

# **ST. JOHNS COUNTY SCHOOL DISTRICT**



## **Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

# **Project Manual**

**Bid #2018-36**

**December 6, 2018**

**prepared by**

**M. V. Cummings Engineers, Inc.  
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**ADVERTISEMENT FOR BIDS**

**Installation of Emergency backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools  
Bid #2018-36**

Sealed bids will be received by the **St. Johns County School Board** for the **Installation of Emergency backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools** located in St. Johns County, Florida.

The work shall include the following:

Installation of Emergency backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools

All plant, labor, material, temporary facilities for general construction and restoration to provide work complete and in place.

All bids (**to include an original and one copy**) must be sealed and clearly marked on the outside **"Bid #2018-36 Installation of Emergency backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools"**

Bids will be received in the office of the **St. Johns County School District, Maintenance Department, 299 School House Rd., St. Augustine, FL 32084** until **2:00 p.m.** prevailing local time **Tuesday January 15, 2019**. Bids received after that time will not be accepted. The Bids will then be opened publicly and read aloud.

A **non-mandatory Pre-Bid Conference** will be held on **Friday December 14, 2018 at 10:00 a.m.** at **St. Johns County School District Maintenance Department** located at **299 School House Rd, St. Augustine, Florida 32084**. All bona fide Bidders shall check in at the front office prior to the meeting time. **Instructions for site visits will be provided at this meeting.**

The Invitation to Bid, Drawings, and Specifications are available through DemandStar, [www.demandstar.com](http://www.demandstar.com).

All questions concerning the Project shall be submitted in writing to the Design Consultant. This office is the only point where information will be disseminated. **All questions must be received by Friday, January 4, 2019 @ 12:00 p.m.** Send all questions to:

**Larry M. "Mike" Carney, P.E.**  
**M.V. Cummings Engineers, Inc**  
[LMCarney@mvce.net](mailto:LmCarney@mvce.net)

All questions will be answered via the posting to the DemandStar website [www.demandstar.com](http://www.demandstar.com) no later than **Tuesday, January 8, 2019 @ 5:00 PM.**

The District will not respond to questions and inquiries submitted after the deadline stated above. Copies of addendum will be made available for inspection at the Facilities and Operations office, 3740 International Golf Parkway, Suite 200, St. Augustine, Florida 32092, where bid documents will be kept on file.

No Addendum will be issued later than **Tuesday, January 8, 2018**, except an addendum withdrawing the Invitation to Bid or one which includes postponement of the date for receipt of bids or one containing

the questions and answers.

All notices relative to this Bid, including but not limited to initial release, addendums, letters of intent and awards will be posted on the DemandStar web site – [www.demandstar.com](http://www.demandstar.com).

The successful Bidder will be required to furnish and record in the official records of the county in which the Project is located a 100% Performance Bond and a 100% Labor and Material Payment Bond in the form included herein.

The **St. Johns County School Board** reserves the right to reject any and all Bids, waive informalities and minor irregularities in Bidding and to accept Bids which are considered to be in the best interest of the System.

Dated: **December 6, 2018**

Patrick Snodgrass, Director of Purchasing  
St. Johns County School District  
3015 Lewis Speedway, Building 5  
St. Augustine, Florida 32084

Published:     December 6, 2018  
                  December 13, 2018  
                  December 20, 2018

**St. Johns County School District**  
Sebastian Administrative Annex  
Purchasing Department  
3015 Lewis Speedway, Unit 5  
St. Augustine, FL 32084



# INVITATION TO BID (ITB) REQUIRED RESPONSE FORM

BID NO.: 2018-36  
RELEASE DATE: December 6, 2018

**INVITATION TO BID TITLE: Installation of  
Emergency Backup Generators at Osceola,  
Mason and Mill Creek Elementary Schools**

F.O.B. Destination:

CONTACT: Patrick Snodgrass  
Director of Purchasing  
(904) 547-8941  
patrick.snodgrass@stjohns.k12.fl.us

**BID DUE DATE AND TIME: Tuesday, January 15, 2019 @ 2:00 pm**  
**BID OPENING DATE AND TIME: January 15, 2019 @ 2:00 pm**

SUBMIT BID TO: St. Johns County School District  
Maintenance Department  
299 School House Road  
St. Augustine, FL 32084

BID OPENING LOCATION: St. Johns County School District  
Maintenance Department  
299 School House Road  
St. Augustine, FL 32084

REQUIRED SUBMITTALS CHECKLIST - Each submittal checked below is **required** for Bid to be considered.

- Literature     Specifications     Catalogs     Product Samples: See Special Conditions  
 Debarment Form     Manufacturer's Certificate of Warranty  
 Drug-Free Workplace Certification     List of References  
 Certificate of Insurance: See Special Conditions  
 Additional submittals specific to this ITB may also be required – See Special Conditions for details

**BIDDER MUST FILL IN THE INFORMATION LISTED BELOW AND SIGN WHERE INDICATED FOR BID TO BE CONSIDERED.**

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

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

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

**Signature of Owner or  
Authorized Officer/Agent** \_\_\_\_\_ Telephone: \_\_\_\_\_

Typed Name of Above: \_\_\_\_\_ FAX: \_\_\_\_\_

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

By my signature, I certify that this offer is made without prior understanding, agreement, or connection with any corporation, firm, business entity or person submitting an offer for the same materials, supplies, equipment, or services (s), and is in all respects fair and without collusion or fraud. I further agree to abide by all conditions of this invitation and certify that I am authorized by the offeror to sign this response. In submitting an offer to the School Board of St. Johns County, I, as the Bidder, offer and agree that if the offer is accepted, the offeror will convey, sell, assign, or transfer to the School Board of St. Johns County all right, title, and interest in and to all causes of action it may now or hereafter acquire under the Anti-trust laws of the United States and the State of Florida for price fixing relating to the particular commodity(s) or service(s) purchased or acquired by the School Board. At the School Board's discretion, such assignment shall be made and become effective at the time the School Board of St. Johns County tenders final payment to the vendor.

## GENERAL CONDITIONS, INSTRUCTIONS AND INFORMATION

Bidder: To ensure acceptance of the bid follow these instructions:

1. **DEFINITIONS:** For purpose of these General Conditions "ITB" refers to the Invitation to Bid. "Bid" refers to the completed ITB Required Response Form above, together with all supporting documentations and submittals. "Bidder" or "Contractor" or "Respondent" refers to the entity or person that submits the Bid. "District" refers to the St. Johns County School District, and "School Board" to the St. Johns County School Board. "Purchasing Department Representative" refers to the Purchasing Department staff member named as its contact on the first page of the ITB. "Conditions" refers to both the General Conditions and the Special Conditions of this ITB.
2. **EXECUTION OF BID:** The ITB Required Response Form must be completed, signed, and returned in a sealed envelope to the Purchasing Department, together with the Bid and all required submittals. All Bids must be completed in ink or typewritten. If a correction is necessary, draw a single line through the entered figure and enter the corrected figure or use an opaque correction fluid. All corrections should be initialed by the person signing the Bid even when using opaque correction fluid. Any illegible entries will not be considered for award. The ITB General Conditions, Special Conditions and specifications **cannot** be changed or altered in any way by the Bid or otherwise by the Bidder. In the event of any conflict between the Conditions and specifications of the ITB and the terms and conditions of the Bid, the Conditions and specifications of the ITB take precedence. Any failure to comply with the ITB Conditions or specifications or attempt to alter them by the Bidder shall be grounds for rejection of the Bid.
3. **SUBMISSION OF BID:** The completed Bid must be submitted in a sealed envelope with the ITB title and bid number on the outside. Bids must be time stamped by the Purchasing Department prior to the ITB due time on date due. No Bid will be considered if not time stamped by the Purchasing Department prior to the stated submission deadline. Bids submitted by telegraphic or facsimile transmission will not be accepted unless authorized by the Special Conditions of this ITB.
4. **SPECIAL CONDITIONS:** The Purchasing Department has the authority to issue Special Conditions as required for a particular ITB. Any Special Conditions that vary from these General Conditions shall take precedence over the General Conditions.
5. **PRICES QUOTED:** Deduct trade discounts and quote a firm net price. Give both unit price and aggregate total. Prices must be stated in units to quantity specified in the ITB. In case of discrepancy in computing the amount of the Bid, the **Unit Price** quoted will govern. All prices quoted shall be F.O.B. destination, freight prepaid. Bidder is responsible for freight charges. Bidder owns goods in transit and files any claims, unless otherwise stated in Special Conditions. Each item must be proposed separately and no attempt is to be made to tie any item or items in with any other item or items. If a Bidder offers a discount or offers terms less than Net 30, it is understood that a minimum of thirty (30) days will be required for payment. If a payment discount is offered, the discount time will be computed from the date of satisfactory delivery at place of acceptance and receipt of correct invoice at the office specified.
  - a) Taxes: The School Board does not pay Federal excise and State taxes on direct purchase of tangible personal property. The applicable tax exemption number is shown on the purchase order. This exemption does not apply to purchases of tangible personal property made by contractors who use the tangible personal property in the performance of contracts for the improvement of School Board-owned real property as defined in Chapter 192 of the Florida Statutes.
  - b) Mistakes: Bidders are expected to examine the General and Special Conditions, specifications, delivery schedules, Bid prices and extensions, and all instructions pertaining to supplies and services. Failure to do so will be at Bidder's risk.
  - c) Conditions and Packaging: It is understood and agreed that any item offered or shipped as a result of this ITB shall be new (current production model at the time of this ITB) unless otherwise stated. All containers shall be suitable for storage or shipment, and all prices shall include standard commercial packaging.
  - d) Underwriters' Laboratories: Unless otherwise stipulated in the ITB, all manufactured items and fabricated assemblies shall be U.L. listed where such has been established by U.L. for the item(s) offered and furnished. In lieu of the U.L. listing, Bidder may substitute a listing by an independent testing laboratory recognized by OSHA under the Nationally Recognized Testing Laboratories (NRTL) Recognition Program.
  - e) Preference for St. Johns County Bidders: For all purchases made by the School Board, prices and quality being equal, preference may be given to St. Johns County Bidders, subject to certification as a drug-free workplace (Florida Statutes 287.087 and 287.084).
6. **BRAND NAMES:** The District reserves the right to invite Bids for a particular product or specific equipment by manufacturer, make, model or other identifying information. However, a Bidder may propose a substitute product of equal quality and functionality unless the Conditions or specifications state that substitute products or equipment may not be proposed and will not be considered. If a substitute product is proposed, it is the Bidder's responsibility to submit with the Bid brochures, samples and/or detailed specifications on the substitute product. The District shall be the sole judge in the exercise of its discretion for determining whether the substitute product is equal and acceptable.

7. **QUALITY:** The items proposed must be new and equal to or exceed specifications. The manufacturer's standard warranty shall apply. During the warranty period, the successful Bidder must repair and/or replace the unit without cost to the District with the understanding that all replacements shall carry the same warranty as the original equipment. The successful Bidder shall make any such repairs and/or replacements immediately upon receiving notice from the District.
8. **SAMPLES:** Samples of items, when required, must be furnished free of expense by the ITB due date unless otherwise stated. If not destroyed, upon request, samples will be returned at the Bidder's expense. Bidders will be responsible for the removal of all samples furnished within thirty (30) days after ITB opening. All samples will be disposed of after thirty (30) days. Each individual sample must be labeled with Bidder's name, ITB number, and item number. Failure of Bidder to either deliver required samples or to clearly identify samples as indicated may be reason for rejection of the ITB. Unless otherwise indicated, samples should be delivered to the office of the Purchasing Department of the St. Johns County School Board, Sebastian Administrative Annex, 3015 Lewis Speedway Unit 5, St. Augustine, FL 32084.
9. **TESTING:** Items proposed may be tested for compliance with ITB Conditions and specifications.
10. **NON-CONFORMITY:** Items delivered that do not conform to ITB Conditions or specifications may be rejected and returned at Bidder's expense. Goods or services not delivered as per delivery date in ITB and/or purchase order may be purchased on the open market. The Bidder shall be responsible for any additional cost. Any violation of these stipulations may also result in Bidder being disqualified from participating in future competitive solicitations or otherwise doing business with the District.
11. **DELIVERY:** Unless actual date of delivery is specified (or if specified delivery cannot be met), the Bid must show the number of days required to make delivery after receipt of purchase order in space provided. Delivery time may become a basis for recommending an award (see Special Conditions).
12. **REQUESTS FOR CLARIFICATION:** No correction or clarification of any ambiguity, inconsistency or error in the ITB Conditions and specifications will be made to any Bidder orally. Any request for such interpretation or correction should be by email addressed to the Purchasing Department Representative prior to the deadline specified in the Special Conditions for submitting questions. All such interpretations and supplemental instructions will be in the form of written addenda to the ITB. Only the interpretation or correction so given by the Purchasing Department Representative, by email or in writing, shall be binding and prospective Bidders are advised that no other source is authorized to give information concerning, or to explain or interpret the ITB Conditions and specifications.
13. **DISPUTE:** Any dispute concerning the Conditions or specifications of this ITB or the contract resulting from this ITB shall be decided by Purchasing Department and that decision shall be final.
14. **AWARDS:** Bids shall be reviewed in accordance with the ITB Conditions and specifications and the best interest of the School District. To that end, the Board reserves the right to reject any and all Bids; to waive any irregularities or informalities; to accept any item or group of items; to request additional information or clarification from any Bid; to acquire additional quantities at prices quoted in the Bid unless additional quantities are not acceptable, in which case the Bid must be conspicuously labelled "BID IS FOR SPECIFIED QUANTITY ONLY", and to purchase the product or service at the price and terms of any contract with a governmental entity procured by competitive solicitation, in accordance with Florida law. The decision to award a contract or take other action in regard to the ITB shall be made in the best interest of the School District.
15. **OTHER GOVERNMENTAL AGENCIES:** It is the intent of this solicitation to obtain Bids to sell the services or products to the School Board. Other school boards and governmental agencies/entities may purchase goods or services based on the contract awarded as a result of this ITB. The services and products are to be furnished in accordance with the terms of the resulting contract.
16. **MARKING:** A packing list must be included in each shipment and shall show the School Board purchase order number, ITB number, school name or department name, contents and shipper's name and address; mark packing list and invoice covering final shipment "Order Completed". If no packing list accompanies the shipment, the buyer's count will be accepted. Mark each package clearly with (A) shipper's name and address, (B) contents, (C) the School Board of St. Johns County purchase order number, and (D) ITB number.
17. **INSPECTION, ACCEPTANCE & TITLE:** Inspection and acceptance will be at destination shown on purchase order unless otherwise provided. Title to/or risk of loss or damage to all items shall be the responsibility of the successful Bidder until acceptance by the District. If the materials or services supplied to the District are found to be defective or do not conform to specifications, the Board reserves the right to cancel the order upon written notice to the Bidder and return product at Bidder's expense.
18. **BILLING AND PAYMENT:** Invoices, unless otherwise indicated, must show purchase order numbers and shall be submitted to St. Johns County School District, Accounts Payable Department, 40 Orange Street, St. Augustine, FL 32084. Payment will be made as prescribed in the Special Conditions and properly invoiced.
19. **COPYRIGHT AND PATENT RIGHTS:** The Bidder, without exception, shall indemnify and hold harmless the School Board and its employees from liability of any nature or kind, including legal fees and other costs and expenses, for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the School Board. If the Bidder uses any design, device, or materials



covered by letters, patent, or copyright, it is mutually understood and agreed without exception that the Bid prices shall include all royalties or cost arising from the use of such design, device or materials in any way involved in the work.

20. **OSHA:** The Bidder warrants that the product supplied to the School Board shall conform in all respects to the standards set forth in the Occupational Safety and Health Act of 1970, as amended, and the failure to comply with this condition will constitute a breach of contract.
21. **LEGAL REQUIREMENTS:** The Bidder shall comply with Federal, State, County, and local laws, ordinances, rules, and regulations that in any manner affect the items covered herein. Lack of knowledge by the Bidder will in no way be a cause for relief from responsibility.
22. **CONFLICT OF INTEREST:** The award hereunder is subject to the provisions of Chapter 112, Florida Statutes. All Bidders must disclose with their Bid the name of any officer, director, or agent who is also an employee of the School Board. Further, all Bidders must disclose the name of any Board employee who owns directly or indirectly, an interest of five percent (5%) or more of the total assets of capital stock in the Bidder's firm.
23. **ANTI-DISCRIMINATION:** The Bidder certifies that Bidder is in compliance with the requirements of law regarding equal employment opportunity for all persons without regard to age, race, color, religion, sex, national origin, or disability.
24. **LICENSES AND PERMITS:** The Bidder shall be responsible for obtaining, at its expense, all licenses and permits required for performance of the work or services resulting from the ITB award.
25. **BID BONDS, PERFORMANCE BONDS, CERTIFICATES OF INSURANCE:** Bid bonds, when required, shall be submitted with the Bid in the amount specified in Special Conditions. Bid bonds will be returned to unsuccessful Bidders. After acceptance of Bid, the Board will notify the successful Bidder to submit a performance bond and certificate of insurance in the amount specified in Special Conditions. St. Johns County School District shall be named as additional insured on policies required by detailed specifications. Upon receipt of the performance bond, the Bid bond will be returned to the successful Bidder.
26. **DEFAULT AND REMEDIES:** The following remedies for default shall apply.
  - a) **Failure to Timely Deliver.** The parties acknowledge and agree that the damages for the failure of the successful Bidder to timely deliver the products or services contracted for may be difficult to determine. Moreover, both parties wish to avoid lengthy delay and expensive litigation relating to the failure of the successful Bidder to deliver on time. Therefore, in the event the successful Bidder fails to timely deliver the products or services contracted for, the School Board may exercise the remedy of liquidated damages against the successful Bidder in an amount equal to 25% of the unit price Bid, times the quantity. The successful Bidder shall pay that sum to the School Board not as a penalty, but as liquidated damages intended to compensate for unknown and unascertainable damages.
  - b) **Other Default.** In the event of default for any reason other than the failure of the successful Bidder to timely deliver the products or services contracted for, the School Board may exercise any and all remedies in contract or tort available to it, including, but not limited to, the recovery of actual and consequential damages.
27. **TERMINATION:** In the event any of the provisions of this ITB are violated by the Bidder, the Purchasing Department reserves the right to reject its Bid. Furthermore, the School Board reserves the right to terminate any contract resulting from this ITB for financial or administrative convenience, as determined in its sole business judgment, upon giving thirty (30) days prior written notice to the other party.
28. **FACILITIES:** The Board reserves the right to inspect the Bidder's facilities at any time with prior notice.
29. **ASBESTOS STATEMENT:** All material supplied to the School Board must be 100% asbestos free. Bidder by virtue of proposing, certifies by signing Bid, that if awarded any portion of this Bid, will supply only material or equipment that is 100% asbestos free.
30. **INDEMNITY AND HOLD HARMLESS AGREEMENT:** During the term of this Bid and any contract awarded to Bidder as a result of this ITB, the Bidder shall indemnify, hold harmless, and defend the School Board, its agents, and employees from any and all costs and expenses, including but not limited to, attorney's fees, reasonable investigative and recovery costs, court costs and all other sums which the Board, its agents, servants and employees, may pay or become obligated to pay on account of any, all and every claim or demand, or assertion of liability, or any claim or actions founded, thereon, arising or alleged to have arisen out of the products, goods or services furnished by the Bidder, its agents, or employees, or any of its equipment, including, without limitation, claims for damages, injury to person or property, including the Board's property, or death.
31. **CRIMINAL BACKGROUND SCREENING:** Pursuant to Florida Statute 1012.467 and School Board Rule 7.142, the District will issue and recognize statewide background badges to non-instructional contractor employees who meet the clearance requirements of Florida Statute 1012.467(2)(g) when it is not anticipated that they will come into direct contact with students. However, pursuant to Florida Statute 1012.467 and School Board Rule 7.142, if the District is unable to rule out that Bidder's employees or subcontractors may come into contact with students, then, in the paramount interest of student safety, the employees will be required to undergo and pass background screening in accordance with School Board Rule 7.142, unless another statutory exemption applies.

**For this ITB:**

- A.  Student contact not anticipated
- B.  Student contact anticipated

If Box A is checked, statewide badge will be recognized or issued, if requested and the contractor meets clearance requirements.

If Box B is checked, background screening pursuant to School Board Rule 7.142(4) will be required.

**The Bidder acknowledges and agrees to comply with the requirements of School Board Rule 7.142. Bidder shall be responsible for the expense of the background screening of its employees.**

- 32. **VENUE:** Any suit, action, or other legal proceedings arising out of or relating to any contract awarded based upon this ITB shall be brought in a court of competent jurisdiction in St. Johns County, Florida. The parties waive any right to require that a suit, action, or proceeding arising out of this Agreement be brought in any other jurisdiction or venue.
- 33. **WAIVER OF JURY TRIAL:** The parties knowingly, voluntarily, and intentionally waive their right to trial by jury with respect to any litigation arising out of, under, or in connection with this ITB or any contract awarded upon this ITB. This provision is a material inducement for the School Board to enter into a contract with the successful Bidder.
- 34. **LOBBYING:** Lobbying is not permitted with any District personnel or School Board members in connection with any ITB or competitive solicitation. All oral or written inquiries must be directed through the Purchasing Department. Lobbying is defined as any action taken by an individual, firm, association, joint venture, partnership, syndicate, corporation, and all other groups who seek to influence the governmental decision of a board member or district personnel on the award of this contract. Any Bidder or any individuals that lobby on behalf of Bidder will result in rejection/disqualification of said Bid.
- 35. **ASSIGNMENTS:** The successful bidder may not sell, assign or transfer any of its rights, duties or obligations under Bid contract without the prior written consent of the School Board.
- 36. **PROTEST:** Failure to give notice or file a protest within the time prescribed in Section 120.57 (3), Florida Statutes, shall constitute a waiver of any protest.
- 37. **COMPLIANCE WITH FEDERAL REGULATIONS:** All contracts involving Federal funds will contain certain provisions required by applicable sections of Title 34, Section 80.36(l) and 85.510, Code of Federal Regulations and are included by reference herein.
  - a) **Debarment:** The Bidder certifies by signing the Bid and required response form that the Bidder and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in Federally funded transactions and may, in certain instances, be required to provide a separate written certification to this effect.

During the term of any contract with the School Board, in the event of debarment, suspension, proposed debarment, declared ineligible or voluntarily excluded from participation in Federally funded transactions, the Bidder shall immediately notify the Purchasing Department and the Superintendent, in writing.
  - b) **Records:** Vendors will also be required to provide access to records, which are directly pertinent to the contract and retain all required records for three (3) years after the School Board's final **payment is made**.
  - c) **Termination:** For all contracts involving Federal funds, in excess of \$10,000, the School Board reserves the right to terminate the contract for cause as well as convenience by issuing a certified notice to the vendor.
- 38. **PUBLIC ENTITY CRIME:** Pursuant to Florida Statute 287.133, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a Bid on a contract to provide any goods or services to a public entity, may not submit a Bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit Bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 of Florida Statute, for CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.
- 39. **COLLECTION, USE OR RELEASE OF SOCIAL SECURITY NUMBERS:** The St. Johns County School District is authorized to collect, use or release social security numbers (SSN) of vendors, contractors and their employees and for the following purposes, which are noted as either required or authorized by law to be collected. The collection of social security numbers is either specifically authorized by law or imperative for the performance of the District's duties and responsibilities as prescribed by law (Sections 119.07(5)(a)2 and 3, Florida Statutes):
  - a) **Criminal history and criminal background checks/identifiers for processing fingerprints by Department of Law Enforcement/, if SSN is available** [Required by Fla. Admin. Code 11 C-6.003 and Fla. Stat. § 119.07(5)(a)6]

b) **Vendors/Consultants that District reasonably believes would receive a 1099 form if a tax identification number is not provided including for IRS form W-9** [Required by 26 C.F.R. § 31.3406-0, 26 C.F.R. § 301.6109-1, and Fla. Stat. § 119.07(5)(a)2 and 6]

**40. PURCHASING AGREEMENTS AND STATE TERM CONTRACTS:** The Purchasing agreements and state term contracts available under s. 287.056 have been reviewed.

**41. PUBLIC RECORDS AND CONFIDENTIALITY:** Subject to the limited confidentiality afforded pending competitive solicitation by Florida Statute 119.071, the ITB and all Bids are public records subject to disclosure pursuant to the Florida Public Records Law. Requests for tabulations and other records pertinent to the competitive solicitation shall be processed in accordance with the Florida Public Records Law. By submitting a Bid, Bidders will be deemed to have waived any claim of confidentiality based on trade secrets, proprietary rights, or otherwise.

Florida Statute 119.0701 requires the Contractor to comply with Florida's public records laws with respect to services performed on behalf of the School District. Specifically, the Statute requires that the Contractor:

- a) Keep and maintain public records required by the School District to perform the service.
- b) Upon request from the School District's custodian of public records, provide the School District with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119 of the Florida Statutes or as otherwise provided by law.
- c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Contractor does not transfer the records to the School District.
- d) Upon completion of the contract, transfer, at no cost, to the School District all public records in possession of the Contractor or keep and maintain public records required by the School District to perform the service. If the Contractor transfers all public records to the School District upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the School District, upon request from the School District's custodian of public records, in a format that is compatible with the information technology systems of the School District.

**IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 904-547-7637; [sjpubrec@stjohns.k12.fl.us](mailto:sjpubrec@stjohns.k12.fl.us) ; OR ST. JOHNS COUNTY SCHOOL BOARD, ATTN: COMMUNITY RELATIONS, 40 ORANGE STREET, ST. AUGUSTINE, FL 32084**

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions**

*This certification is required by the Department of Education regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, for all lower tier transactions meeting the threshold and tier requirements stated at Section 85.110.*

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to whom this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

**Instructions for Certification:**

1. The prospective lower tier participant certifies, by submission of this proposal that neither it nor its principals or affiliates are:
  - (a) presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions as defined in 49 CFR s29.110(a) by any Federal department or agency;
  - (b) have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in performing a public (federal, state or local) transaction or contract under a public transaction; or for violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
  - (c) are not presently indicted for or otherwise criminally or civilly charged by a government entity (federal, state or local) with commission of the offenses enumerated in this certification; or
  - (d) have not within a three-year period preceding this application had one or more public transaction (federal, state or local) terminated for cause or default.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Name of Applicant	PR/Award Number and/or Project Name
Printed Name	Title of Authorized Representative
Signature	Date

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

**DRUG FREE WORKPLACE CERTIFICATION FORM**

In accordance with 287.087, Florida Statutes, preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids, which are equal with respect to price, quality, and service, are received by the state or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program *shall be given preference* in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the action that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- 3) Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
- 5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

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(Vendor's Signature)

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

**EQUAL OPPORTUNITY REPORT STATEMENT**

The Bidder (Proposer) shall complete the following statement by signing this form where indicated. Failure to complete this form may be grounds for rejection of bid:

The awarded Contractor shall comply with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987 and the Florida Civil Rights Act of 1992, as amended) prohibiting employment discrimination and shall comply with the regulations and guidelines promulgated pursuant to this Act by the Secretary of the Interior and the Heritage Conservation and Recreation Service.

During the performance of this contract, the awarded Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, 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 setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as

provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

Handwritten Signature of Authorized Principal(s):

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

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

PRINT NAME: \_\_\_\_\_

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

DATE: \_\_\_\_\_

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

**BYRD ANTI-LOBBYING COMPLIANCE AND CERTIFICATION REGARDING LOBBYING**

Certification for Contracts, Grants, Loans, and Cooperative Agreements (To be submitted with each bid or offer exceeding \$100,000) The undersigned [Contractor] certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or Current as of 9-26-16 11 cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

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

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

Handwritten Signature of Authorized Principal(s):

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

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

PRINT NAME: \_\_\_\_\_

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

DATE: \_\_\_\_\_



**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

**Certification of Non-Segregated Facilities**

The federally assisted construction Contractor certifies that he does not maintain or provide for his employees, any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location under his control, where segregated facilities are maintained. The federally assisted construction Contractor certifies that he will not maintain or provide for his employees segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location under his control, where segregated facilities are maintained. The federally assisted construction Contractor agrees that a breach of this certification is a violation of the equal opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting room, work areas, rest rooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directives or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally assisted construction Contractor agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding ten thousand (\$10,000.00) dollars US which are not exempt from the provisions of the equal opportunity clause and that he will retain such certifications in his files.

