation Insurance.
- 6.6 The Contractor shall furnish to the NJSEA certificates for the following types of insurance showing the type, amount, and class of operations insured, and the effective and expiration dates of the policies. The certificates shall be submitted

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with the executed Contract(s). Work on the Contract will not be permitted to proceed until the certificate has been received and verified. Specific reference to the Contract shall be made in all policies.

- A. CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE, including Independent Contractor's Completed Operations and Contractual Liability Insurance with combined single limits of not less than one million dollars (\$1,000,000) each occurrence and with an annual aggregate of three million dollars (\$3,000,000) with respect to bodily/personal injury and property damage. Said policies of insurance shall contain a provision or endorsement providing insurance protection against property damage caused by explosion or collapse; and against damage to or interference with other facilities.
 - B. CONTRACTOR'S VEHICLE LIABILITY INSURANCE, for "any auto/vehicle" for the duration of the contract for bodily injury/property damage with a combined single limit of one million dollars (\$1,000,000).
 - C. EXCESS LIABILITY INSURANCE, in the amount of five million dollars (\$5,000,000) is to be provided in addition to the above requirements.
 - D. COMPENSATION INSURANCE, coverage "B", as required by state law for all employees who will be engaged in the work associated with this Contract. The Contractor shall require all subcontractors to provide similar workmen's compensation insurance for all of their employees, unless those employees are covered under the Contractor's insurance. If any employees engaged in hazardous work under this Contract are not protected under the workmen's compensation statute; the Contractor (and any subcontractors) shall also provide adequate employer's liability insurance for the protection of these employees.
 - E. ENVIRONMENTAL LIABILITY INSURANCE - in the amount of one million dollars (\$1,000,000) for bodily injury/property damage. The policy form must accompany the certificate of insurance and the contract documents.
- 6.7 SUBCONTRACTORS: The Contractor shall not permit any Subcontractor to commence work on his subcontract until all similar insurance (as listed above) required of the subcontractor has been obtained and approved. Copies of all Subcontractors certificates shall be forwarded to the NJSEA.
- 6.8 All insurance certificates shall stipulate that the insurance will not be changed or canceled without giving at least 30 days written notice to the NJSEA and the Project Representative by certified mail.

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- 6.9 The insurance required above shall be written for not less than the limits of liability specified therein. Coverages, whether written or an occurrence or claims-made basis, shall be maintained without interpretation from date of commencement of the Work until the date of final payment and the termination of any coverage required to be maintained after final payment.

The forms and/or amounts of insurance to be furnished by the Contractor and each of its Subcontractors shall not in any way operate to relieve or limit the liability of the Contractor or any Subcontractor under the Contract or any other of the Contract Documents.

The Contractor shall not commence work under the Contract until all insurance required of the Contractor has been obtained and has been approved by the Owner, nor shall the Contractor allow any Subcontractor to commence work on its subcontract until all similar insurance required of the Subcontractor has been obtained and approved by the Owner. Approval of such insurance by the Owner shall not relieve or decrease the liability of the Contractor under the Contract or the Contract Documents.

The Contractor and each of its Subcontractors shall purchase from and maintain insurance with companies which, as of the time of the Bid (in the case of the Contractor) and as of the time of the purchase (in the case of the Subcontractor), have at the very least an A Minus rating by A.M. Best & Company.

All of the insurance to be provided shall be considered to be primary insurance as respects the Owner, the Engineer and the municipalities in which the on-site Work is to be performed. The Contractor will save harmless, indemnify and defend the Owner, the Engineer and the municipalities in which the on-site Work is to be performed, as well as their respective agents, officers and employees, from any and all claims arising out of the Contractor's performance.

7.0 NJSEA RIGHT TO DEDUCT MONIES:

- 7.1 The Contractor shall pay to the NJSEA, and the NJSEA shall have the right to deduct the full amount of all expenses, losses, damages and costs from all monies due, or to become due, the Contractor under this Contract for any of the following reasons:

- A. Any defect, omission, or mistake of the Contractor or his employees, and the repairs of same, as determined by the Project Representative.
- B. All costs incurred by the NJSEA for overtime payments to the Project Representative caused by the Contractor's overtime work (Overtime is

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considered to be all hours worked in excess of eight hours per day or 40 hours per week, all hours worked on Saturdays and Sundays, and all hours worked on legal holidays observed by the NJSEA). All such inspection costs shall be at a rate of \$100.00 per hour.

8.0 SANITARY FACILITIES:

8.1 The Contractor MUST provide sanitary facilities for their employees

9.0 WATER:

9.1 The Contractor may use potable outdoor drinking fountain. The Contractor may use outdoor spigot for water and washing from the NJSEA facilities.

10.0 ELECTRICAL SERVICE:

10.1 The Contractor may use electrical service from the NJSEA facilities.

11.0 TELEPHONE SERVICE:

11.1 The Contractor is responsible for providing telephone service for use of its personnel working on the Project.

12.0 CONTRACTOR'S STORAGE AREA:

12.1 The contractor may use the area designated to store equipment and material upon the approval of the Project Representative.

13.0 COORDINATION WITH NJSEA OPERATIONS: HOURS OF OPERATION

13.1 The NJSEA Facilities will be open for normal business during the course of the Contract. The Contractor shall not interfere with the NJSEA operations in any manner. Should conflicts arise; the NJSEA operations will take precedence over the Contractor's operations.

13.2 All work shall be executed Monday-Friday 7:00 AM - 4:00 PM.

No work shall be performed outside these hours unless prior approval is obtained through the Project Representative. The contractor must report to the Project Representative before starting work, and also at the end of each work day. Work will be done under the term of contract at no additional cost.

13.3 The Contractor shall not schedule work on days when the NJSEA is closed without advance approval of the Project Representative.

13.4 All work schedules shall be coordinated through the Project Representative in order to minimize interference with normal operations of the NJSEA.

13.5 At the end of each day's work, all equipment that the contractor has been servicing must be put back in service in order to maintain operation of NJSEA Facilities.

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- 13.6 The NJSEA will be closed the following 13 days: New Year's Day, Martin Luther King Day, Presidents Day, Good Friday, Memorial Day, Juneteenth, Independence Day, Labor Day, Columbus Day, Election Day, Veterans Day, Thanksgiving Day, and Christmas Day.
- 13.7 During the servicing procedure, should contractor discover any code violations or other conditions contrary to reliability or safe operation, a report shall be made at once directly to the Project Representative.
- 13.8 Under no circumstances will equipment be shut down, repairs or adjustments made without first securing the approval of Project Representative.
- 13.9 Any work that disrupts or interferes with the operations of the NJSEA shall be terminated immediately and rescheduled at the direction of the Project Representative.

14.0 MATERIALS:

- 14.1 All materials furnished by the Contractor shall be compatible with those specified herein. Any substitutions shall be subject to the approval of the Project Representative.
- 14.2 Where materials are not specified, Contractor shall submit Manufacturer's Data sheets for all products proposed for use under this contract and shall obtain approval of Project Representative prior to their application.
- 14.3 Contractor shall supply labels of all products proposed for use under this contract to the Project Representative for approval prior to any application of these chemicals.
 - A. In accordance with the New Jersey Right to Know Act, the Contractor shall supply Material Safety Data Sheets (MSDS) for chemical cleaners, solutions, cleaners and chemicals proposed for use under this contract.

15.0 QUALITY ASSURANCE:

- 15.1 One to Three experienced personnel must be designated by the Contractor to oversee this work. They must have knowledge of standard industry practices relating to the scope of work.
- 15.2 Only experienced workmen shall perform the Work. In the acceptance of the Work, no allowance will be made for lack of skill or experience on the part of workmen.

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- 15.2 Contractor shall have all equipment available and tools necessary to properly perform all parts of the work described herein.
- 15.3 Contractor shall supply the proper equipment required to each job described herein.

A. The NJSEA reserves the right to withhold or reduce payment up to one hundred percent in the event that, the right equipment is not on site, equipment is not working properly, a full day is not completed, or scheduled work has not been completed according to these specifications to the satisfaction of the Project Representative. (Example: Payments may be reduced if contractor doesn't show up for the scheduled day/week are not consistent, and or certain task don't get completed, proper equipment is not on site. Work order reports are not emailed or faxed to the Project Representative). This will be determined by the Project Representative.

16.0 STAFFING

- 16.1 The Project Representative may assign additional tasks to expend any hours remaining after the work of Section 02000, outlined herein, and is completed.

- 16.2 While doing the work specified in Section 02000, the Contractor shall be required to sign in upon arrival at the site and to sign out upon departure.

- A. The Sign in book is at the NJSEA Administration main front desk. The Contractor shall sign in and out when working at the NJSEA facility. This is not applicable if the Contractor is not entering the facility.
- B. Contractor shall supply daily Service Reports/ Work order reports - on date of work - the names of all workers, hours worked; tasks accomplished and any chemical cleaners, solutions, and chemicals used and or major work completed or required. In addition to a written report - the reports shall be emailed and or faxed to the Project Representative after the completion of any service.
- C. The Contractor shall maintain records for services rendered against the contract for a period of three (3) years from the date of final payment. Such records shall be made available to the NJSEA upon request for purposes of conducting an audit, or for ascertaining information regarding dollar volume or number of transactions.
- D. The Foreman shall be the Contractor's Representative at the site and shall have the authority to act on behalf of the Contractor.

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E. All communications given to the Foreman shall be binding as if given to the Contractor.

16.3 The Contractor shall provide consistency in staff so that individuals become familiar with the requirements of the site.

17.0 GUARANTEE

17.1 All Contractors shall guarantee their labor and all materials for a period of two (2) years from date of Substantial Completion, unless otherwise specified in writing and approved by the Owner.

END OF SECTION 00800

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SECTION 00900

GENERAL REQUIREMENTS

1.0 ABBREVIATIONS, SYMBOLS, AND STANDARDS:

1.1 The following abbreviations may appear in the Contract Documents:

C.	degrees Centigrade
cu. ft.	cubic foot (feet)
cu. in.	cubic inch(es)
C.Y.	cubic yard(s)
USEPA (EPA)	United States Environmental Protection Agency
F.	degrees Fahrenheit
ft.	foot (feet)
gpm	gallons per minute
in.	inch(es)
lb.	pound(s)
NJAC	New Jersey Administrative Code
NJDEP (DEP)	New Jersey Department of Environmental Protection
NJSA	New Jersey Statutes Annotated
No.	number
OSHA	Occupational Safety and Health Administration
psi	pounds per square inch
psf	pounds per square foot
rpm	revolutions per minute
sq. ft.	square foot(feet)
sq. in.	square inch(es)

2.0 REFERENCE SPECIFICATIONS AND STANDARDS:

The following current standards and publications of the issues currently in effect form a part of this specification to the extent indicated by any reference thereto:

3.0 SUBMITTALS:

3.1 Submittals that are required in the performance of work of this Contract are as follows:

- A. It shall be the Contractor's ultimate responsibility to ensure the health and safety of all his employees and subcontractor personnel. The Contractor shall develop a pollution control system which will be in compliance with all USEPA, NJDEPE, OSHA, USCG, etc. rules, regulations, standards, and guidelines in effect at the time the Work is in progress. All references to workers and employees shall mean the Contractor's employees and

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subcontractor personnel.

- B. Material Safety Data Sheets (MSDS): Submit MSDS sheets for all chemicals, cleaners, solutions, refrigerants, and oils used on the facility.
- C. Certificates: Submit labels from the manufacturer's or supplier's container certifying that the following products meet the specified requirements: chemicals, cleaners and solutions, used on the facility.

4.0 RESPONSIBILITY FOR PROPERTY DAMAGE:

- 4.1 The Contractor assumes full responsibility for the equipment employed in the execution of the work described herein and agrees to make no claims whatsoever against the NJSEA for any damages to such equipment, or injuries caused by the equipment.
 - 4.2 All property of the Contractor, its employees or agents which is brought, kept, used, and or left on NJSEA property shall be at the sole risk of the Contractor who shall be responsible for all loss or damage to such equipment and property.
 - 4.3 The Contractor shall be responsible for any damage to NJSEA property in excess (cumulatively) of \$50 caused by its negligence in the performance of work under this Contract.
 - 4.4 In the event of damage to NJSEA property in excess (cumulatively) of \$50, NJSEA reserves the right to immediately effect both temporary and permanent repairs at the expense of the Contractor. The Contractor agrees that, in such event, NJSEA may deduct the cost of such repairs and related expenses incurred by the NJSEA from any moneys due to the Contractor under this Contract or to charge the Contractor accordingly. Any repairs made by the Contractor shall be "in kind", i.e. match existing conditions.
 - 4.5 The Contractor will work closely with NJSEA personnel to establish all necessary safeguards or safety devices to protect equipment and safety of workmen and other personnel while work is being performed.
 - 4.6 Use all means necessary to protect all NJSEA Facilities.
- 5.0 CLEANUP - SAFETY:**
- 5.1 It shall be the responsibility of the Contractor to leave the job sites in a clean and safe condition at the end of each workday.
 - 5.2 The Contractor shall properly remove and/or store all tools, equipment and materials and shall clean debris from the job sites at the end of each workday.

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- 5.3 The Contractor shall wear proper safety gear while operating machinery or applying chemicals, including but not limited to eye and ear protection.
- 5.4 The Contractor shall promptly notify the Project Representative of any damage resulting from weather, vandalism, etc. observed during the performance the work of this Contract. This will allow for the prompt remediation of potential safety hazards.
- 5.5 All employees of the Contractor shall be trained to properly perform the work assigned to them.

6.0 PROHIBITED ACTIVITIES:

- 6.1 The Contractor shall not use procedures, activities or operations that may adversely impact the natural environment, or the public health and safety of the area. Prohibited activities include, but are not limited to, the following:
 - A. Dumping or disposing of materials into any stream corridors, wetlands, or surface waters or on public or private property not specified for said purpose.
 - B. Indiscriminate, arbitrary, or capricious operation of equipment in any wetlands or surface waters.
 - C. Indiscriminate damaging of vegetation.
 - D. Disposal of trees, brush, and other debris in any wetlands, surface waters, or unspecified locations.
 - E. Discharging injurious silica dust concentrations into the atmosphere closer than 200 feet to areas of human occupation.
 - F. Closing off clear access to the site without the prior the consent of the Project Representative and the NJSEA.
 - G. Operation of equipment outside the boundaries of the working area.

7.0 ACCIDENT REPORTS

- 7.1 The Contractor shall promptly report, in writing within 24 hours to the Project Representative, all accidents whatsoever arising out of, and in conjunction with the performance of work, whether on or adjacent to the working site, which cause death, personal injury or property damage, giving details and statements of witnesses.

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- 7.2 In addition, if death or serious personal injury is caused, the accident shall be reported immediately, by telephone, to the Project Representative.
- 7.3 If any claim is made by a third person against the Contractor on account of any accident, the Contractor shall promptly report the matter in writing, within 24 hours to the Project Representative, giving full details of the claim.
- 8.0 WASTE DISPOSAL:**
- 8.1 All debris and waste materials shall be removed from the site by vehicles designed for the transport of the various materials being removed.

END SECTION 00900

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SECTION 01070

ABBREVIATIONS, SYMBOLS, AND STANDARDS

1.0 ABBREVIATIONS:

1.1 The following abbreviations may appear in the Contract Documents:

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
ASTM	American Society of Testing and Materials
AWG	American (or Brown and Sharpe) Wire Gauge
AWS	American Welding Society
AWWA	American Water Works Association
C.	degrees Centigrade
cfs	cubic feet per second
cu. ft.	cubic foot (feet)
cu. in.	cubic inch(es)
C.Y.	cubic yard(s)
USEPA (EPA)	United States Environmental Protection Agency
F.	degrees Fahrenheit
ft.	foot (feet)
gpm	gallons per minute
in.	inch(es)
ISO	International Organization for Standardization
lb.	pound(s)
LF	linear foot
MSDS	Material Safety Data Sheet
NAVD88	North American Vertical Datum of 1988
NGVD29	National Geodetic Vertical Datum of 1929
NIST	National Institute of Standards and Technology
NJAC	New Jersey Administrative Code
NJDEP (DEP)	New Jersey Department of Environmental Protection
NJDOT	New Jersey Department of Transportation
NJSEA	New Jersey Sports and Exposition Authority
NJSA	New Jersey Statutes Annotated
NJTA	New Jersey Turnpike Authority
No.	number
NOAA	National Oceanic and Atmospheric Administration
OSHA	Occupational Safety and Health Administration
psi	pounds per square inch
psf	pounds per square foot

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PVC	Polyvinyl Chloride
QPL	Qualified Product List
RCP	Reinforced Concrete Pipe
ROW	Right-of-Way
rpm	revolutions per minute
SESC	Soil Erosion and Sediment Control
SI	International System of Units
sq. ft.	square foot(feet)
sq. in.	square inch(es)
USACE	United States Army Corps of Engineers
USEPA (EPA)	United States Environmental Protection Agency
USGS	United States Geodetic Survey

2.0 REFERENCE SPECIFICATIONS AND STANDARDS:

- 2.1 Standard specifications, such as those published by ASTM, ACI, NEMA, ANSI, and others that are referenced herein shall be the latest revisions thereof and shall include all amendments and revisions that are in effect on the date bids are received unless otherwise specified.
- 2.2 Reference to New Jersey Department of Transportation (NJDOTSS) shall refer to Standard Specifications for Road and Bridge Construction (dated 2007)

END OF SECTION 01070

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SECTION 01200

PROJECT MEETINGS AND CORRESPONDENCE

1.0 MEETINGS:

- 1.1 Project meetings shall be where necessary to discuss the progress and prosecution of the Work. The meetings will be held at the time and place designated by the Project Representative. The Project Representative will prepare minutes of these meetings. The Contractor shall be provided a copy of the minutes for his records. Meeting minutes shall be read and accepted, either as read or as amended, at the following meeting.
- 1.2 The Contractor or the NJSEA may request additional meetings when they believe such are necessary. A minimum of forty-eight (48) hours notice shall be given, though each request will be treated on an individual basis.

2.0 CORRESPONDENCE:

- 2.1 Any request in writing by the NJSEA to the Contractor must be answered in writing, in sufficient detail and within a reasonable period of time, by the Contractor.

3.0 PAYMENT:

- 3.1 Payment for the above work shall not be made under any specific item. The Contractor shall include all costs for the above work in the bid prices for the various items scheduled in the Bid Forms.

END OF SECTION 01200

SECTION 01340

SUBMITTALS AND SAMPLES

1.0 GENERAL:

- 1.1 All equipment and materials to be incorporated in the Work shall be submitted to the Project Representative for review and acceptance. No equipment or materials shall be processed, fabricated, or delivered to the site without the prior review of submittals and/or samples; and acceptance of same by the Project Representative, except at the sole risk of the Contractor. The Contractor shall be responsible for prompt submission of all submittals and samples to insure there will be no delay to the Work. All material must have certifications that they meet the requirements of the Contract Specifications and Drawings.

