

# **PROJECT MANUAL**

**FOR**



## **CHESTER UPLAND SCHOOL DISTRICT ESSER FUNDS**

### **Marquee Signs Electrical Construction Contract**

**Prepared By: MGE Associates**

**February 16, 2024 – Bid Opening**

## NOTICE OF ADVERTISEMENT

### **Chester Upland School District – ESSER Project**

#### **1. Marquee Signs Electrical Construction Contract**

**Public notice is given that sealed bids/proposals will be received online via the PennBid Program by the Chester Upland School District by February 16, 2024 until 4:00 PM prevailing time.**

**The work included within this the scope of this project includes the electrical installation of electronic message board (Marquee) signs at various schools.**

Bidders are required to submit a surety in the form of a bond or equivalent meeting 10% of the overall bid price in compliance with the contract documents. Bid bonds will be returned to the non-awarded bidders upon the execution of the contract. The successful Bidder shall also be required to provide a Performance Bond in an amount of one hundred percent (100%) of the Contract amount within ten (10) calendar days of receipt of written notice of acceptance of the Bid.

There is no physical public bid opening for this project, bids will be revealed via the PennBid website.

The Successful Bidder Who Is Awarded The Contract, Will Be Required To Pay “PennBid” A Fee Of 0.0033% ( $\frac{1}{3}$  of 1 percent) up to \$5,000 Of The Contract Award Value.

All interested parties must submit questions via PennBid website (<https://pennbid.bonfirehub.com.com/login>) by the posted deadline. Bidders are not permitted to contact the District Engineer or staff directly.

The Bidder's attention is called to the fact that this project is assisted with federal funds, and various federal requirements apply as noted in the bid documents, including but not limited to equal opportunity provisions. Davis-Bacon and Related Acts.

The Bidder's attention is called to the fact that is project is subject to the Pennsylvania Department of Education Standard Terms and Conditions for federally funded grants.

The Contract Documents contain all pertinent regulations. Award of the contract will be to the lowest responsible bidder. The Owner reserves the right to reject any or all bids or to accept any portion of any bid, and to award Contracts as is deemed best for the Owner.

Receiver Nafis Nichols  
Chester Upland School District

Advertised in the Delaware County Times:  
Friday, January 26, 2024 & Wednesday, January 31, 2024

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## **NOTICE TO CONTRACTORS**

Sealed proposals for the Marquee Signs Electrical Construction Contract will be received electronically via the PennBid Program by the Chester Upland School District until February 16, 2024 until 4:00 PM prevailing time, at which time said bids will be publicly opened with the results made available via PennBid.

Plans, Specification, and bid forms may be obtained at no cost on PennBid  
(<https://pennbid.bonfirehub.com.com/login>)

Each bid must be accompanied by either a bid bond in an amount of ten (10%) of the bid amount from a surety satisfactory to the District or by certified check or letter of credit upon a solvent bank in the amount of ten (10%) of the bid amount in favor of the District. Bid Bonds shall be accompanied by Proof of Authority of the official or agent signing the bond.

The Bidder's attention is called to the fact that this project is assisted with federal funds, and various federal requirements apply as noted in the bid documents, including but not limited to equal opportunity provisions. Davis-Bacon and Related Acts, various insurance requirements, various equal opportunity provisions, and the requirement of a payment bond and performance bond for 100% of the contract price.

The Bidder's attention is called to the fact that this project is subject to the Pennsylvania Department of Education Standard Terms and Conditions for federally funded grants.

The Contract Documents contain all pertinent regulations. Award of the contract will be to the lowest responsible bidder. The Owner reserves the right to reject any or all bids or to accept any portion of any bid, and to award Contracts as is deemed best for the Owner.

All prospective bidders are required to present proof of an acceptable disposal method approved by the Pennsylvania Department of Environmental Resources or counterpart Agency in another State. The proof may consist of a copy of a State Solid Waste Disposal Permit to the prospective bidder or a Letter of Approval for the use of a proposed or existing disposal facility which has a permit or is under review for a permit.

Attention is called to the fact that the Contractor must ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, handicap, familial status, or national origin.

No bidder may withdraw his bid within sixty (60) days after the actual date of the opening thereof. Chester Upland School District reserves the right to waive any informalities or to reject any or all bids.

**NONCOLLUSION AFFIDAVIT**

State of

BID Identification: Marquee Signs Electrical Construction Contract

CONTRACTOR \_\_\_\_\_, being first duly sworn, deposes and says that he is \_\_\_\_\_ (sole owner, a partner, president, secretary, etc.) of the party making the foregoing BID; that such BID is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization, or corporation; that such BID is genuine and not collusive or sham; that said BIDDER has not directly or indirectly induced or solicited any other BIDDER to put in a false or sham BID, and has not directly or indirectly colluded, conspired, connived, or agreed with any BIDDER or any one else to put in a sham BID, or that any one shall refrain from bidding; that said BIDDER has not in any manner, directly or indirectly, sought by agreement, communication or conference with any one to fix the BID price of said BIDDER or of any other BIDDER, or to fix any overhead, profit, or cost element of such BID price, or of that of any other BIDDER, or to secure any advantage against the OWNER awarding the contract or anyone interested in the proposed contract; that all statements contained in such BID are true; and, further, that said BIDDER has not, directly or indirectly, submitted his BID price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid and will not pay any fee in connection therewith, to any corporation, partnership, company, association, organization, BID depository, or to any member or agent thereof, or to any other individual except to such person or persons as have a partnership or other financial interest with said BIDDER in his general business.

Signed:

\_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Seal of Notary

\_\_\_\_\_

## BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WE, \_\_\_\_\_ as PRINCIPAL, and \_\_\_\_\_ as SURETY, are held and firmly bound unto the \_\_\_\_\_ (hereinafter called the OWNER), in the penal sum of \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_) lawful money of the United States, for payment of which sum well and truly to be made, we bond ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THE OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying Bid dated \_\_\_\_\_ for \_\_\_\_\_.

NOW, THEREFORE, if the Principal shall not withdraw said Bid within the time specified therein after the opening of the same, and shall within ten (10) days after the Principal is notified by the Owner of the award of such Contract to him, enter into a written contract with the Owner, in accordance with the Bid as accepted; and give bond with good and sufficient surety or sureties as may be required for the faithful performance and proper fulfillment and labor supplied, if required in said Contract; or in event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bonds within the time specified if the Principal shall pay the Owner the difference between the amount specified in said Bid and the amount for which the Owner may procure the required materials or supplies, or both, if the latter amount of the former, together with any other expenses and costs that may have been incurred by the Owner, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above bonded parties have executed this instrument under their several seals this day of \_\_\_\_\_, 20\_\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

WITNESSED BY:

\_\_\_\_\_

(Individual Principal)

Business Address:

ATTEST:

\_\_\_\_\_  
Corporate Principal

Corporate Surety

By:

SEAL

(Power of Attorney for person signing for Surety Company must be attached to bond.)

## INSTRUCTIONS TO BIDDERS

1. **RECEIPT AND OPENING OF BIDS:** Chester Upland School District (herein called the "Owner"), invites bidders to submit sealed bids that will be received online via the PennBid Program by the Chester Upland School District by February 16, 2024, 4:00 PM prevailing time. There is no physical bid opening for this project, bids will be revealed via the PennBid website.

A uniform fee of 0.333% (1/3 of 1 percent) of the bid amount (up to \$5,000.00) is applied only to bidders who area awarded contracts. No fees apply to bidders who submit without being awarded the contract.

**The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids.** Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within thirty (30) days after the actual date of the opening thereof.

2. **PREPARATION OF BID:** Each bid must be submitted electronically via PennBid, on the prescribed form and accompanied by a Bid Bond, Certified Check, or Letter of Credit, the Non-collusion Affidavit, and Subcontractor Declaration Form. All blank spaces for bid prices must be completed, in ink or typewritten, in both words and figures, and the foregoing Certifications must be fully completed and executed when submitted. In case of discrepancies of written words and figures, the prices written in words shall govern.

All bids will be received through the PennBid Program and bidder shall adhere to requirements detailed on the Bid located on the website.

3. **MODIFICATION OF BIDS:** Any bidder may modify his/her bid within PennBid at any time prior to the due date and time listed in the invitation to bid.
4. **METHOD OF BIDDING:** The Owner invites unit price/lump sum price bids as indicated in the Bid Form.

If the lowest total responsive bid received exceeds the amount of funds available to finance the contract, the Owner may:

- a. Reject all bids;
- b. Augment the funds available in an amount sufficient to enable award to the lowest responsive bidder or bidders;
- c. Take the base bid less the alternative deductible (if any) as listed on the proposal form as to produce a net amount which is within available funds.

5. **QUALIFICATIONS OF BIDDER:** The Owner may make such investigations as he/she deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted.
6. **BID SECURITY:** Each bid must be accompanied by cash, certified check of the bidder, or a bid bond prepared on the form of bid bond attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner. Such cash, checks or bid bonds will be returned to all except the three lowest bidders within three days after the opening of bids, and the remaining cash, checks or bid bonds will be returned promptly after the Owner and the accepted bidder have executed the contract,

or, if no award has been made within thirty (30) days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he/she has not been notified of the acceptance of his/her bid. Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

7. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT: The successful bidder, upon his/her failure or refusal to execute and deliver the contract and bonds required within ten (10) days after he/she has received notice of the acceptance of his/her bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his/her bid.
8. CONDITIONS OF WORK: Each bidder must inform himself/herself fully to the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his/her obligation to furnish all material and labor necessary to carry out the provisions of his/her contract. Insofar as possible, the contractor in carrying out the work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor.
9. OBLIGATION OF BIDDER: At the time of the opening of bids each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his/her bid.
10. EXAMINATION OF SITE: Each bidder shall, and is hereby directed to inspect the entire site of the proposed work and judge for himself/herself as to all the circumstances affecting the cost and progress of the work and shall assume all patent and latent risks in connection therewith.
11. SOIL CONDITIONS: NA
12. WORKING FACILITIES: The plans show, in the general manner, the existing structures and the land available for construction purposes. The bidders must satisfy themselves of the conditions and difficulties that may be encountered in the execution of the work at this site.
13. ADDENDA AND INTERPRETATIONS: No official interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally.

Every request for such interpretation should be in writing and will be submitted via the "Clarifications" feature within PennBid, and to be given consideration, must be received at least five (5) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be distributed to all prospective bidders, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his/her bid as submitted. All addenda so issued shall become part of the contract documents.

14. WATER SUPPLY: All water for construction purposed, as well as the expense of having water conveyed about the work, must be provided by the Contractor and the cost of this work shall be included in the unit prices stipulated for the various items of the work to be done under this contract.

The source, quality and quantity of water furnished shall at all times be satisfactory to the Engineer.

15. SIGNATURE OF BIDDERS: The firm, corporate or individual name of the bidder must be signed in ink in the space provided for the signatures on the proposed blanks. In the case of a corporation, the title of the officer signing must be stated and such officer must be thereunto duly authorized and the seal of said corporation duly affixed. In the case of a partnership, the signature of at least one of the partners must follow the firm name, using the term "member of the firm". In the case of an individual, use the terms "doing business as", or "sole owner". The bidder shall further state in his proposal the name and address of each

person or corporation interested therein.

16. NOTICE OF SPECIAL CONDITIONS: Attention of the bidder is particularly called to those parts of the General Contract Conditions and other contract documents and specifications which deal with the following:
- a. Insurance requirements
  - b. Davis Bacon and Related Acts Provisions, including Davis-Bacon Act wage rates
  - c. Requirement for a payment bond and performance bond for 100% of contract price
  - d. Requirement that all subcontractors be approved by the Owner
  - e. Time-for-completion and liquidated damages requirements
  - f. Safety standards
  - g. Contractor's responsibility to obtain permits
  - h. Affirmative Action and Equal Opportunity provisions
  - i. PDE Master Standard Terms and Conditions
17. ADDITIONAL OBLIGATIONS UPON CONTRACT AWARD: Upon award of the contract but prior to issuance of the notice to proceed, the contractor shall submit all of the following documents, completed as required:
- (a) Acceptance of Notice of Award
  - (b) Contract
  - (c) Insurance certificate(s) and/or policy(ies)
  - (d) Performance & Payment bonds
  - (e) Subcontractor declaration form
  - (g) (If over \$10,000:) Certification of Bidder Regarding Equal Employment Opportunity
  - (h) (If over \$10,000:) Certification(s) by (all) Proposed Subcontractors Regarding Equal Employment Opportunity
  - (k) (If over \$100,000:) Certification by Contractor and Subcontractors of Compliance with Clean Air and Water Acts
  - (l) Contractor's Certification Concerning Labor Standards and Prevailing Wage Requirements
  - (m) (All) Subcontractor's Certification(s) Concerning labor Standards and Prevailing Wage Requirements

## **GENERAL CONTRACT CONDITIONS**

### **ARTICLE 1 - CONTRACT AND CONTRACT DOCUMENTS**

- A. All applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.
- B. The Plans, Specifications and Addenda, hereinafter enumerated in Paragraph 1 of the Supplemental General Conditions shall form part of this Contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal notes contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way affect, limit or cast light on the interpretation of the provisions to which they refer.

### **ARTICLE 2 - PERFORMANCE AND PAYMENT BONDS**

Simultaneously with his/her delivery of the executed contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner. The bond shall be for 100 percent of the contract price. A Payment Bond and Performance Bond are required. Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney. Under certain conditions, and within the limits of State and local laws and regulations, the Owner may waive the requirement that the Payment and Performance Bond be underwritten by a surety company and may authorize in lieu thereof, a personal bond backed by a letter of credit from a local lending institution for the full value of the Contract.

### **ARTICLE 3 - WAGE RATES**

In the event that the rate of wages paid for any trade or occupant in the locality where such work is being performed are under current collective agreements or understandings between bona fide organizations of labor and employer, then the wages to be paid shall be not less than such agreed wage rates, nor less than the minimum rates compiled by the Federal Labor Standard Provision. A copy of these prevailing rates of wages has been included in these specifications.

Every Contractor and Subcontractor who is subject to this contract shall, as soon as he/she begins performance under his/her contract with the Owner, supply the Owner a schedule of the dates on which he/she is required to pay wages to employees. After construction begins he/she shall also deliver to the prevailing wage coordinator a weekly, a certified copy of his/her payroll which shall exhibit for each employee paid any wages, name, current address, identification number, number of hours worked each day of the pay period and the total for each week, hourly rate of pay, job classification, fringe payments, and deductions from wages. The certification of each payroll shall be executed by the Contractor, Subcontractor, or duly appointed agent thereof and shall recite that the payroll is correct and complete and that the wage rate shown is not less than those required by the contract.

### **ARTICLE 4 - AFFIRMATIVE ACTION**

Each bidder, Contractor or Subcontractor (hereinafter the Contractor) must fully comply with Executive Order 11246, during the performance of this contract or sub-contract. The Contractor commits itself to the goals for minority manpower utilization, as applicable, and all other requirements, terms and conditions of these bid conditions by submitting a properly signed bid.



The Contractor shall appoint a company executive to assume the responsibility of the Implementation of the requirements, terms and conditions of these bid conditions.

#### ARTICLE 5 - INSURANCE

A. The contractor shall not commence work under this contract until he/she has obtained all the insurance required hereunder and such insurance has been approved by the Owner, nor shall the Contractor allow any Subcontractor to commence work on his/her subcontract until similar insurance required of the Subcontractor has been so obtained and approved. Approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.

B. The Contractor shall file with the Owner all Certificate(s) of Insurance as are necessary to document the insurance coverage required hereunder, subject to the approval of the Owner and receipt of any additional forms/documentation requested, prior to final execution of Agreement Contract and issuance of the Notice to Proceed.

C. Worker's Compensation.

All contractors and subcontractors shall acquire and maintain, during the term of the contract, Worker's Compensation insurance in full compliance with the laws of the State of Pennsylvania. The contractor shall at all times indemnify and save harmless the Owner from all claims for worker's compensation which may be made by any of the employees of any subcontractor to whom the Contract may have let the performance of any part of the work embraced in this contract, and the Contractor will appear for and defend the Owner against any and all such claims.

D. Contractor's Liability Insurance.

(i) The Contractor shall acquire and maintain during the term of the Contract Bodily Injury and Property Damage Liability Insurance under a standard Comprehensive General/Automobile Liability Policy which shall provide and include coverage on all Contractor's Operations, Contractor's Protective (Sublet) Liability, Contractual Liability, Completed Operations Liability, Owned Automobiles and Non-owned and Hired Automobiles.

(ii) Property Damage Liability Insurance shall be provided on any demolition, blasting, excavating, shoring or similar operation on an "if any" basis.

(iii) Bodily Injury Liability limits shall be for an amount of no less the Five Hundred Thousand (\$500,000) Dollars for injuries, including wrongful death to any one person and subject to the same limit for each person, in amount of not less than One Million (\$1,000,000) Dollars on the account of any one occurrence.

(iv) Property Damage Liability Insurance shall be in an amount of not less than Five Hundred Thousand (\$500,000) Dollars per occurrence. General Liability shall be extended to provide "Broad Form Property Damage Liability," and in an amount of not less the One Million (\$1,000,000) dollars aggregate for damage on account of all occurrences.

(v) Any combination of underlying Comprehensive General/Automobile Liability coverage with Umbrella/Excess Liability coverage which provides no less than One Million (\$1,000,000) Dollars Single Limit Bodily Injury & Property Damage Liability Insurance for the Contractor will also be acceptable.

(vi) The owner may adjust the liability limits to coincide with local government procurement policies and practice within the limits of state and local law.

E. Builder's Risk Insurance.

Each Contractor shall maintain insurance to protect himself and the Owner, jointly, from loss incurred by fire, lightning, extended coverage hazards, vandalism, theft, explosion and malicious mischief in the full amount of the Contract and such insurance shall cover all labor and materials connected with the work, including materials delivered to the site but not yet installed.

F. Installation Floater Insurance.

When a Contractor is involved solely in the installation of materials and not in the construction of a building, an Installation Floater is required in lieu of a Builder's Risk Policy with the same general conditions applying as set forth in paragraph E.

G. The Policies as listed above shall all contain the following special provisions:

- (i) "The Company agrees that thirty (30) days prior to cancellation or reduction of the insurance afforded by this policy with respect to the Contract involved, written notice will be mailed to the Chester Upland School District."
- (ii) The maintaining of such insurance as outlined herein shall in no way constitute a waiver of legal liability for damage to any adjoining buildings or their contents or the work and property of others on the site beyond the limits of insurance thus maintained. The Contractor shall hold the Owner free and harmless from any injury and damage resulting from the negligent or faulty performance of the Contract by the Contractor or by his/or her Subcontractors.

H. Additional Insured: Chester Upland School District, MG Engineering Associates, LLC.

ARTICLE 6 - PENNSYLVANIA STEEL PRODUCTS PROCUREMENT ACT

**REFER TO PDE MASTER STANDARD TERMS AND CONDITIONS.**

ARTICLE 7 - SAFETY

- A. The Contractor will be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. He/She will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury, or loss to all employees on the work and other persons who may be affected thereby, all the work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

- B. The Contractor will erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety protection. He/She will notify owners of adjacent utilities when prosecution of the work may affect them.
- C. The Contractor shall comply with the safety standards provisions of applicable laws, building and construction codes and the manual of Accident Prevention in Construction published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the "Federal Register" Volume 36, No. 75, Saturday, April 17, 1971.
- D. The Contractor shall maintain at his/her office or other well known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured at the job site. In no case shall employees be permitted to work at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.
- E. Lights, signs and barricades shall be used to maintain traffic and safety for vehicular and pedestrian traffic during the course of this contract in accordance with the specifications.

#### ARTICLE 8 - PERMITS

The Contractor is responsible for obtaining and paying for all necessary permits and Licenses from the proper authorities. The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the Contract Documents are at variance therewith, he/she shall promptly notify the Owner in writing.

#### ARTICLE 9 - SUPERVISION

- A. The Contractor will supervise and direct the work. He/She will be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The Contractor will employ and maintain on the work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The Supervisor shall have full authority to act on behalf of the Contractor and communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present and on the site at all times as required to perform adequate supervision and coordination of the work.
- B. The Owner and its representatives will at all times have access to the work. In addition, authorized representatives and agents of any participating federal or County agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the work and also for any inspection or testing thereof.
- C. The Contractor shall submit a proposed program of operation, showing clearly how he/she proposed to conduct the work as to bring about the completion of his/her work within the time limit specified. This program shall outline the proposed sequence of operations, the rates of progress and the dates when his/her work will be sufficiently advanced to permit the installation of the work under other contracts, and the estimated progress payments due under the Contract. The work under this contract shall be so scheduled that as structures are completed, they can be placed into useful operation with a minimum of delay. The program shall be subject to the approval of the Owner.
- D. All construction as proposed along all City, Township, County, State and Federal roads including storage and stockpiling of materials, is to be conducted within the limits of the public right-of-way. Bracing, sheeting and shoring shall be used to keep all construction work within the construction limits unless work agreements are secured from the adjacent property Owners. It is the Contractor's

responsibility to secure these work agreements, if deemed necessary. Copies of the work agreements shall be delivered to the Engineer and the Owner prior to any work beginning on the effected property.

#### ARTICLE 10 - CLAIMS AGAINST CONTRACTOR

The Contractor shall indemnify and save the Owner or the owner's agents harmless from all claims growing out of the lawful demands of Subcontractor's laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the work. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged or waived. If the Contractor fails to do so the Owner may, after having notified the Contractor, either pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is fully finished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor, his Surety, or any third party. In paying any unpaid bills of the Contractor, any payment so made by the Owner shall be considered as a payment made under the Contract Documents by the owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments in good faith.

#### ARTICLE 11 - SUBCONTRACTING

- A. Neither the Contractor nor the owner shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of his right, title, or interest therein, or his obligations thereunder.
- B. The Contractor shall not sublet, sell, transfer or assign any portion of the contract without consent of the Owner or his/her designated agent. No subcontract, or transfer of contract, shall in any way release the Contractor of his/her liability under the contract and bonds.
- C. The Contractor shall not award work to Subcontractor(s) not identified on the Subcontractors Declaration Form as submitted with bid, without
  - i) Prior approval of the Owner
  - ii) Submission of all certifications as required in the INSTRUCTIONS TO BIDDERS. The Contractor shall be fully responsible to the Owner for the acts and omissions of the subcontractor(s), and of persons, either directly or indirectly employed by them, as he/she is for the acts and omissions of persons directly employed by him/her.
  - iii) Submission of all certifications as required in the INSTRUCTIONS TO BIDDERS. The Contractor shall be fully responsible to the Owner for the acts and omissions of the subcontractor(s), and of persons, either directly or indirectly employed by them, as he/she is for the acts and omissions of persons directly employed by him/her.

#### ARTICLE 12 - CHANGE OF WORK

- A. The Owner reserves the right to make, at any time during the progress of the work, such increases or decreases in quantities and such alterations in details of work as may be deemed necessary or desirable. Such increases or decreases and alterations shall not invalidate the contract nor release the surety, and the Contractor agrees to perform the work as altered, the same as if it had been a part of the original contract.
- B. Authorized alterations in plans or quantities of work involving work not covered by unit prices in the proposal shall be paid for as stipulated in the change order authorizing such work.
- C. No changes in work covered by the approved Contract shall be made without having prior written approval of the Owner.

#### ARTICLE 13 - TIME

- A. The Date of beginning and the time for completion of the work are essential conditions of the Contract Documents and the work embraced shall be commenced on a date specified in the Notice to Proceed.
- B. The Contractor will proceed with the work at such rate of progress to ensure full completion within the Contract Time. It is expressly understood and agreed, by and between the Contractor and the Owner, that the Contract Time for the completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.
- C. The Contract Time to fully complete the project shall be consecutive calendar days following the date of commencement of work to be specified in a written "Notice to Proceed".
- D. If the Contractor shall fail to complete the work within the Contract Time, or extension of time granted by the Owner, the Contractor will pay to the Owner for liquidated damages \$500.00 for each calendar day that the Contractor shall be in default after the time stipulated in the Contract Documents.

#### ARTICLE 14 - COMPLETION OF WORK

- A. The Contractor shall guarantee all materials and equipment furnished and work performed for a period of one year from the date of Substantial Completion. The Contractor warrants and guarantees for a period of one year from the date of Substantial Completion of the improvement that it is free from all defects due to faulty materials or workmanship, and the Contractor shall promptly make corrections as may be necessary by reason of such defects. The owner will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make repairs, adjustments, or other work, which may be made necessary by such defects, the Owner may do so and charge the Contractor the cost thereby incurred. Upon 100% completion of improvements, the contractor shall provide a Maintenance Bond in the amount of 15% of the cost of improvements for a period of 1-year.
- B. When the work, including that performed by Subcontractors, is completed, the site shall be cleaned of all rubbish and debris caused by the construction. All sheds or other temporary structures, surplus materials, and equipment shall be removed and the project left in a neat and presentable condition.

#### ARTICLE 15 - TERMINATION

After ten (10) days from delivery of a Written Notice to the Contractor, the Owner may, without cause and without prejudice to any other right or remedy elects to terminate the Contract. In such case the Contractor shall be paid for all work executed and any expense sustained plus reasonable profit, unless such termination was due to the act or conduct of the Contractor.

#### ARTICLE 16 - PAYMENT

Payment to the Contractor shall be made by the Chester Upland School District upon receiving invoice from contractor and inspection of work completed. The Owner's representative and the project engineer shall certify on the pay request that the completed work has been approved prior to the submission of the invoice. Retainage to be held should be reflected by the engineer/architect on the contractor's original invoice. A turn-around time of 3-4 weeks is expected before said funds are forwarded to the contractor.

It is important that the progress schedule be based on achievable goals, and that the Contractor makes every effort to meet target dates. The Chester Upland School District may hold the pay request, or a portion of the pay request, in cases where the Contractor is found to be in violation of any of the terms and conditions in this contract, e.g. federal labor standards compliance, until such violations are corrected.

#### ARTICLE 17 - LIVE UTILITIES AND OTHER PROPERTY

The contractor shall assume all responsibility for damage attributed to him to any property upon, or passing through, the Project Area, but excluded from the work or not owned by the Local Public Agency, such as utility lines, surface improvements, or like items.

If disconnections of underground utility services are required to be made in public thoroughfares, the Contractor shall comply with all local requirements and regulations respecting the barricade of streets, the removal and restoration of pavement, and other pertinent matters.

#### ARTICLE 18 - LIVE UTILITIES AND OTHER PROPERTY

The contractor shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms conditions and agreements of said contract.

If disconnections of underground utility services are required to be made in public thoroughfares, the Contractor shall comply with all local requirements and regulations respecting the barricade of streets, the removal and restoration of pavement, and other pertinent matters.

#### ARTICLE 19 - HOLD HARMLESS

The contractor shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the Local Public Agency, with or without notice to the Surety, and he shall satisfy all claims and demands incurred under such contract and shall fully indemnify and save harmless the Local Public Agency from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Local Public Agency all outlay and expense which the Local Public Agency may incur in making good any default.

## SUPPLEMENTAL GENERAL CONDITIONS

1. ENUMERATION OF PLANS, SPECIFICATIONS AND ADDENDA

Following are the Plans, Specifications, and Addenda which form a part of this contract, as set forth in Article I of the General Contract Conditions, "Contract and Contract Documents".

<u>Drawings:</u> Sign Electrical Drawings		Dated Per Plan
<u>Specifications:</u> Technical Specifications		Dated Per Plans
Addenda:	Number	Date

2. STATED ALLOWANCES: Not Included

3. SPECIAL HAZARDS : Not Included

4. CONTRACTOR'S AND SUBCONTRACTOR'S PUBLIC LIABILITY, VEHICLE LIABILITY, AND PROPERTY DAMAGE INSURANCE

See Article 5 of General Contract conditions.

The Contractor shall either (1) require each of his/her subcontractors to procure and to maintain during the life of his/her subcontract, Subcontractor's Public Liability and Property Damage of the type and in the same amounts as specified in Article 5, or (2) insure the activities of his/her subcontractors in his/her own policy.

6. BUILDER'S RISK INSURANCE

The Contractor will maintain Builder's Risk Insurance (fire and extended coverage) on a 100 percent completed value basis on the insurable portions of the project for the benefit of the Owner, the Contractor, and all subcontractors, as their interests may appear.

## CONTRACT

THIS AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between \_\_\_\_\_ hereinafter called the "Contractor, and \_\_\_\_\_ hereinafter called the "Owner".

WITNESSETH, that the Contractor and the Owner for the considerations stated herein mutually agree as follows:

### ARTICLE 1. Statement of Work.

The Contractor shall furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment and services, including utility and transportation services, and perform and complete all work required for the construction of the Improvements embraced in the project; namely, \_\_\_\_\_, and required supplemental work for the \_\_\_\_\_ all in strict accordance with the Contract Documents including all addenda thereto, numbered \_\_\_\_\_, dated \_\_\_\_\_, and \_\_\_\_\_ dated \_\_\_\_\_, all as prepared by \_\_\_\_\_ acting and in these Contract documents preparation, referred to as the "Engineer".

### ARTICLE 2. The Contract Price.

The Owner will pay the Contractor for the total quantities of work performed at the unit prices stipulated in the Bid for the respective items of work completed for the sum not to exceed \_\_\_\_\_ (Dollars) subject to additions and deductions as provided in Section \_\_\_\_ hereof.

### ARTICLE 3. Contract.

The executed contract documents shall consist of the following:

- a. This Agreement
- b. Addenda
- c. Invitation for Bids
- d. Instructions to Bidders
- e. Signed copy of Bid
- f. General Conditions, Parts I and II
- g. Special Conditions
- h. Technical Specifications
- i. Drawings (as listed in the Schedules of Drawings)
- j. Other Contract Provisions required by District
- k. Federal Contract Provisions

This Agreement, together with other documents enumerated in this ARTICLE 3, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, forms the Contract between the parties hereto. In the event that any provision in any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this ARTICLE 3 shall govern, except as otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed in \_\_\_\_\_ original copies on the day and year first above written.

CONTRACTOR:

OWNER:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed/printed name

\_\_\_\_\_  
Typed/printed name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title



**Certifications:**

I, \_\_\_\_\_, certify that I am the \_\_\_\_\_ of the corporation named as Contractor herein; that \_\_\_\_\_ who signed this Agreement on behalf of the Contractor, was then \_\_\_\_\_ of said corporation; that said Agreement was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

\_\_\_\_\_ (Corporate Seal)

PERFORMANCE AND PAYMENT BOND (OR BONDS)

Following the Form of Agreement, attach the approved form of the statutory surety bond or bonds to insure the performance of the Contract and payment of labor and materials. In addition to the corporation signatures of the surety company(ies) on the bond(s), each bond should be countersigned by the surety company's attorney-in-fact, authorized to act within the state in which the Project is situated.

**PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS, that we, \_\_\_\_\_ of \_\_\_\_\_, as PRINCIPAL and \_\_\_\_\_ a corporation incorporated under the laws of the State of \_\_\_\_\_ as Surety, are held and firmly bond unto the \_\_\_\_\_ in the full and just sum of \_\_\_\_\_ (\$ \_\_\_\_\_) dollars, lawful money of the United States of America, to be paid to the said \_\_\_\_\_ or its assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above bounden Principal has entered into a contract with the above, hereinafter called Obligee, bearing even date herewith, for the improvement of:

\_\_\_\_\_

for approximately the sum of \_\_\_\_\_ (\$ \_\_\_\_\_) dollars.

NOW, THEREFORE, the condition of this obligation is such that the above bounden PRINCIPAL shall and will promptly pay cause to be paid in full all sums of money which may be due by contractor or otherwise, to any individual, firm, partnership, association or corporation, for all material furnished or labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and became component parts of the work and for rental of the equipment used and services rendered by public utilities in, or in connection with the prosecution of such work, then this obligation to be void, otherwise to remain in full force and effect.

THE PRINCIPAL and SURETY, hereby, jointly and severally, agree with the Obligee herein that any individual firm, partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided, and any public utility which has not been paid in full therefore, may sue in assumpsit on this Payment Bond, in his, their, or its own name and may prosecute the same to final judgment for such sum or sums as may be justly due him, them or it, and have execution thereon. Provided, however, that the Obligee shall not be liable for the payment of any costs of expenses of such suit.

RECOVERY by any individual, firm, partnership, association or corporation hereunder shall be subject to the provisions of the "Public Works Contractor's Bond Law of 167", Act No. 385, approved December 20, 1967, P.L. 869, which Act shall be incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alteration which may be made in the terms of the contract or its work to be done or materials to be furnished or labor to be supplied or performed under it or the giving by the Obligee of any extension of time for the performance of the contract or any other forbearance on the part of either the Obligee or the Principal to the other, shall not in any way release the PRINCIPAL and the SURETY or SURETIES of any such alteration, extension or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

WITNESS:

PLACE

SEAL

HERE

\_\_\_\_\_  
Contractor

BY

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

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

WITNESS:

PLACE

SEAL

HERE

\_\_\_\_\_  
Surety Company

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

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

**PERFORMANCE BOND**  
(With Corporate Surety)

\_\_\_\_\_  
KNOW ALL MEN BY THESE PRESENTS, that we, \_\_\_\_\_  
(Name and Address of Contractor)

as Principal and \_\_\_\_\_  
(Surety Company)

a corporation incorporated under the laws of the State of \_\_\_\_\_ as Surety.  
(Name of State)

are held and firmly bound unto \_\_\_\_\_ in  
(Name of Contract Owner)

the full and just sum of \_\_\_\_\_ (\$ \_\_\_\_\_) dollars lawful money of the United States of America, to be paid to the above Owner or its assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above bounden Principal has entered into a contract with the above Municipality, bearing even date herewith, for the undertaking of certain obligations as therein set forth.