Handwritten Signature of Authorized Principal(s):

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

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

PRINT NAME: \_\_\_\_\_

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

DATE: \_\_\_\_\_

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

**CERTIFICATION FOR DISCLOSURE OF LOBBYING ACTIVITIES**

**The prospective participant certifies, by signing this certification, that to the best of his or her knowledge and belief:**

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

(2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities", in accordance with its instructions. (Standard Form-LLL can be obtained from the Florida Department of Transportation's Professional Services Administrator or Procurement Office.)

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

The prospective participant also agrees by submitting his or her proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such sub recipients shall certify and disclose accordingly.

Legal Name of Contractor: \_\_\_\_\_

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

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

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

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

**ST. JOHNS COUNTY SCHOOL DISTRICT**

**INVITATION TO BID**

**SPECIAL CONDITIONS**

1.0 **INTRODUCTION**

1.1 The St. Johns County School District (hereinafter referred to as the District) is requesting bid pricing from qualified bidders for Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools

2.0 **INSTRUCTIONS FOR BID SUBMITTAL**

2.1 All bids must be received no later than, **Tuesday, January 15, 2019 at 2:00PM** and must be delivered to:

St. Johns County School District  
Sebastian Administrative Annex  
Purchasing Department  
3015 Lewis Speedway, Building 5  
St. Augustine, FL 32084

If a bid is transmitted by US mail or other delivery medium, the bidder will be responsible for its timely delivery to the address indicated

2.2 Any bid received after the stated date and time, **WILL NOT** be considered.

2.3 One manually signed original bid and one photocopy of the bid must be sealed in one package and clearly labeled “Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools” on the outside of the package. The legal name, address, bidder’s contact person and telephone number must also be clearly noted on the outside of the package.

2.4 Failure to submit one original bid with a manual signature may result in rejection of the bid.

2.5 All bids must be signed by an officer or employee having the authority to legally bind the bidder.

2.6 Any corrections must be initialed. This includes corrections made using correction fluid (white out) or any other method of correction.

2.7 Bidders should become familiar with any local conditions that may, in any manner, affect the services required. The bidder(s) are required to carefully examine the bid terms and to become thoroughly familiar with any and all conditions and requirements that may in any

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

manner affect the work to be performed under the contract. No additional allowance will be made due to lack of knowledge of these conditions.

- 2.8 Bids not conforming to the instructions provided herein will be subject to disqualification at the sole discretion of the District.
- 2.9 Any bid may be withdrawn prior to the date and time the bids are due. Any bid not withdrawn will constitute an irrevocable offer for a period of 90 days, to provide the District with the services specified in the bid.
- 2.10 Pursuant to Florida Statute, it is the practice of the District to make available for public inspection and copying any information received in response to an Invitation to Bid or Request for Proposal (RFP). No action on the part of the respondent to a Bid or RFP will create an obligation of confidentiality on the part of the District, including but not limited to, making a reference in the response to the trade secret statutes. It is recommended that potential suppliers exclude from their response any information that, in their judgment may be considered a trade secret.

**3.0 AWARD**

- 3.1 The District reserves the right to waive any irregularities and technicalities and may, at its sole discretion, request a re-submittal or other information to evaluate any or all bids.
- 3.2 The District reserves the right to require bidder(s) to submit evidence of qualifications or any other information the Board may deem necessary, including audited and unaudited financial statements.
- 3.3 The District reserves the right, prior to Board approval, to withdraw the bid or portions thereof, without penalty.
- 3.4 The District reserves the right to: (1) accept the bid of any firm to be in the best interest of the District and (2) to reject any and/or all bids.
- 3.5 The District reserves the right to conduct interviews with any of the bidders and to require a formal presentation by any of the bidders.
- 3.6 It is the intent of the District to award this bid to one source.
- 3.7 The bid award will be made based on funds availability and will be at the sole discretion of the St. Johns County School Board.

**4.0 CONTRACT/RENEWAL**

- 4.1 The term of this contract shall be from the date of Board award through completion of the project.

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

- 4.2 All terms and conditions of this bid, any addenda, and negotiated terms are incorporated into the contract by reference as set forth herein.
- 4.3 At any point in time during the term of the Contract with the awarded Contractor resulting from this bid, the District may review records of performance to ensure that the Contractor is continuing to provide sufficient financial support, labor, equipment and organization as prescribed herein. The District may implement termination procedures if the District determines that a Contractor no longer possesses the financial support, equipment and organization which would have been necessary in the ITB response in order to comply with the requirements for satisfactory performance.
- 4.4 Failure on the part of the Contractor to comply with any portion of the duties and obligations under an Agreement resulting from this bid shall be cause for termination. If the Contractor fails to perform any aspect of the responsibilities described herein, the District shall provide written notification stating any and all items of non-compliance. The Contractor shall have seven (7) consecutive calendar days to correct any and all items of non-compliance. If the items of non-compliance are not corrected, or acceptable corrective action, as approved by the District, has not taken place within the seven (7) calendar days, the Agreement may be terminated by the District for cause, upon giving seven (7) consecutive calendar days written notice to the Contractor.

In addition to the above, the District may terminate any Agreement resulting from this bid at any time, without cause, upon thirty (30) days written notice to the Contractor.

5.0 **BID INQUIRIES/NOTICES**

- 5.1 In order to maintain a fair and impartial competitive process, prospective bidders shall not communicate with District staff or Board members after bids are released. All questions and inquiries must be submitted via email no later than **Friday, January 4, 2019 @ 12:00 PM** to:

Mike Carney, P.E.  
M.V Cummings Engineering  
[LMCarney@mvce.net](mailto:LMCarney@mvce.net)

**Violation of this section is grounds for automatic disqualification of a Contractor's submittal.**

All questions will be answered via posting to the DemandStar website [www.demandstar.com](http://www.demandstar.com) no later than Tuesday, January 8, 2019 **@ 5:00 PM**.

The District will not respond to questions and inquiries submitted after the deadline stated above.

- 5.2 Copies of addendum will be made available for inspection at the St. Johns County School District Maintenance Department Office, 299 School House Rd., St. Augustine, Florida 32084, or the Purchasing Department, 3015 Lewis Speedway, Building 5, St. Augustine, FL 32084, where bid documents will be kept on file.

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5.3 No Addendum will be issued later than **Tuesday, January 8, 2019 @ 5:00 PM**, except an addendum withdrawing the Invitation to Bid or one which includes postponement of the date for receipt of bids or one containing the questions and answers.

5.4 All notices relative to this Bid, including but not limited to initial release, addendums, letters of intent and awards will be posted on the DemandStar web site – [www.demandstar.com](http://www.demandstar.com).

6.0 **NON MANDATORY PRE-BID CONFERENCE**

A Non Mandatory Pre-Bid Conference has been scheduled for **Friday, December 14, 2018 @ 10:00 AM** at St. Johns County School District Maintenance Department:

St. Johns County School District Maintenance Department  
299 School House Rd.  
St. Augustine, FL 32084

Contractor must become familiar with any local conditions that may in any manner affect the services required. Contractor is required to carefully examine the terms and to become familiar with any and all conditions and any requirements that may in any manner affect the work to be performed under this bid. No additional allowance will be made due to lack of knowledge of these conditions.

7.0 **SCOPE OF SERVICES**

7.1 The bid is for Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools. **See Attachment A for Drawings and Specifications.**

7.2 All work shall be performed in compliance with all applicable federal, state and local laws, regulations and codes.

7.3 Contractor is responsible for supplying, at its own expense, all supervision, labor, equipment, machines, tools, materials, transportation and anything necessary to perform work required under this bid.

7.4 Contractor shall be responsible for removal of all debris from the work site as work progresses or upon request by an authorized District representative. Debris will not be placed in a District refuse container.

7.5 The District reserves the right to inspect all work prior to payment. Contractor shall promptly correct all work rejected by an authorized District representative. Contractor shall bear all costs of correcting such rejected work.

7.6 It shall be the sole responsibility of the Contractor performing services for this contract to safeguard their own materials, tools, and equipment. The District shall not assume any responsibility for vandalism and/or theft of materials, tools and/or equipment.

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

- 7.7 Contractor shall repair, at own expense, any damage that was caused to District or County Right of Way property by awarded Contractor, their employees or their agents. All grounds and areas shall be returned to their original condition as they existed prior to construction
- 7.8 Employees or agents of the Contractor must sign in and sign out when working at any District facility. Only employees or agents of the Contractor who have been fingerprinted and cleared will be permitted on school grounds.
- 7.9 Any changes to the work shall be performed only after execution of a written change order by an authorized representative of the District.
- 7.10 The awarded Contractor will be required to furnish and record in the official records of the County in which the Project is located a 100% Performance Bond and a 100% Labor and Material Payment Bond in the form included herein as **Attachment B**.

8.0 **FEMA REQUIRED PROVISIONS**

This is an acknowledgement that FEMA financial assistance will be used to fund the contract only. The awarded Contractor will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives herein.

The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likeness of DHS agency without specific FEMA pre-approval.

8.1 **Compliance with the Davis-Bacon Act**

- A. Contractor. The awarded Contractor shall comply with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.

Reference 2 C.F.R. § 200 Appendix II (D)

8.2 **Compliance with the Copeland “Anti-Kickback” Act**

- A. Contractor. The awarded Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
- B. Subcontracts. The awarded Contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

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- C. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

Reference 2 CFR 200 A II (D)

**8.3 Compliance with the Contract Work Hours and Safety Standards Act**

Where applicable (*see* 40 U.S.C. § 3701), all contracts awarded by the NFE in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations at 29 C.F.R. Part 5. *See* 2 C.F.R. Part 200, Appendix II, ¶ E.

Under 40 U.S.C. § 3702, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.

The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of property or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Applicability. This requirement applies to all FEMA grant and cooperative agreement programs.

- A. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- B. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (A) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer

or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (A) of this section.

- C. Withholding for unpaid wages and liquidated damages. The District shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be



## **Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (B) of this section.

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

Reference 2 CFR § 200 Appendix II (E)

### **8.4 Rights to Inventions Made Under a Contract or Agreement**

If the Federal award meets the definition of “funding agreement” under 37 CFR §401.2 (a) and the recipient or sub-recipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or sub-recipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

Reference 2 C.F.R. § 200 Appendix II (F)

### **8.5 Clean Air Act and Federal Water Pollution Control Act**

- A. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401-7671 et seq. and the Federal Water Pollution Control Act, as amended, 33 U.S.C.1251 - 1387 et seq. Violations must be reported to the Federal awarding agency and Regional Office of the Environmental Protection Agency (EPA).
- B. The contractor agrees to report each violation to the District and understands and agrees that the District will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- C. The contractor agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FEMA

Reference 2 C.F.R. § 200 Appendix II G

### **8.6 Debarment and Suspension**

A contract award (see 2 CFR 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

- A. This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- B. The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- C. This certification is a material representation of fact relied upon by (insert name of sub grantee). If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (name of state agency serving as grantee and name of sub grantee), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- D. The contractor agrees to comply with the requirements of 2 C.F.R pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The contractor further agrees to include a provision requiring such compliance in its lower tiered covered transactions.

Reference 2 C.F.R. § 200 Appendix II (H)

**8.7 Byrd Anti-Lobbying Amendment**

Byrd Anti-Lobbying Amendment, 31 U.S.C. 1352, as amended by the Lobbying Disclosure Act of 1995, P.L. 104-65 [to be codified at 2 U.S.C. § 1601, et seq.] - Contractors who apply or bid for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

Reference 2 C.F.R. § 200 Appendix II (I)

**8.8 Procurement of Recycled/Recovered Materials**

The Contractor shall comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines on the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management service in a manner that maximizes energy and resource recovery; and establishing and affirmative procurement program for procurement of recovered materials identified on the EPA guidelines.

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

- A. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:
- 1) Competitively within a timeframe providing for compliance with the contract performance schedule;
  - 2) Meeting contract performance requirements; or
  - 3) At a reasonable price.

Reference 2 C.F.R. § 200.322

**8.9 Equal Opportunity**

Compliance with Regulations: The contractor shall comply with the Acts and the Regulations relative to Nondiscrimination in federally-assisted programs, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

During the performance of this contract, the Contractor agrees as follows:

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, 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 setting forth the provisions of this nondiscrimination clause.
- B. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- C. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- D. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- E. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- F. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for

## **Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- G. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provision, including sanctions for noncompliance; provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

References 2 C.F.R. Appendix II (C) and 41 C.F.R. § 60-1.4

### **8.10 Sub-Contractors**

If the awarded Contractor elects to sub-contract with any firm, for any portion of the work, the Contractor shall be responsible for all work performed by any sub-contract and the Contractor shall not be relieved of any obligations under the awarded Contract.

At any time, the District may, at its discretion, require any Respondent to submit all relevant data required to establish to the satisfaction of the District, the reliability and responsibility of the proposed sub-contractors to furnish and perform the work proposed.

Prior to the award of the Contract, the District will notify the Respondent in writing if the District, after due investigation, has reasonable and substantial objection to any person or organization proposed as a sub-contract. The Respondent then may, at their option, withdraw their Bid Package, or submit an acceptable alternate sub-contractor, at no increase in pricing. If the Respondent fails to submit an acceptable substitute within seven (7) days of the original notification, the District then may disqualify the Respondent from further consideration of award under this ITB.

The District reserves the right to disqualify any Contractor, Sub-Contractor, Vendor, or material supplier due to previously documented project problems, either with performance or quality. Sub-contractors and other persons and organizations proposed by the Respondent and accepted by the District, must be used on the work for which they were proposed and accepted and shall not be changed except with the written approval of the District.

The awarded contractor shall take the following affirmative steps to ensure minority business, women's business enterprises and labor surplus area firms are used when possible:

- A. Placing qualified small and minority businesses and women's business enterprises on solicitation lists.
- B. Ensuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources.

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

- C. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises.
- D. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises.
- E. Using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.
- F. Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (A) through (E) of this section.

Reference 2 C.F.R. § 200.321(b)(6)

**8.11 Contracting with Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms**

The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Affirmative steps must include:

- A. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- B. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- C. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- D. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
- E. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
- F. Contractor is required, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (a) through (e) of this section.

Reference 2 C.F.R. Part 200.321

**8.12 No Obligation by Federal Government**

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

**8.13 Program Fraud and False or Fraudulent Statements or Related Acts**

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

The contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor's actions pertaining to this contract.

9.0 **BID PRICING**

9.1 Bidders are required to submit a price for Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools. Bidder must incorporate any and all costs to complete the work as defined in this bid. No additional, fees or charges of any kind not listed on the bid sheet will be accepted by the District, unless accompanied by an authorized change order.

9.2 The bid sheet must be signed by an individual of the bidding firm that has the authority to bind the firm.

10.0 **QUALIFICATIONS**

10.1 The awarded Contractor shall hold a current General Contractor's License in the State of Florida.

11.0 **REFERENCES**

Bidders must provide a minimum of three (3) references whom they have performed similar services for within the past five (5) years.

12.0 **INSURANCE REQUIREMENTS**

It is mandatory that the person/firm submitting the bid have minimum Liability limits of \$1,000,000.00 for both Comprehensive General Liability, including Product Liability Coverage. The person/firm submitting the bid must also have a minimum Liability Limit of \$1,000,000.00 for Motor Vehicle Liability and at least the statutory limit of Worker's Compensation. All coverage must be included on the certificate(s). Bidder's insurance provider must be rated A- or better by AM Best. If the bidder's current certificate of insurance does not meet the amount required, a statement must be included with the bid document from their insurance carrier indicating that if a bid award was made to the firm, that the carrier would write the necessary insurance coverage. The successful bidder must then have the required insurance placed in force with written notification provided to the Director of Purchasing, prior to issuance of a purchase order that authorizes the work performance to begin. Failure to do so may invalidate the award and result in an award to the next lowest responsible bidder. **Successful Contractor must list St. Johns County School Board as an additional insured.**

13.0 **METHOD OF PAYMENT**

The St. Johns County School District requires all Bidders responding to this bid to accept payment from the District via an agreed upon electronic method.

14.0 **PURCHASE ORDERS**

**Bid #2018-36 Installation of Emergency Backup Generators at Osceola Elementary, Mason Elementary and Mill Creek Elementary Schools**

A Purchase Order issued by the Purchasing Department or from School Internal Accounts is the only legal authorization for Contractors to perform services or provide commodities to the District. A commitment, either written or verbal, from District employees without a Purchase Order issued by the Purchasing Department or from School Internal Accounts does not constitute an obligation by the District to a Contractor. Contractors that perform services or provide commodities without a Purchase Order issued by the Purchasing Department or from School Internal Accounts do so at their own risk and at risk of non-payment. Additional information regarding doing business with the District can be found on the District web site, [www.stjohns.k12.fl.us](http://www.stjohns.k12.fl.us) under the Purchasing Department.

15.0 **PREPARATION AND SUBMISSION OF BID**

15.1 Bidders are requested to organize their bids in the following sequence.

15.2 **Invitation to Bid:** Required response form (page 1 of Bid) with all required information completed and all signatures as specified

15.3 **Debarment Form**

15.4 **Drug Free Workplace Certification**

15.5 **Equal Opportunity Report Statement**

15.6 **Byrd Anti-Lobbying Compliance and Certification Regarding Lobbying**

15.7 **Certification of Non-Segregated Facilities**

15.8 **Certification for Disclosure of Lobbying Activities**

15.9 **References**

15.10 **Bid Sheet**

SECTION 00 50 00

CONTRACTING FORMS

PART 1 GENERAL

1.01 Contractor is responsible for obtaining a valid license to use all copyrighted documents specified but not included in the Project Manual.

1.02 FORMS

A. Complete the following forms for the specified purposes unless otherwise indicated elsewhere in the Contract Documents.

1. AIA DOCUMENT 312-2010 - PERFORMANCE BOND SAMPLE
2. CERTIFICATION REGARDING DEBARMENT
3. DRUG FREE WORKPLACE CERTIFICATION FORM
4. THE JESSICA LUNSFORD ACT SWORN STATEMENT FORM
5. PUBLIC ENTITY CRIMES SWORN STATEMENT FORM

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION





# AIA<sup>®</sup> Document A312<sup>™</sup> – 2010

## Payment Bond

**CONTRACTOR:**  
*(Name, legal status and address)*

**SURETY:**  
*(Name, legal status and principal place of business)*

**OWNER:**  
*(Name, legal status and address)*

**CONSTRUCTION CONTRACT**  
Date:  
Amount: \$  
Description:  
*(Name and location)*

# SAMPLE

**BOND**  
Date:  
*(Not earlier than Construction Contract Date)*

Amount: \$  
Modifications to this Bond:  None  See Section 18

**CONTRACTOR AS PRINCIPAL**  
Company: *(Corporate Seal)*

**SURETY**  
Company: *(Corporate Seal)*

Signature: \_\_\_\_\_  
Name and Title:  
*(Any additional signatures appear on the last page of this Payment Bond.)*

Signature: \_\_\_\_\_  
Name and Title:

*(FOR INFORMATION ONLY — Name, address and telephone)*

**AGENT or BROKER:**

**OWNER'S REPRESENTATIVE:**  
*(Architect, Engineer or other party:)*

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

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

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

Int.

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User Notes:

(1246124132)

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
2. have sent a Claim to the Surety (at the address described in Section 13).

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

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§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### § 16 Definitions

§ 16.1 Claim. A written statement by the Claimant including at a minimum:

- 1 the name of the Claimant;
- 2 the name of the person for whom the labor was done, or materials or equipment furnished;
- 3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- 4 a brief description of the labor, materials or equipment furnished;
- 5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- 6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- 7 the total amount of previous payments received by the Claimant; and
- 8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

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§ 16.4 **Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 **Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

*(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)*

**CONTRACTOR AS PRINCIPAL**

Company: \_\_\_\_\_ (Corporate Seal)

Signature: \_\_\_\_\_  
Name and Title: \_\_\_\_\_  
Address: \_\_\_\_\_

**SURETY**

Company: \_\_\_\_\_ (Corporate Seal)

Signature: \_\_\_\_\_  
Name and Title: \_\_\_\_\_  
Address: \_\_\_\_\_

Init.

# Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

*This certification is required by the Department of Education regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, for all lower tier transactions meeting the threshold and tier requirements stated at Section 85.110.*

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to whom this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

## Instructions for Certification:

1. The prospective lower tier participant certifies, by submission of this proposal that neither it nor its principals are:
  - (a) presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency;
  - (b) have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in performing a public (federal, state or local) transaction or contract under a public transaction; or for violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
  - (c) are not presently indicted for or otherwise criminally or civilly charged by a government entity (federal, state or local) with commission of the offenses enumerated in this certification; or
  - (d) have not within a three-year period preceding this application had one or more public transaction (federal, state or local) terminated for cause or default.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Name of Applicant	PR/Award Number and/or Project Name
Printed Name	Title of Authorized Representative
Signature	Date

## **DRUG FREE WORKPLACE CERTIFICATION FORM**

In accordance with Florida statute 287.087, preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids, which are equal with respect to price, quality, and service, are received by the state or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program *shall be given preference* in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the action that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- 3) Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
- 5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

\_\_\_\_\_  
(Vendor's Signature)

**ST. JOHNS COUNTY SCHOOL DISTRICT**

**SWORN STATEMENT PURSUANT TO SECTIONS 1012.465 AND 1012.467,  
FLORIDA STATUTES, THE JESSICA LUNSFORD ACT**

**THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.**

1. This sworn statement is submitted to the School Board of St. Johns County, Florida (Hereinafter "Board" or "School Board") by \_\_\_\_\_  
(Print individual's name and title)

for \_\_\_\_\_ whose  
(Print Name of entity submitting sworn statement)

business address is \_\_\_\_\_  
\_\_\_\_\_

and its Federal Employer Identification Number (FEIN) is \_\_\_\_\_. If the entity has no FEIN, include the Social Security Number (SSN) of the individual signing this sworn statement and so indicate.

2. I, \_\_\_\_\_, am duly authorized to make this sworn statement on  
(Print individual's name and title)

behalf of \_\_\_\_\_  
(Print Name of entity submitting sworn statement)

3. I understand that during the 2005 Legislative Session, House Bill 1877, The Jessica Lunsford Act (hereinafter "The Act" or "Act") was passed and approved by Governor Bush on May 2, 2005, with an effective date of September 1, 2005.

4. I understand that the Act amended the background screening requirements of Section 1012.465, Florida Statutes (2004) for all non-instructional school district employees or "**contractual personnel**" by requiring all non-instructional school district employees or contractual personnel who are permitted access on school grounds when students are present to undergo and pass "level 2 background screening", and further, I understand the Act defines "**contractual personnel**" to include any vendor, individual, or entity under contract with the Board.

5. I understand that pursuant to Section 1012.465, Florida Statutes, non-instructional school district employees or contractual personnel who are permitted access on school grounds when students are present, who have direct contact with students or who have access to or control of school funds must meet level 2 screening requirements as described in Sections 1012.32 and 435.04, Florida Statutes.

6. I further understand that Section 1012.467, Florida Statutes (2007) requires a fingerprint-based criminal history check for all "non-instructional contractors," which is defined as any individual who received remuneration for services performed for the school district or a school, but who is not otherwise considered an employee of the school district. "Non-instructional contractor" includes any employee of a contractor who performed services for the school district or the school under the contract and any subcontractor and its employees who are permitted access to school grounds when students are present, whose performance of the contract with the school or school board are not anticipated to result in direct contact with students, and for whom anticipated contact would be infrequent and incidental.

7. I understand that as a \_\_\_\_\_ (e.g. A private bus service contractor) all  
(Type of entity)  
contractual personnel, as defined in section 1012.465, Florida Statutes, must meet level 2 screening requirements as outlined in sections 1012.32 and 435.04, Florida Statutes in order to do business with the School Board of St. Johns County, Florida. In addition, all "non-instructional contractors" must meet the screening requirements outlined in Section 1012.467, Florida Statutes.

8. I understand that "level 2 screening requirements", as defined in Sections 1012.32 and 435.04, and the background check required by Section 1012.467, Florida Statutes means that fingerprints of all contractual personnel and non-instructional contractors must be obtained and submitted to the Florida Department of Law Enforcement for state processing and to the Federal Bureau of Investigation for federal processing.
9. I understand that the School Board will implement local procedures to comply with screening requirements, as defined in Sections 1012.32, 1012.467 and 435.04. I understand that my company must comply with these local procedures as they are developed.
10. I understand that any costs and fees associated with the required background screening will be borne by my company.
11. I understand that any personnel of the contractor found through fingerprint processing and subsequent level 2 background screening to have been found guilty of, regardless of adjudication, or entered a plea of nolo contendere or guilty to any offense outlined in Section 435.04, Florida Statutes (or any similar statute of another jurisdiction), shall not be permitted to come onto school grounds or any leased premises where school-sponsored activities are taking place when students are present, shall not be permitted direct contact with students, and shall not be permitted to have access to school district funds. In addition, any personnel of the contractor found to have been convicted of any offenses listed in Section 1012.467(2)(g), shall not be permitted access on school grounds.
12. I understand that the failure of any of the company's or my affected personnel to meet the screening standards as required by Sections 1012.465 and 1012.467, Florida Statutes, may disqualify my company from doing business with the School Board.
13. I hereby certify that the foregoing statement is true and correct in relation to the company for which I am submitting this sworn statement. I further certify that this statement is being given knowingly and voluntarily by me on behalf of my company.

The company submitting this sworn statement agrees to be bound by the provisions of SECTIONS 1012.32, 1012.465, 1012.467 AND 435.04, FLORIDA STATUTES, THE JESSICA LUNSFORD ACT 2005.

I CERTIFY THAT THE SUBMISSION OF THIS FORM TO THE SCHOOL BOARD OF ST. JOHNS COUNTY, FLORIDA ON BEHALF OF THE COMPANY IDENTIFIED IN PARAGRAPH ONE (1) ABOVE BINDS THE COMPANY TO FULLY COMPLY WITH THE BACKGROUND SCREENING REQUIREMENTS OF SECTIONS 1012.32, 1012.465, 1012.467 AND 435.04, FLORIDA STATUTES.

\_\_\_\_\_  
(Signature)

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Personally known \_\_\_\_\_

OR Produced Identification \_\_\_\_\_

Notary Public – State of \_\_\_\_\_

\_\_\_\_\_  
(Type of Identification)

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

\_\_\_\_\_  
(Printed typed or stamped commissioned name of notary public)





executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. **(Indicate which statement applies.)**

\_\_\_\_\_ Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent of July 1, 1989.

\_\_\_\_\_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

\_\_\_\_\_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. **(Attach a copy of the final order)**

**I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.**

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

\_\_\_\_\_  
**(date)**

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

COUNTY OF \_\_\_\_\_

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

\_\_\_\_\_ who, after first being sworn by me, affixed  
**(name of individual signing)**

his/her signature in the space provided above on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
**NOTARY PUBLIC**

My commission expires:

## SECTION 01 11 00

### SUMMARY OF WORK

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and General Provisions of the Prime Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to Work of this Section.

##### 1.02 WORK UNDER SINGLE CONTRACT

- A. The Owner intends to award a single prime base bid contract, titled "General Construction Contract," for Work to be performed for this Project. The Contractor shall comply with the requirements of the General Conditions and the Supplementary Conditions in accomplishing his Work on this Project.
- B. Base Bid - General Construction Contract: Includes site, general trades, mechanical, and electrical items specified in Divisions 1 through 16 of the Specifications and Work shown on the Drawings.
- C. The Contractor shall be responsible for demolition and disposal of existing items relative to this Contract.
- D. The "Contract Documents," as defined in the General Conditions, include "the Drawings." Although Drawings are grouped and identified by classification of the Work, the Contractor shall be responsible for the Work as specified herein and as indicated on the Drawings. Although the majority of the Drawings are "to scale," the Contractor is directed to use indicated dimensions for determining material quantities and for other reasons. No additional monies will be allowed due to the Contractor using "scaling instruments" to determine material quantities or for other reasons.

##### 1.03 ADMINISTRATIVE RESPONSIBILITIES OF THE CONTRACTOR

- A. The Contractor shall be responsible for the maintenance of the construction schedule and the management of the Work.
  - 1. The Contractor shall read the Specifications and Drawings for other separate contracts direct with the Owner for fixed equipment and the like, to be incorporated and attached or built in to the Work; and familiarize himself with the requirements and responsibilities of other Contracts to enable the required coordination and supervision.
  - 2. The Contractor shall also familiarize himself with other items to be incorporated into the Work including equipment and Work by the Owner.
  - 3. The Contractor shall cooperate with his subcontractors in notifying them when the Work is at a stage to require their services and shall notify the Architect/Engineer in the event that such subcontractors do not carry out their responsibilities in connection with such notification.