2.0 SUBMITTALS:

- 2.1 All submittals shall be properly referenced to clearly indicate the Contract number, the particular Specification Section, and the Work location, service, and function of each particular item. Inadequate or improperly identified submittals shall be returned to the Contractor without the Project Representative's review.
- 2.2 Each submittal by the Contractor shall have his signature indicating approval of the information contained therein. By approving and submitting the information to the Project Representative, the Contractor represents that he has determined and verified all field measurements, quantities, dimensions, field construction criteria, materials, catalog numbers, and other related data; and that he has reviewed and coordinated each submittal and submittal item with any related approved submittals and the Contract Documents. Any fabrication, erection, setting of equipment, or other work performed in advance of the receipt by the Contractor of submittal(s) returned by the Project Representative and noted as "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED", shall be entirely at the Contractor's own risk. The Contractor is not required to resubmit submittals returned by the Project Representative noted "MAKE CORRECTIONS NOTED". However, the Contractor shall be responsible for making the noted corrections, unless a resubmittal is made.
- 2.3 The notation "NO EXCEPTIONS TAKEN" of a separate item shall not indicate acceptance of the assembly in which the separate item is included. Where manufacturers' publications (in the form of catalogs, pamphlets, or other data sheets) are submitted in lieu of prepared Shop Drawings; such submittals shall specifically indicate the item for which a review is requested. Identification of items shall be made in ink; and sufficient space on the submittals shall be provided for review stamps and comments.
- 2.4 Submittals, and any resubmittals, shall be designated in the following manner:

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- A. Each original submittal shall be identified by the Contract Number, the applicable Specification Section Number, and the applicable Article Number(s).
 - B. The first resubmittal shall have the letter "A" added to the above number. All items changed shall be noted in a revision box under "A" and dated, or marked with an "A" at the changed area.
 - C. Subsequent resubmittals shall be noted as above with the letters "B", "C", "D", etc., as necessary.
 - D. A revision box shall be included on all drawings detailing where the changes have been made. All changes shall be referenced as noted in "B." above.
- 2.5 Sufficient sets of all submittals shall be submitted to the Project Representative by the Contractor. The Project Representative will retain two sets. The other sets will be returned to the Contractor.
- 2.6 All submittals shall be either 8-1/2" by 11", 11" by 17", or 24" by 36", in size.
- 2.7 The Contractor agrees that submittals processed by the Project Representative are not Change Orders; that the purpose of submittals by the Contractor is to demonstrate to the Project Representative that the Contractor understands the design concept. The Contractor demonstrates his understanding by indicating which equipment and material he intends to furnish and install, and by detailing the fabrication and installation methods he intends to use. The Contractor further agrees that if deviations, discrepancies, or conflicts occur between the submittals and the Contract Documents that were not identified in accordance with paragraph 2.7 herein, the Contract Documents shall control and shall be followed at no extra cost.
- 2.8 If the submittals contain any deviations from the Contract Documents, the deviations must be specifically mentioned in the Contractor's submission and letter of transmittal. The Contractor is fully responsible for all required changes to the Work resulting from the deviations. Where such deviations require revisions to layouts or structural changes in the specified Work, the Contractor shall, at his own expense, prepare and submit a revised layout drawing for review. Revision drawings shall include design calculations prepared, signed, and sealed by a licensed New Jersey Professional Engineer/Land Surveyor as needed. Such drawings shall be the same size as the Contract Drawings. The Contractor will not be relieved of his responsibilities for any deviations from the Contract Documents, unless the Project Representative has given written concurrence to the specific deviations. Concurrence by the Project Representative shall not relieve the Contractor from his responsibility for errors and omissions in the submittals.

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- 2.9 The Project Representative will review and comment on submittals with reasonable promptness provided the submissions are complete. The Project Representative's review shall only be for conformance with design concepts of the Project and for compliance with the information given in the Contract Documents. It shall not extend to means, methods, sequences, techniques, and procedures of construction, or to safety precautions or programs incident thereto. The Project Representative's review shall be confined to general arrangements in compliance with the Contract Documents, and will not be for the purpose of checking dimensions, weights, interferences, clearances, tolerances, or fittings; or coordination of trades.

3.0 SAMPLES:

- 3.1 Where required by the Contract Documents, the Contractor shall submit samples of materials to demonstrate that the materials conform to the Contract Documents. Such samples shall be furnished, taken, stored, packed, and shipped as directed, at the expense of the Contractor. Samples shall be packed to reach their destination in good condition.
- 3.2 Each sample shall be identified by the Contract Number, the applicable Specification Section Number, and the applicable Article Number(s).
- 3.3 To ensure consideration of the samples, the Contractor shall give the Project Representative prior notice by letter that the samples have been shipped, and shall describe the samples in the letter. In no case shall the notification letter be enclosed with the sample.

4.0 PAYMENT:

- 4.1 Payment for the above work shall not be made under any specific item. The Contractor shall include all costs for the above work in the bid prices for the various items scheduled in the Bid Forms.

END OF SECTION 01340

SECTION 01410

FIELD AND LABORATORY TESTING SERVICES

1.0 REQUIREMENTS:

- 1.1 The Contractor shall submit samples of all materials and products, as required. Certified reports of results of tests and analyses shall be furnished, either prior to beginning or during the progress of the work, as may be necessary to demonstrate that they conform to the Specifications. The Contractor shall engage the services of independent, qualified testing agencies to perform all laboratory and field tests and analyses on all materials and products used during construction, as specified in the relevant sections of these specifications. Results of all tests shall be submitted to the Project Representative for review in a timely manner. Samples shall be furnished, taken, stored, packed, shipped and tested, at the expense of the Contractor.

The Contractor shall submit data and samples, or place his orders, sufficiently early to permit consideration, inspection, testing and approval before the materials are necessary for incorporation in the work. Any delays resulting from his failure to do so shall not be used as a basis of a claim against NJSEA or the Project Representative

The NJSEA and the Project Representative reserve the right to perform tests on any materials or products, in addition to those performed by the Contractor. If the Project Representative orders additional sampling and analyses or test of materials which are usually accepted on certification of the manufacturer or which appear defective or not conforming to the requirements of the Specifications, such sampling and analyses or tests will be performed by a laboratory selected by NJSEA. The NJSEA will bear the costs of tests and analyses, if the materials are found to be sound and conforming to the Specifications; if the materials are found defective or not conforming to the Specifications, the Contractor shall bear all of the costs.

- 1.2 Tests required by NJSEA shall not relieve the Contractor from the responsibility of supplying certificates from manufacturers or suppliers to demonstrate conformance with the Specifications.

END OF SECTION 01410

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**SECTION 01500
TEMPORARY CONTROLS**

1.0 PERMITS AND LIABILITY

- 1.1 The Contractor is responsible for obtaining all permits, if required, from appropriate utilities prior to commencement of work. The Contractor shall coordinate work per the town requirements and shall prepare a maintenance and protection of traffic plan if so required by same. Review Specific Project Requirements for additional permit information.
- 1.2 The Contractor shall comply with all laws or ordinances applicable to the work under this Contract. The Contractor shall coordinate with the town Police Department prior to initiating haul routes. All service charges and permits shall be obtained at the Contractor's own expense.
- 1.3 The Contractor shall cooperate in every respect with other agencies of the state, town, and private agencies engaged in construction work in the vicinity. Lighting and other methods of protection shall be changed from time to time as conditions change and as ordered by the Project Representative.
- 1.4 Any method or clause under this section is intended to be the minimum requirement. The Contractor shall provide any other facilities that may be required.
- 1.5 The Contractor agrees to assume all responsibility for damage to persons or property that may accrue during the prosecution of the work, due to negligence of the Contractor, the Contractor's agents or employees, in failing to comply with the requirements of the specifications or other necessary precautions for the protection and safety of traffic.
- 1.6 The Contractor shall have no claim against the town, county, state or NJSEA for the extension of the time of completion of this contract nor for damages due to delay, inconvenience or expense caused by the provisions of this section.

2.0 RESTORATION AND CLEAN-UP

- 2.1 Upon completion of the Contract, all temporary controls shall be removed from the Project Site and shall become the property of the Contractor. The Contractor shall remove damaged, excess, and waste materials from the Project Site and dispose of the materials properly.

3.0 PAYMENT:

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- 3.1 Separate payment will not be made for the work of this Section. The cost shall be included in the prices bid for the various items of work scheduled in the Bid.

END OF SECTION 01500

SECTION 01550

HEALTH AND SAFETY PROVISIONS

1.0 GENERAL REQUIREMENTS:

- 1.1 The following personal protective equipment (PPE) will be required for the work to be performed within a specific area:
 - A. Hard hat, safety glasses, steel toe/shank work boots, traffic safety vest.
- 1.2 The Contractor is responsible to monitor working conditions at all times during construction and, if it is found to be necessary, to provide appropriate protective clothing, equipment and facilities for its personnel, and/or to establish workplace procedures to ensure their safety, and to enforce the use of these procedures, equipment and/or facilities.
- 1.3 The Contractor shall prepare and implement a Health and Safety protection program which shall be described in detail in a site-specific health and safety plan (HASP). The HASP shall require the Contractor to have a Site Health and Safety Coordinator (SHSC).
- 1.4 The Contractor shall engage an independent, qualified health and safety expert to monitor Site conditions during construction activities and recommend all necessary health and safety protection. The Contractor shall follow such recommendations and shall provide such protection to his personnel and personnel of the Owner and Project Representative, as may be affected.
- 1.5 The Contractor shall comply with all Federal, State, and local safety and health requirements related to the presence of combustible gases, nausea-inducing gases, hazardous substances, and physical hazards, as well as the specific requirements stated in this Section and else in the Specifications.
- 1.6 In addition to the above requirements, the Contractor shall comply with the following requirements:
 - A. All construction equipment on the Site shall be equipped with vertical exhaust pipes or spark-proof exhausts.
 - B. Smoking shall not be permitted in any area where gases can accumulate, or in the vicinity of any combustible material, such as a wood, paper, brush, etc.

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2.0 APPLICABLE REGULATIONS

- 2.1 The Contractor and his subcontractors shall comply with all applicable Federal, State, and local laws and regulations concerning worker health and safety. All work shall be in accordance with safety and health regulations promulgated by the U.S. Department of Labor OSHA at 29 CFR 1910: Occupational Safety and Health Standards and at 29 CFR 1926: Safety and Health Regulations for Construction.

3.0 SUBMITTALS

- 3.1 Site-Specific Health and Safety Plan – Prior to commencement of the work, the Contractor shall:

- A. Submit in writing a site-specific health and safety plan (HASP); and
- B. Meet with the Project Representative to develop mutual understandings relative to the compliance with the provisions of this Section and implementation of the HASP.

4.0 EXECUTION

- 4.1 The Contractor shall implement the Health and Safety protection program, as prepared by his independent, qualified health and safety expert. The HASP shall require the Contractor to have a Site Health and Safety Coordinator (SHSC) present at all times during construction activities.

END OF SECTION 01550

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**SECTION 01600
EQUIPMENT AND MATERIALS**

1.0 TRANSPORTATION AND HANDLING:

- 1.1 The Contractor shall be responsible to insure that all equipment and materials are delivered to the project site in good condition. The Contractor shall coordinate with his suppliers to insure that deliveries are made in a timely manner and do not delay the Work.
- 1.2 The Contractor shall take whatever measures are necessary to provide for the proper handling of all equipment and materials.

2.0 STORAGE AND PROTECTION:

- 2.1 The Contractor expressly agrees that he is responsible for the following as part of the Work:
 - A. Taking every precaution against injuries to persons or damage to property.
 - B. Storing his equipment, materials, and supplies in an orderly fashion at the site, so as not to interfere with the progress of the Work, or the work of others.
 - C. Maintaining the site in a neat, orderly, and workmanlike manner at all times.
 - D. Removing all surplus materials, temporary structures, and debris of any nature resulting from his operations before final payment.
 - E. Placing upon the site, or any part thereof, only such loads as are consistent with the safety of that portion of the site.
- 2.2 The Contractor shall insure that all materials shall be stored to cause the least inconvenience to the NJSEA and the public. All fire hydrants shall be kept free and unobstructed at all times. Water and gas shutoff boxes, and underground power and telephone manholes shall not be covered or otherwise obstructed.
- 2.3 It shall be understood that the responsibility for the protection and safekeeping of all equipment and materials on or near the site shall be entirely that of the Contractor, and no claim shall be made against the NJSEA or Project Representative because of an act by an employee or a trespasser.
- 2.4 During adverse weather, the Contractor shall take all necessary precautions to properly prosecute the Work. When necessary, protection shall be provided by use of tarpaulins, temporary structures, and/or other approved means.

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- 2.5 The performance of the Work may be suspended at any time when, in the judgment of the Project Representative, the conditions are unsuitable, or the necessary precautions are not being taken.

3.0 CLEANING:

- 3.1 Before final acceptance by the NJSEA, the Contractor shall remove from the site all equipment, temporary work, unused and useless materials and rubbish. The Contractor shall repair or replace in an acceptable manner all private and/or public property which may have been damaged or destroyed because of the prosecution of the Work, and shall fill all depressions and water pockets on the property caused by his operations. The Contractor shall clean all drains and ditches within and adjacent to the site, which have been obstructed by his operations, and shall leave the site and adjacent properties in a neat and presentable condition.

4.0 PAYMENT:

- 4.1 Separate payment will not be made for the work of this Section. The cost shall be included in the prices bid for the various items of work scheduled in the Bid.

END OF SECTION 01600

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SECTION 01720

PROJECT RECORD DOCUMENTS

1.0 PROJECT RECORD DOCUMENTS:

- 1.1 The purpose of the Project Record Documents is to record the actual location of the Work in place and to record changes in the Work.
- 1.2 In addition to the sets of Contract Documents that are required by the Contractor to perform the Work, Contractor shall maintain, at the Site, 1 copy of all Drawings, Specifications, and Addenda, that are part of the Contract as awarded, and also Change Orders, Modifications, approved Shop Drawings, and other approved changes. Each of these documents shall be clearly marked "Project Record Copy" as indicated below, maintained in a clean and neat condition available at all times for inspection by the Project Representative and shall not be used for any other purpose during the progress of the Work.
- A. Each record copy shall bear the legend "PROJECT RECORD COPY" in heavy block lettering, 1/4" high and contain the following data:

PROJECT RECORD COPY

Contractor's Name _____
Contractor's Address _____
Made by _____ Date _____
Checked by _____ Date _____

- B. Where possible, changes from the Contract as awarded Documents shall be conspicuously encircled.
- 1.3 Project Record Requirements
- A. The Contractor shall mark-up the "Project Record Documents" to show:
- a. Approved changes in the Work.
 - b. Details not shown in the original Contract Documents.
 - c. All relocations of Work.
 - e. All changes in dimensions.
- B. As applicable for the project, such information shall include, but shall not be limited to:
- a. All approved structural changes.
 - b. All approved substitutions.

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- c. Elevations and locations of all features referenced to permanent above-ground structures or monuments.
 - d. All approved Change Orders.
- 1.4 Contractor shall keep the Project Record Documents up-to-date from day to day as the Work progresses. Appropriate documents shall be updated promptly and accurately; no Work shall be permanently concealed until all required information has been recorded.
- 1.5 Each month these record drawings will be examined by the Project Representative prior to recommending the approval of the partial payment request to ascertain that the record prints reflect the changes to date.
- 1.6 Record Shop Drawings: If installed equipment is at variance with the respective approved Shop Drawings, Contractor shall furnish to the Project Representative revised Shop Drawings indicating the actual completed installation.
- 1.7 As-Built Drawings: At the conclusion of the job, the Contractor shall transfer all the changes appearing on the Record Document Prints to the as-built drawings. The as-built drawings shall be completed in accordance with SURVEYING SECTION. The title block for the as-built drawings shall include the name of Contractor.
- 1.8 Shop Drawings for Permanent Records - In addition to the drawings required as above mentioned, Contractor shall submit a list of all approved Shop Drawings of the Work as installed. From this list the Project Representative will select the drawings desired for permanent records. Contractor shall furnish these in a bound set to the Project Representative.
- 1.9 The Project Record Documents shall be submitted by Contractor to the Project Representative when all the Work is completed and shall be approved by the Project Representative before Contractor may request final payment.
- 1.10 Final payment shall be contingent on completion of the above listed requirements in this Section.
- 2.0 PAYMENT:**
- 2.1 Separate payment will not be made for the work of this Section. The cost shall be included in the prices bid for the various items of work scheduled in the Bid.

END OF SECTION 01720

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SECTION 01740

GUARANTEES, WARRANTIES & BONDS

1.0 CONTRACTOR'S GUARANTEE:

1.1 The Contractor shall furnish a written guarantee in the following form:

"GUARANTEE"

PROJECT _____

CONTRACT NO. _____

The Contractor hereby guarantees that the Work specified for the aforesaid Contract will be free from defects of material and workmanship for a period as specified in SECTION 800 SPECIFIC PROJECT REQUIREMENTS.

The Contractor also guarantees that it will repair or replace, whichever may be deemed necessary by the Project Representative, all defective material or workmanship of the Work that may appear within the guarantee period, to the satisfaction of the Project Representative and without any cost or expense to the Project Representative.

Contractor

By _____

Date _____

Sworn to me before this

_____ day of _____, 20____

_____ Notary Public

1.2 Scheduling of corrective Work will be determined by the Project Representative. Work required to correct defective material or workmanship during the guarantee periods shall be done by the Contractor without cost to the NJSEA.

1.3 Should the Contractor fail to remedy defects immediately, the Project Representative may furnish such materials and labor as are necessary to bring the

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Work to the standard called for and the Contractor shall reimburse the Project Representative in full immediately.

2.0 WARRANTIES AND GUARANTEES (OTHER THAN CONTRACTOR'S):

- 2.1 Warranties and guarantees as specified in the respective Sections for products and systems shall be in addition to the Contractor's guarantee, and shall be for such periods and with such conditions as stipulated.

3.0 BONDS:

- 3.1 The Contractor shall provide bonds as stipulated in SPECIFIC PROJECT REQUIREMENTS.

4.0 PAYMENT:

- 4.1 Separate payment will not be made for the work of this Section. The cost shall be included in the prices bid for the various items of work scheduled in the Bid.

END OF SECTION 01740

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SECTION 003100
AVAILABLE PROJECT INFORMATION

PART 1 GENERAL

1.01 EXISTING CONDITIONS

- A. Certain information relating to existing surface and subsurface conditions and structures is available to bidders but will not be part of Contract Documents, as follows:
- B. Existing Conditions Survey: Entitled Core Cut Findings, dated 11-8-2022.
 - 1. This survey identifies conditions of existing construction prepared primarily for the use of Architect in establishing the extent of the new versus existing work.
 - 2. This survey includes a photographic record of existing conditions visible.
 - 3. This survey is attached for reference only.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 011000

SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: NJ Sports & Exposition Authority - Meadowlands Center Arena Lower Roof Replacement.
- B. Owner's Name: New Jersey Sports & Exposition Authority.
- C. Architect's Name: FKA Architects.
- D. The Project consists of the Removal of existing roofing and the installation of new roofing of the Lower Roof area of the Meadowlands Center Arena.

1.02 CONTRACT DESCRIPTION

- A. Contract Type: A single prime contract based on a Stipulated Price as described in The Front End.

1.03 DESCRIPTION OF ALTERATIONS WORK

- A. Scope of demolition and removal work is indicated on drawings and specified in Section 024100.
- B. Scope of alterations work is indicated on drawings.
- C. Renovate the following areas, complete all new re-roofing & accessories:
 - 1. Meadowlands Center Arena.
- D. Plumbing: Alter existing system and add new construction, keeping existing in operation, tying into existing utilities.
- E. HVAC: Alter existing system and add new construction, keeping existing in operation.
- F. Electrical Power and Lighting: Alter existing system and add new construction, keeping existing in operation, tying into existing utilities.

1.04 OWNER OCCUPANCY

- A. Owner intends to continue to occupy adjacent portions of the existing building during the entire construction period.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.
- D. The Owner requires access and use of the elevator, therefore the Contractor shall coordinate use of elevator with the Owner. Contractor shall install temporary protection inside and outside elevator to avoid damage.
- E. The Contractor is to coordinate deliveries of materials, supplies and equipment with the Owner.