NOW, THEREFORE, the condition of this obligation is such that if the above bounden Principal, as Contractor, shall in all respects comply with and faithfully perform the terms and conditions of said Contract, including the Specifications and conditions referred to and made a part thereof, and such alterations as may be made in said specifications as therein set forth, then this Obligation shall be void, but otherwise the same shall be and remain in full force, virtue and effect.

It is further provided that any alteration which may be made in the terms of the contract or its specifications with the express approval of the Municipality or the Principal to the other, shall not in any way release the Principal and the Surety or either of any of them, their heirs, executors, administrators, successors or assigns from their liability hereunder, notice to the Surety of any such alteration or forbearance being hereby waived.

IN WITNESS WHEREOF, the said Principal and Surety have duly executed this Bond under Seal, pursuant to due and legal action authorizing the same to be done on \_\_\_\_\_.  
(Date of Bond)

Attest/Witness: \_\_\_\_\_  
PLACE SEAL HERE Contractor

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

Attest/Witness: \_\_\_\_\_  
PLACE SEAL HERE Surety Company

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

## NOTICE OF AWARD

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

PROJECT Description: \_\_\_\_\_  
\_\_\_\_\_

The OWNER has considered the BID submitted by you on \_\_\_\_\_, 20\_\_ (BID Date) for the above described WORK in response to its Advertisement for BIDS and Information for BIDDERS.

You are hereby notified that your BID has been accepted for items in the amount of \$\_\_\_\_\_.

You are required by the Information for BIDDERS to execute the Agreement and furnish the required CONTRACTOR's Contract BOND, if applicable, and Certificates of Insurance within 10 calendar days from the date of this notice to you.

If you fail to execute said Agreement and to furnish said BOND within 10 days from the date of this notice, said OWNER will be entitled to consider all your rights arising out of the OWNER's acceptance of your BID as abandoned and as a forfeiture of your BID guaranty. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Owner

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

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

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

### ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by: \_\_\_\_\_ on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

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

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

cc: CONTRACTOR's Surety  
Surety's Agent

## NOTICE TO PROCEED

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

\_\_\_\_\_  
\_\_\_\_\_

PROJECT Description: \_\_\_\_\_

\_\_\_\_\_

You are hereby notified to commence WORK in accordance with the Agreement dated \_\_\_\_\_, 20\_\_, on  
or

after \_\_\_\_\_, 20\_\_, and you are to complete the WORK within \_\_\_\_\_ consecutive calendar days thereafter.

The date of completion of all WORK is therefore \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Owner

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

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

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

### ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO  
PROCEED is hereby acknowledged

by \_\_\_\_\_  
on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

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

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

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

## CONTRACT CHANGE ORDER

Contract No. \_\_\_\_\_

Date \_\_\_\_\_

Change Order No. \_\_\_\_\_

Project No. \_\_\_\_\_

To: (Contractor) \_\_\_\_\_

You are hereby requested to comply with the following changes from the contract plans and specifications:

[illegible]

The sum of \$\_\_\_\_\_ is hereby added to, deducted from, the total contract price and the total adjusted price to date thereby is \$\_\_\_\_\_.

The time provided for completion in the contract is unchanged, increased, decreased, by \_\_\_\_ calendar days. This document shall become an amendment to the contract and all provisions of the contract will apply hereto.

Accepted by:

Contractor

Date

Recommended by:

Architect/Engineer

Date

Approved by:

Chester Upland School District

Date \_\_\_\_\_

Note: Work performed under this change order prior to District concurrence is at owner's risk. District concurrence will be evidenced by signature of Engineer, Owners Representative and Owner.

004116 - BID FORM - STIPULATED SUM

1.1 BID INFORMATION

- A. Bidder: \_\_\_\_\_.
- B. Project Name: **Marquee Signs Electrical Construction Contract**
- C. Project Location:
  - 1. Various Schools – Chester Upland School District
- D. Owner: Chester Upland School District

1.2 CERTIFICATIONS AND BASE BID

- A. Base Bid, Contract: The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:
  - 1. \_\_\_\_\_ Dollars (\$\_\_\_\_\_).
  - 2. The above amount may be modified by amounts indicated by the Bidder on the attached Document 004322 "Unit Prices Form"

1.3 BID GUARANTEE

- A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within **10** days after a written Notice of Award, if offered within **60** days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:
  - 1. \_\_\_\_\_ Dollars (\$\_\_\_\_\_).
- B. In the event Owner does not offer Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.4 TIME OF COMPLETION

- A. The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed to be issued by Engineer, and shall fully complete the Work within 90 calendar days.



1.5 ACKNOWLEDGEMENT OF ADDENDA

- A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

1. Addendum No. 1, dated \_\_\_\_\_.
2. Addendum No. 2, dated \_\_\_\_\_.
3. Addendum No. 3, dated \_\_\_\_\_.
4. Addendum No. 4, dated \_\_\_\_\_.

1.6 BID SUPPLEMENTS

- A. The following supplements are a part of this Bid Form and are attached hereto.

1. Bid Form Supplement - Alternates.
2. Bid Form Supplement - Unit Prices.
3. Bid Form Supplement - Bid Bond Form (AIA Document A310-2010).

1.7 CONTRACTOR'S LICENSE

- A. The undersigned further states that it is a duly licensed contractor, for the type of work proposed, in the Commonwealth of Pennsylvania, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.8 SUBMISSION OF BID

- A. Respectfully submitted this \_\_\_\_ day of \_\_\_\_\_, 2023
- B. Submitted By: \_\_\_\_\_ (Name of bidding firm or corporation).
- C. Authorized Signature: \_\_\_\_\_ (Handwritten signature).
- D. Signed By: \_\_\_\_\_ (Type or print name).
- E. Title: \_\_\_\_\_ (Owner/Partner/President/Vice President).
- F. Witness By: \_\_\_\_\_ (Handwritten signature).
- G. Attest: \_\_\_\_\_ (Handwritten signature).
- H. By: \_\_\_\_\_ (Type or print name).
- I. Title: \_\_\_\_\_ (Corporate Secretary or Assistant Secretary).
- J. Street Address: \_\_\_\_\_.
- K. City, State, Zip: \_\_\_\_\_.

CUSD - Marquee Signs Electrical Construction Contract  
100% BID SET

- L. Phone:\_\_\_\_\_.
- M. License No.:\_\_\_\_\_.
- N. Federal ID No.:\_\_\_\_\_(Affix Corporate Seal Here).

END OF DOCUMENT 004116

004322 - UNIT PRICES FORM

1.1 BID INFORMATION

- A. Bidder: \_\_\_\_\_.
- B. Project Name: **Marquee Signs Electrical Construction Contract**
- C. Project Location: Various Schools – Chester Upland School District
- D. Owner: **Chester Upland School District**

1.2 BID FORM SUPPLEMENT

- A. This form is required to be attached to the Bid Form.
- B. The undersigned Bidder proposes the amounts below be added to or deducted from the Contract Sum on performance and measurement of the individual items of Work.
- C. If the unit price does not affect the Work of this Contract, the Bidder shall indicate "NOT APPLICABLE."

1.3 UNIT PRICES

- A. None

1. \_\_\_\_\_ dollars (\$ \_\_\_\_\_) per unit.

1.4 SUBMISSION OF BID SUPPLEMENT

- A. Respectfully submitted this \_\_\_\_ day of \_\_\_\_\_, 2023
- B. Submitted By: \_\_\_\_\_ (Insert name of bidding firm or corporation).
- C. Authorized Signature: \_\_\_\_\_ (Handwritten signature).
- D. Signed By: \_\_\_\_\_ (Type or print name).
- E. Title: \_\_\_\_\_ (Owner/Partner/President/Vice President).

END OF DOCUMENT 004322

## SECTION 006000 - PROJECT FORMS

### 1.1 FORM OF AGREEMENT AND GENERAL CONDITIONS

- A. The following form of Owner/Contractor Agreement and form of the General Conditions shall be used for Project:
  - 1. The General Conditions are included in the Project Manual
  - 2. The Supplementary Conditions for Project are separately prepared and included in the Project Manual.

### 1.2 ADMINISTRATIVE FORMS

- A. Copies of AIA standard forms may be obtained from the American Institute of Architects; [www.aiacontractdocsaicontracts.org](http://www.aiacontractdocsaicontracts.org); (800) 942-7732.
- B. Preconstruction Forms:
  - 1. Form of Performance Bond and Labor and Material Bond: included in Project Manual
  - 2. Form of Certificate of Insurance: AIA Document G715-2017 "Supplemental Attachment for ACORD Certificate of Insurance 25."
- C. Information and Modification Forms:
  - 1. Form for Requests for Information (RFIs): AIA Document G716-2004 "Request for Information (RFI)."
  - 2. Form of Request for Proposal: AIA Document G709-2018 "Proposal Request."
  - 3. Change Order Form: AIA Document G701-2017 "Change Order."
  - 4. Form of Architect's Memorandum for Minor Changes in the Work: AIA Document G710-2017 "Architect's Supplemental Instructions."
  - 5. Form of Change Directive: AIA Document G714-2017 "Construction Change Directive."
- D. Payment Forms:
  - 1. Schedule of Values Form: AIA Document G703-1992 "Continuation Sheet."
  - 2. Payment Application: AIA Document G702-1992/703-1992 "Application and Certificate for Payment and Continuation Sheet."
  - 3. Form of Contractor's Affidavit: AIA Document G706-1994 "Contractor's Affidavit of Payment of Debts and Claims."
  - 4. Form of Affidavit of Release of Liens: AIA Document G706A-1994 "Contractor's Affidavit of Payment of Release of Liens."
  - 5. Form of Consent of Surety: AIA Document G707-1994 "Consent of Surety to Final Payment."

END OF SECTION 006000

### SUBCONTRACTOR DECLARATION FORM

Each prime contractor is required to submit a list of subcontractors it intends to use on the project.

Subcontractor	Business Address	Type of Work

---

Project Name

---

Prime Contractor

---

Signature      Title      Date

## **NONDISCRIMINATION CLAUSE**

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

1. In the hiring of any employee(s) for the manufacture of supplies, performance of work, or any other activity required under the grant agreement or any subgrant agreement, contract, or subcontract, the Grantee, a subgrantee, a contractor, a subcontractor, or any person acting on behalf of the Grantee shall not discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the *Pennsylvania Human Relations Act* (PHRA) and applicable federal laws, against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.
2. The Grantee, any subgrantee, contractor or any subcontractor or any person on their behalf shall not in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against or intimidate any of its employees.
3. Neither the Grantee nor any subgrantee nor any contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, in the provision of services under the grant agreement, subgrant agreement, contract or subcontract.
4. Neither the Grantee nor any subgrantee nor any contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate against employees by reason of participation in or decision to refrain from participating in labor activities protected under the *Public Employee Relations Act*, *Pennsylvania Labor Relations Act* or *National Labor Relations Act*, as applicable and to the extent determined by entities charged with such Acts' enforcement, and shall comply with any provision of law establishing organizations as employees' exclusive representatives.
5. The Grantee, any subgrantee, contractor or any subcontractor shall establish and maintain a written nondiscrimination and sexual harassment policy and shall inform their employees in writing of the policy. The policy must contain a provision that sexual harassment will not be tolerated and employees who practice it will be disciplined. Posting this Nondiscrimination/Sexual Harassment Clause conspicuously in easily-accessible and well-lighted places customarily frequented by employees and at or near where the grant services are performed, shall satisfy this requirement for employees with an established work site.
6. The Grantee, any subgrantee, contractor or any subcontractor shall not discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against any subgrantee, contractor, subcontractor or supplier who is qualified to perform the work to which the grant relates.
7. The Grantee, and each subgrantee, contractor and subcontractor represents that it is presently in compliance with and will maintain compliance with all applicable federal, state, and local laws and regulations relating to nondiscrimination and sexual harassment. The Grantee and each subgrantee, contractor and subcontractor further represents that it has filed a Standard Form 100 Employer Information Report ("EEO-1") with the U.S. Equal Employment Opportunity Commission ("EEOC") and shall file an annual EEO-1 report with the EEOC as required for employers' subject to *Title VII of the Civil Rights Act of 1964*, as amended, that have 100 or more employees and employers that have federal government contracts or first-tier subcontracts and have 50 or more employees. The Grantee, any subgrantee, any contractor or any subcontractor shall, upon request and within the time periods requested by the Commonwealth, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to their books, records, and accounts by the granting agency and the Bureau of Diversity, Inclusion and Small Business Opportunities for the purpose of ascertaining compliance with the provisions of this Nondiscrimination/Sexual Harassment Clause.
8. The Grantee, any subgrantee, contractor or any subcontractor shall include the provisions of this Nondiscrimination/Sexual Harassment Clause in every subgrant agreement, contract or subcontract so that those provisions applicable to subgrantees, contractors or subcontractors will be binding upon each subgrantee, contractor

or subcontractor.

**9.** The Granter's and each subgrantee's, contractor's and subcontractor's obligations pursuant to these provisions are ongoing from and after the effective date of the grant agreement through the termination date thereof.

Accordingly, the Grantee and each subgrantee, contractor and subcontractor shall have an obligation to inform the Commonwealth if, at any time during the term of the grant agreement, it becomes aware of any actions or occurrences that would result in violation of these provisions.

**10.** The Commonwealth may cancel or terminate the grant agreement and all money due or to become due under the grant agreement may be forfeited for a violation of the terms and conditions of this Nondiscrimination/Sexual Harassment Clause. In addition, the granting agency may proceed with debarment or suspension and may place the Grantee, subgrantee, contractor, or subcontractor in the Contractor Responsibility File.

CONTRACTOR \_\_\_\_\_ Date \_\_\_\_\_

## CONFLICT OF INTEREST

### Interest of Local Public Officials

No member of the governing body of the locality or entity and no other officer, employee, agent or public official of such locality, who exercises any functions or responsibilities in connection with the planning and carrying out of the program, shall have any personal financial interest, direct or indirect, in this contract; and the governing body contractor shall take appropriate steps to assure compliance.

### Interest of Contractor and Employees

The Contractor covenants that he presently has no interest and shall not acquire interest, direct or indirect, in the study area or any parcels therein or any other interest which would conflict in any manner or degree with the performance of his services hereunder. The Contractor further covenants that in the performance of this Contract, no person having any such interest shall be employed.

## RECORDS AND AUDITS

The Contractor shall maintain accounts and records, including personnel, property and financial records, adequate to identify and account for all costs pertaining to the Contract and such other records as may be deemed necessary by the Municipality and County to assure proper accounting for all project funds. These records will be made available for audit purposes to the Municipality and County or any authorized representative, and will be retained for three years after the close out of the project by the County unless stipulated otherwise by the County.

The undersigned contractor agrees to abide by the above provisions.

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



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

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY  
CONSTRUCTION CONTRACT SPECIFICATIONS  
(EXECUTIVE ORDER 11246)**

1. As used in these specifications:

- A. "Covered Area" means the geographical area described in the solicitation from which this Contract resulted.
- B. "Director" means Director, Office of Federal contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
- C. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941.
- D. "Minority" includes:
  - (i) Black (all persons having origins in any of the black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Island); and
  - (iv) American Indian or Alaska native (all persons having origins in any of the original peoples of North America maintaining identifiable tribal affiliations through membership and participation or community identification.

- 2. Whenever the CONTRACTOR, or subcontractor at any tier, subcontracts any portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000, the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this Contract resulted.
- 3. If the CONTRACTOR is participating (pursuant to 41 CFR 60-4.5) in any Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. CONTRACTOR must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each CONTRACTOR or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO Clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other CONTRACTOR or subcontractors toward a goal in an approved Plan does not excuse any covered CONTRACTOR'S or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
- 4. The CONTRACTOR shall implement the specific affirmative action standards provided in Paragraphs 7A through P of these specification. The goals set forth in the solicitation from which this Contract resulted are expressed as percentages of the total hours of employment and training of minority and

female utilization the CONTRACTOR shall reasonably be able to achieve in each construction trade in which it has employees in the covered area. The CONTRACTOR is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the CONTRACTOR has a collective bargaining agreement, to refer either minorities or women shall execute the CONTRACTOR'S obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trained to be counted in meeting the goals, such apprentices and trainees must be employed by the CONTRACTOR during the training period, and the CONTRACTOR must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The CONTRACTOR shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be used upon its effort to achieve maximum results from its actions. The CONTRACTOR shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - A. Ensure and maintain a working environment free of harassment, intimidation and coercion at all sites, and in all facilities at which the CONTRACTOR'S employees are assigned to work. The CONTRACTOR, where possible, will assign two or more women to each construction project. The CONTRACTOR shall specifically ensure that all foremen, superintendents and other on site supervisory personnel are aware of and carry out the CONTRACTOR's obligation to maintain such working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - B. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when CONTRACTOR or its unions have employment opportunities available and maintain a record of the organizations responses.
  - C. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was referred back to the CONTRACTOR by the union or, if referred, not employed by the CONTRACTOR, this shall be documented in the file with the reason therefore; along with whatever additional actions the CONTRACTOR may have taken.
  - D. Provide immediate written notification to the Director when the union or unions with which the CONTRACTOR has a collective bargaining agreement has not referred to the CONTRACTOR a minority person or woman sent by the CONTRACTOR, or when the CONTRACTOR has other information that the union referral process has impeded the CONTRACTOR's efforts to meet its obligations.
  - E. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the CONTRACTOR's employment needs, especially those programs funded or approved by the Department of Labor. The CONTRACTOR shall provide notice of these programs to the sources compiled under 7B above.

- F. Disseminate the CONTRACTOR's EEO policy by providing notice of policy to unions and training programs and requesting their cooperation in assisting the CONTRACTOR in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement, by publicizing it in the company newspaper annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location when construction work is performed.
- G. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings and persons attending, subject matter discussed and disposition of the subject matter.
- H. Disseminate the CONTRACTOR'S EEO policy externally by including in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the CONTRACTOR'S EEO policy with other CONTRACTORS and subcontractors with whom the CONTRACTOR does or anticipates doing business.
- I. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority female recruitment and training organizations serving the CONTRACTOR'S recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the CONTRACTOR shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- J. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a CONTRACTOR'S workforce.
- K. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- L. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- M. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the CONTRACTOR'S obligations under these specification are being carried out.
- N. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- O. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to

minority and female contractor associations and other business associations.

P. Conduct a review, at least annually, of all supervisors adherence to and performance under the CONTRACTOR'S EEO policies and affirmative action obligations.

8. CONTRACTORS are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7A through P). The efforts of a contractor association, joint contractor-union, contractor- community, or other similar group of which the CONTRACTOR is a member and participant, may be assertee as fulfilling any one or more of its obligations under 7A through P of these specifications provided that the CONTRACTOR actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program reflected in the CONTRACTOR'S minority and female workforce participation, makes a good faith effort to meet its individual goal and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the CONTRACTOR. The obligation to comply, however, is the CONTRACTOR'S and failure of such a group to fulfill an obligation shall not be a defense for the CONTRACTOR'S noncompliance.
9. A single goal for minorities and a separate single goal for women has been established. The CONTRACTOR, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the CONTRACTOR may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the CONTRACTOR may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The CONTRACTOR shall not use the goals and timetables or affirmative action standards or discriminate against any person because of race, color, religion, sex or national origin.
11. The CONTRACTOR shall not enter into any subcontract with any person or firm disbarred from Government contracts pursuant to Executive Order 11246.
12. The CONTRACTOR shall carry out such sanctions and penalties for violations of these specifications and or the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any CONTRACTOR who fails to carry out such sanctions and penalties shall be in violation of the Specifications and Executive Order 11246, as amended.
13. The CONTRACTOR, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in Paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the CONTRACTOR fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The CONTRACTOR shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions herein as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of Pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, CONTRACTORS shall be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish

different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

## MBE/WBE Outreach

The undersigned prime contractor agrees to solicit at least 5 bids and/or quotes from minority-/female-owned businesses and record them on the **MBE/WBE Contact/Solicitation Statement** form. The prime contractor is not required to use these businesses, but these contacts must at least be made. An MBE/WBE directory of minority- and/or female-owned contractors and businesses in the Delaware County area is available and can be used to facilitate this requirement, although Primes are free to use any other MBE/WBE contractors as well. **This form must be submitted with the Prime Contractor Questionnaire.**

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Contractor

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Date

## **CERTIFICATION OF COMPLIANCE WITH AIR AND WATER ACTS**

(Applicable to Federally assisted construction contracts and related subcontracts exceeding \$100,000)

### Compliance with Air and Water Acts

During the performance of this contract, the contractor and all subcontractors shall comply with the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended.

In addition to the foregoing requirements, all nonexempt contractors and subcontractors shall furnish to the owner, the following:

- (1) A stipulation by the Contractor or subcontractors, that any facility to be utilized in the performance of any nonexempt contract or subcontract, is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.
- (2) Agreement by the contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 USC 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.
- (3) A stipulation that as a condition for the award of the contract, prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized, or to be utilized for the contract, is under consideration to be listed on the EPA List of Violating Facilities.
- (4) Agreement by the Contractor that he/she will include, or cause to be included, the criteria and requirements in paragraph (1) through (4) of this section in every nonexempt subcontract and requiring that the Contractor will take such action as the Government may direct as a means of enforcing such provisions.

\_\_\_\_\_  
Name and Title of Signer (Print or type)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



**Certificate of Compliance with Federal  
Labor Standards Provisions**

I, the undersigned \_\_\_\_\_, the duly authorized representative of \_\_\_\_\_ (hereinafter referred to as the "contractor"), do hereby certify that I have examined the Federal Labor Standards Provisions (HUD-4010) with related certificates and documents, and all of the conditions surrounding these provisions including, but not limited to the following:

1. The contractor is responsible for employing only eligible subcontractors who have certified eligibility in written contracts containing Federal Labor Standards Provisions.
2. The contractor is responsible for the payment of federal prevailing wage rates by its subcontractors while performing work under this contract. If the subcontractor fails to pay the prevailing wages as specified in this contract, the prime contractor may be required to make appropriate restitution to the underpaid workers.
3. The contractor is responsible for collecting weekly certified payrolls from its subcontractors, review said payrolls for compliance with the federal wage rates, and forward same to the local government contract authority.
4. The contractor also understands that only those classifications listed in the original bid documents are applicable to this job, and no special classifications may be incorporated after contract award.

The prime contractor hereby agrees to perform all of its responsibilities in conformance with the Federal Labor Standards Provisions both diligently and effectively.

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

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

## Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

**A. 1. (i) Minimum Wages.** All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

**(ii) (a)** Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

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

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

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

**(b)** If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

**(c)** In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**(d)** The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

**(iii)** Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

**(iv)** If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**2. Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

**3. (i) Payrolls and basic records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

**(ii) (a)** The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

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

**(1)** That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

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

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

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

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

#### **4. Apprentices and Trainees.**

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

**(iii) Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

**6. Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

**7. Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

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

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

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

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

**(ii)** No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

**(iii)** The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

**11. Complaints, Proceedings, or Testimony by Employees.** No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

**B. Contract Work Hours and Safety Standards Act.** The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

**(1) Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 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 40 hours in such workweek.

**(2) Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, 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 subparagraph (1) of this paragraph, 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 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

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**(3) Withholding for unpaid wages and liquidated damages.** HUD or its designee 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 contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

**(4) Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph 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 subparagraphs (1) through (4) of this paragraph.

**C. Health and Safety.** The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

**(1)** No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

**(2)** The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

**(3)** The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

"General Decision Number: PA20240004 01/12/2024

Superseded General Decision Number: PA20230004

State: Pennsylvania

Construction Types: Heavy and Highway

Counties: Bucks, Chester, Delaware, Montgomery and Philadelphia Counties in Pennsylvania.

#### HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/05/2024
1	01/12/2024

\* BOIL0013-003 01/01/2024

	Rates	Fringes
BOILERMAKER.....	\$ 52.10	35.38
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CARP0219-005 05/01/2023		
	Rates	Fringes
MILLWRIGHT.....	\$ 51.60	35.81
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CARP0255-006 05/01/2023		
	Rates	Fringes
CARPENTER.....	\$ 54.78	29.27

FOOTNOTE:

## A. PAID HOLIDAY: LABOR DAY

CARP0474-004 05/01/2023

	Rates	Fringes
PILEDRIVERMAN.....	\$ 46.73	41.69

ELEC0098-001 04/29/2018

BUCKS COUNTY: Starting at the Delaware River and following the west limits of the Borough of Bristol, along the continuation of U.S. Highway 13 and under the Pennsylvania Railroad Bridge to Route 09113, north 09113 to Route 152, north along Route 152 to the Humeville Road, east on Humeville Road to Route 333, north on Route 344 to the junction of Spurs 281 and 252, continue north on Spur 252 to Route 09028, west on 09028 to Route 152, north on 152 to TR 232, north on TR 532 to Tr 113, north on TR 113 to TR 232 at Anchor Inn, northeast on TR 232 and continue northeast along Route 659 to Route 09060, west on 09060 to Route 402, north on 402 to the Borough line at the southwest corner of the Borough of New Hope. The Borough of New Hope is excluded. Starting at the Delaware at the Delaware River and proceeding southwest along the Plumstead-Solebury and the Plumstead-Buckingham Township lines to Route 09064, northwest on 09064 to U.S. Highway 611 south on 611 to the spur of Route 270, northwest along the spur to Route 397, Southwest on 397 to Route 350, southeast on 350 to Route 395, southwest on 395 to Route 09060, southeast on 09069 to Route 09041 southwest on 09041 to the Montgomery County line.

DELAWARE COUNTY: That portion east of a line following State Highway 320 from Montgomery County to Maple, then along the Springfield Road to Saxer Ave, along Saxer Avenue to Powell Road, along Powell Road to State Highway 420 and continuing in a straight line to the Delaware River. MONTGOMERY COUNTY: That portion southeast of a line following Lower State Road from Bucks County southwest to the Bethlehem Pike (U.S Highway 309), south on the Bethlehem Pike to the Penllyn Pike, southwest on the Penllyn and Blue Bell Pikes to the Wissahickon Creek, southeast on the Wissahickon Creek to the Butler Pike to North Lane near Conshohocken Borough, southwest on North Lane to Schuylkill River and continuing southeast in a line to the Spring Mill Road and southwest on the Spring Mill Road to Delaware County. PHILADELPHIA COUNTY

	Rates	Fringes
ELECTRICIAN.....	\$ 58.33	59%+1.75

ELEC0102-003 05/29/2023

BUCKS COUNTY (Plumstead, Bedminister, Tinicum, Nockamixon, Bridgeton and Durham Townships in their entirety, and that portion of Haycock and Springfield Townships east of a line following State Highway 412, from Northampton County south to Route 09071 to State Highway 212, along Highway 212 to Route 09068, and along 09068 to State Highway 313. Also included is that portion of Dublin Borough east of State Highway 313

	Rates	Fringes
ELECTRICIAN.....	\$ 61.87	62.50%

ELEC0126-002 05/31/2021

CHESTER, DELAWARE, MONTGOMERY, PHILADELPHIA, AND REMAINDER OF BUCKS COUNTY

	Rates	Fringes
Line Construction:		
Cable Splicer.....	\$ 57.93	32.25%+11.00
Groundman.....	\$ 34.76	32.25%+11.00
Lineman.....	\$ 57.93	32.25%+11.00
Truck Driver.....	\$ 37.65	32.25%+11.00
Winch Truck Operator.....	\$ 40.55	32.25%+11.00

ELEC0269-001 01/02/2023

BUCKS COUNTY (Area East of a line starting at the Delaware River and following the west limits of the Borough of Bristol, along the continuation of U.S. Highway 13 and under the Pennsylvania Railroad Bridge to Route 09113, north along 09113 to route 152, north along route 152 to the Hulmeville Rd., east



on the Hulmeville to Route 344, north on route 344 to the junction of Spurs 281 and 252 continue north on spur 252 and route 09028, west on 09028 to Route 152, north on 152 to TR 532, north on TR 532 to TR 113, north on TR 113 to TR 232 as Anchor Inn, northeast on TR 232 and continue northeast along 659 to Route 09060, West on 09060 to Route 402, north on 402 to the Borough Line at the southwest corner of the Borough of New Hope; including the Boroughs of New Hope and Bristol)

	Rates	Fringes
ELECTRICIAN.....	\$ 54.27	65.20%
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ELEC0269-002 01/02/2023		

BUCKS COUNTY - That portion east of a line starting at the Delaware River and following the west limits of the Borough of Bristol, along the continuation of U.S. Highway 13 and under the Pennsylvania Railroad Bridge to Route 09113, north along 09113 to route 152, north along route 152 to the Hulmeville Rd., east on the Hulmeville to Route 344, north on route 344 to the junction of Spurs 281 and 252 continue north on spur 252 and route 09028, west on 09028 to Route 152, north on 152 to TR 532, north on TR 532 to TR 113, north on TR 113 to TR 232 as Anchor Inn, northeast on TR 232 and continue northeast along 659 to Route 09060, West on 09060 to Route 402, north on 402 to the Borough Line at the southwest corner of the Borough of New Hope. The Boroughs of New Hope and Bristol are included.

	Rates	Fringes
Line Construction:		
Cable Splicer.....	\$ 59.70	64.75%
Groundman, Truck Driver....	\$ 43.42	64.75%
Linemen and Heavy		
Equipment Operator.....	\$ 54.27	64.75%
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ELEC0313-003 06/01/2011		

DELAWARE COUNTY :(That portion south of U.S. Highway No. 1 and west of U.S. Highway No. 202) Chester County (That portion South and east of U. S. Highway 1)

	Rates	Fringes
ELECTRICIAN.....	\$ 35.00	23.70
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ELEC0375-001 06/01/2023		

BUCKS COUNTY (East Rock Hill, West Rock Hill, Milford and Richland Townships in their entirety and that portion of Haycock and Springfield Townships west of a line following State Highway 212 from Northampton County South to Route 09071 along 09071 to state Highway 212, along Highway 212 to Route 09068 and along 09068 to State Highway 313) MONTGOMERY COUNTY(Upper Hanover Twp.in its entirety)

	Rates	Fringes
ELECTRICIAN.....	\$ 45.15	24.03
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ELEC0380-001 09/29/2014		

BUCKS COUNTY (Hilltown and New Britain Townships in their entirety; that portion of Telford Borough Northeast of County Line Road (Main Street) and bounded by West Rock Hill and Hilltown Township that portion of Dublin Borough West of State Highway 313, and that portion of Doylestown and Warrington Townships and Doylestown Borough Northwest of a line following U.S. Highway 611 South from Route 09064 to the spur of Route 270, and proceeding Northwest along the spur to Route 397, Southwest on 397 to Route 350, Southeast on 350 to Route 395, Southwest on 395 to Route 09069, Southeast on 09069 to Route 09041, Southwest on 09041 to the Montgomery County Line)  
DELAWARE COUNTY (The portion of Radnor Township North of U.S Highway 30 and West of State Highway 320) MONTGOMERY COUNTY (The portion Northwest of a line following Lower State Road from Bucks County Southwest to Bethlehem Pike (U.S. Highway 309), South on Bethlehem Pike to Penllyn Pike, Southwest on the Penllyn and Blue Bell Pikes to Wissahickon Creek to the Butler Pike, Southwest Wissahickon Creek to Butler Pike, Southwest on Butler Pike, to North Lane near Conshohocken Borough, Southeast on North Lane to the Schuylkill River and

continuing Southeast in a line to Spring Mill Road, Southwest on Spring Mill Road to Delaware County; but excluding Upper Hanover, Douglas, Upper Pottsgrove, West Pottsgrove Townships and also excluding that portion of the Borough of Pottstown North and West of a line drawn Northeast on Kein Street from the Schuylkill River to Reading Railroad Northwest on the railroad to Madison Street, to High Street, East on High Street to Green Street, North on Green Street and Northeast on Mintzer Street to Lower Pottsgrove Township Line, along this township line and the borough line Northwest to Adams Street and Beehive Road, Northeast on Beehive Road to the Township Line at Mervine Street)

CHESTER COUNTY (East Coventry, East Vincent, West Vincent, East Pikeland, West Pikeland, Uwchlan, Upper Uwchlan, East Brandywine, Schuylkill and Charleston Townships in their entirety, and that portion of Clan, East Clan, East Whiteland & West Whiteland, Tredyffrin, Willistown, Easttown Townships and Borough of Downingtown north of U. S. Highway 30 )

	Rates	Fringes
ELECTRICIAN.....	\$ 41.05	29.99
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ELEC0654-001 05/29/2023		

DELAWARE COUNTY (The portion south of U.S. Highway 30 and north of that part U.S. Highway 1 between U.S. Highway 202 and the Chester County Line, and east of that part of U.S. Highway 202 between U.S. Highway 1 and the Delaware Line, and west of a line extending from Montgomery County along State Route 320 to Maple, then along the Springfield Road to Saxer Avenue, along Saxer Avenue to Powell Road; along Powell Road to State Highway 420; along 420 and continuing in a straight line to the Delaware River in the State of Pennsylvania) CHESTER COUNTY (That portion south of U. S. Highway 30 and north of that part of U.S. Highway 1)

	Rates	Fringes
ELECTRICIAN.....	\$ 47.72	27.60%+24.29
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ELEC0743-001 09/01/2023		

CHESTER (Coatesville, Honey Brook, South Coventy, Valley, Wallace, Warwick, West Brandywine, West Clan, and West Nantmeal Twps); AND MONTGOMERY (Douglas, Pottstown, Upper Pottsgrove, and West Pottsgrove, Twps) COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 42.52	24.83
New Year's Day, Good Friday, Memorial Day, Fourth of July, Labor Day, Veterans' Day, Thanksgiving Day, and Christmas Day.		
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ELEC0743-007 09/01/2023		

CHESTER COUNTY (The portion of Sadsbury and West Sadsbury Township north of U.S. Highway 30)

	Rates	Fringes
ELECTRICIAN.....	\$ 42.52	24.83
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* ENGI0542-005 05/01/2023		

	Rates	Fringes
Power equipment operators: (HEAVY, HIGHWAY, AND WATER LINE CONSTRUCTION (Off Plant Site))		
GROUP 1.....	\$ 52.20	32.81
GROUP 1a.....	\$ 55.20	33.70
GROUP 2.....	\$ 51.95	32.74
GROUP 2a.....	\$ 54.97	33.61
GROUP 3.....	\$ 47.87	31.53
GROUP 4.....	\$ 47.57	31.44
GROUP 5.....	\$ 45.85	30.93
GROUP 6.....	\$ 44.85	30.65

## POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Handling steel and stone in connection with erection, cranes doing hook work, any machine handling machinery, helicopters, concrete pumps building machines similar to the above, including remote control equipment.

