SINGLE-PRIME CONTRACTOR PROPOSALS, BONDS, AGREEMENT AND SPECIFICATIONS

For

WIRELESS ACCESS UPGRADES WORK

Morrow Intermediate SCHOOL Pittsburgh, Pa.

REPORT TO OFFICE

Contractor shall use this specification book for identification to permit entry to the school shown on this cover during the pursuance of this project

SPECIAL NOTICE

NO BID WILL BE CONSIDERED UNLESS THE <u>PROPOSAL</u> AND <u>BIDDERS</u>
<u>BOND</u> ARE COMPLETELY FILLED IN WITH THE <u>REQUIRED</u>
AND <u>CORRECT</u> AMOUNTS AND <u>SIGNED</u> IN THE PROPER PLACES IN
ACCORDANCE WITH BID INSTRUCTIONS.

OFFICE OF THE EXECUTIVE DIRECTOR OF BUSINESS AFFAIRS AND ASSISTANT SECRETARY

THE BOARD OF PUBLIC EDUCATION SCHOOL DISTRICT OF PITTSBURGH PITTSBURGH, PA.

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OFFICIAL ADVERTISEMENT

THE BOARD OF PUBLIC EDUCATION OF THE SCHOOL DISTRICT OF PITTSBURGH

Sealed proposals shall be addressed to and deposited with Mr. Ronald Joseph, Chief Operations Officer, at the School District of Pittsburgh Administration Building, Room 251, 341 South Bellefield Avenue, Pittsburgh, Pa., 15213, on **April 4, 2017**, until 2:00 P.M., local prevailing time, for the following Prime Contract(s), Building(s), Location(s), and Project Site Work:

Wireless Access Upgrades Structured Cabling Prime Morrow Intermediate School Pittsburgh, PA

Separate bids will be publicly opened and read aloud in the Board Room, 341 South Bellefield Avenue, Pittsburgh, Pa., 15213 at 2:00 P.M.

The Owner intends to apply for discounts on the equipment/services listed in this solicitation through the federal E-rate program. Several criteria and restrictions pertinent to the E-rate program are included herein and must be met by the successful vendor in order for the bid to be considered a responsive bid.

There is no pre-bid conference scheduled for this project.

Specifications include forms for the Eligible Business Opportunity Program. Form A-1 must be completed and submitted with the bid. Also, a Certificate of Compliance with the Substance Abuse Policy of the School District of Pittsburgh is included and must be completed and submitted with the bid.

Each bid shall be signed, sealed and accompanied by a certified check, a cashier's check or the bid bond of an approved Surety Company licensed to do business in the Commonwealth of PA in an amount of not less than ten percent (10%) of the amount of the base bid proposal. Check or bond shall be drawn in favor of the School District of Pittsburgh.

No Bidder may withdraw his or her bid for a period of <u>One Hundred, Twenty (120)</u> days after the date set for the opening of bids unless extended by the mutual written consent of the Contracting Body and the Bidder. Thirty (30) day extensions of the date for the award of the Contract may be made by the mutual written consent of the Owner and the Bidder.

Project Manual and Drawings for bidding purposes will be available starting March 2, 2017. Contractors may download electronic document without cost at the USAC website at https://data.usac.org/publicreports/Form470Rfp/index. Contractors may purchase bound paper copies at Modern Reproductions, 127 McKean Street, Pittsburgh, Pa., 15219 between 9:00 A.M. and 4:00 P.M.. Modern Reproductions may be contacted by Phone 412-488-7700 or Fax 412-488-7338 to determine the cost of the Project Manual and Documents. The cost of the Project Manual and Drawings is non-refundable.

Notice is given that the Project for which construction bids are being solicited is hereby a Project constituting public works and is subject to applicable provisions of the Pennsylvania Prevailing Wage Act, Act of August 15, 1961, P.L. 987, as amended and supplemented, and appropriate prevailing minimum wage rates as promulgated under provisions of said Act must be paid by Contractors in connection with performance of the necessary work.

Off-site work shall be started on the Project no later than ten (10) days after the execution of a Contract with the Owner or as otherwise directed in writing. On-site work shall start <u>June 19, 2017</u>. The work shall be substantially completed and ready for Owner use on <u>August 4, 2016</u>. Punch list items must be completed 30 days after substantial completion.

The School District of Pittsburgh reserves the right to waive any informalities in bids or to reject any or all bids.

By Order of the Board of Public Education

Dr. Anthony Hamlet Superintendent of Schools and Secretary

THE BOARD OF PUBLIC EDUCATION OF THE PITTSBURGH PUBLIC SCHOOLS OF PITTSBURGH, PENNSYLVANIA

BIDDING REQUIREMENTS and GENERAL CONDITIONS of the CONTRACT

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THE BOARD OF PUBLIC EDUCATION OF THE SCHOOL DISTRICT OF PITTSBURGH

STANDARD CONTRACT DOCUMENTS PROJECT NO. ES16-104-34

INSTRUCTIONS TO BIDDERS (Section Nos. 1 to 10 Inclusive)

1.00 SCOPE OF CONTRACT

1.01 **Work Contemplated:** The Contract for which bids are requested will be executed between the Pittsburgh Public Schools of Pittsburgh, Pennsylvania, as Owner, and the Contractor submitting an acceptable bid for furnishing and installing all that work upon which the bid was based, which is shown, called for, or reasonably implied by the Contract Documents bearing the above Project Number and entitled:

Wireless Access Upgrades Structured Cabling Prime Contract Morrow Intermediate School Pittsburgh, PA

- 1.02 <u>Commencement/Completion</u>: Off-site work shall be started on the Project no later than ten (10) days after the execution of a Contract with the Owner or as otherwise directed in writing. The Contractor shall be prepared to start the on-site work <u>June 19, 2017</u>. The entire work shall be substantially complete, ready for use on <u>August 4, 2017</u>. Punch list items must be completed 30 days after substantial completion.
- 1.03 <u>Liquidated Damages</u>: Liquidated Damages shall be provided in the specification at <u>One Hundred dollars (\$100.00)</u> per calendar day, through the first thirty (30) days beyond the Substantial Completion Date, which will be increased to an additional amount, also noted in the specification at <u>Two Hundred Dollars (\$200.00)</u> per day for any days after the 30-day interval following the Substantial Completion Date. Liquidated Damages provision is more specifically set forth in Article 17.04 of the General Conditions.

2.00 **DOCUMENTS OF THE CONTRACT**

2.01 <u>Bidders Application</u>: Project Manual and Drawings for bidding purposes will be available starting <u>March 2, 2017</u>. Contractors may download electronic document without cost at the USAC website at https://data.usac.org/publicreports/Form470Rfp/index. Contractors may purchase bound paper copies at <u>Modern Reproductions</u>, 127 McKean Street, Pittsburgh, Pa., 15219 between 9:00 A.M. and 4:00 P.M.. Modern Reproductions may be contacted by Phone 412-488-7700 or Fax 412-488-7338 to determine the cost of the Project Manual and Drawings is *non-refundable*.

2.02 **Enumeration:** The Contract Documents comprise the Agreement between the Owner and Contractor (herein "the Contract"), drawings, specifications and forms prepared by The Pittsburgh Public Schools, enumerated and identified as follows:

A. Drawings comprising in all:

As listed on Drawing List Document 00004

B. Specifications comprising in all:

- All information listed on Document 00003 (Table of Contents)
- Advertisement
- Instructions to Bidders
- General Conditions
- Supplemental or other Conditions
- Technical Specifications
- Bulletins (if any) issued before or during the bidding period.
- Latest applicable assigned Pennsylvania Minimum Wage Pre- Determination (included when applicable, as required by law)

C. <u>Forms comprising in all:</u>

- Proposal (Alternate and Unit Prices, if applicable)
- Materials/Subcontractors Listing
- Bid Bond
- Contract (Owner & Contractor)
- Performance Bond
- Payment Bond
- Business Opportunity Program Forms
- Certificate of Compliance with the Substance Abuse Policy
- Bid-Bulletin Confirmation Sheets
- Schedule of Values
- Change Order Request
- Change Order Approval Form
- Construction Change Directive
- Progress Payment Approval

2.03 Relationship of Documents

- A. The Contract Documents are complementary and what is required by any one shall be binding as if required by all. In addition, all detail of labor and material reasonably implied as necessary for proper execution of the work as required by one shall be furnished and installed as if required by all. If multiple Prime Contractors are required by the Contract Documents, each Prime Contractor is responsible for reviewing the complete set of documents to determine their full scope of work as it related to the other Prime Contractors' work.
- B. When the Contract Documents include the Owner's General Conditions, Special Conditions, or Standard Specifications, provisions or any part of a provision therein, which does not apply to the Contractor's work shall be disregarded; but all provisions or any part of a provision, which do apply shall become part of the Contract requirements.

- C. Conversely, where one part of the Contract Documents conflicts with or contradicts another provision or any part of a provision, which applies to the Contractor's work, the Contractor will be responsible for the completion of the work in accordance with the most complete interpretation of such conflict, providing the superior quality of quantity of work in question. It is incumbent upon the Contractor to review and clarify the Scope of their work during the Bid process.
- D. If in the Contract Documents there is a conflict or duplication, in the same scope of work assigned to multiple Prime Contractors, for the purpose of bidding, each Prime Contractor shall include that full scope of work in their base bid price along with a deduct price for said scope of work.

For example, if a scope of work is required by the plumber on one drawing and the same scope of work is required by the general on a different drawing, then both the Plumbing Prime Contractor and the General Prime Contractor must include the same scope of work in their base bid price along with a deduct price for said scope of work.

Again, it is incumbent upon the Contractor to review and clarify the scope of their work during the bid process.

- E. The Specifications may be subdivided into headings for convenience of reference only. Such divisions are not intended to designate or assign the work among different trades or Subcontractors. The Contractor shall do all work as called for and typical of such prime Contractor, regardless of any perceived limitation or subdivision of which the topical arrangement of the Specification might suggest. The Contractor shall also be solely responsible for assignment of work to any Subcontractors in such a way as to avoid jurisdictional disputes between trades.
- 2.04 The Contract Documents described the scope of the work, which is to be executed by the Contractor. The Contract Documents are the property of the Owner. The Contractor has been granted limited rights and licenses to use and reproduce these Contract Documents solely for the purpose of completing the work on this Project.
- 3.00 **DEFINITIONS:** The following definitions shall govern the meaning of terms used in the Contract Documents.
- 3.01 "Owner" is The Pittsburgh Public Schools of Pittsburgh, Pennsylvania, but shall be understood to embrace and include The Board of Public Education of said School District, and in all matters pertaining to direction and supervision of all work shall be understood to embrace and include the representatives of the Operations Office/Facilities.
- 3.02 "Architect" is the person, partnership, firm, or corporation commissioned by the Owner to develop, design (including designated engineering disciplines), supervise, inspect, approve, or accept any material, facility, equipment, or service, having to do this Contract and any supplement thereto. However, in any instance, developing or defining the intent of the Contract Documents and, specifically, with respect to the scope of the work and the standard of acceptability, any instruction, or interpretation or like action in representation of the Owner shall be subject to specific and explicit endorsement by the Owner.
- 3.03 **"Contractor"** is the person, or entity (or his authorized representative) contracting with the Owner for the completion of the work therein specified.

- 3.04 **"Subcontractor"** is a person, or entity having a direct contract with the "Contractor" to perform any of the work at the site. The Subcontractor has no contractual relationship with the Owner.
- 3.05 "Notice" is written notice. Written notice shall be deemed to have been duly served when delivered to the last known business address of the person, firm, or corporation for whom intended.
- 3.06 **"Emergency"** is any unforeseen occurrence or combination of circumstances damaging, or threatening to damage, work already done on the Project or likely to become detrimental to the public welfare or to life or to property involved by work on the Project and which must be averted by taking some immediate remedial measures.
- 3.07 For convenience in reference the term "shown" will be used to designate any form of information principally recorded on the Contract Drawings and the term "called for" will be used to designate any information principally recorded in the Contract Specifications. Each term has the force of a notice of specifications of the Contract wherever recorded.
- 3.08 **"Provide"** is interpreted to mean furnish and install.
- 3.09 **"Substantial Completion"** is defined in Article 17.03.
- 3.10 "Complete" or "Completion" shall mean that work required under the terms of the Contract, including punch list items, final certifications, requests for final payment, and other documents, shall have been completed and/or submitted by the Contractor.
- 3.11 "Work" is the construction and services required or reasonably inferred by the Contract Documents, including; all labor, materials, and equipment necessary to fulfill the Contractor's obligations.
- 3.12 **"Project"** is the total construction of which the work is a part and includes the work of separate Contractors.
- 3.13 "Change Order" is a written instrument developed by the Owner, prepared by the Architect and signed by the properly authorized Owner, Architect and Contractor stating that all three are in agreement about a change in the work, which either impacts the scope of the work, the Contract amount of the work, or an extension of time for the Completion of the work. A Change Order is the sole means of authorization for effecting such changes to the Contract. All unauthorized, non-emergency work done in the by the Contractor will be done at the Contractor's risk and without obligation of the Owner.
- 3.14 "Construction Change Directive" is a written instrument prepared by the Architect and signed by the properly authorized Owner, which is used to instruct the Contractor to proceed with a detailed scope of work described in the Directive and establishes the Owner's basis for valuing such work. The Contractor will have to proceed in accordance with the instructions in the Directive, but retains its right to dispute the Owner's valuation of compensation for the scope of work.

4.00 **BIDDER'S OBLIGATION**

4.01 **To Meet Contract Requirements**

- A. Each Bidder is cautioned to familiarize himself with all elements of the Contract Documents for the successful Bidder shall comply with them in full. Submission of a bid constitutes the Bidder's acceptance of the existing conditions and a confirmation that the Bidder has been to the site to examine the existing conditions.
- B. No claims on account of mistakes or omissions in the bids shall be considered after award of the Contract, except as provided by law. The Bidder must note that the law empowering the Owner additionally limits such powers. Accordingly, the Owner has no power to make adjustments and compromises in terms of a Contract, except as provided by law and by approval of a majority of the School Board.
- 4.02 <u>To Examine Conditions of Work:</u> Starting the work shall be construed as acceptance of all responsibility and as a guarantee to perform all work required, whether or not distinctly shown on the drawings or specified. Therefore, each bidder:
 - A. Shall visit the premises and thoroughly familiarize himself with the existing conditions and the work to be performed. The building will be accessible Mondays through Fridays, between the hours of 8:00 A.M. and 3:00 P.M.
 - Since the Board has been forced by circumstances to enact a regulation that all
 unauthorized persons found in the buildings or on the sites of any of its properties
 will be arrested for trespassing, it is imperative that the following procedures be
 followed:
 - a. During the bidding, on the Contractor's visit to the site, the Contractor (or any representatives sent on its behalf) shall report to the main office, bearing proper identification and carrying the Contract Documents. The Contractor or his representative will be introduced to the custodian who will conduct the Contractor to the area of the work.
 - b. The Contractor will be responsible to ensure that the same procedure shall be followed by all potential Subcontractors, suppliers, and other legitimately interested persons assisting the Contractor with its bid.
 - c. Failure of any Bidder to comply with the rules of visitation described in this provision could result in a forfeiture of ones right to bid on the Project or a rejection of bid if discovered after bids are submitted.
 - B. Shall become fully informed of any conditions relating to construction and labor or of cooperation with other Contractors under which the work shall be or now is being performed.
 - 1. When other Contracts will be let at the same time for other projects at the same site, Contract Documents for such work will be on file and open for inspection at the Owner's Operations Office/Facilities. Copies of such other Contract Documents shall be kept in complete sets only, and may be purchased by Bidders who desire to do so; but Bidders shall be responsible for obtaining any such information, which affects the conditions of their work.

- C. Shall employ such methods and means in carrying out its work as will cause the least interference with the work of any other Contractor, or in the conduct of the school activity. The Owner shall be given at least fourteen (14) calendar days notice prior to the commencement of any Work, which may cause any possible interference by the Contractor.
 - 1. The Owner will make available a legal description of the Project site and existing documents, plans, specifications, etc., relating to the area of the Contract but does not guarantee the accuracy or completeness of the information.

4.03 TO COMPLY WITH LEGAL REQUIREMENTS

- A. The Bidder acknowledges that the Project for which construction proposals are being solicited is a Project constituting public works and is subject to applicable provisions of the statutes and regulations of the Commonwealth of Pennsylvania, including the Pennsylvania Human Relations Act, the Pennsylvania Prevailing Wage Act, the Separations Act, the Steel Products Procurement Act, the Antibid-Rigging Law, the Bid Withdrawal Act, the Public Works Contractors Bond Law, the Resident Labor Statute, the Trade Practices Act, and the Utilities Protection Act ("Pa, One-Call").
- B. Bidders further acknowledge that provisions of federal and state statutes, rules, and regulations dealing with the prevention of environmental pollution and the preservation of public natural resources may affect the Project on which bids are being received. Bidders shall thoroughly acquaint themselves with the terms of the applicable statutes, rules, regulations, codes, and ordinances, and shall include in their bid price all costs of complying with their terms. No separate or additional payment will be made for such compliance. It is the responsibility of the Bidder to determine what local ordinances, if any, will affect the Bidder's Work. The Bidder shall check for county, city, borough or township rules or regulations applicable to the area in which the Project is being constructed, and in addition, for any rules or regulations of other organizations, such as Chamber-of-Commerce, planning commissions, or utility companies, who have jurisdiction over lands which the Contractor occupies during the Project. Any costs of compliance with said rules, regulations and ordinances shall be included in the cost bid, even though documents of such local controlling agencies are not listed herein.

5.00 CONDUCT OF THE BIDDING

5.01 Revisions During Bidding Period: During the bidding period, and up until seventy-two (72) hours prior to bid opening, the Architect through the Owner may issue written Bid Bulletins, to be delivered by mail, facsimile, e-mail or messenger to every bidder, making changes or corrections to the Contract Documents, as issued. Such changes or corrections shall be included in the work covered by the proposal. The Bid-Bulletins shall become part of the Contract Documents and be acknowledged by the Bidder in the submission of the bid. The Bidder will include the Bid-Bulletin Confirmation Sheet, in the form attached to this Document, with the bid.