1.05 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
- B. Arrange use of site and premises to allow:
 - 1. Owner occupancy.
 - 2. Work by Others.
 - 3. Work by Owner.
- C. 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.
- D. 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. Prevent accidental disruption of utility services to other facilities.

PART 2 PRODUCTS

2.01 WHERE COMPLIANCE WITH TWO (2) OR MORE STANDARDS, PRODUCTS, DETAILS OR METHODS OF WORK ARE SPECIFIED AND THE STANDARDS ESTABLISH DIFFERENT OR CONFLICTING REQUIREMENTS FOR MINIMUM QUANTITIES OR QUALITY LEVELS, COMPLY WITH THE MOST STRINGENT REQUIREMENTS.

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 012000
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 RELATED REQUIREMENTS

- A. Section 007200 - General Conditions: Additional requirements for progress payments, final payment, changes in the Work.
- B. Section 007300 - Supplementary Conditions: Percentage allowances for Contractor's overhead and profit.
- C. Section 017800 - Closeout Submittals: Project record documents.

1.03 SCHEDULE OF VALUES

- A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect and Construction Manager for approval.
- C. Forms filled out by hand will not be accepted.
- D. Submit a printed schedule on AIA Form G703 - Application and Certificate for Payment Continuation Sheet. Contractor's standard form or electronic media printout will be considered.
- E. Submit Schedule of Values in duplicate within 15 days after date of Owner-Contractor Agreement.
- F. 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.
- G. Include a line item for each allowance scheduled.
- H. Include within each line item, a direct proportional amount of Contractor's overhead and profit.
- I. Where applications for payment are likely to include products purchased or fabricated but not yet installed, provide individual line items for material cost, and other applicable phases of completion.
- J. The Architect and Construction Manager will notify the Contractor if the schedule is not satisfactory; revise and resubmit acceptable schedule.
- K. Revise schedule to list approved Change Orders, with each Application For Payment.

1.04 FIRST PAYMENT PROCEDURE

- A. The first application for payment will not be reviewed until the following submittals have been received:
 - 1. Certificates of insurance.
 - 2. Performance and payment bonds.
 - 3. Schedule of values.
 - 4. List of subcontractors, principal suppliers, and fabricators.
 - 5. Contractor's construction schedule.
 - 6. Submittal schedule.
 - 7. Quality control activities schedule.

8. Names of the contractor's principal staff assigned to the project.
9. Copies of the building permit and other authorizations from governing authorities.
10. Provide a PDF copy of the Construction Company Safety Plan.

1.05 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
- C. Forms filled out by hand will not be accepted.
- D. Present required information in typewritten form.
- E. Form: AIA G702 Application and Certificate for Payment and AIA G703 - Continuation Sheet including continuation sheets when required.
 1. Notarize each copy.
- F. 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.
- G. Execute certification by signature of authorized officer.
- H. 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.
- I. List each allowance as a separate line item.
- J. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.
- K. Submit one electronic and three hard-copies of each Application for Payment.
- L. Include the following with the application:
 1. Transmittal letter as specified for submittals in Section 013000.
 2. Construction progress schedule, revised and current as specified in Section 013000.
 3. Current construction photographs specified in Section 013000.
 4. Partial release of liens from major subcontractors and vendors.
 5. Project record documents as specified in Section 017800 for review by Owner which will be returned to the Contractor.
 6. Affidavits, Bill of Sale, Insurance Certificate and Photos of the items attesting to off-site stored products.
- M. When Architect requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

1.06 MODIFICATION PROCEDURES

- A. Submit name of the individual authorized to receive change documents and who will be responsible for informing others in Contractor's employ or subcontractors of changes to Contract Documents.

- B. For minor changes not involving an adjustment to the Contract Price or Contract Time, Architect will issue instructions directly to Contractor.
- C. Architect will advise of minor changes in the Work not involving an adjustment to Contract Sum or Contract Time as authorized by the Conditions of the Contract by issuing supplemental instructions on AIA Form G710.
- D. 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.
- E. 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.
- F. Changes proposed by the contractor will not be considered.
- G. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
 - 1. For change requested by Architect for work falling under a fixed price contract, the amount will be based on Contractor's price quotation as approved by the Architect.
 - 2. For pre-determined unit prices and quantities, the amount will be based on the fixed unit prices.
- H. Substantiation of Costs: Provide full information required for evaluation.
 - 1. Provide following data:
 - a. Quantities of products, labor, and equipment.
 - b. Taxes, insurance, and bonds.
 - c. Overhead and profit.
 - d. Justification for any change in Contract Time.
 - e. Credit for deletions from Contract, similarly documented.
 - 2. Support each claim for additional costs with additional information:
 - a. Origin and date of claim.
 - b. Dates and times work was performed, and by whom.
 - c. Time records and wage rates paid.
 - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
 - e. A statement describing the effect the change may have on the work of other prime contractors.
- I. Contractors Fees: The maximum Contractors fees and other charges related to approved change orders are as follows:
 - 1. Work performed by General Contractor: 10% overhead and 5% profit.
 - 2. Work performed by General Contractor's subcontractor: 10% overhead and 5% profit. Plus 5% fee for the General Contractor.
 - 3. When change work is funded through the base bid Contract Allowance and Contingency, there should be no payment for insurance and bond cost as they are included in the base bid amount.
 - 4. Labor cost, including time for the foreman while engaged directly upon extra work will be paid at the current NJ Prevailing Wage Rate for the trade employed.
 - 5. Labor insurance, fringe benefits mandated by agreement and taxes.

6. Equipment, materials and supplies actually used for the work. The actual cost of these items shall be considered the actual cost paid by the Contractor to suppliers of these items.
 7. Small tools are considered part of overhead.
 8. Provide invoices for equipment, materials and supplies with the change order.
- J. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- K. 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.
- L. 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.
- M. Promptly enter changes in Project Record Documents.
- N. Construction Change Directive:
1. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - a. Construction Change Directive contains a complete description of change in the Work. It also designates methods to be followed to determine change in the Contract Sum or the Contract Time.
 2. Documentation: Maintain detail records on a time and material basis of work required by the constructive Change Directive.
 - a. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.07 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 017000.
 - 2.

PART 2 PRODUCTS - NOT USED

END OF SECTION

SECTION 012500
SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Procedural requirements for proposed substitutions.

1.02 RELATED REQUIREMENTS

- A. Section 013000 - Administrative Requirements: Submittal procedures, coordination.
- B. Section 016000 - Product Requirements: Fundamental product requirements, product options, delivery, storage, and handling.

1.03 DEFINITIONS

- A. Substitutions: Changes from Contract Documents requirements proposed by Contractor to materials, products, assemblies, and equipment.
 - 1. Substitutions for Cause: Proposed due to changed Project circumstances beyond Contractor's control.
 - a. Unavailability.
 - b. Regulatory changes.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 GENERAL REQUIREMENTS

- A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
 - 2. Agrees to provide the same warranty for the substitution as for the specified product.
 - 3. Agrees to provide same or equivalent maintenance service and source of replacement parts, as applicable.
 - 4. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.
 - 5. Waives claims for additional costs or time extension that may subsequently become apparent.
 - 6. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.
- B. A Substitution Request for specified installer constitutes a representation that the submitter:
 - 1. Has acted in good faith to obtain services of specified installer, but was unable to come to commercial, or other terms.
- C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.
 - 1. Note explicitly any non-compliant characteristics.
- D. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
 - 1. No specific form is required. Contractor's Substitution Request documentation must include the following:
 - a. Project Information:
 - 1) Official project name and number, and any additional required identifiers established in Contract Documents.
 - b. Substitution Request Information:

- 1) Discrete and consecutive Substitution Request number, and descriptive subject/title.
 - 2) Indication of whether the substitution is for cause or convenience.
 - 3) Issue date.
 - 4) Reference to particular Contract Document(s) specification section number, title, and article/paragraph(s).
 - 5) Description of Substitution.
 - 6) Reason why the specified item cannot be provided.
 - 7) Differences between proposed substitution and specified item.
 - 8) Description of how proposed substitution affects other parts of work.
- c. Attached Comparative Data: Provide point-by-point, side-by-side comparison addressing essential attributes specified, as appropriate and relevant for the item:
- 1) Physical characteristics.
 - 2) In-service performance.
 - 3) Expected durability.
 - 4) Visual effect.
 - 5) Sustainable design features.
 - 6) Warranties.
 - 7) Other salient features and requirements.
 - 8) Include, as appropriate or requested, the following types of documentation:
 - (a) Product Data:
 - (b) Samples.
 - (c) Certificates, test, reports or similar qualification data.
 - (d) Drawings, when required to show impact on adjacent construction elements.
- d. Impact of Substitution:
- 1) Savings to Owner for accepting substitution.
- E. Limit each request to a single proposed substitution item.
1. Submit an electronic document, combining the request form with supporting data into single document.

3.02 SUBSTITUTION PROCEDURES DURING PROCUREMENT

- A. Submittal Time Restrictions:
1. **Owner will consider requests for substitutions only if submitted at least 14 days prior to the date for receipt of bids.**

3.03 RESOLUTION

- A. Architect may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.
- B. Architect will notify Bidding - Contractor in writing of decision to accept or reject request.

3.04 CLOSEOUT ACTIVITIES

- A. See Section 017800 - Closeout Submittals, for closeout submittals.

END OF SECTION

SECTION 013000
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General administrative requirements.
- B. Preconstruction meeting.
- C. Site mobilization meeting.
- D. Progress meetings.
- E. Construction progress schedule.
- F. Contractor's daily reports.
- G. Progress photographs.
- H. Coordination drawings.
- I. Submittals for review, information, and project closeout.
- J. Number of copies of submittals.
- K. Requests for Interpretation (RFI) procedures.
- L. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Section 013216 - Construction Progress Schedule: Form, content, and administration of schedules.
- B. Section 016000 - Product Requirements: General product requirements.
- C. Section 017000 - Execution and Closeout Requirements: Additional coordination requirements.
- D. Section 017800 - Closeout Submittals: Project record documents; operation and maintenance data; warranties and bonds.

1.03 REFERENCE STANDARDS

- A. AIA G716 - Request for Information; 2004.
- B. AIA G810 - Transmittal Letter; 2001.

1.04 GENERAL ADMINISTRATIVE REQUIREMENTS

- A. Comply with requirements of Section 017000 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.
- B. Make the following types of submittals to Architect:
 - 1. Requests for Interpretation (RFI).
 - 2. Shop drawings, product data, and samples.
 - 3. Test and inspection reports.
 - 4. Design data.
 - 5. Manufacturer's instructions and field reports.
 - 6. Applications for payment and change order requests.
 - 7. Progress schedules.
 - 8. Coordination drawings.
 - 9. Correction Punch List and Final Correction Punch List for Substantial Completion.
 - 10. Closeout submittals.

1.05 CONSTRUCTION MANAGER

- A. Cooperate with the Owner in allocation of mobilization areas of site; for field offices and sheds, for worker access, traffic, and parking facilities.

- B. During construction, coordinate use of site and facilities through the Owner.
- C. Comply with Owner's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- D. Comply with instructions of the Owner for use of temporary utilities and construction facilities. Responsibility for providing temporary utilities and construction facilities is identified in Section 011000 - Summary & 015000 - Temporary Facilities and Controls.
- E. Coordinate field engineering and layout work under instructions of the Owner.

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. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
 - 5. Submission of initial Submittal schedule.
 - 6. Procedures and processing of field decisions, submittals, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
- D. Architect will record minutes and distribute copies within Seven days after meeting to participants, with two copies to Architect, Owner, Contractor, Construction Manager and participants, and those affected by decisions made.
- E. At the preconstruction meeting, Contractors shall identify those individuals who shall supervise and direct the Work including both office and field supervisors. The on-site supervisor shall be present at all times that the Contractor's forces are present to perform work, shall attend all progress meetings, shall attend all coordination and scheduling meetings and such other meetings as may be reasonably requested and scheduled by the Construction Manager

3.02 SITE MOBILIZATION MEETING

- A. Project Coordinator will schedule meeting at the Project site prior to Contractor occupancy.
- B. Attendance Required:
 - 1. Contractor.
 - 2. Owner.
 - 3. Architect.
 - 4. Contractor's superintendent.
 - 5. Major subcontractors.
- C. Agenda:
 - 1. Use of premises by Owner and Contractor.
 - 2. Owner's requirements.
 - 3. Construction facilities and controls provided by Owner.

4. Temporary utilities provided by Owner.
 5. Survey and building layout.
 6. Security and housekeeping procedures.
 7. Schedules.
 8. Application for payment procedures.
 9. Procedures for testing.
 10. Procedures for maintaining record documents.
 11. Requirements for start-up of equipment.
 12. Inspection and acceptance of equipment put into service during construction period.
- 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.

3.03 PROGRESS MEETINGS

- A. The Architect will schedule and administer meetings throughout progress of the work at maximum bi-monthly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Project Coordinator will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- D. Attendance Required:
 1. Contractor.
 2. Owner.
 3. Architect.
 4. Contractor's superintendent.
 5. Major subcontractors.
- E. 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. Review of RFIs log and status of responses.
 7. Review of off-site fabrication and delivery schedules.
 8. Maintenance of progress schedule.
 9. Corrective measures to regain projected schedules.
 10. Planned progress during succeeding work period.
 11. Coordination of projected progress.
 12. Maintenance of quality and work standards.
 13. Effect of proposed changes on progress schedule and coordination.
 14. Other business relating to work.
- F. The Architect will Record minutes and distribute copies within four days after meeting to participants, with two copies to Architect, Owner, Contractor, Construction Manager and participants, and those affected by decisions made.

3.04 CONSTRUCTION PROGRESS SCHEDULE

- A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.
- B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- C. 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.
- D. Within 10 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment.

3.05 DAILY CONSTRUCTION REPORTS

- A. Include only factual information. Do not include personal remarks or opinions regarding operations and/or personnel.
- B. In addition to transmitting electronically a copy to Owner and Architect, and Construction Manager submit two printed copies at weekly intervals.
 1. Submit in format acceptable to Owner.
- C. Prepare a daily construction report recording the following information concerning events at Project site and project progress:
 1. Date.
 2. High and low temperatures, and general weather conditions.
 3. List of subcontractors at Project site.
 4. List of separate contractors at Project site.
 5. Approximate count of personnel at Project site.
 - a. Include a breakdown for supervisors, laborers, journeymen, equipment operators, and helpers.
 6. Major equipment at Project site.
 7. Material deliveries.
 8. Safety, environmental, or industrial relations incidents.
 9. Meetings and significant decisions.
 10. Unusual events (submit a separate special report).
 11. Stoppages, delays, shortages, and losses. Include comparison between scheduled work activities (in Contractor's most recently updated and published schedule) and actual activities. Explain differences, if any. Note days or periods when no work was in progress and explain the reasons why.
 12. Emergency procedures.
 13. Directives and requests of Authority(s) Having Jurisdiction (AHJ).
 14. Change Orders received and implemented.
 15. Testing and/or inspections performed.
 16. List of verbal instruction given by Owner and/or Architect.
 17. Signature of Contractor's authorized representative.

3.06 PROGRESS PHOTOGRAPHS

- A. Submit photographs with each application for payment, taken not more than 3 days prior to submission of application for payment.
- B. Maintain one set of all photographs at project site for reference; same copies as submitted, identified as such.
- C. Photography Type: Digital; electronic files.
- D. Provide photographs of site and construction throughout progress of work produced by an experienced photographer, acceptable to Architect.
- E. Views:
 1. Provide non-aerial photographs from four cardinal views at each specified time, until date of Substantial Completion.
 2. Consult with Architect for instructions on views required.
 3. Provide factual presentation.

4. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.
- F. Digital Photographs: 24 bit color, minimum resolution of 1024 by 768, in JPG format; provide files unaltered by photo editing software.
 1. Delivery Medium: Via email.
 2. File Naming: Include project identification, date and time of view, and view identification.
 3. PDF File: Assemble all photos into printable pages in PDF format, with 2 to 3 photos per page, each photo labeled with file name; one PDF file per submittal.
 4. Hard Copy: Printed hardcopy (grayscale) of PDF file and point of view sketch.

3.07 COORDINATION DRAWINGS

- A. Contractor is to hire a Project Coordinator to prepare coordination drawings of all included trades to ensure no conflicts during construction.
- B. Review drawings prior to submission to Architect.
- C. The Architect will review the coordination drawings and request changes if required.

3.08 REQUESTS FOR INTERPRETATION (RFI)

- A. Definition: A request seeking one of the following:
 1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.
 2. A resolution to an issue which has arisen due to field conditions and affects design intent.
- B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.
- C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
 1. Prepare a separate RFI for each specific item.
 - a. Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.
 - b. Do not forward requests which solely require internal coordination between subcontractors.
 2. Prepare in a format and with content acceptable to Owner.
 - a. Use AIA G716 - Request for Information .
- D. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
 1. Include in each request Contractor's signature attesting to good faith effort to determine from Contract Documents information requiring interpretation.
 2. Unacceptable Uses for RFIs: Do not use RFIs to request the following::
 - a. Approval of submittals (use procedures specified elsewhere in this section).
 - b. Approval of substitutions (see Section - 016000 - Product Requirements)
 - c. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).
 - d. Different methods of performing work than those indicated in the Contract Drawings and Specifications (comply with provisions of the Conditions of the Contract).
 3. Improper RFIs: Requests not prepared in compliance with requirements of this section, and/or missing key information required to render an actionable response. They will be returned without a response, with an explanatory notation.

4. Frivolous RFIs: Requests regarding information that is clearly indicated on, or reasonably inferable from, Contract Documents, with no additional input required to clarify the question. They will be returned without a response, with an explanatory notation.
 - a. The Owner reserves the right to assess the Contractor for the costs (on time-and-materials basis) incurred by the Architect, and any of its consultants, due to processing of such RFIs.
- E. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
- F. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
- G. RFI Log: The Contractor will Prepare and maintain a tabular log of RFIs for the duration of the project.
 1. Indicate current status of every RFI. Update log promptly and on a regular basis.
 2. Note dates of when each request is made, and when a response is received.
 3. Highlight items requiring priority or expedited response.
- H. Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.
 1. Response period may be shortened or lengthened for specific items, subject to mutual agreement, and recorded in a timely manner in progress meeting minutes.
- I. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.
 1. Upon receipt of a response, promptly review and distribute it to all affected parties, and update the RFI Log.
 2. Notify Architect within seven calendar days if an additional or corrected response is required by submitting an amended version of the original RFI, identified as specified above.

3.09 SUBMITTAL SCHEDULE

- A. Submit to Architect and Construction Manager for review a schedule for submittals in tabular format.
 1. Submit at the same time as the preliminary schedule specified in Section - 013216 - Construction Progress Schedule.
 2. Coordinate with Contractor's construction schedule and schedule of values.
 3. Format schedule to allow tracking of status of submittals throughout duration of construction.
 4. Arrange information to include scheduled date for initial submittal, specification number and title, submittal category (for review or for information), description of item of work covered, and role and name of subcontractor.
 5. Account for time required for preparation, review, manufacturing, fabrication and delivery when establishing submittal delivery and review deadline dates.
 - a. For assemblies, equipment, systems comprised of multiple components and/or requiring detailed coordination with other work, allow for additional time to make corrections or revisions to initial submittals, and time for their review.
 6. The submittal schedule must be updated monthly and forwarded to the Architect and Construction Manager with the Contractor's payment application.

3.10 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 compliance with information given and the design concept expressed in Contract Documents.
- C. Samples will be reviewed 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 017800 - Closeout Submittals.