GROUP 1a: Machines handling steel, or the functional equivalent, and stone in connection with erection 15 ton and over factory rating; Cranes doing hook work 15 ton and over factory rating; Any machines handling machinery; High Rail/Burro Crane 15 ton and over factory rating; Rail Loader (Winch Boom Type) 15 ton and over factory rating; Concrete Pumps (Building) 120 feet of Boom length or less (200 yard pour or less); Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 2: All types of cranes, All types of backhoes, Cableways, Draglines, Keystones, all types of shovels, Derricks, Pavers 21E and over, Trenching machines, Trench shovel, Graddalls, Front-End loaders, Boat Captain, Pippin type backhoes, Tandems scrapers, Towers type crane operation erecting, Dismantling, Jumping or Jacking, Drills (self-contained), (drillmaster type) forklift (20 ft. and over), Motor patrols (fine grade), Batch plant with mixer, Carryalls, Scraper, Trounappulls, Roller (Hith Grade Finishing), Spreaders (asphalt), Bulldozers and Tractors, Mechanic welder, Conveyor loaders (euclid-type wheel), Concrete pump, Milling Machines, Hoist with two towers, Building hoist double drum (unless used as a single drum), Mucking machines in tunnel, All auto grade and concrete finishing machines, Bundle pullers/extractors (tublar), toxic/hazardous waste removal rate 20 per cent added to all classification, bobcat, side broom, directional boring machines, vermeet saw type machines ( other than hand held) tractor mounted hydro axe, chipper with boom, all machine similar to the above including remote control equipment.

3: Asphalt plant engineers, Well drillers, Ditch witch (small trencher), Motor patrols, Fine grade machines, Ten-ton roller (grade fill stone base), Concrete breaking machines, Guilloline only, Stump grinder, Conveyors (except building conveyors), Fork lift trucks of all types, High pressure boliers, Machine similar to the above, including remote control equipment.

GROUP 2a: Crawler backhoes and Crawler gradalls over one cubic yard factory rating; Hydraulic backhoes over one cubic yard factory rating; All types of cranes 15 ton and over factory rating; Single person operation truck cranes 15 ton and over factory rating; Cherry picker type machinery and equipment 15 ton and over factory rating; Concrete Pumps (Heavy/Highway); Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 3: Asphalt plant engineers, Well drillers, Ditch witch (small trencher), Motor patrols, Fine grade machines, Ten-ton roller (grade fill stone base), Concrete breaking machines, Guilloline only, Stump grinder, Conveyors (except building conveyors), Fork lift trucks of all types, High pressure boliers, Machine similar to the above, including remote control equipment.

GROUP 4: Seaman, Pulverzer form line grader, Farm tractors, road finishing, Concrete spreader, Power broom (self-contained), Seed spreader, Grease truck.

GROUP 5: Compressors pumps, Well point pumps, Welding machines Tireman, Power equipment, Maintenance engineer (power boats), and machines similar to the above.

GROUP 6: Fireman, Oilers and deck hands (personnel Boats), grease truck.

FOOTNOTE: A. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day and Christmas Day

**\*\*TOXIC/HAZARDOUS WASTE REMOVAL\*\***

Add 20 per cent to basic hourly rate for all classifications

BUCKS (Includes the towns of Bensalem, Breadysville, Bristol Churchville, Cornwells Heights, Davisville, Eddington, Feasterville, Hartsville, Johnsville, Line Lexington, Neshaminy, Southampton, Tradesville, Trevoise, Unionville, Warminster, and Warrington); DELAWARE (North of a line running along State Rt 352 to right on State Rt 291 to State Line); CHESTER (Includes the towns of Aldham, Anselma, Bacton, Berwyn, Cedar Hollow, Charlestown, Chester Springs, Cromby, Devon, Devault, Daylesford, Diamond Rock, Dutton Mill, Frazer, Goshenville, Howellville, Kimberton, Ludwigs Corner, Paoli, Matthews, Perkiomen Junction, Phoenixville, Rapps Corner, Rocky Hill, Stratford, Sugartown, Tanguy, Valley Forge, Valley Store, White Horse, Williams Corner, and Wilsons Corner); MONTGOMERY (Remainder); and PHILADELPHIA COUNTIES

	Rates	Fringes
IRONWORKER, STRUCTURAL AND ORNAMENTAL.....	\$ 51.20	40.60
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IRON0404-023 07/01/2023		

MONTGOMERY COUNTY (Anise, Berguy, Congo, Douglas, East Greenfield, East Limerick, East Slafor, East Zieglerville, Engleville, Fagleysville, Ford, Gilbertsville, Green Lane, Hanover, New Perkisionerville, Niato, Palm, Obelish, Pennsburg, Perkiomen, Pottstown, Royerford, Roytown, Sammamansville, Tylerport, Upper Hanover, Upper Pottsgrove, Upper Wodall, West Limerick, West Salford, and West Zieglerville Townships)

	Rates	Fringes
Ironworkers:.....	\$ 36.26	31.38
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IRON0405-001 07/01/2023		

BUCKS (Includes the towns of Bensalem, Breadysville, Bristol, Churchville, Cornwell Heights, Davisville, Eddington, Festerville, Hartsville, Johnsville, Line Lexington, Neshaminy, Southampton, Transville, Trevoise, Unionville, Warminster, and Warrington); DELAWARE (North of a line running along State Route 352 to right on State Route 291 to State Line); CHESTER (Includes the towns of Aldham, Anselma, Bacton, Berwyn, Cedar Hollow, Charlestown Chester Springs, Cromby, Devon, Devault, Daylesford, Diamand Rock, Dutton Mill, Frazer, Goshenville, Howellville, Kimberton, Ludwigs Corner, Paoli, Mathews, Perkiomen Junction, Phoenixville, Rapps Corner, Rocky Hill, Strafford, Sugartown, Tanguy, Valley Forge, Valley Store, White Horse, Williams Corner, and Wilsons Corner); MONTGOMERY (Remainder); AND PHILDELPHIA COUNTIES

	Rates	Fringes
IRONWORKER, REINFORCING		
Bucks, Chester, Delaware and Montgomery Counties....	\$ 45.70	34.17
Philadelphia County.....	\$ 48.29	34.17
Reinforcing Steel Mesh, Rebar Work		

The following holidays shall be observed and when work is performed thereon it shall be paid for at twice the base rate: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Employees shall be off Christmas Eve Day and receive four hours pay. Employees who have to work on Christmas Eve Day shall work four hours and be paid for eight hours pay for the holiday. Any time worked beyond fours hours shall be paid at the double time rate plus the four hours holiday pay. To receive holiday pay, the employee must work the day before Christmas Eve and the first working day after Christmas Day.

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IRON0405-003 07/01/2023

BUCKS COUNTY (Includes the towns of Bensalem, Breadysville, Bristol, Churchville, Cornwells Heights, Davisville, Eddington, Feasterville, Hartsville, Johnsville, Line Lexington, Neshaminy, Southampton, Tradesville, Trevoise, Unionville, Warminster, and Warrington); DELAWARE (North of a line running along State Route 352 to right on Stae Route 291 to State Line); CHESTER (Includes the towns of Alsham, Anselma, Bacton, Berwyn, Cedar Hollow, Charlestown, Chester Springs, Cromby, Devon, Devault, Daylesford, Diamond Rock, Dutton Mill, Frazer, Goshenville, Howellville, Kimberton, Ludwig Corner, Paoli,

Mattews, Perkiomen Junction, Phoenixville, Rapps Corner, Rocky Hill, Strafford, Sugartown, Tanguy, Valley Forge, Valley Store, White Horse, Williams Corner); MONTGOMERY (Remainder); and PHILADELPHIA COUNTIES

	Rates	Fringes
IRONWORKER (Rigger and Machinery Mover).....	\$ 45.70	34.17

The following holidays shall be observed and when work is performed thereon it shall be paid for at twice the base rate: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Employees shall be off Christmas Eve Day and receive four hours pay. Employees who have to work on Christmas Eve Day shall work four hours and be paid for eight hours pay for the holiday. Any time worked beyond four hours shall be paid at the double time rate plus the four hours holiday pay. To receive holiday pay, the employee must work the day before Christmas Eve and the first working day after Christmas Day.

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IRON0451-004 07/01/2023

CHESTER (Remainder of County), AND DELAWARE (Remainder of County) COUNTIES

	Rates	Fringes
Ironworkers: (Structural, Ornamental, and Reinforcing)....	\$ 40.10	34.85

The following holidays shall be observed, and when work is performed thereon it shall be paid for at twice the base wage rate: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

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LAB00057-001 05/01/2023

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 37.55	26.79
GROUP 2.....	\$ 37.75	26.79
GROUP 3.....	\$ 37.75	26.79
GROUP 4.....	\$ 32.35	26.79
GROUP 5.....	\$ 38.40	26.79
GROUP 6.....	\$ 38.45	26.79
GROUP 7.....	\$ 38.30	26.79
GROUP 8.....	\$ 38.05	26.79
GROUP 9.....	\$ 37.90	26.79
GROUP 10.....	\$ 38.05	26.79
GROUP 11.....	\$ 37.95	26.79
GROUP 12.....	\$ 41.68	26.79
GROUP 13.....	\$ 38.25	26.79

#### LABORERS CLASSIFICATIONS

GROUP 1: Yardwork Laborers; Scale Mixermen; Burnermen, Feeders; Dustmen

GROUP 2: General Laborer; Asphalt Shovelers; Sheeting, Shoring & Lagging Laborers; Stone, Granite & Artificial Stone Setting Laborer; Hod Carriers; Scaffold Builders; Relief Joints & Approach Slabs; Assembling & Placing Gabions; Pneumatic Tool Laborers; Concrete Forms & Stripping Laborers; Concrete & Lumber Material Laborers; Steel & Steel Mesh (Carrying & Handling); Form Pinners; Mortar Mixers; Pouring & Placing Concrete; Grade Men

GROUP 3: Vibrator Laborer; Finish Surface Asphalt Rackers; Jackhammer Operators; Paving Breaker Operator; Pipelayer & Caulker (all joints up to within 5 feet of the Building Foundation Line); Conduit & Duct Layers

GROUP 4: Flagperson

GROUP 5: Miners

GROUP 6: Burners

GROUP 7: Miner Bore Driver; Blasters; Drillers; Pneumatic Shield Operator

GROUP 8: Form Setters

GROUP 9: Trackmen; Brackmen; Groutmen; Bottom Shaft Men; All Other Laborers in Free Air Tunnels; Underpinning (When an underpinning excavation is dug eight feet or more below the natural grade or where an excavation for a pier hole of five feet square or less and eight feet or more deep is dug, the rate shall apply only after a depth of eight feet is reached, to the men working in the bottom)

GROUP 10: Circular Caissons (Where an excavation for circular caissons are dug eight feet or more below the natural grade level adjacent to the starting point of the caisson hole, at ground level, for the men working in the bottom); Welders, Burners & Air Tuggers

GROUP 11: Powderman; Multiple Wagon Drill Operator

GROUP 12: Toxic/Hazardous Waste Handler

GROUP 13: Wagon Drill/Hydraulic Track Drill Operator

-----  
LAB00413-005 05/01/2023

	Rates	Fringes
Landscaping		
Farm Tractor Driver,		
Hydroseeder Nozzleman,		
Mulcher Nozzleman.....	\$ 29.45	23.55+A

FOOTNOTE:

A. PAID HOLIDAYS: Independence Day, Labor Day, and  
Thanksgiving Day

-----  
PAIN0021-003 02/01/2023

	Rates	Fringes
Painters:		
Bridge.....	\$ 59.78	30.51
All Other Work.....	\$ 48.82	30.47

-----  
PLAS0592-008 05/01/2023

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 43.20	32.91

-----  
PLAS0592-012 05/01/2023

PHILADELPHIA COUNTY

	Rates	Fringes
PLASTERER.....	\$ 42.97	32.45

-----  
PLAS0592-013 05/01/2023

BUCKS, CHESTER, DELAWARE and MONTGOMERY COUNTIES

	Rates	Fringes
PLASTERER.....	\$ 39.32	32.44

-----  
PLUM0420-001 05/01/2023

	Rates	Fringes
Steamfitter		
Bucks, Chester, Delaware,		
Montgomery and		
Philadelphia Counties.....	\$ 67.37	41.68

-----  
PLUM0690-008 05/01/2023

	Rates	Fringes
PLUMBER.....	\$ 64.73	37.21

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\* TEAM0107-002 05/01/2023

	Rates	Fringes
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Truck drivers:

GROUP 1.....	\$ 36.14	21.555+a+b
GROUP 2.....	\$ 36.24	21.555+a+b
GROUP 3.....	\$ 36.49	21.555+a+b

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 - Stake body truck (single axle, dumpster)

GROUP 2 - Dump trucks, tandem and batch trucks, semi-trailers, agitator mixer trucks, and dumpcrete type vehicles, asphalt distributors, farm tractor when used for transportation, stake body truck (tandem)

GROUP 3 - Euclid type, off-highway equipment or belly dump trucks and double hitched equipment, staddle (ross) carrier  
\*\* Low bed trailers shall be paid \$0.50 higher than the hourly rate for GROUP 2

FOOTNOTE:

A. PAID HOLIDAYS: Memorial Day, Independence Day, Labor Day, Thanksgiving Day and five personal holidays provided employee works at least one day in the three work days before and at least one day in the three work days after the said holiday. Employee earns a personal holiday every two months, provided employee has worked twenty-six day in each consecutive two month period, up to a maximum of five per calendar year. After 130 work days the employee is entitled to all five personal holidays.

B. PAID VACATION: Employee will earn one vacation day for every two months, provided employee has worked twenty-six day in each consecutive two month period, up to a maximum of five vacation days per calendar year. After 130 workdays the employee is entitled to all five days of vacation. Employees with 5 years of seniority, earn an additional week of vacation, accrued in the same way.

c. Low bed trailers shall be paid \$0.50 higher than the hourly rate for GROUP 2

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

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

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

-----

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

## Union Rate Identifiers

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

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

## Survey Rate Identifiers

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

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

## Union Average Rate Identifiers

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

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

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## WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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



Washington, DC 20210

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

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

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

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

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

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

=====

END OF GENERAL DECISION"

## **CERTIFICATION OF NON-SEGREGATED FACILITIES**

The Bidder certified 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 Bidder certifies further that he will not maintain or provide for his employees any 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 Bidder agrees that a breach of his certification will be a violation of the Equal Opportunity Clause in any contract resulting from acceptance of this Bid. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage areas, transportation and facilities provided for employees which are segregated on the basis of race, color, religion or national origin, because of habit, local custom.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. Paragraph 1001.

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

NAME OF BIDDER: \_\_\_\_\_

BY: \_\_\_\_\_

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

OFFICIAL ADDRESS (INCLUDING ZIP CODE)

---

PHONE NO.: \_\_\_\_\_

**VERIFICATION OF CONTRACTOR ELIGIBILITY AND**  
***TERMINATION OF INELIGIBLE CONTRACTOR***

I hereby certify that I / we am / are eligible for award of a Federally assisted or insured Contract.

In the event I / we am / are found ineligible after an award of Contract, said Contract shall be terminated and the matter will be referred to the Department of Labor for its action.

---

Signature

---

Date

---

Name of Firm

---

Subcontractor

---

Date

---

Name of Firm

### MBE/WBE Contact/Solicitation Statement

The Subrecipient and Prime Contractor are encouraged to solicit a minimum of 5 quotes/bids from minority/female owned businesses for all CDBG/HOME funded projects. Please refer to the MBE/WBE directory as needed.

---

Project Name

Subrecipient or Company Name

---

Contact Person

Telephone Number

Please list the minority- and/or woman-owned businesses and contractors from which you solicited quotes or bids in regard to this contract.

Company Name & Telephone #	MBE ( × )	WBE ( × )	Type of Work and/or Material to be Supplied	Dollar Amount of Quote

---

Authorized Signature

Print Name

---

Title

Date

**THE DELAWARE COUNTY**  
**DIRECTORY OF**  
**MINORITY- & WOMAN-OWNED**  
**AND SECTION 3**  
**CONTRACTORS AND BUSINESSES**



**Prepared by the County of Delaware**

**OHCD** **Office of Housing and Community Development**  
**600 N. Jackson Street, Rm. 101, Media, PA 19063 (610) 891-5425**

**Revised, August 2019**

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## **INTRODUCTION**

This directory is published as an information listing only. It has been produced in response to HUD requirements to facilitate the use of minority and woman-owned and Section 3 contractors and businesses. Delaware County does not endorse the products and services offered nor does it vouch for the capacity, workmanship, financial stability, or minority status of the businesses listed in this directory. Neither the County of Delaware, its agents or anyone distributing the directory make any warranty regarding the contents of this directory and will not be liable or responsible for any loss, damages, or injury to persons or property in any manner arising out of or incident to the use of this directory, including all consequential damages. All listings and advertisements have been accepted for publication on the presumption that the information is true. This directory is also a working document that is neither exhaustive nor all-inclusive and will be updated on a periodic schedule. To be included in the next addition to this directory, please contact the Delaware County Office of Housing and Community Development at (610) 891-4312, 600 N. Jackson Street, Room 101, Media, PA 19063.

This directory has been updated using the original resource directory and the PA Department of General Services, MBE/WBE website:

<http://www.dgs.internet.state.pa.us/SBPI/AlphaResults.aspx>

<http://www.dgs.internet.state.pa.us/SmallDiverseBusinessSearch/>

<https://portalapps.hud.gov/Sec3BusReg/BRegistry/SearchBusiness>

Note: \*\*\* designates the MBE/WBE business is also registered as a Section 3 Business.

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**A&E SERVICES****MBE/WBE:****ANN ROTHMANN DBA**

1224 Baltimore Pike, Suite 205  
 Chadds Ford, PA 19317  
 (610) 945-1839  
 Ann Rothmann  
[arothmann@aol.com](mailto:arothmann@aol.com)  
[arpe1991@gmail.com](mailto:arpe1991@gmail.com)

**APEX TECHNOLOGY GROUP LLC**

1224 Baltimore Pike, Suite 205  
 Chadds Ford, PA 19317  
 (610) 558-0555  
 Ali Shahid  
[ali@atgmail.net](mailto:ali@atgmail.net)

**CUETOKEARNEY DESIGN LLC**

110 Park Avenue, Suite 1  
 Swathmore, PA 19081  
 (610) 544-1722  
 Claudia Cueto  
[claudia@cuetokeyearney.com](mailto:claudia@cuetokeyearney.com)  
[cuetok@comcast.net](mailto:cuetok@comcast.net)

**J&M PRESERVATION STUDIO LLC**

105 Rutgers Avenue, Suite 244  
 Swathmore, PA 19081  
 (215) 769-1133  
 Jessica Senker  
[info@jimpreservation.com](mailto:info@jimpreservation.com)

**KOH ENGINEERS, LLC \*\*\***

325 Chestnut Street, Suite 800  
 Philadelphia, PA 19106  
 Duane A. Quamina  
[kohengineers@gmail.com](mailto:kohengineers@gmail.com)

**THERESA PEARCE SHEPHARD DBA**

335 W. State Street  
 Media, PA 19063  
 (484) 442-8137  
 Theresa Shephard  
[theresa@shephardrestoration.com](mailto:theresa@shephardrestoration.com)  
[info@shephardrestoration.com](mailto:info@shephardrestoration.com)

**TREC GROUP INC**

900 Old Marple Road  
 Springfield, PA 19064  
 (610) 328-6465  
 Barbara Tulske  
[BARB@trecgroup.com](mailto:BARB@trecgroup.com)

**MBE/WBE:****ALBERT G CIPOLLONI, JR & SONS, INC**

719 Highland Avenue  
 Morton, PA 19070  
 (610) 543-6144  
 Carol Cipolloni  
[agcip@live.com](mailto:agcip@live.com)

**COCCO CONTRACTING CORP**

201 Saville Avenue  
 Eddystone PA, 19022  
 (610) 874-3400  
 Lois E. Cocco  
[Coccocontracting@aol.com](mailto:Coccocontracting@aol.com)

**COMPACTION GROUTING SERVICES INC**

375 Parkmount Road  
 Media, PA 19063  
 (610) 558-8999  
 Kathrine L Miluski  
[kmiluski@cgsinc.net](mailto:kmiluski@cgsinc.net); [kaylmer@cgsinc.net](mailto:kaylmer@cgsinc.net)

**CONNELLY CONSTRUCTION CORP**

1126 Upper State Road  
 P.O. Box 587  
 Montgomeryville, PA 18926  
 (215) 362-6283  
 Rita Connelly  
[estimating.dept@connellycorp.com](mailto:estimating.dept@connellycorp.com)

**CONCRETE, CURBS & CURBING, MASONRY, SEWERS****GORECON INC**

PO Box 1778  
 Doylestown, PA 18901  
 (267) 880-0890  
 Brina Sweet  
[brinasweet@goreconinc.com](mailto:brinasweet@goreconinc.com)

**MARA RESTORATION INC**

150 Roesch Avenue  
 Oreland, PA 19075  
 (215) 887-9900  
 Patty McNamara  
[pmcnamara@mararestoration.com](mailto:pmcnamara@mararestoration.com)

**OLD PHILADELPHIA ASSOCIATES INC**

315 S. Bolmar Street  
 West Chester, PA 19380  
 (610) 436-8022  
 Christina Patrone  
[cpatrone@oldphila.com](mailto:cpatrone@oldphila.com)

**QUINN CONSTRUCTION INC**

1017 4<sup>th</sup> Avenue, Suite 100  
 Essington, PA 19029  
 (610) 586-1332  
 Elizabeth Quinn  
[equinn@quinnconstruction.com](mailto:equinn@quinnconstruction.com)



**CONSTRUCTION/GENERAL CONSTRUCTION****MBE/WBE:****AKM CONSTRUCTION SERVICES INC**

350 S. Governor Printz Boulevard  
 Lester, PA 19029  
 (610) 362-0210  
 Kimberly Moore  
[akmconstservices@aol.com](mailto:akmconstservices@aol.com)  
[moorek-akm@comcast.net](mailto:moorek-akm@comcast.net)

**AHJ CONSTRUCTION CO**

1208 Main Street  
 Darby, PA 19023  
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 Henry Robinson  
[info@ahjconstructionco.com](mailto:info@ahjconstructionco.com);  
[hrobinson@ahjconstructionco.com](mailto:hrobinson@ahjconstructionco.com)

**CHOATES G CONTRACTING LLC \*\*\***

225 Lincoln Highway  
 Philadelphia, PA 19111  
 (267) 864-7817  
 Darrel Choates, Jr.  
[darellchoates@gmail.com](mailto:darellchoates@gmail.com)

**HP TOTAL CONSTRUCTION \*\*\***

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 (215) 828-1944  
 Michael Bowman  
[Bowmanmichael215@gmail.com](mailto:Bowmanmichael215@gmail.com)

**LYON CONTRACTING SERVICES, LLC \*\*\***

702 N 3<sup>rd</sup> Street, Suite 209  
 Philadelphia, PA 19148  
 (267) 419-7800  
 Daniel Labrador  
[lyoncontracting@comcast.net](mailto:lyoncontracting@comcast.net)

**NESMITH & COMPANY INC**

2440 Tasker Street  
 Philadelphia, PA 19145  
 (215) 755-4570  
 Karen Burgoyne  
[k.burgoyne@nesmith-electric.com](mailto:k.burgoyne@nesmith-electric.com);  
[admin@nesmithcompany.com](mailto:admin@nesmithcompany.com)

**PERRYMAN BUILDING & CONSTRUCTION**

100 N. 20th Street, Suite 305  
 Philadelphia, PA 19103  
 (267) 538-0700  
 Angelo Perryman  
[angelop@perrymanbc.com](mailto:angelop@perrymanbc.com)

**QUANTUM BUILDERS**

295 E Swedesford Road, Suite 282  
 Wayne, PA 19087  
 (610) 453-8662  
 Victor Milbourne  
[victor@militaryconstruction.net](mailto:victor@militaryconstruction.net)

**SECTION 3:****ATTRACTIVE PROPERTIES**

843 Tyson Avenue  
 Abington, PA 19001  
 (267) 625-7107  
 Alan Simbo  
[alan@remodelphilly.com](mailto:alan@remodelphilly.com)

**NEW AGE DEVELOPMENT GROUP INC**

125 East Elm, Suite 300  
 Conshohocken, PA 19428  
 (215) 676-1326  
 Dexter Lanigan  
[dl@newagedevelopment.com](mailto:dl@newagedevelopment.com)

**CW3 INC**

P.O. Box 794  
 Glenside, PA 19038  
 (215) 469-1302  
 Clifford Washington  
[cw3inc@gmail.com](mailto:cw3inc@gmail.com)

**ADKINS MANAGEMENT INC**

8109 Vermeer Place  
 Philadelphia, PA 19153  
 (267) 249-9843  
 Sheila Adkins  
[adkinsmus@aol.com](mailto:adkinsmus@aol.com)

**METRO SERVICE GROUP INC**

1 International Plaza, Suite 550  
 Philadelphia, PA 19113  
 (844) 520-8331  
 Melissa Tate  
[mtate@metroservicegroup.com](mailto:mtate@metroservicegroup.com)

**THE Q GROUP BUILDERS INC**

138 Railroad Drive  
 Warminster, PA 18974  
 (215) 942-6700  
 Angelo Quisito  
[angelo@theggroup.biz](mailto:angelo@theggroup.biz)

**DEMOLITION CONTRACTORS****MBE/WBE:****TAMCO CONSTRUCTION INC**

539 E Dark Hollow Road  
 Pipersville, PA 18947  
 (215) 416-3646  
 Tammy Johnson  
[tamcoconstruction@gmail.com](mailto:tamcoconstruction@gmail.com)

---

**ELECTRICAL CONTRACTORS****MBE/WBE:****JUST IT'S ELECTRIC, LLC**

P.O. Box 881  
 Bala Cynwyd, PA 19004  
 (215) 473-5878  
 Erik Truxon  
[etruxon@justitselectric.com](mailto:etruxon@justitselectric.com);  
[info@justitselectric.com](mailto:info@justitselectric.com)

**MJK ELECTRICAL CORPORATION**

5957 Addison Street  
 Philadelphia, PA 19143  
 (215) 471-4110  
 Michael J. Jones  
[mike@mjkecorp.com](mailto:mike@mjkecorp.com)

**SECTION 3:****BILAL BUSINESS WORKS, LLC**

441 West Champlost Street, Apt 2  
 Philadelphia, PA 19120  
 (215) 815-3455  
 Lloyd Bilal  
[lloydzbilal@gmail.com](mailto:lloydzbilal@gmail.com)

**ENVIROMENTAL CONTRACTORS/CONSULTANTS****MBE/WBE:****ANCHOR CONSULTANTS LLC**

1224 BALTIMORE PIKE, Suite 205  
 Chadds Ford, PA 19317  
 (610) 945-1839  
 Seema Nadeem  
[MARKETING@ANCHOR-CONSULTANTS.COM](mailto:MARKETING@ANCHOR-CONSULTANTS.COM)

**FRERRICK CONSTRUCTION CO INC**

811 Ivy Hill Road  
 Philadelphia, PA 19150  
 (215) 233-1600  
 Janice Ferrick  
[Janice.Ferrick@comcast.net](mailto:Janice.Ferrick@comcast.net)

**KEATING ENVIROMENTAL**

835 Spring Drive, Suite 200  
 Exton, PA 19341  
 (484) 876-2200  
 Keith Choper  
[info@kempartners.com](mailto:info@kempartners.com)

**WESTCHESTER ENVIRONMENTAL LLC**

307 N Walnut Street  
 West Chester, PA 19380  
 (610) 431-7545  
 Matthew Abraham  
[mabraham@westchesterenvironmental.com](mailto:mabraham@westchesterenvironmental.com)

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106 West Clearfield Street  
 Philadelphia, PA 19133  
 (215) 609-1000  
 Steve Luxton  
[stevel@ecasavesenergy.org](mailto:stevel@ecasavesenergy.org)

**EXCAVATION****MBE/WBE:****FLOYD G HERSH INC**

5275 McLean Station Road  
 Green Lane, PA 18054  
 (215) 679-2833  
 Michele Peart  
[michelep@fghershinc.com](mailto:michelep@fghershinc.com);  
[mikep@fghershinc.com](mailto:mikep@fghershinc.com)

**LANDSCAPING/HORTICULTURISTS****MBE/WBE:****CAST CONSTRUCTION INC**

11 Graystone Drive  
 Chadds Ford, PA 19317  
 (610) 459-5080  
 Diane Schiavino  
[castconstruction@comcast.net](mailto:castconstruction@comcast.net)

**RECREATION RESOURCE USA LLC**

425 McFarlan Road, Suite 100  
 Kennett Square, PA 19348  
 (610) 444-4402  
 Kevin Umbreit  
[info@recreation-resource.com](mailto:info@recreation-resource.com)

**RAM-T CORPORATION**

1121 Downingtown Pike  
 West Chester, PA 19380  
 (610) 269-4495  
 Cathy DiLuigi  
[estimating@ramtcorporation.com](mailto:estimating@ramtcorporation.com)  
[dturner@ramtcorporation.com](mailto:dturner@ramtcorporation.com)

**PAINTING CONTRACTORS****MBE/WBE:****GRACIE PAINTING SERVICES, INC**

1222 East Columbia Avenue  
 Philadelphia, PA 19125  
 (215) 345-0956  
 Maude Martin  
[jvgpaintng@aol.com](mailto:jvgpaintng@aol.com)

**SECTION 3:****EXCELLENT PAINTING USA, LLC**

3548 Woodhaven Rd  
 Philadelphia, PA 19154  
 (267) 592-7593  
[craigexcellentpaintingusa@gmail.com](mailto:craigexcellentpaintingusa@gmail.com)

**PLUMBING/MECHANICAL CONTRACTORS****MBE/WBE:****CROMEDY CONSTRUCTION CORPORATION**

5702 Newtown Avenue  
 Philadelphia, PA 19120 USA  
 (215) 437-7606  
 Billy Cromedy  
[bcromedy@cromedyconstruction.com](mailto:bcromedy@cromedyconstruction.com)

**JOHN KINKAID HEATING & AIR**

1366 Fitzwatertown Road  
 Roslyn, PA 19001  
 (215) 657-1262  
 Melissa Ryan  
[John.Kinkaid.HVAC@Gmail.com](mailto:John.Kinkaid.HVAC@Gmail.com)

**ROOFING CONTRACTORS****MBE/WBE:****MUNN ROOFING CORP**

3213 Unionville Pike  
 Hatfield, PA 19440  
 (215) 997-2258  
 Chad Munn  
[info@munnroofingcorp.com](mailto:info@munnroofingcorp.com)  
[Tonya@munnroofingcorp.com](mailto:Tonya@munnroofingcorp.com)

**SECTION 3:****CLARK ROOFING CO**

6727 Lindbergh Blvd  
 Philadelphia, PA 19142  
 (215) 235-2000

**STRUCTURAL STEEL/IRON/METAL CONTRACTORS****MBE/WBE:****E & K CONSTRUCTION SERVICES**

3070 Bristol Pike, Build 1 Suite 102C  
 Bensalem, PA 19020  
 (215) 633-7200  
 Sheri Etter-Levins  
[eandkconstructionservices@verizon.net](mailto:eandkconstructionservices@verizon.net);  
[sheri\\_eandk@verizon.net](mailto:sheri_eandk@verizon.net)

**L B CONSTRUCTION ENTERPRISES INC**

905 Bethlehem Pike, Number 232  
 Spring House, PA 19477  
 (215) 421-3978  
 LaMar Childs  
[lamar@lbconstructionenterprises.com](mailto:lamar@lbconstructionenterprises.com);  
[mandy@lbconstructionenterprises.com](mailto:mandy@lbconstructionenterprises.com)



**MBE/WBE:****PBA CONSTRUCTION INC**

4999 Grays Avenue  
Philadelphia, PA 19143  
(215) 729-1107  
Patricia Ciervo  
[pba1@snip.net](mailto:pba1@snip.net)

**STRUCTURAL STEEL/IRON/METAL CONTRACTORS****QUINCO CONTRACTING & MAINTENANCE**

842 Arrowhead Lane, PO Box 147  
Harleysville, PA 19438  
(215) 513-1554  
Debra Quinn  
[dquinn@quincococontracting.com](mailto:dquinn@quincococontracting.com)  
[qcm@quincococontracting.com](mailto:qcm@quincococontracting.com)

**MBE/WBE:****ABSTRACT OVERHEAD DOOR COMPANY, INC \*\*\***

1911 Pennsylvania Avenue  
Croydon, PA 19021  
(215) 781-1500  
Mark Gallagher  
[AbstractDoor@gmail.com](mailto:AbstractDoor@gmail.com)

**GRABOYES COMMERCIAL WINDOW CO**

4050 S. 26th Street, Suite 160  
Philadelphia, PA 19112  
(215) 625-8810  
Ellis G. Guiles  
[ellis@graboyes.com](mailto:ellis@graboyes.com)  
[laura@graboyes.com](mailto:laura@graboyes.com)

**QUALITY FLOORING WORKROOM, INC**

6176 Newtown Avenue  
Fairless Hills, PA 19103  
(215) 949-1356  
Jonathan Arnold  
[JONARNOLD@QUALITYFLOORING.CO](mailto:JONARNOLD@QUALITYFLOORING.CO)

**WINDOWS/DOORS/FLOORING/INSULATION****SMITH FLOORING, INC \*\*\***

903 Townsend Street  
Chester, PA 19013  
(610) 497-9758  
Angelique Hunter  
[ahunter@smithflooringinc.com](mailto:ahunter@smithflooringinc.com)

**SUN LITE CORPORATION**

3525 Lancaster Avenue  
Philadelphia, PA 19104  
(215) 222-4402  
Joan E Schiff  
[joanschiff@sunlitecorp.com](mailto:joanschiff@sunlitecorp.com)  
[admin@sunlitecorp.com](mailto:admin@sunlitecorp.com)

**SECTION 3:****PHILLY OVERHEAD DOORS, INC**

2542 Ann Street  
Philadelphia, PA 19134  
(215) 291-0519  
Monica Shaw  
[philly.19134@verizon.net](mailto:philly.19134@verizon.net)

**SHARON HILL INSULATION**

240 Cherry Street  
Sharon Hill, PA 19079  
(610) 476-8477  
Ahmad Rahim  
[sharonhillinsul@yahoo.com](mailto:sharonhillinsul@yahoo.com)

### BIDDER'S QUALIFICATIONS

All questions must be answered and the date given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit additional information if he so desires.