5.02 **Interpretation of Documents**

A. If any Bidder is in doubt about the meaning of any part of the Contract Documents as issued, or finds conflicts in their stipulations, or with regard to field conditions, the Bidder should submit to the Architect a written request for an interpretation during the bidding period. The Bidder shall be responsible for its delivery in sufficient time for the Architect

to post an answer at least seventy-two (72) hours in advance of the scheduled opening of bids. By means of clarification; sufficient time to have an answer posted at least seventy-two (72) hours in advance of bid openings, means such question must be received by the Architect at least five (5) days prior to the bid opening time. Verbal questions and answers regarding procedure or the clerical completion of the bid form, which do not require posting to other Bidders, can continue to be received up to the time of the bid opening.

B. The Architect will reply to any reasonable request for interpretation which has been submitted in proper time, in the form of a Bid-Bulletin issued by the Owner to every bidder on the same terms as provided above, but will not be responsible for any verbal interpretation of the Contract Documents regardless of the source; nor will the Owner or Architect be responsible for a Bidder's failure to request an interpretation in time for written responses and instructions to all Bidders. Therefore, for items in the Contract Documents not addressed in the form of a Bid-Bulletin issued by the Owner, if there is a conflict or duplication in the same scope of work assigned to multiple prime contractors, for the purpose of bidding, each Prime Contractor shall include that full scope of work in their base bid price along with a deduct price for said scope of work

For example, if a scope of work is required by the HVAC Contractor in one section of the specifications and the same scope of work is required by the Electrical Contractor in a different section of the specs, then both the HVAC Prime Contractor and the Electrical Prime Contractor must include same scope of work in their base bid price along with a deduct price for said scope of work.

C. The drawings and the specifications, whether taken separately or together, are to be interpreted as one and explain mutually the work to be completed under this Contract. Should any discrepancy appear between the drawings and specifications, such discrepancy shall be called to the attention of the Architect, for interpretation. See Article 24.02 for guidance on Contract Document Precedence. Should the Bidder thereafter awarded the Contract have failed to call attention to any such inconsistency, no adjustment in the Contract Sum shall be allowed. If the discovery of such inconsistency or conflict occurs during construction, the subsequent interpretation will typically require, at no additional cost to the Owner, the Contractor to implement the work according to the description providing the superior quality or quantity, as determined by the Architect, and such determination by the Architect shall be final.

6.00 **CERTIFICATION OF BIDDERS AND BID**

6.01 <u>Certification of Competence</u>

- A. Awards will be made only to persons or corporations determined by the Owner to be responsible and experienced in the work and financially able to undertake this Contract. Particular experience levels and skills shall be described in detail in the Bid Documents and can be demonstrated by and attributed to a person, rather than the Owners of a corporation.
- B. Bidders are required to submit statement of Contractor's Qualifications and Financial Responsibility if requested, if they have not performed previous contract work for the Owner, if the Contractor's business name or ownership has changed in the last five (5) years, or if the company has not worked directly for the Owner within three (3) years.

- C. No proposal will be considered from any person or entity in default of the performance of any Contract or agreement made with the Owner or that has failed to satisfactorily perform such Contract or agreement.
- D. In determining the responsibility of any Bidder, the Owner will give proper consideration to any factor which in its judgment may tend to cause delay in the completion of the work to be done under this Contract or under other Contracts on this site or elsewhere that the Owner has or may let. Owner reserves the right to reject any and all bids, if it is in the best interest of the Owner.
- 6.02 <u>Certification of Bid:</u> Each proposal shall be accompanied by an approved Surety Company's Bid Bond on the form provided herewith in the amount of 10% of the Base Bid. A certified check in the amount of 10% of the Base Bid is also acceptable.
- 6.03 <u>Bidder's Obligation to Execute the Contract:</u> The bid will be awarded to the lowest responsible Bidder by a majority vote of the School Board. The Bidder to whom the award is made will be required to enter into a written Contract and provide a Performance Bond and a Payment Bond, in accordance with Article 10. All bids shall be valid for a period of not less than sixty (60) days and not more than one hundred twenty (120) days subsequent to date of opening.

7.00 **FORM OF PROPOSAL**

7.01 **Required Form**

- A. Proposals comprising "Base Bid" and "Specified Alternate Bids," if any, shall be submitted on the Proposal form furnished each Bidder, and shall be accompanied by a Bid Bond correctly filled out. The Proposal form shall be filled in completely with all amounts written out in full and also stated in figures. The Proposal form shall be signed in writing by the Bidder or an authorized agent of the Bidder. If the Bidder is a corporation, the signature shall be that of a duly authorized officer or agent of the corporation and the bid shall be sealed with the corporate seal.
- B. The Bidder shall submit with his Proposal any and all unit prices listed in the Specifications on the Proposal form provided.
- C. The Bidder shall submit a signed verification of receipt and review of all Bid-Bulletins. The attached Bid-Bulletin Confirmation Sheet will list the number and date of each individual notice sent to all bidders. It is the Bidder's responsibility to confirm that is has received all of the applicable Bid-Bulletins after the Owner has ceased issuing Bid-Bulletins. No Bid-Bulletins will be issued within less than seventy-two (72) hours of the bid opening.

7.02 Approval of Manufacturers and Subcontractors

A. Certain equipment, material or trade items and all Subcontractors require approval prior to Contract award. The apparent low bidder shall submit, within three (3) Working days of bid opening, to the Architect and Owner a confirmation of commitment of the manufacturers (not distributors) of these items along with a confirming list of Subcontractors for approval on the form provided. Failure to do so may be cause for rejection of the bid. The confirmation should merely formalize the relationship between the Contractor and those Subcontractors submitted with the bid.

- B. Products are generally specified as ASTM or other reference standard, and/or by manufacturer's name and model number of trade name. When specified only by reference standard, the Contractor may select any product meeting this standard, by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the Contractor may use any product and manufacturer listed which complies with the Specification. When the phrase "or equal" is used in the Specification, the Contractor may use an unlisted product subject to approval by the Architect. If the phrase "or equal" is not used in the Specification, a Bidder may request the Architect's approval of a substitution a minimum of 10 days prior to the date bids are due. If the Architect deems the substitution to be equal to the Specification, all Bidders will be notified, by Bid-Bulletin, that the product may be used. When only one product and manufacturer is specified, this is the basis of the Contract, without substitution or exception, unless otherwise indicated or unless waived in writing by Owner.
- C. Contract award shall be construed as approval of Subcontractors submitted except those disapproved in writing before execution of the Contract. In case of disapproval of a Subcontractor, the Contractor shall substitute names until approval is secured. Approved Subcontractors cannot be changed without written authorization from the Owner.
- 7.03 <u>Irregular Bids:</u> Proposals which are not complete or are not based on these Contract Documents, or which contain any letter or written memorandum qualifying their stipulations, or which are not submitted on the Forms of Proposal provided, will not be considered. All Bidders shall be given equal opportunity to ask questions, clarify interpretations, and receive guidance on proper and complete response to the bid, it is not the responsibility of the Owner to correct mistakes in submitted bids.

8.00 POLICIES ON SUBSTANCE ABUSE AND THE BUSINESS OPPORTUNITY PROGRAM

8.10 Procedures for Implementation of Substance Abuse Policy

8.11 **PURPOSE**

The purpose of these Procedures is to specify to whom the Substance Abuse Policy of the School District of Pittsburgh applies and to ensure that the Substance Abuse Policy is implemented and enforced in a uniform manner throughout the School District of Pittsburgh (the District).

8.12 **APPLICABILITY**

The Substance Abuse Policy of the District applies to Construction Contractors and other Independent Contractors, and their employees whose work with the District will include tasks that are considered high risk or safety sensitive or includes tasks that genuinely implicate public safety.

8.13 **DEFINITIONS**

A. Alcohol Test – A "for cause" only test for alcohol performed according to the National Highway Traffic Safety Administration, Model Specifications and Evidential Breath Testing Devices, 49 Federal Register 48855, dated December 14, 1984 (and any amendments thereto). For purposes of these procedures, the cut off level for alcohol shall be .04%.

- B. Appropriate Drug Test A test for drugs that is performed according to the Department of Health and Human Services Mandatory Guidelines for Federal Workplace Drug Testing Program, 53 Federal Register 11970, April 11, 1988 (and any amendments thereto).
- C. Certificate of Compliance A notarized Certificate executed by the Contractor and submitted to the School District's Compliance Officer declaring that the Contractor has read and understands the Substance Abuse Policy of the District and will allow only those employees who have passed an appropriate drug test to work on District projects.
- D. Contractor A Construction Contractor or an Independent Contractor.
- E. Contractor's Substance Abuse Testing Program The Pre-Access Testing accredited through the Joint Committee on Accreditation of Health Care Organizations Program and/or "for cause" testing program established, administered and enforced by the Contractor pursuant to Paragraphs 2 & 3 of the District's Substance Abuse Policy. Such a program may include a rehabilitation component through a facility that has been accredited.
- F. Employee A Subcontractor or an employee of a Construction Contractor or an Independent Contractor.
- G. High Risk or Safety Sensitive Tasks Functions that include, but are not limited to: 1) duties related to construction on District property, including tasks performed by ironworkers, plumbers, electricians, roofers, painters and those engaged in HVAC (heating, cooling, ventilation and air conditioning) work; 2) tasks that include the operation of all kinds of equipment and machinery; 3) the operation of vehicles that require the operator to hold a CDL (Commercial Driver's License); and 4) any type of work that requires an individual to climb or use any type of scaffolding, lifts, or ladders or would require an individual to work at a substantial height.
- H. Pre-Access Testing Program The portion of the Contractor's Substance Abuse Testing Program that requires a drug test to be performed on an employee and passed prior to allowing an employee access to District workplaces.
- I. Random Testing A drug testing program implemented and managed by a Third Party Administrator, at a cost to the Contractor, whereby participants are selected by social security number from the total program participation. Participants are selected by utilizing a computer with a number generating software program. Twenty-five percent (25%) of the total program participation will be randomly tested. A participant may be tested more than once.
- J. Substance Abuse The use of drugs or alcohol at the workplace.
- K. Testing "for cause" Alcohol testing necessitated by observed behavior indicating that the employee may be under the influence of drugs or alcohol and/or the involvement by the employee in, or cause of an accident which causes or could have caused injury to the employee or another individual, or which causes or could have caused destruction or damage to the District's property.
- L. Third Party Administrator The entity that will validate Contractor's Substance Abuse Testing Program and will implement and manage a random testing program and develop/maintain a database for the District.

8.14 **PROCEDURES**

- A. It is the policy of the School District of Pittsburgh, consistent with applicable laws and regulations to prohibit the use of illegal drugs and the use of alcohol at the workplace and to require that all Construction Contractors and other Independent Contractors certify that their employees engaged in the type of work covered by this policy have passed an appropriate drug test.
- B. Prior to the bidding process for each contract subject to this policy, it shall be the duty of the Director of the Division or Administrator soliciting the bid to determine if any of the work of the Contract is considered high risk, safety sensitive or considered to genuinely implicate public safety and if so must include the School District of Pittsburgh's Substance Abuse Policy and Certification Form in the Bid Documents.
- C. During the negotiation process for each personal services Contract subject to this Policy, it shall be the duty of the Director of the Division or Administrator to determine if any of the work of the Contract is considered high risk, safety sensitive or considered to genuinely implicate public safety and if so must provide the School District of Pittsburgh's Substance Abuse Policy and Certification Form to the individual who will execute the Contract.
- D. The list of high risk safety sensitive tasks or tasks that genuinely implicate public safety are listed in the definition of this policy however, the list is not exclusive. Such list shall be reviewed by the Chief of Operations and/or his designee prior to the commencement of the policy. Such list shall be periodically reviewed in order to determine if additional tasks should be added to the list.
- E. Certificate of Compliance with the "School District of Pittsburgh's Substance Abuse Policy "MUST" accompany bid proposal. Submission of this document is a mandatory condition for bid acceptance. Such certificates will be maintained on file for one year beyond job completion in the office of the Compliance Officer. Certificates of Compliance will be required for each Contract with the School District of Pittsburgh to which these guidelines apply.
- F. Any Construction Contractor, Independent Contractor or employee of same who observes behavior indicating that another person to whom this policy applies may be under the influence of drugs or alcohol shall immediately report such behavior to the District's Compliance Officer or the Office of the Chief of Staff at 412-622-3633.
- G. Any Construction Contractor or Independent Contractor who violates this policy or its reporting requirements shall cause its contract with the District to be immediately terminated, and any employee who violates same shall immediately be removed from such project.
- H. The School District of Pittsburgh and/or its designee maintain the absolute right to examine and review from time to time, any and all records related to the Contractor's Substance Abuse Program.

8.20 BUSINESS OPPORTUNITY PROGRAM

Instructions to Participants for bids administered through Facilities.

8.21 ELIGIBLE BUSINESS ENTERPRISE (EBE) POLICY AND PROCEDURES

The Business Opportunity Program has been developed in response to the M/WBE Board Policy of April 2002 and is under the auspices of the M/WBE Department. The objective of this Business Opportunity Program is to promote and encourage full and open competition in the procurement of goods and services by the Pittsburgh Public Schools ("District"); encourage all District personnel involved with procurement and contracting activities to maintain good faith efforts and appropriate purchasing procedures; protect the District from becoming a passive participant in any unlawful discrimination; and to spur economic development in the public and private sectors of the local economy. Any questions concerning these requirements should be directed to the:

Business Opportunity Program Pittsburgh Public Schools 341 S. Bellefield Ave. Pittsburgh, PA 15213 (412) 622-3500

8.22 NONDISCRIMINATION, AFFIRMATIVE ACTION AND EBE PARTICIPATION

In accordance with the provisions of the Business Opportunity Program, for all bids/proposals valued at \$10,000.00 or more, the District will conduct a compliance review to determine if the otherwise eligible Participant is responsive with regard to the Business Opportunity Program requirements of the Pittsburgh Public Schools. Accordingly, responsive Participants are required to furnish information demonstrating satisfaction of the Business Opportunity Program requirements of this solicitation with the submission of their bid/proposal packet.

8.23 EMPLOYMENT PRACTICES

- A. **Equal Employment Opportunity Policy** No person shall be denied the benefit of, or otherwise discriminated against, on the basis of race, creed, color, national origin, handicap, sex, age, marital status, or sexual orientation in connection with the award performance, and/or modification of a contract between a vendor or contractor and the Pittsburgh Public Schools.
- B. **Representation** The Pittsburgh Public Schools has instituted an Affirmative Action Plan to ensure equality of opportunity in employment practices by firms contracting for goods and services with the District. All successful contractors are strongly encouraged to employ and utilize a workforce that is representative of the diversity of the citizens in the Greater Pittsburgh area for all PPS contracts.

8.24 **DEFINITIONS**

- A. "Broker": shall refer to a business or firm that does not house or stock materials or equipment in a warehouse or storage facility, that it leases or owns, or will not take possession of what it will supply to the District nor add value to the process by altering, by any means, the material or equipment.
- B. **"Business Opportunity Coordinator"** (BOC): shall refer to the person responsible for the development and administration of the Business Opportunity Program.

- C. **"Business Opportunity Program"** (BOP): shall refer to the initiative established by the District to ensure that minority and women-owned business enterprises have an opportunity to participate fully on contracts awarded.
- D. "Commercially Useful Function": shall refer to the work performed by an EBE firm for a bid/proposal that, in light of industry practices and other relevant considerations, has a necessary and useful role towards the completion of the scope of work for the transaction and is not a superfluous sep added in an attempt to obtain credit towards goals.
- E. "Compliance": shall refer to the condition existing when a Participant has met the requirements of this Program. If a Participant is found to be non-compliant the bid, from the Participant, will be rejected and the Participant disqualified from contract award.
- F. **"Eligible Business Enterprise"** ("EBE"): shall refer to a firm that is certified as an MBE, WBE, DBE or SDB, is registered with the District and eligible to take advantage of affirmative action efforts established in this Business Opportunity Program.
- G. "Goal": shall refer to an aspirational effort to attain in specified level of EBE participation on Contracts awarded by the District based on potential partnership opportunities between a successful Participant and available EBEs to perform as Subcontractors.
- H. "Good Faith Efforts": shall refer to the aggressive actions, and supporting documentation, of a Participant undertaken in earnest to achieve an EBE goal and to ensure that it does not discriminate in its contracting practices.
- I. "Participant": shall refer to any Contractor, vendor, supplier, consultant, or other person, partnership, joint venture, corporation or other business entity that submits a quote, bid, or proposal in response to a solicitation issued by the Pittsburgh Public Schools.
- J. "Pittsburgh Public Schools": shall refer to the School District of Pittsburgh and is ultimately referred to as the District or PPS, which encompasses the City of Pittsburgh and the Borough of Mount Oliver as established in the Public School Code of 1949, as amended, and refers to the District which provides public education in those communities including any of its operating elements, officers and/or employees acting with authority.
- K. "Responsible": shall refer to a Participant's integrity, compliance with policy, skill, financial standing, reputation, experience, resources, past history of adherence, capacity and ability to do the work as outlined in the specifications.
- L. "Subcontractor": shall refer to any Contractor, vendor, supplier, consultant, or other business entity that the Participant will partner with and compensate to fulfill any requirements of the scope of work detailed in response to a solicitation issued by the District.

8.25 CONTRACT GOALS AND EBE PARTICIPATION

The Pittsburgh Public Schools has established a contract specific EBE goal of <u>three percent (3%)</u> for the work performed under this contract by Eligible Business Enterprises. Although this goal is aspirational it is meant to serve as the minimum and not the maximum level for EBE participation.