3.11 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.

3.12 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 in compliance with requirements of Section 017800 - Closeout Submittals:
 - 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.

3.13 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. 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.

3.14 SUBMITTAL PROCEDURES

- A. General Requirements:
 - 1. Use a single transmittal for related items.
 - 2. Submit separate packages of submittals for review and submittals for information, when included in the same specification section.

3. Sequentially identify each item. For revised submittals use original number and a sequential numerical suffix.
 4. 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.
 - a. Submittals from sources other than the Contractor, or without Contractor's stamp will not be acknowledged, reviewed, or returned.
 5. Deliver each submittal on date noted in submittal schedule, unless an earlier date has been agreed to by all affected parties, and is of the benefit to the project.
 - a. Send submittals in electronic format via email to Architect.
 6. Schedule submittals to expedite the Project, and coordinate submission of related items.
 - a. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
 - b. For sequential reviews involving Architect's consultants, Owner, or another affected party, allow an additional 7 days.
 - c. For sequential reviews involving approval from authorities having jurisdiction (AHJ), in addition to Architect's approval, allow an additional 30 days.
 7. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of the completed work.
 8. Provide space for Contractor and Architect review stamps.
 9. When revised for resubmission, identify all changes made since previous submission.
 10. Distribute reviewed submittals. Instruct parties to promptly report inability to comply with requirements.
 11. Incomplete submittals will not be reviewed, unless they are partial submittals for distinct portion(s) of the work, and have received prior approval for their use.
 12. Submittals not requested will not be recognized or processed.
 13. The Contractor will submit shop drawings, product data, samples and other submittals within 60 days of the notice to proceed as directed by the Construction Manager
- B. Product Data Procedures:
1. Submit only information required by individual specification sections.
 2. Collect required information into a single submittal.
 3. Do not submit (Material) Safety Data Sheets for materials or products.
- C. Shop Drawing Procedures:
1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting Contract Documents and coordinating related work.
 2. Do not reproduce Contract Documents to create shop drawings.
 3. Generic, non-project-specific information submitted as shop drawings do not meet the requirements for shop drawings.
- D. Samples Procedures:
1. Transmit related items together as single package.
 2. Identify each item to allow review for applicability in relation to shop drawings showing installation locations.

3.15 SUBMITTAL REVIEW

- A. Submittals for Review: Architect will review each submittal, and approve, or take other appropriate action.
- B. Submittals for Information: Architect will acknowledge receipt and review. See below for actions to be taken.
- C. Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.

- D. Architect's and consultants' actions on items submitted for review:
1. Authorizing purchasing, fabrication, delivery, and installation:
 - a. "Approved", or language with same legal meaning.
 - b. "Approved as Noted, Resubmission not required", or language with same legal meaning.
 - 1) At Contractor's option, submit corrected item, with review notations acknowledged and incorporated.
 - c. "Approved as Noted, Resubmit for Record", or language with same legal meaning.
 - 1) Resubmit corrected item, with review notations acknowledged and incorporated. Resubmit separately, or as part of project record documents.
 2. Not Authorizing fabrication, delivery, and installation:
 - a. "Revise and Resubmit".
 - 1) Resubmit revised item, with review notations acknowledged and incorporated.
 - b. "Rejected".
 - 1) Submit item complying with requirements of Contract Documents.
- E. Architect's and consultants' actions on items submitted for information:
1. Items for which no action was taken:
 - a. "Received" - to notify the Contractor that the submittal has been received for record only.
 2. Items for which action was taken:
 - a. "Reviewed" - no further action is required from Contractor.

END OF SECTION

SECTION 013216
CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preliminary schedule.
- B. Construction progress schedule, bar chart type.

1.02 RELATED SECTIONS

- A. Section 013000: Work sequence.

1.03 REFERENCE STANDARDS

- A. M-H (CPM) - CPM in Construction Management - Project Management with CPM; O'Brien; 2006.

1.04 SUBMITTALS

- A. Within 10 days after date of Agreement, submit preliminary schedule.
- B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- C. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
 - 1. Include written certification that major Subcontractors have reviewed and accepted proposed schedule.
- D. Within 10 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment.
- F. Submit in PDF format.
- G. Submit the number of opaque reproductions that Contractor requires, plus two copies that will be retained by Architect and Construction Manager.
- H. Submit under transmittal letter form specified in Section 013000 - Administrative Requirements.

1.05 QUALITY ASSURANCE

- A. Scheduler: Contractor's personnel or specialist Consultant specializing in CPM scheduling with Five years minimum experience in scheduling construction work of a complexity comparable to this Project, and having use of computer facilities capable of delivering a detailed graphic printout within 48 hours of request.

1.06 SCHEDULE FORMAT

- A. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.
- B. Sheet Size: Multiples of 11" x 17".
- C. Scale and Spacing: To allow for notations and revisions.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRELIMINARY SCHEDULE

- A. Prepare preliminary schedule in the form of a horizontal bar chart.

3.02 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.

- B. Identify each item by specification section number.
- C. Identify work of separate stages and other logically grouped activities.
- D. Provide sub-schedules to define critical portions of the entire schedule.
- E. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- F. Provide separate schedule of submittal dates for shop drawings, product data, and samples, owner-furnished products, products identified under Allowances, and dates reviewed submittals will be required from Architect. Indicate decision dates for selection of finishes.
- G. Identify the following information on the schedule:
 - 1. Long Lead items with durations.
 - 2. Dates required for mock-ups and approvals.
 - 3. Shut downs and interruptions of utilities.
 - 4. Enclosure of building.
- H. Indicate delivery dates for owner-furnished products.
- I. When preparing the schedule, take into account:
 - 1. Site Limitations.
 - 2. Weather, including seasonal changes.
 - 3. Need for temporary heating, ventilating, or air conditioning.
- J. Coordinate content with schedule of values specified in Section 012000 - Price and Payment Procedures.
- K. Provide legend for symbols and abbreviations used.
- L. The work activity milestone date requirements for this project, which must be incorporated into the project schedule, are as follows:

3.03 BAR CHARTS

- A. Include a separate bar for each major portion of Work or operation.
- B. Identify the first work day of each week.

3.04 REVIEW AND EVALUATION OF SCHEDULE

- A. Submit evidence to the Architect that all major subcontractors and suppliers of long lead items have reviewed and agreed to the project schedule.
- B. Participate in joint review and evaluation of schedule with Architect at each submittal.
- C. Evaluate project status to determine work behind schedule and work ahead of schedule.
- D. After review, revise as necessary as result of review, and resubmit within 10 days.

3.05 UPDATING SCHEDULE

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity.
- C. Annotate diagrams to graphically depict current status of Work.
- D. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- E. Indicate changes required to maintain Date of Final Completion.
- F. Submit reports required to support recommended changes.
- G. Provide narrative report to define problem areas, anticipated delays, and impact on the schedule. Report corrective action taken or proposed and its effect.

3.06 DISTRIBUTION OF SCHEDULE

- A. Distribute copies of updated schedules to Contractor's project site file, to subcontractors, suppliers, Architect, Owner, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.

END OF SECTION

SECTION 013553
SECURITY PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Security measures including formal security program, entry control, personnel identification, and miscellaneous restrictions.

1.02 RELATED REQUIREMENTS

- A. Section 011000: use of premises and occupancy.
- B. Section 013000: Temporary lighting, site fence, and barriers and enclosures.

1.03 SECURITY PROGRAM

- A. Protect Work, existing premises and Owner's operations from theft, vandalism, and unauthorized entry.
- B. Initiate program in coordination with Owner's existing security system at project mobilization.
- C. Maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.

1.04 ENTRY CONTROL

- A. Restrict entrance of persons and vehicles into Project site and existing facilities.
- B. Allow entrance only to authorized persons with proper identification.
- C. Maintain log of workers and visitors, make available to Owner on request.
- D. Owner will control entrance of persons and vehicles related to Owner's operations.
- E. Coordinate access of Owner's personnel to site in coordination with Owner's security forces.
- F. Contractors must sign the Visitors Log daily located at Facilities and Management Building 229.

1.05 PERSONNEL IDENTIFICATION

- A. Provide identification badge to each person authorized to enter premises.
- B. Badge To Include: Name, assigned number, expiration date and employer.
- C. Maintain a list of accredited persons, submit copy to Owner on request.
- D. Require return of badges at expiration of their employment on the Work.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 014000
QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

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

1.02 RELATED REQUIREMENTS

- A. Section 013000 - Administrative Requirements: Submittal procedures.
- B. Section 016000 - Product Requirements: Requirements for material and product quality.

1.03 REFERENCE STANDARDS

- A. ASTM C1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2008 (Reapproved 2014).
- B. ASTM C1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation; 2014.
- C. ASTM C1093 - Standard Practice for Accreditation of Testing Agencies for Masonry; 2013.
- D. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2012a.
- E. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection and/or Testing; 2014a.
- F. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing; 2013.
- G. IAS AC89 - Accreditation Criteria for Testing Laboratories; 2010.

1.04 DEFINITIONS

- A. Contractor's Quality Control Plan: Contractor's management plan for executing the Contract for Construction.
- B. Design Data: Design-related, signed and sealed drawings, calculations, specifications, certifications, shop drawings and other submittals provided by Contractor, and prepared directly by, or under direct supervision of, appropriately licensed design professional.

1.05 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Design Data: Submit for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.
 - 1. Include calculations that have been used to demonstrate compliance to performance and regulatory criteria provided, and to determine design solutions.
 - 2. Include required product data and shop drawings.

3. Include a statement or certification attesting that design data complies with criteria indicated, such as building codes, loads, functional, and similar engineering requirements.
 4. Include signature and seal of design professional responsible for allocated design services on calculations and drawings.
- C. Test Reports: After each test/inspection, promptly submit two copies of report to Architect and to Owner.
1. Include:
 - a. Date issued.
 - b. Project title and number.
 - c. Name of inspector.
 - d. Date and time of sampling or inspection.
 - e. Identification of product and specifications section.
 - f. Location in the Project.
 - g. Type of test/inspection.
 - h. Date of test/inspection.
 - i. Results of test/inspection.
 - j. Compliance with Contract Documents.
 - k. When requested by Architect, provide interpretation of results.
 2. Test report submittals are for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.
- D. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
 2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.
- E. 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.
- F. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for Owner.
1. Submit report in duplicate within 30 days of observation to Architect for information.
 2. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.

1.06 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
- B. Quality-Control Personnel Qualifications. Engage a person with requisite training and experience to implement and manage quality assurance (QA) and quality control (QC) for the project.

1.07 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with

requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

- B. Comply with reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

1.08 TESTING AND INSPECTION AGENCIES AND SERVICES

- A. The Owner at their discretion may employ additional testing and inspection services. Contractor is to cooperate with any Owner engaged testing agencies.
- B. As indicated in individual specification sections, Contractor shall employ and pay for services of an independent testing agency to perform specified testing.
- C. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- D. Contractor Employed Agency:
 - 1. Inspection agency: Comply with requirements of ASTM D3740 and ASTM E329.
 - 2. Laboratory: Authorized to operate in the State in which the Project is located.
 - 3. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
 - 4. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

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

3.02 TOLERANCES

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

- 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 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Architect 30 days in advance of required observations.
 - 1. Observer subject to approval of Owner.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.04 DEFECT ASSESSMENT

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

END OF SECTION

SECTION 015000
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary utilities.
- B. Temporary sanitary facilities.
- C. Temporary Controls: Barriers, enclosures, and fencing.
- D. Security requirements.
- E. Vehicular access and parking.
- F. Waste removal facilities and services.
- G. Field offices.
- H. Job site administrative facilities.

1.02 RELATED REQUIREMENTS

- A. Section 013553 - Security Procedures
- B. Section 015500 - Vehicular Access and Parking.

1.03 REFERENCE STANDARDS

- A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.
- B. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009.

1.04 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.
- B. Existing facilities may be used.
- C. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.05 TEMPORARY SANITARY FACILITIES

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

1.06 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.

1.07 FENCING

- A. Construction: Commercial grade chain link fence.

- B. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.
- C. Provide 6 foot high fence around contractor's staging area and storage areas.
- D. Provide and maintain fence for duration of on-site work.

1.08 SECURITY

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

1.09 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. Designated existing on-site roads may be used for construction traffic.
- F. Existing parking areas may be used for construction parking as coordinated with the Owner.

1.10 WASTE REMOVAL

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site weekly.
- C. 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.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.11 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition.
- D. Restore new permanent facilities used during construction to specified condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 015500
VEHICULAR ACCESS AND PARKING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Access roads.
- B. Parking.
- C. Existing pavements and parking areas.
- D. Permanent pavements and parking facilities.
- E. Construction parking controls.
- F. Flag persons.
- G. Flares and lights.
- H. Haul routes.
- I. Traffic signs and signals.
- J. Maintenance.
- K. Removal, repair.
- L. Mud from site vehicles.

1.02 RELATED REQUIREMENTS

- A. Section 015000: For access to site, work sequence, and occupancy.

PART 2 PRODUCTS

2.01 SIGNS, SIGNALS, AND DEVICES

- A. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.
- B. Flag Person Equipment: As required by local jurisdictions.

PART 3 EXECUTION

3.01 PREPARATION

- A. Clear areas, provide surface and storm drainage of road, parking, area premises, and adjacent areas.

3.02 ACCESS ROADS

- A. Use of designated existing on-site streets and driveways for construction traffic is permitted only as authorized by the Owner.
- B. Tracked vehicles not allowed on paved areas.
- C. Location as approved by Owner.
- D. Provide unimpeded access for emergency vehicles. Maintain 20 foot width driveways with turning space between and around combustible materials.
- E. Provide and maintain access to fire hydrants free of obstructions.

3.03 PARKING

- A. Use of designated areas of existing parking facilities by construction personnel is permitted.
- B. Arrange for temporary parking areas to accommodate use of construction personnel.
- C. When site space is not adequate, provide additional off-site parking.
- D. Locate as approved by Owner.

3.04 CONSTRUCTION PARKING CONTROL

- A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Owner's operations.
- B. Monitor parking of construction personnel's vehicles in existing facilities. Maintain vehicular access to and through parking areas.
- C. Prevent parking on or adjacent to access roads or in non-designated areas.

3.05 FLAG PERSONS

- A. Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.

3.06 FLARES AND LIGHTS

- A. Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

3.07 HAUL ROUTES

- A. Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access.
- B. Confine construction traffic to designated haul routes.
- C. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.

3.08 TRAFFIC SIGNS AND SIGNALS

- A. At approaches to site and on site, install at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
- B. Relocate as work progresses, to maintain effective traffic control.

3.09 MAINTENANCE

- A. Maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, products, mud, snow, and ice.
- B. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

3.10 REMOVAL, REPAIR

- A. Repair existing facilities damaged by use, to original condition.
- B. Remove equipment and devices when no longer required.
- C. Repair damage caused by installation.

3.11 MUD FROM SITE VEHICLES

- A. Provide means of removing mud from vehicle wheels before entering streets.

END OF SECTION

SECTION 016000
PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

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

1.02 RELATED REQUIREMENTS

- A. Section 011000 - Summary: Lists of products to be removed from existing building.
- B. Section 012500 - Substitution Procedures: Substitutions made during procurement.
- C. Section 014000 - Quality Requirements: Product quality monitoring.

1.03 REFERENCE STANDARDS

- A. CAL (CDPH SM) - Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions From Indoor Sources Using Environmental Chambers; California Department of Public Health; v1.1, 2010.
- B. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.04 SUBMITTALS

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
 - 1. Submit within 14 days after date of Notice to Proceed.
 - 2. For products specified only by reference standards, list applicable reference standards.
- B. 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.
- C. 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.
- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.
- E. 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 Contract Documents.

- B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.
- C. 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.
- D. Specific Products to be Reused: The reuse of certain materials and equipment already existing on the project site is required.

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by Contract Documents.
- B. See Section 014000 - Quality Requirements, for additional source quality control requirements.
- C. Use of products having any of the following characteristics is not permitted:
 - 1. Made outside the United States, its territories, Canada, or Mexico.
 - 2. Made using or containing CFC's or HCFC's.
 - 3. Made of wood from newly cut old growth timber.
 - 4. Containing lead, cadmium, or asbestos.
- D. Where other criteria are met, Contractor shall give preference to products that:
 - 1. Are extracted, harvested, and/or manufactured closer to the location of the project.
 - 2. Have longer documented life span under normal use.
 - 3. Result in less construction waste. See Section 017419

2.03 PRODUCT OPTIONS

- A. It is the contractor's responsibility to select products which comply with the contract documents and which are compatible with one another, with existing work, and with products selected by other contractors.
 - 1. Verify that electrical characteristics of products are compatible with electrical systems; notify Architect of all discrepancies.
- B. Do not use any substitute products which have not been approved in accordance with the requirements of the contract documents; formal substitution request is required.
- C. Definition of Substitute Product: Any product which does not meet the requirements of the contract documents, whether in product characteristics, performance, quality, or manufacturer or brand names, is considered a substitution. All substitutions must be requested and approved by the Architect and Owner prior to the submission of the bid.
- D. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- E. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- F. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named. All substitutions must be requested and approved by the Architect and Owner prior to the submission of the bid.
- G. Products specified by listing a brand name product as the "Basis of Design": Provide a product equivalent to the product specified within the limits of variation specified; submit substitution request for all products other than that listed as the basis of design. All substitutions must be requested and approved by the Architect and Owner prior to the submission of the bid.

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 LIMITATIONS

- A. See Section 012500 - Substitution Procedures.
- B. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated lead time and determined that it meets or exceeds the specified products lead time.
 - 2. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
 - a. Including redesign and additional components and capacity required by other work affected by the change.
 - 3. Will submit accurate and adequate documentation indicating a side by side comparison with specified item to prove to the design team that the proposed substitution is equal or greater than the item specified.
- C. Substitution requests will not be considered when submitted directly by subcontractor or supplier.
- D. Substitution Submittal Procedure:
 - 1. Submit Two copies of request for substitution for consideration. Limit each request to one proposed substitution. **All substitutions must be requested and approved by the Architect and Owner prior to the submission of the bid.**
 - 2. The Architect will notify Bidder in writing of decision to accept or reject request.
- E. Data Required with substitution request:
 - 1. Identify product by specification section and paragraph number.
 - 2. Manufacturer's name and address, trade name and model number of product, and name of fabricator or supplier.
 - 3. Complete product data.
 - 4. A list of other projects on which the proposed product has been used, with project name, the design professionals name, owner and contact.
 - 5. Itemized side by side comparison of the proposed product to the specified product.
 - 6. List of maintenance services and replacement materials available.
 - 7. Statement of the effect of the substitution on the construction schedule. Including statement of lead time.
 - 8. Statement of changes that will be required in other work or products if the substitute product is approved.