- B. The Contractor shall cooperate with and assist his subcontractors in the preparation of construction progress and procedures, schedule of product deliveries, and their effect on the overall project progress and completion. The subcontractors shall cooperate in getting their Work and the Work of their sub-subcontractors completed according to the schedule as prepared and maintained by the Contractor. Each subcontractor shall immediately notify the Contractor of any delay in delivery of products or the scheduled date of completion that may affect the total progress of construction.
- C. A topographical survey, is provided as a part of these Drawings, giving the general topographical lines existing at the site and the property lines.
- D. The Contractor, when required to make connections to existing utilities, especially sewage where gravity flow occurs, shall verify grades and locations at points of such connections and shall notify the Architect/Engineer of circumstances which would adversely affect the proper flow or connection to such facilities.
- E. The Architect/Engineer and Owner will not tolerate any visible or audible actions initiated or responded to by any employees or Contractors on this Project toward anyone. Violators shall be promptly removed from the site.
- F. Contractors must expend their best effort toward protection of the health, safety, and welfare of occupants on the Owner's property during the course of Work on this Project.
- G. Contractors and Subcontractors shall be subject to such rules and regulations for the conduct of the Work as the Owner may establish. Employees shall be properly and completely clothed while working. Bare torsos, legs and feet will not be allowed. Possession or consumption of alcoholic beverages or drugs, tobacco or other noxious behavior on the site is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.

#### 1.04 WORK BY OWNER

- A. The Owner intends to complete the following items of Work outside the provisions of these Contract Documents. The Contractor shall not restrict or interfere with the Owner's right to the Project to accomplish this Work.
  - 1. Items which may be deleted from Contracts for Work as required by the Contract Documents.
  - 2. Equipment and furniture except as scheduled and specified under Divisions 11 and 12 and shown on the Drawings.
  - 3. The purchase and supplying of certain materials as noted in the Project Manual.

#### 1.05 PERMITS, FEES, AND NOTICES

- A. The Contractor shall secure and pay for permits, governmental fees, and licenses necessary for the proper execution and completion of the Work, which are applicable at the time the bids are received whether or not effective or scheduled to go into effect, and shall obtain and pay the cost of any general building permit and other

approvals, permits, and fees that may be required by the local governing political entity.

- B. Utility Tie-Ins: Shall be arranged by the General Contractor with local utility company and other involved parties for minimum interruption of service.
- C. Shutdowns of existing systems shall be limited to minimum time required and scheduled with other involved parties. Provide 2 days written notice of shutdown to Architect/Engineer and Owner.
- D. Inspections of installed work shall be performed by the governing authority as arranged for by the Contractor. Work shall not be covered until approved.
- E. The Contractor shall give notices and comply with laws, ordinances, rules, regulations, and orders of public authority bearing on the performance of his Work. If the Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the Architect/Engineer in writing, and necessary changes shall be adjusted by appropriate notification. If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Architect/Engineer, he shall assume full responsibility therefore and shall bear costs attributable thereto.
- F. All warranties shall be as per State of Florida laws. Any disputes shall be settled in Florida courts.

#### 1.06 CONTRACTORS USE OF PREMISES

- A. Contractor is responsible for all power and water until substantial completion, to include control of Energy Management System by Owner and final acceptance by commissioning agent, at which time the power and water shall be transferred to the Owner.
- B. General: During the construction period, the Contractor shall have full use of the premises for construction operations, including use of the site. The Contractor's use of the premises is limited only by the Owner's right to perform work or to retain other Contractors on portions of the Project.

#### 1.07 LABOR AND MATERIALS

- A. Unless otherwise specifically noted, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of his Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- B. The Contractor shall enforce strict discipline and good order among his employees or other persons carrying out Work of his contract and shall not permit employment of unfit person or persons or anyone not skilled in the task assigned to them.

#### 1.08 CUTTING AND PATCHING

- A. Refer to Section 01731 – Cutting and Patching, for provisions on this subject.

1.09 VERIFICATIONS OF EXISTING DIMENSIONS

- A. When verification of existing dimensions is advisable or required, the Contractor requiring said verification for the construction or fabrication of his material shall be responsible for the procurement of the field information.

1.10 PROJECT SECURITY

- A. The General Contractor shall be responsible for developing and conducting a security program, specifically oriented for the protection of preventing damage, injury or loss to the entire project site and other property at the site or adjacent thereto. This shall be acceptable to the Owner and Architect/Engineer, and shall remain in effect through Substantial Completion of the Project.

1.11 UTILITY SHUT-OFFS AND CHANGEOVERS

- A. Notify the Architect/Engineer and Owner at least 24 hours in advance of utility connections, or shut-offs.
  - 1. Coordinate these operations with the Owner, through the Architect/Engineer, and complete the Work in the minimum amount of time.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION

SECTION 01 28 00

SCHEDULE OF VALUES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements governing prime contractor's Schedule of Values.
  - 1. Coordinate the Schedule of Values with the Applications for Payment, Project Schedule, Submittal Schedule, and List of Subcontracts.
  - 2. Contractors using computer generated AIA Forms must submit a copy of their license, including license number, with each request for payment.
- B. **Progress payments will not be processed without an approved Schedule of Values on file.**

1.03 SCHEDULE OF VALUES

- A. Coordination: Contractor shall coordinate preparation of its Schedule of Values for its part of the Work with the Project Schedule.
  - 1. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
    - a. Project Schedule.
    - b. Application for Payment forms, including Continuation Sheets.
    - c. List of subcontractors.
    - d. Schedule of allowances.
    - e. Schedule of alternates.
    - f. List of products.
    - g. List of principal suppliers and fabricators.
    - h. Schedule of submittals.
  - 2. Within 15 days of award of Contract, each awarded Contractor shall submit to the Architect/Engineer a Schedule of Values, for approval, showing accurate costs for the items of work assigned to the Contractor, defined under Section 01110 – Summary of Work.
  - 3. Subschedules: Where Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish the format for the Schedule of Values. The Schedule of Values shall include at a minimum a line item for labor and material costs for each specification section assigned to the Contractor under Section 01110 – Summary of Work, and shall further divide the work into a sufficient number of individual work items to serve as an

accurate basis for Contractor's Application for Payment. Each work item shall receive its prorated share of profit and overhead, including a line item for closeout. The Schedule of Values shall consist of a complete breakdown of the Contractor's contract sum showing the various items of work, divided so as to facilitate the approval of payments to the Contractor for Work completed. In addition to and conjunctive with the division of various items of work, the breakdown shall separate individual buildings within the project shall separate sitework from building(s) components, and shall separate remodeling/renovation work from new construction work. The Schedule of Values shall be prepared in a format as directed by the Architect/Engineer, showing the breakdown of items of Work and supported by such data to substantiate its correctness as the Architect/Engineer may require. The contract breakdown shall be the same form as that to be used in submitting request for payments as covered by Article 9, of the General and Supplementary Conditions. Each item of Work shall have indicated a separate cost of labor and material. This schedule when reviewed by the Architect/Engineer and Owner shall be used as the basis of approving payments along with establishing percentages of Work complete.

1. Identification: Include the following Project identification on the Schedule of Values:
  - a. Project name and location.
  - b. Name of the Architect/Engineer.
  - c. Project number.
  - d. Contractor's name and address.
  - e. Date of submittal.
2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed.
  - a. Related Specification Section or Division.
  - b. Description of Work.
  - c. Name of subcontractor.
  - d. Name of manufacturer or fabricator.
  - e. Name of supplier.
  - f. Change Orders (numbers) that affect value.
  - g. Dollar value.
  - h. Percentage of Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
3. In addition to the sections assigned to the Contractor as defined above, Contractors shall include the following line items on their Schedule of Values:
  - a. Bonds: Performance, Labor and Material (if required).
  - b. Mobilization.
  - c. Demobilization. (\*\* Note that demobilization cost shall be equal to or greater than any mobilization costs)
  - d. Insurance/Hazcom/Safety.
  - e. Submittals in the amount of 2 percent of the Contract; however, not less than \$1,000.00 nor more than \$15,000.00.
  - f. Project Meetings in the amount of \$250.00 times the anticipated number of meetings the Contractor will be required to attend during the course of the Project.
  - g. Cost for administration of Owner Direct Purchase (ODP) program
  - h. Daily cleanup (in the amount of 1 percent of the total contract amount).
  - i. Closeout in an amount equal to 1 percent of the Contract amount; however, not less than \$500.00 nor more than \$10,000.00.



4. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Break principal subcontract amounts down into several line items. Schedule of Values shall be coordinated with the Construction Schedules such that the percentages of Work completed closely relates to the values for the Work shown on the request for payments. At the beginning of the Project, the Contractor shall prepare a schedule of monthly progress payments showing the amount the Contractor may require for the Work proposed to be completed. The purpose of this schedule is to allow the Owner to determine what amounts of funds will be required to have available each month during the progress of construction for progress payments.
  5. Round amounts to nearest whole dollar; the total shall equal the Contract Sum.
  6. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment, purchased or fabricated and stored, but not yet installed.
    - a. Differentiate between items stored on-site and items stored off-site. Include requirements for insurance and bonded warehousing, if required.
  7. Provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
  8. Unit-Cost Allowances: Show the line-item value of unit-cost allowances, as a product of the unit cost, multiplied by the measured quantity. Estimate quantities from the best indication in the Contract Documents.
  9. Margins of Cost: Show line items for indirect costs and margins on actual costs only when such items are listed individually in Applications for Payment. Each item in the Schedule of Values and Applications for Payment shall be complete. Include the total cost and proportionate share of general overhead and profit margin for each item.
    - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at the Contractor's option.
  10. Schedule Updating: Update and resubmit the Schedule of Values prior to the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.
- C. Schedule of Values shall be typed or printed on AIA Documents G702-992 and G703-1992.
- D. Each Schedule of Values shall have the Contractor's name, Bid Category name and number, project name and number and shall be dated and signed.
- E. Should the Schedule of Values be "rejected, resubmit", resubmittal is due within 5 days of receipt of rejected schedule.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION

## SECTION 01 31 19

### PROJECT MEETINGS

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. The Work of this Section shall be included as a part of the Contract Documents of the Contractor on this Project.

##### 1.02 DESCRIPTION OF WORK

- A. This Section specifies administrative and procedural requirements for project meetings, including, but not limited to, the following:
  - 1. Pre-construction conferences.
  - 2. Pre-installation conferences.
  - 3. Progress meetings.
- B. The Contractor or awardee shall be required to have present at each of the following project meetings a representative acceptable to the Architect. The designated representative shall have sufficient authority and knowledge to make decisions for the Contractor he is representing on matters affecting this Project.
- C. The Contractor or representatives unable to attend a specified meeting shall have an acceptable alternate representative designated or shall notify the Architect/Engineer not less than 7 days prior to date of meeting.
- D. Contractor shall prepare minutes and record significant discussions and agreements and disagreements of each meeting schedule. Meeting minutes shall be initiated by the Contractor and coordinated with the Architect/Engineer prior to publishing. Promptly distribute the record of the meeting to each party present and to parties who should have been present within 48 hours of completion of meetings.

##### 1.03 PRE-CONSTRUCTION CONFERENCE

- A. The purpose of this meeting is to review submittals that will be required by the Contractor and to review the project procedures that are to be followed during the progress of construction.
- B. Advance written notice of the pre-construction conference date, time, and place will be sent to the successful bidder by the Architect/Engineer. Contractor shall require his major subcontractors to attend.
- C. Minimum agenda shall be as follows:
  - 1. Discussion of construction schedule.
  - 2. Critical work sequencing.
  - 3. Designation of responsible personnel.
  - 4. Processing of field decisions and Change Orders.
  - 5. Procedures for processing Applications for Payment.
  - 6. Distribution of Contract Documents.

7. Submittal of shop drawings, product data and samples.
8. Procedures for maintaining record documents.
9. Use of premises:
  - a. Office and storage areas.
  - b. Owner's requirements.
10. Major equipment deliveries and priorities.
11. Safety and first-aid procedures.
12. Security procedures.
13. Housekeeping procedures.
14. Working hours.
15. Review of code compliance requirements (with code officials present and available for questions).

#### 1.04 PRE-INSTALLATION CONFERENCES

- A. Conduct a pre-installation conference at the project site before each construction activity that requires coordination with other construction, as outlined in the technical sections.
- B. Attendees: The Prime Contractor, installing foreman, and representatives of manufacturers and fabricators involved in or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. The General Contractor shall schedule conferences and advise the Architect/Engineer of scheduled meeting dates.
  1. Review the progress of other construction activities and preparations for the particular activity under consideration at each pre-installation conference, including requirements for the following:
    - a. Contract documents.
- C. Discussion Topics:
  1. Related Change Orders.
  2. Purchases.
  3. Deliveries.
  4. Shop drawings, product data, and quality control samples.
  5. Review of mockings.
  6. Possible conflicts.
  7. Compatibility problems.
  8. Time schedules.
  9. Weather limitations.
  10. Manufacturer's recommendations.
  11. Warranty requirements.
  12. Compatibility of materials.
  13. Acceptability of substrates.
  14. Temporary facilities.
  15. Space and access limitations.
  16. Governing regulations.
  17. Safety.
  18. Inspecting and testing requirements.
  19. Required performance results.
  20. Recording requirements.

21. Protection.
  - a. Do not proceed with the installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene the conference at the earliest feasible date.
22. Contractors shall review and comply with required pre-installation conferences outlined in the Contract Documents. (See individual Specification Sections.)

#### 1.05 PROGRESS MEETINGS

- A. Progress meetings will be established on a weekly or biweekly basis, or more frequent as determined by the Architect/Engineer, to review the progress of construction, possible delays, problems, and projected construction activity. The Contractor is required to attend progress meetings. Contractor failing to be represented at project meetings, when specifically requested, will be taken into consideration when payment applications are being considered for approval by the Architect/Engineer.
  1. Notice of said meetings will originate in the office of the Architect/Engineer.
  2. Contractor shall require his principal subcontractors to attend.
  3. The progress and schedule of each involved Contractor shall be coordinated at this meeting. The representative of the Contractor present shall have the authority to change the Contractor's work schedule or authorize work with the consent of the Architect/Engineer. If the Contractor fails to attend this meeting, it shall be his responsibility to obtain the information discussed at the meeting. Meeting notes and the most current construction schedule will be in the office of the Architect/Engineer and Contractor. Attendance at these meetings is required for Contractor's payments.
  4. Coordinate dates of meetings with preparation of payment requests.
- B. Minimum Agenda shall be as follows:
  1. Review work progress since last meeting.
  2. Note field observations, problems, and decisions.
  3. Identify problems which impede planned progress.
  4. Review off-site fabrication problems.
  5. Develop corrective measure and procedures to regain planned schedule.
  6. Revise construction schedule as indicated.
  7. Plan progress during next work period.
  8. Review submittal schedules, expedite as required to maintain schedule.
  9. Maintaining of quality and work standards.
  10. Review changes proposed by Owner for effect on construction schedule and effect on completion schedule.
  11. Complete other current business.
  12. Documentation of information for payment requests.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION

## SECTION 01 32 00

### SCHEDULES AND REPORTS

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. The Work of this Section shall be included as a part of the Contract Documents of each Contractor on this Project. Where such Work applies to only one Contractor, it shall be defined as to which Contractor the Work belongs.

##### 1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for schedules and reports required for proper performance of the Work, including:
  1. Preliminary construction schedule
  2. Contractor's construction schedule
  3. Submittal schedule
  4. List of subcontractors, suppliers, and manufacturers
  5. Use of site plan

##### 1.03 PRELIMINARY CONSTRUCTION SCHEDULE

- A. Pursuant to paragraph 4.11 of the General Conditions of this contract, the Contractor shall, within fourteen (14) calendar days following receipt of the Notice of Award, submit to the Owner an Interim Project Construction Schedule, in Critical path Method format (or CPM), for his construction/erection scope of work for the first 90 days of the Project, compatible in Primavera Sure Trak (latest version) format. The schedule shall consist of a network diagram with activity descriptions and durations and supporting data that will explain the Contractor's planning of the work and provide cost allocation and resource estimates for each activity. The Owner will review the Contractor's Preliminary Project Construction Schedule to determine if it meets the specific requirements of Article 4, TIME OF COMMENCEMENT AND COMPLETION of the Owner/Contractor Agreement.

##### 1.04 CONSTRUCTION SCHEDULES

- A. SCHEDULE
  1. Pursuant to paragraph 4.11 of the General Conditions of this contract, the following additional scheduling requirements are a part of this Contract.
  2. Work under this Section shall consist of furnishing a Construction Schedule showing in detail how the Contractor plans to execute and coordinate the Work. The Contract Schedule shall be based on and incorporate the Contract Milestone and Completion Dates specified in the Owner-Contractor Agreement and shall show the order in which Contractor shall perform the Work, projected dates for the start and completion of separable portions of the work, and any other information concerning Contractor's Work scheduling as Owner may request. The proposed Construction Schedule and related Schedule of Values must be submitted to the Design Consultant, Construction Program Manager and Owner prior to commencement of the

work.

3. The Construction Schedule shall be in the Critical Path Method Format (CPM) bar chart, submitted to the Owner on a computer disc in Primavera Sure Trak format. The schedule shall consist of a network diagram with activity descriptions and durations and supporting data that will explain the Contractor's planning of the work and provide cost allocation and resource estimates for each activity. Each pay item designed in the Contractor's Schedule of Values shall be denominated as a separate activity and represented by a horizontal bar or bars on the chart. The time-scale shall indicate all required Milestone and Completion Dates as set forth in the Owner-Contractor Agreement. The horizontal bar(s) shall indicate the start and finish dates as well as the total time period of performance for each pay item activity. The Contractor shall arrange the chart so as to show the pay item activities when are necessary to fulfill each and every Milestone and Completion Date requirement.
4. Each Work item on the bar chart, as well as being correlated to the payment document, shall be broken into reasonable work segments/activities (where practicable) with individual starting and stopping dates. As a minimum, work shall be segmented to demonstrate its relationship to the various Milestone Dates, if any. The segmented Work activities shall be cost loaded to show their dollar value as part of the entire pay item. Activity titles shall be self-explanatory; abbreviations shall be shown in the legend.
5. If the Contractor should desire or intend to complete the work earlier than any required Milestone or Completion date, the Owner or the Construction Program Manager shall not be liable to the Contractor for any costs or other damages should the contractor be unable to complete the Work before such Milestone or Completion date. The duties, obligations and warranties of the Owner to the Contractor shall be consistent with and applicable only to the completion of the Work on the Milestone and completion dates required in the Owner-Contractor Agreement, unless Owner, the Construction Program Manager and Contractor otherwise agree in a written Change Order.
6. The network diagram shall show:
  - a. The order and interdependencies of the Contractors activities and the major points of interface or interrelation with the activities of others, including Specific Dates for completion.
  - b. Conformance with an identification of the specified mandatory Milestone dates specified in the Contract Documents.
  - c. The description and quantity of work by activity.
  - d. For all equipment and materials fabricated or supplied for this Project, the network shall show a sequence of activities including:
    - (a) Procurement
    - (b) Engineering and Preparation of Submittals
    - (c) Approval of Submittals
    - (d) Fabrication/Manufacturing
    - (e) Delivery
    - (f) Erection/Installation
  - e. Delivery of Owner-Furnished Materials/Equipment
  - f. Critical Path (or Paths)
  - g. Training of Owner Personnel on equipment.

## B. UPDATES AND REVISIONS

1. The chart shall be updated to show actual progress and the effect of modifications, delays and other events. A second bar for each work item, in a contrasting color or pattern, shall be drawn parallel to the proposed schedule to show actual progress and to forecast future progress. The actual start and stop dates shall be entered, as well as the actual dates of the Milestone events. Updates are to be submitted monthly to the Construction Program Manager with, and as part of, each payment request.
2. The updated Construction Schedule submitted by Contractor shall not show a completion date later than the Contract Time, subject to any time extensions approved by Owner; provided, however, that if Contractor believes he is entitled to an extension of the Contract under the Contract Documents, Contractor shall submit to the Construction Program Manager, with each update, a separate schedule analysis (entitled "Requested Time Adjustment Schedule") indicating suggested adjustments in the Contract Time which should, in the opinion of the Contractor, be made by time extension, due to changes, delays or conditions occurring during the past month or previously, or which are expected or contemplated by Contractor (whether such conditions are excusable under the Contract or are allegedly due to Contractor or Owner fault); this separate schedule, if submitted, shall be accompanied or preceded by a formal time extension request as required by the Contract Documents and a detailed narrative justifying the time extension requested. To the extent any time extension requests are pending at the time of any update in the Construction Schedule, the "Requested Time Adjustment Schedule" shall be updated also each month, to reflect any adjustments made by Contractor in the Construction Schedule, or any time extensions previously granted by Owner, and to reflect actual or expected progress. Neither the Construction Program Manager nor the Owner shall have any obligation to consider any time extension request unless the requirements of the Contract Documents, and specifically, but not limited to, the requirements set forth in this paragraph, are complied with; and neither the Construction Program Manager nor the Owner shall not be responsible or liable to Contractor for any constructive acceleration due to failure of Owner to grant time extensions under the Contract Documents should Contractor fail to substantially comply with the submission requirements and the justification requirements of this Contractor for time extension requests. Contractor's failure to perform in accordance with the Construction Schedule shall not be excused, nor be chargeable to Owner, the Construction Program Manager nor the Design Consultant, because Contractor has submitted time extension requests or the "Requested Time Adjustment Schedule."
3. Neither the updating of Contractor's work schedule nor the submission, updating, change or revision of any other report or schedule submitted to Owner by Contractor under this Contractor nor review or non objection of the Owner or Construction Program Manager of any such report or schedule shall have the effect of amending or modifying, in any way, the Contract Completion Date, Milestone Dates or of modifying or limiting in any way Contractor's obligations under this Contract.
4. All of Contractor's detailed calculations and documents supporting all schedules, reports, and forecasts shall be available to Owner and the Construction Program Manager on request.
5. Each updated Construction Schedule submitted by contractor to the Construction Program Manager shall be accompanied by a narrative report



which reflects the following:

- a. Description of Work accomplished since submission of previous progress schedule;
  - b. Comparison of the actual status of the Work with Contractor's project schedule;
  - c. Status of equipment and material deliveries;
  - d. Personnel staffing schedule;
  - e. Causes of any delays;
  - f. Revision of schedules;
  - g. Action proposed to restore schedule.
6. Pursuant to paragraph 4.12 of the General Conditions, should any of the conditions listed in paragraph 4.10.3 exist such that certain activities shown on the Contractor's Construction Schedule fall behind schedule to the extent that any of the mandatory specific or milestone dates or completion dates are in jeopardy, the Contractor shall be required to, at no extra cost to the Owner, prepare and submit to the Construction Program Manager a supplementary Recovery Schedule, in a form and detail appropriate to the need, to explain and display how he intends to reschedule those activities to regain compliance with the Construction Schedule during the immediate subsequent pay period.

#### C. SUBMITTAL SCHEDULE

1. Concurrent with the development and acceptance of the Construction Schedule, prepare a complete schedule of submittals. Submit the schedule within 10 days of the date required for submittal of the Construction Schedule.
  - a. Coordinate Submittal Schedule with the list of subcontracts, Schedule of Values, and the list of products as well as the Construction Schedule.
    - (a) Prepare the schedule in chronological order. Provide the following information:
    - (b) Scheduled date for the first submittal.
    - (c) Related Section number.
    - (d) Submittal category (Shop Drawings, Product Data, or Samples).
    - (e) Name of the Subcontractor.
    - (f) Description of the part of the Work covered.
    - (g) Scheduled date for resubmittal.
    - (h) Scheduled date for the Architect/Engineer's final release or approval.
2. Distribution: Following response to the initial submittal, print and distribute copies to the Construction Program Manager, Architect/Engineer, Owner, subcontractors, and other parties required to comply with submittal dates indicated.
3. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.

D. SCHEDULE OF OFF-SITE ACTIVITIES

1. The contractor shall include in his Construction Schedule all procurements related activities which lead to the delivery of materials to the site in a timely manner. Upon written approval by the Owner, these activities may be submitted as a separate Off-Site Activities Schedule, properly correlated to the Construction Schedule. The schedule of off-site activities shall include, but is not limited to, the following:
  - a. Dates for submittals, ordering, manufacturing, or fabricating and delivery of equipment and materials. Long lead items requiring more than one month between ordering and delivery to site shall be clearly noted;
  - b. All significant activities to be performed by the Contractor during the fabrication and erection/ installation in a Contractor's plant or on a job site, including materials/equipment purchasing, delivery; and
  - c. Contractor's drawings and submittals to be prepared and submitted through the Construction Program Manager to the Owner or Design Consultant for approval.
2. The Contractor shall be solely responsible for expediting the delivery of all materials to be furnished by him so that the construction progress shall be maintained according to the current schedule for the Work as approved by the Construction Program Manager.
3. The Construction Program Manager shall be advised in writing by the Contractor wherever it is anticipated or determined by the Contractor that the delivery date of any material and/or equipment furnished by the Contractor for installation will be later than the delivery dates shown on the schedule, subject to schedule updates.
4. Submittals, equipment orders and similar items are to be treated as schedule activities.

E. FLOAT TIME

1. Float or slack time is defined as the amount of time between the earliest start date and the latest start date or between the earliest finish date and the latest finish date of an activity on the Construction. Float or slack time is for the exclusive use and benefit of the Owner. The Contractor acknowledges and agrees that actual delays, affecting activities containing float time, will not have any affect upon contract completion times, providing that the actual delay does not exceed the float time associated with those activities.
2. Extensions of time for performance as described in the Contract Documents will be granted only to the extent that time adjustment for the activity or activities affected by any condition or event which entitles the Contractor to a time extension exceed the total float or slack of the affected activity at the time of issuance of a Change Order or the commencement of any delay or condition for which an adjustment is warranted under the Contract Documents.

1.05 LIST OF SUBCONTRACTORS, SUPPLIERS, AND MANUFACTURERS

- A. Contractor shall submit a list of subcontractors participating on this Project.

Contractor shall submit a complete list of all Subcontractors to Owner immediately upon notice of apparent low Bidder status and prior to award of the Contract. The list shall be complete with names, street addresses, city, state, and zip code. Owner shall consider such matters as it deems fit as to each Subcontractor and how, if at all, it impacts on Contractor's responsibility, fitness or ability to perform this Contract and on Bidder's overall responsibility.

- B. Contractor shall submit a list of suppliers and manufacturers furnishing and installing materials and products specified on this Project. List shall be submitted within 15 days of Notice to Award. List shall be complete including manufacturers and model numbers of equipment on which the bid is based on.
  - 1. Items shall be taken from those named in the Contract Documents.
  - 2. The proprietary name first listed, where more than one manufacturer is listed, shall be interpreted as the specified item.
  - 3. If the Contractor fails to submit the list of materials and products within 60 days, the proprietary name first listed, where more than one manufacturer is listed, shall be interpreted as the only specified item. Products submitted other than the specified item will be rejected or treated as change orders.

#### 1.06 COORDINATION

- A. The Contractor shall coordinate his work with that of other contractors and shall cooperate fully with the Construction Program Manager in maintaining orderly progress toward completion of the work as scheduled. The Construction Program Manager's decisions regarding priority between the Contractor's work and the work of other contractors at the site shall be final and shall not be cause for extra compensation or extension of time, except where extension of time is granted because of a delay for which Contractor is otherwise entitled to an extension of time under the Contract Documents.
- B. The milestone dates referred to in the Contract Documents for delivery of Owner-furnished equipment and materials and interface activities of other contractors on the site are based on dates set forth in separate contracts with the Owner and represent the information available at this time.
- C. Failure of Owner-furnished equipment and materials to arrive as scheduled, or failure of other construction contractors to meet their schedule, shall not be justification for an extension of time, except where such failure causes, in the opinion of the Construction Program Manager and Design Consultant, an unreasonable delay in the Contractor's work, in which case the provisions of the General Conditions regarding extensions of time and extra work shall apply.
- D. The Contractor shall keep himself, and his subcontractors, advised at all times during the course of the Work regarding delivery status of Owner-furnished equipment and materials and of the progress of construction work being performed under separate contracts.