- B. In order to meet the EBE requirements of the Business Opportunity Program, EBEs will be afforded an opportunity to participate, to an extent reflective of their availability, in the performance of contracts financed in whole or part with PPS funds under this agreement. This EBE goal will remain applicable to the total contract dollar amount, for the life of the contract, including any change orders, modifications, amendments, alternates, and/or reimbursables.
- C. **EBE Firm Eligibility** The EBE entities utilized toward the EBE participation goal on a contract should be registered in accordance with the Business Opportunity Program. The firms eligible for inclusion in the contractor's EBE plan must be registered with the Pittsburgh Public Schools' Business Opportunity Program. Proof of current certification and a completed EBE Registration Form may be submitted at time of bid submission for firms certified by a local agency e.g., Allegheny County, PRMPC, SBA, Port Authority or Pennsylvania's DGS. You may view the most current EBE Directory at the following website address: http://www.pps.k12.pa.us/chiefofstaff/mwbe/ebedirectory.asp. This database is updated as often as twice per month so please review the most recent listing prior to completing your bid/proposal documents.
- D. **Counting EBE Participation** The District will count EBE participation as follows:

TYPE OF BUSINESS	% OF PARTICIPATION COUNTED		
STRUCTURE			
Certified EBE Prime Contractor or	The percentage equal to the value of the work		
consultant	actually performed by the EBE with its own forces and any other EBE work performed.		
Non-EBE Prime Contractor or	The percentage equal to the value of the work		
consultant	actually performed by the EBE subcontractors		
	with its own forces.		
EBE Manufacturer	100% of the expenditures with an EBE		
	manufacturer of materials or equipment.		
EBE Distributor	60% of the expenditures with a regular		
	distributor of materials for service contracts.		
	100% of the expenditures on materials or		
	equipment contracts.		
EBE Broker	10% of the expenditures with a broker for		
	service contracts. 100% on materials or		
	equipment contracts.		
EBE Trucking Services	100% of expenditures with its own trucks and		
	drivers including leases with EBE independent owner operators and EBE trucking companies.		
-			

- 1) When an EBE participates in a Contract, only expenditures to an EBE Contractor or consultant that is performing a commercially useful function, as further specified in the Business Opportunity Program, shall be counted towards the established EBE goal.
- 2) When an EBE subcontracts part of the work of its Contract to another firm, the value of the subcontracted work may be counted toward the EBE goal only if the EBE's

Sub-Consultant or Sub-Contractor is itself an EBE. This participation <u>must be</u> documented. Work that an EBE subcontracts to a non-EBE firm does not count toward the EBE goal.

- 3) The entire amount of that portion of a construction Contract that is performed by the EBEs own forces shall be counted, including the cost of supplies and materials obtained by the EBE for the work of the Contract, and supplies purchased or equipment leased by the EBE (except supplies and equipment the EBE subconsultant purchases or leases from the prime consultant or its affiliate).
- 4) In instances where the EBE goal is greater than 0% on solicitations for materials, equipment, supplies, etc. you may elect to partner with an EBE firm that can:
 - a) supply one or more of the items requested in this solicitation
 - b) supply and deliver one or more of the items requested in this solicitation
 - c) provide delivery for all of the items requested in this solicitation
 - d) install, finish or otherwise add value to one or more of the items requested in this solicitation
- 5) When an EBE performs as a participant in a joint venture, only the portion of the total dollar value of the contract that is equal to the distinct, clearly defined portion of the work of the contract that the EBE performs with its own forces toward EBE goals shall be counted.
- 6) If an EBE firm is declared ineligible for any reason during the life of a contract, the dollar value of work performed under a contract with that firm after it has been deemed ineligible shall not be counted. In this instance the Prime Contractor must identify and partner with a substitute EBE.
- 7) In determining the achievement of an EBE goal, the participation of an EBE subconsultant or Subcontractor shall not be counted until the amount being counted toward the goal has been paid to the EBE. The Prime Contractor must document this activity.

8.26 SOLICITATION EBE REQUIREMENT, TERMS AND CONDITIONS

- A. In addition to any other requirements contained in this solicitation, the following Business Opportunity Program requirements must be satisfied. The solicitation must include a representation that the Participant has met the EBE goal established by the District for this procurement, or documented evidence that the Participant has made a good faith effort to attain the level of EBE participation sought by the District for this procurement. The following forms must be completed, authorized and submitted with the bid/proposal packet:
 - 1) (A-1) Certification of EBE Compliance
 - 2) (A-2) List of All Participating Sub-Contractors
 - 3) (A-3) EBE Intent to Perform as a Sub-Contractor
 - 4) (A-4) Good Faith Efforts (GFE) Checklist

Any previous references made to the submission of forms beyond the Bid Due Date, **DISREGARD**.

<u>Failure to provide these completed submittals will serve to disqualify the bid/proposal as non-compliant.</u>

- B. The District may at any time prior to award seek clarification or additional information regarding Participant responsibility in respect to EBE involvement with this procurement.
- C. In the event that a Contract is awarded, after Board approval, the successful Participant must submit an executed sub-contract agreement to the M/WBE Office within three (3) days. The terms, conditions and requirements contained in this solicitation shall become an integral part of the Contract, binding the successful Participant to full and faithful performance in accordance with the subcontract agreement. No language contained in the subcontract agreement should supersede the requirements of the Business Opportunity Program.

8.27 GOOD FAITH EFFORTS

If after an aggressive effort has been made the EBE goal is not met, the Participant must submit documented evidence of mandatory good faith efforts taken to include EBE participation in the Contract. To demonstrate that aggressive actions have been expanded the <u>Good Faith Efforts Checklist (A-5)</u> must be completed, executed and submitted, in addition to the required supporting documents when the bid/proposal package is due. All efforts must be made <u>prior</u> to bid/proposal submission.

The first three (3) items must be completed and documented by the Participant who wants to indicate that they are going to "self-perform" some portion of work. This Participant will be exempt from completion the balance of the Good Faith Effort Checklist only if provided with written permission from the M/WBE Coordinator and only for the items identified as areas that the Participant has proven they are able to and will perform for this specific contract. This permission **will not** serve as an indication of compliance for the entire bid. The determination for compliance will be made after the official bid opening. All efforts outlined on the Good Faith Efforts Checklist are mandatory for all other Participants as defined in this Good Faith Efforts section.

Failure to accomplish and provide documented evidence of each mandatory action (if the EBE goal has not been met) will render your bid/proposal non-compliant.

8.28 EBE MODIFICATIONS AND SUBSTITUTIONS

If a Prime Contractor wishes to terminate or substitute an EBE Subcontractor listed as fulfilling its contract goal then perform the work of the terminated EBE Subcontractor with its own forces, an affiliate, a non-EBE Subcontractor or with another EBE Subcontractor, it must submit written documentation prior to the termination or substitution of the EBE Subcontractor to the BOC. This will include any changes to items of work, materials, services, or EBE firms that differ from those identified on its <u>Successful Subcontractor Participation Plan (A-3)</u> and the <u>Intent to Perform as an EBE Subcontractor (A-4)</u> forms previously submitted by the Prime Contractor, approved and on file. The Prime Contractor must provide any and all documentation and information as may be required with respect to the requested change.

This provision applies to all change orders, amendments, and/or modifications under this Contract. The Contractor will be required to comply with this provision to the extent needed to achieve the EBE goals agreed to at the time of contract award. The Prime Contractor's documentation shall include the specific reasons for the proposed change. After careful review, the BOC will approve or deny the change.

- A. For approval the Prime Contractor must document that a good faith effort was made to replace one EBE with another EBE. The substitute EBE firm must be registered in accordance with the Business Opportunity Program in order for the Prime Contractor to receive credit toward fulfilling its EBE participation goal for the Contract. In the event that the Contractor is unable to contract with another EBE firm, good faith effort documentation must be provided to the BOC describing the aggressive, yet unsuccessful attempts to locate a substitute EBE. In all situations, the Contractor may not terminate or substitute an EBE Subcontractor without prior written consent from the BOP.
- B. When an EBE substitute has been identified, the Contractor should provide, in writing, the name, address, phone, and principal contact of the proposed EBE firm. The Prime Contractor must submit a revised Summary of Successful Subcontractors (A-3) as well as a copy of the executed subcontract agreement with the proposed EBE firm to the BOC within three (3) business days of its receipt of the substitution approval. The substitute EBE should not begin working until the executed subcontract agreement has been received and acknowledged by the Business Opportunity Office.
- C. If an EBE allows its certification to lapse or expire during the execution of this Contract the EBE will be found ineligible and the Prime Contractor will receive no further credit for that EBE's participation on the project. The Prime Contractor must identify a substitute EBE to complete the scope of work for any EBE firm that has been found ineligible.

If the Prime Contractor does not comply with this provision, the District may elect to apply Contract remedies as defined in the Business Opportunity Program or other Contract remedies, as appropriate.

8.29 EBE PAYMENT COMPLIANCE REPORT AND AUDITS

- A. During the performance of any resulting contract and for a period of up to three (3) years following completion of the Contract work the District may initiate reviews for compliance with the requirements of the District's Business Opportunity Program and the successful Contractor's <u>Successful Subcontractor Participation Plan (A-3)</u>. Such review may involve, but not be limited to; the review of monthly invoices, the <u>EBE Payment Compliance Report (B-1)</u> forms, desk and/or field audits.
- B. In conjunction with the submission of the invoice or each request for a progress payment under this Contract, the Contractor shall provide on the completed <u>EBE Payment Compliance Report (B-1)</u> form a breakdown of the amounts paid to date to EBEs identified by the Contractor to participate on this Contract with copies of cancelled checks for all payments made to EBE firms during that report period. As provided in the contract, the District may withhold all or part of any progress payment otherwise due the Contractor if the Contractor fails to submit the <u>EBE Payment Compliance Report (B-1)</u> form and/or make prompt payments, according to PPS procurement procedures to its Subcontractors.
 - 1. Any award resulting from this procurement competition shall be and is conditioned upon the attainment of the aforesaid goals <u>or</u> the satisfactory showing of good faith efforts to attain said goals.
 - 2. If the prime Contractor submits a request for a progress payment, and the District honors it, all Subcontractors must be compensated for work performed in accordance with the prompt payment act.

3. Where a Contractor is found by the District to have failed to comply with the requirements of the Business Opportunity Program or the Contractor's Subcontractor Participation Plan (A-3), the Contractor will be required to take corrective action. If the offending Contractor does not promptly take corrective action, sanctions may be imposed.

9.00 **AWARDS**

- 9.01 **Base Bid:** Awards of Contracts will be made at the Owner's option to the lowest responsible Bidder either on the base bid excluding all (if any) specified alternate(s); or, to the Bidder whose base bid, when reduced or when increased by the Owner's election to exercise any one or more alternates, is the lowest in comparison with other base bids when modified respectively by each Bidder's quoted amounts on the same (if any) alternates.
- 9.02 **Rejection:** The Owner reserves the right to reject any or all bids and to waive minor or immaterial informalities in any bid. Minor or immaterial informalities are not irregularities described in Article 7.03.

9.03 Unit Prices for Additions and Deductions

- A. In the event that the unit prices submitted for additions and deductions are determined to be unbalanced or unreasonable, the Owner reserves the right to reject any or all such unit prices.
- B. When unit prices are rejected, the Owner may proceed to award Contracts at his option as stated above.
- C. When unit prices for additions to, or deductions from the work covered by the Contract are accepted, they will be noted on the Contract and become a part of the Contract, it is specifically understood that such prices are intended to cover small quantities. In the event the quantities affected by a change are more than 10% in excess of the original quantities as shown by the drawings and specifications, the unit prices will not apply to the amounts in excess of this 10% and a Change Order will be entered into, adjusting those units prices to cover the work done in excess of 10%. It is the intent of this paragraph, that such Change Order be used to achieve quantity discounts for larger purchase of materials, supplies or equipment, which were not accounted for in the unit price provided. This is not a mechanism to increase the unit price amount provided by the Contractor.
- 9.04 <u>Cash Allowances:</u> No cash allowances for any purpose are included in the specifications of this Project.

10.00 EXECUTION OF DOCUMENTS

10.01 General: The successful Bidder will be required to execute the Contract (form attached) in duplicate together with single copies of all required bonds and affidavits within ten (10) days after receipt of formal notice of the Board Approval to Award to Apparent Lowest Responsible Bidder. The proposed Contractor/Owner Agreement shall be provided, with the formal notice of Board Approval to Award to Apparent Lowest Responsible Bidder, bearing the date of the day following the Award by the Board and the Contract shall be accepted as beginning after the Contractor's execution and return of the Contract to the Board for Review and execution and not until formally executed by the Board. Note, however, that some Prime Contractors may execute their Contracts with the Owner well in advance of their ability to proceed. Such circumstances will be reflected in the schedule and anticipated start dates and durations provided in the individual Contract.

GENERAL CONDITIONS

(Section Numbers 11 to 27 Inclusive)

PART 1 – CONTRACT SECURITIES AND PAYMENTS

11.00 CONTRACTOR'S RESPONSIBILITY

11.01 The Contract

- A. The Contractor shall provide all materials, labor, and equipment, for the prompt and satisfactory execution of the Contract work to be completed as shown, called for, expressed and/or shall do all else, which should be reasonably implied by the Contract Documents in compliance with all applicable national, state, county, and local codes and regulations.
- B. The Contractor shall make good, without cost to the Owner, any omissions from his work or the results of his negligence, improper materials, or defective workmanship or consequences of which he may, in writing, be notified within one (1) year of the date of the Certificate of Substantial Completion. However, this general guarantee shall not act as a waiver of any specific guarantee for another length of time set elsewhere in the Contract Documents or by law. Within the period of general or special guarantee, no certificate given, nor payment under this Contract, nor use of equipment or occupancy of the premises by the Owner, shall be construed as an acceptance of defective work, improper material, negligence or omission.
- C. The Owner shall not be responsible for furnishing surveys (unless required for the execution of the work and requested by the Contractor in writing) or other information as to the physical characteristics of, legal limitations of, or utility locations for the Project site, but shall furnish or cause to be furnished to the Contractor a legal description of the Project site, which shall not constitute one of the Contract Documents. Contractor shall confirm the location of each utility, shall excavate and dispose of each on-site utility and shall cap each off-site utility as required by the work and as may be included in the Contract Documents. To the extent required for the execution of the work, the Owner shall provide to contractor such test borings and information as it has as to subsurface conditions and site geology. Owner does not assume any responsibility whatsoever with respect to the sufficiency or accuracy of borings made, or of the logs of test borings, or of other investigations, or of the interpretations made thereof, and there is no warranty or guaranty, express or implied, that the conditions indicated by such investigations, borings, logs or information or representative of those existing throughout the Project site, or any part thereof, or that unforeseen developments may not occur. To the extent the Owner provides test borings and information related to the subsurface conditions, which has been generated by an independent third-party licensed professional, the Bidder may rely upon these documents to the extent the licensed professional is expected to act within its standard of care in producing such. The Contractor's sole cause of action for a failure of the licensed professional to adequately perform its services, in line with the standard of care of such professionals, will be derived from a direct assignment of the Owner's contractual right against the professional.
- D. The Contractor represents that it is familiar with the Project site and has received all information it needs concerning the condition of the Project site. The Contractor represents that is has inspected the location of the work and has satisfied itself as to the condition thereof, including, without limitation, all structural, surface and reasonable ascertainable subsurface conditions. Based upon the foregoing inspections, understandings, agreements

and acknowledgements, the Contractor agrees and acknowledges (1) that the Contract Sum is just and reasonable compensation for all work, including foreseen and foreseeable risks, hazards and difficulties in connection therewith, and (2) that the Contract Time is adequate for the performance of the work. Contractor shall have no claims for surface or reasonable ascertainably subsurface work in proximity of known subsurface utilities, improvements and easements.

E. Contractor agrees to include the language in Articles 11.01 C and D verbatim and in highlighted text in all agreements with Subcontractors. The Contractor further agrees to provide copies to the Owner of all Subcontract agreements, upon the Owner's request. The Contractor may redact or edit out the financial terms between the Contractor and the Subcontract when providing these copies to the Owner.

11.02 Subcontracts

- A. The Contractor can Subcontract portions of the work to any Subcontractor. The Owner reserves the right to approve or disapprove of the selected Subcontractor, which has been previously identified by the Contractor. By entering into Subcontracts, the Prime Contractor is not relieved from the contractual responsibility to deliver the entire work as described in the terms of its Contract with the Owner.
- B. The Contractor, in subcontracting any portion of his work, shall include the following statement, to make the Owner/Contractor Contract's Terms and Conditions binding upon its Subcontractor by all the terms of these Contract Documents insofar as they are applicable to the work described in the Subcontract. The Subcontractor Agrees that all of the terms and conditions contained in the Contract Documents, in so far as they are applicable to the Subcontractor's work, are incorporated by this reference into this Subcontract Agreement. A copy of the applicable Contract terms and conditions has been provided to the Subcontractor.
- C. The Contractor shall promptly advise the Owner and Architect, with in ten (10) days of receipt of any claim or demand by a Subcontractor claiming that any amount is past due to such Subcontractor or claiming any default by the Contractor in any of its obligations to such Subcontractor. The Contractor will have thirty (30) days to respond in writing or to pay the claim of the Subcontractor. The Owner and Architect shall review the Subcontractor's Claim or Demand and the Contractor's response and will issue an official and final ruling with in ten (10) days of such receipt of notice from the Contractor. If the determination requires the Contractor to make payment to the Subcontractor, such payment will be made within five (5) days of issuance of the written ruling. Such payment by the Contractor does not waive its rights to appeal the decision in accordance with the dispute resolution terms of this Agreement or its agreement with the Subcontractor. Additionally, if the Subcontractor is order to perform without immediate payment, then the Subcontractor must begin performing within five (5) days of the ruling. Such performance does not waive the Subcontractor's right of appeal the decision in accordance with the dispute resolution provisions in its Agreement or its agreement with the Subcontractor.

11.03 **Separate Contracts and Owner's Work**

- A. The Owner reserves the right to let separate contracts for work on the Project not included in the work and to do any work on the premises as it may choose which does not interfere unreasonably with the work.
- B. The Contractor shall cooperate with any such separate Contractors as subsequently provided under "Coordination of the Work," but, otherwise will not be responsible for their work.

- C. Prosecution or completion of work under separate Contracts, or of work done by the Owner, shall not be considered or construed as an acceptance of the work of other adjacent or dependant Contractors, in whole or in part.
- D. Should the Contractor, either itself or by its Subcontractor or Sub-Subcontractors or their respective agents, servants or employees, cause damage or injury to the property or work of any other Prime Contractor or Contractors, or to one another, or by failing to perform its work (including the work of its Subcontractor or Sub-Subcontractors) with due diligence, delay any Prime Contractor or Contractors, or one another, which suffer additional expense or damage as a result, the parties involved shall resolve any disputes in accordance with the terms of the Contractor/Subcontractor Agreement, which recognize the creation of the Owner's role as third-party beneficiary to the prime Contractor's Agreement. The Owner will not be a party to disputes or actions between Prime Contractors or Subcontractors concerning such additional expense or damage caused by one to the other.
- E. It is agreed by all parties that disputes or actions between Contractors concerning the additional expense or damage will not delay completion of the work, which shall be continued by the parties, subject to the rights hereinbefore provided. It is agreed by the parties to the Contract (the Owner as promisee and the Contractor as promisor) that the intent of this clause is to benefit the other Prime Contractors on the Project or related Projects and to serve as an indication of the mutual intent of the Owner and the Contractor that this clause raise such other Prime Contractors to the status of third-party beneficiaries only as to the terms and conditions of **Articles 11.03 C, D and E**. The Contractor agrees that **Articles 11.03 C, D and E** are provided as a benefit to the Contractor and that they specifically exclude any claims against the Owner for delay or other damages arising from disputes among Contractors.