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. Provide protection of stored materials and products against theft, casualty, or deterioration.
- B. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. See Section 017419.
 - 1. Structural Loading Limitations: Handle and store products and materials so as not to exceed static and dynamic load-bearing capacities of project floor and roof areas.
- C. Store and protect products in accordance with manufacturers' instructions.
- D. Store with seals and labels intact and legible.
- E. Arrange storage of materials and products to allow for visual inspection for the purpose of determination of quantities, amounts, and unit counts.
- F. Store sensitive products in weather tight, climate-controlled enclosures in an environment favorable to product.
- G. For exterior storage of fabricated products, place on sloped supports above ground.
- H. Provide off-site storage and protection when site does not permit on-site storage or protection.
 - 1. Execute a formal supplemental agreement between Owner and Contractor allowing off-site storage, for each occurrence.
- I. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- J. Comply with manufacturer's warranty conditions, if any.
- K. Do not store products directly on the ground.
- L. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- M. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- N. Prevent contact with material that may cause corrosion, discoloration, or staining.
- O. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- P. 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 017000
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.
- 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 01100 - Summary: Limitations on work; Owner occupancy.
- B. Section 01300 - Submittals.
- C. Section 014000 - Quality Requirements: Testing and inspection procedures.
- D. Section 015000 - Temporary Facilities and Controls: Temporary exterior enclosures.
- E. Section 017800: Project record documents, operation and maintenance data, warranties and bonds.
- F. Section 024100 - Demolition: Demolition of whole structures and parts thereof; site utility demolition.
- G. Individual Product Specification Sections:
 - 1. Advance notification to other sections of openings required in work of those sections.

1.03 REFERENCE STANDARDS

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

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
 - 1. On request, submit documentation verifying accuracy of survey work.
 - 2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in compliance with Contract Documents.
 - 3. Submit surveys and survey logs for the project record.
- C. Selective Demolition Plan: Submit selective demolition plan as specified by OSHA and local authorities.
 - 1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences. Include design drawings and calculations for bracing and shoring.
 - 2. Identify demolition firm and submit qualifications.

3. Include a summary of safety procedures.
- D. 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. Written permission of affected separate Contractor.
 - f. Date and time work will be executed.
- E. Project Record Documents: Accurately record actual locations of capped and active utilities. Record all underground utilities and structures.

1.05 QUALIFICATIONS

- A. For selective demolition work, employ a firm specializing in the type of work required.
 1. Minimum of 5 years of documented experience.
- B. 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. Employ only individual(s) trained and experienced in establishing and maintaining horizontal and vertical control points necessary for laying out construction work on project of similar size, scope and/or complexity.
- C. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

1.06 PROJECT CONDITIONS

- A. Use of explosives is not permitted.
- B. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- C. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors.
 2. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Owner.
- D. 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.
- E. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from entering any buildings.
- F. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises and adjacent properties.
- G. 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.

- H. Existing conditions:
 - 1. After the project is begun, the contractor is responsible for the condition of the structures to be demolished. The Owner does not warrant that the condition of the structures to be demolished will not have changed since the time of inspection for bidding purposes.
 - 2. The Owner reserves the right to remove and salvage portions of the structure prior to the start of demolition.
- I. Unforeseen Conditions:
 - 1. Should unforeseen conditions be encountered that affect the design or function of the project, investigate fully and submit an accurate, detailed, written report to the Architect. While awaiting the Architect's response, re schedule operations if necessary to avoid delay of overall project.
- J. Lead Paint Protection: Contractor shall test paint on surfaces of existing features to be removed. If lead paint is found to exist on painted surfaces within existing facility, all precautions shall be taken when performing demolition work in and adjacent to such areas and surfaces. The Contractor shall be responsible for verifying with the local health department and other authorities having jurisdiction which procedures and precautions shall be implemented at the jobsite. The Contractor shall be responsible for coordination of all precautions required for lead paint protection.
 - 1. Precautions: The Contractor is responsible for sealing off all areas where demolition involving existing lead paint is taking place. Contractor shall use suitable methods to limit spread of lead dust into other areas, and complying with, regulations of the New Jersey Department of Health, Accident Prevention and Poison Control, and any other applicable regulations. Precautions shall include the protection of workers, the Owner's representative, professionals hired by the Owner and inspectors.
 - 2. Procedures: The following procedures are prohibited when working on surfaces which contain lead paint (Some procedures may include the use of NIOSH approved respirators with high efficiency filters (HEPA)):
 - a. Use of heat (gas fired torches, heat guns, infrared lamps, etc.
 - b. Sanding
 - c. Sandblasting

1.07 COORDINATION

- A. See Section 011000 for occupancy-related requirements.
- B. 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.
- C. Notify affected utility companies and comply with their requirements.
- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- G. Coordinate completion and clean-up of work of separate sections.
- H. 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.

- I. The Contractor shall coordinate their construction activities with the Owner, the Contractors Subcontractors and other entities involved assuring efficient and orderly installation of each part of the Work. The Contractor shall coordinate its operations with operations included under different Sections of the specifications that depend on each other for proper installation, connection, and operation.
- J. The Contractor shall be responsible for the daily monitoring of its work for quality assurance compliance and shall immediately correct any conditions found to be unacceptable and not conforming with the quality level established by the Architect, Owner and Construction Manager

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, **prior to submitting bid.**

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 miss-fabrication.
- 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 pre-installation 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 seven 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 copies to Architect, Owner, participants, and those affected by decisions made.

3.04 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Architect of any discrepancies discovered.
- C. Contractor shall locate and protect survey control and reference points.
- D. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- E. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- F. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
- G. Utilize recognized engineering survey practices.
- H. Establish a minimum of four permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on project record documents.
- I. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
- J. Periodically verify layouts by same means.
- K. Maintain a complete and accurate log of control and survey work as it progresses.
- L. On completion of foundation walls and major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.
- M. On completion of earthwork, prepare a certified survey illustrating topography, dimensions, locations, angles, and elevations of construction and site work.

3.05 GENERAL DEMOLITION REQUIREMENTS

- A. Definitions:
 - 1. Remove: unless items are otherwise indicated to be reinstalled or salvaged, remove and scrap.
 - 2. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare for service.
 - 3. Remove and Install New: Remove and dispose of items indicated and install new items.
 - 4. Remove and Salvage: Items indicated to be salvaged will remain the Owner's property. Carefully remove and clean items indicated to be salvaged; pack or crate to protect against damage; identify contents of containers; deliver to the locations indicated.
 - 5. Remove and Scrap: Remove and dispose of items indicated.
 - a. All demolished or removed items and materials shall be considered scrap except for those indicated to remain, those indicated to be reinstalled, and those indicated to be salvaged.
 - b. Items of value to the Contractor:
 - 1) Do not store removed items on site.
 - 6. Existing to Remain: Construction or items indicated to remain shall be protected against damage during demolition operations. Where practicable, and with the Architect's permission, the Contractor may elect to remove items to a suitable storage location during demolition and then properly clean and reinstall the items.
- B. Demolish and remove existing construction only to the extent required by the new construction and as indicated in the contract documents.

3.06 GENERAL INSTALLATION REQUIREMENTS

- A. 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.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.07 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as indicated.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 015000 .
 - 2. Provide sound retardant partitions of construction indicated on drawings in locations indicated on drawings.
- C. 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.
- D. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
 - 2. Remove items indicated on drawings.
 - 3. Relocate items indicated on drawings.
 - 4. 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.
 - 5. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- E. Services (): Remove, relocate, and extend existing systems to accommodate new construction.
 - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
 - 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
 - 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.

- b. See Section 011000 for other limitations on outages and required notifications.
 - c. Provide temporary connections as required to maintain existing systems in service.
- 4. Verify that abandoned services serve only abandoned facilities.
- 5. Remove abandoned pipe, ducts, conduits, and equipment ; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- F. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Patch as specified for patching new work.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
 - 1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Architect.
 - 2. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
 - 3. Where a change of plane of 1/4 inch or more occurs in existing work, submit recommendation for providing a smooth transition for Architect review and request instructions.
- H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- I. Refinish existing surfaces as indicated:
 - 1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
 - 2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
 - 3. Patch as specified for patching new work.
- J. Clean existing systems and equipment.
- K. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- L. Do not begin new construction in alterations areas before demolition is complete.
- M. Comply with all other applicable requirements of this section.

3.08 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Fit products together to integrate with other work.
 - 3. Provide openings for penetration of mechanical, electrical, and other services.
 - 4. Match work that has been cut to adjacent work.
 - 5. Repair areas adjacent to cuts to required condition.
 - 6. Repair new work damaged by subsequent work.
 - 7. Remove samples of installed work for testing when requested.
 - 8. Remove and replace defective and non-complying work.
 - 9. Remove existing footings in conflict with new construction.

- D. Execute cutting and patching to complete the work, to uncover work in order to install improperly sequenced work, to remove and replace defective or non-conforming work, to remove samples of installed work for testing when requested, to provide openings in the work for penetration of mechanical and electrical work, to execute patching to complement adjacent work, and to fit products together to integrate with other work.
- E. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- F. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- G. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- H. Restore work with new products in accordance with requirements of Contract Documents.
- I. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- J. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 078400, to full thickness of the penetrated element.
- K. 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.
- L. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
- M. Make neat transitions. Patch work to match adjacent work in texture and appearance. Where new work abuts or aligns with existing, perform a smooth and even transition.
- N. Patch or replace surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. Repair substrate prior to patching finish. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

3.09 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Collect and remove waste materials, debris, and trash/rubbish from site weekly and dispose off-site; do not burn or bury.

3.10 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Protect work from spilled liquids. If work is exposed to spilled liquids, immediately remove protective coverings, dry out work, and replace protective coverings.
- G. 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.
- H. Prohibit traffic from landscaped areas.
- I. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

3.11 SYSTEM STARTUP

- A. Coordinate with requirements of Section 017900.
- B. Coordinate schedule for start-up of various equipment and systems.
- C. Notify Architect and Owner seven days prior to start-up of each item.
- D. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- E. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- F. Verify that wiring and support components for equipment are complete and tested.
- G. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- H. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- I. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.12 ADJUSTING

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

3.13 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
 - 1. Clean areas to be occupied by Owner prior to final completion before Owner occupancy.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- F. Clean debris from roofs, gutters, downspouts, scuppers, overflow drains, area drains, and drainage systems.
- G. Clean site; sweep paved areas, rake clean landscaped surfaces.
- H. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.14 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to Architect and Owner.

3.15 SUBSTANTIAL COMPLETION PROCEDURES

- A. 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.
- B. Notify Architect when work is considered ready for Substantial Completion. Do not submit request for inspection for substantial completion until the following activities have been completed:
 - 1. Delivery of maintenance materials and tools.
 - 2. Demonstration of all equipment and systems.
 - 3. Instruction of the Owner's personnel.
 - 4. Removal of temporary facilities.
 - 5. Changeover to permanent locking systems.
 - 6. Final cleaning.
 - 7. Final extermination.
 - 8. The Owner has been informed of necessary procedures for changing over operation, maintenance, security, etc.
 - 9. The Owner has received occupancy and operating permits from authorities having jurisdiction.
 - 10. All activities specified to occur prior to substantial completion.
- C. Do not submit request for inspection for substantial completion until the following submittals have been completed:
 - 1. List of incomplete work prepared by the Contractor.
 - 2. Final testing, adjusting, and balancing reports.
 - 3. All submittals specified to occur prior to substantial completion.
- D. Submit the following with application for payment following substantial completion:
 - 1. Contractor's affidavit of release of liens.
 - 2. Meter readings of all utilities services for which the Contractor has been paying.
 - 3. Consent of Surety to reduction in or partial release of retainage.
 - 4. Final list of incomplete work.
 - 5. Other data required by the contract documents.
 - 6. Warranties/ guarantees and maintenance agreements.
 - 7. Starting performance reports.
- E. 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.
- F. The Architect will perform one inspection for substantial completion, upon request of the contractor.
 - 1. If the Architect is unable to issue the certificate of substantial completion because the work is not considered to be substantially complete, the contractor shall pay all subsequent inspection costs, including compensation for the Architect's services and expenses.
 - 2. Only one certificate of substantial completion will be issued for the entire project.
- G. Owner will occupy portions of the building as specified in Section 011000.

- H. 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.
- I. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.

3.16 FINAL COMPLETION PROCEDURES

- A. Accompany Project Coordinator on Contractor's preliminary final inspection.
- B. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
- C. The Architect will perform one inspection for final completion, upon request of the contractor.
 - 1. Submit the following with request for inspection:
 - a. Previous inspection lists indicating completion of all items.
 - b. If any items cannot be completed, obtain prior approval of such delay.
 - 2. If the Architect is unable to issue the certificate for final payment because the work is not complete, the contractor shall pay all subsequent inspection costs, including compensation for the Architect's services and expenses.
- D. Do not submit request for final inspection until the following activities have been completed:
 - 1. Completion of all work, except those items agreed upon by the Owner.
 - 2. Final property survey, including review and approval.
 - 3. All activities specified to occur between substantial completion and final completion.
- E. Submit the following with the final application for payment:
 - 1. Certified copy of the previous list of items to be completed or corrected, stating that each has been completed or otherwise resolved for acceptance.
 - 2. Updated final statement, accounting for final changes to the contract sum.
 - 3. Consent of surety to final payment.
 - 4. Fully executed Maintenance Bond.
 - 5. Final liquidated damages statement.
 - 6. Meter readings of all utilities services for which the contractor has been paying after substantial completion.
 - 7. Certification that financial obligations to governing authorities and public utilities have been fulfilled.
 - 8. Ensure that unsettled claims will be settled.
 - 9. Certificates of insurance for all coverages specified to commence at final completion.
 - 10. Proof that taxes, fees and similar obligations have been paid.
 - 11. Completion of training necessary for the Owner's personnel to operate all systems trouble-free.
 - 12. Execution of maintenance agreements and assurance that maintenance is ongoing.
 - 13. Final Lien Release from General Contractor, Subcontractors and Vendors.
- F. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

3.17 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Furnish service and maintenance of components indicated in specification sections during the warranty period.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, as required.

- D. Include systematic examination, and adjustment of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION

SECTION 017800
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 007200 - General Conditions: Performance bond and labor and material payment bonds, warranty, and correction of work.
- B. Section 013000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- C. Section 017000 - Execution and Closeout Requirements: Contract closeout procedures.
- D. Individual Product Sections: Specific requirements for operation and maintenance data.
- E. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect upon substantial completion.
- B. 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. 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.
 - 3. Submit two sets of revised final documents in final form within 10 days after final inspection.
- C. Warranties and Bonds:
 - 1. For materials put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.

- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. 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. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 2. Field changes of dimension and detail.
 - 3. 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 new materials. 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 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.

- E. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
- F. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- G. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- H. Text: Manufacturer's printed data, or typewritten data on 24 pound paper.
- I. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- J. Arrangement of Contents: Organize each volume in parts as follows:
 - 1. Project Directory.
 - 2. Table of Contents, of all volumes, and of this volume.
 - 3. Operation and Maintenance Data: Arranged by system, then by product category.
 - a. Source data.
 - b. Product data, shop drawings, and other submittals.
 - c. Operation and maintenance data.
 - d. Field quality control data.
 - e. Photocopies of warranties and bonds.

3.05 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.
- F. Manual: Bind in commercial quality 8-1/2 by 11 inch three D side ring binders with durable plastic covers.
- G. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor, material supplier ; and name of responsible company principal.
- H. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- I. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

END OF SECTION

SECTION 024100

DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Building demolition excluding removal of hazardous materials and toxic substances.
- B. Selective demolition of building elements for alteration purposes.

1.02 RELATED REQUIREMENTS

- A. Section 011000 - Summary: Limitations on Contractor's use of site and premises.
- B. Section 015000 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- C. Section 016000 - Product Requirements: Handling and storage of items removed for salvage and relocation.
- D. Section 017000 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.

1.03 REFERENCE STANDARDS

- A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Site Plan: Showing:
 - 1. Areas for temporary construction and field offices.
- C. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.
 - 1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences.
 - 2. Identify demolition firm and submit qualifications.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

1.05 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: Company specializing in the type of work required.
 - 1. Minimum of 10 years of documented experience.

PART 2 PRODUCTS

PART 3 EXECUTION

3.01 SCOPE

- A. Remove existing roofing and all accessories down to existing roof deck for installation of new insulation and roofing system.
- B. Remove all copings were indicated for installation of new coping systems.
- C. Remove other items indicated, for salvage, relocation, and recycling.

3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with other requirements specified in Section 017000.
- B. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.

1. Obtain required permits.
 2. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 3. Provide, erect, and maintain temporary barriers and security devices.
 4. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
 5. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 6. Do not close or obstruct roadways or sidewalks without permit.
 7. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
 8. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.
- C. Do not begin removal until receipt of notification to proceed from Owner.
- D. Do not begin removal until built elements to be salvaged or relocated have been removed.
- E. Protect existing structures and other elements that are not to be removed.
1. Provide bracing and shoring.
 2. Prevent movement or settlement of adjacent structures.
 3. Stop work immediately if adjacent structures appear to be in danger.
- F. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- G. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury. Known ACM locations include but are not limited to:

Material	Location	Survey Results
Roof flashing along roof perimeter, vents, ducts, air handling unit supports, conduits and any other roof openings	Lower Roofs	ACM

- H. Hazardous Materials: Comply with 29 CFR 1926 and state and local regulations.
- I. Perform demolition in a manner that maximizes salvage and recycling of materials.
1. Dismantle existing construction and separate materials.
 2. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.

3.03 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities hazards to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.

- G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.
- H. Prepare building demolition areas by disconnecting and capping utilities outside the demolition zone; identify and mark utilities to be subsequently reconnected, in same manner as other utilities to remain.

3.04 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as indicated.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Separate areas in which demolition is being conducted from other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 015000 in locations indicated on drawings.
 - 2. Provide sound retardant partitions of construction indicated on drawings in locations indicated on drawings.
- C. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
- D. Services (Including but not limited to HVAC, Plumbing, Electrical, and Telecommunications): Remove existing systems and equipment as indicated.
 - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
 - 2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - 3. Verify that abandoned services serve only abandoned facilities before removal.
 - 4. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.
- E. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Patch as specified for patching new work.

3.05 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION

SECTION 061000
ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Roof-mounted curbs.
- B. Roofing nailers.
- C. Preservative treated wood materials.
- D. Concealed wood blocking, nailers, and supports.

1.02 RELATED REQUIREMENTS

- A. Section 077200 - Roof Accessories: Prefabricated roof curbs.

1.03 REFERENCE STANDARDS

- A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.
- B. AWPA U1 - Use Category System: User Specification for Treated Wood; 2012.
- C. PS 20 - American Softwood Lumber Standard; 2010.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide technical data on application instructions.
- C. Manufacturer's Certificate: Certify that wood products supplied for rough carpentry meet or exceed specified requirements.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
 - 1. Species: Douglas Fir-Larch, unless otherwise indicated.
 - 2. If no species is specified, provide species graded by the agency specified; if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements.
 - 3. Grading Agency: Grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee at www.alsc.org, and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

- A. Moisture Content: S-dry or MC19.
- B. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
 - 1. Lumber: S4S, No. 2 or Standard Grade.
 - 2. Boards: Standard or No. 3.

2.03 ACCESSORIES

- A. Fasteners and Anchors:
 - 1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.

2. Drywall Screws: Bugle head, hardened steel, power driven type, length three times thickness of sheathing.
3. Anchors: Toggle bolt type for anchorage to hollow masonry.

2.04 FACTORY WOOD TREATMENT

- A. Treated Lumber and Plywood: Comply with requirements of AWP A U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
 1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWP A standards.
- B. Preservative Treatment:
 1. Manufacturers:
 - a. Arch Wood Protection, Inc.: www.wolmanizedwood.com.
 - b. Koppers Performance Chemicals, Inc.: www.koppersperformancechemicals.com.
 - c. Viance, LLC: www.treatedwood.com.
 - d. Substitutions: See Section 016000 - Product Requirements.
 2. Preservative Pressure Treatment of Lumber Above Grade: AWP A U1, Use Category UC3B, Commodity Specification A using waterborne preservative.
 - a. Kiln dry lumber after treatment to maximum moisture content of 19 percent.
 - b. Treat lumber exposed to weather.
 - c. Treat lumber in contact with roofing, flashing, or waterproofing.
 - d. Treat lumber in contact with masonry or concrete.
 - e. Treat lumber less than 18 inches above grade.
 - f. Treat lumber in other locations as indicated.