1. Name of Bidder:
2. Permanent main office address:
3. When Organized:
4. If a corporation, where incorporated:
5. How many years have you been engaged in the contracting business under your present firm or trade name?
6. Contracts on hand: Schedule these showing amount of each contract and the appropriate anticipated dates of completion.
7. General character of work performed by your company:
8. Have you ever failed to complete any work awarded to you? If so, where and why.
9. Have you ever defaulted on a contract? If so, where and why.
10. List the more important projects recently completed by your company, stating the approximate cost for each and the month and year completed.
11. List your major equipment available for this contract:
12. List experience in construction work similar in importance to this project:
13. List background and experience of the principal members of your organization, including the officers:
14. List credit available: \$
15. List bank references:
16. Will you, upon request, fill out a detailed financial statement and furnish any other information which may be required by the Owner?
17. The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the Owner in verification of the recitals comprising this Statement of Bidder's Qualifications.

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

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

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

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

State of \_\_\_\_\_ \$

County of \_\_\_\_\_:

\_\_\_\_\_ being duly sworn deposes and says that he is \_\_\_\_\_ of  
and that the answers to the foregoing questions and all statements therein contained are true and correct.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

My commission expires: \_\_\_\_\_ Notary Public



COMMONWEALTH OF PENNSYLVANIA

**PUBLIC WORKS EMPLOYMENT VERIFICATION FORM**

Date \_\_\_\_\_

Business or Organization Name (Employer) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

.....Contractor.....O.....

Contracting Public Body \_\_\_\_\_

Contract/Project No \_\_\_\_\_

Project Description \_\_\_\_\_

Project Location \_\_\_\_\_

As a contractor/subcontractor for the above referenced public works contract, I hereby affirm that as of the above date, our company is in compliance with the Public Works Employment Verification Act ('the Act') through utilization of the federal E-Verify Program (EVP) operated by the United States Department of Homeland Security. To the best of my/our knowledge, all employees hired post January 1, 2013 are authorized to work in the United States.

It is also agreed to that all public works contractors/subcontractors will utilize the federal EVP to verify the employment eligibility of each new hire within five (5) business days of the employee start date throughout the duration of the public works contract. Documentation confirming the use of the federal EVP upon each new hire shall be maintained in the event of an investigation or audit.

I, \_\_\_\_\_, authorized representative of the company above, attest that the information contained in this verification form is true and correct and understand that the submission of false or misleading information in connection with the above verification shall be subject to sanctions provided by law.

\_\_\_\_\_  
Authorized Representative Signature

**PDE MASTER STANDARD TERMS AND CONDITIONS**

1. **Definitions.** Capitalized terms used in these PDE master standard terms and conditions that are not otherwise defined in these provisions have the meanings specified in the agreement to which they are attached.
2. **Applicable Law and Forum.** This agreement is governed by and must be interpreted and enforced in accordance with the laws of the Commonwealth of Pennsylvania (without regard to any conflict of laws provisions) and the decisions of the Pennsylvania courts. The Grantee consents to the jurisdiction of any court of the Commonwealth of Pennsylvania and any federal courts in Pennsylvania and waives any claim or defense that such forum is not convenient or proper. Any Pennsylvania court or tribunal has in personam jurisdiction over the Contractor, and the Contractor consents to service of process in any manner authorized by Pennsylvania law. This provision may not be interpreted as a waiver or limitation of the Commonwealth's rights or defenses.
3. **Independent Capacity of Grantee.** The parties hereto agree that the Grantee, and any agents and employees of the Grantee, in the performance of this agreement, shall act in an independent capacity and not as officers, employees or agents of the Commonwealth.
4. **Assignability.** This grant may not be assigned by the Grantee either in whole or in part.
5. **Subcontracts.** Subcontracting by the Grantee shall be prohibited unless permitted by individual program guidelines or regulations.
6. **Indemnification.** The Grantee shall indemnify and defend the Commonwealth against all third-party claims, suits, demands, losses, damages, costs, and expenses, including without limitation, litigation expenses, attorneys' fees, and liabilities, arising out of or in connection with any activities performed by the Grantee or its employees and agents pursuant to this agreement, as determined by the Commonwealth in its sole discretion.
7. **Copyright Indemnity.** The Grantee shall defend any suit or proceeding brought against the Commonwealth on account of any alleged infringement of any copyright arising out of the performance of this grant, including all work, services, materials, reports, studies and computer programs provided by the Grantee. This is upon the condition that the Commonwealth shall provide prompt notification in writing of such suit or proceeding, full right, authorization and opportunity to conduct the defense thereof, and full information and all reasonable cooperation for the defense of same. As principles of governmental or public law are involved, the Commonwealth may participate in the defense of any such action. The Grantee shall pay all damages and costs awarded therein against the Commonwealth. If information and assistance are furnished by the Commonwealth at the Grantee's written request, it shall be only that within the Grantee's written authorization. If any of the materials, reports, studies or computer programs provided by the Grantee are in such suit or proceeding held to constitute infringement and the use or publication thereof is enjoined, the Grantee shall, at his own expense and at his option, either procure the right to publish or continue use of such infringing materials, reports, studies or computer programs, replace them with non-infringing items, or modify them so that they are no longer infringing. The obligations of the Grantee under this paragraph continue without time limit.
8. **Nondiscrimination/Sexual Harassment Clause.** The Grantee agrees:
  - a. **Representations.** The Grantee represents that it is presently in compliance with and will remain in compliance with all applicable federal, state, and local laws, regulations, and policies relating to nondiscrimination and sexual harassment for the term of the agreement. The Grantee shall, upon request and within the time periods requested by the Commonwealth, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to its books, records, and accounts by the Commonwealth for the purpose of ascertaining compliance with provisions of this Nondiscrimination/Sexual Harassment Clause.
  - b. **Nondiscrimination/Sexual Harassment Obligations.** The Grantee shall not:
    - i. in any manner discriminate in the hiring of any employee(s) for the performance of the activities required under this agreement or any subgrant agreement, contract, or subcontract, by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the Pennsylvania Human Relations Act ("PHRA") and

applicable federal laws, against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.

- ii. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against or intimidate any of its employees.
- iii. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, in the provision of services under this agreement or any subgrant agreement, contract, or subcontract.
- iv. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of PHRA and applicable federal laws, against any subgrantee, contractor, subcontractor, or supplier who is qualified to perform the work to which this agreement relates.
- v. in any manner discriminate against employees by reason of participation in or decision to refrain from participating in labor activities protected under the Public Employee Relations Act, Pennsylvania Labor Relations Act, or National Labor Relations Act, as applicable, and to the extent determined by entities charged with the Acts' enforcement and shall comply with any provision of law establishing organizations as employees' exclusive representatives.

c. **Establishment of Grantee Policy.** The Grantee shall establish and maintain a written nondiscrimination and sexual harassment policy that complies with the applicable law and these Nondiscrimination/Sexual Harassment provisions and shall inform its employees in writing of the policy. The policy must contain a provision that states that sexual harassment will not be tolerated and employees who practice it will be disciplined. For the entire period of this agreement, the Grantee shall: (1) post its written nondiscrimination and sexual harassment policy or these Nondiscrimination/Sexual Harassment provisions conspicuously in easily accessible and well-lighted places customarily frequented by employees at or near where the grant activities are performed; or (2) provide electronic notice of the policy or this clause to its employees not less than annually.

d. **Notification of Violations.** The Grantee's obligations pursuant to these provisions are ongoing from the effective date and through the termination date of the agreement. Accordingly, the Grantee shall notify the Commonwealth if, at any time during the term of this agreement, it becomes aware of any actions or occurrences that would result in violation of these provisions.

e. **Cancellation or Termination of Agreement.** The Commonwealth may cancel or terminate this agreement and all money due or to become due under this agreement may be forfeited for a violation of the terms and conditions of these Nondiscrimination/Sexual Harassment provisions. In addition, the granting agency may proceed with debarment or suspension and may place the Grantee in the Contractor Responsibility File.

f. **Subgrant Agreements, Contracts, and Subcontracts.** The Grantee shall include these Nondiscrimination/Sexual Harassment provisions in its subgrant agreements, contracts, and subcontracts with all subgrantees, contractors, and subcontractors providing goods or services under this agreement. The incorporation of these provisions in the Grantor's subgrants, contracts, or subcontracts does not create privity of contract between the Commonwealth and any subgrantee, contractor, or subcontractor, and no third-party beneficiaries are created by those provisions. If the Grantee becomes aware of a subgrantee's, contractor's, or subcontractor's violation of these provisions, the Grantee shall use its best efforts to ensure the subgrantee's, contractor's, or subcontractor's compliance with these provisions.

## 9. **Equal Opportunity for the Handicapped.**

- a. The Grantee agrees to abide by Sections 503 and 504 of the Rehabilitation Act of 1973, as amended (Public Law 93-112, 29 U.S.C. §§793 and 794, as amended) and implementing federal regulations. The Grantee assures that any benefits, services, or employment, available through the Grantee to the public by way of this grant's funds, shall not be denied handicapped persons who are otherwise qualified or eligible for the benefits, services, or employment available as a result of this grant.
- b. The Grantee will include the provisions of paragraph 9(a) above in every subgrant under this grant so that such provision binds each subgrantee.



10. **Covenant Against Contingent Fees.** The Grantee warrants that no person or selling agency has been employed or retained to solicit or secure this grant upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Grantee for the purpose of securing business. For breach or violation of this warranty, the Commonwealth shall have the right to annul this grant without liability or in its discretion to deduct from the grant price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.
11. **Sensitive Information.** The Grantee shall not publish or otherwise disclose, except to the Commonwealth and except matters of public record, any information or data obtained hereunder from private individuals, organizations, or public agencies, in a publication whereby the information or data furnished by or about any particular person or establishment can be identified, except with the consent of such person or establishment. While this grant is in effect any documentation provided by the Grantee, if marked as proprietary information, shall be held by the Commonwealth to the best of its ability as confidential and protected from unauthorized disclosure. The Commonwealth shall have the right to reproduce, including a proprietary notice, or copy any portion of such documentation for its own use. All such copies will be treated as the property of the Grantee.
12. **Publication Rights.** All property rights, including publication rights, in the interim, draft and final reports and other documentation produced by the Grantee in connection with the work provided for under this grant, shall rest with the Commonwealth. The Grantee shall not publish any of the results of the work without the written permission of the Department of Education.
13. **Termination.** The Commonwealth has the right to terminate this grant for any of the following reasons:
  - a. **TERMINATION FOR CONVENIENCE:** The Commonwealth may terminate this grant for its convenience if the Commonwealth determines termination to be in its best interest. The Grantee shall be paid for work satisfactorily completed prior to the effective date of the termination, but in no event shall the Grantee be entitled to recover loss of profits.
  - b. **NONAPPROPRIATION:** The Commonwealth's obligations are contingent upon appropriation of funds for the grant purpose and the availability of sufficient funds to pay Grantee's full allocation. The Commonwealth shall have the right to terminate this grant because of the nonavailability of sufficient funds (state and/or federal) for the Commonwealth to pay for the services to be rendered under this grant, including but not limited to the reservation of funds.
  - c. **TERMINATION FOR CAUSE:** The Commonwealth reserves the right to terminate this grant upon written notice for Grantee's nonperformance or inadequate performance.
14. **Disputes.** All questions or disputes arising between the parties hereto respecting any matter pertaining to this Agreement or any part thereof or any breach of contract arising thereunder shall be referred to the Pennsylvania Secretary of Education (under procedures which can be found at 1 Pa. Code Chapters 31, 33, and 35). Settlement of disputes under this provision must be prior to subsequent payments to Grantee. The foregoing provision notwithstanding, any dispute between the parties regarding matters governed by 34 C.F.R. 76.783 shall be resolved in accordance with the procedures in 34 C.F.R. 76.401(d).
15. **Record Retention.**
  - a. The Grantee will create and maintain program and accounting records required by the Commonwealth and agrees that a program review may be conducted at any reasonable time by Federal and State personnel and by any other persons duly authorized by the Federal grantor agency or the Commonwealth. Review of program and accounting records will be conducted in accordance with applicable Federal and State policies and regulations.
  - b. The Grantee will maintain all statistical records of the program, as required by the Commonwealth, and will produce program narrative and statistical data at times prescribed, and on forms provided, by the Commonwealth.
  - c. All required records will be retained in accordance with the statute and regulations governing the individual grant

program.

- d. Regardless of any other applicable requirement, all records pertinent to this Agreement, including financial, statistical, property and participant, and supporting documentation shall be retained for a period of at least **six (6) years** from the date of submission of the final closeout report for this Agreement or until all audits are complete and findings on all claims have been completely resolved.
- e. The Grantee shall make any grant application, program evaluation, periodic program plan, or report relating to any program operated under this Agreement available for public inspection upon request.

16. **Insurance.** The Grantee shall provide public liability, property damage and worker's compensation insurance, insuring as they may appear, the interest of all parties to this Agreement against any and all claims which may arise out of Grantee's operations under the terms of this Agreement. It is agreed that in the event any carrier of such insurance exercises cancellation, notice will be made immediately to the Commonwealth of such cancellation. The Grantee shall accept full responsibility for the payment of required premiums for worker's compensation, employment security, and social security, as well as all income tax deductions and any other taxes or payroll deductions required by law for its employees who are performing services specified by the Agreement.

17. **Patents and Copyrights.** If, in the course of performance of services pursuant to this agreement, the Grantee produces patentable items, patent rights processes or inventions, said items, rights, processes, inventions or discoveries become the property of the Commonwealth.

If, in the course of the performance of services pursuant to this agreement, the Grantee produces copyrightable material, the copyright rests with the Commonwealth. The Grantee shall provide public notice of the Commonwealth's copyright ownership by placing the following designation on all copies of the material: (1) the symbol c or the word "Copyright" or the abbreviation "Copr."; (2) the year of first publication; and (3) the name of the owner of the copyright. For example: "Copyright 2023 Commonwealth of Pennsylvania." The notice is to be affixed to all copies in such a manner and location as to give reasonable notice of the claim of the copyright.

The Commonwealth shall have unrestricted authority to reproduce, distribute and use any submitted report, data, or material, and any software or modifications, and any associated documentation that is designed or developed and delivered to the Commonwealth under this Agreement.

18. **Grantee Integrity Provisions.**

- a. **Definitions.** For purposes of these Grantee Integrity Provisions, the following definitions apply:
  - i. "Affiliate" means two or more entities where (a) a parent entity owns more than 50% of the voting stock of each of the entities; (b) a common shareholder or group of shareholders owns more than 50% of the voting stock of each of the entities; or (c) the entities have a common proprietor or general partner.
  - ii. "Grantee" means the individual or entity, that has entered into this agreement with the Commonwealth.
  - iii. "Grantee Related Parties" means any Affiliates of the Grantee and the Grantee's executive officers, Pennsylvania officers and directors, or owners of five percent or more interest in the Grantee.
  - iv. "Financial Interest" means ownership of more than a five percent interest in any business or holding a position as an officer, director, trustee, partner, employee, or holding any position of management.
  - v. "Gratuity" means tendering, giving, or providing anything of more than nominal monetary value including, but not limited to, cash, travel, entertainment, gifts, meals, lodging, loans, subscriptions, advances, deposits of money, services, employment, or contracts of any kind. The exceptions set forth in the Governor's Code of Conduct, Executive Order 1980-18, as may be amended, 4 Pa. Code §7.153(b), apply.

vi. “Non-Solicitation Award Process” means a method of awarding grants based on predetermined criteria, without the solicitation of grant applications.

**b. Representations and Warranties.**

i. Grantee Representation and Warranties. The Grantee represents, to the best of its knowledge and belief, and warrants that within the last five years neither the Grantee nor Grantee Related Parties have:

1. been indicted or convicted of a crime involving moral turpitude or business honesty or integrity in any jurisdiction;
2. been suspended, debarred, or otherwise disqualified from entering into any contract with any governmental agency;
3. had any business license or professional license suspended or revoked;
4. had any sanction or finding of fact imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, bid rigging, embezzlement, misrepresentation or anti-trust; and
5. been, and are not currently, the subject of a criminal investigation by any federal, state, or local prosecuting or investigative agency or civil anti-trust investigation by any federal, state, or local prosecuting or investigative agency.

ii. Contractor Explanation. If the Grantee cannot make the representations and warranties set forth above at the time of its submission of its grant application or if the agreement is awarded pursuant to a Non-Solicitation Award Process at the time of the execution of the agreement, the Grantee shall submit a written explanation outlining the reasons why it cannot make those representations and warranties. The Commonwealth may, based on its evaluation of the explanation provided, determine whether it is in the Commonwealth’s best interest to execute the agreement.

iii. Further Representations. By submitting any bills, invoices, or requests for payment pursuant to the agreement, the Grantee further represents that it has not violated any of these Grantee Integrity Provisions during the term of the agreement.

iv. Notice. The Grantee shall immediately notify the Commonwealth, in writing, if at any time during the term of the agreement it becomes aware of any event that would cause the Contractor's certification or explanation to change. The Grantee acknowledges that the Commonwealth may, in its sole discretion, terminate the agreement for cause if it learns that any of the certifications made in these Grantee Integrity Provisions are currently false or misleading due to intervening factual circumstances or were false or misleading or should have been known to be false or misleading when entering into the agreement.

**c. Grantee Responsibilities.** During the term of this agreement, the Grantee shall:

- i. maintain the highest standards of honesty and integrity.
- ii. take no action in violation of any applicable laws, regulations, or other requirements applicable to the Grantee that govern Commonwealth contracting or grant administration.
- iii. establish and implement a written business integrity policy that includes, at a minimum, the requirements of these Grantee Integrity Provisions as they relate to the Grantee’s activity with the Commonwealth and Commonwealth employees and ensure that its employees comply with the policy.
- iv. not accept, agree to give, offer, confer, agree to confer, or promise to confer, directly or indirectly, any gratuity or pecuniary benefit to any person, or to influence or attempt to influence any person in violation of any federal or state law, regulation, executive order, statement of policy, management directive, or bulletin applicable to the award of grants or the administration of this agreement.
- v. not have a financial interest in any other subgrantee, contractor, subcontractor, or supplier providing services, labor, or material under this agreement, unless the financial interest is disclosed to the Commonwealth in writing and the Commonwealth consents to Grantee’s financial interest. The Grantee must disclose the financial interest to the Commonwealth at the time of submission of its grant application, or if a Non-Solicitation Award

Process is used, no later than the date the Grantee signs the agreement. The Commonwealth shall be deemed to have consented if the required disclosure is received and all of the required Commonwealth signatures are affixed.

vi. comply with the requirements of the Lobbying Disclosure Act (65 Pa.C.S. § 13A01 et seq.) regardless of the method of award.

vii. comply with the requirements of Section 1641 of the Pennsylvania Election Code (25 P.S. § 3260a) if this agreement was awarded pursuant to a Non-Solicitation Award Process.

viii. immediately notify the Commonwealth or the Office of the State Inspector General, in writing, when the Grantee has reason to believe that any breach of ethical standards as set forth in law, the Governor's Code of Conduct, or these Grantee Integrity Provisions has occurred or may occur, including, but not limited to, contact by a Commonwealth officer or employee, which, if acted upon, would violate the ethical standards.

d. **Investigations.** If a State Inspector General investigation is initiated, the Grantee shall:

i. reimburse the Commonwealth for the reasonable costs of investigation incurred by the Office of the State Inspector General for investigations of the Grantee's compliance with the terms of this or any other agreement between the Grantee and the Commonwealth that results in the suspension or debarment of the Grantee. The Grantee shall not be responsible for investigative costs for investigations that do not result in the Grantee's suspension or debarment.

ii. cooperate with the Office of the State Inspector General in its investigation of any alleged Commonwealth agency or employee breach of ethical standards and any alleged Grantee non-compliance with these Grantee Integrity Provisions and make identified Grantee employees and volunteers available for interviews at reasonable times and places.

iii. upon the inquiry or request of an Inspector General, provide, or if appropriate, make promptly available for inspection or copying, any information of any type or form deemed relevant by the Office of the State Inspector General to Grantee's integrity and compliance with these provisions. This information may include, but is not be limited to, the Grantee's business or financial records, documents or files of any type or form that refer to or concern this agreement.

e. **Termination.** For violation of any of these Grantee Integrity Provisions, the Commonwealth may terminate this agreement and any other contract with the Grantee, claim liquidated damages in an amount equal to the value of anything received in breach of these Grantee Integrity provisions, claim damages for all additional costs and expenses incurred in obtaining another grantee to complete performance under this agreement, and debar and suspend the Grantee from doing business with the Commonwealth. These rights and remedies are cumulative, and the use or non-use of any one does not preclude the use of all or any other. These rights and remedies are in addition to those the Commonwealth may have under law, statute, regulation, or otherwise.

f. **Subcontracts.** The Grantee shall include these Grantee Integrity Provisions in its subgrant agreements, contracts, and subcontracts with all subgrantees, contractors, and subcontractors providing goods or services under this agreement. The incorporation of this provision in the Grantee's subgrant agreements, contracts, and subcontracts shall not create privity of contract between the Commonwealth and any subgrantee, contractor, or subcontractor, and no third-party beneficiaries are created by the inclusion of these provisions. If the Grantee becomes aware of a subgrantee's, contractor's, or subcontractor's violation of these provision, the Grantee shall use its best efforts to ensure their compliance with these provisions.

19. **Offset Provision.** The Commonwealth may set off the amount of any state tax liability or other obligation of the Grantee, or its subsidiaries, owed to the Commonwealth against any payments due the Grantee under any contract between the Commonwealth and Grantee.

20. **Contractor Responsibility Provisions.**

a. **Definition.** For the purpose of these provisions, the term "Contractor" means as any person, including, but not limited to, a bidder, offeror, loan recipient, grantee or lessor, who has furnished or performed or seeks to furnish or perform, goods, supplies, services, leased space, construction or other activity, under a contract, grant, lease, purchase order or reimbursement agreement with the Commonwealth. The term also includes a permittee, licensee, or any agency, political subdivision, instrumentality, public authority, or other public entity in the Commonwealth.

b. **Contractor Representations.**

i. The Contractor represents for itself and its subgrantees, contractors, and subcontractors required to be disclosed or approved by the Commonwealth, that as of the date of its execution of this agreement, that neither the Contractor, nor any of its subgrantees, contractors, and subcontractors, are under suspension or debarment by the Commonwealth or any governmental entity, instrumentality, or authority and, if the Contractor cannot make this representation, the Contractor shall submit, along with the agreement, a written explanation of why the certification cannot be made.

ii. The Contractor represents that, as of the date of its execution of this agreement, it has no tax liabilities or other Commonwealth obligations, or has filed a timely administrative or judicial appeal, if any liabilities or obligations exist, or is subject to a duly approved deferred payment plan if any liabilities exist.

c. **Notification.** The Contractor shall notify the Commonwealth if, at any time during the term of the agreement, it becomes delinquent in the payment of taxes, or other Commonwealth obligations, or if it or, to the best of its knowledge, any of its subgrantees, contractors, or subcontractors are suspended or debarred by the Commonwealth, the federal government, or any other state or governmental entity. The Contractor shall provide this notification within 15 days of the date of suspension or debarment.

d. **Default.** The Contractor's failure to notify the Commonwealth of its suspension or debarment by the Commonwealth, any other state, or the federal government constitutes an event of default of the agreement with the Commonwealth.

e. **Reimbursement.** The Contractor shall reimburse the Commonwealth for the reasonable costs of investigation incurred by the Office of State Inspector General for investigations of the Contractor's compliance with the terms of this agreement or any other agreement between the Contractor and the Commonwealth that results in the suspension or debarment of the Contractor. These costs include, but are not limited to, salaries of investigators, including overtime; travel and lodging expenses; and expert witness and documentary fees. The Contractor shall not be responsible for investigative costs for investigations that do not result in the Contractor's suspension or debarment.

f. **Suspension and Debarment List.** The Contractor may obtain a current list of suspended and debarred Commonwealth contractors by visiting the eMarketplace website at <http://www.emarketplace.state.pa.us> and clicking the Debarment list tab.

21. **Worker Protection and Investment.** The Grantee shall comply with all applicable Pennsylvania state labor laws and worker safety laws including, but not limited to, the following:

- a. Construction Workplace Misclassification Act;
- b. Employment of Minors Child Labor Act;
- c. Minimum Wage Act;
- d. Prevailing Wage Act;
- e. Equal Pay Law;
- f. Employer to Pay Employment Medical Examination Fee Act;
- g. Seasonal Farm Labor Act;
- h. Wage Payment and Collection Law;
- i. Industrial Homework Law;
- j. Construction Industry Employee Verification Act;
- k. Act 102: Prohibition on Excessive Overtime in Healthcare;

- l. Apprenticeship and Training Act; and
- m. Inspection of Employment Records Law.

22. **Americans with Disabilities Act.**

- a. **No Exclusion.** Pursuant to the Americans with Disabilities Act, 42 U.S. Code § 12101, et seq., no qualified individual with a disability may, on the basis of the disability, be excluded from participation in this contract or from activities provided for under this agreement.
- b. **Compliance.** For all goods and services provided pursuant to this agreement, the Grantee shall comply with Title II of the Americans with Disabilities Act, the "General Prohibitions Against Discrimination" set forth in 28 C. F. R. § 35.130, and all other regulations promulgated under Title II of the Americans with Disabilities Act that apply to state and local governments.
- c. **Indemnification.** The Grantee shall indemnify the Commonwealth against all third-party claims, suits, demands, losses, damages, costs, and expenses, including without limitation, litigation expenses, attorneys' fees, and liabilities, arising out of or in connection with the Grantee's failure or its employee's or agent's failure to comply with the provisions of paragraph a, as determined by the Commonwealth in its sole discretion.

23. **Integration Clause.** This agreement and attachments hereto constitute the entire agreement between the parties. No agent, representative, employee or officer of either the Commonwealth or the Grantee has authority to make, or has made, any statement, agreement or representation, oral or written, in connection with this agreement, which in any way can be deemed to modify, add to or detract from, or otherwise change or alter its terms and conditions. No negotiations between the parties, nor any custom or usage, shall be permitted to modify or contradict any of the terms and conditions of this agreement. Except as set forth in this agreement, no modifications, alterations, or changes to this agreement or any of its terms shall be valid or binding unless accomplished by a written amendment signed by both parties. All such amendments or modifications will be made using the appropriate Commonwealth form.

24. **Donation of Excess Prepared Food Clause.** The Grantee agrees to make a good faith effort to donate to a nonprofit organization for ultimate free distribution to needy individuals any apparently wholesome food or grocery products apparently fit for human consumption which are not consumed at the Commonwealth function. A good faith effort includes, but is not limited to, contacting one or more of the entities appearing on the referral listing maintained by the Department of Agriculture. Grantee is hereby put on notice that liability will not attach if the Grantee complies with 42 PA. C.S. §8338.

25. **Automated Clearing House Payment**

- a. **Payment Method.** The Commonwealth shall make payments to the Grantee through the Automated Clearing House (ACH). Within 10 days of the grant award, the Grantee must submit or must have submitted its ACH information within its user profile in the Commonwealth's Master Database. The Grantee may enroll to receive remittance information via electronic addenda and email (e-Remittance). ACH and e-Remittance information is available at the following:

<https://www.budget.pa.gov/Services/ForVendors/Pages/Direct-Deposit-and-e-Remittance.aspx>

- b. **Unique Identifier.** The Grantee must submit a unique invoice number with each invoice submitted. The Commonwealth shall list the Grantee's unique invoice number on its ACH remittance advice to enable the Grantee to properly apply the state agency's payment to the respective invoice or program.
- c. **ACH Information in the Commonwealth's Master Database.** The Grantee shall ensure that the ACH information contained in Commonwealth's Master Database is accurate and complete. The Grantee's failure to maintain accurate and complete information may result in delays in payments.

26. **Right to Know Law**

- a. **Applicability.** The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, (“RTKL”) applies to this contract.
- b. **Grantee Assistance.** If the Commonwealth needs the Grantee’s assistance in any matter arising out of the RTKL related to this contract, the Commonwealth shall notify the Grantee that it requires the Grantee’s assistance, and the Grantee shall provide to the Commonwealth:
  - i. access to, and copies of, any document or information in the Grantee’s possession (Requested Information) arising out of this contract that the Commonwealth reasonably believes is a public record under the RTKL, within ten calendar days after receipt of written notification; and
  - ii. any other assistance as the Commonwealth may reasonably request, in order to comply with the RTKL with respect to this contract.
- c. **Trade Secret or Confidential Proprietary Information.** If the Grantee considers the Requested Information to include a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, the Grantee shall notify the Commonwealth and provide, within seven calendar days of receipt of the written notice a written statement, signed by a representative of the Grantee, that explains why the requested material is exempt from public disclosure under the RTKL. If the Commonwealth determines that the Requested Information is clearly not exempt from disclosure, the Grantee shall provide the Requested Information to the Commonwealth within five business days of receipt of written notice of the Commonwealth’s determination.
- d. **Reimbursement**
  - i. **Commonwealth Reimbursement.** If the Grantee fails to provide the Requested Information and the Commonwealth is ordered to produce the Requested Information, the Grantee shall reimburse the Commonwealth for any damages, penalties, or costs that the Commonwealth may incur as a result of the Grantee’s failure, including any statutory damages assessed against the Commonwealth.
  - ii. **Contractor Reimbursement.** The Commonwealth will reimburse the Grantee for any costs that the Grantee incurs as a direct result of complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL.
  - e. **Challenges of Commonwealth Release.** The Grantee may file a legal challenge to any Commonwealth decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, the Grantee shall reimburse the Commonwealth for any legal expenses incurred by the Commonwealth as a result of the challenge, including any damages, penalties or costs that the Commonwealth may incur as a result of the Grantee’s legal challenge, regardless of the outcome.
- f. **Waiver.** As between the parties, the Grantee waives all rights or remedies that may be available to it as a result of the Commonwealth’s disclosure of Requested Information pursuant to the RTKL.
- g. **Survival.** The Grantee’s obligations contained in this Section survive the termination or expiration of this contract.

## 27. AUDIT REQUIREMENTS.

The Department shall have the right to audit or investigate the provision of services and the expenditure of funds under this agreement and/or to ensure the Grantee’s compliance with any provision of state or federal laws. Grantee will fully cooperate with any such audit or investigation, including without limitation by providing representatives of the Department with full and complete access to the facility and records of the Grantee and to interview any employees/students of the Grantee in connection with such audit or investigation.

The following applies to federal grant awards: Grantee must comply with all applicable federal and state grant requirements including The Single Audit Act Amendments of 1996; 2 CFR Part 200 as amended; and any other applicable law or regulation, and any amendment to such other applicable law or regulation that may be enacted or promulgated by the federal government.

If the Grantee is a local government or non-profit organization that expends \$750,000 or more in federal awards during its fiscal year, Grantee is required to provide the appropriate single or program specific audit in accordance with the provisions outlined in 2 CFR Part 200.501.

If Grantee expends total federal awards of less than the threshold established by 2 CFR 200.501, it is exempt from federal audit requirements for that year, but records must be available for review or audit by appropriate officials (or designees) of the federal agency, pass-through entity, and Government Accountability Office (GAO).

If Grantee is a for-profit entity, it is not subject to the auditing and reporting requirements of 2 CFR Part 200, Subpart F- Audit Requirements (Subpart F). However, the pass-through commonwealth agency is responsible for establishing requirements, as necessary, to ensure compliance by for-profit subrecipients. The contract with the for-profit subrecipient should describe applicable compliance requirements and the for-profit subrecipient's compliance responsibility. Methods to ensure compliance for federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the contract and post-award audits. The post-award audits may be in the form of a financial audit in accordance with Government Auditing Standards, a single audit report or program-specific audit report in accordance with Subpart F. However, these post-award audits must be submitted directly to the affected commonwealth agency that provided the funding. Only single audit reports for local governmental and non-profit subrecipients are electronically submitted to the Federal Audit Clearinghouse.

In instances where a federal program-specific audit guide is available, the audit report package for a program-specific audit may be different and should be prepared in accordance with the appropriate audit guide, Government Auditing Standards, and Subpart F.

In addition to the requirements of Subpart F, commonwealth agencies may require that the single audit reporting packages include additional components in the SEFA, or supplemental schedules, as identified through the respective grant agreement.

Grantee must submit an electronic copy of the audit report package to the Federal Audit Clearinghouse, which shall include the elements outlined in Subpart F.

The subrecipients must send a copy of the confirmation from the Federal Audit Clearinghouse to the resource account RA-BOASinqlAudit@pa.gov.