#### 1.07 CONTRACTOR COVENANTS AND GUARANTEES

- A. Contractor covenants and guarantees that Contractor will not:
  - 1. Misrepresent to Owner, Design Consultant or Construction Program Manager its planning scheduling or execution of the Work;
  - 2. Utilize schedules materially different from those provided by Contractor to the Owner or Construction Program Manager.
  - 3. Prepare schedules, updates, revisions or reports for the work which do not

accurately reflect the actual intent or reasonable and actual expectations of Contractor and its Subcontractors as to:

- a. The sequences of activities,
  - b. The duration of activities,
  - c. The responsibility of activities,
  - d. Resources availability,
  - e. Labor availability or efficiency,
  - f. Foreseeable weather conditions,
  - g. The value associated with the activity,
  - h. The percentage complete of any activity,
  - i. Completion of any item of work or activity,
  - j. Project milestone completion,
  - k. Delays, slippages, or problems encountered or expected,
  - l. Subcontractor requests for time extensions or delay claims of subcontractors, and
  - m. If applicable, the float time available.
- B. Contractor's failure to substantially comply with the foregoing covenant and guarantee shall be a substantial and material breach of contract which will permit Owner to terminate Contract for default, or withhold payments under the Contract Documents, and shall entitle Owner to the damages afforded for misrepresentation or fraud by these Contract documents or applicable law.
- C. Should Contractor fail to substantially comply with the provisions of the Contract documents relating to planning, scheduling and execution of the Work by the overall project schedule, Owner and the Construction Program Manager shall have the right, at their option, to retain the services of scheduling consultants or experts (including attorneys if necessary in their opinion) to prepare a schedule in accordance with the Contract Documents and to review and analyze same, in order to allow Owner and Construction Program Manager to evaluate the program of the Work by Contractor, to determine whether Contractor is substantially complying with the contract Documents, and to direct such action on the part of the contractor, as permitted by the Contract Documents, as required to ensure, under the owner's schedule prepared hereunder, that Contractor will comply with such schedule. All costs (including attorneys' fees) incurred by Owner or Construction Program Manager in preparing the schedule hereunder shall be charged to Contractor's account or deducted from retainage. If contractor fails to substantially comply with the scheduling and execution of the work requirements of the Contract Documents, Contractor hereby agrees, in such instance, to comply with such schedules, as the Construction Program Manager develops, or directions, and activity sequences and durations as the Construction Program Manager may reasonably require, without additional cost to the Owner (subject only to cost adjustments for such changes in the Work as the Owner may direct by written change order), to ensure completion within the Contract Time.
- D. Default - Failure of the Contractor to substantially comply with the requirements of this Section shall constitute reason that the Contractor is failing to prosecute the Work with such diligence as will insure its completion within the Contract times and shall be considered grounds for termination by the Owner, pursuant to subparagraph 14.3.1.1 of the General Conditions.

1.08 PROJECT USE SITE PLAN

- A. The Contractor, in cooperation with subcontractors on this Project, shall prepare a proposed project use of the site plan.
- B. Contractor shall confine operations at the site to areas within the areas indicated and as approved on the use of the site plan, and as permitted by law, ordinances, and permits. Site shall not be unreasonably encumbered with materials, products, or construction equipment.
- C. The Contractor in reviewing his use of the site shall include access to proposed building for construction purposes, storage of materials and products, parking, where possible, for employees, temporary facilities including offices, storage, and workshop sheds or portable trailers, and unloading space.
- D. Where a temporary fence is to be provided, the Contractor shall show any additional area needed in the Contractor's use of the site beyond that which may be indicated on the Drawings. Where additional fencing is required, such fencing shall be included at no additional cost to the Owner.
- E. The Contractor will indicate to the subcontractor after award of Contract which portions of the site can be used for construction activities. Damage to any existing paved or unpaved areas shall be paid for by the Contractor responsible for damage.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION

## SECTION 01 33 00

### SUBMITTAL PROCEDURES

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. The Work of this Section shall be included as a part of the Contract Documents of each Contractor and subcontractor on this Project.

##### 1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including the following:
  - 1. Shop drawings.
  - 2. Product data.
  - 3. Samples.

##### 1.03 SUBMITTAL PROCEDURE

- A. Submittals are to be submitted directly to the Architect/Engineer.
- B. Subcontractors on this Project shall provide submittals in accordance with the requirements of this Section. Where a submittal is required by a Subcontractor but assistance needed from others, the General Contractor shall participate and coordinate the submittal.
- C. Where submission of samples, shop drawings, or other items are required from suppliers or subcontractors, it shall be the responsibility of the General Contractor to see that the submittal items required are complete and properly submitted, and corrected and resubmitted at the time and in the order required so as not to delay the progress of the Work. Submittals shall be made through the General Contractor.
- D. The General Contractor shall check shop drawings, samples, and other submittals and submit them to the Architect/Engineer with a letter of transmittal giving his approval, comments, and suggestions. Each transmittal shall include the following information:
  - 1. Date submitted.
  - 2. Project title and number.
  - 3. Contractor's name and address.
  - 4. Identification by Specification Section and quantity submitted for each submittal including name of subcontractors, manufacturer, or supplier.
  - 5. Notification of deviations from the Contract Documents for each submittal.
  - 6. Contractor's written approval marked on each submittal.
- E. The General Contractor shall prepare, review, and stamp with his approval and submit, with reasonable promptness or within the specified time periods and in orderly sequence so as to cause no delay in the Work submittals required by these Contract Documents or subsequently required by modifications.

- F. The Architect/Engineer shall review and take action on submittals with reasonable promptness, so as to cause no delay in the progress. A reasonable period of time in accordance with approved project schedule for review of and action taken on submittals shall be as specified herein, but in no case shall it be less than 10 calendar days from the time it is received by the Architect/Engineer until the time the submittal is marked and forwarded or returned. General Contractor shall allow sufficient mailing time for submittals.

#### 1.04 SHOP DRAWINGS

- A. The General Contractor shall perform no portion of the Work requiring submittal and review of shop drawings, product data, samples or similar submittals until the respective submittal has been approved by the Architect/Engineer. Such Work shall be in accordance with approved submittals.
- B. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the bases of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
  - 1. Autocad Drawings: Floppy disk copy of Drawings may be available from the Architect/Engineer. The Contractors requiring this service must contact the Architect/Engineer to verify availability. Cost to obtain Autocad Drawings will be \$40.00 per Drawing file. Request for floppy disk copy should be addressed to the Project Architect/Engineer, and will be required to complete an authorization to use copyrighted material and waiver of liability form.
- C. Shop drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data which are prepared by the Contractor or subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.
  - 1. Advertising brochures will not be accepted as shop drawings.
  - 2. Erection and setting drawings as referred to in these Specifications will be considered as shop drawings and shall be submitted along with detailed shop drawings.
  - 3. Where schedules are required to indicate locations, they shall be submitted as part of the shop drawings package for that item.
  - 4. Shop drawings and schedules shall repeat the identification shown on the Contract Drawings.
  - 5. Include the following information:
    - a. Dimensions.
    - b. Identification of products and materials included by sheet and detail number.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurements.
- D. Preparation of Submittals: Provide permanent marking on each submittal to identify project, date, Contractor, Subcontractor, submittal name, and similar information to distinguish it from other submittals. Show Contractor's executed review and approval marking and provide space for Architect/Engineer's "action" marking. Package each submittal appropriately for transmittal and handling. Submittals which are received

from sources other than through the Contractor will be returned "without action."

- E. By approving and submitting shop drawings, the General Contractor thereby represents that he has determined and verified field measurements, field construction criteria, materials, catalog numbers, and similar data, and that he has checked and coordinated each shop drawing with the requirements of the Work and of the Contract Documents prior to submitting to the Architect/Engineer. Submittals which are received from sources other than through the General Contractor will be returned without review, requiring resubmittal.
- F. The General Contractor shall have corrections required by the Architect/Engineer made and shall resubmit the required number of corrected copies of shop drawings until appropriately marked. The General Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections requested by the Architect/Engineer on previous submissions.
- G. The Architect/Engineer will review shop drawings only for conformance with the design concept of the Project and with the information given in the Contract Documents. The Architect/Engineer's review of a separate item shall not indicate review of an assembly in which the item functions.
  - 1. Only shop drawings, product data, and samples marked "No Exceptions Taken" or "Note Markings/Confirm" shall be considered "final" and used in conjunction with the work of this Project.
- H. The Architect/Engineer's review of shop drawings shall not relieve the General Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the General Contractor has informed the Architect/Engineer in writing of such deviation at the time of submission and the Architect/Engineer has given written approval to the specific deviation, nor shall the Architect/Engineer's action relieve the General Contractor from responsibility for errors or omissions in the shop drawings.
  - 1. The Architect/Engineer's review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and qualities, or for substantiating instructions or performance of equipment or systems, all of which remain the responsibility of the General Contractor as required by the Contract Documents. The Architect/Engineer's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect/Engineer, of any construction means, methods, techniques, sequences, or procedures. The Architect/Engineer's approval of a specific item shall not indicate approval of an assembly of which it is a component.
- I. Notations and remarks added to shop drawings by the Architect/Engineer are to insure compliance to Drawings and Specifications and do not imply a requested or approved change to contract cost.
- J. Should deviations, discrepancies, or conflicts between shop drawings and the Contract Documents (Contract Drawings and Specifications) be discovered, either prior to or after review, the Contract Documents shall control and be followed.
- K. The following number of shop drawings and product data submittals shall be made



on this Project. Where an insufficient number of copies are submitted, no action will be taken until the proper number of copies have been received. Additional copies beyond the number required will be discarded.

Schedule of Required Shop Drawings and Product Data

1. Architectural/Structural:
    - Submit: 6 copies
    - Distribution:
      - 1 copy - Architect/Engineer's Office File
      - 1 copy - Owner's Representative
      - 4 copies - General Contractor
        - 1 copy – General Contractor's Office File
        - 1 copy - Field Copy (Job Record)
        - 1 copy - Supplier or Subcontractor
        - 1 copy Owner's Manual
  2. Mechanical/Electrical:
    - Submit: 9 copies
    - Distribution:
      - 1 copy - Engineer
      - 1 copy – Architect's Office File
      - 1 copy – Owner's Representative
      - 6 copies - General Contractors
        - 1 copy – General Contractor's Office File
        - 1 copy - Field Copy (Job Record)
        - 3 copies – Owner's Manual
        - 1 copy - Supplier or Subcontractor
- L. Shop drawings not requested by the Architect/Engineer shall be returned without action.
- M. Shop drawings will be marked as follows: General Contractor shall take the following action for each respective marking:
1. "NO EXCEPTIONS TAKEN" - Copies will be distributed as indicated under above schedule.
  2. "NOTE MARKINGS/CONFIRM" - Final but Restricted Release; General Contractor may proceed with fabrication, taking into account the necessary corrections on submittal and with Contract Documents. General Contractor must submit a confirmation letter to remove restriction and allow shop drawings on the project site. A sample of a confirmation letter is enclosed herein.
  3. "NOTE MARKINGS/RESUBMIT" - General Contractor may proceed with fabrication, taking into account the necessary corrections. Corrected shop drawings shall be resubmitted before fabrication of this work is complete to obtain a different action marking. Do not allow drawings marked "Resubmit" to be used in connection with installation of the Work.
  4. "REJECTED/RESUBMIT" - General Contractor will be required to resubmit shop drawings in their entirety. No fabrication or installation shall be started until shop drawings so marked have been completely revised, resubmitted, and marked by Architect/Engineer according to preceding Paragraphs a. or b.

- N. Where resubmittal is required, 3 copies will be marked up and so noted of which the following distribution shall be made:
1. One (1) copy will be retained for Architect/Engineer's file
  2. Two (2) copies will be returned with corrections:
    - a. One (1) copy for General Contractor
    - b. One (1) copy for supplier/subcontractor

#### 1.05 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Product data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.
1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information.
    - a. Manufacturer's printed recommendations.
    - b. Compliance with trade association standards.
    - c. Compliance with recognized testing agency standards.
    - d. Application of testing agency labels and seals.
    - e. Notation of dimensions verified by field measurement.
    - f. Notation of coordination requirements.
  2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
    - a. Preliminary Submittal: Submit a preliminary single copy of Product Data where selection of options is required.
  3. Submittals: Submit 2 copies of each required submittal; submit 4 copies where required for maintenance manuals. The Architect/Engineer will retain one and will return the other marked with action taken and corrections or modifications required.
    - a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
  4. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
    - a. Do not proceed with installation until a copy of Product Data is in the Installer's possession.
    - b. Do not permit use of unmarked copies of Product Data in connection with construction.
- B. In compliance with the OSHA Hazard Communication Standard (1910.1200, 08-24-1987) Contractors shall post at the site MSDS (Material Safety Data Sheets) for ALL products classified as hazardous that their firm has knowledge that they will be furnishing, using, or storing on the jobsite during the duration of this Project in accordance with OSHA standards. At the completion of the project, the Contractor shall turn their "MSDS" information directly over to the Owner with a receipt for the Owner to sign. A copy of the signed receipt only shall be submitted to the Architect/Engineer.

#### 1.06 SAMPLES

- A. The Contractor shall submit to the Architect/Engineer triplicate samples to illustrate materials or workmanship, colors, and textures, and establish standards by which the Work will be judged.
1. Submit full size, fully fabricated samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern.
    - a. Mount or display samples in the manner to facilitate review of qualities indicated. Prepare samples to match the Architect/Engineer's sample. Include the following:
      - 1) Specification Section number and reference.
      - 2) Generic description of the sample.
      - 3) Sample source.
      - 4) Product name or name of the manufacturer.
      - 5) Compliance with recognized standards.
      - 6) Availability and delivery time.
    - b. Submit samples for review of size, kind, color, pattern, and texture. Submit samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
      - 1) Where variation in color, pattern, texture, and other characteristic is inherent in the material or product represented, submit at least 3 multiple units that show approximate limits of the variations.
      - 2) Refer to other Specification Sections for requirements for samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
- B. By approving and submitting samples, the Contractor thereby represents that he has determined and verified materials, catalog numbers, and similar data, and that he has checked and coordinated each sample with the requirements of the Work and of the Contract Documents prior to submitting to the Architect/Engineer.
- C. The Contractor shall resubmit the required number of correct or new samples until approved. The Contractor shall direct specific attention in writing or on resubmitted samples to revisions other than the changes requested by the Architect/Engineer on previous submissions.
- D. The Architect/Engineer will review samples but only for conformance with the design concept of the Project and with the information given in the Contract Documents. The Architect/Engineer's review of a separate item shall not indicate approval of an assembly in which the item functions.
- E. The Architect/Engineer's action shall not relieve the Contractor of responsibility for deviations from the requirements of the Contract Documents unless the Contractor has informed the Architect/Engineer in writing of the deviation at the time of submission and the Architect/Engineer has given written approval to the specific deviation, nor shall the Architect/Engineer's action relieve the Contractor from

responsibility for errors or omissions in the samples.

- F. Unless otherwise specified, samples shall be in triplicate and of adequate size to show function, equality, type, color, range, finish, and texture of material. When requested full technical information and certified test data shall be supplied.
  - 1. Each sample shall be labeled, bearing material name and quality, the Contractor's name, date, project name, and other pertinent data.
  - 2. Transportation charges to and from the Architect/Engineer's office must be prepaid on samples forwarded. Samples shall be retained by the Architect/Engineer until the Work for which they were submitted has been accepted.
  
- G. Materials shall not be ordered until final review is received in writing from the Architect/Engineer. Materials shall be furnished, equal in every respect to reviewed samples. Where color or shade cannot be guaranteed, the maximum deviation shall be indicated by the manufacturer. Work shall be in accordance with the final reviewed samples.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION

SAMPLE OF CONFIRMATION LETTER

(Type on Company Letterhead)

Date

Architect/Engineer  
Address  
Address Line  
Address Line

Re:  
(Project Name)  
  
(Specification Section No.)

Attn:

The undersigned does hereby certify that \_\_\_\_\_ manufactured  
by \_\_\_\_\_ (name of product)

\_\_\_\_\_ which is to be used on the above referenced project by (name of  
manufacturer)

\_\_\_\_\_ conforms  
to \_\_\_\_\_ (name of installer)

(list of standard, specification requirement or note marking)

Very truly yours,

Notary Stamp  
and/or Seal

(Signature)

(Title)

## SECTION 01 34 00

### OWNER PURCHASED MATERIALS/EQUIPMENT

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. The Work of this Section shall be included as a part of the Contract Documents of each Contractor and subcontractor on this Project.

##### 1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for Owner Purchased materials/equipment.

##### 1.03 PROCEDURES

- A. The Contractor's bid shall include Florida State Sales and other applicable taxes in his bid for materials, supplies, and equipment. The Owner, being exempt from sales tax, reserves the right to make direct purchases of various construction materials and/or equipment included in the Contractor's bid and/or contract.
- B. The Owner reserves the right to require the Contractor assign some or all of his subcontractors or other agreements with material suppliers directly to the Owner. Any materials purchased by the Owner pursuant to such an assignment of a materials supply subcontractor or agreement shall be referred to as "Owner Direct Purchased materials", and the responsibilities of both the Owner and the Contractor relating to such Owner Purchased Materials shall be governed by the Owner pursuant to such an assignment of an equipment supply subcontractor agreement shall be referred to as "Owner-Direct Purchased equipment", and identical conditions to those outlined for materials, shall prevail for equipment purchases as well.
- C. Material/equipment suppliers shall be selected by the Contractor awarded the contract by the competitive bid process. Supply contracts shall be awarded by the Contractor to the supplier whose bid/proposal is most advantageous to the Owner, price and other factors considered.
- D. The Contractor shall supply the Owner a list of intended suppliers, vendors, and material men/ equipment men for consideration as Owner Direct Purchased Materials/Equipment. This list shall be submitted not later than the pre-construction conference. The Contractor shall submit price quotes from the vendors as well as a description of the materials/equipment to be supplied, estimated quantities and prices.
- E. The Owner intends to furnish materials/equipment worth several million dollars of Owner Direct Purchased materials/equipment. Therefore, the Contractor shall prepare purchasing requisition request forms which shall, in form and detail, be acceptable to the Owner, specifically identifying the materials/equipment which the Owner may, in its discretion, elect to purchase directly. The purchasing requisition

request forms shall include:

1. the name, address, telephone number and contact person for the material/equipment supplier;
  2. the manufacturer or brand, model or specification number of the item;
  3. the quantity needed as estimated by the Contractor;
  4. the price quoted by the supplier for the materials/equipment identified therein;
  5. any sales tax associated with such quote;
  6. shipping and handling and insurance costs;
  7. delivery dates as established by the Contractor;
  8. detail concerning bonds or letters of credit provided by the supplier if included in his proposal.
- F. After receipt of a purchasing requisition request form, the Owner shall prepare purchase orders for items of material/equipment that the Owner chooses to purchase directly. Pursuant to the purchase order, the vendor will provide the required quantities of material/equipment at the price established in the vendor's quote to the Contractor less any sales tax associated with such price. The Owner's purchasing Agent shall be the approving authority for the Owner on purchase orders in conjunction with Owner Direct Purchased Materials/Equipment. The purchase order shall require that the supplier provide the required shipping and handling insurance. The purchase order shall also require the delivery of the Owner Direct Purchased Materials/Equipment on the delivery dates provided by the Contractor in the purchasing requisition request form.
- G. In conjunction with the execution of the purchase orders by the suppliers, the Contractor shall execute and deliver to the Owner one or more deductive change order proposal requests referencing the full value of all Owner Direct Purchased Materials/Equipment to be provided by each supplier from whom the Owner elected to purchase materials/equipment directly, plus all sales taxes associated with such materials/equipment in the Contractor's bid to the Owner, plus any savings to the Contractor in the cost of Payment Bonds and Performance Bonds associated with the Owner Direct Purchased Materials/Equipment. The Owner's Purchasing Agent and/or the School Board shall be the approving authority for the Owner on deductive change orders in conjunction with Owner Direct Purchased Materials/Equipment.
- H. The Contractor shall be fully responsible for all matters relating to the receipt of materials/equipment furnished by the Owner as provided herein including, but not limited to, verifying correct quantities, verifying documents of orders in a timely manner, shop drawing submittals, coordinating purchases, providing, obtaining and administering, all warranties and guarantees as required by the contract Documents, inspection and acceptance of the goods at time of delivery, and loss or damage to equipment and materials following acceptance of items by the Owner due to the negligence of the Contractor. The Contractor shall coordinate delivery schedules, sequence of delivery, loading orientation and other arrangements normally required by Contractor for the particular materials/equipment furnished. The Contractor shall provide all services required for the unloading, handling and storage of materials/equipment through installation. The Contractor agrees to indemnify and hold harmless the Owner from any and all claims of whatever nature resulting from non-payment of goods to suppliers arising from the actions of the Contractor.

- I. As Owner Direct Purchased Materials/Equipment are delivered to the jobsite, the Contractor shall visually inspect all shipments from the suppliers, and shall approve the vendor's invoice for material/equipment delivered. The Contractor shall assure that each delivery of Owner Direct Purchased Materials/Equipment is accompanied by documentation adequate to identify the purchase order against which the purchase is made. This documentation may consist of a delivery ticket and an invoice from the supplier confirming the purchase order together with such additional information as the Owner may require. The Contractor will then forward the invoice to the Owner through the Architect to the Purchasing Agent for payment. The Contractor shall also have the Owner's representative attest to the delivery and receipt of such goods, by signing all delivery tickets.
- J. The Contractor shall ensure that Owner Direct Purchased Materials/Equipment conform to the specifications, and shall determine prior to the incorporation into the work if such material/equipment are patently defective, and whether such material/equipment are identical to the material/equipment ordered and match the description on the bill of lading. If the Contractor discovers defects or non-conformities in Owner Direct Purchased Materials/Equipment upon such visual inspection, the Contractor shall not utilize such defective or nonconforming materials/equipment in the work and instead shall promptly notify the Owner and the vendor of the defective or nonconforming condition so that repair or replacement of those materials/equipment can occur without any undue delay or interruption to the project. If the Contractor fails to perform such inspection and otherwise incorporates into the work such defective or nonconforming Owner Direct Purchased Materials/Equipment, the condition of which is either known or should have been known by performance of an inspection, the Contractor shall be responsible for all damages to the Owner resulting from the Contractor's incorporation of such materials/equipment into the project, including liquidated or delay damages.
- K. The Contractor shall maintain records of all Owner Direct Purchased Materials/Equipment that it incorporates into the work from the stock of Owner Direct Purchased Materials/Equipment in its possession. The Contractor shall account monthly to the Owner through the Program Manager and the Purchasing Agent of the Owner for any Owner Direct Purchased Materials/Equipment delivered into the Contractor's possession, indicating portions of all such materials/equipment that have been incorporated into the work.
- L. The Contractor shall be responsible for obtaining and managing all warranties and guarantees for all materials/equipment and products required by the Contract Documents. All repair, maintenance or damage-repair calls shall be forwarded to the Contractor for resolution with the appropriate supplier, vendor, or subcontractor.
- M. On a monthly basis the Contractor shall review invoices submitted by all suppliers of Owner Direct Purchased Materials/Equipment delivered to the project site during that month and either concur or object to the Owner's issuance of payment to the supplier, based upon the Contractor's records of materials/equipment delivered to the site and any defects in such materials/equipment. In order to arrange for prompt payment to the supplier, the Contractor shall provide to the Owner a list indicating the acceptance of the goods or materials/equipment within fifteen days of receipt of said



goods or materials/equipment. The list shall include a copy of the applicable purchase order, invoices, delivery tickets, written acceptance of the delivered items, and such other documentation as may be reasonably required by the Owner. Upon receipt of the appropriate documentation, the Owner shall prepare a check drawn to the supplier based upon the receipt of data provided. This check will be released, delivered and remitted directly to the supplier. The Contractor agrees to assist the Owner to immediately obtain partial or final release of liens as appropriate.

- N. Materials/Equipment ordered which are found to be short of the quantity actually needed shall be augmented and paid for by the Contractor at no additional expense to the Owner. Materials/equipment ordered in excess of the quantity actually needed shall not be invoiced and no credit will be given the Contractor or vendor. Materials/equipment ordered, delivered and not used shall be stored by the Contractor and become the Contractor's responsibility for disposal if no salvage value is first available to the Owner.
- O. The Owner will not be responsible for storage of any Owner Direct Purchased Materials/Equipment.
- P. The Performance and Material Bonds shall be in the amount of the Contract plus Owner Direct Purchased Materials/Equipment, and shall satisfy the requirements of Florida State Statutes 2.35.32 and 2.55.05.
- Q. Specific items to be considered for purchase by the Owner include:
  - 1. Electrical Switchgear
  - 2. Electrical Panel Boards
  - 3. Emergency Generator
  - 4. Automatic transfer Switch
- R. The Owner reserves the right to add other large purchase price items to this list.
- S. Ten percent (10%) retainage will not be withheld for Owner Direct Purchased Materials/Equipment.
- T. Prior to the final reconciliation of the Owner Direct Purchase program the contractor shall provide documentation that no outstanding monies are owed by the contractor to the vendors that are in the Owner Direct Purchase program. The documentation shall be provided prior to substantial completion.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION

## SECTION 01 45 00

### QUALITY CONTROL

#### PART 1 GENERAL

##### RELATED DOCUMENTS

- A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to Work of this Section.

##### SUMMARY

- A. This Section includes Contractors responsibilities of quality control services and extent of quality control services to be performed.
- B. Related Work Specified Elsewhere
  - 1. Section 01 45 10 - Testing Laboratory Service.
- C. Definitions: Quality control services include inspections and tests, and actions related thereto including reports, but do not include contract enforcement activities performed directly by Architect/ Engineer. Quality control services include those inspections and tests and related actions performed by independent agencies and governing actions performed by independent agencies and governing authorities, as well as directly by Contractor.
  - 1. Testing service is required to immediately notify Architect/Engineer of discrepancies observed in the Work performed and to be performed in accordance to the Contract Documents.
- D. Inspections, tests, and related actions specified in this Section and elsewhere in Contract Documents are not intended to limit Contractor's quality control procedures which facilitate compliance with requirements of Contract Documents.
- E. Requirements for quality control services by Contractor, as requested or to be requested by Architect/Engineer, Owner, governing authorities or other authorized entities are not limited by provisions of this Section.

##### OWNER/CONTRACTOR RESPONSIBILITIES

- A. Owner will employ and pay for services of independent testing agency to perform inspections, tests, and quality control services, specified herein, in individual Specification Sections, and as required by governing authorities.
- B. Contractor shall coordinate and schedule services of independent testing agency to perform inspections, tests, and quality control services, specified in individual Specification Sections and required by governing authorities, performing services so specified.
- C. Retest Responsibility: Where results of required inspection, test, or similar service are unsatisfactory (do not indicate compliance of related work with requirements of Contract Documents), retests are responsibility of Contractor. Retesting of work

revised or replaced by Contractor is Contractor's responsibility, where required tests were performed on original work.

- D. Responsibility for Associated Services: Contractor is required to cooperate with independent agencies performing required inspections, tests, and similar services. Provide auxiliary services as reasonably requested, including access to work, the taking of samples or assistance with the taking of samples, delivery of samples to test laboratories, and security and protection for samples and test equipment at project site.
- E. Coordination: Contractor and each engaged independent agency performing inspections, tests, and similar services for project are required to coordinate and sequence activities so as to accommodate required services with minimum delay of work and without the need for removal/replacement of work to accommodate inspections and tests. Scheduling of times for inspections, tests, taking of samples, and similar activities is Contractor's responsibility.
- G. Test procedures to be used shall be submitted for approval of the Architect/Engineer where other than those specified are recommended by the testing agency.

#### SUBMITTALS

- A. Testing service will submit 2 copies of test reports directly to the Architect/Engineer from the testing service, with one copy to the Contractor.

#### CONCRETE MATERIALS AND MIX DESIGN

- A. Concrete Materials and Mix Design: The Contractor(s) for Section 03300 shall provide the following in conformance with the requirements of Section 03300, Cast-In-Place Concrete.
  - 1. Ready-mixed concrete shall be mixed and delivered in accordance with ASTM C94.
  - 2. Product Data: Submit 2 copies of manufacturer's specifications with application and installation instructions for proprietary materials and items, including admixtures, bonding agents, waterstops, joint systems, chemical floor hardeners, and dry shake finish materials.
  - 3. Laboratory Test Reports: Submit 2 copies of laboratory test reports for concrete materials and mix design tests. The Architect/Engineer's review will be for general information only. Production of concrete to comply with specified requirements is the Contractor's responsibility.
  - 4. Mix Design: Submit 6 copies of concrete mix designs for each type of mix required by the Concrete Schedule indicating the amount of each ingredient (by weight) in one cubic yard of concrete, the calculated water/cement ratio, and the slump.
- C. Submit signed statement from ready-mix plant that concrete furnished for the Project will exactly conform to the approved design mixes.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.01 REPAIR AND PROTECTION

- A. General: Upon completion of inspection, testing, sample-taking, and similar services performed on Work, repair damaged Work and restore substrates and finishes to eliminate deficiencies including defects in visual qualities of exposed finishes. Except as otherwise indicated, comply with requirements of Contract Documents for "Cutting and Patching." Protect Work exposed by or for service activities and protect repaired Work. Repair and protection is Contractor's responsibility, regardless of assignment of responsibility for inspection, testing, or similar service.