11.04 INDEMNIFICATION

A. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and Architect and consultants, agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to, attorneys' fees and defense costs, arising out of or resulting from performance of the work, but only to the extent caused in whole or in part by the acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts or omissions they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this **Article 11.04**.

12.00 CONTRACT SECURITIES

12.01 **Performance Securities**

- A. The Contractor shall furnish a Performance Bond on the form provided, in an amount equal to One Hundred Percent (100%) of the Contract Price as a security for the faithful performance of this Contract. The Contractor shall also furnish a separate Payment Bond, on the form provided in an amount equal to One Hundred Percent (100%) of the Contract Price as security for the payment of all persons performing labor and furnishing materials in connection with this Contract.
- B. Any and all Contract Bonds shall be with a Surety Company licensed to do business in Pennsylvania, and satisfactory to the Owner.

- 12.02 Additional or Substitute Bond: If at any time the Owner shall become dissatisfied with the financial viability of any Surety or Sureties then upon the Performance Bond, or if for any other reason such bond shall cease to be adequate security to the Owner, then the Contractor shall, within five (5) days after notice from the Owner, substitute an acceptable bond in such form and sum signed by such other Sureties as may be satisfactory to the Owner. The premiums of such bond shall be paid by the Contractor. No further payments shall be deemed due or shall be made until the new Sureties have qualified.
- 12.03 <u>Assignment of Contract</u>: No assignment by the Contractor of any principal construction Contract or any part thereof will be recognized unless such assignment has had the prior written approval of the Owner, and the Surety has been given due notice of such assignment in writing with the terms of its bond.

13.00 INSURANCE

- 13.01 <u>Contractor's Insurance</u>: No Contractor shall commence work under this Contract until it has obtained all insurance required under this or any subsequent section of the Contract Documents and such insurance has been approved by the Owner. The Contractor shall not permit any Subcontractor to commence work on its subcontract until all similar insurance required of the Subcontractor has been so obtained and approved. Public Liability and Property Damage Insurance shall be made out in favor of the Pittsburgh Public Schools of Pittsburgh, Pennsylvania with the Architect as an additional insured. All insurance specified herein shall be paid for by the Contractor.
- 13.02 <u>Compensation Insurance</u>: The Contractor shall accept, insofar as the work covered by this Contract is concerned, provisions of Workmen's Compensation Act of 1915 and any supplements or amendments now in force or which may hereafter be enacted, and agrees that it will insure its liability thereunder. In case any work is subcontracted, the Contractor shall require the Subcontractors to provide Workers Compensation Insurance for all of the Subcontractors employees unless such employees are covered by protection afforded by the Contractors.
- 13.03 Public Liability and Property Damage Insurance: The Contractor shall take out and maintain during the life of this Contract, such Public Liability and Property Damage Insurance as shall protect it, and the Subcontractors performing work covered by this Contract, from claims for damages and personal injury, including accidental death, as well as from claims for property damages which may arise from operations in accordance with this Contract, whether such operations be by itself or by any Subcontractor or anyone directly or indirectly employed by either of them. The amounts of such insurance shall be as follows:

Type of Coverage

Workmen's Compensation Employers Liability, including Occupational Disease

Comprehensive General, Liability including Contractual Products - Completed Operations, Contractors Protective, Personal Injury (including Claims by Employees)

Minimum Limits

Statutory \$500,000/\$500,000/\$500,000

\$2,000,000 General Aggregate \$1,000,000 Occurrence, etc. \$1,000,000 Products/Completed Operations Aggregate

OR

Property Damage Liability to include coverage for Explosion, Collapse, and Dual Limits: Bodily Injury \$2,000,000 General Aggregate \$1,000,000 Occurrence, etc.

Underground Damage

\$1,000,000 Products/Completed Operations Aggregate

Property Damage \$2,000,000 General Aggregate \$1,000,000 Occurrence, etc. \$1,000,000 Products/Completed Operations Aggregate

Business Automobile including Owned Vehicles, Hired and Non-Owned Vehicles

\$1,000,000 Combined single limit

Umbrella \$1,000,000

- 13.04 **Property Insurance:** Property insurance acceptable in the form of Builder's Risk. The Prime General Contractor for the General Work shall obtain, and maintain during the life of this Contract, property insurance for the Total Project (all four Prime Contracts General Construction; Electrical, Heating Ventilation/Air Condition; and Plumbing are the Prime Contractors) to the full insurable value thereof. The insurance shall include the interests of all Prime Contractors, Subcontractors, and the Owner and shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss or damage, including, without duplication of coverage, theft, vandalism, and malicious mischief.
- 13.05 <u>Insurance Covering Special Hazards:</u> Insurance covering special hazards shall be taken out by the Contractor if so required in the Specifications. Any contract requiring removal of material containing asbestos will require appropriate coverage.
- 13.06 <u>Certificates of Insurance</u>: Acceptable to the Owner shall be filed with the Owner prior to the commencement of the work, updated as required. No Contractor will be permitted to proceed, unless the Certificate of Insurance is presented to the Owner.
 - A. If any party is damaged by the failure of the other to purchase or maintain insurance required under Article 13 and so notifies the other party, then the party who failed to purchase or maintain the insurance shall bear all reasonable costs properly attributable thereto, in accordance with Article 11.03E.
 - B. Whenever the Contractor is required under these Contract Documents to furnish insurance coverage, all policies of insurance so furnished shall be issued by an insurance company or by insurance companies qualified to do business in the Commonwealth of Pennsylvania and having a A.M. BEST Rating of "A" or better.

14.00 CHANGES AND ALTERATIONS IN CONTRACT WORK

- 14.01 <u>General</u>: The Owner may, at any time, by written order and without notice to the Sureties, require the performance of such changes and alterations in the work as it may find necessary or desirable. Work may also be deleted for the convenience of the Owner by written notice.
- 14.02 <u>Changes in the Work:</u> Owner initiated changes in the work will be executed in two forms, either; Construction Change Directive or Change Order. A Change Order shall be a written notice prepared and signed by the Architect, presented and approved by the Owner (where authorized by a majority vote of the School Board), and executed by the Contractor or Contractors whose work is being altered. The Change Order will contain the particulars of any change in the work, the amount of adjustment (increase or reduction) in Contract Price, and any adjustment in Contract Time. The Owner has the authority to issue a Construction Change Directive, where the parties have not agreed to the adjustment, or is any, is due. The Construction Change Directive is prepared by the Architect and authorized by the Owner to direct the Contractor to proceed as instructed, with compensation or adjustments to be determined later.

14.03 **Extras**

- A. When such a change or alteration increases the amount of work shown or called for in the Contract Documents the amount of compensation to be paid to the Contractor for any changes and alterations, as so ordered, shall be determined as follows:
 - 1. By such applicable unit prices, if any, as are set forth in the Contract; or
 - 2. If no such unit prices are set forth, then by a lump sum proposed by the Contractor, reviewed by the Architect and agreed upon by the Owner, or
 - 3. When requested by the Owner or Architect the Contractor or Subcontractor shall itemize the cost and/or credit for a change in the work in the following manner:
 - a. Costs of labor, including social security, unemployment insurance, fringe benefits and Workmen's compensation insurance;
 - b. Costs of materials, supplies and equipment (maximum of 80% of AED), including cost of transportation, whether incorporated or consumed;
 - c. Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
 - d. Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the work; and
 - e. Additional costs of field supervision and field office personnel directly attributable to the change.
 - f. For work performed by a Subcontractor, the Subcontractor shall be entitled to fifteen percent (15%) of the Subcontractor's net increased cost, and the

Contractor shall be entitled to five percent (5%) of the amount due the Subcontractor. Except as provided in this subparagraph, the Contractor is not entitled to anything additional for overhead, profit, costs of additional field supervision and costs of additional field office personnel.

- g. For work performed by a Sub-Subcontractor, the Sub-Subcontractor shall be entitled to fifteen percent (15%) of its net increased cost, and the Subcontractor and Contractor, each shall be entitled to five percent (5%) of the price to them. This allowance for overhead and profit shall be applied such that the only entity performing the work shall be entitled to the fifteen-percent allowance; all others in the contractual chain back to the Owner shall be entitled to the five-percent allowance. There shall be no other charges for overhead, profit, costs of additional field supervision and costs of additional field office personnel.
- 4. In the absence of a total agreement on the terms of a Change Order, the Owner may at any time issue a Construction Change Directive that sets forth the adjustment in the Contract Sum or Contract Time. The Construction Change Directive shall be signed by the Owner or by the Owner through the Architect and may consist of additions, deletions or revisions within the general Scope of the Contract. The Contractor must proceed to provide the work under the terms of a Construction Change Directive properly approved by the Board. With in Twenty-One (21) days of Claim for a Change and prior to the issuance of the Change Directive, the Contractor shall submit all documentation to support permissible costs, as set forth in Article 14.02.A.3. If the Change Directive is for a Continuing cost, the Contractor must provide a daily rate of estimated expenses. Pending final determination of cost to the Owner, amounts not in dispute and recommended for payment by the Architect and approved by the Owner may be included in requisitions for payment.
- B. Requests for additional compensation for extra work completed without prior approval by the Owner will not be considered.
- C. These foregoing provisions shall not affect the power of the Contractor to act in case of emergency.
- 14.04 <u>Credits:</u> When a change or alteration is such as to decrease any quantity of labor or materials shown or called for under the Contract Documents, the Contractor shall grant the Owner a credit to be deducted from the Contract Price. Where such a credit is not covered by unit prices it shall equal the net decreases in cost of labor and material exclusive of all Contractor's overhead and profit as listed above. A Credit shall be breakdown in accordance with Article 14.03.A.3. The Contractor is responsible for all Contract work, until the deletion of work is approved and Change Order is delivered by the Owner.
- 14.05 <u>Compensated Changes</u>: When changes and alterations consist of omitting certain quantities of materials in one or more parts of the work and adding the same kind or kinds of material(s) to another part or parts of the work, no extra or credit shall be claimed for this operation, except for any difference in the quantities of labor or material involved.
- 14.06 <u>Changes Without Written Order</u>: No change or alteration shall be made in the materials or work without the Owner's written Change Order, which has been approved by a majority vote of the Board.

- 14.07 <u>Changes in Time for Completion</u>: There shall be no change in the time of completion, except pursuant to Article 17 of these General Conditions, or by written agreement signed by the Owner.
- 14.08 <u>Final Settlement</u>: Agreement on any Change Orders shall constitute a final settlement of all matters related to the change in the work that is the subject of the Change Order, including, but not limited to, all direct and indirect costs associated with such change and any and all adjustments to the Contract Sum and any reduction or addition to the construction schedule.

15.00 PAYMENTS

15.01 Estimates and Requisitions

- A. Before the first Requisition for Payment, the Contractor shall submit, on a form provided or approved by the Owner, to the Owner and Architect a Schedule of Values allocated to various portions of the work, the total equaling the Contract Price. This schedule shall relate directly to the activities on the Project Schedule and be prepared such that each major item of work in each major work area and each subcontracted item of Work in each major area is shown separately, itemized by labor and material with no line item exceeding \$50,000.00. The Owner or Architect may request that the Contractor submit data substantiating the accuracy of the schedule. This schedule, when approved by the Architect and Owner shall be used as the basis for the Contractor's Requisition for Payment. The Contractor shall submit his first requisition for payment only after he receives the fully executed copy of his Contract. The Contractor shall utilize the Schedule of Values and other necessary data to complete and certify the required Pennsylvania Department of Education PLANCON forms.
- B. On or about the 20th of the month the Contractor shall review with the Owner's Representative the percentage of each item that will be requested for the current month, projecting to the end of the month. Upon agreement by the Owner's Representative, the Contractor shall submit the Requisition for Payment to the Architect on or about the 25th of the month including data substantiating the Contractor's right to payment as the Owner or Architect may require. With each Requisition, the Contractor shall submit: Weekly payroll data on Pennsylvania Department of Labor and Industry Form LIPW-128 for each of his employees and the employee of any Subcontractors. The Owner will hold payroll data as confidential and will be destroyed upon the completion of the Contract.
- C. Payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include applicable insurance, storage, and transportation to the site for such materials and equipment stored off the site.

15.02 **Approval for Payment**

A. The Architect will, within seven (7) days after receipt of the Contractor's Requisition for Payment, either issue to the Owner's Representative an Approval for Payment for such amount as the Architect determines is properly due, or notify the Contractor and Owner in writing of the Architect's reasons for withholding approval, returning the requisition to the Contractor for revision and re-submittal.

- B. The Owner may withhold payment, and the Architect may withhold recommendations for payment in whole or in part, to the extent reasonably necessary to protect the Owner from loss because of:
 - * Unsatisfactory prosecution of the work by the Contractor;
 - * Failure to comply with government regulations and law;
 - * Defective work not remedied;
 - * Third party claims filed or reasonable evidence indicating probable filing of such claims;
 - * Failure of the Contractor to make payments properly to Subcontractors or for labor, materials, or equipment;
 - * Reasonable evidence that the work cannot be completed for the unpaid balance of the Contract Sum;
 - * Damage to the Owner or another contractor;
 - * Reasonable evidence that the work will not be completed within the Contract Time, and the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
 - * Persistent failure to carry out the work in accordance with the Contract Documents.
- C. When the above reasons for withholding approval are removed, approval will be made for amounts previously withheld.

15.03 Method of Payment

- A. After the Architect has recommended approval for payment, and the Owner has approved payment, the Owner shall make payment within forty-five (45) days.
- B. Progress payments will be made in the amount of ninety percent (90%) of the value of the work completed to date, as reviewed and estimated by the Architect. This 10% retainage shall be reduced to 5% when the work is 50% completed provided that:
 - * the Architect; recommends approval of the payment and/or the Owner has approved the payment
 - * the Contractor obtains the consent of surety for the reduction of retainage;
 - * the Contractor is making satisfactory progress in accordance with the schedule;
 - * there is no specific cause for greater withholding.
- C. In the event a dispute arises over claims of increased costs occasioned by delays or other action of another Contractor, additional retainage in the sum of one and one-half times the amount of any possible liability may be withheld until such time as a final resolution is agreed upon by all parties involved. Unless, the Contractor causing the claim furnishes a satisfactory Bond to indemnify the Owner against the claim, then there is no need to increase retainage to one and one-half (1-1/2) times the value of the estimated work. All such money retained may be withheld from the Contractor until substantial completion of the Contract.

- D. Upon Substantial Completion of <u>all</u> the work, such that only minor items remain incomplete and upon application initiated by the Contractor, the Contractor will execute the Substantial Completion Form, and submit same to Architect for review and recommendation for approval. After review and approval by the Architect, the Owner shall seek the consent of Surety for reduction of retainage in the amount recommended by the Architect, upon release from the Surety, the Owner shall make payment for the work reducing retainage to an amount equal to one and one-half (1-1/2) times the amount required to complete the remaining incomplete minor items. Final payment of an amount withheld for the completion of Contract items will be paid upon completion of these items.
- E. Within fourteen (14) days of receipt of payment from the Owner, the Contractor shall pay each Subcontractor out of the amount paid to the Contractor on account of such Subcontractor's portion of the work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor's portion of the work. The Contractor shall, by appropriate agreement with Subcontractor, require each Subcontractor to make payments to Sub-Subcontractors in similar manner. With the next Requisition for Payment, the Contractor shall furnish a written affirmation as evidence or as the Architect or Owner may require, that all such payments have been made as herein provided and that all such payments have been made on account of labor and materials upon which the preceding requisitions were based.
- F. An Approval for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of work not in accordance with the Contract Documents.

16.00 STOPPAGE OF WORK OR TERMINATION OF CONTRACT

16.01 Owner's Right

- A. The Owner may terminate employment of the Contractor on all or any portion of the work, and without prejudicing any other rights or remedies allowed in the Contract, for any one or more of the following reasons:
 - 1. Bankruptcy of the Contractor.
 - 2. Contractor's assignment of the Contract for the benefit of creditors.
 - 3. Appointment of a receiver for the Contractor.
 - 4. Refusal, failure or inability of the Contractor to provide sufficient skilled workmen, or proper materials, or to prosecute the work with the diligence required to complete it within the Contract period; or to obey laws, ordinances, or Owner's instructions, or to discharge any other provision or reasonable implication of the Contract.
 - 5. Failure to make prompt payment to Subcontractors or for materials and labor.
 - 6. Failure to provide Coordinated Documents in accordance with the terms of this Agreement.
- B. The Owner shall give five (5) days notice of such intent to terminate all or any portion of the work hereafter and may take possession of all or any portion of the premises together

with all material, tools and appliances thereon, which have been purchased under the costs of this Contract and may finish the work so taken over by what means it chooses as agent of the Contractor.