PART 3 EXECUTION

3.01 PREPARATION

- A. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION - GENERAL

- A. Select material sizes to minimize waste.
- B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.
- C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.03 TOLERANCES

- A. Framing Members: 1/4 inch from true position, maximum.
- B. Variation from Plane, Other than Floors: 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

3.04 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements for additional requirements.

3.05 CLEANING

- A. Waste Disposal: See Section 017419 - Construction Waste Management and Disposal.
 1. Comply with applicable regulations.
 2. Do not burn scrap on project site.
 3. Do not burn scraps that have been pressure treated.
 4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or "waste-to-energy" facilities.

- B. Do not leave wood, shavings, sawdust, etc. on the ground or buried in fill.
- C. Prevent sawdust and wood shavings from entering the storm drainage system.

END OF SECTION

SECTION 070150.19
PREPARATION FOR RE-ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Partial replacement of existing roofing system in preparation for replacement roofing system in designated areas as indicated on drawings.
- B. Removal of existing flashing and counter flashings.
- C. Temporary roofing protection.

1.02 RELATED REQUIREMENTS

- A. Section 075400 - Thermoplastic Membrane Roofing.

1.03 REFERENCE STANDARDS

- A. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation; 2015a.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate with affected mechanical and electrical work associated with roof penetrations.
- B. Pre-installation Meeting: Convene one week before starting work of this section.
 - 1. Attendees:
 - a. Architect.
 - b. Contractor.
 - c. Owner.
 - d. Installer.
 - e. Roofing system manufacturer's field representative.
 - 2. Meeting Agenda: Provide agenda to participants prior to meeting in preparation for discussions on the following:
 - a. Removal and installation schedule.
 - b. Necessary preparatory work.
 - c. Protection before, during, and after roofing system installation.
 - d. Removal of existing roofing system.
 - e. Installation of new roofing system.
 - f. Temporary roofing and daily terminations.
 - g. Transitions and connection to and with other work.
 - h. Inspections and testing of installed systems.
- C. Schedule work to coincide with commencement of installation of new roofing system.

1.05 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittal procedures.
- B. Product Data: Submit for each type of material.
- C. Shop Drawings: Indicate size, configuration, and installation details.
- D. Installer's Qualification Statement.

1.06 QUALITY ASSURANCE

- A. Materials Removal Company Qualifications: Company specializing in performing work of type specified with at least three years of documented experience.
 - 1. Comply with EPA notification regulations prior to start of roofing removal work.
 - 2. Comply with removal and disposal regulations of local authorities having jurisdiction (AHJ).
- B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.

1. When same installer as new roofing system, comply with related requirements of section indicated for new roofing system.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Ensure storage and staging of materials does not exceed static and dynamic load-bearing capacities of roof decking.

1.08 FIELD CONDITIONS

- A. Do not remove existing roofing membrane when weather conditions threaten the integrity of building contents or intended continued occupancy.
- B. Maintain continuous temporary protection prior to and during installation of new roofing system.
- C. Provide notice at least three days before starting activities that will affect normal building operations.
- D. Verify that occupants have been evacuated from building areas when work on structurally impaired roof decking is scheduled to begin.
- E. Owner will occupy building areas directly below re-roofing area.
 1. Provide Owner with at least 48 hours written notice of roofing activities that may affect their operations and to allow them to prepare for upcoming activities as necessary.
 2. Maintain access of Owner's personnel to corridors, existing walkways, and adjacent buildings.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Temporary Roofing Protection Materials:
 1. Contractor's responsibility to select appropriate materials for temporary protection of roofing areas as determined necessary for this work.

2.02 ACCESSORIES

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

PART 3 EXECUTION

3.01 EXAMINATION

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

3.02 PREPARATION

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

3.03 MATERIAL REMOVAL

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

3.04 PROTECTION

- A. Provide for surface drainage from sheeting to existing drainage facilities.
- B. Do not permit traffic over unprotected or repaired deck surface.

END OF SECTION

SECTION 075440
TPO MEMBRANE ROOFING

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes
 - 1. Thermoplastic Polyolefin Single-Ply Roofing Membrane
 - 2. Thermoplastic Polyolefin Flashings
 - 3. Thermoplastic Polyolefin Accessories
 - 4. Insulation
- B. Related Sections
 - 1. Section 06100: Rough Carpentry
 - 2. Section 07620: Sheet Metal Flashing and Trim
 - 3. Section 15430: Plumbing Specialties

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM) - Annual Book of ASTM Standards
 - 1. ASTM D-751 - Standard Test Methods for Coated Fabrics
 - 2. ASTM D-2137 - Standard Test Methods for Rubber Property – Brittleness Point of Flexible Polymers and Coated Fabrics
 - 3. ASTM E-96 - Standard Test Methods for Water Vapor Transmission of Materials
 - 4. ASTM D1204 - Standard Test Method for Linear Dimensional Changes of Nonrigid Thermoplastic Sheet or Film at Elevated Temperature
 - 5. ASTM D-471 - Standard Test Method for Rubber Property – Effect of Liquids
 - 6. ASTM D-1149 - Standard Test Methods for Rubber Deterioration – Cracking in an Ozone Controlled Environment
 - 7. ASTM C-1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer
 - 8. ASTM C-1371 - Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers
 - 9. ASTM E 903 - Standard Test Method for Solar Absorptance, Reflectance, and Transmission of Materials Using Integrating Spheres
 - 10. ASTM G155 - Standard Practice For Operating Xenon Arc Light Apparatus For Exposure Of Non-Metallic Materials
 - 11. ASTM D573 - Standard Test Method for Rubber - Deterioration in An Air Oven
- B. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) - *Architectural Sheet Metal Manual*
- C. National Roofing Contractors Association (NRCA)
- D. U.S. Green Building Council (USGBC)
 - 1. Leadership in Energy and Environmental Design (LEED)
- E. California Title 24 Energy Efficient Standards
- F. ENERGY STAR
- G. Cool Roofing Rating Council (CRRRC)

1.03 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) *Roofing and Waterproofing Manual* for definitions of roofing terms related to this section.

1.04 SUBMITTALS

- A. Product Data: Provide product data sheets for each type of product indicated in this section.

- B. Shop Drawings: Provide manufacturers standard details and approved shop drawings for the roof system specified.
- C. Samples: Provide samples of insulations, fasteners, membrane materials and accessories for verification of quality.
- D. Certificates: Installer shall provide written documentation from the manufacturer of their authorization to install the roof system, and eligibility to obtain the warranty specified in this section.

1.05 **QUALITY ASSURANCE**

- A. Manufacturer's Qualifications: GAF shall provide a roofing system that meets or exceeds all criteria listed in this section.
- B. Installer's Qualifications:
 - 1. **TFATI80-30 Year Warranty:** Installer shall be classified as a *Master Select*™ contractor as defined and certified by GAF.
- C. Source Limitations: All components listed in this section shall be provided by a single manufacturer or approved by the primary roofing manufacturer.
- D. Final Inspection
Manufacturer's representative shall provide a comprehensive final inspection after completion of the roof system. All application errors must be addressed and final punch list completed.

1.06 **PRE-INSTALLATION CONFERENCE**

- A. Prior to scheduled commencement of the roofing installation and associated work, conduct a meeting at the project site with the installer, architect, owner, GAF representative and any other persons directly involved with the performance of the work. The installer shall record conference discussions to include decisions and agreements reached (or disagreements), and furnish copies of recorded discussions to each attending party. The main purpose of this meeting is to review foreseeable methods and procedures related to roofing work.

1.07 **REGULATORY REQUIREMENTS**

- A. All work shall be performed in a safe, professional manner, conforming to all federal, state, and local codes.

1.08 **DELIVERY, STORAGE AND HANDLING**

- A. Deliver all roofing materials to the site in original containers, with factory seals intact. All products are to carry a GAF label.
- B. Store all pail goods in their original undamaged containers in a clean, dry location within their specified temperature range.
- C. Do not expose materials to moisture in any form before, during, or after delivery to the site. Reject delivery of materials that show evidence of contact with moisture.
- D. Remove manufacturer supplied plastic covers from materials provided with such. Use "breathable" type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Cover and protect materials at the end of each work day. Do not remove any protective tarpaulins until immediately before the material will be installed.
- E. Materials shall be stored above 55°F (12.6°C) a minimum of 24 hours prior to application.

1.09 **PROJECT CONDITIONS**

- A. Weather
 - 1. Proceed with roofing only when existing and forecasted weather conditions permit.
 - 2. Ambient temperatures must be above 45°F (7.2°C) when applying hot asphalt or water based adhesives.

1.10 **WARRANTY**

- A. Provide Manufacturers standard EverGuard® Diamond Pledge™ Guarantee with single source edge-to-edge coverage and no monetary limitation where the manufacturer agrees to repair or replace components in the roofing system, which cause a leak due to a failure in materials or workmanship.
1. Duration: Thirty (30) years from the date of completion. – TFATI80
 - a) Covered components include GAF roofing membrane, liquid-applied membrane or coating, base flashing, high wall waterproofing flashing, insulation, expansion joint covers, pre-flashed accessories, and metal flashings used by the contractor of record that meet SMACNA standards (the “GAF Roofing Materials”).
 - b) Materials and workmanship of listed products within this section are included when installed in accordance with current GAF application and specification requirements. Contact GAF Design Services for the full terms and conditions of the guarantee.
 - c) Leaks caused by any non-GAF materials, such as the roof deck, existing materials, or non-GAF insulation are not covered.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURER

- A. Acceptable Manufacturer: GAF, Commercial Roofing Products Division, which is located at: 1 Campus Drive; Parsippany, NJ 07054; Toll Free Tel: 877-423-7663 (option 4, then option 3); Email: designservices@gaf.com; Web: www.gaf.com

2.02 VAPOR RETARDER

- A. SBS Modified self-adhering vapor retarder for use in approved GAF roof assemblies. Each full roll contains 5 squares (46.68 m²) of roofing material, 134' x 45". **GAF SA Vapor Retarder** by GAF.
1. Sprayable, Low VOC solvent-based contact adhesive suitable for use as a primer for GAF self-adhered vapor retarders. One canister covers 10 squares. **EverGuard® TPO Quick Spray Adhesive LV50** by GAF.

2.03 INSULATION

- A. Rigid, tapered polyisocyanurate board, with a glass-reinforced cellulosic felt facer. Conforms to or exceeds the requirements of ASTM C 1289 Type II, Class 1, Grade 2. **EnergyGuard™ Tapered Polyiso Insulation**, with the following characteristics:
1. Board Thickness: ¼" Tapered
 2. Thermal Resistance (LTTR value) of: varies
 3. Board Size: 4' x 4'
 4. Compressive Strength: 20 psi

2.04 COVER BOARD

- A. **Rigid polyisocyanurate cover board, with coated polymer-bonded glass fiber mat facers on both major surfaces of the core foam conforming to or exceeding the requirements of ASTM C 1289, Type 2, Class 4, Grade 1. EnergyGuard™ HD Polyiso Insulation, with the following characteristics:**
1. Board Thickness: ½" or 12.7mm
 2. Board Size: 4' x 4'
 3. Minimum Compressive Strength: 80psi (551kPa)
 4. Thermal Resistance (LTTR value) of: >2.5

2.05 MEMBRANE MATERIALS

- A. A smooth type, polyester scrim reinforced thermoplastic polyolefin membrane for use as a single ply roofing membrane. Meets or exceeds the minimum requirements of ASTM D-

6878. UL Listed, FM Approved, Dade County Product Approval, Florida Building Code Approved. White membrane is Energy Star Listed, CRRC Listed and Title 24 Compliant.

1. **30 Year Warranty: EverGuard® TPO 80 Mil Membrane by GAF.**

a) 10' X 100', each roll contains 1000 sq. ft. of material weighing 420 lbs.

2.06 **CURB/WALL FLASHING MEMBRANE**

A. GENERAL

1. EverGuard® membrane flashing should be of the same type and thickness as the roof membrane. EverGuard® Freedom™ TPO can be used with EverGuard® TPO membrane for flashing in the same thickness as the field membrane.
2. Because colored TPO membranes may exhibit different welding characteristics, please call the GAF Design Services hotline at 800-766-877-423-7663 Option 4, Option 3 before attempting to weld different-colored TPO membranes with white membranes or flashings.

B. FLASHING MEMBRANE

1. A smooth type, polyester scrim reinforced thermoplastic polyolefin membrane for use as a single ply roofing membrane. Meets or exceeds the minimum requirements of ASTM D-6878. UL Listed, FM Approved, Dade County Product Approval, Florida Building Code Approved. White membrane is Energy Star Listed, CRRC Listed and Title 24 Compliant.
a) **30 Year Warranty: EverGuard® TPO 80 Mil Membrane by GAF.**

2.07 **ADHESIVES, SEALANTS AND PRIMERS**

- A. Sprayable, Low VOC solvent-based contact adhesive used for bonding smooth EverGuard® and EverGuard® Extreme® TPO membranes. One canister covers 10 squares. **EverGuard® TPO Quick Spray Adhesive LV50** by GAF.
- B. Two component, low-rise polyurethane adhesive. Appropriate for application temperatures of 40°F+ (4.4°C). Available in Bag-in-Box, 15 Gal (57L) drums, and SpotShot. **Oly-Bond 500™** distributed by GAF.
- C. Low VOC solvent-based primer for preparing surfaces to receive butyl based adhesive tapes, **EverGuard® TPO Low VOC Primer**, by GAF.
- D. Low VOC TPO cleaner designed to clean exposed or contaminated seams prior to heat welding to remove any residual soap or revitalize aged membranes. Contains only 50 grams per liter of Volatile Organic Content and has been formulated using a blend of primarily VOC-exempt ingredients to be in compliance with air quality regulations for single ply roofing products. **EverGuard® TPO CleanWeld® Conditioner** by GAF.
- E. One part butyl based high viscosity sealant suitable for sealing between flashing membrane and substrate surface behind exposed termination bars and for sealing between roofing membrane and drain flange. **EverGuard® Water Block**, by GAF.
- F. One-part, moisture-cure, self-leveling sealant designed for use in pitch pans on single ply roof systems. **EverGuard® One-Part Pourable Sealant**.

2.08 **FLASHING ACCESSORIES - TFATI80 - 30 Year Warranty**

A. GENERAL FLASHING ACCESSORIES

1. A smooth type, unreinforced thermoplastic polyolefin based membrane for use as an alternative flashing/reinforcing material for penetrations and corners. Required whenever preformed vent boots cannot be used, available in White, 0.055 inches (55 mils) nominal thickness and sheet size: 24in x 50ft. **EverGuard Extreme® TPO Detailing Membrane**, by GAF.
2. An 8 inch (203 mm) wide smooth type, polyester scrim reinforced thermoplastic polyolefin membrane strip for use as a cover strip over coated metal and stripping-in coated metal flanges and general repairs: 0.045 inches (45 mils) nominal thickness with 100 foot length, available in White, **EverGuard Extreme® TPO Flashing Membrane**, by GAF.

3. 25 mil TPO membrane laminated to galvanized sheet metal for fabrication into metal gravel stop and drip edge profiles, metal base and curb flashings, sealant pans, and scupper sleeves. **EverGuard Extreme® TPO Coated Metal**, by GAF.
 - a) Metal type: Available in 24 gauge, 20 gauge, Aluminum, and Stainless steel
 - b) Sheets per pallet: Available in 5, 10, or 30
 - c) Sheet Size: 4' x 10' or Custom size
 - d) Sheet Color: White
 - i) Custom colors available
4. Extruded aluminum termination bar with angled lip caulk receiver and lower leg bulb stiffener. Pre-punched slotted holes at 6" on center or 8" on center. ¾" x 10' with 0.090" cross section, **DRILL-TEC™ Termination Bar**, by GAF.

B. FIELD OF ROOF ACCESSORIES

1. A smooth type, unreinforced thermoplastic polyolefin based membrane for use as an alternative flashing/reinforcing material for penetrations and corners. Required whenever preformed vent boots cannot be used, 0.055 inches (55 mils) nominal thickness and sheet size: 24in x 50ft. **EverGuard Extreme® TPO UN-55 Detailing Membrane**, by GAF.
2. An 8 inch (20 cm) wide smooth type, polyester scrim reinforced thermoplastic polyolefin membrane strip for use as a cover strip over coated metal and stripping-in coated metal flanges and general repairs: 0.045 inches (45 mils) nominal thickness with 100 foot length, **EverGuard Extreme® TPO Utility Flashing Membrane**, by GAF.
3. 24 gauge steel with 0.025" thick TPO based film as required for fabrication into metal gravel stop and drip edge profiles, metal base and curb flashings, sealant pans, and scupper sleeves. Standard sheet size 4' x 10', sheet weight 47 lbs. Custom sizes available, **EverGuard Extreme® TPO Coated Metal**, by GAF.
4. Pre-manufactured expansion joint covers used to bridge expansion joint openings in a roof structure. Fabricated to accommodate all roof to wall and roof to roof applications, made of .060" reinforced TPO membrane, available in 5 standard sizes for expansion joint openings up to 8" wide. **EverGuard Extreme® TPO Expansion Joint Covers**, by GAF
5. .055" thick smooth type, unreinforced thermoplastic polyolefin membrane designed for use as a conforming membrane seal over T-joints in 60, 70 and 80 mil membrane applications. **EverGuard Extreme® T-Joint Patches**, by GAF.

C. WALL & CURB ACCESSORIES

1. .045" reinforced TPO membrane with pressure sensitive adhesive, to be installed on horizontal surfaces using plates and fasteners as a base attachment in fully adhered systems. Size 6" x 100', **EverGuard Extreme® RTA (Roof Transition Anchor) Strip™**, by GAF
2. 55 mil TPO membrane and 24 gauge coated metal prefabricated into standard and custom size thru wall scuppers. Available in two sizes: 4" x 6" x 12" (l x w x d) with a 5.75" x 3.75" opening and 8" x 10" x 12" (l x w x d) with a 9.75" x 7.75" opening, **EverGuard Extreme® TPO Scupper**, by GAF
3. .045" or .060" thick reinforced TPO membrane fabricated corners. Available in four standard sizes to flash curbs that are 24", 36", 48", and 60" in size. Four corners are required to flash the curb, **EverGuard Extreme® Corner Curb Wraps**, by GAF.
4. 0.060" thick molded TPO membrane outside corners of base and curb flashing. Hot-air welds directly to EverGuard® TPO membrane. Size 4" x 4" with 6" flange, **EverGuard Extreme® TPO Universal Corners** by GAF.
5. 8" diameter, nominal .050" vacuum formed unreinforced TPO membrane for use in flashing outside corners of base and curb flashings, **EverGuard Extreme® TPO Fluted Corner**, by GAF.

6. 0.050" molded TPO membrane inside corners of base and curb flashing. Hot-air welds directly to EverGuard TPO membrane. Size 6" x 6" x 5.25" high **EverGuard Extreme® TPO Inside Corners** by GAF.