Grantee is responsible for obtaining the necessary audit and securing the services of a certified public accountant or independent governmental auditor.

The commonwealth reserves the right for federal and state agencies or their authorized representatives to perform additional audits of a financial or performance nature, if deemed necessary by commonwealth or federal agencies. Any such additional audit work will rely on work already performed by the Grantee's auditor and the costs for any additional work performed by the federal or state agencies will be borne by those agencies at no additional expense to the Grantee.

Audit documentation and audit reports must be retained by the Grantee's auditor for a minimum of five years from the date of issuance of the audit report, unless Grantee's auditor is notified in writing by the commonwealth, the cognizant federal agency for audit, or the oversight federal agency for audit to extend the retention period. Audit documentation will be made available upon request to authorized representatives of the commonwealth, the cognizant federal agency for audit, the oversight federal agency for audit, the federal funding agency, or the GAO.

## 28. **PRO-CHILDREN ACT OF 1994.**

If this grant provides payments of federal funds to the Grantee, pursuant to the Pro-Children Act of 1994, 20 U.S.C. §6081 et. seq., the Grantee assures that:

- a. The Grantee prohibits smoking within any indoor facility owned or leased or granted for and utilized by the Grantee for the routine or regular kindergarten, elementary, or secondary education or library services to children; and
- b. The Grantee prohibits smoking within any indoor facility (or portion thereof) owned or leased or granted for by the



Grantee for the provision by the Grantee of regular or routine health care or day care or early childhood development (Head Start) services to children or for the use of the employees of the Grantee who provide such services, except that this subsection shall not apply to:

- (i) any portion of such facility that is used for inpatient hospital treatment of individuals dependent on, or addicted to, drugs or alcohol; and
- (ii.) any private residence.

29. **FEDERAL ASSURANCE CLAUSE.**

If this grant provides payments of federal funds to the Grantee, the following clause will apply: Grantee's activities under this grant shall be carried out on a nondiscriminatory basis in accordance with 34 CFR Parts 100, 104 and 106 and 45 CFR Part 90 (relating to nondiscrimination on the basis of race, color, national origin, sex, handicap or age), the Civil Rights Act of 1870, as amended (42 U.S.C. §§1981 et seq.) and the Federal Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), and shall be carried out in accordance with the Fair Labor Standards Act (29 U.S.C. §§201-219), Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (42 U.S.C. §4601 et seq.), Equal Pay Act (29 U.S.C. §206), 34 CFR Parts 76, 80, 82, 98 and 99, and Office of Management and Budget Circulars A-87, A-102, A-110, A-128 and A-133, as applicable. Grantee certifies that it is acting in compliance with the provisions of 34 CFR Part 85 (relating to debarment and suspension), 20 U.S.C. §3224(a) (relating to drug and alcohol abuse prevention programs), and 31 U.S.C. §1352 (relating to lobbying). The above required certification shall be in such manner as required by applicable law. If Grantee is a school district, intermediate unit, area vocational-technical school, or other local educational agency or a state or public agency, it further assures that its employees and officials, whose principal employment is in connection with an activity funded with federal grant money, shall not engage in any political activity barred by the Hatch Act, 5 U.S.C. §§1501 et seq.

30. **GUN FREE SCHOOLS.**

As required by the Gun Free Schools Act, 20 U.S.C. §7151, the Grantee assures that, as a condition of receiving funds under this contract, it is complying with 24 P.S. §13-1317.2.

31. **LOBBYING CERTIFICATION.**

The following applies if this grant provides payment over \$100,000 of federal funds to the Grantee: The Grantee certifies, to the best of its knowledge and belief, that:

- a. No federal appropriated funds have been paid or will be paid, by or on behalf of the Grantee 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 the awarding of any federal grant, 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 grant, grant, loan, or cooperative agreement.
- b. 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 grant, loan, or cooperative agreement, the Grantee shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
- c. The Grantee shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subgrants, and grants under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed under 31 U.S.C. §1352. 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 such failure.

## 32. **FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT PROVISIONS**

### **A. Registration and Identification Information**

Grantee must maintain current registration in the Central Grantee Registration ([www.ccr.gov](http://www.ccr.gov)) at all times during which they have active federal awards funded pursuant to this agreement. A Dun and Bradstreet Data Universal Numbering System (DUNS) Number ([www.dnb.com](http://www.dnb.com)) is one of the requirements for registration in the Central Grantee Registration.

Grantee must provide its assigned DUNS number, and DUNS + 4 number if applicable, to the Commonwealth along with Grantee's return of the signed grant agreement. The Commonwealth will not process this grant until such time that Grantee provides this information.

### **B. Primary Location**

Grantee must provide to the Commonwealth the primary location of performance under the award, including the city, State, and zip+4. If performance is to occur in multiple locations, then Grantee must list the location where the most amount of the grant award is to be expended pursuant to this grant agreement.

Grantee must provide this information to the Commonwealth along with Grantee's return of the signed grant agreement. The Commonwealth will not process this grant until such time that Grantee provides this information.

### **C. Compensation of Officers**

Grantee must provide to the Commonwealth the names and total compensation of the five most highly compensated officers of the entity **if**—

(i) the entity in the preceding fiscal year received—

- (I) 80 percent or more of its annual gross revenues in Federal awards; and
- (II) \$25,000,000 or more in annual gross revenues from Federal awards; and

(ii) the public does not have access to information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986.

If the Grantee does not meet the conditions listed above, then it must specifically affirm to the Commonwealth that the requirements of this clause are inapplicable to the Grantee.

Grantee must provide information responding to this question along with Grantee's return of the signed grant agreement. The Commonwealth will not process this grant until such time that Grantee provides such information responding to this question.

33. **TRANSPORTATION, LODGING AND SUBSISTENCE.** Transportation, lodging and subsistence expenses incurred under this Agreement shall be reimbursed at state rates as per Management Directive 230.10

34. **SIGNATURES.** This Agreement may be executed in multiple counterparts, each of which shall be deemed an original and all of which shall together constitute one and the same instrument. Execution by the Commonwealth shall not be complete unless the Agreement bears all the signature approvals of duly authorized representatives of each and every Commonwealth office designated on the signature page. This Agreement, agreements ancillary to this Agreement, and related documents to be entered into in connection with this Agreement will be considered duly executed and delivered by any party affixing its electronic signature to an electronic file of the contract via the Department's e-grants system, or when the signature of a party is delivered by facsimile transmission or delivered by scanned image (e.g. .pdf or .tiff file extension name) as an attachment to electronic mail (email).

35. **ADDITIONAL TERMS AND CONDITIONS.**

- A. **Compliance with Law, Regulation and Guidelines.** The Grantee will adhere to all Federal and State laws, regulations and guidelines relating to the program funded under this agreement which constitute the conditions upon which these program funds are allocated.
- B. **Disallowed Costs.** The Grantee shall be liable for all disallowed costs, as determined during program audits or reviews, or as otherwise determined. The Grantee shall be liable for any payments made to, or for, any participants determined ineligible during program audits or reviews, or as otherwise determined.
- C. **Use of Funds.** The Grantee shall administer grant equipment, materials and supplies purchased with the funds provided by this Grant Agreement and use the funds provided hereunder for the purposes stated in the Agreement and in accordance with the applicable Federal and state laws and regulations and the most current program guidelines issued by Commonwealth. Without limitation of the foregoing, Grantee shall comply with all applicable federal regulations concerning the use of funds or property purchased with federal funds, including 34 C.F.R. §§74.31 through 74.37 (concerning the management and disposition of property charged to a project supported by a Federal award).
- D. **Antitrust.** The Grantee and the Commonwealth recognize that in actual economic practice, overcharges by the Grantee's suppliers resulting from violations of state and Federal antitrust laws are in fact borne by the Commonwealth. As part of the consideration for the award of this agreement, and intending to be legally bound, the Grantee assigns to the Commonwealth all right, title and interest in and to any claims the Grantee now has or may hereafter acquire under state or Federal antitrust laws relating to the goods or services which are the subject of this agreement.
- E. **Environmental Protection.** In carrying out this Agreement, the Grantee shall minimize pollution and shall strictly comply with all applicable environmental laws and regulations. (Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended; the Solid Waste Management Act, Act of July 7, 1980, P.L. 380, as amended; and the Dam Safety and Encroachments Act of November 26, 1978, P.L. 1375, as amended) (This clause does not apply to any project that does not have an environmental component).
- F. **Notice of Suspension or Debarment.** In addition to any other notice required hereunder, the Grantee shall notify the Department's Division of Procurements and Grants in the event of Grantee debarment or suspension by any agency or department of the federal government or by any other state.

## SECTION 012200 - UNIT PRICES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related Requirements:
  - 1. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
  - 2. Section 014000 "Quality Requirements" for field testing by an independent testing agency.

#### 1.3 DEFINITIONS

- A. Unit price is an amount incorporated into the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

#### 1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the Part 3 "Schedule of Unit Prices" Article contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

END OF SECTION 012200

## SECTION 012500 - SUBSTITUTION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
  - 1. Section 016000 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

#### 1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required to meet other Project requirements but may offer advantage to Contractor or Owner.

#### 1.4 ACTION SUBMITTALS

- A. Substitution Requests: Submit documentation identifying product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use form acceptable to Architect.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
    - b. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.

- c. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - d. Samples, where applicable or requested.
  - e. Certificates and qualification data, where applicable or requested.
  - f. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
  - g. Cost information, including a proposal of change, if any, in the Contract Sum.
  - h. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
  - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

## 1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

## 1.6 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

## 1.7 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
  - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - b. Requested substitution will not adversely affect Contractor's construction schedule.

- c. Requested substitution has received necessary approvals of authorities having jurisdiction.
  - d. Requested substitution is compatible with other portions of the Work.
  - e. Requested substitution has been coordinated with other portions of the Work.
  - f. Requested substitution provides specified warranty.
  - g. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Architect will consider requests for substitution if received within **60** days after the Notice to Proceed Requests received after that time may be considered or rejected at discretion of Architect.
1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
- a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
  - b. Requested substitution does not require extensive revisions to the Contract Documents.
  - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  - d. Substitution request is fully documented and properly submitted.
  - e. Requested substitution is compatible with other portions of the Work.
  - f. Requested substitution has been coordinated with other portions of the Work.
  - g. Requested substitution provides specified warranty.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500



## SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
  - 1. Section 012500 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.
  - 2. Section 013100 "Project Management and Coordination" for requirements for forms for contract modifications provided as part of web-based Project management software.

#### 1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710.

#### 1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
  - 2. Within 10 days, when not otherwise specified after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.

- d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  - e. Quotation Form: Use forms acceptable to Architect.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
  - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Include costs of labor and supervision directly attributable to the change.
  - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  - 6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
  - 7. Proposal Request Form: Use form acceptable to Architect

#### 1.5 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Change Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on **AIA Document G701**

#### 1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: **Architect** may issue a Construction Change Directive on **AIA Document G714**. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

## SECTION 012900 - PAYMENT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
  - 1. Section 012600 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
  - 2. Section 013200 "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

#### 1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

#### 1.4 SCHEDULE OF VALUES

- A. Submit the schedule of values to Architect at earliest possible date, but no later than 10 days before the date scheduled for submittal of initial Applications for Payment.
  - 1. Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
  - 2. Identification: Include the following Project identification on the schedule of values:
  - 3. 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 the 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 of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent. Round dollar amounts to whole dollars, with total equal to Contract Sum.
  - 1) Labor.
  - 2) Materials.
  - 3) Equipment.
- 4. 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.
- 5. Overhead Costs, Proportional Distribution: Include total cost and proportionate share of general overhead and profit for each line item.
- 6. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction Change Directive.

#### 1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments, as certified by Architect, and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the Owner/Contractor Agreement. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Times: Submit Application for Payment to Architect by the 15 of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
  - 1. Submit draft copy of Application for Payment **seven** days prior to due date for review by Architect.
- D. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
  - 1. Other Application for Payment forms proposed by the Contractor may be acceptable to Architect and Owner. Submit forms for approval with initial submittal of schedule of values.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. **Engineer** will return incomplete applications without action.
  - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
  - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.

3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
  4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- F. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
  2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  3. Provide summary documentation for stored materials indicating the following:
    - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
    - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- G. Transmittal: Submit 1 signed and notarized original copies of each Application for Payment to **Engineer** electronically. One copy shall include waivers of lien and similar attachments if required.
1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
  2. Schedule of values.
  3. Contractor's construction schedule (preliminary if not final).
  4. Products list (preliminary if not final).
  5. Sustainable design action plans, including preliminary project materials cost data.
  6. Schedule of unit prices.
  7. Submittal schedule (preliminary if not final).
  8. List of Contractor's staff assignments.
  9. List of Contractor's principal consultants.
  10. Copies of building permits.
  11. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
  12. Initial progress report.
  13. Report of preconstruction conference.
  14. Certificates of insurance and insurance policies.
  15. Performance and payment bonds.

16. Data needed to acquire Owner's insurance.
- I. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
  1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
    - a. Complete administrative actions, submittals, and Work preceding this application, as described in Section 017700 "Closeout Procedures."
  2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
  1. Evidence of completion of Project closeout requirements.
  2. Certification of completion of final punch list items.
  3. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  4. Updated final statement, accounting for final changes to the Contract Sum.
  5. AIA Document G706.
  6. AIA Document G706A.
  7. AIA Document G707.
  8. Evidence that claims have been settled.
  9. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
  10. Proof that taxes, fees, and similar obligations are paid.
  11. Waivers and releases.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

## SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project, including, but not limited to, the following:
  - 1. General coordination procedures.
  - 2. RFIs.
  - 3. Digital project management procedures.
  - 4. Project meetings.
- B. Related Requirements:
  - 1. Section 011200 "Summary" for a description of the work
  - 2. Section 013200 "Construction Progress Documentation"
  - 3. Section 017300 "Execution"
  - 4. Section 017700 "Closeout Procedures" for coordinating closeout of the Contract.

#### 1.3 DEFINITIONS

- A. BIM: Building Information Modeling.
- B. RFI: Request for Information. Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
  - 2. Number and title of related Specification Section(s) covered by subcontract.
  - 3. Drawing number and detail references, as appropriate, covered by subcontract.



- B. Key Personnel Names: Within **15** days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities, list addresses, cellular telephone numbers, and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.
  - 1. Post copies of list in Project meeting room, in temporary field office, in web-based Project software directory, **and** in prominent location in built facility. Always keep list current.

#### 1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results, where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and scheduled activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of Contractor's construction schedule.
  - 2. Preparation of the schedule of values.
  - 3. Installation and removal of temporary facilities and controls.
  - 4. Delivery and processing of submittals.
  - 5. Progress meetings.
  - 6. Preinstallation conferences.
  - 7. Project closeout activities.
  - 8. Startup and adjustment of systems.

#### 1.6 REQUEST FOR INFORMATION (RFI)

- A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
  - 1. Engineer will return without response those RFIs submitted to Architect by other entities controlled by Contractor.
  - 2. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.

- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
1. Project name.
  2. Owner name.
  3. Owner's Project number.
  4. Name of Architect
  5. Architect's Project number.
  6. Date.
  7. Name of Contractor.
  8. RFI number, numbered sequentially.
  9. RFI subject.
  10. Specification Section number and title and related paragraphs, as appropriate.
  11. Drawing number and detail references, as appropriate.
  12. Field dimensions and conditions, as appropriate.
  13. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  14. Contractor's signature.
  15. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
    - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: Software-generated form with substantially the same content as indicated above, acceptable to Architect.
1. Attachments shall be electronic files in PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow ten days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for approval of Contractor's means and methods.
    - d. Requests for coordination information already indicated in the Contract Documents.
    - e. Requests for adjustments in the Contract Time or the Contract Sum.
    - f. Requests for interpretation of Architect's actions on submittals.
    - g. Incomplete RFIs or inaccurately prepared RFIs.
  2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect of additional information.

3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."

a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within **5** days of receipt of the RFI response.

E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number.

1. Project name.
2. Name and address of Contractor.
3. Name and address of Architect
4. RFI number, including RFIs that were returned without action or withdrawn.
5. RFI description.
6. Date the RFI was submitted.
7. Date Architect's response was received.
8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within **seven** days if Contractor disagrees with response.

## 1.7 PROJECT MEETINGS

A. General: **Schedule and conduct** meetings and conferences at Project site unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times a minimum of **seven** days prior to meeting.
2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner, Architect, within **three** days of the meeting.

B. Preconstruction Conference: Schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.

1. Agenda: Discuss items of significance that could affect progress, including the following:
  - a. Responsibilities and personnel assignments.
  - b. Tentative construction schedule.
  - c. Phasing.
  - d. Critical work sequencing and long lead items.
  - e. Designation of key personnel and their duties.
  - f. Lines of communications.
  - g. Procedures for processing field decisions and Change Orders.

- h. Procedures for RFIs.
  - i. Procedures for testing and inspecting.
  - j. Procedures for processing Applications for Payment.
  - k. Distribution of the Contract Documents.
  - l. Submittal procedures.
  - m. Project closeout requirements and sustainable design certification procedures.
  - n. Construction waste management.
  - o. Construction operations and sustainable design requirements and restrictions.
  - p. Preparation of Record Documents.
  - q. Use of the premises
  - r. Work restrictions.
  - s. Working hours.
  - t. Owner's occupancy requirements.
  - u. Responsibility for temporary facilities and controls.
  - v. Procedures for moisture and mold control.
  - w. Procedures for disruptions and shutdowns.
  - x. Construction waste management and recycling.
  - y. Parking availability.
  - z. Office, work, and storage areas.
  - aa. Equipment deliveries and priorities.
  - bb. First aid.
  - cc. Security.
  - dd. Progress cleaning.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity when required by other Sections and when required for coordination with other construction.
- 1. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
  - 2. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
- D. Project Closeout Conference: **Schedule and conduct** a project closeout conference, at a time convenient to Owner and Architect, but no later than **90** days prior to the scheduled date of Substantial Completion.
- 1. Conduct the conference to review requirements and responsibilities related to Project closeout.
  - 2. Attendees: Authorized representatives of Owner, Owner's Commissioning Authority, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
    - a. Preparation of Record Documents.
    - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.

- c. Submittal of written warranties.
  - d. Requirements for delivery of material samples, attic stock, and spare parts.
  - e. Preparation of Contractor's punch list.
  - f. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
  - g. Submittal procedures.
  - h. Coordination of separate contracts.
  - i. Owner's partial occupancy requirements.
  - j. Installation of Owner's furniture, fixtures, and equipment.
  - k. Responsibility for removing temporary facilities and controls.
4. Minutes: Entity conducting meeting will record and distribute meeting minutes.
- E. Progress Meetings: Conduct progress meetings at biweekly intervals.
- 1. Coordinate dates of meetings with preparation of payment requests.
  - 2. Attendees: In addition to representatives of Owner, Owner's Commissioning Authority and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
      - 1) Review schedule for next period.
    - b. Review present and future needs of each entity present, including the following:
      - 1) Status of submittals.
      - 2) Deliveries.
      - 3) Access.
      - 4) Site use.
      - 5) Temporary facilities and controls.
      - 6) Progress cleaning.
      - 7) Quality and work standards.
      - 8) Status of correction of deficient items.
      - 9) Field observations.
      - 10) Status of RFIs.
      - 11) Status of Proposal Requests.
      - 12) Pending changes.
      - 13) Status of Change Orders.
      - 14) Pending claims and disputes.
      - 15) Documentation of information for payment requests.

4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
  - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting, where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

## SECTION 013233 - PHOTOGRAPHIC DOCUMENTATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
  - 1. Preconstruction photographs.
  - 2. Concealed Work photographs.
  - 3. Periodic construction photographs.
  - 4. Final Completion construction photographs.
- B. Related Requirements:
  - 1. Section 017700 "Closeout Procedures" for submitting photographic documentation as Project Record Documents at Project closeout.

#### 1.3 INFORMATIONAL SUBMITTALS

- A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same information as corresponding photographic documentation.
- B. Digital Photographs: Submit image files within 5 days of taking photographs.
  - 1. Submit photos by uploading to project management site. Include copy of key plan indicating each photograph's location and direction.
  - 2. Identification: Provide the following information with each image description in web-based project management site:
    - a. Name of Project.
    - b. Name and contact information for photographer.
    - c. Name of Engineer
    - d. Name of Contractor.
    - e. Date photograph was taken.
    - f. Description of location, vantage point, and direction.
    - g. Unique sequential identifier keyed to accompanying key plan.

1.4 CONSTRUCTION PHOTOGRAPHS

- A. General: Take photographs with maximum depth of field and in focus.
  - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- B. Preconstruction Photographs: Before commencement of the Work, take photographs of Project area, including existing items to remain during construction, from different vantage points, as directed by Engineer.
- C. Concealed Work Photographs: Before proceeding with installing work that will conceal other work, take photographs sufficient in number, with annotated descriptions, to record nature and location of concealed Work.
- D. Periodic Construction Photographs: Take 10 photographs weekly. Select vantage points to show status of construction and progress since last photographs were taken.
- E. Final Completion Construction Photographs: Take 40 photographs after date of Substantial Completion for submission as Project Record Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013233



## SECTION 013300 - SUBMITTAL PROCEDURES

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Submittal schedule requirements.
2. Administrative and procedural requirements for submittals.

B. Related Requirements:

1. Section 013100 "Project Management and Coordination"
2. Section 013200 "Construction Progress Documentation"
3. Section 013233 "Photographic Documentation"
4. Section 014000 "Quality Requirements"
5. Section 017700 "Closeout Procedures"
6. Section 017839 "Project Record Documents"

#### 1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Engineer's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

#### 1.3 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Engineer and additional time for handling and reviewing submittals required by those corrections.
1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
  2. Format: Arrange the following information in a tabular format:
    - a. Scheduled date for first submittal.
    - b. Specification Section number and title.

- c. Submittal Category: Action; informational.
- d. Name of subcontractor.
- e. Description of the Work covered.
- f. Scheduled date for Engineer's final release or approval.

#### 1.4 SUBMITTAL FORMATS

A. Submittal Information: Include the following information in each submittal:

- 1. Project name.
- 2. Date.
- 3. Name of Engineer.
- 4. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier and alphanumeric suffix for resubmittals.
- 5. Category and type of submittal.
- 6. Submittal purpose and description.
- 7. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
- 8. Drawing number and detail references, as appropriate.
- 9. Indication of full or partial submittal.
- 10. Location(s) where product is to be installed, as appropriate.
- 11. Other necessary identification.
- 12. Remarks.
- 13. Signature of transmitter.

B. Options: Identify options requiring selection by Engineer.

C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Engineer on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.

D. Electronic Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.

E. Submittals Utilizing Web-Based Project Software: Prepare submittals as PDF files or other format indicated by Project management software.

#### 1.5 SUBMITTAL PROCEDURES

A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

- 1. Email: Prepare submittals as PDF package and transmit to Engineer by sending via email. Include PDF transmittal form. Include information in email subject line as requested by Engineer.

- a. Engineer will return annotated file. Annotate and retain one copy of file as a digital Project Record Document file.
  2. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project management software website. Enter required data in web-based software site to fully identify submittal.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
  4. Coordinate transmittal of submittals for related parts of the Work specified in different Sections, so processing will not be delayed because of need to review submittals concurrently for coordination.
- a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow 15 days for review of each resubmittal.
  4. Sequential Review: Where sequential review of submittals by Engineer's consultants, Owner, or other parties is indicated, allow 21 days for initial review of each submittal.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
  2. Note date and content of revision in label or title block, and clearly indicate extent of revision.
  3. Resubmit submittals until they are marked with approval notation from Engineer's action stamp.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Engineer's and Construction Manager's action stamp.

## 1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
  2. Mark each copy of each submittal to show which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
  4. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams that show factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  5. Submit Product Data before Shop Drawings, and before or concurrently with Samples.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.
    - g. Seal and signature of professional engineer if specified.
- C. Samples: Submit Samples for review of type, color, pattern, and texture for a check of these characteristics with other materials.

1. Transmit Samples that contain multiple, related components, such as accessories together in one submittal package.
2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
  - a. Project name and submittal number.
  - b. Generic description of Sample.
  - c. Product name and name of manufacturer.
  - d. Sample source.
  - e. Number and title of applicable Specification Section.
  - f. Specification paragraph number and generic name of each item.
3. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project software website. Enter required data in web-based software site to fully identify submittal.
4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
  - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
  - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units, showing the full range of colors, textures, and patterns available.
  - a. Number of Samples: Submit **one** full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Engineer, will return submittal with options selected.
6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - a. Number of Samples: Submit **three** sets of Samples. Engineer will retain **two** Sample sets; remainder will be returned.
    - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
    - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least **three** sets of paired units that show approximate limits of variations.

- D. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
  2. Manufacturer and product name, and model number if applicable.
  3. Number and name of room or space.
  4. Location within room or space.
- E. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of Engineers and owners, and other information specified.
- F. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.
- G. Certificates:
1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
  2. Installer Certificates: Submit written statements on manufacturer's letterhead, certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
  3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead, certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
  4. Product Certificates: Submit written statements on manufacturer's letterhead, certifying that product complies with requirements in the Contract Documents.
- H. Test and Research Reports:
1. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for substrate preparation and primers required.
  2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
  3. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
  4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

#### 1.7 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with a uniform approval stamp, and indication in web-based Project management software. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
  1. Engineer will not review submittals received from Contractor that do not have Contractor's review and approval.

#### 1.8 ENGINEER'S REVIEW

- A. Action Submittals: Engineer will review each submittal, indicate corrections or revisions required.
  1. PDF Submittals: Engineer will indicate, via markup on each submittal, the appropriate action.
    - 1) APPROVED: The work involved may proceed, and no further submission is required.
    - 2) APPROVED AS NOTED: The work involved may proceed incorporating comments. Annotations do not authorize changes to Contract Sum.
    - 3) REVISE AND RESUBMIT: The work involved may not proceed. Submittal must be corrected and resubmitted.
    - 4) REJECTED: The submittal is not in accordance with the Contract Documents, and a completely new submittal is required
  2. Submittals by Web-Based Project Management Software: Engineer will indicate, on Project management software website, the appropriate action.
    - a. Actions taken by indication on Project management software website have the following meanings:
      - 1) APPROVED: The work involved may proceed, and no further submission is required.
      - 2) APPROVED AS NOTED: The work involved may proceed incorporating comments. Annotations do not authorize changes to Contract Sum.
      - 3) REVISE AND RESUBMIT: The work involved may not proceed. Submittal must be corrected and resubmitted.

- 4) REJECTED: The submittal is not in accordance with the Contract Documents, and a completely new submittal is required
- B. Informational Submittals: Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Engineer will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Engineer.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents will be returned by Engineer without action.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013300



## SECTION 014000 - QUALITY REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - 1. Specific quality-assurance and quality-control requirements for individual work results are specified in their respective Specification Sections. Requirements in individual Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-assurance and quality-control services required by Engineer, Owner or authorities having jurisdiction are not limited by provisions of this Section.

#### 1.3 DEFINITIONS

- A. Experienced: When used with an entity or individual, "experienced," unless otherwise further described, means having successfully completed a minimum of **five** previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
- B. Field Quality-Control Tests and Inspections: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- C. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, subcontractor, or sub-subcontractor, to perform a particular construction operation, including installation, erection, application, assembly, and similar operations.
  - 1. Use of trade-specific terminology in referring to a Work result does not require that certain construction activities specified apply exclusively to specific trade(s).

- D. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria. Unless otherwise indicated, copies of reports of tests or inspections performed for other than the Project do not meet this definition.
- E. Product Tests: Tests and inspections that are performed by a nationally recognized testing laboratory (NRTL) according to 29 CFR 1910.7, by a testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program (NVLAP), or by a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Tests and Inspections: Tests and inspections that are performed at the source (e.g., plant, mill, factory, or shop).
- G. Testing Agency: An entity engaged to perform specific tests, inspections, or both. The term "testing laboratory" has the same meaning as the term "testing agency."
- H. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work, to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- I. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work, to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Contractor's quality-control services do not include contract administration activities performed by Architect.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- B. Qualification Data: For Contractor's quality-control personnel.
- C. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility submitted to authorities having jurisdiction before starting work on the following systems:
  - 1. Seismic-force-resisting system, designated seismic system, or component listed in the Statement of Special Inspections.
  - 2. Primary wind-force-resisting system or a wind-resisting component listed in the Statement of Special Inspections.
- D. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- E. Reports: Prepare and submit certified written reports and documents as specified.

- F. Permits, Licenses, and Certificates: For Owner's record, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents established for compliance with standards and regulations bearing on performance of the Work.

#### 1.5 REPORTS AND DOCUMENTS

- A. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, telephone number, and email address of technical representative making report.
  2. Statement on condition of substrates and their acceptability for installation of product.
  3. Statement that products at Project site comply with requirements.
  4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  6. Statement of whether conditions, products, and installation will affect warranty.
  7. Other required items indicated in individual Specification Sections.

#### 1.6 QUALITY ASSURANCE

- A. Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units. As applicable, procure products from manufacturers able to meet qualification requirements, warranty requirements, and technical or factory-authorized service representative requirements.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, applying, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

#### 1.7 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities, whether specified or not, to verify and document that the Work complies with requirements.

1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
  2. Engage a qualified testing agency to perform quality-control services.
  3. Notify testing agencies at least **24** hours in advance of time when Work that requires testing or inspection will be performed.
  4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
  5. Testing and inspection requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
  6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspection.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014000

## SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
  - 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

#### 1.3 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

#### 1.4 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-mil minimum thickness, with flame-spread rating of 15 or less in accordance with ASTM E84 and passing NFPA 701 Test Method 2.
- B. Dust-Control Adhesive-Surface Walk-Off Mats: Provide mats, minimum 36 by 60 inches

## PART 3 - EXECUTION

### 3.1 TEMPORARY FACILITIES, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. General: Install temporary service or connect to existing service.
- C. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project Area. Provide temporary, directional signs for construction personnel and visitors.
- D. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."
- E. Existing Elevator Use: Use of Owner's existing elevators will be permitted, provided elevators are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore elevators to condition existing before initial use, including replacing worn cables, guide shoes, and similar items of limited life.

### 3.2 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
  - 1. Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - 1. Comply with work restrictions specified in Section 011000 "Summary."
- C. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
- D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

1. Provide overhead decking, protective enclosure walls, handrails, barricades, warning signs, exit signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
  2. Paint and maintain appearance of walkway for duration of the Work.
- E. Temporary Enclosures: Construct dustproof partitions with gypsum wallboard, with joints taped on occupied side, and fire-retardant-treated plywood on construction operations side.
1. Construct dustproof partitions with two layers of 6-mil polyethylene sheet on each side. Cover floor with two layers of 6-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant-treated plywood.
  2. Provide walk-off mats at each entrance through temporary partition.
- F. Controlled Construction Period: After completing and sealing of the building enclosure but

### 3.3 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
1. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

END OF SECTION 015000

## SECTION 016000 - PRODUCT REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
  - 1. Section 011000 "Summary" for Contractor requirements related to Owner-furnished products.
  - 2. Section 012500 "Substitution Procedures" for requests for substitutions.
  - 3. Section 01770 "Closeout Procedures" for submitting warranties.

#### 1.3 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
  - 2. New Products: Items that have not previously been incorporated into another project or facility. Salvaged items or items reused from other projects are not considered new products. Items that are manufactured or fabricated to include recycled content materials are considered new products, unless indicated otherwise.
  - 3. Comparable Product: Product by named manufacturer that is demonstrated and approved through the comparable product submittal process described in Part 2 "Comparable Products" Article, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a single manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation. Published attributes and characteristics of basis-of-design product establish salient characteristics of products.



1. Evaluation of Comparable Products: In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification.
- C. Subject to Compliance with Requirements: Where the phrase "Subject to compliance with requirements" introduces a product selection procedure in an individual Specification Section, provide products qualified under the specified product procedure. In the event that a named product or product by a named manufacturer does not meet the other requirements of the specifications, select another named product or product from another named manufacturer that does meet the requirements of the specifications; submit a comparable product request or substitution request, if applicable.
- D. Comparable Product Request Submittal: An action submittal requesting consideration of a comparable product, including the following information:
  1. Identification of basis-of-design product or fabrication or installation method to be replaced, including Specification Section number and title and Drawing numbers and titles.
  2. Data indicating compliance with the requirements specified in Part 2 "Comparable Products" Article.
- E. Basis-of-Design Product Specification Submittal: An action submittal complying with requirements in Section 013300 "Submittal Procedures."
- F. Substitution: Refer to Section 012500 "Substitution Procedures" for definition and limitations on substitutions.

#### 1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
  - a. Contractors are responsible for providing products and construction methods compatible with products and construction methods of other contractors.
  - b. If a dispute arises between the multiple contractors over concurrently selectable but incompatible products, Engineer will determine which products shall be used.
- B. Identification of Products: Except for required labels and operating data, do not attach or imprint manufacturer or product names or trademarks on exposed surfaces of products or equipment that will be exposed to view in occupied spaces or on the exterior.
  1. Labels: Locate required product labels and stamps on a concealed surface, or, where required for observation following installation, on a visually accessible surface that is not conspicuous.

2. Equipment Nameplates: Provide a permanent nameplate on each item of service- or power-operated equipment. Locate on a visually accessible but inconspicuous surface. Include information essential for operation, including the following:
  - a. Name of product and manufacturer.
  - b. Model and serial number.
  - c. Capacity.
  - d. Speed.
  - e. Ratings.
3. See individual identification Sections in Divisions -23, and 26 for additional equipment identification requirements.

#### 1.5 COORDINATION

- A. Modify or adjust affected work as necessary to integrate work of approved comparable products and approved substitutions.