END OF SECTION

## SECTION 01 50 00

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to Work of this Section.

##### 1.02 SUMMARY

- A. The Work of this Section shall be included as a part of the Contract Documents of the Contractor on this Project. The Contractor shall provide such temporary facilities as specified and as indicated on the Drawings.
- B. The Contractor responsible for installing and maintaining such temporary facilities shall remove from the premises temporary work erected by him at the completion of the Project, or when requested to do so by the Architect/Engineer. Temporary structures and facilities become the property of the party furnishing them. Leave premises clean and in acceptable conditions as approved by the Architect/Engineer.
- C. Temporary facilities include, but are not limited to, the following:
  - 1. Temporary utilities include, but are not limited to, the following:
    - a. Water service and distribution
    - b. Temporary electric power and light
    - c. Ventilation
    - d. Telephone service
    - e. Sanitary facilities, including drinking water
    - f. Storm and sanitary sewer
  - 2. Support facilities include, but are not limited to, the following:
    - a. Field offices and storage sheds
    - b. Temporary roads and paving
    - c. Waste disposal services
    - d. Temporary enclosures
    - e. Moisture and sediment control
    - f. Temporary project identification signs
    - g. Openings for electrical, mechanical, and other trades
    - h. Temporary first aid facilities
  - 3. Security and protection facilities include, but are not limited to, the following:
    - a. Temporary fire protection
    - b. Safety and health regulations for construction
    - c. Environmental protection
    - d. Security enclosure
    - e. Utility protection
- D. Temporary facilities must meet all applicable governing codes.

##### 1.03 DIVISION OF RESPONSIBILITIES

- A. Contractor is responsible for the following, unless noted otherwise:
  - 1. Installation, operation, maintenance, and removal of each temporary facility

usually considered as its own normal construction activity, as well as the costs and use charges associated with each facility.

2. Plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting necessary exclusively for its own activities.
6. Collection and disposal of its own hazardous, dangerous, unsanitary, or other harmful waste material.
7. Secure lockup of its own tools, materials, and equipment.
8. Construction aids and miscellaneous service and facilities necessary exclusively for its own construction activities.
9. Collection and disposal of own wastes, unless noted as responsibility of Contractor.
10. Own temporary telephone.
11. Barricades, warning signs, and lights.
12. Environmental protection.

E. The Contractor is responsible for the following:

1. Temporary electric power service and distribution as required to complete construction.
2. Temporary lighting as required to complete construction.

#### 1.04 QUALITY ASSURANCE

A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:

1. Building code requirements
2. Health and safety regulations
3. Utility company regulations
4. Police, fire department, and rescue squad rules
5. Environmental protection regulations

B. Standards: Comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations", ANSI A10 Series Standards for "Safety Requirements for Construction and Demolition," and NECA Electrical Design Library "Temporary Electrical Facilities".

1. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with NFPA 70 "National Electric Code".

C. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

#### 1.05 PROJECT CONDITIONS

A. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the work progresses. Do not overload facilities or permit them to interfere with progress. Take necessary fire prevention measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist onsite.

B. Temporary Utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of permanent service.

## PART 2 PRODUCTS

### 2.01 MATERIALS

- A. General: Provide new materials. If acceptable to the Architect/Engineer, the Contractor may use undamaged, previously used materials in serviceable condition. Provide materials suitable for use intended.

### 2.02 EQUIPMENT

- A. General: Provide new equipment. If acceptable to the Architect/Engineer, the Contractor may use undamaged, previously used equipment in serviceable condition. Provide equipment suitable for use intended.
- B. Water Hoses: Provide 3/4 inch, heavy duty, abrasion resistant, flexible rubber hoses 100 feet long, with pressure rating greater than the maximum pressure of the water distribution system. Provide adjustable shutoff nozzles at hose discharge.
- C. Electrical Outlets: Provide properly configured, NEMA polarized outlets to prevent insertion of 110 to 120 volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground fault circuit interrupters, reset button, and pilot light for connection of power tools and equipment.
- D. Electrical Power Cords: Provide grounded extension cords. Use hard service cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length voltage ratio.
- E. Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered glass enclosures where exposed to breakage. Provide exterior fixtures where exposed to moisture.

## PART 3 EXECUTION

### 3.01 INSTALLATION

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
- B. Provide each facility ready for use where needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### 3.02 TEMPORARY UTILITY INSTALLATION

- A. General: Engage the appropriate local utility company to install temporary service or connect to existing service. Where company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with company recommendations.

1. Arrange with company and existing users for a time when service can be interrupted.
2. Provide adequate capacity at each stage of construction. Prior to temporary utility availability, provide trucked in services.
3. Obtain easements to bring temporary utilities to the site where the Owner's easements cannot be used for that purpose.
4. Use Charges: Cost or use charges for temporary facilities are not chargeable to the Owner or Architect/Engineer. Neither the Owner nor Architect/Engineer will accept cost or use charges as a basis of claims for Change Orders.

END OF SECTION



SECTION 01 56 00  
TEMPORARY CONTROLS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Water Control.
- B. Dust Control.
- C. Erosion and Sediment Control.
- D. Prevention, Control and Abatement of Erosion and Water Pollution.
- E. Contractor's Responsibilities.

1.2 WATER CONTROL

- A. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.3 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere

1.4 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize amount of bare soil exposed at one time.
- C. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.

1.5 CONTRACTOR'S RESPONSIBILITIES

- A. Contractor shall comply with all laws, ordinances, rules, regulations and permit requirements bearing on the performance of the work and shall obtain all permits and licenses necessary for the prosecution of the work.
- B. Contractor shall pay all fees and charges required for permits and licenses.
- C. Contractor shall pay all fines, fees, charges and assessments resulting from Contractor's failure to comply with laws, ordinances, rules, regulations and permit requirements whether such fines, fees, charges and assessments are imposed on the Contractor or the Owner.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

## SECTION 01 60 00

### PRODUCT REQUIREMENTS

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. The Work of this Section shall be included as a part of the Contract Documents of the Contractor on this Project.

##### 1.02 SUMMARY

- A. This Section includes administrative and procedural requirements governing the Contractor's selection of products for use in the Project.
  - 1. Product standards and quality – substitutions
  - 2. Substitutions
  - 3. Manufacturer's directions
  - 4. Warranties
  - 5. Material delivery and responsibilities
  - 6. Protection
  - 7. Acceptance of equipment or systems
- B. It is the intent of the Specifications and Drawings to accomplish a complete and first-grade installation executed by competent and experienced workmen.
- C. Equipment, specialties, and similar items shall be checked for compliance and fully approved prior to installation. The Contractor is cautioned that work or equipment installed without approval is subject to condemnation and removal, with subsequent replacement with an approved item without extra remuneration.
- D. Related Work Specified Elsewhere
  - 1. Section A - Instructions to Bidders
  - 2. General Conditions
  - 3. Section 01 33 00 - Submittal Procedures

##### 1.03 DEFINITIONS

- A. Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms. Such terms are self explanatory and have well recognized meanings in the construction industry.
  - 1. "Products" are items purchased for incorporation in the Work, whether purchased for the project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - 2. "Named Products" are items identified by the manufacturer's product name, including make or model number or other designation, shown or listed in the manufacturer's published product literature that is current as of the date of the Contract Documents.

- B. "Materials" are products substantially shaped, cut, worked, mixed, finished, refined, or otherwise fabricated, processed, or installed to form a part of the Work.
- C. "Equipments" is a product with operational parts, whether motorized or manually operated, that require service connections, such as wiring or piping.

#### 1.04 QUALITY ASSURANCE

- A. Source Limitations: To the fullest extent possible, provide products of the same kind from a single source.
- B. Compatibility of Options: When the Contractor is given the option of selecting between 2 or more products for use on the project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.
  - 1. The prime contractor is responsible for providing products and construction methods that are compatible with products and construction methods of other prime or separate contractors.

#### 1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products according to the manufacturer's recommendations, using means and methods that will prevent damage, deterioration, and loss, including theft.
  - 1. Schedule delivery to minimize long term storage at the site and to prevent over crowding of construction spaces.
  - 2. Coordinate delivery with installation time to assure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  - 3. Deliver products to the site in an undamaged condition in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  - 4. Inspect products upon delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
  - 5. Store products of the site in a manner that will facilitate inspection and measurement of quality or counting of units.
  - 6. Store heavy materials away from the project structure in a manner that will not endanger the supporting construction.
  - 7. Store products subject to damage by elements above ground, under cover in a weathertight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required by manufacturer's instructions.

### PART 2 PRODUCTS

#### 2.01 PRODUCT STANDARDS AND QUALITY - SUBSTITUTIONS

- A. The Contract is based on the materials, equipment, and methods described in the Contract Documents.

- B. Where in the Drawings and Specifications certain products, manufacturer's trade names, or catalog numbers are given, it is done for the expressed purpose of establishing a basis of quality, durability, and efficiency of design in harmony with the work outlined and is not intended for the purpose of limiting competition.
- C. The Architect/Engineer will consider proposals for substitution of materials, equipment, and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Architect/Engineer to evaluate the proposed substitution.
- D. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this Work by the Architect/Engineer.
  - 1. Refer to Contract "Front End" Section A – Information for Bidders.
- E. "Or equal":
  - 1. Where the phrase "or equal" or "or equal as approved by the Architect/Engineer" occurs in the Contract Documents, do not assume that material, equipment, or methods will be approved as equal by the Architect/Engineer unless the item has been specifically approved for this Work by the Architect/Engineer in an Addendum.
  - 2. The decision of the Architect/Engineer shall be final.
- F. Availability of Specified Items
  - 1. Verify prior to bidding that specified items will be available in time for installation during orderly and timely progress of the work.
  - 2. In the event specified item or items will not be so available, so notify the Architect/Engineer prior to receipt of bids.
  - 3. Costs of delays because of non availability of specified items, when such delays could have been avoided by the Contractor, will be back charged as necessary and shall not be borne by the Owner.
- G. Where the questions of appearance, artistic effect, or harmony of design are concerned, the Architect/Engineer reserves the right to refuse approval of substituted products proposed to be substituted for that specified, if in his opinion the item to be substituted is not harmonious to the finished effect and appearance desired, as portrayed in the Drawings and Specifications. The Architect/Engineer's said refusal to approve, established by this paragraph, is final.

## 2.02 SUBSTITUTIONS

- A. Substitutions: Changes in products, materials of construction required by the Contract Documents proposed by the Contractor after award of the Contract are considered to be requests of substitutions. The following are not considered to be requests for substitutions.
  - 1. Substitutions requested during the bidding period, accepted by Addendum prior to award of the Contract, are included in the Contract Documents and are not subject to requirements specified in this Section for substitutions.
  - 2. Revisions to the Contract Documents requested by the Owner or Architect/Engineer.
  - 3. Specified options of products and construction methods included in the Contract Documents.

4. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.
- B. Conditions: The Architect/Engineer will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Architect/Engineer. If the following conditions are not satisfied, the Architect/Engineer will return the requests without action except to record noncompliance with these requirements:
1. Extensive revisions to the Contract Documents are not required.
  2. Proposed changes are in keeping with the general intent of the Contract Documents.
  3. The request is timely, fully documented, and properly submitted.
  4. The specified product or method of construction cannot be provided within the Contract Time. The Architect/Engineer will not consider the request if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.
  5. The requested substitution offers the Owner a substantial advantage, in cost, time, energy conservation, or other considerations, after deducting additional responsibilities the Owner must assume. The Owner's additional responsibilities may include compensation to the Architect/Engineer for redesign and evaluation services, increased cost of other construction by the Owner, and similar considerations.
  6. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
  7. The specified product or method of construction cannot be provided in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.
  8. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitutions provides the required warranty.
- C. Products of other manufacturers will be considered for acceptance provided they equal or exceed the material requirements and functional qualities of the specified product. Requests for Architect/Engineer's approval and complete technical data for evaluation must be received at least 10 days prior to bid due date. Additional approved manufacturers will be issued by Addendum.

## 2.03 MANUFACTURER'S DIRECTIONS

- A. Manufactured products shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the manufacturer's printed directions, unless herein specified to the contrary. Where manufacturer's printed directions are available and where reference is made to manufacturer's directions in the Specifications, the Contractor shall submit 2 copies of such directions to the Architect/Engineer prior to the beginning of any Work covered thereby.
- B. Where specific installation instructions are not part of these Specifications and Drawings, equipment shall be installed in strict accordance with instructions from the respective manufacturers. Where installation instructions included in these Specifications or Drawings are at a variance with instructions furnished by the

equipment manufacturer, the Contractor shall make written request for clarification from the Architect/Engineer.

- C. In accepting or assenting to the use of an apparatus or material, or make, or arrangement thereof, the Architect/Engineer in no way waives any of the requirements of these Specifications or the warranty embodied therein.

#### 2.04 WARRANTIES

- A. Specific warranties or bonds called for in the Contract Documents, in addition to that falling under the general warranty as set forth in General Conditions, shall be furnished in accordance with the requirements of the Specifications.
  - 1. Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
  - 2. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
- B. The Contractor shall and does hereby agree to warrant for a period of one year, or for longer periods, where so provided in the Specifications, as evidenced by the date of Substantial Completion issued by the Architect/Engineer, all products installed under the Contract to be of good quality in every respect and to remain so for periods described herein.
- C. Should defects develop in the aforesaid Work within the specified periods, due to faults in products or their workmanship, the Contractor hereby agrees to make repairs and do necessary Work to correct defective Work to the Architect/Engineer's satisfaction. Such repairs and corrective Work, including costs of making good other Work damaged by or otherwise affected by making repairs or corrective Work, shall be done without cost to the Owner and at the entire cost and expense of the Contractor within 14 days after written notice to the Contractor by the Owner.
  - 1. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
  - 2. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- D. Nothing herein intends or implies that the warranty shall apply to Work which has been abused or neglected or improperly maintained by the Owner or his successor in interest.
- E. Where service on products is required under this Article, it shall be promptly provided when notified by the Owner and no additional charge shall be made, unless it can be established that the defect or malfunctioning was caused by abuse or accidental

damage not to be expected under conditions of ordinary wear and tear.

- F. The manufacturer and supplier expressly warrants that each item of equipment furnished by him and installed in this Project is suitable for the application shown and specified in the Contract Documents and includes features, accessories, and performing characteristics listed in the manufacturer's catalog in force on the date bids are requested for the Work. This warranty is intended as an assurance by the manufacturer that his equipment is not being misapplied and is fit and sufficient for the service intended. This warranty is in addition to and not in limitation of any other warranty or remedy required by law or by the Contract Documents. It shall be the responsibility of the Contractor for the particular equipment to obtain this warranty in writing.
- G. In case the Contractor fails to do Work so ordered, the Owner may have work done and charge the cost thereof against monies retained as provided for in the Agreement and, if said retained monies shall be insufficient to pay such cost or if no money is available, the Contractor and his Sureties shall agree to pay to the Owner the cost of such Work.

## 2.05 MATERIAL DELIVERY AND RESPONSIBILITIES

- A. The Contractor shall be responsible for materials he orders for delivery to the jobsite. Responsibility includes, but is not limited to, receiving, unloading, storing, protecting, and setting in place; ready for final connections.
  - 1. The Owner will not be responsible for deliveries related to the construction or operation of the Contractor. The Owner cannot sign delivery forms for the Contractor.
- B. Contractor shall insure that products are delivered to the Project in accordance with the Construction Schedule of the Project. In determining date of delivery, sufficient time shall be allowed for shop drawings and sample approvals, including the possibility of having to resubmit improperly prepared submittals or products other than those specified and the necessary fabrication or procurement time along with the delivery method and distance involved.

## 2.06 PROTECTION

- A. The Contractor shall protect building elements and products subject to damage. Should workmen or other persons employed or commissioned by the Contractor be responsible for damage, the entire cost of repairing said damage shall be assumed by said Contractor. Should damage be done by a person or persons not employed or commissioned by the Contractor, the Contractor shall make repairs and charge the cost to the guilty person or persons. The Contractor shall be responsible for collecting such charges.
- B. The Contractor shall protect products prior to installation and final acceptance. Storage shall be dry, clean, and safe. Materials or equipment damaged, deteriorated, rusted, or defaced due to improper storage, shall be fully repaired, refinished, or replaced, as required by the Architect/Engineer. Products lost through theft or mishandling shall be replaced by the Contractor without cost to the Owner.



2.07 ACCEPTANCE OF EQUIPMENT OR SYSTEMS

- A. The Owner will not accept the start of the warranty period on systems or equipment until Substantial Completion is issued to the Contractor for Owner's occupancy of the building, in part or whole. The Contractor shall make such provisions as required to extend the manufacturer's warranty from time of initial operation of systems or equipment until Substantial Completion is given in writing.

2.08 PART 3 EXECUTION (Not Applicable)

END OF SECTION

## SECTION 01 70 00

### CLOSEOUT PROCEDURES

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. The Work of this Section shall be included as a part of the Contract Documents of the Contractor on this Project.
- B. Refer to the General and Supplementary Conditions of the Contract for Substantial Completion and final payment.

##### 1.02 SUMMARY

- A. Closeout is hereby defined to include general requirements near end of Contract Time in preparation for final acceptance, final payment, normal termination of contract, occupancy by Owner, and similar actions evidencing completion of the Work. Specific requirements for individual units of Work are specified in the Project Manual. Time of closeout is directly related to "Substantial Completion."
- B. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
  - 1. Prerequisites to substantial completion
  - 2. Prerequisites to final payment
  - 3. Punch list (inspection procedures)
  - 4. Correction of work period
  - 5. Project record documents
  - 6. Certification of code compliance
  - 7. Maintenance and operating manuals
  - 8. Instructions for the Owner's personnel

##### 1.03 PREREQUISITES TO SUBSTANTIAL COMPLETION

- A. General: Prior to requesting Architect/Engineer inspection for certification of Substantial Completion (for either entire Work or portions thereof), complete the following and list known exceptions in request:
  - 1. In the Application for Payment that coincides with, or first follows, the date of Substantial Completion is claimed, show 100 percent completion for the Work claimed as substantially complete.
    - a. Include supporting documentation for completion as indicated in those Contract Documents and a statement showing an accounting for changes to the Contract Sum.
    - b. If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.
  - 2. Advise Owner of pending insurance changeover requirements.
  - 3. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, agreements, final certifications, and similar documents.
  - 4. Obtain and submit releases enabling Owner's full and unrestricted use of the

Work and access to services and utilities, including occupancy permits, operating certificates, and similar releases.

5. Submit record drawings, maintenance manuals, damage or settlement surveys, property survey, and similar final record information.
  6. Deliver tools, spare parts, extra stocks of materials, and similar physical items to Owner.
  7. Make final changeover of locks and transmit keys to Owner and advise Owner's personnel of changeover in security provisions.
  8. Complete start-up testing of systems and instructions of Owner's operating/maintenance personnel. Discontinue and remove from project site temporary facilities and services, along with construction tools, mock-ups, and similar elements.
  9. Complete final cleaning-up requirements. Refer to Section 01740 - Construction Cleaning.
  10. Touch up and otherwise repair and restore marred, exposed finishes.
- B. Inspection Procedures: On receipt of a request for inspection, the Architect/Engineer will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect/Engineer will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
1. The Architect/Engineer will repeat inspection when requested and assured that the Work is substantially complete.
  2. Results of the completed inspection will form the basis of requirements for final acceptance.

#### 1.04 PREREQUISITES TO FINAL PAYMENT

- A. General: Prior to requesting Architect/Engineer final inspection for certification of final payment, complete the following:
1. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
  2. Submit final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and complete operations where required.
  3. Submit copy of Architect/Engineer final punch list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance.
  4. Submit record drawings, maintenance manuals, and similar final record information.
  5. Certification of code compliance.
  6. Submit certification stating that no materials containing asbestos were incorporated into the Work.
  7. Plumbing Contractor shall submit certification stating that no flux or solder used for drinking water piping contained more than 0.2 percent lead, and that no pipe or fittings used for drinking water piping contained more than 8.0 percent lead.
  8. Firestopping Contractor's letter of certification stating that all firestopping systems have been installed in accordance with the Contract Documents.
  9. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion or when the Owner took

possession of and assumed responsibility for corresponding elements of the work.

10. Submit consent of surety to final payment.
11. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
12. Submit a final liquidated damages settlement statement.
13. Final unconditional waiver of liens, prepared on AIA Documents G706, G706A, and G707.

B. Reinspection Procedure: The Architect/Engineer will reinspect the work upon receipt of notice that the work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Architect/Engineer.

1. Upon completion of reinspection, the Architect/Engineer will prepare a certificate of final acceptance. If the work is incomplete, the Architect/Engineer will advise the Contractor of work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

### 3.01 PUNCH LIST

- A. Prior to the Architect/Engineer's preparation of a Project Punch list, the Contractor shall prepare and keep his own punch list on the job for use by his employees and subcontractors and for use by the Architect/Engineer to facilitate completion of the Work.
- B. The Contractor's inspection shall be as thorough as possible, in accordance with his desire to provide first class workmanship and maintain good reputation, and shall include Work under his Contract, including that of his subcontractors.
- C. The Architect/Engineer shall observe the Work, providing Work on the Contractor's punch list has been completed, and prepare the Project Punch list for use by subcontractors to expedite proper completion of the Work.
- D. The time fixed by the Architect/Engineer for the completion of all items on the list accompanying the Certificate of Substantial Completion shall not be greater than 21 days. The Contractor shall complete items on the list within such 21 day period. The Contractor shall begin completion and correction activities within 7 days of receipt of the lists and complete all activities within the 21 day period specified. If the Contractor fails to do so, the Owner in its discretion may perform the Work by itself or others and the cost thereof shall be charged against the Contractor. If more than one inspection by the Architect/Engineer for the purpose of evaluating corrected work is required by the subject list of items to be completed or corrected, it will be performed at the Contractor's expense.
- E. At the time the Architect/Engineer commences the Substantial Completion Inspection, if the Architect/Engineer discovers excessive additional items requiring completion or correction, the Architect/Engineer may decline to continue the

inspection, instructing the Contractor as to the general classification of deficiencies which must be corrected before the Architect/Engineer will resume the Substantial Completion Inspection. If the Contractor fails to pursue the Work so as to make it ready for Substantial Completion Inspection in a timely fashion, the Architect/Engineer shall, after notifying the Contractor, conduct inspections and develop a list of items to be completed or corrected. This list of items shall be furnished to the Contractor who shall proceed to correct such items within 21 days. The Architect/Engineer will conduct additional inspections as required to determine that the Work is ready for Substantial Completion Inspection. The Architect/Engineer will invoice the Owner for 1) The cost of inspections between the termination of the initial Substantial Completion Inspection and the commencement of the satisfactory Substantial Completion Inspection, 2) The cost of inspection or review after the 21 day period established for the completion of the list by the Contractor. The Contractor shall reimburse the Owner for such cost, and the Owner may offset the amounts payable to the Architect/Engineer for such services from the amounts due the Contractor under the Contract Documents.

### 3.02 CORRECTION OF WORK PERIOD (WARRANTY)

- A. Prior to the expiration of the one year correction of work period (warranty), the Architect/Engineer will check to see if additional Work by the Contractor is needed to make good on the warranties. An itemized list will be furnished to the Contractor for corrective or replacement work.
- B. This Work shall be completed immediately by the Contractor after receiving notification.

### 3.03 PROJECT RECORD DOCUMENTS

- A. Project Record Documents include drawings, project manual, project data, and samples.
- B. The Contractor shall update "Project Record Documents" on separate blue or black line prints set aside especially for this purpose on the job. Drawings shall incorporate all changes made in the Work of the respective trades during the construction period. Such changes shall be indicated at the time they occur.
  - 1. Accurately record information in an understandable drawing technique.
  - 2. Record data as soon as possible after obtaining it. Record and check markup prior to enclosing concealed installations.
- C. Maintain at the jobsite one copy of Drawings, Project Manual, addenda, final shop drawings, change orders, field orders, other contract modifications, and other documents submitted by the Contractor, in compliance with various Sections of the Project Manual.
- D. Each of these project record drawings shall be clearly marked "Project Record Document"; maintained in good condition; available for observation by the Architect/Engineer; and shall not be used for construction purposes. Mark these drawings to show the actual installation where the installation varies from the installation shown originally. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Items

required to be marked include, but are not limited to, the following:

1. Dimensional changes to the Drawings.
  2. Significant detail not shown in the original Contract Documents including Change Orders or Construction Change Directives.
  3. The location of underground utilities and appurtenances, dimensionally referenced to permanent surface improvements.
  4. The location of internal utilities and appurtenances concealed in building structures, referenced to visible and accessible features of the structures.
  5. When elements are placed exactly as shown on Drawings, so indicate; otherwise show changed location.
  6. Revisions to details shown on the Drawings.
  7. Depths of foundations below the first floor.
  8. Revisions to routing of piping and conduits.
  9. Revisions to electrical circuiting.
  10. Actual equipment locations.
  11. Duct size and routing.
  12. Changes made following the Architect/Engineer's written orders.
  13. Details not on original Contract Drawings.
  14. Charts and locations of concealed work.
    - a. The Plumbing and HVAC Contractors shall prepare a suitable chart identifying and locating each concealed control or other concealed item requiring repair, adjustment, and maintenance. Charts shall be mounted in suitable frames with glass covers secured to wall where directed.
    - b. Charts shall list each item, together with its function, item number, and location.
    - c. Locations throughout the building shall be identified on the wall or ceiling by permanent, nonobstructive plates, labels, or other approved means secured in a permanent manner.
    - d. Chart details, identification methods, locations, and methods of attachment shall be as approved by the Architect/Engineer's representative at the jobsite upon full submission of proposed procedures and proper execution of same.
- E. Keep project record documents current. Do not permanently conceal work until the required information has been recorded. Mark record prints of Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where shop drawings are marked, show cross reference on Contract Drawings location.
1. Mark record sets with red, or color that may be photo copied, erasable colored pencil. Use other colors (no blue) to distinguish between changes for different categories of the work at the same location.
  2. Note Construction Change Directive numbers, alternate numbers, change order numbers, and similar identification.
- F. During the construction period, maintain one copy of the Project Manual, including addenda and modifications issued, for Project Record Documents purposes.
1. Mark the Specifications to indicate the actual installation where the installation varies from that indicated in Specifications and modifications issued. Note related project record drawings information, where applicable. Give particular attention to substitutions, selection of product options, and

information on concealed installations that would be difficult to identify or measure and record later.

- a. In each Specification Section where products, materials, or units of equipment are specified, indicate whether record product data has been submitted in maintenance manual instead of submitted as record product data.
- G. During the construction period, maintain 3 copies of each product data submittal for Project Record Document purposes.
1. Mark product data to indicate the actual product installation where the installation varies substantially from that indicated in project data submitted. Include significant changes in product delivered to the site and changes in manufacturer's instructions and recommendations for installation.
  2. Give particular attention to information on concealed products and installation that cannot be readily identified and recorded later.
  3. Note related Change Orders and markup of record drawings, where applicable.
  4. Where record product data is required as a part of maintenance manuals, submit marked up product data as an insert in the manual instead of submittal as record product data.
- H. Record Sample Submittal: Immediately prior to date of Substantial Completion, meet with the Architect/Engineer and Owner's personnel at the site to determine which of the samples maintained during the construction period shall be transmitted to the Owner for record purposes. Comply with the Architect/Engineer's instructions for packaging, identification marking, and delivery to the Owner's samples storage space. Dispose of other samples in a manner specified for disposing samples and waste materials.
- I. Prior to Final Payment, submit to the Architect/Engineer final Record Documents ("As-Builts") in the form of two (2) bond copies after transposition of all Record Document changes into the Drawings (note that all Drawing changes shall be "clouded") and Specifications (note that all Specification changes shall be "bolded and underlined") for the Owner's permanent record.
1. Each drawing shall be labeled "As-Built", dated and signed by the Contractor.

### 3.04 CERTIFICATION OF CODE COMPLIANCE

- A. Prior to final payment the subcontractors indicated below shall submit through the General Contractor to the Architect/Engineer (in duplicate) letters of certification of code compliance as follows:
1. The Subcontractor for Division 15 Work shall submit letter certifying mechanical installations comply with the current applicable editions of the State and Local Codes having jurisdiction.
  2. The Subcontractor for Division 16 Work shall submit letters certifying that the electrical wiring, alarm systems, smoke and heat detection systems comply with current applicable editions of the State and Local Codes having jurisdiction.