D. **PENETRATION ACCESSORIES**

1. 0.075" thick molded TPO membrane sized to accommodate most common pipe and conduits, (1" (25.4 mm) to 6" diameter pipes), including square tube. Hot-air welded directly to EverGuard® TPO membrane, supplied with stainless steel clamping rings, **EverGuard Extreme® TPO Preformed Vent Boots** by GAF.
2. 0.045" or 0.60" thick molded TPO membrane preformed boots are split to accommodate most common pipes and conduits and available in three standard sizes, **EverGuard Extreme® TPO Split Pipe Boots**, by GAF.
3. 0.045" or 0.60" thick molded TPO membrane preformed square boots are split to accommodate most common square penetrations and conduits and available in three standard sizes, **EverGuard Extreme® TPO Square Tube Wraps**, by GAF.
4. .070 thick molded penetration pocket to provide structure and foundation for the application of a pourable sealant for a variety of roof penetrations, weldable and 9" x 6" x 4" (l x w x h). **EverGuard Extreme® TPO Pourable Sealer Pocket**
5. 0.055" thick smooth type, unreinforced thermoplastic polyolefin membrane designed for use as a conforming membrane seal over T-joints in 60 and 80 mil membrane applications. **EverGuard® TPO Drain** by GAF

E. **WALKWAYS**

1. 1/8" thick extruded and embossed TPO roll 34" x 50', heat welds directly to roofing membrane. Unique herringbone traction surface. Available in gray or yellow, **EverGuard® TPO Walkway Rolls**, GAF.

PART 3 EXECUTION

3.01 SITE CONDITIONS

- A. Obtain verification that the building structure can accommodate the added weight of the new roofing system.
- B. Confirm the adequacy of the new roofing system to provide positive slope to drain. Eliminate ponding areas by the addition of drainage locations or by providing additional pitch to the roof surface.
- C. Prepare substrate surfaces thoroughly prior to application of new roofing materials. This is particularly important for re-cover and reroofing applications. Providing a smooth, even, sound, clean, and dry substrate minimizes the likelihood that underlying deficiencies will cause premature deterioration or even failure of the new roofing system.
- D. All defects in the roof deck or substrate must be corrected before new roofing work commences. Verify that the deck surface is dry, sound, clean, and smooth, and free of depressions, waves, or projections.
- E. Protect building surfaces against damage and contamination from roofing work.
- F. Where work must continue over completed roof areas, protect the finished roofing system from damage.
- G. Deck preparation is the sole responsibility of the roofing contractor. All defects in the roof deck or substrate must be corrected before roofing work commences.
- H. Refer to GAF Roof Guarantee Program for specific requirements for extended guarantees.

3.02 SUBSTRATE PREPARATION

- A. Tear-off

1. Remove all existing roofing materials to the roof decking, including flashings, metal edgings, drain leads, pipe boots, and pitch pockets, and clean substrate surfaces of all asphalt and adhesive contaminants.
 2. Confirm the quality and condition of the roof decking by visual inspection. Fastener pull-out testing must be conducted by the roof fastener manufacturer.
 3. Secure all loose decking. Remove and replace all deteriorated decking.
 4. Remove abandoned equipment and equipment supports.
 5. Confirm that the height of equipment supports will allow the installation of full-height flashings.
- B. Structural Concrete Deck**
1. Minimum Min. 2,500 psi compressive resistance (98,066 kilogram-force/square centimeter)
 2. The deck must be smooth, level and cannot be wet or frozen. If deck is determined to be wet, it must be allowed to dry.
 3. Curing agents must be checked for compatibility with roofing materials. Prior to the installation of the roof assemblies, GAF recommends the evaluation of the surface moisture and deck's dryness through the use of ASTM D-4263 or hot bitumen test.
 4. Treat cracks greater than 1/8" (3 mm) in width in accordance with the deck manufacturer's recommendations.
 5. In all retrofit roof applications, it is required that deck be inspected for defects. Any defects are to be corrected per the deck manufacturer's recommendations prior to the new roof application.
 6. Code standards apply when their requirements exceed those listed here.
 7. For Concrete Decks
 - a) Minimum 2" (51 mm) deck thickness
 - b) Joints must be filled with a masonry grout to correct imperfections between slabs and feathered to provide a slope not greater than 1/8:12 adhered insulated assemblies.
 - c) If the joints cannot be grouted and finished smooth, then a leveling course of lightweight insulating concrete (minimum 2" [51 mm] thickness) must be applied. Do not seal joints between the slabs; leave open to permit venting and drying of the roof fill from below.
 8. When insulation or roofing is to be adhered with hot asphalt, prime the deck with asphalt/concrete primer, ASTM D 41 at the rate of one gallon per 100 square feet (0.4 L/m²). Allow the primer to dry prior to the application of the roofing system.

3.03 **NAILER INSTALLATION**

- A. Acceptable Wood**
1. Solid Blocking: Non-pressure treated wood as required, #2 Grade or better, nominal 1 1/4" (30 mm) x 4" (102 mm) with a minimum thickness of 3 1/2" (88 mm).
 2. Shim Material: Plywood, 1 1/2" (13 mm) x width to match solid blocking.
 3. Verify the condition of existing roof nailers and anchor to resist 250 lb. per ft. (550 kg) load applied in any direction. New nailers should meet same load requirements.
 4. DRILL-TEC™ spikes or HD screws 18" (457 mm) o.c. attachment to concrete decks. Min. 1" (25 mm) shank or thread penetration.
 5. Wood nailers attached to gypsum, concrete, cellular concrete and cementitious wood fiber must be fastened 12" (305 mm) o.c., through the nailer into the substrate with substrate approved DRILL-TEC™ fasteners.
 6. Three anchors per length of wood nailer minimum.

3.04 **INSTALLATION - GENERAL**

- A.** Install GAF's EverGuard® TPO roofing system according to all current application requirements in addition to those listed in this section.
- B.** GAF EverGuard® TPO Specification #: TFATI80 (30 Year Warranty)

- C. Start the application of membrane plies at the low point of the roof or at the drains, so that the flow of water is over or parallel to, but never against the laps.

3.05 VAPOR RETARDER

A. GAF SA Vapor Retarder

1. Primer is not required for metal decks. Other acceptable substrates, (plywood, gypsum, or concrete) must be primed prior to application.
2. Prime substrate with EverGuard® TPO Quick Spray Adhesive LV50.
3. Roll out the GAF SA Vapor Retarder over clean, dry deck and allow to relax. For metal decks, the width of the membrane is designed to match with the top of the flute.
4. Place GAF SA Vapor Retarder in desired position. Once the membrane is in place, while holding the membrane tight, peel off the silicone release film by pulling diagonally from the underside of the sheet.
5. Install subsequent rolls of membrane in the same way, taking care to overlap the longitudinal side laps a minimum of 3" (76 mm) and end laps a minimum of 6" (152 mm).
6. For metal decks, at the end of the roll, install a metal plate 6" x 42" (152 mm x 1.07 m) to support the membrane end lap between the metal flutes ensuring a complete end lap seal. Overlap end laps a minimum of 6" (152 mm).
7. Once installed, pressure must be applied over the whole surface using a weighted roller to ensure adequate adhesion to the substrate.
8. Seal perimeter and penetration areas with closed-cell foam sealant. The GAF SA Vapor Retarder must be tied into the building's air/vapor retarder system as appropriate with compatible SBS asphaltic materials.
9. Because the water resistance characteristics of vapor retarders can be compromised by storms, physical damage and installation issues, vapor retarders should be covered by a primary roof covering as soon as possible after installation. If GAF SA Vapor Retarder is not immediately covered, particular attention should be paid to implementation of details to ensure a temporary seal or GAF will have no responsibility for any moisture infiltration that results. All T-joints and 90 degree transitions must be sealed with Matrix™ 201 SBS Flashing Cement. If fish mouths or other openings are created at overlap, they must be sealed with Matrix™ 201 SBS Flashing Cement. All damage to or leaks through the GAF SA Vapor Retarder must be repaired before installing the finished roof.
10. GAF SA Vapor Retarder is UV resistant up to 90 days. 90-day UV resistance refers to standardized testing conducted to ensure the product will not physically degrade when exposed to UV

3.06 INSULATION

A. GENERAL

1. Do not apply roof insulation or roofing until all other work trades have completed jobs that require them to traverse the deck on foot or with equipment. A vapor retarder coated lightly with asphalt may be applied to protect the inside of the structure prior to the insulation and final roofing installation. Before the application of the insulation, any damage or deterioration to the vapor retarder must be repaired.
2. Do not install wet, damaged or warped insulation boards.
3. Insulation boards installed in multiple layers must have the joints between boards staggered in all directions a minimum of 6" (152 mm) between layers.
4. Butt insulation boards together with a 1/4" (6.3 mm) maximum space between adjoining boards. Fit insulation boards around penetrations and perimeter with a 1/4" (6.3 mm) maximum space between board and penetration. Do not kick insulation boards into place.
5. Install tapered insulation to provide a sump area a minimum of 36" x 36" (914 mm x 914 mm) where applicable.

6. Wood nailers must be 3-1/2" (8.9 cm) minimum width or 1" (25 mm) wider than metal flange. They shall be of equal thickness as the insulation, and be treated for rot resistance. All nailers must be securely fastened to the deck.
7. Miter and fill the edges of the insulation boards at ridges, valleys and other changes in plane to prevent open joints or irregular surfaces. Avoid breaking or crushing of the insulation at the corners.
8. Remove and replace insulation boards that become wet or damaged after installation.
9. Pre-drilling is required for concrete decks, and may be required for gypsum concrete and cementitious wood fiber decks.
10. Where insulation is to be adhered in insulation adhesive, adhesion testing is required. The maximum board size for PolyIso roof insulation is 4' x 4'. Gypsum boards and max 1/2" HD Wood Fiberboard/Perlite may be adhered in 4' x 8 boards except where code requirements supersede.
11. Do not install any more insulation than will be completely waterproofed each day.

3.07 **INSULATION - BASE LAYER**

A. OLYBOND 500

1. The substrate must be free of debris, dust, dirt, oil, grease, and standing water before applying the adhesive.
2. OlyBond 500 must be applied using the specially designed PaceCart dispenser. OlyBond 500 SpotShot shall be applied using one of the specially designed dual cartridge dispensers. OlyBond 500 Equipment Free Canister System dispenses with 25' hose and gun assembly included with product.
3. Install insulation layers applied with bands of OlyBond 500 to achieve proper coverage rates for insulation attachment:
 - a) Field: 12" o.c.
 - b) Perimeter: 6" o.c.
 - c) Corners: 4" o.c.
4. Approximate coverage rate is 1/2 to 1 gallon per 100 square feet, depending on the substrate. Allow the foam to rise 3/4" to 1". Walk each board firmly into place. Stagger the joints of additional layers in relation to the insulation joints in the layer(s) below by a minimum of 6" (15.2 cm) to eliminate continuous vertical gaps.

3.08 **INSULATION - 2ND LAYER**

A. OLYBOND 500

1. The substrate must be free of debris, dust, dirt, oil, grease, and standing water before applying the adhesive.
2. OlyBond 500 must be applied using the specially designed PaceCart dispenser. OlyBond 500 SpotShot shall be applied using one of the specially designed dual cartridge dispensers. OlyBond 500 Equipment Free Canister System dispenses with 25' hose and gun assembly included with product.
3. Install insulation layers applied with bands of OlyBond 500 to achieve proper coverage rates for insulation attachment:
 - a) Field: 12" o.c.
 - b) Perimeter: 6" o.c.
 - c) Corners: 4" o.c.
4. Approximate coverage rate is 1/2 to 1 gallon per 100 square feet, depending on the substrate. Allow the foam to rise 3/4" to 1". Walk each board firmly into place. Stagger the joints of additional layers in relation to the insulation joints in the layer(s) below by a minimum of 6" (15.2 cm) to eliminate continuous vertical gaps.

3.09 **SINGLE PLY MEMBRANE APPLICATION**

A. GENERAL

1. Substrates must be inspected and accepted by the contractor as suitable to receive and hold roof membrane materials.
2. Place roof membrane so that wrinkles and buckles are not formed. Any wrinkles or buckles must be removed from the sheet prior to permanent securement.
3. Membrane that has been exposed for more than 12 hours or has become contaminated will require additional cleaning methods.
 - a) Light Contamination - Membrane that has been exposed overnight up to a few days to debris, foot traffic, or dew or light precipitation can usually be cleaned with a white cloth moistened with EverGuard® TPO Cleaner (or EverGuard® CleanWeld™ Conditioner, a low-VOC cleaner) for TPO membranes.
 - b) Dirt-Based Contamination - Membrane that is dirt encrusted will require the use of a low-residue cleaner, such as Formula 409® and a mildly abrasive scrubbing pad to remove the dirt. This must be followed by cleaning with a white cloth moistened with EverGuard® TPO Cleaner (or EverGuard® CleanWeld™ Conditioner) for TPO membranes.
 - c) Exposure-Based Contamination - Membrane that is weathered or oxidized will require the use of EverGuard® TPO Cleaner, EverGuard® CleanWeld™ Conditioner and a mildly abrasive scrubbing pad to remove the weathered/oxidized top surface layer. This must be followed by cleaning with a white cloth moistened with EverGuard® TPO Cleaner (or EverGuard® CleanWeld™ Conditioner) for TPO membranes. Unexposed membrane left in inventory for a year or more may need to be cleaned as instructed above. Be sure to wait for solvent to flash off prior to welding.
 - d) Chemical-Based Contamination - Membrane that is contaminated with bonding adhesive, asphalt, flashing cement, grease and oil, and most other contaminants usually cannot be cleaned sufficiently to allow an adequate heat weld to the membrane surface. These membranes should be removed and replaced.

B. Fully Adhered

1. All work surfaces should be clean, dry, and free of dirt, dust, debris, oils, loose and/or embedded gravel, un-adhered coatings, deteriorated membrane, and other contaminants that may result in a surface that is not sound or is uneven.
2. Full-width rolls can be installed throughout the field and perimeter of the roof. Half sheets are not necessary.
3. Overlap roof membrane a minimum of 3" (76 mm) for end laps. For fleece-back membrane, butt ends together and cover joint with 8" (203 mm) wide EverGuard® Flashing Strip heat-welded. Membranes are provided with lap lines along the side laps.
4. Best practice is to install membrane so that the side laps run across the roof slope lapped toward drainage points.
5. All exposed sheet corners must be rounded a minimum of 1" (25 mm).
6. Use full-width rolls throughout the field and perimeter of the roof. Half sheets are not necessary.
7. Membrane laps shall be heat-welded together. All welds shall be continuous, without voids or partial welds. Welds shall be free of burns and scorch marks.
8. Weld shall be a minimum of 1" (25.4 mm) in width for automatic machine welding and a minimum 2" in width for hand welding. Code requirements may supersede these instructions.
9. Roof membrane must be mechanically attached along the base of walls with screws and plates 6" (152 mm) on center.
10. Adhesive should be applied to the membrane at the following rate:
 - a) (Quick Spray LV50): Applied at a total rate of 10 squares (1,000 sq. ft.) per canister equally to both the substrate and the underside of the membrane. Coverage rates may vary depending on the porosity of the substrate.

11. Use appropriate bonding adhesive for substrate surface, applied with a solvent-resistant roller, brush or squeegee.
12. Adhere approximately one half of the membrane sheet at a time. One half of the sheet's length shall be folded back in turn to allow for adhesive application. Lay membrane into adhesive once the bonding adhesive is tacky to the touch.
13. Roll membrane with a weighted roller to ensure complete bonding between adhesive and membrane.
14. Prevent seam contamination by keeping the adhesive application a few inches back from the seam area.
15. Reference the Adhesive securement tables in the EverGuard® Application and Specifications Manuals for substrate adhesion and compatibility.
16. Roll in membrane using a 150 lb. membrane roller or equivalent.
17. To reduce thermal bridging, a full spray of approved Low Rise Foam Adhesive may be used to attach individual insulation layers or adhere the top layer to a mechanically fastened bottom layer.

3.10 FLASHINGS

A. GENERAL

1. All penetrations must be at least 24" (61 cm) from curbs, walls, and edges to provide adequate space for proper flashing.
2. Flash all perimeter, curb, and penetration conditions with coated metal, membrane flashing, and flashing accessories as appropriate to the site condition.
3. All coated metal and membrane flashing corners shall be reinforced with preformed corners or non-reinforced membrane.
4. Hot-air weld all flashing membranes, accessories, and coated metal. A minimum 2" wide (hand welder) weld or minimum 1 - 1/2" automatic machine weld is required.
5. Non-coated metal edge details must be installed in accordance with current EverGuard® construction details and requirements.
6. All twenty (20) year EverGuard® systems require the use of coated metal edges where applicable. Bonding adhesive and/or cover tape is not acceptable.
7. All cut edges of reinforced membrane must be sealed with EverGuard® TPO Cut Edge Sealant.
8. EverGuard Extreme® flashings and accessories are required for use with EverGuard Extreme® membranes.
9. Consult the EverGuard® *Application and Specifications Manual* or GAF Contractor Services for more information on specific construction details.

3.11 TRAFFIC PROTECTION

- A. Install walkway rolls at all roof access locations and other designated locations including roof-mounted equipment work locations and areas of repeated rooftop traffic.
- B. Walkway pads must be spaced 6" apart to allow for drainage between the pads.
- C. Heat-weld walkway rolls to the roof membrane surface continuously around the perimeter of the roll.

3.12 ROOF PROTECTION

- A. Protect all partially and fully completed roofing work from other trades until completion.
- B. Whenever possible, stage materials in such a manner that foot traffic is minimized over completed roof areas.
- C. When it is not possible to stage materials away from locations where partial or complete installation has taken place, temporary walkways and platforms shall be installed in order to protect all completed roof areas from traffic and point loading during the application process.

- D. Temporary tie-ins shall be installed at the end of each workday and removed prior to commencement of work the following day.

3.13 **CLEAN-UP**

- A. All work areas are to be kept clean, clear, and free of debris at all times.
- B. Do not allow trash, waste, or debris to collect on the roof. These items shall be removed from the roof on a daily basis.
- C. All tools and unused materials must be collected at the end of each workday and stored properly off the finished roof surface and protected from exposure to the elements.
- D. Dispose of or recycle all trash and excess material in a manner conforming to current EPA regulations and local laws.
- E. Properly clean the finished roof surface after completion, and make sure the drains and gutters are not clogged.
- F. Clean and restore all damaged surfaces to their original condition.

END OF SECTION

SECTION 076200
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fabricated sheet metal items, including flashings and counter flashings.
- B. Sealants for joints within sheet metal fabrications.

1.02 RELATED REQUIREMENTS

- A. Section 061000 - Rough Carpentry: Field fabricated roof curbs.
- B. Section 077100 - Roof Specialties: Manufactured copings, flashings, and expansion joint covers.
- C. Section 077200 - Roof Accessories: Manufactured metal roof curbs.
- D. Section 079200 - Joint Sealants: Sealing non-lap joints between sheet metal fabrications and adjacent construction.

1.03 REFERENCE STANDARDS

- A. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; 2020.
- B. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.
- C. CDA A4050 - Copper in Architecture - Handbook; current edition.
- D. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Pre-installation Meeting: Convene one week before starting work of this section.

1.05 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittal procedures.
- B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
- C. Samples: Submit two samples, 6 by 6 inches in size, illustrating material of typical standing seam.

1.06 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 5 years of documented experience.

1.07 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. Anodized Aluminum: 0.050 inch thick: Clear anodized finish.
 - 1. Clear Anodized Finish: AAMA 611, AA-M12C22A41, Class I, clear anodic coating not less than 0.7 mil, 0.0007 inch thick.

2.02 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.

2.03 ACCESSORIES

- A. Fasteners: Galvanized steel, with soft neoprene washers.
- B. Primer: Zinc chromate type.
- C. Concealed Sealants: Non-curing butyl sealant.
- D. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material.

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. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil, 0.015 inch.