- C. In the event the Owner is required to take possession of the work and complete the work as agent of the Contractor as set forth in Paragraph B above, the Contractor shall be liable for the cost of finishing the work. The cost shall include the Owner's managerial, administration and consultant services, and valid claims made by other Contractors as a result of the transfer of possession, together with any damages awarded the Owner on account of delay. Additional costs of finishing the work include, without limitation, all reasonable attorney's fees, additional title costs, insurance, additional interest because of any delay in completing the work, and all other direct and indirect consequential costs incurred by the Owner by reason of the termination of the Contractor or by reason of the completion of a portion of the Contractor's work. If the total cost to complete the Work is such that a balance of the Contract Price remains after all the work is completed, said balance shall be retained by the Owner as liquidated damages, not as a penalty since the amount of damages to the Owner caused by the breach of the Contractor is unable to be precisely determined. In the alternative, if the cost to complete the work is such that after all the work is completed the Contract Price is exceeded, the Contractor and his Sureties shall be liable for the whole of such excess.
- D. The Owner may terminate all or any portion of the Contract at any time for its convenience, and shall give five (5) days notice of such intent. All adjustments in the work and compensation affected by such action will be negotiated or settled in the manner provided by law. Typically including payment to the Contractor for actually completed Work, materials that cannot be returned or used by the Owner, restocking fees or cancellation penalties, and a percentage of overhead and profit on actually completed work.
- E. The right of the Owner to terminate the Contractor to take over any portion of the work pursuant to this Article 16 shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.
- 16.02 Contractor's Right: If the work shall be stopped by order of the Court or any other public body for a period of one month without act or fault of the Contractor or any of his agents, servants, employees, or Subcontractors, the Contractor, upon ten (10) days notice to the Owner, may terminate the Contract, in which event the liability of the Owner to the Contractor shall be determined by mutual agreement or in the manner provided by law.

17.00 COMPLETION DATE

17.01 <u>Time of Completion</u>: The Contractor shall commence the work under this Contract within ten (10) days of receipt of the executed Contract or as otherwise directed, in writing, by the Owner (preparation and execution of the Contract is anticipated by the Owner, to occur within one hundred twenty (120) days of the bid opening date and within sixty (60) days of the Award of the Contract) and shall fully complete all work within the time duration previously set under "Instructions to Bidders". Each Contractor shall be prepared to commence work as soon as the work of other Contractors permits and shall carry on and complete their work so that the entire Project can be completed before the duration time set in the Contract. Time limits stated in the Contract Documents are the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the work.

17.02 Extension of Time

- A. If any Contractor shall be delayed in the completion of his work by reason of unforeseeable causes beyond his control, without his fault or negligence, and not caused by the acts or omissions of another Prime Contractor or Subcontractor, the period hereinabove specified for completion of the work shall be extended by such time as will be fixed by the Owner, following written notification to the Owner within twenty (20) days of the occurrence of the delay, stating reasons for such delay. The extension of such time shall be the Contractor's sole remedy in these limited instances.
- B. Where the delay arises from acts, omissions or defaults of another Prime Contractor or the other Prime's Subcontractors and suppliers, then the Contractor will be entitled to no extension of time and its sole remedy will be to bring Claims against the other Prime Contractors through the third-party benefits provisions of the Prime Contract, which recognizes no action against the Owner and limits such relief to a dispute against the responsible Prime Contractor and another Prime Contractor and/or its Subcontractors. See Articles 11.02D & E.
- C. No such Change Order extending the Contract time, that is not associated with a change in the Scope of the Work, shall result in any increased payments to the Contractor for overhead, extended overhead or for any other amounts of any nature.

17.03 Substantial Completion

- A. Substantial Completion is when the work or a defined portion of the work is sufficiently completed so the Owner can have beneficial occupancy or use of the work for its intended purpose. Such use by the Owner does not signify an acceptance of any deficient or incomplete work in the occupied space.
- B. When the Contractor considers that the work, or a portion of the work that the Owner agrees to accept separately, is Substantially Complete, he shall submit to the Architect and Owner a list of items that remains to be completed or corrected. Upon receipt of the Contractor's list, the Architect shall inspect the Work with the Owner and the Contractor, amend the Contractor's list and establish a new Completion Date to have remedied each item. The Architect shall prepare the Certificate of Substantial Completion attaching the list of items to be completed or corrected.
- C. Following Substantial Completion, in the event the Contractor or its Subcontractor fails to complete the list of items of the work as prepared by the Architect and required before the new Completion Date established by the Architect, the Owner may (1) exercise any available remedies to correct or complete deficient work or retain a third-party to correct or complete such work at the cost of the defaulting Contractor; and (2) retain and deduct from any payments or retention otherwise due to the defaulting Contractor Liquidated Damages, fees and expenses for services required to be provided by the Architect more than twenty-one (21) days after the date of Substantial Completion.

17.04 **Liquidated Damages for Delay**

A. It is agreed that a failure by the Contractor to fully complete the work comprehended in the Contract Documents within the time specified will inflict loss upon the Owner and that owing to difficulty or impossibility of ascertaining and fixing the said loss, an amount

equal to the total daily expense, inspection, supervision and any loss of use of the space, which the Owner provides for each calendar day after said Completion Date, is hereby agreed upon, fixed and determined by the Owner and the Contractor as the loss which the Owner will suffer by said failure and delay in completion as Liquidated Damage and not as a penalty. The amount per day, if any, shall be as stated in the Instruction to Bidders, Article 1.04. The Contractor shall be liable for and shall pay the same to the Owner.

B. In the event that the time allowed herein for completion has been extended under the extension of time provision above, the Contractor shall not be liable for the per diem Liquidated Damage here named during such extended period.

17.05 Other Damage for Delay

- A. The Contractor shall have only the limited relief described herein for any damages caused by any delay. No payment or compensation or claim for damages shall be made by the Contractor against the Owner for any delays or hindrances from any cause arising from the progress of the work, notwithstanding whether such delays may be avoidable.
- B. The Contractor's sole remedy, against the Owner, for any delays shall be an extension of time pursuant to, and only in accord with Article 17.02, such extension shall be limited to the equivalent time lost on a day-for-day accounting, as determined by the Architect. In consideration for the reasonable grant of a time extension, the Owner and Architect shall not be held responsible for any losses or damages or increased costs sustained by the Contractor from any delays caused by the Owner or (Architect's non-willful or non-negligent delays or hindrances). Any claim of delay or hindrance caused in whole or in part by any other Contractor or Subcontractor shall not involve the Owner.
- C. The Contractor shall have the right to pursue a direct claim for damages against any other Prime Contractor or that Prime Contractor's Subcontractors, employees or agents, and against the Architect for claims arising from the Architect's willful or negligent acts or omissions causing delay or hindrance, pursuant to Article 11.03.E. In the event the Contractor shall choose to litigate this clause or brings the Owner or Architect into a claim against other Prime Contractors, Subcontractors, (or the Architect or non-willful or non-negligent conduct) for monetary damages and the Contractor loses such litigation, the Contractor shall reimburse the Owner and the Architect for their reasonable attorney's fees and all other costs and expenses incurred by them in defense of the litigation.
- D. The Contractor may not rely on any Completion Date set out in any schedule, which will be developed as requested under this Contract, to form the basis of a claim for delay in achieving such early completion of the work before such date. No claim of delay can be made for the Contractor's inability to meet the early completion data in a schedule, if it is earlier that the Final Completion Date noted in the Initial Contract. Liquidated Damages will only be assessed against the failure of a Contractor to meet the Final Completion date, per the initial Contract.
- E. The General Contractor has been contractually granted the authority to update and modify the overall Construction Schedule. The other Prime Contractors must provide necessary and timely input to the General Contractor, which permits the General Contractor to anticipate and plan for the orderly progress of the work. All Prime Contractors will have input into the updated schedule as provided in Article 22.04. Therefore, no claim for an increase in the Contract Sum for either acceleration or delay will be allowed for extensions of time pursuant to this paragraph, except as permitted between Contractors under Article 11.03 E.

18.00 **PUBLIC LAW**

18.01 Each and every provision of law and clause required by law to be inserted into any part of this Contract shall be deemed to have been so inserted herein and the Contract shall be read and enforced as though the insertion had been physically made.

PART II – LABOR AND MATERIALS

19.00 LABOR AND APPLIANCES

19.01 <u>Competent Workers Required</u>: The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them as required by all the valid provisions of an Act of the Legislature of the Commonwealth of Pennsylvania, approved March 10, 1949, with all amendments thereto, commonly known as Public School Code of 1949, as contained in Section 752.

19.02 **Wages:**

- A. When the Owner has determined that prevailing wages are required, a copy of the Pennsylvania Minimum Wage Predeterminations will be included in the Contract Documents.
 - 1. No workman for a Contractor or a Subcontractor may be paid less than the applicable minimum wage rate as determined by the Secretary of Labor and Industry under the provisions of the "Prevailing Wage Act", Act 442 approved August 15, 1961, P.L. 987.
 - 2. All Contractors and Subcontractors must comply with the provisions of the aforesaid "Prevailing Wage Act". This Act together with regulations issued pursuant thereto by the Secretary of Labor and Industry are hereby incorporated by reference as a part of this Contract. The Contractor shall insert in each of his subcontracts required compliance with the Act and its regulations. Specific attention is called to the following provisions of the Act and its regulations: payment of not less than the general prevailing minimum wage rates keeping and preserving of wage records posting of wage rates certificates of unpaid wages penalties submission of Form LIPW-128 with monthly requisitions for payment.
- 19.03 **Background Check of Employees:** The contractor and any of his/her employees who come in direct contract with children during the discharge of responsibilities under this contract must obtain at the contractor's expense the following background clearances. As required by Section 1-111 of the Public School Code of 1949, as amended by Act 114 of 2006, and Act 34 of 1986, and the Child Protective Services Law, as amended, 23 Pa C.S. 6301, et seq. the contractor shall provide Federal Criminal History Record, a Pennsylvania State Police Clearance and a Pennsylvania Child Abuse History Clearance. The Police Clearance may be obtained from the Pennsylvania State Police. The Child Abuse Clearance may be obtained from the Pennsylvania Department to Public Welfare. The results must be submitted to your School District contact person before performing any services under this contract.

Required forms can be viewed on-line at the following website:

www.dpw.state.pa.us/general/formspub/003671038.htm

19.04 Labor Discrimination – Public School Code of 1949, Section 755

The Contractor agrees:

- A. That in hiring employees for the performance of work under this Contract, or any subcontract hereunder, no Contractor, Subcontractor, or any person acting on behalf of such Contractor or Subcontractor, shall, by reason of race, creed, color, or sex, discriminate against any citizen of the Commonwealth of Pennsylvania who is qualified and available to perform the work to which the employment relates.
- B. That no Contractor, Subcontractor, or any person acting on behalf of such Contractor or Subcontractor shall in any manner discriminate against or intimidate any employee hired for the performance of Work under this Contract on account of race, creed, color, or sex.
- C. That this Contract may be canceled or terminated by the Owner and all money due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this portion of the Contract.
- 19.05 <u>Labor Discrimination Pennsylvania Human Relations Act</u>: The Contractor agrees to comply with all the provisions of the Pennsylvania Human Relations Act, as amended.
- 19.06 Owner's Authority in Employment: Should the Owner deem anyone employed by the Contractor in connection with the work, including the Contractor's project manager or other key personnel, incompetent or unfit for his duties, the Contractor shall dismiss him or her, and he or she shall not be employed on the work again without the permission of the Owner.
- 19.07 **Appliances:** It is the Contractor's responsibility that:
 - A. Tools, machines and appliances of all kinds furnished for use on the work shall be sound, suitable for their purpose, and shall expose workmen to no extraordinary hazard.
 - B. No workmen shall be permitted to use any tool or appliance who has not been fully instructed in its safe and proper use.

20.00 MATERIALS

- 20.01 **Quality of Materials:** All materials, unless otherwise specified, shall be new and of the best quality of their respective kinds, and shall conform to any applicable requirements of the City of Pittsburgh Code and all other applicable standards in the Contract Documents.
- 20.02 **Standard of Quality:** The Contract is based on materials, equipment and methods described in the Contract Documents.

20.03 **Submittals**

A. The Contractor shall, when required, produce satisfactory evidence to show the kind, quality and origin of materials used, and shall furnish duplicate labeled samples of materials and workmanship or of specified items of equipment together with reports and laboratory tests or other information that may be required for approval. Also see Article 25. All materials and items of equipment furnished shall have the same characteristics as those of the approved samples.

- B. Special Inspection and Testing: After the commencement of the work, the Owner may arrange for any special inspection, testing or approvals that he considers necessary. If such special inspection or testing reveals a failure of the work to comply with the requirements of the Contract Documents, or the performance of the work fails to comply with laws, ordinances, rules, regulations, or orders of any Public Authority having jurisdiction, the Contractor shall bear all costs of the inspections, testing, removal of work (if necessary), and repair or replacement of the work affected, including the Architect's and Owner's additional services made necessary by such failure. If the work is in compliance with the Contract Documents and all laws, ordinances, rules, regulations, and orders of any Public Authority having jurisdiction, the Owner shall bear the costs.
- 20.04 Provisions for the Use of Steel and Steel Products Made in the United States: In accordance with Act 3 of the 1978 General Assembly of the Commonwealth of Pennsylvania, if any steel or steel products are to be used or supplied in the performance of the Contract, only those produced in the United States as defined therein shall be used or supplied in the performance of the Contract or any subcontracts thereunder.

In accordance with Act 161 of 1982, cast iron products shall also be included and produced in the United States. Act 141 of 1984 further defines "steel products" to include machinery and equipment. The Act also provides clarifications and penalties.

PART III – FIELD WORK

21.00 LEGAL AND RELATED REQUIREMENTS

- 21.01 <u>Public Permits, Law and Rules</u>: The Contractor shall, at his own expense, obtain for the Owner all necessary permits and licenses, give all necessary notices and pay all fees required by law, ordinances, rules and regulations relating to the work, and to the preservation of public health and safety. If the drawings and specifications are at variance therewith, he shall so notify the Owner and Architect, in writing, stating the affect of such compliance upon the Contract Price.
- 21.02 **Patents and Fees:** The Contractor shall pay all royalties and license fees and shall save the Owner harmless from loss or annoyance on account of suits or claims of any kind of violation or infringement on any patent, Copyright or Trademark rights.

21.03 **Taxes**

- A. The Contractor shall pay sales, consumer, use, Pittsburgh Business Privilege Tax, and similar taxes for the work or portions thereof provided by the Contractor which are legally enacted when bids are received, whether or not yet effective or merely scheduled to go into effect.
- B. The Owner is exempt from sales tax on items that are not a permanent part of the real estate, in accordance with the Pennsylvania Department of Revenue Sales and Use Tax Regulation 150. A listing of these items is included in the regulation. The Contractor or Subcontractors may purchase items exempt from sales tax by submitting a list of the specific items, attached to Department of Revenue Form 583, "Certification", which has been completed ready for execution by the Owner. At the time of purchase of the exempt items, the Contractor shall provide the supplier with a copy of the "Certification" and a completed "Blanket Exemption Certification", Department of Revenue Form REV-1220, stating "Property and/or services will be resold to The Board of Public Education of the School District of Pittsburgh pursuant to the Certification executed by them and filed with you on (date of filing)".
- C. The Contractor agrees to assign and transfer to the Owner all its rights to sales and use tax, which may be refunded as a result of a claim for refund for materials purchased in connection with the Contract. The Contractor further agrees that it will not file a claim for refund for any sales or use tax which is the subject of this assignment. The Owner or its agent shall be afforded access at Owner's expense to Contractor's and all Subcontractor's records, books correspondence, instructions, drawings, receipt vouchers, memoranda, and similar data relating to this contract, for the purpose of documenting and substantiating any such refund claim. The Contractor shall preserve all such records for a period of three years, or for such longer period as may be required by law after final payment. The Contractor agrees to the following.
 - 1. To assign and transfer to the Owner all its rights to sales and use tax which may be refunded as a result of this claim, or a claim for refund for materials purchased in connection with this contract.
 - 2. Not to file a claim for refunds or any sales or use tax which is the subject of this assignment.
 - 3. To include the above paragraph in full in any contracts with Subcontractors. The Contractor further agrees that it will assist the Owner in the preparation and submission of petitions for refund pertaining to those taxes.

- D. The Contractor hereby accepts and assumes exclusive liability for and shall indemnify, protect and save harmless the Architect and Owner from and against the payment of:
 - 1. Contributions, taxes or premiums (including interest and penalties thereon) which may be payable under the Unemployment Insurance Law of any State, the Federal Social Security Act, Federal, State, County and/or Municipal Tax Withholding Laws, or any other law, measured upon the payroll of or required to be withheld from employees, by whomever employed, engaged in the work.
 - 2. Sales, use, personal property and other taxes (including interest and penalties thereon) required by any Federal, State, County, Municipal or other law to be paid or collected by the Contractor or any of its Subcontractors or vendors or any other person acting for, through or under it or any of them, by reason of the performance of the work or the acquisition, ownership, furnishing or use of any materials, equipment, supplies, labor, services or other items for or in connection with the work.
 - 3. Pension, welfare, vacation, annuity and other union benefit contributions payable under or in connection with labor agreements with respect to all persons, by whomsoever employed, engaged in the work.
- 21.04 **Public Safety, Etc.:** All excavations, open trenches and abrupt changes in elevation shall be protected by barricades. All City ordinances, police or other regulations regarding barricades, lights, signals, ladders, ramps, etc., shall be and are hereby made a part of this specification. In addition, safe and convenient means of access to all parts of the operation shall be maintained for the purpose of workmen and inspections.
- 21.05 <u>Storage Limits</u>: The Contractor shall confine the storage of materials and operations of his workmen to the limits indicated by law, ordinance, permits, or by the Owner and shall not unnecessarily encumber the premises with his materials.
- 21.06 Accounting: The Contractor shall keep such full and detailed accounts as may be necessary for proper financial management of this Contract and the system shall be satisfactory to the Owner. The Owner or its representative shall be afforded access to all the Contractor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to this Contract, and the Contractor shall preserve all such records for a period of three years, or for such longer period as may be required by law after the final payment.

22.00 ORGANIZATION OF WORK

22.01 Occupancy of the Premises

- A. The normal work hours for access to the construction area within the building and grounds during periods when school is not in session, will be Monday through Friday, from 7:00 a.m. to 4:30 p.m., excluding Owner's holidays, unless otherwise specified. When school is in session, all work in, on or around an occupied existing building shall be done after 3:30 p.m., unless written permission is obtained from the Owner to perform work prior to 3:30 p.m. For any other work time required, the Contractor may be charged the additional expense of custodial and/or inspection time caused the Owner.
 - 1. Work done in a building occupied for school purposes shall be done in such a fashion and at such times as will cause minimum disturbance to the normal conduct of school operations, and the Contractor, by any action or by omission of any

- action, shall not subject any occupant of the building to alarm or personal hazard. The Contractor shall consult with the Owner to this end. Areas necessary for egress from buildings shall be kept clear at all times.
- 2. The Contractor shall permit the Owner to use any portion of the work, which is incomplete or partially complete, provided the Owner gives the Contractor sufficient warning of seven (7) days in advance to re-allocate its forces during the Owner's use. If such use is more than de minimus, then the Owner and Contractor can negotiate an extension of time, if appropriate.
- B. Before commencing any work, the Contractor or his authorized representative shall report to the main office, identify himself and provide a list of all workers who will be employed on the site or in the building. All identification will then be transferred to the custodian.
 - 1. Each new person shall be identified in the same manner.
 - 2. After identification has been established and in order to avoid being classified as an unauthorized intruder, it shall be the duty of an authorized person to report to the custodian each day he and a crew of workers enters the building and before commencing work.
 - 3. The Owner shall provide identification badges for all workmen of the Contractor and Subcontractor. When provided, each worker shall display the badge at all times when on the site.
 - 4. If the Contractor desires access to additional facilities or instructions, the Contractor or his authorized representative shall contact the Owner.