### 3.05 MAINTENANCE AND OPERATING MANUALS

- A. At the time of Contractor's pay application reaches 75 percent complete, the Contractor shall submit to the Architect/Engineer one copy of a rough draft for a comprehensive Maintenance and Operating Manual presenting complete directions and recommendations for the proper care and maintenance of visible surfaces as well as maintenance and operating instructions for equipment items which he has provided.
- B. Operating instructions shall include necessary printed directions for correct operations, adjustment, servicing, and maintenance of movable parts. Also included shall be suitable parts lists, final shop drawings, and diagrams showing parts location and assembly, and information specified in individual Specification Sections and the following:
  - 1. Emergency instructions.
  - 2. Copies of specific warranties.
  - 3. Wiring diagrams.
  - 4. Recommended maintenance procedures and turn around times.
  - 5. Inspection and system test procedures.
  - 6. Precautions against improper maintenance and exposure.
- C. Upon Architect/Engineer's approval and prior to issuance of final payments, the Contractor shall submit 3 corrected and completed copies of maintenance manuals to the Architect/Engineer.
  - 1. If the project is being constructed in Phases, provide Maintenance and Operating Manuals at the completion of each Phase of Work.
- D. Finished manuals shall be loose-leaf type with hardboard covers and titled tabs identifying each particular portion or item of the Work.
- E. For each titled item or work portion, manual must provide the names, addresses, and phone numbers of the following parties:
  - 1. Contractor/installer
  - 2. Manufacturer
  - 3. Nearest dealer/supplier
  - 4. Nearest agency capable of supplying parts and service
- F. For each manual label on front cover or spine shall indicate the following information:
  - 1. Project name and address
  - 2. Owner's name
  - 3. Name and address of Architect/Engineer
  - 4. Name and address of Contractor
  - 5. Date of submission
- G. Refer to Section 07 52 00 for Roof Maintenance Manual requirements.

### 3.06 INSTRUCTIONS FOR THE OWNER'S PERSONNEL

- A. Arrange for each Installer of equipment that requires regular maintenance and noted in technical sections, to meet with the Owner's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if Installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:



1. Maintenance manuals
2. Record documents
3. Spare parts and materials
4. Tools
5. Lubricants
6. Fuels
7. Identification systems
8. Control sequences
9. Hazards
10. Cleaning
11. Warranties and bonds
12. Maintenance agreements and similar continuing commitments

B. As part of instruction for operating equipment, demonstrate the following procedures:

1. Startup
2. Shutdown
3. Emergency operations
4. Noise and vibration adjustments
5. Safety procedures
6. Economy and efficiency adjustments
7. Effective energy utilization

END OF SECTION

## SECTION 01 73 29

### CUTTING AND PATCHING

#### PART 1 GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and General Provisions of the Prime Contract, including General and Supplementary Conditions, apply to Work of this Section.
- B. Section 01 11 00 – Summary of the Work.

##### 1.02 DEFINITIONS

- A. “Cutting and patching” includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting and patching required to restore surfaces to their original condition.
- B. “Cutting and patching” is performed for coordination of the work, to uncover work for access or inspection, to obtain samples for testing, to permit alterations to be performed, and for other similar purposes.
- C. Cutting and patching performed during the manufacture of products or during the initial fabrication, erection, or installation processes is not considered to be “cutting and patching” under this definition. Drilling of holes to install fasteners and similar operations are also not considered to be “cutting and patching”.

##### 1.03 DESCRIPTION OF WORK

- A. Each sub-contractor shall make arrangements with other subcontractors and the General Contractor for fitting his Work into the general construction. Where the sub-contractor was given sufficient information as to required openings prior to construction, then the cost for cutting and restoring shall be paid for by the subcontractor failing to provide the required openings.
- B. Cutting or restoring performed by subcontractors which is not accepted by the General Contractor shall have such correction or restoration work performed when directed by the General Contractor.
- C. Cutting and patching of concrete floors and decks shall be performed in a neat and workmanlike manner, using a coring machine. Openings over 6 inch diameter must be formed by the subcontractor for such Work. After coring, each subcontractor shall pack and grout openings around sleeves or Work penetrating the floor of deck which he is furnishing.
- D. No Contractor shall do cutting that may impair the strength of the building or its components. No holes except for small screws or bolts may be drilled in the beams or other structural members for the purpose of supporting, routing, or attaching Work without obtaining prior approval from the Architect/Engineer.

- E. Work shall be done in a neat manner by mechanics skilled in their trades, and the final Work shall be subject to approval by the General Contractor, Architect/Engineer, and the Owner.
- F. Each subcontractor shall do his own cutting and patching Work. This shall include cutting and patching required to install new utilities on the site.
- G. Refer to other sections of these Specifications for specific cutting and patching requirements and limitations applicable to individual units of Work.
- H. Unless otherwise specified, requirements of this Section apply to Mechanical and Electrical Work. Refer to Division 23 and Division 26 Sections, for additional requirements and limitations.

#### 1.04 SUBMITTALS

- A. Procedural Proposal for Cutting and Patching: Where prior approval of cutting and patching is required, submit proposed procedures for Work to be performed and request approval to proceed. Include the following information, as applicable, in the submittal:
  - 1. Describe nature of the work and how it is to be performed, indicating why cutting and patching cannot be avoided. Describe anticipated results of the work in terms of changes to existing work, including structural, operational, and visual changes as well as other significant elements.
  - 2. List of products to be used and firms that will perform Work.
  - 3. Give dates when Work is expected to be performed.
  - 4. List utilities that will be disturbed or otherwise be affected by Work, including those that will be relocated and those that will be out of service temporarily. Indicate how long utility service will be disrupted.
  - 5. Approvals by the Architect/Engineer to proceed with cutting and patching Work does not waive the Architect/Engineer's right to later require complete removal and replacement of Work found to be cut and patched in an unsatisfactory manner.
- B. Should conditions of Work or schedule indicate change of materials or methods, submit recommendation to the Architect/Engineer, through the General Contractor, indicating:
  - 1. Condition indicating change.
  - 2. Recommendation for alternative materials or methods.
  - 3. Submittals as required for substitutions.
- C. Submit written notice to Architect/Engineer or General Contractor designating time Work will be uncovered, to provide for Architect/Engineer observation.

#### 1.05 PAYMENT FOR COSTS

- A. Costs caused by ill-timed or defective work, or work not conforming to Contract, including costs for additional services of the Architect/Engineer shall be paid by the party responsible for ill-timed, rejected or nonconforming Work.

#### PART 2 PRODUCTS

## 2.01 MATERIALS

- A. General: Except as otherwise indicated, or as directed by the Architect/Engineer, use materials for cutting and patching that are identical to existing materials. If identical materials are not available, or cannot be used, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials for cutting and patching that will result in equal or better performance characteristics.
- B. For replacement of Work removed: comply with Technical Specification Sections for type of Work to be performed.

## PART 3 EXECUTION

### 3.01 INSPECTION

- A. Before cutting, examine the surfaces to be cut and patched and the conditions under which the Work is to be performed. If unsafe or otherwise unsatisfactory conditions are encountered, take corrective action before proceeding with the Work.

### 3.02 PREPARATION

- A. Protect other Work during cutting and patching to prevent damage. Provide protection from adverse weather conditions for that part of the project that may be exposed during cutting and patching operations.
  - 1. Avoid interference with use of adjoining areas of interruption of free passage to adjoining areas.
- B. Take precautions not to cut existing pipe, conduit.

### 3.03 PERFORMANCE

- A. General: Employ skilled workmen to perform cutting and patching Work. Except as otherwise indicated or as approved by Architect/Engineer, proceed with cutting and patching at the earliest feasible time and complete Work without delay.
- B. Cutting: Cut the Work using methods that are least likely to damage Work to be retained or adjoining Work.
  - 1. Comply with requirements of applicable Sections of Division 2 where cutting and patching requires excavating and backfilling.
- C. Patching: Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the Work.
  - 1. Where feasible, inspect and test patched areas to demonstrate integrity of work.
  - 2. Restore exposed finishes of patched areas and where necessary extend finish restoration into retained adjoining Work in a manner which will eliminate evidence of patching and refinishing.
  - 3. Where removal of walls or partitions extends one finished area into another finished area, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. If necessary to

achieve uniform color and appearance, remove existing floor and wall coverings and replace with new materials.

END OF SECTION

## SECTION 01 74 13

### CONSTRUCTION CLEANING

#### PART 1 GENERAL

##### 1.01 RELATED WORK

- A. The Work of this Section shall be included as a part of the Contract Documents of the Contractor on this Project.

##### 1.02 SUMMARY

- A. The Architect/Engineer reserves the right to act on behalf of the Owner pertaining to the clean-up responsibilities that are a part of the Contractor's Work.
- B. Related Work Specified Elsewhere
  1. Section 01 70 00 - Closeout Procedures.
  2. Special cleaning requirements for specific construction elements are included in appropriate sections of Divisions 02 through 26.

##### 1.03 PURPOSE - DAILY CLEANING

- A. Define and emphasize the responsibility of the Contractor to remove his rubbish and debris from the construction site to guard against fire and safety hazards as well as to provide a more efficient construction operation for all Contractors. If this cleaning is not performed to the satisfaction of the Owner and the Architect/Engineer, it will be performed for the Contractor at his expense, cost of which will be deducted by Change Order prior to final payment.

##### 1.04 PURPOSE - ROUTINE CLEANING

- A. Each afternoon, and more often if necessary, the Contractor shall perform an overall clean-up of the entire site, including a broom cleaning of appropriate surfaces. The trades shall remove their rubbish and debris from the building site to the rubbish collection location promptly upon its accumulation and in no event later than the Contractor's regular daily general clean-up.

##### 1.05 RUBBISH CONTAINMENT

- A. Refer to Section 01500 - Temporary Facilities and Controls for requirements.

##### 1.06 SAFETY REQUIREMENTS

- A. Hazards Control
  1. Store volatile wastes in covered metal containers, and remove from premises daily.
  2. Prevent accumulation of wastes which create hazardous conditions.
  3. Provide adequate ventilation during use of volatile or noxious substances.
- B. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.

1. Do not burn or bury rubbish and waste materials on project site.
2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
3. Do not dispose of wastes into streams or waterways.

## PART 2 PRODUCTS

### 2.01 MATERIALS

- A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
  1. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finish surface.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

## PART 3 EXECUTION

### 3.01 DAILY CLEANING

- A. Contractor shall execute cleaning to ensure that building, grounds, and public properties are maintained free from accumulations of waste materials and rubbish.
- B. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
- C. Daily, during progress of work, clean site and public properties and dispose of waste materials, debris, and rubbish in dumpster type rubbish container provided under this Section.
- D. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights.
- E. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.
- F. Place no new work on dirty surfaces.

### 3.02 ROUTINE CLEANING

- A. Employ experienced workmen for cleaning.
- B. Remove dirt, mud, and other foreign materials from sight exposed interior and exterior surfaces.
- C. Weekly, or at more frequent intervals, if work activities justify same, perform the following cleaning. This includes all dirt, dust, and debris not identifiable as part of a Contract. Broom clean floor and paved surfaces; rake clean other surfaces of ground.
- D. Maintain cleaning throughout the duration of the Project.

### 3.03 FINAL CLEANING

- A. General: Provide final cleaning operations when indicated. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of work to the condition expected from a commercial building cleaning and maintenance program. Comply with manufacturer's instructions.
- B. Contractor shall perform his respective final clean-up and shall leave the Work of the completed Project in clean, neat condition.
- C. The following are examples, but not by way of limitation, of cleaning levels required:
  - 1. Remove labels which are not required as permanent labels.
  - 2. Clean transparent materials, including mirrors and window/door glass to a polished condition, removing substances which are noticeable as vision-obscuring materials. Replace broken glass and damaged transparent materials.
  - 3. Clean exposed exterior and interior hard-surfaced finishes, to a dirt-free condition, free of dust, stains, films, and similar noticeable distracting substances. Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces. Restore reflective surfaces to original reflective condition.
  - 4. Wipe surfaces of mechanical and electrical equipment clean, including elevator equipment and similar equipment; remove excess lubrication and other substances.
  - 5. Remove debris and surface dust from limited-access spaces including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
  - 6. Clean concrete floors in unoccupied spaces broom clean.
  - 7. Vacuum clean carpeted surfaces and similar soft surfaces.
  - 8. Clean plumbing fixtures to a sanitary condition, free of stains, including those resulting from water exposure.
  - 9. Clean light fixtures and lamps so as to function with full efficiency.
  - 10. Clean project site (yard and grounds), including landscape development areas of litter and foreign substances. Sweep paved areas to a broom-clean condition; remove stains, petro-chemical spills, and other foreign deposits. Rake grounds, which are neither planted nor paved, to a smooth, even textured surface.
  - 11. Sweep paved areas broom clean. Rake grounds that are neither planted nor paved to a smooth, even textured surface.
  - 12. Remove petrochemical spills, stains, and other foreign deposits.
  - 13. Remove tools, construction equipment, machinery, and surplus material from the site.
- D. Removal of Protection: Remove temporary protection and facilities installed during construction to protect previously completed installations during the remainder of the construction period.
- E. Compliances: Comply with governing regulations and safety standards for cleaning operations. Remove waste materials from the site and dispose of lawfully.

END OF SECTION



## SECTION 01 78 36

### WARRANTIES

#### PART 1 GENERAL

##### 1.1 RELATED DOCUMENTS

- A. The provisions of the General Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section as though bound herein.

##### 1.2 SECTION INCLUDES:

- A. Provide labor, materials, services, and equipment necessary to furnish and install work as indicated and as specified herein, which includes, but is not limited to:
  - 1. Preparation and submittal of warranties
  - 2. Time and schedule of submittals
  - 3. Transfer of Maintenance responsibility

##### 1.3 WARRANTY TIME PERIOD COMMENCEMENT

- A. The time for the warranty period shall commence on the date the project is determined to be Final Completion by the Architect/Engineer.

##### 1.4 FORM OF SUBMITTALS

- A. Warranties shall be in a separate three-ring binder.
- B. Provide one original and two copies of all warranties.
- C. Information that shall also be included in the warranty:
  - 1. Include owner's name, project title and number and the address of the school.
  - 2. Date of final completion which begins the warranty period, the date warranty period ends per the contract.
  - 3. Describe item warranted, what is warranted and what company is responsible per the warranty.
  - 4. Warranty to be on company letter head.
  - 5. Product model and serial number if applicable.
  - 6. Signature of authorized individual of the company including title.
- D. Prepare table of contents in the same sequence as the Project Manual, identify each item with the number and title of the correct specification section, and the product name.

- E. Separate each warranty with index tab sheets keyed to the table of contents listing.
- F. Provide full information on CD as necessary listing subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible company principal.
- G. Provide a contact list with names and phone numbers for each warranty.
- H. Provide two copies of all warranty information in an electronic format on a compact disk (CD).
- I. Provide CD's labeled WARRANTIES, with project number and title, name of responsible company principal, address, and telephone number of Contractor and equipment supplier.

#### 1.5 PREPARATION OF SUBMITTALS

- A. Provide the responsible subcontractors, suppliers, and manufacturers' warranties in duplicate, within ten days after completion of the applicable item of work.
  - 1. Warranty shall be on the company's' original forms signed by authorized agent only.
  - 2. Except for items put into use with Owner's permission, leave start date of warranty period until the Date of Final 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 until time specified for submittal.
- E. All of the above shall be in electronic format included on the CD or DVD, provide 2 copies.

#### 1.6 TIME OF SUBMITTALS

- A. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
- B. Submit other warranties within ten days after Date of Final Completion, but prior to final Application for Payment.
- C. For warranty items, submit with the date of final acceptance as the beginning of the warranty period.

#### 1.7 TRANSFER OF MAINTENANCE RESPONSIBILITY

- A. Provide a separate tabbed section in the warranty documents for all letters of maintenance responsibility transference.
- B. Provide separate letter for each transfer, which shall include the mutually agreed time and date of the transfer of responsibility.

### PART 2 PRODUCTS

#### 2.1 WARRANTY CERTIFICATES

- A. All warranties shall be as per State of Florida law. Any disputes shall be settled in Florida courts.
- B. The installation contractor shall complete all warranty certificates, registering the product with the manufacturer.
- C. Use the date of final completion as the installation date, and commencement date of all warranties.
- D. List the product model and serial number on each certificate.
- E. Provide copy of the original certificate in warranty manual if the original goes to manufacturer.

### PART 3 EXECUTION

3.1 The installing contractor shall fill out all product warranty forms during the manufacture's required time limit.

- A. Failure to do so may result in the Owner's loss of standard product coverage in which the installing contractor shall become liable for the same coverage and time limit forfeited due to their omission.
- B. The installing contractor shall notify the owner, in a timely manner, of all optional extended warranties provided by the manufacturer and make available to the owner the opportunity to purchase the extended warranty.
- C. The installing contractor shall insure that all warranty documents, including copies of completed registration forms, are submitted to the General Contractor for inclusion into their closeout documents as required by the specifications.

3.2 Warranty pre-expiration equipment review.

- A. The Architect/Engineer and Owner shall conduct an on-site review of equipment and systems covered by warranties.
- B. This review will be scheduled approximately 2-months prior to expiration of the Warranty.
- C. The Contractor, Owner's Representative, and Owner's Operations & Maintenance representative shall accompany the Commissioning Authority during this review.
- D. The purpose of the review will be to evaluate the condition of the equipment and systems to determine if Warranty repairs or claims are necessary.
- E. The Contractor shall cooperate to notify the issuer of the Warranty and to schedule necessary repairs or corrective actions prior to expiration of the Warranty.

END OF SECTION

## SECTION 260305 - ELECTRICAL GENERAL REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 WORK INCLUDED

- A. Electrical work for this project will include all electrical work necessary to provide Emergency Engine Generators with Emergency Automatic Transfer Switches and all supporting electrical equipment as shown on the drawings. Electrical work will include all power wiring, 120 volt and above, new equipment and necessary modifications to the existing electrical distribution systems.

#### 1.2 CONTINUOUS OPERATION

- A. All existing buildings shall be occupied throughout the duration of construction. All electrical systems shall remain in use and in operation at all times. Notify school personnel before disrupting any electrical system. Minimize all outage durations. Make temporary connections to maintain electrical systems in use when extended outages are required.

#### 1.3 APPLICABLE PUBLICATIONS

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

##### A. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. (IEEE)

IEEE 100                      2000 Dictionary of Electrical and Electronics Terms

##### B. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA ICS 6                    1993 (Rev. 2006) Enclosures for Industrial Control and Systems

NEMA MG 1                    2006 (Rev. 2007) Motors and Generators

NEMA MG 10                   2001 (Rev. 2007) Energy Management Guide for Selection and Use of Polyphase Motors

NEMA MG 11                   1977 (Rev. 2007) Energy Management Guide of Selection and Use of Single-Phase Motors

##### C. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70                        2008 National Electrical Code

NFPA 101                      2006 Life Safety Code

##### D. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI C2                        2007 National Electrical Safety Code

E. CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910.147 Control of Hazardous Energy (Lock Out/Tag Out)

F. FEDERAL SPECIFICATIONS (FS)

FS L-P-387 (Rev. A) (Int Am. 2) Plastic Sheet, Laminated, Thermosetting (for Design Plates)

G. Florida Building Code 2007 (with 2009 Supplement)

Chapter 4 Special Occupancy, Section 423 State Requirements for Educational Facilities

1.4 APPLICATION

- A. This section applies to all sections of Division 26, "Electrical," of this project except as specified otherwise in each individual section.

1.5 DEFINITION OF ELECTRICAL TERMS

- A. Unless otherwise specified or indicated, electrical terms used in these specifications, and on the drawings, shall be as defined in IEEE Standard No. 100.

1.6 SUBMITTALS

- A. Obtain approval before procurement, fabrication, or delivery of items to the job site. Partial submittals will not be acceptable and will be returned without review. Submittals shall include the manufacturer's name, trade name, place of manufacture, catalog model or number, nameplate data, size, layout dimensions, capacity, project specification and paragraph reference, applicable Federal, Military, industry, and technical society publication references, and other information necessary to establish contract compliance of each item to be furnished.
- B. Shop Drawings: In addition to the requirements specified elsewhere, shop drawings shall meet the following requirements. Drawings shall be a minimum of 8.5 inches by 11 inches in size, except as specified otherwise. Drawings shall include complete ratings information, wiring diagrams, and installation details of equipment indicating proposed location, layout and arrangement, control panels, accessories, piping, ductwork, and other items that must be shown to assure a coordinated installation. Wiring diagrams shall identify circuit terminals and indicate the internal wiring for each item of equipment and the interconnection between each item of equipment. Drawings shall indicate adequate clearance for operation, maintenance, and replacement of operating equipment devices. If equipment is disapproved, revise drawings to show acceptable equipment and resubmit.
- C. Manufacturer's Product Data: Submittals for each manufactured item shall be current manufacturer's descriptive literature of cataloged products, equipment drawings, diagrams, performance and characteristic curves, and catalog cuts.
- D. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions and required clearances.

- E. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.
- F. Publication Compliance: Where equipment or materials are specified to conform to industry and technical society publications of organizations such as American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), and Underwriters Laboratories Inc. (UL), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word "shall" had been substituted for "should" wherever it appears. In lieu of the label or listing, submit a certificate from an approved independent testing organization, adequately equipped and competent to perform such services, stating that the item has been tested in accordance with the specified organization's test methods and that the item conforms to the specified organization's publication.
- G. Certificates of Compliance: Submit manufacturer's certifications as required on products, materials, finish, and equipment indicated in the technical sections. Certifications shall be documents prepared specifically for this contract. Preprinted certifications and copies of previously submitted documents will not be acceptable. The manufacturer's certifications shall name the appropriate products, equipment, or materials and the publication specified as controlling the quality of that item. Certification shall not contain statements to imply that the item does not meet requirements specified, such as "as good as"; "achieve the same end use and results as materials formulated in accordance with the referenced publications"; or "equal or exceed the service and performance of the specified material." Certifications shall simply state that the item conforms to the requirements specified. Certificates shall be printed on the manufacturer's letterhead and shall be signed by the manufacturer's official authorized to sign certificates of compliance.

## 1.7 WARRANTY

- A. All equipment, material, accessories and installation shall carry a guarantee against defects and workmanship for a period of one year from the date of acceptance. Each system as a whole, and in all its parts, shall be guaranteed to function correctly up to the specified capacity. Should a system, or any part thereof, fail to meet the performance requirements, necessary replacements, alternations or repairs and required labor shall be made to bring performance up to specified requirements. Building construction finishes damaged or marred shall be restored to the satisfaction of the Owner's representative. All of the above described shall be done without cost to the Owner.
- B. Provide a warranty statement to be included in all Operations and Maintenance Manuals.
- C. Provide extended manufacturer's warranties where required by specific technical sections of these specifications.
- D. Where extended guarantees are called for herein, provide a warranty statement detailing the extended guarantees and length coverage for each required system(s) to be included in all Operations and Maintenance Manuals.
- E. Warranty maintenance shall be provided by the Contractor during his normal working hours at no expense to the Owner.
- F. This warranty shall not apply if damage is caused by abuse, accident, improper operation, or negligence.

## 1.8 OPERATION AND MAINTENANCE MANUAL

- A. Submit as required for systems and equipment indicated in the technical sections. Furnish five copies, bound in hardback binders or an approved equivalent. Furnish one complete manual prior to performance of systems or equipment tests, and furnish the remaining manuals prior to contract completion. Inscribe the following identification on the cover: the words "OPERATION AND MAINTENANCE MANUAL," the name and location of the system, equipment, building, name of Contractor, and contract number. Include in the manual the names, addresses, and telephone numbers of each subcontractor installing the system or equipment and the local representatives for the system or equipment. Include a table of contents and assemble the manual to conform to the table of contents, with the tab sheets placed before instructions covering the subject. The instructions shall be legible and easily read, with large sheets of drawings folded in. The manual shall include:
1. Internal and interconnecting wiring and control diagrams with data to explain detailed operation and control of the system or equipment.
  2. A control sequence describing startup, operation, and shutdown.
  3. Description of the function of each principal item of equipment.
  4. Installation and maintenance instructions.
  5. Safety precautions.
  6. Diagrams and illustrations.
  7. Testing methods.
  8. Performance data.
  9. Lubrication schedule including type, grade, temperature range, and frequency.
  10. Parts list: The list shall indicate sources of supply, recommended spare parts, and name of servicing organization.
  11. Appendix: List qualified permanent servicing organizations for support of the equipment, including addresses and certified qualifications.

## 1.9 POSTED OPERATING INSTRUCTIONS

- A. Furnish approved operating instructions for systems and equipment indicated in the technical sections for use by operation and maintenance personnel. The operating instructions shall include wiring diagrams, control diagrams, and control sequence for each principal system and equipment. Print or engrave operating instructions and frame under glass or in approved laminated plastic. Post instructions as directed. Attach or post operating instructions adjacent to each principal system and equipment including startup, proper adjustment, operating, lubrication, shutdown, safety precautions, procedure in the event of equipment failure, and other items of instruction as recommended by the manufacturer of each system or equipment. Provide weather-resistant materials or weatherproof enclosures for operating instructions exposed to the weather. Operating instructions shall not fade when exposed to sunlight and shall be secured to prevent easy removal or peeling.

## 1.10 DELIVERY AND STORAGE

- A. Handle, store, and protect equipment and materials in accordance with the manufacturer's recommendations and with the requirements of NFPA 70B, Appendix I, titled "Equipment Storage and Maintenance During Construction." Replace damaged or defective items with new items.

## 1.11 CATALOGED PRODUCTS/SERVICE AVAILABILITY

- A. Materials and equipment shall be current products by manufacturers regularly engaged in the production of such products. Products shall have been in satisfactory commercial or industrial use for 2 years prior to

bid opening. The 2-year period shall include applications of equipment and materials under similar circumstances and of similar size. The 2-year period shall be satisfactorily completed by a product for sale on the commercial market through advertisements, manufacturers' catalogs, or brochures. Products having less than a 2-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 6000 hours, exclusive of the manufacturers' factory or laboratory tests, is furnished. The equipment items shall be supported by service organizations which are reasonably convenient to the equipment installation in order to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.

#### 1.12 MANUFACTURER'S INSTRUCTIONS

- A. Where installation procedures or any part thereof are required to be in accordance with manufacturer's instructions, furnish printed copies of the instructions prior to installation. Installation of the item shall not proceed until instructions are received. Failure to furnish instructions shall be cause for rejection of the equipment or material.
- B. Comply with instructions in full detail, including each step in sequence. Should instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

#### 1.13 MOTORS AND MOTOR CONTROLS FOR MECHANICAL EQUIPMENT

- A. The electrical components of mechanical equipment, such as motors, motor starters, control or push-button stations, float or pressure switches, solenoid valves, and other devices functioning to control mechanical equipment, and control wiring and conduit for circuits rated 100 volts or less, are specified in the section covering the associated mechanical equipment, rather than in Division 26. The interconnecting power wiring and conduit, control wiring rated 120 volts (nominal) and conduit, and the electrical power circuits shall be furnished and installed under Division 26.

#### 1.14 AS BUILT DRAWINGS

- A. Maintain one complete set of drawings on the job site for the purpose of recording changes and modifications in the Contract Documents. Do not use the job set for any purpose except entry of new data.
- B. Using an erasable colored pencil (not ink or indelible pencil), clearly and accurately record all changes to the construction. Locate all conduits, circuits, junction boxes, pull boxes, panels, starters and similar items where different from that shown on the Contract Documents and where not shown. Clearly indicate the location of any junction containing splices, taps or terminations. Date all entries.
- C. At a time nearing the completion of the work, complete all changes to the job set of drawings and forward the drawings to the Architect/Engineer for review and approval.
- D. The work shall not be considered substantially complete until As-Built Drawings are submitted for review.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS AND EQUIPMENT

- A. All materials, equipment, and devices shall, as a minimum, meet the requirements of UL where UL standards are established for those items, and the requirements of NFPA 70. All items shall be new unless specified or indicated otherwise.



## PART 3 - EXECUTION

### 3.1 MATERIAL AND EQUIPMENT

- A. All material and equipment shall, as a minimum, be installed in accordance with NFPA 70, National Electrical Code.