#### 1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products, using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
  1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
  2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  4. Inspect products on delivery to determine compliance with the Contract Documents and that products are undamaged and properly protected.
- C. Storage:
  1. Provide a secure location and enclosure at Project site for storage of materials and equipment.
  2. Store products to allow for inspection and measurement of quantity or counting of units.
  3. Store materials in a manner that will not endanger Project structure.
  4. Store products that are subject to damage by the elements under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation and with adequate protection from wind.
  5. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.

6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.

## 1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
  1. Manufacturer's Warranty: Written standard warranty form furnished by individual manufacturer for a particular product and issued in the name of the Owner or endorsed by manufacturer to Owner.
  2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner and issued in the name of the Owner or endorsed by manufacturer to Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
  1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
  2. Specified Form: When specified forms are included in the Project Manual, prepare a written document, using indicated form properly executed.
  3. See other Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

## PART 2 - PRODUCTS

### 2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
  1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
  2. Owner reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.
  3. Where products are accompanied by the term "as selected," Engineer will make selection.
  4. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
  5. Or Equal: For products specified by name and accompanied by the term "or equal," "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.

- a. Submit additional documentation required by Engineer in order to establish equivalency of proposed products. Unless otherwise indicated, evaluation of "or equal" product status is by the Engineer, whose determination is final.

B. Product Selection Procedures:

1. Limited List of Products: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
  - a. Limited list of products may be indicated by the phrase "Subject to compliance with requirements, provide one of the following."
2. Limited List of Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience **will** be considered
  - a. Limited list of manufacturers is indicated by the phrase "Subject to compliance with requirements, provide products by one of the following."
3. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications may additionally indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
  - a. For approval of products by unnamed manufacturers, comply with requirements in Section 012500 "Substitution Procedures" for substitutions for convenience.

C. Visual Matching Specification: Where Specifications require the phrase "match Engineer's sample," provide a product that complies with requirements and matches Engineer's sample. Engineer's decision will be final on whether a proposed product matches.

1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.

D. Visual Selection Specification: Where Specifications include the phrase "as selected by Engineer from manufacturer's full range" or a similar phrase, select a product that complies with requirements. Engineer will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

E. Sustainable Product Selection: Where Specifications require product to meet sustainable product characteristics, select products complying with indicated requirements. Comply with requirements in Division 01 sustainability requirements Section and individual Specification Sections.

1. Select products for which sustainable design documentation submittals are available from manufacturer.

## 2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration of Comparable Products: Engineer will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Engineer may return requests without action, except to record noncompliance with the following requirements:
  1. Evidence that proposed product does not require revisions to the Contract Documents, is consistent with the Contract Documents, will produce the indicated results, and is compatible with other portions of the Work.
  2. Detailed comparison of significant qualities of proposed product with those of the named basis-of-design product. Significant product qualities include attributes, such as type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other specific features and requirements.
  3. Evidence that proposed product provides specified warranty.
  4. List of similar installations for completed projects, with project names and addresses and names and addresses of Engineers and owners, if requested.
  5. Samples, if requested.
- B. Engineer's Action on Comparable Products Submittal: If necessary, Engineer will request additional information or documentation for evaluation, as specified in Section 013300 "Submittal Procedures."
  1. Form of Approval of Submittal: As specified in Section 013300 "Submittal Procedures."
  2. Use product specified if Engineer does not issue a decision on use of a comparable product request within time allocated.
- C. Submittal Requirements, Two-Step Process: Approval by the Engineer of Contractor's request for use of comparable product is not intended to satisfy other submittal requirements. Comply with specified submittal requirements.

## PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

## SECTION 017300 - EXECUTION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work, including, but not limited to, the following:
  - 1. Installation of the Work.
  - 2. Cutting and patching.
  - 3. Coordination of Owner-installed products.
  - 4. Progress cleaning.
  - 5. Starting and adjusting.
  - 6. Protection of installed construction.
  - 7. Correction of the Work.
- B. Related Requirements:
  - 1. Section 017700 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, replacing defective work, and final cleaning.

#### 1.2 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of subsequent work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of subsequent work.

#### 1.3 QUALITY ASSURANCE

- A. Professional Engineer Qualifications: Refer to Section 014000 "Quality Requirements."
- B. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
  - 1. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
- C. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of specified products and equipment.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Comply with requirements specified in other Sections.
  - 1. For projects requiring compliance with sustainable design and construction practices and procedures, use products for patching that comply with sustainable design requirements.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
  - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials. Use materials that are not considered hazardous.
- C. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
  - 1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  - 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
  - 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- B. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

### 3.3 INSTALLATION

- A. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- B. Install products at the time and under conditions that will ensure satisfactory results as judged by Architect. Maintain conditions required for product performance until Substantial Completion.
- C. Conduct construction operations, so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy of type expected for Project.
- D. Tools and Equipment: Select tools or equipment that minimize production of excessive noise levels.
- E. Templates: Obtain and distribute to the parties involved templates for Work specified to be factory prepared and field installed. Check Shop Drawings of other portions of the Work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- F. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions with manufacturer.
- G. Joints: Make joints of uniform width. Where joint locations in exposed Work are not indicated, arrange joints for the best visual effect, as judged by Architect. Fit exposed connections together to form hairline joints.

### 3.4 CUTTING AND PATCHING

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.



- C. Temporary Support: Provide temporary support of Work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to **minimize** interruption to occupied areas.
- F. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
  - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
- G. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as practicable, as judged by Architect. Provide materials and comply with installation requirements specified in other Sections, where applicable.
  - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
  - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
    - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
    - b. Restore damaged pipe covering to its original condition.
  - 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
    - a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch, corner to corner of wall and edge to edge of ceiling. Provide additional coats until patch blends with adjacent surfaces.
  - 4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.

- 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- H. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

### 3.5 PROGRESS CLEANING

- A. Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Work Areas: Clean areas where Work is in progress to the level of cleanliness necessary for proper execution of the Work.
  - 1. Remove liquid spills promptly.
  - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- C. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- D. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- E. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- F. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- G. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- H. Limiting Exposures: Supervise construction operations to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.6 CORRECTION OF THE WORK

- A. Repair or remove and replace damaged, defective, or nonconforming Work. Restore damaged substrates and finishes.
  - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Repair Work previously completed and subsequently damaged during construction period. Repair to like-new condition.
- C. Restore permanent facilities used during construction to their specified condition.
- D. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- E. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- F. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

## SECTION 017700 - CLOSEOUT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, the following:
  - 1. Substantial Completion procedures.
  - 2. Final completion procedures.
  - 3. Warranties.
  - 4. Final cleaning.
- B. Related Requirements:
  - 1. Section 012900 "Payment Procedures" for requirements for Applications for Payment for Substantial Completion and Final Completion.
  - 2. Section 013233 "Photographic Documentation" for submitting Final Completion construction photographic documentation.
  - 3. Section 017839 "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

#### 1.3 DEFINITIONS

- A. List of Incomplete Items: Contractor-prepared list of items to be completed or corrected, prepared for the Engineer's use prior to Engineer's inspection, to determine if the Work is substantially complete.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of cleaning agent.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.5 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest-control inspection.

1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's "punch list"), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of **10** days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction, permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 2. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 3. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by **Engineer**. Label with manufacturer's name and model number.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of **10** days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Advise Owner of pending insurance changeover requirements.
  - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  - 3. Complete startup and testing of systems and equipment.
  - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
  - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Section 017900 "Demonstration and Training."
  - 6. Advise Owner of changeover in utility services.
  - 7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
  - 8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 9. Complete final cleaning requirements.
  - 10. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of **10** days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.

1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

#### 1.7 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining Final Completion, complete the following:

1. Submit a final Application for Payment in accordance with Section 012900 "Payment Procedures."
2. Certified List of Incomplete Items: Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report.
5. Submit Final Completion photographic documentation.

- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Engineer, will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

#### 1.8 LIST OF INCOMPLETE ITEMS

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order, listed by room or space number.
2. Organize items applying to each space by major element, including categories for ceilings, individual walls, floors, equipment, and building systems.

3. Include the following information at the top of each page:
  - a. Project name.
  - b. Date.
  - c. Name of Engineer,
  - d. Name of Contractor.
  - e. Page number.
4. Submit list of incomplete items in the following format:
  - a. MS Excel Electronic File: Engineer, will return annotated file.
  - b. Web-Based Project Software Upload: Utilize software feature for creating and updating list of incomplete items (punch list).

#### 1.9 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Engineer for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- C. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
  1. Submit on digital media acceptable to Engineer, by uploading to web-based project software site.
- D. Warranties in Paper Form:
  1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
  2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
  3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- E. Provide additional copies of each warranty to include in operation and maintenance manuals.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## PART 3 - EXECUTION

### 3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - a. Clean Project site of rubbish, waste material, litter, and other foreign substances.
  - b. Remove tools, construction equipment, machinery, and surplus material from Project site.
  - c. Remove snow and ice to provide safe access to building.
  - d. Clean flooring, removing debris, dirt, and staining; clean according to manufacturer's recommendations.
  - e. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
  - f. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
  - g. Remove labels that are not permanent.
  - h. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
  - i. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
  - j. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
  - k. Clean ducts, blowers, and coils, if units were operated without filters during construction or that display contamination with particulate matter on inspection.
  - l. Clean luminaires, lamps, globes, and reflectors to function with full efficiency.
  - m. Clean strainers.
  - n. Leave Project clean and ready for occupancy.



- C. Construction Waste Disposal: Comply with waste-disposal requirements in Section 015000 "Temporary Facilities and Controls." Section 017419 "Construction Waste Management and Disposal.

### 3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations required by Section 017300 "Execution" before requesting inspection for determination of Substantial Completion.

END OF SECTION 017700

## 017823 - OPERATION AND MAINTENANCE DATA

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for preparing, product maintenance manuals.
- B. Related Requirements:
  - 1. Section 011200 "Multiple Contract Summary" for coordinating operation and maintenance manuals covering the Work of multiple contracts.
  - 2. Section 013300 "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
  - 3. Section 019113 "General Commissioning Requirements" for verification and compilation of data into operation and maintenance manuals.

#### 1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

#### 1.4 CLOSEOUT SUBMITTALS

- A. Submit operation and maintenance manuals indicated. Provide content for each manual as specified in individual Specification Sections, and as reviewed and approved at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
  - 1. Engineer will comment on whether content of operation and maintenance submittals is acceptable.
  - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operation and maintenance manuals in the following format:

1. Submit on digital media acceptable to Engineer, by uploading to web-based project software site. Enable reviewer comments on draft submittals.
  2. .
- C. Initial Manual Submittal: Submit draft copy of each manual at least **30** days before commencing demonstration and training. Engineer will comment on whether general scope and content of manual are acceptable.
- D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least **15** days before commencing demonstration and training. Engineer will return copy with comments.
1. Correct or revise each manual to comply with Engineer's comments. Submit copies of each corrected manual within **15** days of receipt of Engineer's comments and prior to commencing demonstration and training.
- E. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

#### 1.5 FORMAT OF OPERATION AND MAINTENANCE MANUALS

- A. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
  2. File Names and Bookmarks: Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.

#### 1.6 PRODUCT MAINTENANCE MANUALS

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- C. Product Information: Include the following, as applicable:
1. Product name and model number.

2. Manufacturer's name.
3. Color, pattern, and texture.
4. Material and chemical composition.
5. Reordering information for specially manufactured products.

D. Maintenance Procedures: Include manufacturer's written recommendations and the following:

1. Inspection procedures.
2. Types of cleaning agents to be used and methods of cleaning.
3. List of cleaning agents and methods of cleaning detrimental to product.
4. Schedule for routine cleaning and maintenance.
5. Repair instructions.

E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

1. Include procedures to follow and required notifications for warranty claims.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 017823

## SECTION 017839 - PROJECT RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for Project Record Documents, including the following:
  - 1. Record Drawings.
  - 2. Record specifications.
  - 3. Record Product Data.
  - 4. Miscellaneous record submittals.
- B. Related Requirements:
  - 1. Section 017700 "Closeout Procedures" for general closeout procedures.
  - 2. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.

#### 1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
  - 1. : Submit copies of Record Drawings as follows:
    - a. Initial Submittal:
      - 1) Submit PDF electronic files of scanned record prints
      - 2) Submit Record Digital Data Files
      - 3) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
    - b. Final Submittal:
      - 1) Submit PDF electronic files of scanned Record Prints
      - 2) Print each drawing, whether changes and additional information were recorded.
- B. Record Specifications: Submit **annotated PDF electronic files** of Project's Specifications, including addenda and Contract modifications.
- C. Record Product Data: Submit **annotated PDF electronic files and directories** of each submittal.

1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.
- D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit **annotated PDF electronic files and directories** of each submittal.
- E. Reports: Submit written report **weekly** indicating items incorporated into Project Record Documents concurrent with progress of the Work, including revisions, concealed conditions, field changes, product selections, and other notations incorporated.

#### 1.4 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation, where installation varies from that indicated in Specifications, addenda, and Contract modifications.
  1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
- B. Format: Submit record specifications as **annotated PDF electronic file**

#### 1.5 RECORD PRODUCT DATA

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and revisions to Project Record Documents as they occur; do not wait until end of Project.
- B. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
  1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  2. Include significant changes in the product delivered to Project site and changes in
- C. Format: Submit Record Product Data as **annotated PDF electronic file**.
  1. Include Record Product Data directory organized by Specification Section number and title, electronically linked to each item of Record Product Data.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 017839

SECTION 000000  
SCOPE OF WORK

PART 1 - GENERAL

1.01 Site Location

- A. The project site is located in the at various schools in the Chester Upland School District System. The school locations are as follows:
1. Chester High School – 232 W. 9<sup>th</sup> Street, Chester, PA 19013
  2. Toby Farms Intermediate School – 201 Bridgwater Road, Chester Township, PA
  3. Edgmont Scholars Academy – 1450 Edgmont Avenue, Chester, PA 19013
  4. Main Street Elementary School – 704 Main Street, Upland PA 19015
  5. Chester Upland School of the Arts – 501 W. 9<sup>th</sup> Street, Chester, PA 19013
  6. Stem Academy at Showalter – 1100 W. Tenth Street, Chester, PA 19013

1.02 Project Description

- A. The Chester Upland School District is proposing new Marquee signs at various schools within the District. The Marquee signs are already purchased of this contract and this contract is for the Electrical Construction Only for the powering of the signs.
- B. The intent is to provide two dedicated branch circuits required to serve the new signage per the signage vendor's specifications. Each location will require a different approach and it is imperative that the electrical contractor be familiar with all existing conditions. The electrical contractor is to visit each site and review the existing conditions prior to submitting their bid. The scope of work is further detailed below:

**Edgmont Scholars Academy:**

Provide a transformer via new overcurrent protection in existing panel(s) and all wiring methods, penetrations, etc. as required by the signage vendors specifications.

**Chester High School:**

Survey the existing site lighting wiring pathway for possible re-use to serve the new signage. Provide new overcurrent protection in existing panel(s). Provide new wiring methods, etc. as required.

**Main Street Elementary:**

Provide new overcurrent protection in existing panels. Wiring methods are to be routed above ceiling to an approved penetration point, then underground to the new signage location.

**Chester Upland School of the Arts:**

Provide new overcurrent protection in existing panels. Wiring methods are to be routed above ceiling to an approved penetration point, then underground to the new signage location, avoiding playground area(s) and drip lines.

**STEM Academy at Showalter:**

Provide new overcurrent protection in existing panels. Wiring methods are to be routed above ceiling to an approved penetration point, then underground to the new signage location.

**Toby Farms**

Provide new overcurrent protection in existing panels. Wiring methods are to be routed above ceiling to an approved penetration point, then underground to the new signage location

- C. The scope of work is all inclusive and contractor is responsible for means and methods to install wiring and conduit for new signs. No separate payments will be made for cutting and patching which includes interior and exterior work.
- D. The contractor is required to coordinate with the sign supplier and installer as part of this project.

**1.04 General Requirements**

- A. The construction layout of all proposed elements of construction shall be to the specified lines and grades. All limits of work shall be marked out and approved by the Project Engineer prior to excavation. Grades shall be verified in the field during construction layout.
- B. The removal of existing features as incidental to the contract work items shall be completed, including but not limited to the following: metal plates, pipes, concrete slabs, stone, bricks, and all foreign materials encountered during the excavation for contract items.
- C. The curb ramp construction and sidewalk shall be deemed acceptable, prior to final restoration.

**1.05 Additional Requirements**

- A. All Base Bid work by the Contractor must be 100% complete within the contract time limit of 90 calendar days. The contract time limit shall begin once a written Notice to Proceed order has been issued to the contractor.
- B. The cost of all related incidental work, dust control, cleaning and restorations shall be included in the various unit prices bid. These activities are not separate pay items.
- C. All materials, construction procedures, type and use of equipment, measurement and payment shall be in accordance with the Commonwealth of Pennsylvania Department of Transportation Specifications, Publication 408, unless otherwise noted and/or modified by these specifications.
- D. The contractor is responsible for the construction layout of this project. The contractor shall forward all construction layout survey information to the Project Engineer for reference including: benchmarks, stationing, and elevations.



- E. All contractors and other persons utilizing this specification and the information contained herein are cautioned to comply with the requirements of Pennsylvania Act 172, entitled “Excavation and Demolition Work Protection of Underground Utilities.” Each individual contractor using the project plans must verify the location and depth of all underground utilities and facilities before starting work. The contractor shall notify “PA One Call” (1-800-242-1776) at least 72 hours prior to the start of any excavation.
- F. The contractor shall establish contact with an individual from each local utility prior to commencement of excavation. The contractor shall notify the Engineer and the utility owner immediately should a conflict occur in the limits of construction. The contractor shall be responsible for coordination of all work to be performed by the utility owner with regards to the work included in this contract. Additional payment will not be made for any delays incurred or any additional work performed due to conflicts with existing utility mains or service lines.
- G. All paved asphalt or concrete areas disturbed during construction shall be restored to a condition at least equal to that which existed prior to the start of construction.
- H. All fill shall be placed in twelve inch (12”) thick lifts and thoroughly compacted to the satisfaction of the Engineer. If borrow fill is required, it shall be subject to the approval of the Project Engineer.
- I. The contractor shall be responsible for the location and preservation of underground and surface utilities and structures at, or adjacent to, the site of construction. It shall be at the contractor’s own expense to repair or replace anything that is damaged by the contractor.
- J. All construction details not shown shall be in accordance with PennDOT standards as detailed in:
  - 1. PennDOT Specifications, Pub. 408, latest revision
  - 2. PennDOT Standards for Roadway Construction, Pub. 72, latest revisionThese standards can be purchased at: PA Department of Transportation, Sales Store, P.O. Box 2028, Harrisburg, PA 17105-2028, (717-787-6746).
- K. If encountered, payment will not be made for the excavation of rock, but the cost shall be included in the various items of the proposal.
- L. The contractor shall refer to the project plans for additional requirements.
- M. The project plans, entitled “Electrical Plans Bid Set” are appended and hereby included with the project specifications.

## PART 2 – PRODUCTS

Not Used

## PART 3 – EXECUTION

Not Used

## PART 4 – QUANTITY AND PAYMENT

Not Used

END OF SECTION

SECTION 010000  
GENERAL REQUIREMENTS

PART 1 - GENERAL

1.01 General

- A. Only major items of work are given in the Bid Form, but it is the intent of the specifications to secure a completely interconnected and functioning system, and should any workmanship or materials be required which are obviously necessary to carry out the full intent and meaning of the plans and specifications, or to be reasonably inferred therefrom, the cost of such workmanship or materials shall be included in the items in the bid form.
- B. Where construction is being performed in traveled roadways or rights-of-way, the Contractor is to provide all necessary traffic controls and devices in accordance with the current Pennsylvania Department of Transportation standards.
- C. The Contractor shall notify all utility companies prior to construction of utilities, curbing, and paving.
- D. Prior to any excavation, the Contractor shall have all utilities marked and shall excavate or otherwise determine the exact location and elevations of said utilities. The Contractor shall notify the Engineer of any conflicts. The Contractor shall arrange for any necessary utility relocations or field changes and shall reschedule his operations appropriately.
- E. The Contractor, in the construction of the project, shall not stockpile materials or store equipment on any private property, except areas designated by the plans or as directed by the Engineer. If required, the Engineer may direct the Contractor to have equipment removed from any project during weekend hours.
- F. All work of refilling sunken ditches, repaving over trenches, and keeping streets and sidewalks in passable condition shall be done to the satisfaction of the Owner during the construction of the project, as well as during the maintenance period. If any remedial work is not done within three (3) days after written notice is given by the Engineer, the work may be done by the Owner and charged to the Contractor.
- G. Special care shall be taken to prevent contamination, siltation, or interference of any kind with the stream flows or ponds along the line of work. No waste matter of any kind will be allowed to discharge into the stream flows or impounded water of any ponds or other bodies of water.
- H. The Contractor is to insure that proper measures for erosion control are employed and provide for the early establishment of vegetation that will help avoid erosion problems during and after construction. It is expected that the Contractor will anticipate possible

problems and provide timely and adequate control to prevent or minimize adverse effects.

- I. The Contractor is to notify residents by door-hangers at least forty-eight (48) hours in advance of starting construction work that will directly affect their property frontage, driveway(s), and/or on-street parking.
- J. All notes on plans shall be made a part of the specifications.
- K. The Contractor shall notify the Engineer at least forty-eight (48) hours in advance of any work scheduled for Saturdays.
- L. Separate payment will not be made for construction layout. The costs for construction layout for all site work shall be included in the various items of the proposal.

#### 1.02 Public Utilities

- A. The Contractor is required to ascertain all the facts concerning the location of utilities.
- B. The Contractor shall cooperate with the utility Owners in the adjustment of their facilities and shall notify the utility Owners not less than ten (10) days in advance of the time scheduled to perform any work that will impact or affect their facilities.
- C. The Contractor shall permit the Owners of utilities, or their agents, access to the site of the work at all times in order to relocate, construct, or protect their lines, and shall cooperate with them in performing this work.
- D. Separate payments will not be made for the coordination and cooperation of the Contractor with the utility companies, nor for the protection or replacement of utilities as specified hereinbefore, and the bidder shall include all such costs in the prices bid for the various scheduled items in the Bid Form.

#### 1.03 Preconstruction Video

- A. The Contractor shall, at no extra cost to the Owner, take DVD video recordings of the site prior to the commencement of construction. The video recording shall accurately depict the existing preconstruction condition of all curbs, sidewalks, driveways, fences, lawns, landscaped area, mailboxes, street furniture, and all other appurtenances within or outside a 25 foot radius of the limits of the construction of the project. One (1) copy of the video recording shall be provided to the Engineer. The date of the DVD video, as well as identification as to the location which the video depicts, must be provided.

#### 1.04 Maintenance and Protection of Traffic

- A. The Contractor shall erect, or place and maintain in good condition, barricades, warning signs, lights, flares, approved yellow-flashing light units, rubber traffic cones, and other warning and danger signals and devices appropriate and adequate for the specific project needs, and subject to the Engineer's approval. These shall be placed at working sites, closed roads, intersections, open excavations, locations of material storage, standing equipment, and other obstructions, at points where the usable vehicular or pedestrian traffic width of the road or sidewalk is reduced, at points where traffic is deflected from its normal courses or lanes, and at other places of danger to vehicular or pedestrian traffic.
- B. The Contractor shall provide sufficient watchmen and traffic directors, and shall take all other precautions, including any that may be ordered by the Engineer, which are necessary for the safety of the public and protection of the work.
- C. Road construction signs shall be placed at each end of the project along with every connecting intersection. At the start and end of each day, detour signs shall be placed if required.
- D. During the work on this project, the Contractor shall provide and/or be prepared to provide traffic protection devices in accordance with the Manual on Uniform Traffic Control Devices. The minimum numbers set forth in the Schedule shall be on hand at each separate project site prior to the commencement of any work (or phase of work) and shall be maintained on the project site throughout the period of the project (or phase). Failure to provide and maintain the minimum number of devices shall be sufficient cause for the Engineer to order cessation of work. When lack of any required safety devices presents an immediate hazard, the Engineer may order that such devices be provided by the Owner or by other Contractors, deducting the cost thereof from any monies due or becoming due to the Contractor lacking the required devices.
- E. The Contractor shall provide adequate means of access for fire, police, and emergency vehicles throughout the length of the project. The Contractor shall also provide for safe and adequate means of access to adjacent properties, both private and public.
- F. The cost of all work, as specified hereinbefore, and all other work required to protect public safety and maintain traffic flow shall be included in the prices bid for the various items in the Bid Form, unless specifically requested as a bid item in which case payment will be made as a lump sum.

#### 1.05 Reference to the Standard Specifications

- A. Portions of the work performed under this contract shall comply with the requirements of the Commonwealth of Pennsylvania Department of Transportation Publication 408, latest edition and supplements, the Pennsylvania Department of Transportation Standard Construction Details as applicable, and all requirements modified, as amended or supplemented, and whose specifications are made part of these specifications.
- B. The Standard Specifications are made part of these specifications by this reference as if they were set forth in full. It is the responsibility of the prospective bidder to be familiar with these Standard Specifications.

#### 1.06 Dust Control

- A. The Contractor will be required to maintain all excavations, embankments, stockpiles, haul roads, permanent access roads, plant sites, waste areas, borrow areas, and all other work areas within or outside the project boundaries free from dust which would cause a hazard or nuisance to others. Approved temporary methods of stabilization, consisting of sprinkling, chemical treatment, light bituminous treatment, or similar methods, will be permitted to control dust. Sprinkling, to be approved, must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times, and the Contractor must have sufficient competent equipment on the job to accomplish this if sprinkling is used. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs. If any dust control is not done within twenty-four (24) hours after written notice is given by the Engineer, the work may be done by the Owner and charged to the Contractor. Costs for dust control shall be included in the prices bid for the various items in the bid form.

#### 1.07 Mobilization

- A. This work is the assembly and set-up of the general plant required to comply with the contract and with local and State laws and regulations. General plant includes Contractor's offices, shops, plants, storage areas, and sanitary or other facilities. This work includes obtaining the required permits, insurance, bonds, and any other initial items required for the start of the work. These materials and furnishings will not be considered a part of the other completed contract items.
- B. Mobilization shall be performed in strict compliance with Section 608 of the Commonwealth of Pennsylvania Department of Transportation, Publication 408.

## PART 2 – PRODUCTS

Not Used

## PART 3 – EXECUTION

Not Used

## PART 4 – QUANTITY AND PAYMENT

### 4.01 Mobilization

- A. Quantity of “Mobilization” will not be measured for this project, but the work shall be performed as incidental to the proposed work.

### 4.02 Maintenance and Protection of Traffic

- A. Quantity of “Maintenance and Protection of Pedestrian and Vehicular Traffic” will not be measured for this project, but the work shall be performed as incidental to the proposed work.

### 4.03 General Requirements

- A. Quantity of all other items covered in the General Requirements will not be measured for this project, but the work shall be performed as incidental to the proposed work.
- B. Payment for all other items covered in the General Requirements will not be made for this project, but the cost shall be included in the various items of the proposal.

END OF SECTION

SECTION 020100  
CLEANING AND RESTORATIONS

PART 1 - GENERAL

1.01 Description

- A. The Contractor shall provide all equipment, labor, and materials required to clean and restore the site to at least the pre-existing condition.
- B. The Contractor shall maintain premises and public and/or private properties free from accumulations of waste, debris, and rubbish caused by work operations.
- C. At the completion of work, the Contractor shall remove waste materials, rubbish, tools, equipment, machinery, and surplus materials, clean all visually exposed surfaces, and leave project site clean and ready for occupancy.
- D. At the completion of work, the Contractor shall restore or replace, where and as directed by the Owner, any public or private property disturbed or damaged by Contractor's work operations to a condition at least equal to that existing prior to beginning work, or as otherwise specified. Materials, equipment and methods shall be approved by the Owner.

PART 2 - PRODUCTS

2.01 Materials

- A. For restorations, the Contractor shall use the following materials. All materials shall comply with the following Articles of the Commonwealth of Pennsylvania Department of Transportation Specifications, latest revision, and these specifications.
- B. Grass Restoration: See Section 802 "Topsoil Furnished and Placed", Section 804 "Seeding and Soil Supplements", and Section 809 "Sodding".
- C. Pavement Restoration: See Section 409 "Superpave Asphalt".
- D. Restoration of curbs and other concrete structures:
  - 1. Concrete:
    - a. Class AA: See Section 704 "Cement Concrete"
    - b. Design Compressive Strength: 3,500 psi at 28 days
    - c. Air-Entrainment: 6.0% +/- 1.5%
  - 2. Joint Fillers: See Section 705.4

3. Curing Compound: See Section 711.2

E. All Other Materials: As approved by the Owner or authorities having jurisdiction.

### PART 3 – EXECUTION

#### 3.01 Methods of Conducting Work - Cleaning

A. Requirements of regulatory agencies:

All excess material shall be removed from the site and disposed of by the Contractor at his expense. The cost of removal is to be included in the Base Bid for the Project. The disposal site shall be a permanently established licensed landfill.

B. Cleaning during construction:

The Contractor shall provide periodic cleaning to keep the work, site, and adjacent properties free from accumulations of waste materials, rubbish, and windblown debris resulting from construction operations. This includes dust, dirt, and mud.

The Contractor shall provide on-site containers for the collection of waste materials, debris, and rubbish, and shall maintain the containers as required. The containers shall be covered, as required, to prevent unauthorized use.

C. Dust control during construction:

The Contractor will be required to maintain all excavations, embankments, stockpiles, haul roads, permanent access roads, plant sites, waste areas, borrow areas, and all other work areas within or without the project boundaries free from dust which would cause a hazard or nuisance to others. Approved temporary methods of stabilization consisting of sprinkling, chemical treatment, light bituminous treatment, or similar methods will be permitted to control dust. Sprinkling, to be approved, must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times, and the Contractor must have sufficient competent equipment on the job to accomplish this if sprinkling is used.

Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs. If any dust control is not done within twenty four (24) hours after written notice is given by the Engineer, the work may be done by the Owner and charged to the Contractor.



### 3.02 Methods of Construction

#### A. General:

All existing structures, unpaved areas, and paved areas disturbed or damaged during the work under this contract shall be restored or replaced to a condition at least equal to that existing prior to beginning work, or as otherwise specified. The methods of conducting this work shall, as a minimum, conform to the following Articles of the Commonwealth of Pennsylvania Department of Transportation Specifications.

#### B. Grass Restoration:

See Section 802 "Topsoil Furnished and Placed", Section 804 "Seeding and Soil Supplements", and Section 809 "Sodding".

#### C. Pavement Restoration:

Restoration type and thickness shall be as shown on the contract drawings or as otherwise directed.

#### D. Restoration of Curbs and Other Concrete Structures:

1. Curbs: See Section 630 "Plain Cement Concrete Curb".
2. Other concrete structures: Restore in accordance with applicable Articles of the Standard Specifications.

#### E. All Other Restorations:

Restore in accordance with applicable Articles of the Standard Specifications, or as approved by the Owner or authorities having jurisdiction.

## PART 4 – QUANTITY AND PAYMENT

### 4.01 Cleaning and Restorations

- A. Quantity of Cleaning and Restorations will not be measured for this project, but the work shall be performed as necessary to restore all disturbed areas to at least the pre-existing condition.

END OF SECTION

SECTION 022000  
EARTHWORK

PART 1 – GENERAL

1.01 Description

- A. The work covered by this section consists of all earthwork and related/incidental work required to complete the project as indicated on the drawings and specified herein, including but not limited to:
1. Site demolition and clearing
  2. Stripping, stockpiling, and respreading topsoil
  3. Mechanical stone removal
  4. Soil erosion and sedimentation control
  5. Rough grading
  6. Excavation
  7. Trenching
  8. Filling and backfilling
  9. Shoring and bracing
  10. Footing drains
  11. Stone base under slabs on earth
  12. Soil compaction
  13. Disposal of excess material
  14. Quality control testing

1.02 Work Not Included

- A. The following related items of work are included in other sections of these specifications:
1. Final preparation of subgrade or provision of subbase for bituminous paving
  2. Finished grading, lawns, planting, sodding, and seeding
  3. Quality Assurance testing

1.03 Basis of Contract

- A. Excavation for this project shall be considered unclassified and shall include all types of earth and soil, any pebbles, boulder, and bedrock, municipal trash, rubbish, and garbage, and all types of debris of the construction industry such as wood, stone, concrete, plaster, brick, mortar, steel and iron shapes, pipe, wire, asphaltic materials, paper, and glass. All such materials encountered which are identified by this paragraph as unclassified shall be removed to the required widths and depths to create a finished product as shown and/or noted on the drawings and as written in the specifications. No additional compensation shall be made to the Contractor for this unclassified excavation. The materials defined by this paragraph as unclassified will not be considered to be concealed conditions or unknown physical conditions below the surface of the ground.

#### 1.04 Protection

- A. Existing monuments, bench marks, or other markers must not be damaged or disturbed. Suitable protection must be provided where required before starting work.
- B. Before starting work, any trees or shrubs shown or designated to be saved must be protected by boxing, wood, wire, or plastic fencing staked securely in place or other approved means, maintained until completion of work or until removal is approved by the Engineer.
- C. Any damage occurring because of failure of the Contractor to adequately provide protection shall be corrected at no additional cost to the Owner.

#### 1.05 Disposition of Utilities

- A. Rules and regulations of the various utility companies and other authorities having jurisdiction over such work shall be observed in the performance of all excavating, backfilling, and rough grading. The Contractor shall comply with the requirements of House Bill No. 1735 (of December 1986), Amendments to Act 287 of 1974.
- B. Active underground lines owned by utility companies or by the Owner shown on the drawings shall be adequately protected and shall be removed or relocated only as indicated or specified.
- C. The Contractor shall bear the burden of locating existing utilities prior to excavation. The Engineer and Owner shall be notified immediately should active utilities not indicated on the drawings be encountered. Such utilities shall be adequately protected, supported, or relocated as directed by the Engineer and the Owner. All work associated with a utility shall be coordinated with the utility company at no additional cost to the Owner.
- D. Abandoned utilities not indicated on the drawings which are encountered in excavating within the limits of the construction shall be removed to a point at least three (3) feet outside of building walls, or as required by local regulations. Except as otherwise specified above, abandoned utilities may remain in place, provided they do not interfere with the new construction, in which case they shall be removed to the full extent of such interference. Remaining lines shall be suitably plugged or capped.