3.03 INSTALLATION

- A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted..
- B. Apply plastic cement compound between metal flashings and felt flashings.
- C. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles.

3.04 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements for field inspection requirements.
- B. Inspection will involve surveillance of work during installation to ascertain compliance with specified requirements.

END OF SECTION

SECTION 077100
ROOF SPECIALTIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Manufactured roof specialties, including copings.
- B. Roof control and expansion joint covers.

1.02 RELATED REQUIREMENTS

- A. Section 077200 - Roof Accessories: Manufactured curbs, roof hatches, and snow guards.

1.03 REFERENCE STANDARDS

- A. AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2021.
- B. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2021, with Errata (2022).
- C. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2020.
- D. ANSI/SPRI/FM 4435/ES-1 - Test Standard for Edge Systems Used with Low Slope Roofing Systems; 2017.
- E. NRCA (RM) - The NRCA Roofing Manual; 2022.
- F. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide data on shape of components, materials and finishes, anchor types and locations.
- C. Shop Drawings: Indicate configuration and dimension of components, adjacent construction, required clearances and tolerances, and other affected work.
- D. Samples: Submit two appropriately sized samples of coping and gravel stop.
- E. Manufacturer's Installation Instructions: Indicate special procedures, fasteners, supporting members, and perimeter conditions requiring special attention.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Roof Edge Flashings and Copings:
 - 1. GAF; M-Weld Snap-On Copings
- B. Control and Expansion Joint Covers:
 - 1. GAF; .: www.gaf.com/#sle.
- C. Pipe and Penetration Flashings:
 - 1. GAF

2.02 COMPONENTS

- A. Copings: Factory fabricated to sizes required; corners mitered; concealed fasteners.
 - 1. Configuration: Concealed continuous hold down cleat at both legs; internal splice piece at joints of same material, thickness, and finish as cap; concealed stainless steel fasteners.

2. Pull-Off Resistance: Tested in accordance with ANSI/SPRI/FM 4435/ES-1 using test method RE-3 to positive and negative design wind pressure as defined by applicable local building code.
3. Wall Width: As indicated on drawings.
4. Outside Face Height: As indicated on drawings.
5. Inside Face Height: As indicated on drawings.
6. Material: Formed aluminum sheet, 0.040 inch thick, minimum.
7. Finish: 70 percent polyvinylidene fluoride.
8. Color: As selected by Architect from manufacturer's standard range.
9. Products:
 - a. GAF - M-Weld Snap-On Coping
- B. Control and Expansion Joint Covers: Composite construction of 2-inch wide flexible EPDM flashing of white color with closed cell urethane foam backing, each edge seamed to aluminum sheet metal flanges, designed for nominal joint width of 1 inch. Include special formed corners, tees, intersections, and wall flashings, each sealed watertight.

2.03 FINISHES

- A. Fluoropolymer Coating: High Performance Organic Finish, AAMA 2604; multiple coat, thermally cured fluoropolymer finish system; color as indicated.
- B. PVDF (Polyvinylidene Fluoride) Coating: Superior Performance Organic Finish, AAMA 2605; multiple coat, thermally cured fluoropolymer finish system; color as indicated.

2.04 ACCESSORIES

- A. Sealant for Joints in Linear Components: As recommended by component manufacturer.
- B. Adhesive for Anchoring to Roof Membrane: Compatible with roof membrane and approved by roof membrane manufacturer.
- C. Insulation Board Adhesive: Two-component, low-rise polyurethane foam adhesive used for adhering insulation to low slope roof deck materials.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that deck, curbs, roof membrane, base flashing, and other items affecting work of this Section are in place and positioned correctly.
 1. See Section 077200 for information on roofing related accessories.

3.02 INSTALLATION

- A. Install components in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.
- B. Seal joints within components when required by component manufacturer.
- C. Anchor components securely.
- D. Coordinate installation of components of this section with installation of roofing membrane and base flashings.
- E. Coordinate installation of sealants and roofing cement with work of this section to ensure water tightness.

END OF SECTION

SECTION 077200
ROOF ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Roof curbs.
- B. Equipment rails.
- C. Roof penetrations mounting curbs.
- D. Non-penetrating pedestals.

1.02 RELATED REQUIREMENTS

- A. Section 077100 - Roof Specialties: Other manufactured roof specialty items.

1.03 REFERENCE STANDARDS

- A. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.
- B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.
- C. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021a.
- D. FM (AG) - FM Approval Guide; current edition.
- E. MSS SP-58 - Pipe Hangers and Supports - Materials, Design, Manufacture, Selection, Application, and Installation; 2018, with Amendment (2019).
- F. UL (DIR) - Online Certifications Directory; Current Edition.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittal procedures.
- B. Product Data: Manufacturer's data sheets on each product to be used.
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
 - 4. Maintenance requirements.
- C. Shop Drawings: Submit detailed layout developed for this project and provide dimensioned location and number for each type of roof accessory.
 - 1. Non-penetrating Rooftop Supports: Submit design calculations for loadings and spacings.
- D. Warranty Documentation:
 - 1. Submit manufacturer warranty.
 - 2. Ensure that forms have been completed in Owner's name and registered with manufacturer.
 - 3. Submit documentation that roof accessories are acceptable to roofing manufacturer, and do not limit the roofing warranty.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store products under cover and elevated above grade.

1.06 WARRANTY

- A. See Section 017800 - Closeout Submittals for additional warranty requirements.

- B. Extended Correction Period: Correct defective work within 5-year period commencing on Date of Substantial Completion.

PART 2 PRODUCTS

2.01 ROOF CURBS

- A. Roof Curbs Mounting Assemblies: Factory fabricated hollow sheet metal construction, internally reinforced, and capable of supporting superimposed live and dead loads and designated equipment load with fully mitered and sealed corner joints welded or mechanically fastened, and integral counter flashing with top and edges formed to shed water.
 - 1. Applications: Roof curbs used for roof penetrations/openings as indicated on drawings.
 - 2. Sheet Metal Material:
 - a. Aluminum: 0.080 inch minimum thickness, with 3003 alloy, and H14 temper.
 - 1) Finish: Mill finish.
 - 3. Provide layouts and configurations indicated on drawings.
- B. Curbs Adjacent to Roof Openings: Provide curb on each side of opening, with top of curb horizontal for equipment mounting.
 - 1. Provide preservative treated wood nailers along top of curb.
 - 2. Insulate inside curbs with 1-1/2 inch thick fiberglass insulation.
 - 3. Height Above Finished Roof Surface: 8 inches, minimum.
- C. Equipment Rail Curbs: Straight curbs on each side of equipment, with top of curbs horizontal and level with each other for equipment mounting.
 - 1. Height Above Finished Roof Surface: 8 inches, minimum.
- D. Pipe, Duct, or Conduit Mounting Curbs: Vertical posts, minimum 8 inches square unless otherwise indicated.
 - 1. Height Above Finished Roof Surface: 8 inches, minimum.

2.02 NON-PENETRATING ROOFTOP SUPPORTS/ASSEMBLIES

- A. Non-Penetrating Rooftop Support/Assemblies: Manufacturer-engineered and factory-fabricated, with pedestal bases that rest on top of roofing membrane, and not requiring any attachment to roof structure and not penetrating roofing assembly.
 - 1. Design Loadings and Configurations: As required by applicable codes.
 - 2. Height: Provide minimum clearance of 6 inches under supported items to top of roofing.
 - 3. Support Spacing and Base Sizes: As required to distribute load sufficiently to prevent indentation of roofing assembly.
 - 4. Steel Components: Stainless steel, or carbon steel hot-dip galvanized after fabrication in accordance with ASTM A123/A123M.
 - 5. Hardware, Bolts, Nuts, and Washers: Stainless steel, or carbon steel hot-dip galvanized after fabrication in accordance with ASTM A153/A153M.
- B. Pipe Supports: Provide attachment fixtures complying with MSS SP-58 and as indicated.
- C. Non-Penetrating Pedestals: Steel pedestals with square, round, or rectangular bases.
 - 1. Bases: High density polypropylene.
 - 2. Base Sizes: As required to distribute load sufficiently to prevent indentation of roofing assembly.
 - 3. Steel Components: Stainless steel, or carbon steel hot-dip galvanized after fabrication in accordance with ASTM A123/A123M.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.

- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using methods recommended by manufacturer for achieving acceptable results for applicable substrate under project conditions.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions, in manner that maintains roofing system weather-tight integrity.

3.04 CLEANING

- A. Clean installed work to like-new condition.

3.05 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

END OF SECTION

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**SECTION 079200
JOINT SEALANTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Nonsag gunnable joint sealants.
- B. Joint backings and accessories.

1.02 REFERENCE STANDARDS

- A. ASTM C661 - Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer; 2006 (Reapproved 2011).
- B. ASTM C794 - Standard Test Method for Adhesion-In-Peel of Elastomeric Joint Sealants; 2015.
- C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.
- D. ASTM C1087 - Standard Test Method for Determining Compatibility of Liquid-Applied Sealants with Accessories Used in Structural Glazing Systems; 2000 (Reapproved 2011).
- E. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2013.
- F. ASTM C1311 - Standard Specification for Solvent Release Sealants; 2014.
- G. ASTM C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants; 2002 (Reapproved 2013).
- H. ASTM C1521 - Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints; 2013.

1.03 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittal procedures.
- B. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following.
 - 1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
 - 2. List of backing materials approved for use with the specific product.
 - 3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
 - 4. Substrates the product should not be used on.
 - 5. Substrates for which use of primer is required.
 - 6. Substrates for which laboratory adhesion and/or compatibility testing is required.
 - 7. Installation instructions, including precautions, limitations, and recommended backing materials and tools.
 - 8. Sample product warranty.
 - 9. Certification by manufacturer indicating that product complies with specification requirements.
- C. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.
- D. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.
- E. Samples for Verification: Where custom sealant color is specified, obtain directions from Architect and submit at least two physical samples for verification of color of each required sealant.
- F. Preconstruction Laboratory Test Reports: Submit at least four weeks prior to start of installation.

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- G. Installation Plan: Submit at least four weeks prior to start of installation.
- H. Pre-installation Field Adhesion Test Plan: Submit at least two weeks prior to start of installation.
- I. Field Quality Control Plan: Submit at least two weeks prior to start of installation.
- J. Pre-installation Field Adhesion Test Reports: Submit filled out Pre-installation Field Adhesion Test Reports log within 10 days after completion of tests; include bagged test samples and photographic records.
- K. Installation Log: Submit filled out log for each length or instance of sealant installed.
- L. Field Quality Control Log: Submit filled out log for each length or instance of sealant installed, within 10 days after completion of inspections/tests; include bagged test samples and photographic records, if any.
- M. Manufacturer's qualification statement.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section and with at least three years of documented experience.
- C. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.
- D. Preconstruction Laboratory Testing: Arrange for sealant manufacturer(s) to test each combination of sealant, substrate, backing, and accessories.
 - 1. Adhesion Testing: In accordance with ASTM C794.
 - 2. Compatibility Testing: In accordance with ASTM C1087.
 - 3. Allow sufficient time for testing to avoid delaying the work.
 - 4. Deliver to manufacturer sufficient samples for testing.
 - 5. Report manufacturer's recommended corrective measures, if any, including primers or techniques not indicated in product data submittals.
 - 6. Testing is not required if sealant manufacturer provides data showing previous testing, not older than 24 months, that shows satisfactory adhesion, lack of staining, and compatibility.
- E. Installation Plan: Include schedule of sealed joints, including the following.
 - 1. Joint width indicated in Contract Documents.
 - 2. Joint depth indicated in Contract Documents; to face of backing material at centerline of joint.
 - 3. Method to be used to protect adjacent surfaces from sealant droppings and smears, with acknowledgement that some surfaces cannot be cleaned to like-new condition and therefore prevention is imperative.
 - 4. Installation Log Form: Include the following data fields, with known information filled out.
 - a. Date of installation.
 - b. Name of installer.
 - c. Actual joint width; provide space to indicate maximum and minimum width.
 - d. Actual joint depth to face of backing material at centerline of joint.
 - e. Air temperature.
- F. Pre-installation Field Adhesion Test Plan: Include destructive field adhesion testing of one sample of each combination of sealant type and substrate, except interior acrylic latex sealants, and include the following for each tested sample.
 - 1. Identification of testing agency.
 - 2. Pre-installation Field Adhesion Test Log Form: Include the following data fields, with known information filled out.

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- a. Test date.
 - b. Location on project.
 - c. Sealant used.
 - d. Stated movement capability of sealant.
 - e. Test method used.
 - f. Date of installation of field sample to be tested.
 - g. Date of test.
 - h. Copy of test method documents.
 - i. Age of sealant upon date of testing.
 - j. Test results, modeled after the sample form in the test method document.
 - k. Indicate use of photographic record of test.
- G. Field Quality Control Plan:
1. Visual inspection of entire length of sealant joints.
 2. Non-destructive field adhesion testing of sealant joints, except interior acrylic latex sealants.
 3. Field testing agency's qualifications.
 4. Field Quality Control Log Form: Show same data fields as on Pre-installation Field Adhesion Test Log, with known information filled out and lines for multiple tests per sealant/substrate combinations; include visual inspection and specified field testing; allow for possibility that more tests than minimum specified may be necessary.
- H. Field Adhesion Test Procedures:
1. Allow sealants to fully cure as recommended by manufacturer before testing.
 2. Have a copy of the test method document available during tests.
 3. Record the type of failure that occurred, other information required by test method, and the information required on the Field Quality Control Log.
 4. When performing destructive tests, also inspect the opened joint for proper installation characteristics recommended by manufacturer, and report any deficiencies.
 5. Deliver the samples removed during destructive tests in separate sealed plastic bags, identified with project, location, test date, and test results, to Owner.
 6. If any combination of sealant type and substrate does not show evidence of minimum adhesion or shows cohesion failure before minimum adhesion, report results to Architect.
- I. Non-Destructive Field Adhesion Test: Test for adhesion in accordance with ASTM C1521, using Nondestructive Continuous Method.
1. Record results on Field Quality Control Log.
 2. Repair failed portions of joints.
- J. Destructive Field Adhesion Test: Test for adhesion in accordance with ASTM C1521, using Destructive Tail Procedure.
1. Sample: At least 18 inches long.
 2. Minimum Elongation Without Adhesive Failure: Consider the tail at rest, not under any elongation stress; multiply the stated movement capability of the sealant in percent by two; then multiply 1 inch by that percentage; if adhesion failure occurs before the "1 inch mark" is that distance from the substrate, the test has failed.
 3. If either adhesive or cohesive failure occurs prior to minimum elongation, take necessary measures to correct conditions and re-test; record each modification to products or installation procedures.

1.05 WARRANTY

- A. See Section 017800 - Closeout Submittals for additional warranty requirements.
- B. Correct defective work within a five year period after Date of Substantial Completion.

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- C. Warranty: Include coverage for installed sealants and accessories that fail to achieve watertight seal, exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Non-Sag Sealants: Permits application in joints on vertical surfaces without sagging or slumping.
1. BASF Construction Chemicals-Building Systems: www.buildingsystems.basf.com.
 2. Pecora Corporation: www.pecora.com/?sle.
 3. Sherwin-Williams Company: www.sherwin-williams.com.
 4. Sika Corporation: www.usa-sika.com.
 5. Substitutions: See Section 016000 - Product Requirements.

2.02 JOINT SEALANT APPLICATIONS

- A. Scope:
1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to:
 - a. Wall expansion and control joints.
 - b. Joints between different exposed materials.
- B. Exterior Joints: Use non-sag polyurethane sealant, Type P-1, unless otherwise indicated.
1. Lap Joints in Sheet Metal Fabrications: Butyl rubber, non-curing.
 2. Lap Joints between Manufactured Metal Panels: Butyl rubber, non-curing.
 3. Metal to Metal or glass to metal: Type S-1.

2.03 NONSAG JOINT SEALANTS

- A. Type S-1 - Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus 25 percent, minimum.
 2. Hardness Range: 15 to 35, Shore A, when tested in accordance with ASTM C661.
 3. Color: To be selected by Architect from manufacturer's standard range.
 4. Cure Type: Single-component, neutral moisture curing
 5. Manufacturers:
 - a. Sika Corporation; Sikasil GP: www.usa.sika.com/#sle.
 - b. Substitutions: See Section 016000 - Product Requirements.
- B. Type P-1 - Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; two component; not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus 50 percent, minimum.
 2. Hardness Range: 20 to 35, Shore A, when tested in accordance with ASTM C661.
 3. Color: To be selected by Architect from manufacturer's standard range.
 4. Manufacturers:
 - a. BASF MasterSeal NP 2.
 - b. Sika Corporation; Sikaflex-2c NS: www.usa.sika.com/#sle.
- C. Non-Curing Butyl Sealant: Solvent-based; ASTM C1311; single component, non-sag, non-skinning, non-hardening, non-bleeding; vapor-impermeable; intended for fully concealed applications.
1. Products:
 - a. Pecora Corporation; Pecora BA-98 Non-Skinning Butyl Sealant: www.pecora.com/#sle.

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2.04 ACCESSORIES

- A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
 - 1. Type for Joints Not Subject to Pedestrian or Vehicular Traffic: ASTM C1330; Type O - Open Cell Polyurethane.
 - 2. Type for Joints Subject to Pedestrian or Vehicular Traffic: ASTM C1330; Type B - Bi-Cellular Polyethylene.
 - 3. Open Cell: 40 to 50 percent larger in diameter than joint width.
 - 4. Closed Cell and Bi-Cellular: 25 to 33 percent larger in diameter than joint width.
 - 5. Manufacturers:
 - a. ADFAST Corporation; ADSEAL BR-2600 (Backer Rod): www.adfastcorp.com/#sle.
 - b. Substitutions: See Section 016000 - Product Requirements.
- B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
- C. Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.
- D. Joint Cleaner: Non-corrosive and non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.
- E. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that joints are ready to receive work.
- B. Verify that backing materials are compatible with sealants.
- C. Verify that backer rods are of the correct size.
- D. Pre-installation Adhesion Testing: Install a sample for each test location indicated in the test plan.
 - 1. Test each sample as specified in PART 1 under QUALITY ASSURANCE article.
 - 2. Notify Architect of date and time that tests will be performed, at least seven days in advance.
 - 3. Record each test on Pre-installation Adhesion Test Log as indicated.
 - 4. If any sample fails, review products and installation procedures, consult manufacturer, or take whatever other measures are necessary to ensure adhesion; re-test in a different location; if unable to obtain satisfactory adhesion, report to Architect.
 - 5. After completion of tests, remove remaining sample material and prepare joint for new sealant installation.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.
- E. Concrete Floor Joints That Will Be Exposed in Completed Work: Test joint filler in inconspicuous area to verify that it does not stain or discolor slab.

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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, except where specific dimensions are indicated.
- D. Install bond breaker backing tape where backer rod cannot be used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
- G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.
- H. Concrete Floor Joint Filler: After full cure, shave joint filler flush with top of concrete slab.

3.04 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements for additional requirements.
- B. Perform field quality control inspection/testing as specified in PART 1 under QUALITY ASSURANCE article.
- C. Non-Destructive Adhesion Testing: If there are any failures in first 100 linear feet, notify Architect immediately.
- D. Remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.
- E. Repair destructive test location damage immediately after evaluation and recording of results.

3.05 POST-OCCUPANCY

- A. Post-Occupancy Inspection: Perform visual inspection of entire length of project sealant joints at a time that joints have opened to their greatest width; i.e. at low temperature in thermal cycle. Report failures immediately and repair.

END OF SECTION

END OF SECTION 02000

APPENDIX #1