### 3.2 PAINTING OF EQUIPMENT

- A. Factory Applied: Electrical equipment shall have factory-applied painting systems which shall, as a minimum, meet the requirements of NEMA ICS 6 corrosion-resistance test, except equipment specified to meet requirements of ANSI C37.20 shall have a finish as specified in ANSI C37.20.
- B. Field Applied: Paint electrical equipment as required to match finish or to meet safety criteria.

### 3.3 AS-BUILT DRAWINGS

- A. Submit As-Built Drawings for review and approval at or before Substantial Completion Inspection.

END OF SECTION 260305

## SECTION 260519 - WIRE AND CABLE

### PART 1 - GENERAL

#### 1.1 WORK INCLUDED

- A. Building wire.
- B. Metal Clad Cable
- C. Wiring connections and terminations.

#### 1.2 REFERENCES

- A. NEMA WC 3 - Rubber-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy.
- B. NEMA WC 5 - Thermoplastic-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy.

#### 1.3 SUBMITTALS

- A. Submit shop drawings and product data under the provisions of Section 260305.
- B. Submit manufacturer's instructions.

### PART 2 - PRODUCTS

#### 2.1 BUILDING WIRE

- A. Thermoplastic-insulated Building Wire: NEMA WC 5.
- B. Feeders and Branch Circuits Larger Than 6 AWG: Copper, stranded conductor, 600 volt insulation, THWN.
- C. Feeders and Branch Circuits 6 AWG and Smaller: Copper conductor, 600 volt insulation, THWN 6 and 8 AWG, stranded conductor; smaller than 8 AWG, solid conductor.
- D. Control Circuits: Copper, stranded conductor 600 volt insulation, THW.

#### 2.2 REMOTE CONTROL AND SIGNAL CABLE

- A. Control Cable for Class 1 Remote Control and Signal Circuits: Copper conductor, 600 volt insulation, rated 75 degree C, individual conductors twisted together and covered with aluminum sheath, and overall PVC jacket.
- B. Control Cable for Class 2 or Class 3 Remote Control and Signal Circuits: Copper conductor, 300 volt insulation, rated 75 degree C, individual conductors twisted

together and covered with a PVC jacket; UL listed.

### 2.3 METAL CLAD CABLE

- A. Conductor: Copper. Do not use aluminum.
- B. Insulation Voltage Rating: 600 volts.
- C. Insulation Temperature Rating: 75 degrees C.
- D. Insulation Material: Thermoplastic.
- E. Armor Material: Steel.
- F. Armor Design: Corrugated tube.
- G. Jacket: None.

## PART 3 - EXECUTION

### 3.1 GENERAL WIRING METHODS

- A. Use no wire smaller than 12 AWG for power and lighting circuits, and no smaller than 14 AWG for control wiring.
- B. Use 10 AWG conductor for 20 ampere, 120 volt branch circuit home runs longer than 75 feet and 277 volt branch circuit home runs longer than 200 feet.
- C. Place an equal number of conductors for each phase of a circuit in same raceway or cable.
- D. Splice only in junction or outlet boxes.
- E. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- F. Make Conductor lengths for parallel circuits equal.
- G. Provide a separate neutral conductor for every circuit requiring a neutral. "Common" neutrals shall not be installed.
- H. Provide a separate grounding conductor in every raceway. Provide a separate grounding conductor for every feeder and branch circuit. Multiple ground conductors are required where more than one circuit is installed in a common raceway. "Common" ground conductors shall not be installed.

### 3.2 WIRING INSTALLATION IN RACEWAYS

- A. Pull all conductors into a raceway at the same time. Use UL listed wire pulling lubricate for pulling 4 AWG and larger wires.
- B. Install wire in raceway after interior of building has been physically protected from the

weather and all mechanical work likely to injure conductors has been completed.

- C. Completely and thoroughly swab raceway system before installing conductors.
- D. Use solderless pressure connectors with insulating covers for copper wire splices and taps, 8 AWG and smaller. For 10 AWG and smaller, use insulated spring wire connectors with plastic caps.
- E. Use compression connectors for copper wire splices and taps, 6 AWG and larger. Tape uninsulated conductors and connectors with electrical tape to 150 percent of the insulation value of conductor.
- F. Thoroughly clean wires before installing lugs and connectors.
- G. Make splices, taps and terminations to carry full ampacity of conductors without perceptible temperature rise.
- H. Terminate spare conductors with electrical tape.
- I. All splices, taps and terminations of any Fire Alarm conductors shall be made using binder head screw terminals only.

### 3.3 CABLE WIRING TECHNIQUES

- A. Wiring in raceways may be converted to metal clad cable above accessible ceilings. Do not install metal clad cable in walls, under floors or underground or above hard ceilings.
- B. Protect exposed cable from damage.
- C. Support cables above accessible ceiling, using spring metal clips to support cables from structural members. Do not rest cable on ceiling panels.
- D. Use suitable cable fittings and connectors.

### 3.4 WIRE COLOR

- A. General
  - 1. For wire sizes 10 AWG and smaller, install wire colors in accordance with the following:
    - a. Black, red, and blue for circuits at 120/208 volts single or three phase.
  - 2. For wire sizes 8 AWG and larger, identify wire with colored tape at terminals, splices and boxes. Colors are as follows:
    - a. Black, red, and blue for circuits at 120/208 volts single or three phase.
- B. Neutral Conductors: White. When two or more neutrals are located in one conduit, individually identify each with proper circuit number.
- C. Branch Circuit Conductors: Install three or four wire home runs with each phase uniquely color coded.

- D. Feeder Circuit Conductors: Uniquely color code each phase.
- E. Ground Conductors:
  - 1. For 6 AWG and smaller: Green.
  - 2. For 4 AWG and larger: Identify with green tape at both ends and visible points including junction boxes.

### 3.5 FIELD QUALITY CONTROL

- A. Inspect wire and cable for physical damage and proper connection.
- B. Perform continuity test on all power and equipment branch circuit conductors. Verify proper phasing connections.

### 3.6 WIRE AND CABLE INSTALLATION SCHEDULE

- A. Use building wire in raceways in all exposed locations and in all locations concealed by permanently installed materials.
- B. Metal clad cable may be used above accessible ceilings only.

END OF SECTION 260519

## SECTION 260526 - SECONDARY GROUNDING

### PART 1 - GENERAL

#### 1.1 WORK INCLUDED

- A. Power system grounding.
- B. Communication system grounding.
- C. Electrical equipment and raceway grounding and bonding.
- D. Grounding Systems Testing.

#### 1.2 SYSTEM DESCRIPTION

- A. Ground the electrical service system neutral at service entrance equipment to supplementary grounding electrodes.
- B. Bond together system neutrals, service equipment enclosures, exposed non-current carrying metal parts of electrical equipment, metal raceway systems, grounding conductor in raceways and cables, receptacle ground connectors, and plumbing systems.

#### 1.3 SUBMITTALS

- A. Submit shop drawings under provisions of Section 260305.
- B. Submit grounding electrode test results in tabulated format at substantial completion
- C. Indicate location of system grounding electrode connections, and routing of grounding electrode conductor.

#### 1.4 QUALITY ASSURANCE

- A. Compliance: Testing shall be accomplished by an independent testing firm and comply to the following standards:
  - 1. NEMA
  - 2. NETA
  - 3. NFPA
  - 4. IEEE
- B. Qualification: The testing firm shall be an independent testing organization which can function as an unbiased testing authority, professionally independent of the manufacturers, supplier, and installers of equipment or systems evaluated by the testing firm.
- C. Experience: The testing firm shall be regularly engaged in the testing of electrical equipment devices, installations, and systems.
- D. Accreditation: The testing firm shall meet OSHA criteria for accreditation of testing laboratories, Title 29, Part 1907, or be a Full Member Company of the International Electrical Testing Association.

- E. Certification: The lead, on-site, technical person shall be currently certified by the International Electrical Testing Association (NETA) or National Institute for Certification in Engineering Technologies (NICET) in electrical power distribution system testing.
- F. Personnel: The testing firm shall utilize engineers and technicians who are regularly employed by the firm for testing services.
- G. Proof of Qualifications: The testing firm shall submit proof of the above qualifications when requested.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Ground Rods: Copper-encased steel, 3/4 inch diameter, minimum length 10 feet.

### 2.2 EQUIPMENT

- A. Instruments: Supply all instruments required to read and record data. Calibration date shall be submitted on test reports.
- B. Adjustments: Adjust system to operate at the required performance levels within all tolerances as required NETA standards.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Provide a separate, insulated equipment grounding conductor in every raceway. Provide a separate grounding conductor for every feeder and branch circuit. Multiple ground conductors are required where more than one circuit is installed in a common raceway. "Common" ground conductors shall not be installed. Terminate each end on a grounding lug, bus, or bushing.
- B. Provide three (3) twenty foot (20) supplementary grounding electrodes a minimum of six (6) feet apart near the service entrance location. Connect the electrodes to the service system using copper conductor in nonmetallic conduit in accordance with the National Electrical Code.
- C. Connect grounding electrode conductors to supplementary grounding electrodes using exothermically welded connections after grounding electrode test are complete.
- D. Connect grounding conductors to interior metal water pipes using suitable ground clamps, using copper conductor in accordance with the National Electrical Code.
- E. Use minimum 6 AWG copper conductor for communications service grounding conductor. Leave 10 feet slack conductor at terminal board.

### 3.2 FIELD QUALITY CONTROL

- A. Inspect grounding and bonding system conductors and connections for tightness and proper installation.
- B. Electrode Ground: The resistance of all electrodes (main services, generators, transformer, etc.) shall not exceed 25 ohms and shall be measured by the testing firm before conductors are connected and before

equipment is placed in operation. Any measurement exceeding 5 ohms shall be reported to the Owner and direction from the Owner shall be received before any final connections are made. Testing shall be performed on all grounding electrode installations. Testing shall be conducted by the three (3) point fall-of-potential method in accordance with IEEE Standard No. 81-1983, Section 9.04. Ground tests shall be performed on each electrode before conductor connections are made. If measured resistance is below 5 ohms all conductors shall be connected and the entire grounding electrode system shall be tested. Submit all ground test readings in tabulated format within one week of ground test(s).

- C. Electrical Contractor shall engage an independent testing company to perform the ground testing. The Electrical Contractor shall not perform the ground testing.

END OF SECTION 260526





## SECTION 260529 - SUPPORTING DEVICES

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Conduit and equipment supports.
- B. Anchors and fasteners.

#### 1.2 REFERENCES

- A. NECA - National Electrical Contractors Association.
- B. ANSI/NFPA 70 - National Electrical Code.

#### 1.3 SUBMITTALS

- A. Submit under provisions of Section 260305.
- B. Product Data: Provide manufacturer's catalog data for fastening systems.
- C. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of Product.

#### 1.4 REGULATORY REQUIREMENTS

- A. Conform to requirements of ANSI/NFPA 70.
- B. Furnish products listed and classified by Underwriters Laboratories, Inc. as suitable for purpose specified and shown.

### PART 2 - PRODUCTS

#### 2.1 PRODUCT REQUIREMENTS

- A. Materials and Finishes: Provide adequate corrosion resistance.
- B. Provide materials, sizes, and types of anchors, fasteners and supports to carry the loads of equipment and conduit. Consider weight of wire in conduit when selecting products.
- C. Anchors and Fasteners:
  - 1. Concrete Structural Elements: Use precast insert system, expansion anchors and preset inserts.
  - 2. Steel Structural Elements: Use beam clamps, spring steel clips and welded fasteners.
  - 3. Concrete Surfaces: Use expansion anchors.
  - 4. Hollow Masonry, Plaster, and Gypsum Board Partitions: Use toggle bolts.
  - 5. Solid Masonry Walls: Use expansion anchors and preset inserts.
  - 6. Sheet Metal: Use sheet metal screws.
  - 7. Wood Elements: Use wood screws.

## 2.2 STEEL CHANNEL

- A. Description: Galvanized steel in exterior locations, painted steel for interior applications.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Provide anchors, fasteners, and supports in accordance with NECA "Standard of Installation".
- C. Do not fasten supports to pipes, ducts, mechanical equipment, and conduit.
- D. Do not use powder-actuated anchors.
- E. Do not drill or cut structural members.
- F. Fabricate supports from structural steel or steel channel. Rigidly weld members or use hexagon head bolts to present neat appearance with adequate strength and rigidity. Use spring lock washers under all nuts.
- G. Install surface-mounted cabinets and panelboards with minimum of four anchors.
- H. In wet and damp locations use steel channel supports to stand cabinets and panelboards one inch off wall.
- I. Use sheet metal channel to bridge studs above and below cabinets and panelboards recessed in hollow partitions.
- J. Use galvanized steel channel to construct electrical equipment supports for all exterior mounted equipment that cannot be fastened to a building wall. Use a minimum of two (2) vertical channels with additional horizontal channels where multiple disconnects, starters or where a panelboard is installed. Set vertical members in concrete foundation or anchor to equipment slabs with galvanized angle brackets and 3/8 stainless steel bolts and expansion anchors, minimum of 2 per member.

END OF SECTION 260529

## SECTION 260532 - CONDUIT

### PART 1 - GENERAL

#### 1.1 WORK INCLUDED:

- A. Rigid metal conduit and fittings.
- B. Electrical metallic tubing and fittings.
- C. Electrical non-metallic conduit
- D. Flexible metal conduit and fittings.
- E. Liquidtight flexible metal conduit and fittings.
- F. Surface metal raceways.

#### 1.2 REFERENCES

- A. ANSI C80.1 - Rigid Steel Conduit, Zinc-Coated.
- B. ANSI C80.3 - Electrical Metallic Tubing, Zinc-Coated.
- C. ANSI/NEMA FB 1 - Fittings and Supports for Conduit and Cable Assemblies.
- D. NEMA TC 2 - Electrical Polyvinyl Chloride (PVC) Tubing and Conduit.
- E. NEMA TC 3 - PVC Fittings for Use with Rigid PVC Conduit and Tubing.

#### 1.3 SUBMITTALS

- A. Submit under provisions of Section 260305.
- B. Product Data: Provide for all conduit types, fittings, conduit bodies, surface metal raceways and accessory fittings and device boxes.
- C. Submit product data for the following :
  - 1. Flexible metal conduit.
  - 2. Liquidtight flexible metal conduit.
  - 3. Nonmetallic conduit.
  - 4. Flexible nonmetallic conduit.
  - 5. Raceway fittings.
  - 6. Conduit bodies.
  - 7. Surface raceway.
  - 8. Wireway.
  
  - 9. Pull and junction boxes.
  - 10. Handholes.

## PART 2 - PRODUCTS

### 2.1 RIGID METAL CONDUIT AND FITTINGS

- A. Rigid Steel Conduit: ANSI C80.1.
- B. Fittings and Conduit Bodies: ANSI/NEMA FB 1; threaded type, material to match conduit.

### 2.2 ELECTRICAL METALLIC TUBING (EMT) AND FITTINGS

- A. EMT: ANSI C80.3. Galvanized tubing.
- B. Fittings and Conduit Bodies: ANSI/NEMA FB 1; steel or malleable iron, compression type.

### 2.3 FLEXIBLE METAL CONDUIT AND FITTINGS

- A. Conduit: FS WW-C-566; steel.
- B. Fittings and Conduit Bodies: ANSI/NEMA FB 1.

### 2.4 LIQUIDTIGHT FLEXIBLE CONDUIT AND FITTINGS

- A. Conduit: Flexible metal conduit with PVC jacket.
- B. Fittings and Conduit Bodies: ANSI/NEMA FB 1.

### 2.5 NONMETALLIC CONDUIT

- A. Description: NEMA TC 2; Schedule 40 PVC.
- B. Fittings and Conduit Bodies: NEMA TC 3.

### 2.6 CONDUIT SUPPORTS

- A. Conduit Clamps, Straps, and Supports: Steel or malleable iron.

### 2.7 SURFACE METAL RACEWAY

- A. Manufacturers:
  - 1. The Legrand Wiremold Co. Series 2000 metal raceway.
  - 2. Substitutions: Not Permitted.
- B. Product Description: Sheet metal channel with fitted cover, suitable for use as surface metal raceway.
- C. Nominal Size: 1-1/4 x 3/4 inch.
- D. Finish: Buff enamel.
- E. Fittings, Boxes, and Extension Rings: Furnish manufacturer's standard accessories; match finish on raceway.

## PART 3 - EXECUTION

### 3.1 CONDUIT SIZING, ARRANGEMENT AND SUPPORT

- A. Install conduit in accordance with NECA "Standard of Installation."
- B. Install nonmetallic conduit in accordance with manufacturer's instructions.
- C. Size conduit for conductor type installed or for Type THWN conductors, whichever is larger; 1/2 inch minimum size.
- D. Arrange conduit to maintain headroom and present a neat appearance.
- E. Route exposed conduit and conduit above accessible ceilings parallel and perpendicular to walls and adjacent piping.
- F. Maintain minimum 6 inch clearance between conduit and piping. Maintain 12 inch clearance between conduit and heat sources such as flues, steam pipes, and heating appliances.
- G. Arrange conduit supports to prevent distortion of alignment by wire pulling operations. Fasten conduit using galvanized straps, lay-in adjustable hangers, clevis hangers, or bolted split stamped galvanized hangers.
- H. Group conduit in parallel runs where practical and use conduit rack constructed of steel channel with conduit straps or clamps. Provide space for 25 percent additional conduit.
- I. Do not fasten conduit with wire or perforated pipe straps. Remove all wire used for temporary conduit support during construction, before conductors are pulled.
- J. Support conduit at a maximum of 7 feet on center.
- K. Do not use flexible conduit in lengths exceeding six feet.

### 3.2 CONDUIT INSTALLATION

- A. All conduit in finished spaces and normally occupied spaces shall be concealed where ever possible. Where conduit cannot be concealed, use surface metal raceway and manufacturer's standard accessory fittings and device boxes.
- B. Cut conduit square using a saw or pipecutter; de-burr cut ends.
- C. Bring conduit to the shoulder of fittings and couplings and fasten securely.
- D. Join nonmetallic conduit using cement as recommended by manufacturer. Wipe nonmetallic conduit dry and clean before joining. Apply full even coat of cement to entire area inserted in fitting. Allow joint to cure for 20 minutes, minimum.
- E. Use conduit hubs or sealing locknuts for fastening conduit to cast boxes, and for fastening conduit to sheet metal boxes in damp or wet locations.
- F. Install no more than the equivalent of three 90-degree bends between boxes.

- G. Use conduit bodies to make sharp changes in direction, as around beams.
- H. Use hydraulic one-shot conduit bender or factory elbows for bends in conduit larger than 2 inch size.
- I. Avoid moisture traps where possible; where unavoidable, provide junction box with drain fitting at conduit low point.
- J. Use suitable conduit caps to protect installed conduit against entrance of dirt and moisture.
- K. Provide No. 12 AWG insulated conductor or suitable pull string in empty conduit, except sleeves and nipples.
- L. Install expansion joints where conduit crosses building expansion joints.
- M. Where conduit penetrates fire-rated walls and floors, provide mechanical fire-stop fittings with UL listed fire rating equal to wall or floor rating.
- N. Route conduit through roof openings for piping and ductwork where possible; otherwise, route through roof jack with pitch pocket.
- O. Maximum Size Conduit in Slabs Above Grade: 1" inch. Do not route conduits to cross each other in slabs above grade.
- P. Surface Raceway: Install flat-head screws, clips, and straps to fasten raceway channel to surfaces; mount plumb and level. Install insulating bushings and inserts at connections to outlets and corner fittings.

### 3.3 CONDUIT INSTALLATION SCHEDULE

- A. Underground Installations For Service Entrance and Building Feeder Conductors: Galvanized rigid steel conduit coated with asphaltum paint after fabrication/installation and prior to backfilling or PVC conduit encased in minimum 3" thickness concrete all around.
- B. Underground Installations and in Concrete Slabs: Schedule 40 PVC nonmetallic conduit. Convert PVC to metallic conduit including any elbows before rising through concrete slabs and continue metallic conduit to electrical enclosures.
- C. Exposed Outdoor Locations: Rigid steel conduit.
- D. Wet Interior Locations: Rigid steel conduit.
- E. Concealed Dry Interior Locations: Inside walls and above ceilings; Electrical metallic tubing.
- F. Exposed Dry Interior Locations: In mechanical and electrical rooms and similar utility spaces; Any conduit meeting NEC requirements.  
In finished spaces and normally occupied spaces; Surface metal raceway.

### 3.4 PAINTING

- A. All conduit shall be field painted to match the adjacent wall color where walls are painted.
- B. Surface metal raceway shall be manufacturer's standard painted finish.
- C. All conduit containing fire alarm conductors shall be painted red.

END OF SECTION 260532





## SECTION 260533 - BOXES

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Wall and ceiling outlet boxes.
- B. Pull and junction boxes.

#### 1.2 RELATED SECTIONS

- A. Section 262726 - Wiring Devices: Wall plates in finished areas and access floor boxes.

#### 1.3 REFERENCES

- A. NECA - Standard of Installation.
- B. NEMA FB 1 - Fittings and Supports for Conduit and Cable Assemblies.
- C. NEMA OS 1 - Sheet-steel Outlet Boxes, Device Boxes, Covers, and Box Supports.
- D. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).
- E. NFPA 70 - National Electrical Code.

#### 1.4 SUBMITTALS FOR REVIEW

- A. Submit shop drawings and product data under the provisions of Section 26 03 05.

#### 1.5 SUBMITTALS FOR CLOSEOUT

- A. Section 017800 - Closeout Submittals: Operation and Maintenance Data submittals for Project closeout.
- B. Record actual locations and mounting heights of outlet, pull, and junction boxes on project record documents.

#### 1.6 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.
- B. Provide Products listed and classified by Underwriters Laboratories, Inc., as suitable for the purpose specified and indicated.

### PART 2 - PRODUCTS

#### 2.1 OUTLET BOXES

- A. Sheet Metal Outlet Boxes: NEMA OS 1, galvanized steel.
- B. Luminaire and Equipment Supporting Boxes: Rated for weight of equipment supported; include 1/2

inch (13 mm) male fixture studs where required.

- C. Concrete Ceiling Boxes: Concrete type.
- D. Cast Boxes: NEMA FB 1, Type FD, cast ferrous alloy. Provide gasketed cover by box manufacturer. Provide threaded hubs.
- E. Wall Plates for Finished Areas: As specified in Section 262726.

## 2.2 PULL AND JUNCTION BOXES

- A. Sheet Metal Boxes: NEMA OS 1, galvanized steel.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify locations of floor boxes and outlets in offices, and work areas prior to rough-in.

### 3.2 INSTALLATION

- A. Install boxes in accordance with NECA "Standard of Installation."
- B. Install in locations as shown on Drawings, and as required for splices, taps, wire pulling, equipment connections and compliance with regulatory requirements.
- C. Set wall mounted boxes at elevations to accommodate mounting heights specified in section for outlet device.
- D. Electrical boxes are shown on Drawings in approximate locations unless dimensioned. Adjust box location up to 3 feet if required to accommodate intended purpose.
- E. Orient boxes to accommodate wiring devices oriented as specified in Section 262726.
- F. Maintain headroom and present neat mechanical appearance.
- G. Install pull boxes and junction boxes above accessible ceilings and in unfinished areas only.
- H. Inaccessible Ceiling Areas: Install outlet and junction boxes no more than 6 inches (150 mm) from ceiling access panel or from removable recessed luminaire.
- I. Install boxes to preserve fire resistance rating of partitions and other elements.
- J. Coordinate mounting heights and locations of outlets mounted above counters, benches, and backsplashes.
- K. Locate outlet boxes to allow luminaires positioned as shown on reflected ceiling plan.
- L. Align adjacent wall mounted outlet boxes for switches, thermostats, and similar devices.
- M. Use flush mounting outlet box in finished areas.

- N. Locate flush mounting box in masonry wall to require cutting of masonry unit corner only. Coordinate masonry cutting to achieve neat opening.
- O. Do not install flush mounting box back-to-back in walls; provide minimum 6 inches (150 mm) separation. Provide minimum 24 inches (600 mm) separation in acoustic rated walls.
- P. Secure flush mounting box to interior wall and partition studs. Accurately position to allow for surface finish thickness.
- Q. Use stamped steel bridges to fasten flush mounting outlet box between studs.
- R. Install flush mounting box without damaging wall insulation or reducing its effectiveness.
- S. Use adjustable steel channel fasteners for hung ceiling outlet box.
- T. Do not fasten boxes to ceiling support wires.
- U. Support boxes independently of conduit.
- V. Use gang box where more than one device is mounted together. Do not use sectional box.
- W. Use gang box with plaster ring for single device outlets.
- X. Use cast outlet box with gasket cover in exterior locations and wet locations.
- Y. Use cast floor boxes for installations in slab on grade; formed steel boxes are acceptable for other installations.
- Z. Set floor boxes level.
- AA. Large Pull Boxes: Use NEMA 1 hinged enclosure in interior dry locations, and NEMA 3R hinged enclosure in other locations.

### 3.3 ADJUSTING

- A. Adjust floor box flush with finish flooring material.
- B. Adjust flush-mounting outlets to make front flush with finished wall material.
- C. Install knockout closures in unused box openings.

### 3.4 CLEANING

- A. Clean interior of boxes to remove dust, debris, and other material.
- B. Clean exposed surfaces and restore finish.

### 3.5 PAINTING

- A. Paint all junction boxes to match adjacent wall color where walls are painted.

B. Paint all junction boxes containing fire alarm conductors red.

END OF SECTION 260533

## SECTION 260553 - ELECTRICAL IDENTIFICATION

### PART 1 - GENERAL

#### 1.1 WORK INCLUDED

- A. Nameplates.
- B. Wire and cable markers.
- C. Conduit color coding.

#### 1.2 SUBMITTALS

- A. Submit shop drawings under provisions of Section 260305. Include schedule for nameplates and tape labels.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Nameplates: Engraved three-layer laminated plastic, White letters on a Black background, unless otherwise noted on the drawings.

#### 2.2 MARKERS

- A. Wire and Cable Markers: Cloth markers, split sleeve or tubing type.

#### 2.3 UNDERGROUND WARNING TAPE

- A. Description: 4 inch wide plastic tape, detectable type, colored yellow with suitable warning legend describing buried electrical lines.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Degrease and clean surfaces to receive nameplates.
- B. Install nameplates parallel to equipment lines.
- C. Secure nameplates to equipment fronts using screws, rivets, or adhesive. Secure nameplate to inside face of recessed panelboard doors in finished locations.
- D. Embossed tape will not be permitted for any application.

#### 3.2 WIRE IDENTIFICATION

- A. Provide wire markers on each feeder conductor in panelboard gutters, pull boxes, and at load connection.

Identify with feeder number for power and lighting circuits.

### 3.3 NAME PLATE ENGRAVING SCHEDULE

- A. Provide nameplates of minimum letter height as scheduled below.
- B. Panelboards and Switchboards: 1/4 inch; identify equipment designation. 1/8 inch; identify voltage rating and source.
- C. Individual Circuit Breakers, Enclosed Switches, and Motor Starters: 1/8 inch; identify load served.

### 3.4 Conduit Marker Installation:

- A. Paint conduit marker for each conduit longer than 6 feet.
  - 1. Conduit Marker Spacing: 20 feet on center.
  - 2. Raceway Painting: Identify conduit using field painting in accordance with Section 099000.
  - 3. Paint bands 20 feet on center.
    - a. Fire Alarm Color: Red.

END OF SECTION 260553

## SECTION 262416 - PANELBOARDS

### PART 1 - GENERAL

#### 1.1 WORK INCLUDED

- A. Distribution panelboards.
- B. Lighting and appliance branch circuit panelboards.

#### 1.2 REFERENCES

- A. NEMA AB 1 - Molded Case Circuit Breakers.
- B. NEMA PB 1 - Panelboards.
- C. NEMA PB 1.1 - Instructions for Safe Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less.
- D. NEMA PB 1.2 - Application Guide for Ground-fault Protective Devices for Equipment.

#### 1.3 SUBMITTALS

- A. Submit shop drawings and product data for equipment and component devices under provisions of Section 260305.
- B. Include outline and support point dimensions, voltage, main bus ampacity, integrated short circuit ampere rating, circuit breaker and fusible switch arrangement and sizes.

#### 1.4 SPARE PARTS

- A. Keys: Furnish 2 each to Owner, for each cabinet lock installed.