22.02 Board Policies

- A. The Contractor shall abide by all Board policies, briefly described below:
 - 1. Non-smoking: It is the intent of the Board to have a tobacco-free School District, which includes all buildings and grounds owned and/or operated by the School District, with only the following exceptions: designated smoking areas outside of buildings. The Contractor will be fined, by the Owner, one hundred (\$100.00) dollars per violation of its employees, Subcontractors, material supplies or other agents on-site under its direction.
 - 2. Prohibition of Sexual Harassment: The Board prohibits the sexual harassment of, or by, all persons within the School District of Pittsburgh including, by way of illustration but not by any limitation, all students, employees, applicants for employment and non-employees who transact business with the School District with or without compensation. This policy applies to conduct during and related to the operation of the schools, school sponsored activities, and all School District business. The Board considers sexual harassment in the work and educational environment to be inappropriate and offensive. It will not be tolerated under any circumstances. Any employee or representative of a Contractor found in violation of this policy will be immediately removed from the site and will not be permitted to return without written approval of the Owner.

- 3. <u>Code of Ethics</u>: The Code of Ethics sets forth ethical guidelines for reference by Board Members, employees, volunteers, and persons doing business with the School district when involved in the expenditure and/or obligations of public funds or the collection and/or review of confidential information, assuring the decisions are made independently, free of any conflicts of interest and through the appropriate decision making channels.
- B. A copy of these policies, in their entirety, will be made available upon request.

22.03 Supervision and Verification

- A. The Contractor, as part of his services, shall give personal supervision to the work, using therein the skill and experience for which he receives compensation under this Contract, and he shall carefully study and compare all drawings, specifications, and other information given to him by the Owner and shall immediately report in writing to the Architect and Owner for clarification or rectification of any error, inconsistency, or omission as to figures, materials or methods, which he may discover therein.
- B. The Contractor agrees to Supervise and direct the work at all times, using an appropriately knowledgeable and skilled employee. The Contractor, by entering into this agreement certifies that it has the necessary skill and experience in this particular Project type, which it has successfully participated in for at least five (5) years or work of similar type and scope.
- C. The Contractor shall keep a competent superintendent and any necessary assistants satisfactory to the Owner in charge during the progress of the work. Such necessary assistants shall include manufacturer's representatives whenever expert advice is required on any special type of installation. The Contractor shall provide resumes of all key personnel (superintendent, project manager, etc.) working on the Project. The superintendent shall not be changed except with the consent of, or at the insistence of, the Owner. The superintendent shall represent the Contractor in his absence, and all directions as to the conduct of the work given by him shall be as binding as if given by the Contractor provided that, on request, such directions be given in writing.
- D. The Contractor shall be solely responsible for means, methods, techniques, sequences and procedures of the work.
- E. The presence of an Architect's or Owner's representative on the work shall not relieve the Contractor of any part of his responsibility for supervision or verifications.

22.04 **Project Construction Schedule**

A. Preliminary Schedule:

- 1. The Preliminary Schedule shall be submitted to the Architect and Owner by the General Contractor within seven (7) calendar days after the date of receipt of notice that the Board has approved the Contractor as the Apparent Low Bidder, issued by the Owner. At the same time the General Contractor shall submit a copy of the Preliminary Schedule to the other Prime Contractors. The Preliminary Schedule shall be in bar-chart format and shall show the following:
 - a. General Contractor's planned detailed operations during the first thirty (30) calendar days after the start date indicated in the Board approved and executed Agreement. This Preliminary Schedule shall include construction activities as

- well as procurement of materials and equipment, award of subcontracts, submission and approval of shop drawings, and any utility relocation work required by others.
- b. General Contractor's general approach to the remainder of the Project and milestone target for the entire Project.
- 2. Failure of the General Contractor to submit the Preliminary Schedule within seven (7) days of receipt of notice of Apparent Low Bidder status form the Owner shall be sufficient cause for the Owner to revoke the Contractor's status as Apparent Low Bidder and proceed to negotiate with the Next Lowest Responsible Bidder.

B. **Project Schedule:**

- 1. The Project Schedule in the form of a bar chart shall be submitted to the Architect and Owner by the General Contractor within seven (7) calendar-days after the receipt of the Board approved and executed Contractor/Owner Agreement and at least fourteen (14) days prior to commencing any work on the Project. This will become the Initial Project Schedule. At the same time the General Contractor shall submit a copy of the Project Schedule to the other Contractors.
- 2. Within seven (7) calendar days after submittal of the Initial Project Schedule, the other Prime Contractors shall submit to the General Contractor, the Architect, and the Owner a detailed schedule of the proposed prosecution of their work. These Prime Contractor's schedules shall be in sufficient detail and in such a format that the General Contractor can incorporate it into the Project Schedule. It shall include the information specified below under 5 and 6.
- 3. Upon submission of the Project Schedule and receipt of the other Prime Contractors' schedule, all of the Prime Contractors shall participate with the Owner and the Architect in reviewing and evaluating the schedule. Any revisions necessary as a result of this review and the incorporation of the other Prime Contractors' schedule shall be made by the General Contractor and the schedule resubmitted within seven (7) calendar days after the conference. Approval of the schedule shall in no way waive requirements of this Contract nor excuse the Contractors of any obligations under this Contract. Upon approval of the input from the other Prime Contractors, the revised Project Schedule shall become part of the Contract Documents as the Project Schedule and will be the schedule to be used by the Contractors for planning, organizing, and directing the work and reporting progress. The Completion Dates shown in the Project Schedule will be the critical dates from Liquidated Damages or delay claims may be determined. The interim dates and progress of the work will be routinely modified and are expected to change significantly.
- 4. Failure of the Contractors to submit the Project Schedule or any required revisions or updates thereto within the time limits specified shall, if it occurs prior to the execution of the Contractor's Contract, result in the removal of the Contractor as the Apparent Lowest Responsible Bidder and replacement by the next Lowest Responsible Bidder or if it occurs after the Contract is signed, be sufficient cause for the Owner to withhold approval of the Contractors' invoices for progress payment until such delinquent submittal is made and approved.
- 5. Detailed activities shall include, in addition to construction activities, the submittal and approval of materials, samples, shop drawings, Record Drawings and catalog information, the procurement of critical materials and equipment, fabrication of special material and equipment and their installation and testing, award of

subcontractors, and any utility relocation work. Activities that represent the Contractor giving notice to the Owner for relocation of personnel and the relocation of the Owner's personnel will also be included. The schedule must provide sufficient detail of long duration activities (in excess of twenty (20) days, showing phasing or sequencing of work in areas or building sections. The detail requested shall be task based by trades and should permit others to review for how they will interact with the described activities.

6. All activities of the Owner which affect progress and contract-required dates for completion of all or parts of the work will be shown.

C. <u>Monthly Updated Progress Reports</u>

- 1. The General Contractor shall submit at monthly project progress report of the actual construction progress, including an updated Project Schedule. This Progress Report shall be made in the form standard in the industry for General Contractors or construction managers and shall provide sufficient detail to review and determine the progress of the work against the time and the budget. It shall include updates to the original Project Schedule and shall provide detailed information for the preceding calendar month on the following items, as applicable:
 - a. The actual start dates of those activities started during the report period and those activities planned to be started during the next report period.
 - b. The actual finish dates of those activities completed during the report period and those activities planned to be completed during the next report period.
 - c. The remaining durations of those activities that are in progress.
 - d. A Project Schedule updated through the reporting period showing percentages of work items completed. It shall indicate project schedule deviations and slippages with explanations, a description of their effects on the overall program, and plans for correction.
 - e. Major problems.
 - f. Pending action items requested by the Contractor or the Owner or Architect.
 - g. Subcontractor and supplier status reports.
 - h. Drawing submittals.
 - i. Manpower tracking.
 - j. Actual Progress versus Planned Progress.
 - k. Percentage of total Work completed to date.
 - 1. Pictures of Work in Progress.
 - m. Materials brought on site.

- 2. The monthly Progress Report shall show the activities or portions of activities completed during the reporting period and their total value as the basis for the Contractor's periodic request for payment. Payment made pursuant to the General Conditions clause entitled "Payments" will be based on the total value of such activities completed or partially completed after verification by the Architect and Owner.
- 3. Seven (7) calendar-days prior to the submission of the Monthly Progress Report, the other Contractors shall submit similar information pertaining to its work to the General Contractor, the Architect, and the Owner such that the General Contractor will have sufficient time to incorporate it into the Progress Report and update the Project Schedule.
- 4. The Monthly Progress Reports shall be submitted by the twenty-fifth calendar day of each month. Four copies of the reports shall be bound in suitable folders and transmitted to the Owner.
- Failure of the Contractors to submit the Monthly Progress Reports within the time limits specified shall be sufficient cause for the Owner to withhold approval of the Contractors' invoices for progress payments until such delinquent submittal is made and approved.

D. Submittal of Updated Schedule in Monthly Progress Report

- 1. All schedules shall be submitted as four (4) prints not wider than 36".
- 2. All submittals between the Contractors shall be in duplicate.

E. Changes

- 1. If the Contractor desires to deviate from the approved Project Schedule due to changes in its method of operating, sequence of work, or resource availability, the Contractor shall notify the Architect and the Owner in writing, stating the reasons for the change. If the Architect and the Owner consider these changes to be of a major nature, they may require the Contractor to revise and submit the impact on the latest Project Schedule for approval for show the affect on the entire Project, to prove such change adds no additional cost to the Owner. A change may be considered of a major nature if the estimated time required or actually used for an activity or the logic is varied from the original Project Schedule to a degree that there is a reasonable doubt as to the ability to accomplish the Contract Completion Date or Dates.
- 2. If a Change Order is issued or requested, the Project Schedule shall be changed by the Contractor to reflect the requirements of the Change Order; changes shall be made no later than the next updating after the request is made or the Change Order is issued. The Change Order must reflect all of the Contractor's anticipated costs and any associated costs of other Prime Contractors. Unless otherwise noted, approval of a Change Order will not result in the alteration or extension of time to complete the Project.
- 3. If the Contractor fails to or refuses to submit or include the foregoing revisions in the next succeeding updating Progress Report after the date of change, it shall be sufficient cause for the Owner to withhold approval of the Contractor's invoices for progress payments until such delinquent submittal is made and approved.

F. Expediting

- 1. The Contractors shall be solely responsible for expediting the delivery of all material to be furnished by him so that construction progress shall be maintained according to the Project Schedule. The Contractors shall submit Expediting Reports to the Owner within thirty (30) calendar-days of the Notice of the Board's approval of the Contractor as Apparent Low Bidder. Updated versions of the Expediting Report shall also be submitted to the Owner along with the Monthly Progress Reports.
- 2. As a minimum, the Expediting Reports shall contain the following information:
 - a. Description of all equipment.
 - b. Equipment supplier, address, phone number, and contact.
 - c. Contractor's purchase order number and date.
 - d. Supplier's identifying number.
 - e. Supplier's shop drawing number or catalog information and submittal date to Contractor.
 - f. Date of Contractor's submittals to the Architect/Owner.
 - g. Date of Architect's approval of Contractor's submittals.
 - h. Release date for start of fabrication.
 - i. Job-site delivery date.
 - j. Date of latest contact and information obtained or confirmed.
- 3. Failure of the Contractor to submit the Expediting Reports within the time limits specified shall be sufficient cause for the Owner to withhold approval of the Contractor's invoices for progress payment until such delinquent submittal is made.

G. Submittal of Daily Work Reports

- 1. Each Prime Contractor shall furnish in duplicate to the Owner, not later than 12 o'clock Noon on the following day, a detailed daily force and quantity report for the preceding day. These daily work reports shall include all craft labor and supervision of the Contractor and each of his Subcontractors with a general description of the work performed by each craft.
- 2. Failure of the Contractor to submit the Daily Work Reports within the time limits specified shall be sufficient cause for the Owner to withhold approval of the Contractor's invoices for progress payment until such delinquent submittal is made.

H. Manpower Staffing Levels

- 1. Each Prime Contractor shall submit to the Owner, within thirty (30) calendar days of the date of the issuance of the Initial Project Schedule, a schedule of his intended manpower level. It shall be indicated whether the work is on a single, double, or triple shift and a five-day, six-day, or seven-day week.
- 2. As a minimum, the manpower information shall be noted on the Project Schedule with the manpower staffing levels noted for each activity and summarized to obtain total manpower levels for each Contractor each week.
- 3. Failure of the Contractor to submit the Manpower Staffing Levels within the time limits specified shall be sufficient cause for the Owner to withhold approval of the Contractor's invoices for progress payment until such delinquent submittal is made.
- 4. The Contractor agrees to increase manpower, increase work hours and increase equipment necessary to maintain the projected Progress Schedule at no additional cost to the Owner, where caused through its own fault, fault of its Subcontractors or agents, or the fault of another Prime Contractor. The Contract will retain its rights against the other Contractors for any additional costs incurred. Where the cause is the Owner or the Architect, the Contractor's sole remedy is an extension of time. These resources include, but are not limited to, personnel, material and equipment, extended Working hours or work days, additional crews, and additional shift work, in order to maintain the required Progress Schedule at no additional cost to the Owner. If the Owner determines that the Contractor is not maintaining the existing Progress Schedule, the Owner may require the Contractor to submit, within seven (7) days of its request, a schedule for recovery of the progress for that portion of the work. Any pending requests for payment from the Contractor will be withheld until the recovery schedule has been submitted and approved by the Owner.
- 5. Notwithstanding services to be provided by the General Contractor for the development of a coordinated Project Schedule, it will be the sole responsibility of each Prime Contractor to complete this Project within the phase dates and Contract completion time allotted in the Bidding Documents.
- 6. The updating of the Project Schedule may result in changes in the dates on which activities are expected to be completed. The process of updating the Project Schedule does not replace the process of seeking extensions in accord with Article 8 of the General Conditions, which provision will be strictly enforced. In supporting timely filed requests for extensions of time, each Contractor shall submit Project Schedules with and without the asserted delay. Each Contractor shall establish that the delay is excusable in accord with Article 17 of the General Conditions. Data drawn from the Project Schedule will also be used by the Owner in assessing responsibility for Liquidated Damages, should any Contractor cause a non-excusable delay.
- 22.05 <u>As-Built Drawings</u>: Each Prime Contractor shall keep a "record" set of Contract Documents on the job upon which all changes shall be clearly and completely recorded. Concealed work shall be accurately located as to plan and proper elevation. The "record" set of Contract Documents shall be delivered to the Architect on a monthly basis for his incorporation of these changes into an "As-Built" set of documents for the Owner.

23.00 COORDINATION OF THE WORK

23.01 Responsibility for Coordination

- A. Under no circumstances shall the Owner be considered as coordinator of the work.
- B. The Owner will award other Contracts as it may desire and as required by law. The Contractor of the General Work shall coordinate all of the Work, including the work of the other Prime Contractors.
 - 1. To that end, the Prime Contractors are: the General, Plumbing, Heating & Ventilating, Electrical Contractors. The work of these Prime Contractors, and others shall be guided and so conducted and harmonized that the whole work shall proceed to a conclusion within the Contract time period without any kind of conflict.
- C. <u>Bi-Weekly Contractor Coordination Meetings</u>: The Superintendent for the Contractor for the General Work shall conduct bi-weekly field project meetings and publish meeting minutes, including the work performed in the last period and work scheduled for the next period. The Superintendent for each Prime Contractor, major Subcontractors and the Owner's Representative shall attend these meetings and provide a written report regarding their work.
- D. <u>Bi-Weekly Architect Project Meetings</u>: On alternate weeks the Architect will conduct project meetings and publish meeting minutes, which will include details of the work performed and work scheduled as well as questions posed and decisions. The Project Manager and Superintendent for each Prime Contractor, major Subcontractors and the Owner's Representative shall attend these meetings and provide a written report regarding their work.
- E. Each Contractor shall read the General Requirements of the Contract governing all Contractors and shall obtain from such Contractors all additional information, in writing where necessary, that may be required to coordinate his work with theirs. All such Contractors shall be jointly responsible for delivery of the work in the perfect condition contemplated by each and all Contracts.
- F. All work shall be done with full consideration of its best final appearance in itself and in relation to other parts of the work and to the work of other Contractors, and all details of installation shall be subject to approval on this basis.
- 23.02 <u>Control of Subcontractors</u>: Each Contractor shall direct and control his Subcontractors and shall be responsible for the coordination of their work with that of all others on the job.
- 23.03 <u>Cutting, Patching, Digging, Etc.</u>: Each Contractor shall do all cutting, patching, fitting, digging, etc., that may be necessary when fitting together the several parts of his and the whole work, but without endangering the stability of the structure and without damaging the work of other Contractors. Unless otherwise subsequently directed, the Contractor shall, in every such operation, using employees skilled in the trade required, restore, finish, and paint the work to match its original state.

23.04 Notice of Imperfect Work or Materials

- A. If any part of the Contractor's work is dependent for its proper execution or for its subsequent efficiency or appearance on the character or condition of associated or contiguous work not executed by him, the Contractor shall examine such associated or contiguous work and shall report to the Architect and Owner, in writing, any imperfections therein or any conditions that render it unsuitable for reception of his work.
- B. In case the Contractor proceeds without making such written reports, he shall be held to have accepted such other work and the existing conditions and shall be responsible for any defects in his own work in consequences thereof, and shall not be relieved of the obligation of any guarantee because of any such imperfection or condition.