#### 1.06 Subsurface Information

- A. There is no subsurface information available for the site.

### PART 2 – PRODUCTS

#### 2.01 Products

- A. Approval: All fill material shall be subject to the approval of the Engineer and the Owner.
- B. Notification: The City Engineer shall be notified at least seven working days in advance of intention to import material to the site so that the City Engineer may inspect the borrow area and review the tests to be assured of the quality of the material. If on-site material from excavations is to be used as fill, the Contractor shall allow the City Engineer five working days to review tests performed on this material prior to commencing fill placement.

## 2.02 Fill Materials

- A. Soil Fill Materials:
  - 1. Satisfactory Fill: Satisfactory fill or backfill, whether from on-site or borrowed off-site, shall be of soil classification group GW, GP, GM, GC, SW, SP, SM, or SC, as defined in ASTM D2487. The material shall be clean earth containing no organic matter, rubbish, or debris, but may contain sound rocks, pieces of concrete, and masonry material not over 6" in size if well distributed in earth, but not in the top 12" or against foundations, walls, grades beams, or similar construction. Select granular material, PennDOT 2RC, complying with Form 408, Section 703.3, is also satisfactory fill.
  - 2. Unsatisfactory Fill: Unsatisfactory fill or backfill shall be soil in classification groups CL, ML, OL, CH, MH, OH, and PT. For Engineered fill, defined as fill supporting building footings, slabs, or paving, GC and SC is also unsatisfactory.
- B. Crushed Stone or Gravel:
  - 1. All material shall comply with PennDOT Publication 408, Section 703.2, Type "A" aggregate.
  - 2. Base course under sidewalks shall be PennDOT No. 2A Coarse Aggregate. Base course under concrete and asphalt paving shall be PennDOT No. 2A Coarse Aggregate.
- C. Topsoil:
  - 1. Topsoil stripped from the site is acceptable for respreading. Borrowed topsoil shall be tested for organic content, size of coarse fragments, and undesirable particles. The samples shall be submitted as requested.

## PART 3 – EXECUTION

### 3.01 Site Demolition and Clearing

- A. Remove all improvements, abandoned structures, paved surfaces, utility lines and other items shown on the drawings and indicated to be removed or required to be removed in order to install new work as shown.
- B. Remove all objectionable material, rubbish, and junk within the project limits.

- C. Clear and grub the site of small caliper vegetative matter and roots. Hand grub under drip line of trees designated to remain.
- D. Remove trees, including stumps and root systems, unless specifically indicated to remain.
- E. Salvage items indicated on the plan and deliver as directed by the City Engineer.
- F. Dispose of removed material off site in accordance with requirements of this specification. Burning of waste material on the site is not permitted.

### 3.02 Stripping Topsoil

- A. Before starting rough grading, top soil shall be removed to its full depth and hauled from the site or stockpiled on site at suitable approved locations for use in future finish grading. Heavy growths of grass shall be removed before stripping topsoil.

### 3.03 Soil Erosion and Sedimentation Control

- A. No water transporting sediment resulting from earth moving, demolition, or other construction activities shall be permitted to discharge into the Waters of the Commonwealth or beyond the contract limits of the project.
- B. Natural surface water shall be diverted away from the work area. Diversion terraces and channels shall be constructed up-grade of the work area, as required, to convey tributary runoff around and beyond the outer limits of the area subject to earth moving, demolition, or other construction activities. Interception channels shall be constructed within the project area, as required, to control the discharge of sediment due to construction activities.
- C. All surface runoff from the project area and all discharge resulting from the de-watering of excavations shall be collected and diverted to facilities for removal of sediment. Water collected by interceptor channels shall be conveyed to sedimentation basins or to vegetated areas, but not directly to streams or storm drains.
- D. Earthmoving activities shall be planned to minimize the area, extent, and duration of exposure of disturbed land.
- E. Surfaces of cut and fill slopes, ditches, swales, earth stockpiles, and areas denuded of topsoil shall be stabilized to minimize surface erosion immediately after exposure.
- F. Temporary stabilization shall generally be accomplished by vegetative measures and seeding and with rapidly growing plants, such as annual rye grass, small grain, sudan grass, or field brome grass. This planting should be supplemented by mulches and protective netting as required or directed.

- G. Temporary erosion control facilities shall be maintained for the duration of construction and shall be removed only after the permanent drainage and erosion control features of the project have been completed and established in operation.
- H. Each Contractor is responsible for soil erosion and sedimentation control measures required by his earthwork. The lead Contractor shall coordinate all erosion and sedimentation control activity.
- I. Soil erosion and sedimentation control drawings have been reviewed and approved as to general scope of work required. Contractors are responsible for compliance with all regulations pertaining to soil erosion and sedimentation control during construction, notwithstanding the specifics of referenced drawings and specifications.

### 3.04 Rough Grading

- A. All areas within the construction area shall be rough graded to subgrade elevations, which shall be finished grades less thicknesses of finish materials as shown on the drawings. Only Satisfactory Fill, as previously specified, shall be used.
- B. If fill for construction of embankments is to be placed on existing slopes steeper than 4:1, benches shall be cut into the slope so that fill can be placed in level lifts. Benches shall be cut wide enough to allow passage of compaction equipment.
- C. Fill shall be placed and compacted in accordance with requirements of this section.
- D. At the end of each working day the fill surfaces shall be sealed by rolling to promote surface runoff and graded to prevent ponding of water.

### 3.05 Excavation

- A. The Contractor shall perform all excavation to accommodate all facilities and underground improvements and work incidental thereto. All work shall be performed with equipment suited to the task and operated by experienced operators. Sides of excavations shall be in accordance with OSHA and other applicable regulations and shall provide adequate space for inspection and access to work. All loose material shall be removed from excavations, and bottoms shall be carefully leveled to grade.
- B. The Contractor shall erect and maintain barricades, fences, warning lights, and other protection required to comply with all applicable regulations for safety of all persons at excavations according to requirements of "General Requirements."
- C. Excavated materials shall be piled away from the edge of excavations a sufficient distance to prevent overloading the bank, and graded in such a way as to prevent surface water from entering the excavated area. Excess material from excavation not suitable nor required for backfill or other purposes shall be disposed of in accordance with requirements of this specification and local ordinances.

- D. Excavations shall not be carried below existing building or wall foundations until underpinning and/or sheathing or shoring has been completed.
- E. Excavation to full depth is not to be done when rain or freezing conditions are imminent. Excavated foundation bearing surfaces shall be protected from frost. Where bearing surfaces are damaged by water, mud, or otherwise disturbed, all loose mud or other materials shall be removed and the surface regraded. Where the foundation excavation has been carried below plan grade due to errors in excavation, freezing, removal of mud, or other loose materials, or overshot or pitted rock surface, the foundation bearing surface shall be restored to plan grade with the same strength concrete as that specified for the footing above it at no additional cost to the Owner.
- F. When cutting of paved surfaces is required, the surface shall be machine cut in a neat, uniform manner. No paving shall be broken except that which has been previously cut. Edges of the cut pavement shall be protected during excavation and construction. Any edges which become broken shall be squared prior to pavement replacement.
- G. Hand excavation shall be done in any circumstance where machine excavation could damage existing or new structures or other underground improvements. Exploratory pits shall be hand dug to locate existing underground lines at connection points or points of crossing.

### 3.06 Blasting

- A. Blasting is not permitted on the site.

### 3.07 Approval of Bearing Strata

- A. The Contractor shall furnish adequate advance notification to the Owner and the Engineer of times when footing excavations are to be completed so that the bearing quality of the footings bottoms may be inspected and/or tested and approved. Form work and concreting shall follow only after this approval.
- B. Should the bearing at the levels indicated be found by the Engineer and the Owner to be inadequate, they may order the excavation carried down to sound bearing. Such excavation shall be classed as additional work and payment be made on the basis of an agreed price according to the General Conditions. Should suitable bearing be found at a lesser depth than indicated, the Engineer and the Owner may order the reduction of excavation specified or shown on the drawings and the Contractor shall allow a credit for excavation thus omitted on the same basis.
- C. All footings shall rest on level surfaces and rock shall be stepped and cleaned to a hard surface.

### 3.08 Filling and Backfilling

- A. Fill or backfill may not be done over frozen subgrade nor may any frozen material be used in fill or backfill.
- B. Excavations and areas to be filled must be cleaned of all topsoil, vegetable matter, refuse, and debris before placing any fill or backfill.
- C. No backfilling shall be done around any parts of the structures until such parts have been inspected and the backfilling authorized by the Inspector. No filling inside the building, or backfilling against foundation walls or areaways shall be done until concrete forms have been removed, pointing and dampproofing of concrete and masonry work has been completed, and the concrete is thoroughly cured.
- D. All fill shall be placed in 6" – 8" layers unless approved for thicker layers based upon Quality Control Agent's recommendation, considering soil, location, and compaction equipment. Excavations against walls to be waterproofed are not to be backfilled until waterproofing is completed, protected and approved.
- E. Filling and backfilling is to be performed carefully so as not to damage or otherwise affect the stability of any construction. Backfilling may be done only when the structure is fully capable of withstanding the resulting pressure and shall take place concurrently on both sides of walls.
- F. Where wood sheet piling, form work, bracing or shoring is used, it shall be removed as the work progresses and the voids left shall be backfilled with 2500 lb. concrete below the top of adjacent footings and foundations.
- G. Additional earth for fill or backfill to raise or change the exterior or interior subgrade to the required elevations shown on the drawings, required in excess of acceptable material from excavations on the site, shall be provided by the Contractor from a source approved by the Engineer and the Owner at no additional cost to the Owner.
- H. Any excavations improperly backfilled, or where settlement occurs, shall be opened to the depth required for proper compaction and then refilled in lifts and compacted in accordance with requirements of this section.

### 3.09 Compaction

- A. General: Compaction control shall be exercised during construction to provide no less than the minimum density specified for each class of area and type of material as indicated below.
- B. Cohesive soil fill shall be compacted with a suitable sheeps foot or segmented roller and shall be compacted to not less than the following percentages of maximum dry density as determined in accordance with laboratory test, ASTM D1557 (Modified Proctor) and field tests, ASTM D1556 (sand cone) or D2922 (nuclear):



1. Footings: Where footings are to be placed on Engineered fill, subgrade and succeeding lifts of fill material shall be compacted to 98% of maximum dry density at  $\pm 2\%$  of optimum moisture.
  2. Building Slabs and Steps: Subgrade and each layer of fill material shall be compacted to 95% of maximum dry density at  $\pm 2\%$  of optimum moisture.
  3. Walkways: Subgrade and each layer of fill materials shall be compacted to 92% of maximum dry density at  $\pm 2\%$  of optimum moisture.
  4. Lawns or Unpaved Areas: Subgrade and each layer of fill materials shall be compacted to 90% of maximum dry density at  $\pm 2\%$  of optimum moisture content.
  5. Paved Areas and Roadway Embankments: Subgrade and each layer of fill materials for paved areas shall be compacted to 98% of maximum dry density. Where paved area is to be constructed on embankment, the top three feet shall be compacted to 98% of maximum dry density, with the balance to 95%.
- C. For free draining, granular soils where Proctor test procedures may be inappropriate, the degree of compaction shall be 75% of Relative Density as determined by ASTM D4253.
- D. Crushed Stone shall achieve compaction by the application of appropriate mechanical compaction of the stone in succeeding lifts. Stone subbase for slabs and paving shall be compacted with a 10 ton (static weight) vibratory roller.
- E. Compaction of shale or other material which degrades upon compaction shall only be used if approved and then compacted in an approved manner.
- F. Prior to installing the stone base for slabs or concrete paving on earth, the subgrade shall be proof-rolled with a 10 ton roller until no displacement occurs or a minimum of 10 passes.

### 3.10 Moisture Control

- A. Cohesive soil must achieve moisture conditioning before compaction by the addition of water applied uniformly to the surface, scarified and mixed by discing or harrowing before compacting. If the soil is too wet to achieve proper compaction, it must be scarified and air dried before compacting, or it must be removed and replaced.
- B. Soil material too wet for proper compaction, which has been removed, may be stockpiled or spread and allowed to dry. Material may be reused when moisture content has been lowered sufficiently to allow proper compaction.
- C. Soil material which has been stockpiled for future incorporation into the project shall be protected from becoming saturated. Stockpiled fill in a loose and/or unprotected condition, which becomes too wet for use, shall be spread and allowed to dry until suitable for use or replaced with borrowed fill material at no additional cost to the Owner.

### 3.11 Stone Base under Slab on Earth

- A. Crushed stone or crushed gravel base course shall be provided under all floor slabs, paving slabs, or platforms on earth. Stone shall be as specified in this section and of thicknesses shown on the drawings.

### 3.11 Quality Control Testing

- A. The Contractor shall perform all necessary Quality Control (Q.C.) tests and procedures for the performance of the work in accordance with this section to produce the end results specified. The Contractor shall maintain clear and orderly records of such tests and procedures, and make them available for field review and approval of the Engineer and the Owner. The Contractor's bid shall include the cost of all Q.C. tests.
- B. The Contractor shall submit the plan for Q.C. testing to the Engineer and the Owner for review and comments.
- C. Q.C. tests shall include tests on fill material, optimum moisture content, and maximum density and field density tests of fill layers. The Q.C. testing agent shall comment on the suitability of all subgrades, and the subgrades shall be acceptable to the Q.C. Agency.
- D. Handwritten copies of field test reports shall be provided to the Contractor by the Q.C. Agency. They should be given to the Contractor and inspector within two (2) hours of completion, but in no event shall the technician leave the site without providing the Contractor and inspector with a copy of the test results. This shall include density, % moisture, plan location, elevation, comments, and any other relevant data. Comments shall include any condition that might have an adverse affect on the operations, including weather, drainage, etc.
- E. The Contractor shall consult the Consulting Soils/Foundation Engineer on any problems that arise during construction. Copies of the daily in-place soil density tests shall be faxed to the consultant by the Contractor through the testing agency within twenty-four (24) hours of the time the tests are made.
- F. The Contractor shall approve each subgrade and each fill layer before proceeding to the next layer. Any area which does not meet density, % moisture, or other requirements at any time, shall be suitably reworked and retested by the Contractor at his own expense.

### 3.13 Shoring and Bracing

- A. The Contractor shall provide and maintain sheeting, shoring, and bracing as necessary to protect workmen and work of this project and existing structures. Restoration of damaged areas to original condition is the Contractor's responsibility. The Contractor shall submit his plan for sheeting, shoring, and bracing for approval before commencing work.
- B. It is also the Contractor's responsibility to remove temporary sheeting, shoring, bracing, and protection when no longer required by adjacent conditions and completion of

foundation construction or backfill and rough grading as approved by the Engineer and The Owner.

- C. Contractor is to submit for approval his plan for excavation for underpinning, whether or not sheeting, shoring, or bracing is planned.

### 3.14 Pumping and Drainage

- A. The Contractor shall pump out, or otherwise remove, any water which may be found in the excavation, and shall provide drainage ditches, underdrains, flumes, well points, pumping equipment, and suction and discharge lines as necessary to keep the excavation entirely clear of water while the foundations are being built or other operations are being performed requiring a dry condition.

### 3.15 Respreading Topsoil

- A. Upon completion of concrete work, utilities, paving, drainage, and grading operations, the Contractor shall rough spread topsoil to a depth of 4" over disturbed and new lawn areas and to depths noted at planting beds. Additional topsoil needed to meet this requirement shall be supplied by the Contractor at no cost to the Owner.

### 3.16 Disturbed Areas

- A. The Contractor shall restore all paving, roadways, walkways, lawns, and other surfaces disturbed by this work to the condition prior to execution of the contract. The Contractor shall repair any damages to existing or new structures, site, or underground or above ground improvements caused directly or indirectly by this work.

### 3.17 Cleanup

- A. Any paved area (either new or existing) over which hauling operations or other moving equipment are conducted, shall be kept clean and any soil or other material which may be spilled or left upon the paved surfaces shall be removed. Paved surfaces shall be left broom clean. Wet down surfaces as required to prevent excessive airborne dust.

### 3.18 Disposal

- A. All debris and excess earth must be removed from the site using procedures resulting in full compliance with all applicable regulations. The Contractor shall obtain approval of the dump site(s) from the Engineer and the Owner, which approval will not relieve the Contractor of his responsibility herein.

## PART 4 – QUANTITY AND PAYMENT

### 4.01 Site Clearing and Earthwork

- A. Quantity of “Site Clearing and Earthwork” will not be measured for this project, but the work shall be performed as incidental to the proposed work.

END OF SECTION

SECTION 025500  
SAWCUTTING - BITUMINOUS AND CONCRETE SURFACES

PART 1 – GENERAL

1.01 Description

- A. When sawcutting is specified or required for a neat construction joint, sawing equipment shall be provided adequate in number of units and power to complete the sawing to the required dimensions and at the rate necessary to prevent uncontrolled cracking. The saws shall be equipped with water-cooled diamond edge blades or abrasive wheels and alignment guides.
- B. Saw shall be of a sufficient size to perform a straight even cut with no irregularities when measured with a ten (10) foot straight edge.
- C. This section shall include the full depth sawcutting of the existing concrete or bituminous material.
- D. At least one (1) standby saw in working order shall be provided. An ample supply of saw blades shall be maintained at the work site at all times during sawing operation.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

PART 4 – QUANTITY AND PAYMENT

4.01 Sawcutting – Bituminous and Concrete Surfaces

- A. Quantity of Sawcutting - Bituminous and Concrete Surfaces will not be measured for this project, but the work shall be performed as required to provide quality, neat, and even joints between existing and proposed surfaces.

END OF SECTION

**CONTENTS**

**DIVISION 26 - ELECTRICAL**

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## **DIVISION 26 - ELECTRICAL**

### **SECTION 26 00 00 - STANDARD CONDITIONS FOR ELECTRICAL WORK**

#### **PART 1 - GENERAL**

##### **1.01 REGULATIONS, CODES, STANDARDS**

- A. Reference Codes, applicable sections of the following codes and standards shall be considered as binding to the work of this project:
- |       |   |
|-------|---|
| NEMA  | National Electrical Manufacturers' Association    |
| NEC   | National Electrical Code (NFPA 70) - 2017 Edition |
| NECA  | National Electrical Contractors' Association      |
| NEIS  | National Electrical Installation Standards        |
| EGSA  | Electrical Generating Systems Association         |
| IBC   | International Building Code                       |
| NFPA  | National Fire Protection Association              |
| IEEE  | Institute of Electrical and Electronics Engineers |
| UL    | Underwriter's Laboratories, Inc.                  |
| IES   | Illuminating Engineering Society                  |
| OSHA  | Occupational Safety and Health Administration     |
| ANSI  | American National Standards Institute             |
| ASTM  | American Society for Testing and Materials        |
| FM    | Factory Mutual                                    |
| IRI   | Industrial Risk Ensurers                          |
| ISO   | Insuring Services Office                          |
| IPCEA | Insulated Power Cable Engineers Assoc.            |
| ADA   | Americans with Disability Act                     |
| NETA  | International Electrical Testing Association      |
- B. All local codes are to be incorporated.
- C. The latest adopted codes and latest editions of standards shall be the basis of conformance.
- D. Obtain and pay for all permits and inspections, and any associated charges.
- E. Inspection Agency Certificate of Inspection to be provided at completion of the work.  
Inspection by Middle Department Inspection Agency, Inc., or other local inspection agency.
- F. Drawings, Contract, General Conditions and Supplementary Conditions form a part of this section, by reference thereto and shall have the same force and effect as if printed herewith in full. Failure to review these sections shall not relieve the Contractor of his responsibility to fully comply with the terms therein.
- G. Where the contract documents are more stringent but not in conflict with the applicable codes, the more stringent requirements shall be followed.

##### **1.02 SUBMITTALS**

- A. The procedure for submissions of shop drawings shall be as indicated below.
- B. Furnish submissions of shop drawings and samples of materials and equipment as indicated in these sections, on the drawings, or as directed by the engineer. Submissions will be made in a timely fashion such that adequate time exists to review the drawings, or material, and arrive at the site in accordance with the project schedule.

- C. Submissions will not be accepted with work defined as "By Others". Identify contractor by name and with his approval so indicated. Submissions are required prior to purchasing, fabrication, or installation of any material or equipment. Submissions shall be reviewed and certified by the submitting contractor that they are in accordance with the project documents.
- D. When requested by the engineer, shop drawings shall be required to be submitted to designated agencies for review and approval prior to submission to the engineer.
- E. Contractor shall arrange and pay for all tests and inspections specified herein or required by above agencies and furnish required certificate of inspection to owner.
- F. Contractor shall provide performance test data and wiring diagrams of all electrical equipment.
- G. Submissions shall include warranties by the manufacturer for equipment being provided. Submissions for commonly related items such as fixtures, trim, carriers, shall be combined in a single brochure clearly identifying all items being furnished.
- H. Shop drawings and submittals shall be checked and stamped by the contractor before submitting. They shall conform to measurements made at the site, the contract requirements, and shall be coordinated with all other trades.
- I. Specific models in catalog sheets must be identified as well as all options, voltages, phases, etc. identified to be clear as to what is being provided.
- J. Contractor and manufacturers shall be responsible for all physical characteristics of the equipment and field verify with final locations, coordinate with floor plans, confirm service access, clearances, confirm equipment arrangements, electrical disconnect clearances, and pathways/ travel/ access to the final equipment installation locations. Submission of equipment shop drawing will be deemed evidence of compliance with this requirement. If no shop drawing is submitted, contractor shall be fully responsible for a complete installation and assumes all related costs that affects the contractor and other trades.
- K. To aid in the preparation of submittals or shop drawings, the engineer can provide the electronic files for use by the contractor. The electronic files will be provided upon execution of the engineer's electronic file release contract prepared specifically for this project. The electronic files will be released in the format used by the architect and engineer to design the project. If this file format is not compatible with the contractor's needs, additional charges for providing the changes to the requested file format may be necessary at \$150.00 per hour billable to the contractor.

#### 1.03 SUBSTITUTIONS

- A. Substitution of other than specified manufacturers shall not be allowed after bid date.
- B. Prior approval is required for other manufacturers. If the contractor wishes for alternate materials or equipment to be considered, he must submit information at least ten days prior to the bid date. If acceptable, an addendum will be issued allowing the contractor to utilize the approved alternate.
- C. Samples shall be provided when directed by the architect or engineer.
- D. If the contractor submits alternate equipment, manufacturers, systems, methods, or materials not specifically identified in the specifications, additional review and investigation time may be required by the engineer. If the engineer determines additional review time is required because of the substitution, then this will be a billable service provided by the engineer at the rate of \$150.00 per hour. Also billable will be any redesign time and revisions to drawings should they be necessary for incorporation into the work. Services will be billable to the contractor making such substitutions and will be payable prior to approval, or rejection.
- E. If the contractor elects to submit alternate equipment, manufacturers, systems, methods, or materials, not specifically identified in the drawings and specifications, it is the contractor's responsibility to coordinate the work with other trades and pay for any associated costs with the



substitution or change.

- F. Contractor and manufacturers shall be responsible for all physical characteristics of the equipment and field verify with final locations, coordinate with floor plans, confirm service access, clearances, confirm equipment arrangements, electrical disconnect clearances, and pathways/travel/access to the final equipment installation locations. Submission of equipment shop drawing will be deemed evidence of compliance with this requirement. If no shop drawing is submitted, contractor shall be fully responsible for a complete installation and assumes all related costs that affects the contractor and other trades.

#### 1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials and equipment in manufacturer's original cartons or on skids.
- B. Store materials in dry enclosure out of way of work progress.
- C. Protect equipment, fixtures, and lenses after placement.

#### 1.05 WORK SUMMARY

- A. Provide labor, materials, equipment, and supervision necessary to install complete, operating electrical systems as indicated on the drawings and specified herein, including all work at the site and within the proposed construction areas to accomplish the require work.
- B. Contractor shall provide all demolition necessary to remove, replace, repair, install new or modify existing work whether it be walls, floors, ceilings, structure, mechanical or electrical required to install his work. Contractor shall replace all work to leave in a finished condition. Pipe, conduit, ductwork, and wiring shall be cut back behind wall surfaces above ceilings and below floor levels so that a patch can be placed over the opening.
- C. Demolition:
  - 1. Electrical contractor shall verify all existing conditions prior to commencing work.
  - 2. Label all overcurrent protection devices made "spare" due to demolition. Update all panelboard directories impacted by the demolition.
  - 3. Relocate existing branch circuits which interfere with new construction whether specifically identified or not. Refer to architectural drawings for new walls, structure, millwork, etc. which may require existing conduit, wire, etc. to be relocated.
  - 4. It is the intent that power remain active in adjacent areas during the construction. Contractor is to modify existing wiring arrangement to comply.
  - 5. All equipment and appurtenances removal are to be disposed of properly. Refer to local, state, and federal requirements.
- D. All work shown on the drawings and not expressly mentioned in the specifications and all work specified but not shown on the drawings, but necessary for the proper execution of same shall be performed by the contractor. It is not the intent of the drawings and specifications to describe every feature and detail of the work.
- E. No additions to the contract amount will be approved for any materials, equipment, or labor to perform additional work unless it can be clearly shown to be beyond the scope and intent of the drawings and specifications.
- F. Provide grounding in accordance with the NEC.
- G. Provide code required signage (i.e., NEC 110.34, NEC 700.8, and 695.4 B3).

#### 1.06 SITE INSPECTION

- A. Visit site, inspect, and become aware of all conditions which may affect the work. Investigate utilities, protection requirements for adjacent facilities, storage locations, and access to the construction area.

- B. Submission of a bid will be deemed evidence of being in compliance with this requirement. Contractor may not request additional costs for existing conditions which were evident from inspection of the site.
- C. Before ordering materials or commencing with any work, the contractor shall verify all measurements at the building. Coordination of equipment, materials, spaces, and dimensions are the responsibility of the contractor.

#### 1.07 UTILITY CONNECTION AND CHARGES

- A. The contractor shall be responsible for coordination of the work with the Electric Utility Company. Make all arrangements in a timely fashion for connection of the service.
- B. The Electrical Contractor shall be responsible for utility connection charges, meter charges, and other installation charges as may be applied by the local utility company.
- C. Contact the utility company during the bidding period for connection charges and include same with bid.
- D. Provide connections, terminations, handholes, manholes, pads, transformers, vaults, conduits, wiring, and all required materials and labor as may be required by the utility company to obtain service for the facility. Any costs for service work shall be included in the bid.

#### 1.08 DRAWINGS AND SPECIFICATIONS

- A. Drawings and specifications are intended to be taken as a whole and each is to supplement the other. It is not intended that all work must be both shown on drawings and specified in the specifications.
- B. An item shown on the drawings and not indicated in the specifications is to be understood to be required for the project. An item specified and not shown on the drawings is to be understood to be required for the project.
- C. If there is a conflict between the drawings and specifications it is to be understood that the more strict or more expensive interpretation shall govern. Also, if a conflict exists between specification sections or between drawing plans and details, it is to be understood that the more strict or more expensive interpretation shall govern.
- D. The engineer's interpretation of the documents shall be binding upon the contractor. If a question arises, the contractor shall ask for an interpretation prior to bidding and an answer shall be issued as an addendum to all bidders.
- E. If a question arises after bidding The engineer's interpretation shall govern.
- F. The drawings are generally diagrammatic and necessary field coordination and adjustment must be provided by the contractor prior to installation. Such deviations to the work to allow for coordination shall be kept to a minimum and any such deviations shall be at no extra cost.

#### 1.09 PROGRESS SCHEDULE

- A. Provide a project schedule which shall show start, sequence of each type of work, milestone schedule, and completion of each type of work, with overall completion date.

#### 1.10 COST SCHEDULE

- A. Provide a detailed cost breakdown indicating labor and material amounts for various types of work.
- B. AIA forms are required for this submission.

#### 1.11 OFFICE

- A. The contractor shall set up his job office (desk) where directed by the owner.

#### 1.12 STORAGE

- A. Material shall be stored only where directed by the owner.

#### 1.13 SANITARY

- A. The contractor will at his own expense, provide and maintain in a sanitary condition, a portable chemical toilet.
- B. Toilet will be located where directed by the owner.

### **PART 2 - PRODUCTS**

#### 2.01 GENERAL

- A. All materials and equipment shall be new and in present production of major manufacturers.
- B. All materials and equipment shall be in conformance with accepted trade standards as a minimum. Where specifications exceed any minimum standard, the specifications shall govern.
- C. Reference of equipment in the singular shall be deemed to apply to as many such items as may be required to complete the work.
- D. The word “provide” means “furnish and install complete, tested, and adjusted as necessary with all accessories, wiring methods, switching, lenses, mounting hardware, cover plates, hangers and supports”.

#### 2.02 FASTENERS AND SUPPORTS

- A. All work shall be securely fastened to building construction.
- B. Utilize toggle or machine bolts in hollow construction.
- C. Utilize machine screws for steel construction.
- D. Utilize expansion shields for masonry construction.
- E. Utilize lag bolts for wood construction.
- F. All fasteners shall be galvanized or plated with rustproof finish.
- G. Maximum load on fasteners shall be at a safety factor of 4:1 for a tested sample.

#### 2.03 MANUFACTURERS' NAMES

- A. Manufacturers' names are included herein to establish those suppliers who may provide products for this project subject to the requirements of the specifications. Although a manufacturer's name may appear as an acceptable supplier it is not understood that a standard product is acceptable. Products must also meet the technical, performance, and physical requirements of the project as well as being named in the specification. Any deviations from this must be acknowledged during the bid phase by the supplier, who shall be solely responsible for any and all costs associated with the application of their product(s) in the project.
- B. A design cannot be prepared which accommodates the installation of all suppliers and is not intended to do so. If certain modifications must be made to accommodate one particular supplier's equipment it shall be considered the contractor's responsibility to arrange for such accommodations and be financially responsible for same.

### **PART 3 - EXECUTION**

#### **3.01 WELDING**

- A. All electric power for arc welding shall be supplied by the contractor performing the work.

#### **3.02 VEHICLES**

- A. Vehicle access to the site will be as directed by the owner.

#### **3.03 RUBBISH DISPOSAL**

- A. Except for items or materials identified to be reused, salvaged, reinstalled, or otherwise indicated to remain property of the owner or tenant, demolished materials shall become the contractor's property and shall be removed, recycled, or disposed from the project site in an appropriate and legal manner.
- B. Burning of debris on the site shall not be permitted. All debris, refuse, and waste shall be removed from the premises at regular intervals. No accumulation shall be permitted.

#### **3.04 WORKMANSHIP**

- A. Maintain all public walks and access ways.
- B. Erect and maintain barricades, warning signs, and other protective means as may be directed by the owner for protection of all persons and property from injury or damage.
- C. Plug or cap open ends of piping systems and conduit.
- D. Stored materials shall be covered to prevent damage by inclement weather, sun, dust, or moisture.
- E. Protect all installed work until accepted in place by the owner. Protect luminaires.
- F. Do not install plates, covers, and other finished devices until masonry, tile, and painting operations are complete, or protect otherwise.
- G. Protect all existing or new work from operations which may cause damage such as hauling, welding, soldering, painting, insulation and covering.
- H. All devices and exposed raceways are to be plumb and true. All exposed raceways in finished areas are to be coordinated with the architect/engineer prior to installation.

#### **3.05 SCAFFOLDING**

- A. The contractor shall at his own expense, install, operate, protect, and maintain temporary services such as scaffolding, material hoists, access walks, etc., as may be required.

#### **3.06 SITE UTILITIES**

- A. The contractor may use the existing water and electric power for temporary construction needs.
- B. The owner will direct where these services may be tapped.
- C. Those services that are used during construction, but are to remain, shall be refurbished to a new condition before turning back over to the owner.

#### **3.07 CLEAN-UP**

- A. Remove all visible temporary tags or labels as well as any protective coverings and wrappings from fixtures and equipment.
- B. Remove all spots, stains, soil, paint, spackle, and other foreign matter from all finished work.
- C. Remove all trash and debris from the premises.

#### 3.08 LUBRICATION

- A. Furnish and install and maintain all required lubrication of any equipment operated prior to acceptance by the owner. Lubrication shall be as recommended by the equipment manufacturer.
- B. Provide one year's supply of lubricants to owner at date of acceptance.
- C. Verify that required lubrication has taken place prior to any equipment start-up.

#### 3.09 EQUIPMENT START UP

- A. Verify proper installation by manufacturer or his representative.
- B. Advise the architect and engineer two days prior to actual start up.
- C. Verify proper operation. Obtain signed statement by manufacturer or his representative that equipment is operating within warranty requirements. Submit statement to the architect and engineer.

#### 3.10 OPERATING INSTRUCTIONS AND MANUALS

- A. Properly and fully instruct owner's personnel in the operation and maintenance of all systems and equipment.
- B. Ensure that the owner's personnel are familiar with all operations to carry on required activities.
- C. Such installation shall be for each item of equipment and each system as a whole.
- D. Provide report that instruction has taken place. Include in the report the equipment and/ or systems instructed, date, contractor, owners' personnel, vendor, and that a full operating and maintenance manual has been reviewed.
- E. Manual shall include all instructions on operation, maintenance, repair parts list, lubrication requirements, brochures, catalog cuts, wiring diagrams, piping diagrams, control sequences, service requirements, names and addresses of vendors, suppliers, and emergency contacts. Three manuals shall be provided to owner.
- F. Submit manuals for review prior to operating instruction period. Manuals shall be 8 1/2" x 11" with hard cover, suitably bound.
- G. Provide to the owner any special tools necessary to operate any of the equipment.