### PART 2 - PRODUCTS

#### 2.1 MAIN DISTRIBUTION PANELBOARDS AND PANELBOARDS FOR AIR CONDITIONING EQUIPMENT:

- A. Panelboards: NEMA PB 1; circuit breaker type. Rated for service entrance where used as main distribution panel.
- B. Enclosure: NEMA PB 1; Type 1. Cabinet size: 6 inches deep; 20 inches wide and NEMA type 3R for outdoor installation.
- C. Provide cabinet front, surface door-in-door type, fastened with hinged door with flush lock, with metal directory frame. Finish in manufacturer's standard gray enamel.
- D. Provide panelboards with copper bus, ratings as scheduled on Drawings. Provide copper ground bus in all panel boards.



- E. Minimum Integrated Short Circuit Rating: 22,000 amperes rms symmetrical for 208 volt and 25,000 amperes rms symmetrical for 480 volt. Select panelboards rated to meet maximum rms amperes symmetrical as required by the utility company service requirements.
- F. Molded Case Circuit Breakers: NEMA AB 1 provide circuit breakers with integral thermal and instantaneous magnetic trip in each pole. Provide circuit breakers UL listed as Type HACR for air conditioning equipment branch circuits.

## 2.2 BRANCH CIRCUIT PANELBOARDS

- A. Lighting and Branch Circuit Panelboards: NEMA PB1; circuit breaker type.
- B. Enclosure: NEMA PB 1; Type 1 indoor, NEMA 3R outdoor.
- C. Cabinet Size: 6 inches deep; 20 inches wide.
- D. Provide flush or surface as cabinet front as indicated with hinged interior cover concealed trim clamps, concealed hinge and flush lock all keyed alike. Finish in manufacturer's standard gray enamel.
- E. Provide panelboards with copper bus, ratings as scheduled on Drawings. Provide copper ground bus in all panelboards.
- F. Minimum Integrated Short Circuit Rating: 10,000 amperes rms symmetrical for 208 volt panelboards and 14,000 amperes rms symmetrical for 480 volt panelboards.
- G. Molded Case Circuit Breakers: NEMA AB 1; bolt-on type thermal magnetic trip circuit breakers, with common trip handle for all poles. Provide circuit breakers UL listed as Type SWD for lighting circuits. Provide UL Class A ground fault interrupter circuit breakers for circuits indicated on Drawings.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install panelboards plumb and flush with wall finishes, in conformance with NEMA PB 1.1.
- B. Height: 6 ft.
- C. Provide filler plates for unused spaces in panelboards.
- D. Provide typed circuit directory for each branch circuit panelboard. Revise directory to reflect circuiting changes required to balance phase loads.
- E. Stub 5 empty one inch conduits to accessible location above ceiling out of each recessed panelboard.

### 3.2 FIELD QUALITY CONTROL

- A. Measure steady state load currents at each panelboard feeder. Should the difference at any panelboard between phases exceed 20 percent, rearrange circuits in the panelboard to balance the phase loads within 20 percent. Take care to maintain proper phasing for multi-wire branch circuits.
- B. Visual and Mechanical Inspection: Inspect for physical damage, proper alignment, anchorage, and grounding. Check proper installation and tightness of connections for circuit breakers, fusible switches, and fuses.

### 3.3 PANELBOARD SCHEDULE

- A. Panelboards shall be as scheduled on the Drawings.

### 3.4 SURGE SUPPRESSION

- A. Provide transient voltage surge suppression protection according to Section 263555, "Transient Voltage Surge Suppression" on all new panelboards.

END OF SECTION 262416



## SECTION 262716 - CABINETS AND ENCLOSURES

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Hinged cover enclosures.
- B. Cabinets.
- C. Terminal blocks.
- D. Accessories.

#### 1.2 RELATED SECTIONS

- A. Section 260529 - Supporting Devices.

#### 1.3 REFERENCES

- A. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).
- B. NEMA ICS 4 - Terminal Blocks for Industrial Control Equipment and Systems.
- C. ANSI/NFPA 70 - National Electrical Code.

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 260305.
- B. Product Data: Provide manufacturer's standard data for enclosures and cabinets.
- C. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of Product.

#### 1.5 REGULATORY REQUIREMENTS

- A. Conform to requirements of ANSI/NFPA 70.
- B. Furnish products listed and classified by Underwriters Laboratories, Inc. as suitable for purpose specified and shown.

#### 1.6 EXTRA MATERIALS

- A. Provide two of each cabinet key.

### PART 2 - PRODUCTS

## 2.1 HINGED COVER ENCLOSURES

- A. Construction: NEMA 250, Type 12 steel enclosure.
- B. Covers: Continuous hinge, held closed by flush latch operable by key.
- C. Provide interior metal panel for mounting terminal blocks and electrical components; finish with white enamel.
- D. Enclosure Finish: White enamel. Stainless steel in manufacturing areas and laboratories.

## 2.2 CABINETS

- A. Boxes: Galvanized steel.
- B. Backboard: Provide interior metal panel for mounting terminals blocks and electrical components; finish with white enamel.
- C. Fronts: Steel, flush type with concealed trim clamps, concealed hinge, and flush lock keyed to match branch circuit panelboard. Finish with gray baked enamel.
- D. Provide metal barriers to separate compartments containing control wiring operating at less than 50 volts from power wiring.
- E. Provide accessory feet for free-standing equipment.

## 2.3 TERMINAL BLOCKS

- A. Terminal Blocks: ANSI/NEMA ICS 4.
- B. Power Terminals: Unit construction type with closed back and tubular pressure screw connectors, rated 600 volts.
- C. Signal and Control Terminals: Modular construction type, suitable for channel mounting, with tubular pressure screw connectors, rated 300 volts.
- D. Provide ground bus terminal block, with each connector bonded to enclosure.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install Products in accordance with manufacturer's instructions.
- B. Install enclosures and boxes plumb. Anchor securely to wall and structural supports at each corner.
- C. Install cabinet fronts plumb.

END OF SECTION 262716

## SECTION 262826 - ENCLOSED EMERGENCY AUTOMATIC TRANSFER SWITCH

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Automatic transfer switch.

#### 1.2 RELATED SECTIONS

- A. Section 260553 - Electrical Identification: Engraved nameplates.
- B. Section 263214 - Engine-Emergency Generator: Testing requirements.

#### 1.3 REFERENCES

- A. NFPA 70 - National Electrical Code.
- B. NEMA ICS 1 - General Standards for Industrial Control and Systems.
- C. NEMA ICS 2 - Standards for Industrial Control Devices, Controllers, and Assemblies.
- D. NEMA ICS 6 - Enclosures for Industrial Controls and Systems.

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 26 03 05 1.6.
- B. Product Data: Provide catalog sheets showing voltage, switch size, ratings and size of switching and overcurrent protective devices, operating logic, short circuit ratings, dimensions, and enclosure details.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of Product.

#### 1.5 OPERATION AND MAINTENANCE DATA

- A. Submit under provisions of Section 26 03 05 1.6
- B. Operation Data: Include instructions for operating equipment. Include instructions for operating equipment under emergency conditions when engine generator is running.
- C. Maintenance Data: Include routine preventative maintenance and lubrication schedule. List special tools, maintenance materials, and replacement parts.

#### 1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years experience, and with service facilities within 2 hours travel time of Project.
- B. Supplier: Authorized distributor of specified manufacturer with minimum three years experience.

## 1.7 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.
- B. Furnish products listed and classified by UL as suitable for purpose specified and indicated.

## 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site under provisions of Section 26 03 05.
- B. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.
- C. Handle in accordance with manufacturer's written instructions. Lift only with lugs provided for the purpose. Handle carefully to avoid damage to internal components, enclosure and finish.

## 1.9 MAINTENANCE SERVICE

- A. Furnish service and maintenance of transfer switch for one year from Date of Substantial Completion.

## 1.10 MAINTENANCE MATERIALS

- A. Provide maintenance materials under provisions of Section 01 70 00.
- B. Provide one (1) of each special tool required for maintenance.

## PART 2 - PRODUCTS

### 2.1 AUTOMATIC TRANSFER SWITCH

- A. Description: NEMA ICS 2, automatic transfer switch suitable for use as service equipment.
- B. Configuration: Electrically operated, mechanically held transfer switch.

### 2.2 SERVICE CONDITIONS

- A. Service Conditions: NEMA ICS 1.
- B. Temperature: -40 degrees F to 122 degrees F.
- C. Altitude: up to 10,000 feet without derating.

### 2.3 RATINGS

- A. Voltage: 480 volts, three phase, four wire, 60 Hz.
- B. Switched Poles: 4.
- C. Load Inrush Rating: Combination load.

- D. Continuous Rating: 600 amps.
- E. Interrupting Capacity: 100 percent of continuous rating.
- F. Withstand Current Rating: 30,000 rms symmetrical amperes, when used with molded case circuit breaker.

#### 2.4 PRODUCT OPTIONS AND FEATURES

- A. Indicating Lights: Mount in cover of enclosure to indicate NORMAL SOURCE AVAILABLE, ALTERNATE SOURCE AVAILABLE, AND SWITCH POSITION.
- B. Test Switch: Mount in cover of enclosure to simulate failure of normal source.
- C. Return to Normal Switch: Mount in cover of enclosure to initiate manual transfer from alternate to normal source.
- D. Transfer Switch Auxiliary Contacts: 2 normally open; 2 normally closed.
- E. Normal Source Monitor: Monitor each line of normal source voltage and frequency; initiate transfer when voltage drops below 85 percent or frequency varies more than 5 percent from rated nominal value.
- F. Alternate Source Monitor: Monitor alternate source voltage and frequency; inhibit transfer when voltage is below 85 percent or frequency varies more than 5 percent from rated nominal value.
- G. Key operated selector switch to select automatic or manual operation.
- H. Include internal manual operating handle for complete manual operation.

#### 2.5 AUTOMATIC SEQUENCE OF OPERATION

- A. Initiate Time Delay to Start Alternate Source Engine Generator: Upon initiation by normal source monitor.
- B. Time Delay To Start Alternate Source Engine Generator: 0 to 60 seconds, adjustable, set at 1 second.
- C. Initiate Transfer Load to Alternate Source: Upon initiation by normal source monitor and permission by alternate source monitor.
- D. Time Delay Before Transfer to Alternate Power Source: 0 to 60 seconds, adjustable, set at 0 second.
- E. Initiate Retransfer Load to Normal Source: Upon permission by normal source monitor.
- F. Time Delay Before Transfer to Normal Power: 0 to 30 minutes, adjustable, set at 5 minutes; bypass time delay in event of alternate source failure.
- G. Time Delay Before Engine Shut Down: 0 to 30 minutes, adjustable, of unloaded operation.
- H. Engine Exerciser: Start engine every month; run for 30 minutes before shutting down. Bypass exerciser



control if normal source fails during exercising period.

- I. Alternate System Exerciser: Transfer load to alternate source during engine exercising period.
- J. Switching from manual to automatic start setting during normal utility power outage shall initiate automatic transfer switch operation, generator startup and switch transfer. Switch shall return to normal utility power and initiate generator cool down and generator shut down upon normal utility power restoration.

## 2.6 ENCLOSURE

- A. Enclosure: ICS 6, Type 4.
- B. Finish: Manufacturer's standard gray enamel.

## 2.7 ACCEPTABLE MANUFACTURER

- A. Switch shall be model KCP series as manufactured by Kohler Power Systems or approved equal. Model KCP-DMVD-0600S.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that surface is suitable for transfer switch installation.

### 3.2 INSTALLATION

- A. Install transfer switches in accordance with manufacturer's instructions.
- B. Provide engraved plastic nameplates under the provisions of Section 26 05 53.

### 3.3 MANUFACTURER'S FIELD SERVICES

- A. Prepare and start systems under provisions of Section 26 03 05.

### 3.4 ADJUSTING

- A. Adjust Work under provisions of Section 260305.
- B. Adjust time delays to start generator and transfer load to emergency source within ten seconds from loss of normal power.

### 3.5 DEMONSTRATION

- A. Provide systems demonstration under provisions of Section 260305.
- B. Demonstrate operation of transfer switch in normal, and emergency modes.

END OF SECTION 262826

## SECTION 263213 - ENCLOSED EMERGENCY ENGINE GENERATOR

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Packaged engine generator set.
- B. Exhaust silencer and fittings.
- C. Fuel fittings and tank.
- D. Battery and charger.
- E. Remote Annunciator Panel
- F. Weatherproof enclosure.

#### 1.2 RELATED SECTIONS

- A. Section 262827 - Enclosed Standby Automatic Transfer Switch

#### 1.3 REFERENCES

- A. NEMA AB1 - Molded Case Circuit Breakers.
- B. NEMA MG1 - Motors and Generators.
- C. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum.)
- D. NFPA 30 - Flammable and Combustible Liquids Code.
- E. NFPA 70 - National Electrical Code.

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 260305.
- B. Shop Drawings: Indicate electrical characteristics and connection requirements. Show plan and elevation views with overall and interconnection point dimensions, fuel consumption rate curves at various loads, ventilation and combustion air requirements, electrical diagrams including schematic and interconnection diagrams.
- C. Product Data: Provide data showing dimensions, weights, ratings, interconnection points, and internal wiring diagrams for engine, generator, control panel, battery, battery rack, battery charger, exhaust silencer, vibration isolators, day tank, and remote radiator.
- D. Test Reports: Indicate results of performance testing.
- E. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by Product testing agency. Include instructions for storage, handling, protection, examination, preparation,

installation, and starting of Product.

F. Manufacturer's Certificate: Certify that Products meet or exceed specified requirements.

#### 1.5 OPERATION AND MAINTENANCE DATA

A. Submit under provisions of Section 260305.

B. Operation Data: Include instructions for normal operation.

C. Maintenance Data: Include instructions for routine maintenance requirements, service manuals for engine and fuel tank, oil sampling and analysis for engine wear, and emergency maintenance procedures.

#### 1.6 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years experience and with service facilities within two hours travel time of Project.

B. Supplier: Authorized distributor of specified manufacturer with minimum three years experience.

#### 1.7 REGULATORY REQUIREMENTS

A. Conform to requirements of NFPA 70.

B. Furnish Products listed and classified by Underwriters Laboratories as suitable for purpose specified and indicated.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site under provisions of Section 26 03 05.

B. Accept unit at site. Inspect for damage.

#### 1.9 WARRANTY

A. Provide complete Manufacturer's Warranty for five years from the date of substantial completion to include coverage for complete assembly including materials and labor. Warranty shall include all costs associated with any repairs and replacements required as a result of a failure of the equipment.

#### 1.10 MAINTENANCE SERVICE

A. Provide preventive maintenance and service for five years from the date of substantial completion.

B. Include quarterly inspection by a qualified technician. As a minimum check and test the following systems.

1. Check for holes, leaks and loose connections in the air intake system.

2. Check fuel level and fuel transfer pump operation.

3. Check fuel hoses for cuts and abrasions. Check connections for leaks.

4. Check for holes, leaks and loose connections in the exhaust system. Drain condensate traps.

5. Check coolant system for leaks including hoses, clamps and radiator.

6. Check all meters, gauges, indicator lamps and alarms for proper operation.

7. Check battery condition, battery cables and charge. Recharge batteries if specific gravity is less than 1.260. Replace failed batteries.
  8. Check crankcase breather openings for restrictions.
  9. Run genset to complete inspection.
- C. Include semi-annual inspection by a qualified technician. As a minimum perform quarterly inspection checks and the following additional maintenance procedures.
1. Change engine oil.
  2. Change engine oil filter and the full-flow and by-pass oil filters.
  3. Dispose of used oil and filters adhering to EPA regulations.
  4. Clean crankcase breather filters.
  5. Drain sediment from fuel tanks. Change fuel filters.
  6. Chemically test engine coolant for proper percentage mixture.
  7. Check power distribution wiring, connections, circuit breakers.
  8. Clean accumulations of grease, oil and dirt on the genset.
  9. Run genset by simulating a power outage from the facility electrical distribution system.
- D. Include annual inspection by a qualified technician. As a minimum perform quarterly and semi-annual inspection checks and procedures and the following additional maintenance procedures.
1. Check fan belts, pulleys and water pump condition.
  2. Change engine coolant.
  3. Resistive load bank test the generator.

#### 1.11 MAINTENANCE MATERIALS

- A. Furnish one set of tools required for preventative maintenance of the engine generator system. Package tools in adequately sized metal tool box.

#### 1.12 EXTRA MATERIALS

- A. Provide two of each fuel, oil and air filter element under provisions of Section 16010.

### PART 2 - PRODUCTS

#### 2.1 PACKAGE ENGINE GENERATOR SYSTEM

- A. Description: NFPA 110, engine generator system to provide source of power for Level 1 and 2 applications.
- B. System Capacity: 250 kw, 312.5 kva at elevation of 1,000 feet above sea level, standby rating using engine-mounted radiator.

#### 2.2 ENGINE

- A. Type: Water-cooled, V-type, four stroke cycle, turbocharged and aftercooled, direct injection, compression ignition Diesel internal combustion engine.
- B. Rating: Sufficient to operate under 10 percent overload for one hour in an ambient of 90 degrees F at elevation of 1000 feet.
- C. Fuel System: No. 2 fuel oil.

- D. Engine speed: 1800 rpm.
- E. Governor: EFC electronic governor to maintain engine speed within 0.5 percent, steady state, and 5 percent, no load to full load, with recovery to steady state within 2 seconds following sudden load changes. Equip governor with means for manual operation and adjustment.
- F. Safety Devices: Engine shutdown on high water temperature, low oil pressure, overspeed, and engine overcrank. Limits as selected by manufacturer.
- G. Engine Starting: DC starting system with positive engagement, number and voltage of starter motors in accordance with manufacturer's instructions. Include remote starting control circuit, with MANUAL-OFF-REMOTE selector switch on engine-generator control panel.
- H. Radiator: Radiator using glycol coolant, with blower type fan, sized to maintain safe engine temperature in ambient temperature of 110 degrees F. Radiator air flow restriction 0.5 inches of water maximum.
- I. Engine Accessories: Fuel filter, lube oil filter, intake air filter, lube oil cooler, fuel transfer pump, fuel priming pump, gear-driven water pump. Include fuel pressure gauge, water temperature gauge, and lube oil pressure gauge on engine/generator control panel.
- J. Mounting: Provide unit with suitable spring-type vibration isolators.

### 2.3 GENERATOR

- A. Generator: NEMA MG1, three phase, four pole, reconnectable brushless synchronous generator with brushless exciter.
- B. Rating: 250 kw, 312.5 kva, at 0.8 power factor, 480Y/277 volts, 60 Hz at 1800 rpm.
- C. Insulation Class: H.
- D. Temperature Rise: 125 degrees C Continuous.
- E. Enclosure: NEMA MG1, open drip proof.
- F. Voltage Regulation: Include generator-mounted volts per hertz exciter-regulator to match engine and generator characteristics, with voltage regulation plus or minus 1 percent from no load to full load. Include manual controls to adjust voltage droop, voltage level (plus or minus 5 percent) and voltage gain.

### 2.4 ACCESSORIES

- A. Skid-Mounted Fuel Tank: 1900 gallon minimum size, double-walled steel tank, with fill and vent. Exact tank size shall be selected to run generator for a minimum of 8 hours at full standby loading without need to add fuel.
- B. Exhaust Silencer: Residential type silencer, with muffler companion flanges and flexible stainless steel exhaust fitting, sized in accordance with engine manufacturer's instructions.
- C. Batteries: Heavy duty, diesel starting type lead-acid storage batteries, 170 ampere-hours minimum capacity. Match battery voltage to starting system. Include necessary cables and clamps.

- D. Battery Tray: Treated for electrolyte resistance, constructed to contain spillage.
- E. Battery Charger: Current limiting type designed to float at 2.17 volts per cell and equalize at 2.33 volts per cell. Include overload protection, full wave rectifier, DC voltmeter and ammeter, and 120 volts AC fused input. Provide wall-mounted enclosure to meet NEMA 250, Type 1 requirements.
- F. Line Circuit Breaker: NEMA AB 1, molded case circuit breaker on generator output with integral thermal and instantaneous magnetic trip in each pole, sized in accordance with NFPA 70. Include battery-voltage operated shunt trip, connected to open circuit breaker on engine failure. Unit mount in enclosure to meet NEMA 250, Type 1 requirements.
- G. Engine-Generator Control Panel: NEMA 250, Type 1 generator mounted control panel enclosure with engine and generator controls and indicators. Include provision for padlock and the following equipment and features:
  - 1. Frequency Meter: 45-65 Hz. range, 3.5 inch dial.
  - 2. AC Output Voltmeter: 3.5 inch dial, 2 percent accuracy, with phase selector switch.
  - 3. AC Output Ammeter: 3.5 inch dial, 2 percent accuracy, with phase selector switch.
  - 4. Output voltage adjustment.
  - 5. Push-to-test indicator lamps, one each for low oil pressure, high water temperature, overspeed, and overcrank.
  - 6. Engine start/stop selector switch.
  - 7. Engine running time meter.
  - 8. Oil pressure gauge.
  - 9. Water temperature gauge.
  - 10. Auxiliary Relay: 3PDT, operates when engine runs, with contact terminals prewired to terminal strip.
  - 11. Additional visual indicators and alarms as required by NFPA 110.
- H. Remote Annunciator Panel: Surface mounted panel with brushed stainless steel. Furnish alarm horn and indicators and alarms as follows:
  - 1. High battery voltage (alarm).
  - 2. Low battery voltage (alarm).
  - 3. Low fuel (alarm).
  - 4. System ready.
  - 5. Overcrank (alarm).
  - 6. Emergency stop (alarm).
  - 7. High water temperature (alarm).
  - 8. Overspeed (alarm).
  - 9. Low oil pressure (alarm).
  - 10. Line power available.
  - 11. Generator power available.
  - 12. Lamp test and horn silence switch.
- I. Generator Enclosure:
  - 1. A weatherproof type enclosure shall be provided to house the engine/generator and accessories. The enclosure is to be in complete compliance with the National Electrical Code (NEC), and the National Fire Protection Association (NFPA) with regard to clearances around electrical equipment specified herein. The enclosure shall conform to the following construction and design criteria as set

forth. Enclosure shall be manufactured by Advanced Manufacturing & Power Systems, Inc., DeLand, FL. (A.M.P.S.) Ph. (386) 822-5565. Substitutions must be submitted in writing to the engineer and be accepted as an approved equal prior to bid date.

- a. -Rigidity wind test equal to 170 MPH, or as required by ASCE-7
  - b. -Roof load equal to 30 lbs. per sq. ft.
  - c. -Rain test equal to 4" per hour
  - d. -Florida Department of Buildings and Professional Regulations Modular Building Insignia
  - e. -Large Missile Impact Resistant per FBC 1626.2 Testing Requirements with State of Florida Approval Numbers.
2. Enclosure shall consist of a roof, two (2) sidewalls, two (2) end walls, and be manufactured of formed aluminum components. The enclosure is to be provided with a means for securely attaching the entire structure to the base/fuel tank as specified within.
  3. Roof, sidewalls and end walls shall be of formed 0.090" marine grade aluminum. The roof is to be bolted to both side and end walls to form a complete weather and wind resistance assembly.
  4. A minimum clearance of 20" shall be allowed for walkway space between the generator frame and interior sidewalls. A minimum walkway clearance of 30" shall be allowed between the generator end frame and the interior rear wall of the enclosure. The radiator front face shall be sealed to the front wall utilizing and 2" minimum rubber gasket material to minimize recirculation of radiator air discharge and prevent the transmission of vibration from the packaged generator set to the enclosure.
  5. The radiator front face shall be sealed to the front wall utilizing and 2" minimum rubber gasket material to minimize recirculation of radiator air discharge and prevent the transmission of vibration from the packaged generator set to the enclosure.
  6. Wall framing shall be incorporated in the panels by forming an open back box structure. Skin material shall be minimum thickness .090" marine grade aluminum. Enclosure shall have a baked on painted finish for maximum corrosion resistance. Exterior skin panels shall be integral to the wall structure and not separate pieces riveted onto framing members. Wall panels shall be no wider than 16" each and shall be removable without the use of special tools. Wall and roof panels shall be designed so that field replacement can be accomplished without disassembly of the entire structure if damage should occur.
  7. A minimum of twelve colors shall be available for enclosure exterior. Standard enclosure exterior color is WHITE unless otherwise specified.
  8. Roof assembly shall be cambered to aid in rainwater runoff. Roofs with thicknesses of less than 0.090" nominally shall not be considered. Roof assemblies are to be mechanically fastened to the vertical wall sections. Glued or crimped roofs shall not be allowed nor considered as an acceptable alternative.
  9. Air handling shall be as follows: Air will enter the enclosure through a Hood, Plenum or Sound Attenuated Louvers/Baffles, as determined by the specific application and shall allow for the airflow demand for proper cooling to generator set package. The cooling air Inlet system shall prevent water intrusion into the enclosure with the generator set operating at full rated load while allowing for a maximum air restriction of less than 0.25" H<sub>2</sub>O. Radiator Discharge shall be through a gravity operated extruded aluminum backdraft type damper and into a vertical discharge plenum or hood. Discharge plenum/hood shall discharge air upward and be provided with a means to positively drain

any and all water entering the discharge device. Air discharge devices shall in no event restrict airflow by more than 0.25" H2O. To ensure adequate airflow for cooling and combustion the static restriction over the entire system shall not exceed 0.50" H2O. Both Intake and Discharge hoods and plenums shall be provided with removable bird/rodent screening to prevent the entrance of debris, birds, rodents and other vermin.

10. Acoustical insulation materials shall consist of a UL Classified Thermofiber® insulation material with a heat/fire resistance rating up to 2400° F and provide superior sound attenuation performance. Acoustical insulation material on interior roof and walls is to be mechanically held in place by 0.032" mill finished perforated aluminum with tuned engineered hole diameter for optimum sound attenuation at 1000 Hz. Interior perforated aluminum material shall protect the insulation material as well as allow noise to permeate the absorptive material.
11. Four-point lifting provisions shall be provided and have sufficient capacity suitable for rigging the entire Enclosure assembly.
12. A minimum of two (2) single personnel access doors shall be provided. Doors shall be manufactured of the same material as enclosure. Doors shall be fully gasketed to form a weather tight perimeter seal. Door hinges shall be full length stainless steel piano type and shall be attached with stainless steel hardware. Door handles shall be of a corrosion resistant material and shall provide for a lockable, secure entry point into the enclosure. Doors shall be insulated with no less insulation than is provided in the enclosure walls for sound attenuation.
13. Enclosure manufacturer shall provide all necessary hardware to internally mount the exhaust silencer(s) specified herein. Silencer mounting hardware shall maintain the weatherproof integrity of the enclosure system. The internally mounted silencer shall discharge upward into the radiator discharge plenum or hood where possible, otherwise the enclosure manufacturer shall provide an aluminum rain collar and rain dress shield. Rain Collar and Dress Shield shall be manufactured of aluminum or stainless steel and designed as a circular fabricated part that does not require hole indexing by the installing contractor during site installation.
14. As a minimum the enclosure shall provide an average 25db (A) sound reduction as measured at one meter, five feet above grade level under free field conditions.
15. The Enclosure Components Shall be Registered with the State of Florida Modular Building Program and Have Approval Numbers to Certify the Enclosure Capable of Meeting the Requirements of the Florida Building Code for Large Missile Impact Resistance Per Testing Section 1626.2.

## 2.5 ACCEPTABLE MANUFACTURER

- A. Generator shall be model 250REOZJE as manufactured by Kohler Power Systems with HVHZ rated enclosure as manufactured by AM&PS INC. or approved equals.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install generator and fuel tank in accordance with manufacturer's instructions.
- B. Make connections to Standby Automatic Transfer Switch



- C. Install remote generator annunciator panels where indicated on drawings in Administration Office located in Building 1 and connect in accordance with manufacturer's instructions and wiring diagrams.

### 3.2 QUALITY CONTROL

- A. Before delivery of unit, provide full load test utilizing portable test bank, for four hours minimum.
- B. Record in 20 minute intervals during four hour test:
  - 1. Kilowatts.
  - 2. Amperes.
  - 3. Voltage.
  - 4. Coolant temperature.
  - 5. Ambient temperature.
  - 6. Frequency.
  - 7. Oil pressure.
- C. Provide written report of test certified by generator manufacturer.

### 3.3 MANUFACTURER'S FIELD SERVICES

- A. Deliver generator to project site for demonstration.

### 3.4 DEMONSTRATION

- A. Simulate power outage by interrupting normal source, and demonstrate that system operates to provide auxiliary power. Run load test for 30 minutes minimum during normal business hours.
- B. Instruct Nassau County Public School personnel on generator operation and maintenance. Provide minimum of one hour of training in conjunction with demonstration.

### 3.5 CLEANING

- A. Clean engine and generator surfaces. Replace oil and fuel filters after demonstration.

END OF SECTION 263213