23.05 Damaged Work

- A. Each Contractor shall be responsible for damage done by him or by any of his Subcontractors or employees on the job and shall repair or replace such damaged work in a manner approved by the Architect and Owner.
- B. Plaster and other finished surfaces, painted or unpainted, shall be kept clean and any soiling shall be effaced completely in an approved manner at the expense of the Contractor responsible.

24.00 OWNER'S INSTRUCTIONS

24.01 Responsibility for Wrongly Executed Work

- A. No work shall be done by the Contractor without proper drawings or written instructions. He shall immediately, at his own expense, remove any work wrongly executed, whether from lack of drawings or instructions or otherwise, and shall immediately replace it with properly executed work. Written orders and instructions shall be construed to include all the Contract Documents as issued insofar as they require no further explanation or detailing.
- B. The Contractor, within twenty-four (24) hours after receiving notice from the Owner, shall remove from the premises all condemned materials which are unsalvageable parts of wrongly executed work, or which are not as shown or as called for in the Contract.
- C. In the event that the Owner chooses to accept work that is not in accordance with the Contract Documents, in lieu of requiring its removal and replacement an appropriate credit shall be applied to the Contract Price. Such acceptance will not act as a waiver of Owner's rights or a reduction in any warranties provided on the work.
- 24.02 <u>Precedence of Instructions</u>: Questions concerning the meaning of work instructions or concerning discrepancies found in the Contract Documents which have not been decided by Bid-Bulletins issued during the bidding period shall be decided as follows:
 - A. Contractor cannot rely upon manually scaling to determine a measurement over a noted figured dimension.
 - B. Figured dimensions in error shall be corrected as directed by Architect or Owner.

- C. Where a conflict of scope of work, fact or elaboration of detail is found in information given in different parts of the drawings or of the specifications or between the drawings and the specifications, the superior quality or quantity, wherever shown or called for shall be the Contract requirements. For example: if a scope of work is required by the plumber on one drawing and the same scope of work is required by the General on a different drawing, then both the Plumbing Prime Contractor and the General Prime Contractor must include the same scope of working their base bid price along with a deduct price for said scope of work.
- D. Conflicts or doubts which do not apply or are not addressed by the foregoing rules shall be decided by the Architect and Owner where no issue of cost is concerned, or by the Architect and Owner subject to an adjustment of contract price for extras and credits.

24.03 **Detail Drawings and Instructions**

- A. The Owner will furnish the Contractor, free of cost, a reasonable number of complete sets of the Contract Documents, as determined by the Owner. If additional copies or sets are desired they may be obtained at the cost of reproduction. The Contractor shall keep in good order upon the work one (1) copy of the specifications and one (1) of each drawing, and the Owner and his representative shall have free access to such copies.
- B. Drawings and specifications furnished by the Owner to Contractor shall be used for the work only. As instruments of service they are the property of the Owner and shall be returned to him. Any models furnished under the Contract by the Owner are the property of the Owner and shall be disposed of as directed.
- 24.04 <u>Instructions to Subcontractors</u>: The Contractor shall promptly transmit to his Subcontractors all drawings and specifications bearing on their work.

25.00 SUBMITTALS

25.01 <u>Submittals Required</u>: The Contractor shall submit all shop drawings, samples, setting drawings and diagrams which may be necessary or in order to make clear the work intended or to show its relation to adjacent work of other trades. The specifications state the required submittals. The Contractor shall make changes and resubmit submittals, which have not been approved and returned to the Contractor. No work shall commence until submittals have been approved. All such portions of the work shall be in accordance with approved submittals. Note, however, no changes to the Contract Documents can occur through the submittal process. The Owner reserves its right to require the work as described by the Contract Documents at any point an unauthorized deviation is discovered. Any attempt at altering the work must be done through a Change Order or the Request for Information processes described in the Contract Documents.

25.02 **Submittal Procedures**

A. The Contractor shall review all submittals and indicate thereon his approval for submission. The Contractor shall also indicate on the submittal any deviation from the Contract Documents, which materially alter the work. The Contractor shall transmit all submittals directly to the Architect for his review and forwarding.

- B. The Contractor shall indicate on his transmittal the specification section or other reference, which pertains to the submittal. Note that separate transmittals are required for each specification section or other reference.
- C. The Contractor shall provide submittals to the following in quantities indicated:
 - 1. To the Architect: five (5) copies plus the number of copies the Contractor will require for his use.
 - 2. To the Owner's Operations Office/Facilities: two copies.
 - 3. To the Owner's On-site Representative: one copy.

25.03 **Review Procedures**

- A. After the Architect's review of submittals, the Owner will review submittals and advise the Architect of any comments regarding the submittal.
- B. The Architect shall review submittals in a timely fashion. The Architect shall indicate his action on the submittals according to the following:
 - 1. **Approved:** Submittal complies with the intent of Contract Documents.
 - 2. **Approved as Noted:** Submittal generally complies with the Contract Documents, minor deviations have been noted on the submittal.
 - 3. **Rejected:** Submittal does not comply with the Contract Documents, general note of the source of the noncompliance has been noted on the submittal.
- C. On all submittals it shall be noted that the review does not include verification of field conditions and dimensions or fit with other work. The Contractor is ultimately responsible for the accuracy of the measurements.

25.04 **Distribution by the Architect**

- A. The Architect shall distribute submittals to the following in quantities indicated:
 - 1. To the Contractor: the number of copies submitted for this purpose
 - 2. To the Owner's Operations Office/Facilities: two copies.
 - 3. To the Owner's On-site Representative: one copy.

26.00 PROTECTION OF WORK

26.01 **Protection of Materials and Work**

- A. The Contractor, by construction of sheds, local covering, or other approved means shall protect the existing facility, his materials and work from the normal hazards of the weather and conditions encountered during construction.
- B. All exterior openings in existing buildings shall be secured at all times that the Contractor is not on site.

- C. The Contractor shall, at his own expense, make good to the satisfaction of the Owner, any damage resulting from failure to take such precautions.
- D. Contractor shall employ all necessary measures to reduce noise levels and dust infiltration throughout the Project site. At the end of each day, each Prime Contractor will be responsible for the cleaning, sweeping and removal of all trash, waste and excess material from its work area.
- 26.02 <u>Security/Vandalism</u>: The General Contractor shall be responsible for any loss or damage by reason of theft or vandalism to materials delivered or installed under this Contract. Each Prime Contractor shall exercise reasonable care in protecting stored materials.

27.00 GENERAL PRECAUTIONS

- 27.01 **Fires, Smoking, Signs, and Loading:** The Contractor shall make and enforce rules to prevent the following:
 - A. The lighting of open fires upon the premises.
 - B. Smoking within the existing building.
 - C. The erection on or about the premises of any sign, billboards, or other advertisement by the Contractor or his Subcontractors except by written approval.
 - D. The loading of any part of the structure with weight greater than it is calculated to bear.
 - E. Areas necessary for egress from buildings for possible school fire drills shall be kept clear at all times during construction.

27.02 Scrapped Materials

- A. The Owner reserves the right to retain salvageable materials and will notify the Contractor which of the salvageable materials shall be set aside for collection by the Owner.
- B. All other scrapped materials, of any kind, shall become the property of the Contractor and shall be removed promptly from the premises.
- Material Containing Asbestos: The presence of such material in the work area will be indicated on the Drawings. Removal will be specified when and where required for prosecution of the Work. The Contractor shall be aware at all times that asbestos may be present in the pipe insulation, material or surfaces against which his work is to be applied which may not be indicated on plans and/or specifications. If he suspects that asbestos is present in areas of his work, he shall bring such information to the attention of the Owner, who will investigate the facts and make a determination. If asbestos is present, the Owner may elect to request the Contractor to remove or treat the material as a change to the contract or to take necessary action by other means. The work will stop until the un-surveyed or unknown material is tested and a safe procedure has been developed. Notwithstanding the foregoing, the presence of asbestos containing materials is not a hazard as long as the material is not friable. The contractor is expected to work in areas previously surveyed and tested, containing non-friable asbestos containing materials exercising reasonable care not to damage those materials.

27.04 Cleaning Up

- A. Each Prime Contractor shall provide approved containers for disposal of debris pertaining to his work and his subcontractors work, located at a central point at the site, and shall be responsible for removal and/or dumping of these containers on a regular basis and bear all costs involved.
- B. Each Prime Contractor shall collect and remove all rubbish, surplus materials, tools and scaffolding pertaining to his work and his subcontractors work, and shall keep the work neat and orderly by periodic removal and clean-up.
- C. The General Contractor is responsible for the clean-up of unidentifiable debris, dirt and dust in the Contract work areas.
- D. All surrounding areas and/or adjacent materials are to be kept clean and protected from dirt and dust. Each Prime Contractor shall provide temporary partitions or dust barriers as determined by the Owner.
- E. Each Prime Contractor shall clean and maintain their completed construction as necessary throughout the construction period. Apply protective covering and/or adjust and lubricate operable components to assure operability without damaging effects.
- F. At the completion of the work, and after all other Prime Contractors have done their final cleaning and repairs, the General Prime Contractor shall clean any remaining dirty glass, replace any broken glass, remove remaining stains, spots and marks from finish work and hardware, not required to be removed by the other Prime Contractors.
- G. After all other Prime Contractors have done their required floor and grounds cleaning, the floors and grounds, within the contract limits, shall be left broom and/or rake clean and all remaining debris removed by the General Prime Contractor.

28.00 **DISPUTE RESOLUTION**

A. DISPUTE BETWEEN CONTRACTOR AND OWNER

Any claim, dispute, unresolved question or impasse concerning the Contractor's Work on the Project and arising between the Owner and the Contractor or between one Prime Contractor and another Prime Contractor (hereinafter "the Parties"), shall be subject to the following preliminary procedure before a formal action is undertaken.

- 1. Construction Conferences: Any claim, dispute, unresolved question or impasse, which has already been reviewed and a decision rendered by the Owner/Architect, shall be subject to a negotiation meeting before any scheduled Construction Conference, upon a written demand of either Party. Such demand must be submitted in writing to the other Party, within thirty (30) days of the ruling by the Architect.
- 2. If no demand is made within thirty (30) days of receipt of a written determination by the Owner/Architect or if the Parties met and held a Construction Conference hearing as described above, and thirty (30) days have passed since the determination at the Construction Conference hearing, then the rendered decision will be deemed final. The Party failing to move within the time period will have waived their ability to appeal the decision.

09/2007



1305 Muriel Street | Pittsburgh, PA 15203 Phone: 412-488-4300 Fax: 412-488-4340 Parent Hotline: 412-622-7920 | www.pps.k12.pa.us

Facilities and Plant Operations Division

OFFICIAL BULLETIN NO. 1

August 1, 2014
to the
BIDDING and CONTRACT DOCUMENTS
For
PROJECTS THROUGHOUT THE PITTSBURGH PUBLIC SCHOOLS

TO ALL BIDDERS:

The following items shall be incorporated as a part of the Specifications for this Project and shall be honored as such in your Proposal. Your acknowledgement of this receipt of this **OFFICIAL BULLETIN** shall be noted in the form, "Official Bulletin Receipt", accompanying your proposal.

ITEM NO. 1: TWO-HOUR ASBESTOS AWARENESS TRAINING REQUIREMENT

- A. The Contractor, and its subcontractor(s), are required to provide at least two hours of asbestos awareness training to <u>all</u> their employees, who perform on-site work, prior to being permitted access to the Pittsburgh Public Schools (PPS) facilities. The training and its curriculum shall comply with the Environmental Protection Agency's (EPA) Asbestos Hazard Emergency Response Act (AHERA) [40 CFR 763.92] and/or Occupation Safety and Health Administration (OSHA) [29 CFR 1910.1001 (j)(7); 1926.1101 (k)(9)(vi)] requirements for a two hour asbestos awareness program for maintenance personnel, who work in a facility that contain asbestos, whether or not they are required to work with asbestos containing building material.
- B. PPS Asbestos Management Plan, which identifies various asbestos containing materials and their locations, is available for review in the custodian's office.

ITEM NO. 2: COMPLIANCE WITH THE EPA'S LEAD RENOVATION, REPAIR & PAINTING (RRP) RULE, 40 CFR PART 745

A. The Contractor, and its subcontractor(s), who perform renovation, repair and painting in the PPS facilities, must be certified by EPA as Certified Firms, and must use Certified Renovators who are trained by EPA-approved training provider to follow lead-safe work practices.

- B. The Contractor must submit copies of the following certifications to the Consultant (Architect, Engineer or Construction Manager), prior to the start of work in PPS workplaces:
 - 1. 'Certified Firm' EPA issued certifications for the Contractor, and its subcontractor(s).
 - 2. 'Certified Renovators' EPA accredited certifications for the employees of the contractor and its subcontractor(s). At least one employee of each of the Contractor and the subcontractor(s) must have this certification.
- C. The Contractor, and its subcontractor(s), must comply with all the requirements of the EPA's RRP Rule, 40 CFR Part 745, and shall submit a copy of the recordkeeping maintained by its employee and/or the subcontractor(s), as required by the RRP rule, to the Consultant (Architect, Engineer or Construction Manager) prior to the project close-out.

ITEM NO. 3: ASBESTOS AND LEAD FREE PRODUCT USAGE CERTIFICATION

The Contractor is responsible to ensure and certify that all products used in the Pittsburgh Public School facilities for renovation, repair and painting are free of and do not contain asbestos and lead. Accordingly, Material Safety Data Sheets (MSDS) for all the products shall be submitted to meet the requirements of the project specifications.

ALL OTHER ITEMS OF THE CONTRACT DOCUMENTS REMAIN UNCHANGED AND IN FULL EFFECT.

Vidya Patil, AIA Director

Facilities/Plant Operations



1305 Muriel Street | Pittsburgh, PA 15203 Phone: 412-488-4300 Fax: 412-488-4340 Parent Hotline: 412-622-7920 | www.pps.k12.pa.us

Facilities and Plant Operations Division

OFFICIAL BULLETIN NO. 2

February 19, 2016
to the
BIDDING and CONTRACT DOCUMENTS
For
PROJECTS THROUGHOUT THE PITTSBURGH PUBLIC SCHOOLS

TO ALL BIDDERS:

The following items shall be incorporated as a part of the Specifications for this Project and shall be honored as such in your Proposal. Your acknowledgement of this receipt of this **OFFICIAL BULLETIN** shall be noted in the form, "Official Bulletin Receipt", accompanying your proposal.

ITEM NO. 1 – CONTRACTOR'S QUALIFICATIONS

1. Bidding Requirements and General Conditions of the Contract, page 9, section 6.00 – REPLACE section with the following:

6.00 CERTIFICATION OF BIDDERS AND BID

6.01 <u>Certification of Competence</u>

- A. In determining the lowest <u>responsible</u> bidder, the Owner will consider the bidder's experience, financial responsibility, and ability to successfully complete a project on time. The Owner, Architect/Engineer and/or Construction Manager will scrutinize the low bidder's information for full disclosure before a bid is awarded. Awards will be made only to persons or corporations determined to be responsible and experienced in the work and financially able to undertake this Contract.
- B. Bidders are required to submit CONTRACTOR'S QUALIFICATION STATEMENT. **At the time of BID**, All bidders must furnish responses and requests to the owner in relation the ATTACHMENT. Failure to provide will be cause for bid to be rejected.

6.02 **Bid Rejection**

A. In determining the responsibility of any Bidder, the Owner will give proper consideration to any factor which in its judgment may tend to cause delay in the completion of the work to be done

under this Contract or under other Contracts on this site or elsewhere that the Owner has or may let. Owner reserves the right to reject any and all bids, if it is in the best interest of the Owner.

- B. The failure to fully provide the foregoing information to the Owner or its representatives, may result in the rejection of the bidder's bid, at the sole discretion of the Owner.
 - 1. Failure to disclose a past or current project in default or in arbitration/court proceedings is grounds for disqualification.
 - 2. Failure to disclose a past or current school district where a project has been completed or is not yet completed is grounds for disqualification.
- C. Additionally, any of the following may subject the bidder to disqualification and his bid to rejection:
 - 1. A bidder's failure in the past to have timely completed the work in accordance with the construction contract documents, on a contract awarded to him by the Owner.
 - 2. A bidder's failure in the past to have prosecuted the work in accordance with the construction contract documents, on a contract awarded to him by the owner.
 - 3. A bidder who was awarded a construction contract with the Owner in the past, and whose contract with the Owner was terminated for cause.
 - 4. A bidder was awarded a construction contract with the Owner in the past, and whose contract with the Owner was declared to be in default.
 - 5. A bidder on whose Performance Bond provided for the benefit of the Owner on a construction contract awarded by the Owner in the past, a claim was made and paid or otherwise adjusted by the Surety.
 - 6. A bidder who has no prior, satisfactory experience working on a construction project involving multiple contractors.
 - 7. Where a bidder has been involved on a construction project on which a significant delay existed between the date of issuance of a Certificate of Substantial Completion for the bidder's work, and issuance of Final Payment to that bidder.
 - 8. A bidder who has failed to comply with the Occupational Safety Health Act and/or its implementing regulations, and who has consequently been fined or otherwise subjected to civil penalties as a result of such noncompliance.
 - 9. A bidder who has failed to fully comply with the Pennsylvania Prevailing Wage Act and/or the Federal Government Department of Labor's Davis-Bacon Act.
 - 10. A bidder who has failed to fully comply with the Pennsylvania Steel Products Procurement Act.
 - 11. A bidder who has failed to fully comply with applicable federal and/or state statutes and regulations prohibiting discrimination on a Pennsylvania public works project.
 - 12. A bidder who has otherwise failed to fully comply with federal, state and/or local statutes, ordinances and/or regulations applicable to a Pennsylvania public school district construction project.
 - 13. A bidder who has filed for bankruptcy, or who has been involuntarily placed into bankruptcy by his/its creditors within five (5) years of the date of submission of his/its bid. This provision shall encompass predecessor corporations, partnerships, and/or other entities. And each of the principals involved in the bidding corporation, partnership or other entity.
 - 14. A bidder who has, within the ten (10) years preceding the submission of his/its bid, been convicted by a federal or state court of a crime relating to his/its prosecution of a public works project in any jurisdiction within the United States. This provision shall apply to the entity submitting the bid, as well as to each of the principals involved in the bidding corporation, partnership or other entity.