#### 3.11 PENETRATION SEALING

- A. All penetrations of Natatorium walls, fire walls, smoke walls, and floors shall be sealed around conduits and wiring to prevent the flow of gases or smoke.
- B. The sealant shall be foamed in place between the conduit or wiring and the adjacent walls and floors with Dow/ Corning RTV foam or Fire Stop Caulk.
- C. All penetrations through roof structure shall be coordinated with other trades to minimize the potential for water seepage and leakage through such penetrations.
- D. When electrical boxes are located on opposite side of a fire resistance rated wall assembly are within 2'-0" horizontally of each other, both devices are to be wrapped with Spec Seal Putty Pads as manufactured by Specified Technologies, Inc., or approved equivalent.

### 3.12 COORDINATION

- A. Coordinate with work of other trades prior to installation.
- B. Arrange for minor variations for complete coordinated installation. Provide all necessary offsets to install the work and to provide clearances for other trades.

### 3.13 CUTTING AND PATCHING

- A. Provide for cutting and patching for all electrical work.
- B. Patching to be performed by tradesmen skilled in that particular trade.
- C. Contractor shall patch and repair any existing openings created by the demolition work in floors, walls, partitions, and ceilings not being reused for the new construction.

### 3.14 BALANCING AND TESTING

- A. Electrically balance connected loads in panels.
- B. The entire wiring system shall be tested to be free from grounds and faults.
- C. Identify all circuits and all phase wiring at terminations.

### 3.15 EQUIPMENT FURNISHED BY OTHERS

- A. This contractor shall make final electrical connections to equipment furnished by other contractors or the owner.
- B. Provide electrical service, and disconnect equipment as required by code to supply such equipment.

### 3.16 EXCAVATION, SHORING, PUMPING, BACKFILLING

- A. Perform all excavation required to install the work. Deposit excavated material as so not to create a slide hazard.
- B. Maintain excavations free of water.
- C. Backfill with clean material and pneumatically tamp in 0'-8" layers. Remove excess material, including rock, from site or as directed by the architect and engineer.
- D. Return to original conditions any areas disturbed for excavation.
- E. Install all work neatly, trim, and plumb with building lines.
- F. Install work in spaces allocated.
- G. Cutting and patching shall be performed by skilled tradesmen normally employed for the work involved.

### 3.17 RECESSES

- A. Furnish information to the General Contractor as to sizes and locations of recesses required to install panels, boxes, grilles, and other equipment, and/ or devices which are to be recessed in walls.
- B. Make offsets or modifications as required to suite final locations.

### 3.18 LABELING

- A. All equipment panels, controls, safety switches, and devices shall be provided with permanent black laminated micarta white core labels with 3/8" high letters.
- B. This shall also apply to all controllers, remote start/ stop pushbuttons, equipment cabinets, and wherever directed by the architect and engineer.
- C. This shall not apply to individual room thermostats, and local light switches.

### 3.19 GUARANTEE

- A. All work shall be guaranteed to be free from defects for a period of one year of operation from date of acceptance by the owner unless otherwise specified.
- B. Guarantee shall be extended for all non-operational periods due to failure within the guarantee period.

### 3.20 AS BUILT DRAWINGS

- A. At the completion of the work and prior to final payment, the contractor shall furnish a reproducible as-built drawing to the architect and engineer for approval. The drawings shall indicate all work installed and its actual size, and location and identify all systems installed with locations of concealed devices, conduit, piping and other equipment and complete wiring diagrams of all systems. If acceptable, the architect and engineer will submit the as-built drawings to the owner as record drawings. If not acceptable, the architect and engineer return the drawing to the contractor to make corrections as required. The contractor will resubmit for approval.
- B. The as-built drawings shall indicate measured dimensions of underground lines and other concealed work.
- C. To aid in the preparation of as-built drawings, the engineer can provide the electronic files for use by the contractor. The electronic files will be provided upon execution of the engineer's electronic file release contract prepared specifically for this project. The electronic files will be released in the format used by the architect and engineer to design the project. If this file format is not compatible with the contractor's needs, additional charges for providing the changes to the requested file format may be necessary at \$150.00 per hour billable to the contractor.

### 3.21 WORK COMPLETION

- A. The contractor shall promptly correct work rejected by the engineer or failing to conform to the requirements of the contract documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed, or completed. Costs of correcting such rejected work, including additional testing and inspections and compensation for the engineer's services and expenses made necessary thereby, shall be at the contractor's expense.

### 3.22 REQUEST FOR INFORMATION (RFI) REQUIREMENTS

- A. All RFI's shall include the following information based on AIA Document G716:
  - 1. To, From, Project Name, Issue Date, RFI number in sequential order with all other trades, Requested Reply Date.
  - 2. Provide a description with specification and/or drawing references.
  - 3. Provide the senders recommendation including cost and/or schedule considerations.
  - 4. Provide receiver's reply space.
  - 5. Note an RFI reply is not an authorization to proceed with the work involving additional cost/time.

### 3.23 SHOP DRAWING REQUIREMENTS

- A. The following is a list of required shop drawings for this project.

<b>ELECTRICAL</b>	<b>DATE REC'D</b>	<b>ACTION</b>	<b>DATE REC'D</b>	<b>ACTION</b>
Basic Materials and Equipment (Section 26 05 00 and 26 27 00)				
Safety Switches - (Section 26 28 16)				
As-Builts				
Warranties				
Maintenance Manuals				
Instructions				
Ground Test				

END OF SECTION



## **SECTION 26 01 26 - EXISTING EQUIPMENT TO BE REUSED**

### **PART 1 - GENERAL**

#### **1.01 REFERENCE**

- A. Refer to section 26 00 00 for requirements which are applicable to this section.
- B. Refer to National Electrical Testing Association Standards, particularly NETA MTS-1997 and NETA ATS-1999.

#### **1.02 WORK INCLUDED**

- A. Provide all labor, material, equipment, and supervision necessary to refurbish existing equipment as specified herein and place into operation.
- B. All work and accessories required to perform the intended work is to be included in the scope of work.

#### **1.03 QUALITY ASSURANCE**

- A. Verify that all equipment is installed in accordance with the manufacturer's recommendations.
- B. Install systems and equipment in accordance with current applicable codes.
- C. Provide adequate supervision of labor force to see that installations are complete and correct.
- D. Testing Agency's Field Supervisor and/ or Technicians are to be certified according to NETA ETT-2000.

#### **1.04 SCOPE**

- A. It is the intent to totally refurbish existing equipment to as-new operating condition and efficiency. All parts to be made operable, corrosion removed, repainted, adjusted, cleaned, lubricated, and repaired as necessary.
- B. Schedule outages with owner to minimize downtown. Have parts and supplies for repairs available beforehand.

### **PART 2 - PRODUCTS**

#### **2.01 PARTS**

- A. Replacement parts shall be manufactured by the original equipment supplier or approved substitute. Any substitute shall be submitted to the engineer for approval prior to use.

### **PART 3 - EXECUTION**

### 3.01 PANELBOARDS, LOAD CENTERS

- A. Visually inspect enclosures, bus, and all cable terminations. Report signs of cable overheating, insulation degradation, excessive moisture, rust, etc.
- B. Clean, wire-brush, and paint all corroded and rusted areas with Rustoleum/ Gavanoleum to match existing.
- C. Undo cable terminations, as necessary. Clean with approved electrical cleaner and reconnect to manufacturer's recommended torque.
- D. Replace existing overcurrent protection devices with new devices of similar kAIC ratings. This applies to all overcurrent protection devices rated 100 Amps, or less, and more than 20 years old.

### 3.02 SAFETY SWITCHES

- A. Visually inspect enclosure, bus, or cable terminations. Report signs of cable overheating, insulation degradation, excessive moisture, rust, etc.
- B. Clean, wire-brush, and paint all corroded and rusted areas with Rustoleum/ Gavanoleum to match existing.
- C. Cycle switch(es) on/ off to ensure operability. Lubricate pivot point(s) as necessary as recommended by manufacturer.
- D. Replace switch as necessary.

END OF SECTION

## **SECTION 26 05 00 - FIRE-STOPPING**

### **PART 1 - GENERAL**

#### **1.01 SUMMARY**

- A. Refer to section 26 00 00 for requirements which are applicable to this section.
- B. Refer to International codes.
- C. Section includes:
  - 1. Through-penetration fire stops and smoke-stops for all fire-rated bearing and non-bearing wall and floor assemblies, both blank (empty) and those accommodating penetrating items such as cables, conduits, pipes, ducts, etc.

#### **1.02 REFERENCES**

- A. American Society for Testing and Materials Standards (ASTM):
  - 1. ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials.
  - 2. ASTM E814: Standard Test method for Fire Tests of Through-Penetration Fire Stops.
- B. Underwriters Laboratories, Inc.:
  - 1. UL 723 Surface Burning Characteristics of Building Materials
  - 2. UL 1479 Fire Tests of Through-Penetration Fire Stops.
- C. UL Fire Resistance Directory:
  - 1. Through Penetration Fire Stop Devices (XHJI)
  - 2. Fire Resistive Ratings (BXUV)
  - 3. Through Penetration Fire Stop Systems (XHEZ)
  - 4. Fill, Void, or Cavity Material (XHHW)

#### **1.03 DEFINITIONS**

- A. **FIRE-STOPPING:** The use of a material or combination of materials in a fire rated structure (wall or floor) where it has been breached to restore the integrity of the fire rating on that wall or floor.
- B. **SYSTEM:** The use of a specific fire stop material or combination of materials in conjunction with a specific wall or floor construction type and a specific penetrant(s), constitutes a "System."
- C. **BARRIER:** Any bearing or non-bearing wall or floor that has an hourly fire and smoke rating.
- D. **THROUGH-PENETRATION:** Any penetration of a fire-rated wall or floor that completely breaches the barrier.
- E. **MEMBRANE-PENETRATION:** Any penetration in a fire rated wall that breaches only one side of the barrier.
- F. **CONSTRUCTION GAPS:** any gap, joint, or opening, whether static or dynamic, where the top of a wall may meet a floor; wall-to-wall applications; edge-to-edge floor configurations; floor-to-exterior wall; or any linear breach in a rated barrier. Where movement is required, the fire stopping system must comply with UL2079 for dynamic joints.

#### **1.04 SUBMITTALS**

NOTE: A "Certificate of Conformance" from the manufacturers listed in Section "2.02 ACCEPTABLE MANUFACTURERS," is required with the "Submittal Package" to ensure that the material selected meets all of the criteria of this specification as set forth in Section "1.05 QUALITY ASSURANCE."

- A. Submit manufacturer's product literature for each type of fire-stop material to be installed. Literature shall indicate product characteristics, typical uses, performance and imitation criteria, and test data. Submittal shall comply with Section 26 00 00.
- B. Material Safety Data Sheets (MSDS): Submit MSDS for each fire-stop product.
- C. UL Tested Systems: Submit drawings showing typical installation details for the methods of installation. Indicate which fire-stop materials will be used and thickness(es) for different hourly ratings.
- D. Engineering Judgments: Submit manufacturer's drawings for all non-standard applications where no UL tested system exists. All drawings must indicate the "Tested" UL system upon which the judgment is based to assess the relevance of the judgment to some, known performance.
- E. Submit manufacturer's installation procedures for each type of product.
- F. Approved Applicator: Submit document from manufacturer wherein manufacturer recognizes the installer as qualified or submit a list of past projects to demonstrate capability to perform intended work.
- G. Upon completion, installer shall provide written certification that materials were installed in accordance with the manufacturer's installation instructions and details.

#### 1.05 QUALITY ASSURANCE

- A. Fire-stopping systems (materials and design):
  - 1. Shall conform to both Flame (F) and Temperature (T) ratings as required by local building codes and as tested by nationally accepted test agencies per ASTM E814 or UL 1479 fire tests in a configuration that is representative of field conditions.
    - a. The F rating must be minimum of one hour but not less than the fire resistance rating of the assembly being penetrated. T rating when required by code authority shall be based on measurement of the temperature rise on penetrating item(s). The fire test shall be conducted with a minimum positive pressure differential of 0.01 inches of water column.
  - 2. For joints, must be tested to UL 2079 with movement capabilities equal to those of the anticipated conditions.
- B. Fire-stopping materials and systems must be capable of closing or filling through openings created by:
  - 1. The burning or melting of combustible pipes, cable jacketing, or pipe insulation materials, or.
  - 2. Deflection of sheet metal due to thermal expansion (electrical and mechanical duct work).
- C. Fire-stopping material shall be asbestos and lead-free and shall not incorporate nor require the use of hazardous solvents.
- D. Fire-stopping sealants must be flexible, allowing for normal pipe movement.
- E. Fire-stopping materials shall not shrink upon drying as evidenced by cracking or pulling back from contact surfaces.
- F. Fire-stopping materials shall be moisture resistant and may not dissolve in water after curing.
- G. All fire-stopping materials shall be manufactured by one manufacturer (to the maximum extent possible).

- H. Installation of fire-stopping systems shall be performed by a contractor (or contractors) trained or approved by the fire-stop manufacturer.
- I. Material used shall be in accordance with the manufacturer's written installation instructions.

#### 1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver material in the manufacturer's original, unopened containers or packages with the manufacturer's name, product identification, lot number, UL label and mixing and installation instructions as applicable.
- B. Store materials in the original, unopened containers or packages and under conditions recommended by the manufacturer.
- C. All fire-stop materials will be installed prior to expiration of shelf life.

#### 1.07 PROJECT CONDITIONS

- A. Conform to manufacturer's printed instructions for installation and when applicable, curing in accordance with temperature and humidity. Conform to ventilation and safety requirements.
- B. Contractor shall verify the condition of the substrates before starting work.
- C. Weather Conditions: Do not proceed with installation of fire-stop materials when temperatures fall outside the manufacturer's suggested limits.
- D. Care shall be taken to ensure that fire-stopping materials are installed so as not to contaminate adjacent surfaces.

#### 1.08 SEQUENCING

- A. Schedule fire-stopping after installation of penetrants but prior to concealing the openings.
- B. Fire-stopping shall precede gypsum board finishing.

#### 1.09 PROTECTION

- A. Where fire-stopping is installed at locations which will remain exposed in the completed work, provide protection as necessary to prevent damage to adjacent surfaces and finishes, and protect as necessary against damage from other construction activities.

## **PART 2 - PRODUCTS**

#### 2.01 GENERAL

- A. Fire-stopping materials and systems shall meet the requirements specified herein.
- B. Architect must approve in writing any alternates to the materials and system specified herein.
- C. All fire-stop products and systems shall be designed and installed so that the basic sealing system will allow the full restoration of the thermal and fire resistance properties of the barrier being penetrated with minimal repair if penetrants are subsequently removed.
- D. For applications where combustible penetrants are involved, i.e., insulated, and plastic pipe, a suitable intumescent material must be used.

#### 2.02 ACCEPTABLE MANUFACTURERS

NOTE: Inclusion of materials in this specification does not indicate that the listed products have been evaluated for conformance to this specification. Therefore, the user/ contractor must certify in the submittal package, with a "Certificate of Conformance" from the manufacturers listed below, that the material selected meets all of the criteria set forth in Section "1.05 QUALITY ASSURANCE" of this specification.

- A. Specified Technologies, Inc. /GE Pensil® (STI), Somerville, NJ 08876, Phone: (800) 992-1180.
- B. 3M Fire Protection Products, St. Paul, MN

## 2.03 MATERIALS

- A. Intumescent Fire-stop Sealants and Caulks:
  - 1. STI SpecSeal SSS100
  - 2. 3M Fire Barrier Caulk CP25WB+
- B. Latex Fire-stop Sealant
  - 1. STI SpecSeal LC150 Sealant
- C. Elastomeric Water-Based Sealant
  - 1. STI SpecSeal ES100 Elastomeric Sealant
- D. Silicone Fire-stop Sealants and Caulks:
  - 1. STI SpecSeal Pensil 300
  - 2. 3M Fire Barrier Silicone Sealants
- E. Fire-stop Putty:
  - 1. STI SpecSeal Fire-stop Putty Bars and Pads
  - 2. 3M Fire Barrier Moldable Putty
- F. Fire-stop Collars:
  - 1. STI Spec Seal Fire-stop Collars
  - 2. 3M Fire Barrier PPD's.
- G. Wrap Strips:
  - 1. SpecSeal Wrap Strip
  - 2. 3M Fire Barrier FS195 Wrap Strip.
- H. 2-Part Silicone Fire-stop Foam:
  - 1. STI SpecSeal Pensil 200
  - 2. 3M Fire Barrier 2001 Silicone Foam.
- I. Fire-stop Mortar:
  - 1. STI SpecSeal Mortar.
- J. Fire-stop Pillows:
  - 1. STI SpecSeal Pillows
- K. Elastomeric Spray:
  - 1. STI SpecSeal AS Elastomeric Spray
- L. Composite Board:
  - 1. 3M Barrier Sheet Material
- M. Accessories:
  - 1. Forming/Damming Materials: Mineral fiberboard or other type as per manufacturer recommendation.

## PART 3 - EXECUTION

## CONDITIONS REQUIRING FIRE-STOPPING

- A. General:
  - 1. Provide fire-stopping for conditions specified whether fire-stopping is indicated or not, and if indicated, whether such material is designed as insulation, safing, or otherwise.
- B. Through-Penetrations:
  - 1. Fire-stopping shall be installed in all open penetrations and in the annular space in all penetrations in any bearing or non-bearing fire-rated barrier.
- C. Membrane-Penetrations:
  - 1. Where required by code, all membrane-penetrations in rated walls shall be protected with fire-stopping products that meet the requirements of third-party time/temperature testing.
- D. Construction Joints/ Gaps:
  - 1. Fire Stopping shall be provided:
    - a. Between the edges of floor slabs and exterior walls.
    - b. Between the tops of walls and the underside of floors
    - c. In the control joint in masonry walls and floors
    - d. In expansion joints.
- E. Smoke-Stopping:
  - 1. As required by the other Sections, smoke-stops shall be provided for through-penetrations, membrane-penetrations, and construction gaps with a material approved and tested for such application.

### 3.02 EXAMINATION

- A. Examine the areas and conditions where fire-stops are to be installed and notify the architect of conditions detrimental to the proper and timely completion of the work. Do not proceed with work until unsatisfactory conditions have been corrected by the contractor in a manner acceptable to the architect.
- B. Verify that environmental conditions are safe and suitable for installation of fire-stop products.
- C. Verify that all pipe, conduit, cable, and other items which penetrate fire-rated construction have been permanently installed prior to installation of fire-stops.

### 3.03 INSTALLATION

- A. General:
  - 1. Installation of fire-stops shall be performed by an applicator/ installer qualified and trained by the manufacturer. Installation shall be performed in strict accordance with manufacturer's detailed installation procedures.
  - 2. Apply fire-stops in accordance with fire test reports, fire resistance requirements, acceptable sample installations, and manufacturer's recommendations.
  - 3. Unless specified and approved, all insulation used in conjunction with through-penetrants shall remain intact and undamaged and may not be removed.
  - 4. Seal holes and penetrations to ensure an effective smoke seal.
  - 5. In areas of high traffic, protect fire-stopping materials from damage. If the opening is large, install fire-stopping materials capable of supporting the weight of a human.

6. Insulation types specified in other sections shall not be installed in lieu of fire-stopping material specified herein.
  7. All combustible penetrants (e.g., non-metallic pipes or insulated metallic pipes) shall be fire-stopped using products and systems tested in a configuration representative of the field condition.
- B. Dam Construction:
1. When required to properly contain fire-stopping materials within openings damming or packing materials may be utilized. Combustible damming material must be removed after appropriate curing. Non-combustible damming materials may be left as a permanent component of the fire-stop system.

### 3.04 FIELD QUALITY CONTROL

1. Prepare and install fire-stopping systems in accordance with manufacturer's printed instructions and recommendations.
2. Follow safety procedures recommended in the Material Safety Data Sheets.
3. Finish surfaces of fire-stopping which are to remain exposed in the completed work to a uniform and level condition.
4. All areas of work must be accessible until inspection by the applicable Code Authorities.
5. Correct unacceptable fire-stops and provide additional inspection to verify compliance with this specification.

### 3.05 CLEANING

1. Remove spilled and excess materials adjacent to fire-stopping without damaging adjacent surfaces.
2. Leave finished work in neat, clean condition with no evidence of spill overs or damage to adjacent surfaces.

END OF SECTION



**SECTION 26 27 00 - BASIC MATERIALS AND EQUIPMENT FOR  
RACEWAY SYSTEMS**

**PART 1 - GENERAL**

**1.01 REFERENCE**

- A. Refer to Section 26 00 00 for additional requirements of this section.
- B. Refer to NECA 1-2000 for general installation requirements.

**1.02 SUBMITTALS**

- A. Submit shop drawings and manufacturer's catalog sheets of all specified items unless waived by the engineer.
- B. Submit switches and receptacles as a minimum.

**PART 2 - PRODUCTS**

**2.01 RIGID METAL CONDUIT (GRS)**

- A. Material; Steel, Zinc coated Federal Specification WW-C-581d, ANSI C801.
- B. Fittings; Malleable iron, Threaded
- C. NEC; Article 344
- D. Application; Indoor, above ground, enamel coated, all occupancies not subject to severe corrosive influences.
- E. Manufacturer; Hubbell, Allied Tube and Conduit Corp. or approved equal.

**2.02 ELECTRICAL METALLIC TUBING (EMT)**

- A. Material; Galvanized steel, U.L. labeled, Federal Specification ANSI C80.3.
- B. Fittings; Threadless compression type for up to 1-1/4", set screw for 1-1/2" and larger. Installation in accordance with Article 358 of the National Electrical Code and U.L. general information card #FJMX.
- C. NEC; Article 358
- D. Application; Exposed and concealed work not subject to physical damage.
- E. Manufacturer; Hubbell, Allied Tube and Conduit Corp. or approved equal.

**2.03 FLEXIBLE METAL TUBING (FMT)**

- A. Material; Hot dipped galvanized interlocking convolutions of steel tape in circular cross section. Federal Specification AA-55810
- B. Fittings; Hot dipped galvanized steel
- C. NEC; Article 344
- D. Application; All areas other than wet locations, hoistways, hazardous locations, below ground, and areas with exposure to oil, gasoline, or other materials having an adverse effect on rubber.

- E. Manufacturer; Electri-flex Company Liqueflex Type BR, Hubbell, Allied Tube and Conduit Corp., AFC.

#### 2.04 RIGID NON-METALLIC CONDUIT (SCHEDULE 40 PVC)

- A. Material; U.L. 651, ANSI/ NEMA TC-2, Federal Military Specification WC-1094A, 90 °C wire rated and sunlight resistant.
- B. Fittings; PVC, same as above.
- C. NEC; Article 352
- D. Application; In walls, floors, ceilings, wet locations, underground, and locations subject to severe corrosive influences.
- E. Manufacturer; Carlon Schedule 40 electrical conduit or approved equal.

#### 2.05 LIQUATITE FLEXIBLE METAL CONDUIT

- A. Material: Hot dipped galvanized interlocking convolutions of steel tape in circular cross section with PVC jacket.
- B. Fittings: Hot dipped galvanized steel.
- C. NEC Article 350 (LFMC)
- D. Application: All areas other than elevator hoistways, hazardous locations and where subject to physical damage.
- E. Manufacturers: Electriflex Company Liqueflex Type LT, Hubbell, Allied Tube and Conduit Corp., AFC.

#### 2.06 CONDUCTORS

- A. Type; THHN, 98% conductivity copper, 600-volt, dry locations. Type THWN for wet locations. Conductors shall be U.L. listed.
- B. Equipment terminations for circuits rated 100 Amps or less (#14 AWG - #2 AWG) shall be rated 60 °C (140 °F). Equipment termination for circuits rated over 100 Amps (#1 or larger) shall be rated 75 °C (167 °F). Refer to NEC for allowable exceptions. 90 °C (194 °F) rated conductors shall be used as indicated on the drawings or as indicated within these specifications.
- C. Solid copper conductors for #10 and #12 wire size. #8 and larger are to be stranded copper.
- D. Separate green ground conductor for all circuits including branch, homerun, and feeders.
- E. All conductors shall be color coded as follows:  
120/ 208 Volt Systems
  - Phase A        Black
  - Phase B        Red
  - Phase C        Blue
  - Neutral Grey or Natural White
- F. Minimum size conductor shall be #12 AWG except that #14 AWG shall be used for control wiring. All circuit conductors shall be run in the same raceway system.
- G. A grounding conductor shall be provided to each electrical device in accordance with the National Electrical Code.
- H. Conductor sizes are to be as indicated on the drawings and/ or as specified in this specification.
- I. Conductors are not to be installed in raceways until construction is advanced to allow conductors to be installed completely without damage to conductors and there is not possibility of water or other contaminants entering the raceway system. Conductors shall be installed between convenient terminating points.

- J. An approved pulling compound shall be used to assist in pulling of conductors.
- K. Manufacturers: Alpha Wire, Southwire, Tamaqua Cable, Triangle Wire & Cable, American Insulated Wire, BICC or General Cable.

#### 2.07 JUNCTION BOXES

- A. Material; Galvanized steel, accessible.
- B. Manufacturers; Keystone, Hubbell, Penn Panel and Box Co.
- C. NEC; Article 314

#### 2.08 OUTLET AND SWITCH BOXES

- A. Material; Galvanized steel with knockouts to suit raceway system.
- B. Manufacturer; Crouse Hinds Co., Steel City Div., Racor Inc., or approved equal.

#### 2.09 WALL PLATES - METAL- COMMERCIAL SPECIFICATION GRADE

- A. Wall plates shall be standard size, metal, commercial grade.
- B. Plates shall be provided for all switches, receptacles, blanks, telephone, and special purpose outlets.
- C. Plates must be of modern design having rounded edges and corners and be complete with color-matched mounting screws.
- D. Plates must be of one design throughout the building and shall conform to UL, CSA, and NEMA standards.
- E. Engraving shall be done by plate manufacturer in accordance with the schedule.
- F. Acceptable Manufacturers: Cooper Wiring Devices, Pass & Seymour, Hubbell, Leviton.

#### 2.10 WALL PLATES - STAINLESS STEEL - TYPE 302 - CORROSIVE/ DAMPNESS/ FOOD SERVICE DUTY

- A. Wall plates shall be Pass and Seymour Sierra Series "S", Type 430 Stainless Steel, or "S-N" line Type 302 Stainless Steel or equal and will conform to UL and NEMA standards.
- B. Plates must be provided for all switches, receptacles, blanks, telephone and special purpose outlets.
- C. Plates shall be of a modern design, having rounded edges and corners and be complete with finish-matching mounting screws.
- D. Engraving shall be done by plate manufacturer in accordance with the schedule.
- E. Plates must be of one design throughout the building.
- F. Acceptable Manufacturers: Cooper Wiring Devices, Pass & Seymour, Hubbell, and Leviton.

#### 2.11 TOGGLE SWITCHES - COMMERCIAL DUTY SPECIFICATION GRADE

- A. One-piece brass alloy contact arm.
- B. Thermoset body and cover for superior heat resistance.
- C. High strength polycarbonate toggle resists breaking and chipping under heavy abuse.
- D. Available with side wire or side and back wire models capable of accepting #14 - #10 AWG copper or copper-clad wire.
- E. Cam designed for fast make with positive break action to minimize arcing and prolong switch life.
- F. Heavy-duty toggle bumpers for smooth and quiet operation.
- G. Oversized silver alloy contacts for longer dependable switch life.

- H. Plated steel strap for corrosion resistance.
- I. Combination Phillips/ slotted head screws backed out for ease of installation.
- J. In compliance with UL 20.
- K. Switches shall be Federal Specification WC596 compliant. Marking should be clearly identifiable on face or strap.
- L. Acceptable Manufacturers: Cooper Wiring Devices, Pass & Seymour, Hubbell, and Leviton.
- M. Leviton CS120-2/ CS320-2/ CS420-2, 20 Amp, 120/ 277 V, ivory, white, black, grey, or almond.

## 2.12 SURFACE METAL RACEWAY AND WIREWAY

- A. Provide surface metal raceway system complete with all fittings, wiring, devices, etc. Surface raceway are to have baked enamel finish.
- B. These raceways are permitted only in dry locations where not subject to severe physical damage and must have metal not less than .04" thick. Do not use in hoistways and in any hazardous classified areas.
- C. The number, type, and size of conductors permitted in raceway are to be clearly marked on raceway or on shipping label.
- D. Splices and taps may be made providing raceway has an accessible removable cover.
- E. Wireway made of 14-gauge sheet metal forming a square trough with hinged cover and complete with couplings, 90°. elbows, tees, junction boxes, end plates, and supports may be used for surface wiring at load centers and other locations to the extent permitted by the NEC.
- F. Wireways in sizes 2-1/2" x 2-1/2" up to 12" x 12" square may be used; however, no conductor larger than that which the wireway is designed is to be installed therein. Wireway is to not contain more than 30 current carrying conductors at any cross-section and the sum of cross-sectional areas of all contained conductors at any cross-section is to not exceed 20% of the interior cross-sectional area of wireway.
- G. Wireways are to be treated with rust resistant primer and finished with gray, baked enamel.

## 2.13 MC CABLE

- A. Type; UL listed Type MC Cable with galvanized steel armor outer casing, color coded circuit conductors, insulated green grounding conductor. Each conductor insulated with thermoplastic insulation.
- B. NEC; Article 330, 518 and to comply with Federal Specification J-C-30B.
- C. Manufacturers: AFC Cable Systems MC, Alean Cable, BICC, Tamaqua Cable.

## 2.14 SECURITY PLATES

- A. Receptacle, switch, telephone, and GFI plates in secure areas are to be made of minimum 14-gauge one piece die formed cold rolled steel.
- B. Baked white enamel finish, polyester powder, five-stage pre-treatment, 85% glass, minimum 2H hardness.
- C. Back plate 10-gauge prime galvanized steel with four threaded holes. Security screws Torx T-20.
- D. U.L. Listed.
- E. Manufacturers: Hubbell.

## **PART 3 - EXECUTION**

### **3.01 WIRING DEVICES**

- A. Exterior boxes shall be gasketed and watertight.
- B. Switch and device plates to be mounted with all four corners touching adjacent surface.
- C. All devices to be installed true and plumb.

### **3.02 WIRING METHODS**

- A. Exposed interior wiring, panel feeders, home runs, equipment feeders; EMT. EMT conduit shall be securely fastened at intervals not exceeding 10'-0" and within 3'-0" of all boxes. NOTE: Exposed means all wiring which is not installed within walls, above suspended ceilings, or within a pre-manufactured raceway. Any raceway that is to be exposed in a finished area is to be coordinated with the architect/ engineer prior to installation.
- B. Concealed branch circuiting above suspended ceilings, and in stud partitions; MC Cable. MC Cable shall be securely fastened at intervals not exceeding 4'-6", and within 1'-0" of all boxes or fittings. All home runs are to be in EMT.
- C. Wiring in concrete slabs or decks is not permitted unless approved by the architect or structural engineer.
- D. Exposed exterior wiring; Intermediate rigid conduit.
- E. Wiring below concrete slabs in earth; PVC conduit. \* Provide GRS conduit sweep elbow through concrete slab.
- F. Concrete encasement; 0'-2" minimum cover around each conduit requiring encasement. Reinforcement consisting of 4" x 4" No. 4 wire mesh on top level of conduit.
- G. Minimum conduit size is 3/4"Ø.

### **3.03 RACEWAY SYSTEMS**

- A. All secondary wiring is to be installed in rigid metal conduit, electrical metallic tubing, or MC Cable as specified in these Specifications.
- B. Electrical metallic tubing shall be employed in lieu of rigid metal conduit in all locations except:
  - 1. Underground
  - 2. In gravel, cinder, concrete, or other sub-base floor construction. PVC may be used under floor.
  - 3. Horizontal runs in concrete floor slabs. PVC may be used in slabs.
  - 4. Where subject to possible mechanical injury
  - 5. In masonry construction below finished grade. PVC may be used.
  - 6. Vertically in poured concrete walls.
  - 7. For service work
  - 8. For main distribution feeders
- C. All raceway components shall be fastened at intervals not exceeding 8'-0".
  - 1. Conduits shall not fasten or come in contact with piping of other trades as installed in this building.
  - 2. Conduit is to be separated by a distance not less than 0'-6" from any water, steam or gas lines as may be installed in the building.
- D. Conduits and raceway systems are not to be run concealed in walls, partitions, and floor slabs. Conduit which must be exposed is to be arranged as to not pass in front of windows, doors, access panels, access doors, sky lights, HVAC equipment access for coil removal or filter removal or required service clearances.

- E. Pulling fittings are to be provided for any conduit run which exceeds 200'-0 in length.
- F. All conduits and raceway components installed under this Section for completion by others are to be provided with a pull wire affixed at both ends of conduit.
- G. Insulating bushings are to be used on all conduit terminations entering enclosures, boxes, and panels to protect the conductor from damage during installation.

#### 3.04 POWER WIRING

- A. Wire between disconnects and source.
- B. Furnish and install weatherproof disconnects, as indicated.
- C. Disconnects are to be mounted adjacent to electrical and mechanical equipment. Indoor installations are to utilize NEMA 1 enclosures. Outdoor installations are to utilize NEMA 3R enclosures.

#### 3.05 GROUNDING

- A. All electrical equipment and systems are to be grounded.
- B. Grounding system is to consist of a ground bus bar connected to a driven ground rod. Utilize ground type clamp fitting.
- C. All connections to conduit, equipment and devices are to be made with compression type connections.
- D. The grounding system is to comply with the NEC.
- E. All outside luminaires and poles are to be grounded.
- F. All equipment and devices are to be grounded in accordance with the manufacturer's recommendations.
- G. The ground system is to have a resistance of 25 ohms or less in compliance with the NEC. Utilize the fall of point method.
- H. Furnish a ground system test report at the completion of the work.

END OF SECTION