- 15. A bidder who has a significant history of insurance claims paid, including, but not limited to, workers' compensation claims.
- 16. A bidder who has no prior satisfactory experience with critical path method (CPM) scheduling methods.
- 17. A bidder's failure to sign the Bid Form shall be conclusively treated as a nonresponsive Bid and the Bid shall be rejected.
- D. By the submission of any bid, the bidder agrees that, in the event its bid is rejected by the Owner for any reason, and such rejection is contested by the bidder through the commencement of legal proceedings, whether in law or equity, the Owner shall be entitled to an award of reasonable attorney's fees and costs if the Owner's rejection of the contested bid is upheld, affirmed or otherwise not set aside.
- 6.02 <u>Certification of Bid:</u> Each proposal shall be accompanied by an approved Surety Company's Bid Bond on the form provided herewith in the amount of 10% of the Base Bid. A certified check in the amount of 10% of the Base Bid is also acceptable.
- Bidder's Obligation to Execute the Contract: The bid will be awarded to the lowest responsible Bidder by a majority vote of the School Board. The Bidder to whom the award is made will be required to enter into a written Contract and provide a Performance Bond and a Payment Bond, in accordance with Article 10. All bids shall be valid for a period of not less than sixty (60) days and not more than one hundred twenty (120) days subsequent to date of opening.

ALL OTHER ITEMS OF THE CONTRACT DOCUMENTS REMAIN UNCHANGED AND IN FULL EFFECT.

Vidya Patil, AIA Director Facilities/Plant Operations

CONTRACTOR QUALIFICATIONS

- 1. How many years has your organization been in business as a Contractor?
- 2. How many years has your organization been in business under its present business name?
 a) Under what other or former names has your organization operated?
- 3. List the categories of work that your organization normally performs with its own forces.
- 4. Three architect references, including their names, addresses, telephone numbers, and contact persons.
- 5. Three project owner references, including their names, addresses, telephone numbers and contact persons.
- 6. A statement of the bidder's current bonding limit from the Bidder's surety or insurance agent; the name of the bidder's surety company and insurance company or companies, and proof of the rating and level of retained earnings/surplus required by the General Conditions to the Owner-Contractor Agreement.
- 7. A listing of work, including school-related work, in progress or under contract stating the following:
 - a) The amount of the original contract.
 - b) The amount of all change orders to date
 - c) The required substantial completion date.
 - d) Estimated or anticipated date of certification of substantial completion
 - e) Percentage of work completed and
 - f) The name, address, telephone number and contact person(s) of the architect and construction manager or clerk of the work (if any).
- 8. A listing of all work completed, including school-related work, during the last six (6) calendar years stating the following:
 - a) The amount of the original contract.
 - b) The amount of all change orders and their percentage of the contract's total bid cost.
 - c) The required substantial completion date.
 - d) The actual date of certification completion and the date of final payment.
 - e) The name, address, telephone number and contact person(s) of the architect and construction manager or clerk of the work (if any) and the name, address and telephone number of the owner (School District's Superintendent for school-related work).
- 9. A statement of whether the bidder, whether as a principal or an office of any predecessor or current entity, has defaulted or failed to complete on a construction project within the previous six (6) years and, if so, including information as to:
 - a) The project
 - b) The project owner
 - c) The architect and construction manager or clerk of the works (if any), and
 - d) The circumstances of such default.
- 10. A listing of all claims made against any bonds issued for the bidder's performance, labor and material payment or maintenance within the past six (6) years identifying:
 - a. The project and project owner
 - b. The surety
 - c. The claimant.
- 11. A listing of all arbitration proceedings or court proceedings completed or in progress during the last six (6) calendar years involving the bidder, identifying:
 - a) Bidder's role in proceedings
 - 1) Did/Does bidder's role involve bidder's performance of any construction contract or warranty?
 - b) The parties to such arbitration or litigation
 - c) The arbitrator, court or forum of such arbitration and litigation and
 - d) The case or docket number of such arbitration or litigation.
- 12. A listing of the names, titles and experience of officers, other principals and/or other key individuals in bidder's organization.
- A statement regarding the bidder's prior experience working on a construction project involving multiple contractors.
- 14. A statement regarding the bidder's adherence to the Occupational Safety Health Act; the Pennsylvania Prevailing Wage Act; the Pennsylvania Steel Products Procurement Act; applicable federal and/or state statutes and regulations prohibiting discrimination on a Pennsylvania public works project; and/or any and all other applicable laws, regulations, acts as listed in the non-all-inclusive list of Article 13 in Section 007216 General Conditions.

15. Include the following statement and signature lines verbatim as part of the Bidder's Proof of Competency submission.

THIS IS TO AUTHORIZE THE PERSONS AND REFERENCES IDENTIFIED HEREIN, AS WELL AS ANY OTHER REPRESENTATIVES OF BUSINESSES/AGENCIES/SCHOOL DISTRICTS WITH PROJECTS WITH WHICH I OR MY COMPANY HAVE BEEN INVOLVED, TO SPEAK FREELY AND WITHOUT HESITATION TO REPRESENTATIVES OF THE SCHOOL DISTRICT, INCLUDING ITS SUPERINTENDENT, BUSINESS MANAGER, ARCHITECT, BOARD OF SCHOOL DIRECTORS AND ATTORNEY RELATIVE TO ANY OF THE ABOVE MATTERS OR ANY OTHER SUCH PROJECTS. HEREBY RELEASING ALL PERSONS, FIRMS AND CORPORATIONS WHETHER NAMED HEREIN OR NOT, FROM LIABILITY OR FROM ANY ACTION, SUIT, CLAIM OR DEMAND ARISING OUT OF THE RELEASE OF SUCH INFORMATION.

By:_		
(Name)	(Title)	
(Company)	(Address)	

END OF DOCUMENT



The Pathway to the Promise.™

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Facilities and Plant Operations Division

OFFICIAL BULLETIN NO. 3 March 2, 2017 to the BIDDING AND CONTRACT DOCUMENTS For WIRELESS ACCESS UPGRADES MORROW INTERMEDIATE SCHOOL OF PITTSBURGH PUBLIC SCHOOLS PITTSBURGH, PENNSYLVANIA

TO ALL BIDDERS:

The following items shall be incorporated as a part of the Specifications for this Project and shall be honored as such in your Proposal. Your acknowledgement of this recipe if this OFFICIAL BULLETIN shall be noted in the form, "Official Bulletin Receipt", accompanying your proposal.

E-RATE SPECIAL CONDITIONS

1.0 Introduction

1.1 The District intends to apply for discounts on the equipment/services listed in this solicitation through the federal E-rate program. Several criteria and restrictions pertinent to the E-rate program are included herein and must be met by the successful vendor in order for the bid to be considered a responsive bid.

2.0 Reasons for Disqualification

- 2.1 In addition to those reasons indicated in the Bid Documents, if any of the following conditions occur, Contractor's Bid shall be automatically disqualified from being evaluated:
 - a. Contractor is on Red Light Status with the FCC or is delinquent on a debt to a state or federal governmental agency or entity or has not proven its FCC Red Light Status.
 - b. Contractor does not have an E-rate SPIN number and has not provided that E-rate SPIN number in their bid response.

- c. Contractor cannot provide all equipment and services specified in the Bid Documents and according to the specified timeline.
- d. Contractor does not have any previous experience installing wireless access points and structured cabling systems.

3.0 E-Rate Requirements

Vendors submitting bids must agree to meet the following conditions relating to the E-rate program and be willing to include such requirements in the Vendor's contract:

- 3.1 Vendor must agree to submit to the SLD a completed Form 473 prior to April 11 of each calendar year. This form is available on the SLD's website at www.usac.org/sl in the Forms section.
- Should the District so choose, Vendor must agree to provide 3.2 Discounted Bills: discounted bills to District which reflect the net charges due to the District after E-rate discounts have been reflected (also known as the "non-discount" amount). There will be no additional charges or fees assigned to the district to receive discounted bills. The Vendor will then invoice USAC using the Form 474 SPI form for the E-rate discount amount. Vendor shall be solely responsible for timely filing invoices with USAC. Accordingly, Vendor understands and agrees that District will NOT be liable to Vendor and Vendor shall have no recourse against the District for any discounted amount that Vendor submits late to USAC for payment, if USAC refuses to pay the invoice due to late filing. Further, Vendor understands and agrees that District shall not be liable to Vendor and Vendor shall have no recourse against the District for any discounted amount that Vendor submits to USAC for payment if Vendor is at fault for USAC's refusal to pay. If the District's actions or failure to act are responsible for the non-payment of the Vendor's invoice with USAC, the District shall not be liable to Vendor and Vendor shall have no recourse against the District for the amount at issue until both the District and the Vendor have exhausted their administrative remedies of appeal to USAC and/or the FCC.
- 3.3 If Vendor learns of any federal, state or local investigation conducted by any regulatory authority or law enforcement authority that could have an adverse impact on the District's ability to continue to receive the benefit of E-rate funding, Vendor must notify the District within 30 calendar days of learning of such investigation. The District reserves the right to cancel the agreement without penalty if the investigation impedes the District's ability in any way to receive the benefit of E-rate funding, subject to any investigation of wrongdoing.

- 3.4 Vendor shall maintain all bids, quotes, records, correspondence, receipts, vouchers, delivery information, memoranda and other data relating to Vendor's services and any subcontractors to the District. All such records shall be retained for 10 years following completion of services and/or installation of equipment, and shall be subject to inspection and audit by the District.
- 3.5 In addition to the foregoing, Vendor must maintain and enforce an internal E-rate audit process that ensures that Vendor complies with all E-rate program rules and regulations. This process must include the following:
 - Where labor is involved, maintaining detailed, signed individual timesheets
 - Ensuring that ineligible charges are not submitted to USAC
 - Invoicing to USAC that is consistent with the contract and the District's Form 471
 - Ensuring that services or products are not provided to the District without District's express written permission or official purchase authorization
 - Ensuring that District-approved substitute services or products are prominently noted on invoices submitted to USAC and the District
 - When E-rate eligible services or equipment are allocated or installed in multiple buildings, support for the allocation consistent with the amount and buildings identified in the Form 471
 - Documenting that E-rate funded services were provided within the allowable contract period and program year
 - Charging proper FRN(s)
 - Ensuring that invoices and USAC forms are submitted to the District in a timely manner
 - Ensuring that USAC forms are filled out completely, accurately and on time
 - Ensuring that Forms 472 are signed/dated by vendor's representative in a timely manner
 - Maintaining fixed asset list of E-rate-supported equipment provided to the District
 with detailed information for each item (model number, serial number, product
 description) and made available to the District in electronic format upon project
 completion.

4.0 CONDITIONS, CONTRACT and BILLING

4.1 Equipment Substitution

If the model specified in the contract is discontinued by the manufacturer after the award of this contract, the only acceptable substitute will be the manufacturer's standard replacement in a configuration that meets or exceeds the specifications and operating capabilities of the "as specified" unit. Further, the substituted equipment must be able to meet the FCC's Service Substitution Criteria. The Proposer must agree to cooperate with the District to provide the information necessary to obtain SLD's approval of a service substitution request.

4.2 Lowest Corresponding Price

Per FCC rules, vendors must offer the Lowest Corresponding Price when submitting bids. Lowest Corresponding Price (LCP) is defined as the lowest price that a service provider charges to nonresidential customers who are similarly situated to a particular E-rate applicant (school, library, or consortium) for similar services. See 47 CFR, Part 54, Section 54.500(f). Service providers cannot charge E-rate applicants a price above the LCP for E-rate services. See 47 CFR Section 54.511(b). There is a rebuttable presumption that rates offered within the previous 3 years are still compensatory.

- 4.3 The Owner reserves the right to extend or abbreviate the contract period if such extension or abbreviation is necessary to make the Contract term coincide with an E-rate "program year" or an extended service end date for an E-rate program year pursuant to a "service delivery deadline extension," as those terms are defined by the Federal Communications Commission and/or USAC.
- 4.4 Vendor shall itemize, price, and invoice separately any materials or services that are ineligible for E-rate funding. Vendor must include the following information on all invoices to the District for E-rate eligible equipment and/or services:
 - Date of invoice
 - Date(s) of service
 - Funding Request Number ("FRN")
 - Vendor SPIN
 - Detailed description of services performed and materials supplied that matches District's contract specifications and Form 471 descriptions of same
 - Clear, concise breakdown of amount(s) to be billed to USAC (discounted portion of eligible charges) and amount(s) to be billed to the District (non-discounted amount of eligible charges)
 - Invoice on Vendor's letterhead or on a Vendor-generated form



• Proper E-rate discount percentage as set forth by the applicable FRN and USAC funding commitment decision letter ("FCDL")

ALL OTHER ITEMS OF THE CONTRACT DOCUMENTS REMAIN UNCHANGED AND IN FULL EFFECT.

Questions regarding this Bulletin should be directed IN writing to:

Quad3 Group, Inc. Edward Sullivan, PE esullivan@quad3.com 412.781.1344

END OF BULLETIN NO. 3

OFFICIAL BULLETIN RECEIPT

	Project No.	IN/ A
	low by an authorized represe	I in connection with this bid must be entative as having been received and
OFFICIAL 1	BULLETIN NO. (1)	(sign here)
OFFICIAL 1	BULLETIN NO. (2)	(sign here)
OFFICIAL 1	BULLETIN NO. (3)	(sign here)
OFFICIAL 1	BULLETIN NO. (4)	(sign here)

PA PREVAILING RATES

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project Name:	Wireless Access Upgrades at Morrow Intermediate School
Awarding Agency:	The Board of Public Education, School District of Pittsburgh
Contract Award Date:	4/1/2017
Serial Number:	17-01416
Project Classification:	Building
Determination Date:	2/24/2017
Assigned Field Office:	Pittsburgh
Field Office Phone Number:	(412)565-5300
Toll Free Phone Number:	(877)504-8354
Project County:	Allegheny County

Commonwealth of Pennsylvania Report Date: 2/24/2017

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 17-01416 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	8/1/2015		\$35.17	\$23.20	\$58.37
Boilermakers	6/1/2016		\$40.90	\$27.61	\$68.51
Bricklayer	12/1/2016		\$31.44	\$21.10	\$52.54
Bricklayer	6/1/2016		\$31.42	\$20.62	\$52.04
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2017		\$33.01	\$16.63	\$49.64
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2016		\$32.36	\$15.98	\$48.34
Cement Finishers	6/1/2016		\$28.71	\$17.85	\$46.56
Dockbuilder, Pile Drivers	1/1/2016		\$32.03	\$17.53	\$49.56
Drywall Finisher	6/1/2018		\$28.10	\$19.99	\$48.09
Drywall Finisher	6/1/2016		\$27.50	\$18.29	\$45.79
Drywall Finisher	6/1/2017		\$27.80	\$19.14	\$46.94
Electric Lineman	5/30/2016		\$44.78	\$22.82	\$67.60
Electricians & Telecommunications Installation Technician	12/23/2016		\$40.61	\$23.98	\$64.59
Elevator Constructor	1/1/2016		\$44.80	\$30.29	\$75.09
Glazier	9/1/2017		\$28.62	\$21.98	\$50.60
Glazier	9/1/2016		\$28.62	\$20.73	\$49.35
Glazier	9/1/2018		\$28.62	\$23.23	\$51.85
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2016		\$33.18	\$29.13	\$62.31
Laborers (Class 01 - See notes)	1/1/2019		\$25.37	\$14.67	\$40.04
Laborers (Class 01 - See notes)	1/1/2018		\$24.32	\$14.67	\$38.99
Laborers (Class 01 - See notes)	1/1/2016		\$22.22	\$14.67	\$36.89
Laborers (Class 01 - See notes)	1/1/2020		\$26.42	\$14.67	\$41.09
Laborers (Class 01 - See notes)	1/1/2017		\$22.32	\$15.62	\$37.94
Laborers (Class 01 - See notes)	1/1/2021		\$27.47	\$14.67	\$42.14
Laborers (Class 02 - See notes)	1/1/2020		\$26.57	\$14.67	\$41.24
Laborers (Class 02 - See notes)	1/1/2018		\$24.47	\$14.67	\$39.14
Laborers (Class 02 - See notes)	1/1/2019		\$25.52	\$14.67	\$40.19
Laborers (Class 02 - See notes)	1/1/2017		\$22.47	\$15.62	\$38.09
Laborers (Class 02 - See notes)	1/1/2016		\$22.37	\$14.67	\$37.04
Laborers (Class 02 - See notes)	1/1/2021		\$27.62	\$14.67	\$42.29
Laborers (Class 03 - See notes)	1/1/2019		\$25.65	\$14.67	\$40.32
Laborers (Class 03 - See notes)	1/1/2017		\$22.60	\$15.62	\$38.22
Laborers (Class 03 - See notes)	1/1/2018		\$24.60	\$14.67	\$39.27
Laborers (Class 03 - See notes)	1/1/2016		\$22.50	\$14.67	\$37.17
Laborers (Class 03 - See notes)	1/1/2020		\$26.70	\$14.67	\$41.37
Laborers (Class 03 - See notes)	1/1/2021		\$27.75	\$14.67	\$42.42
Laborers (Class 04 - See notes)	1/1/2017		\$23.07	\$15.62	\$38.69
Laborers (Class 04 - See notes)	1/1/2019		\$26.12	\$14.67	\$40.79
Laborers (Class 04 - See notes)	1/1/2020		\$27.17	\$14.67	\$41.84
Laborers (Class 04 - See notes)	1/1/2016		\$22.97	\$14.67	\$37.64
Laborers (Class 04 - See notes)	1/1/2018		\$25.07	\$14.67	\$39.74
Laborers (Class 04 - See notes)	1/1/2021		\$28.22	\$14.67	\$42.89

Department of Labor & Industry Page 2 of 5 Commonwealth of Pennsylvania Report Date: 2/24/2017

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 17-01416 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Landscape Laborer	1/1/2016		\$20.51	\$13.49	\$34.00
Landscape Laborer	1/1/2017		\$20.59	\$14.36	\$34.95
Landscape Laborer (Skilled)	1/1/2016		\$20.93	\$13.49	\$34.42
Landscape Laborer (Skilled)	1/1/2017		\$21.01	\$14.36	\$35.37
Landscape Laborer (Tractor Operator)	1/1/2016		\$21.23	\$13.49	\$34.72
Landscape Laborer (Tractor Operator)	1/1/2017		\$21.31	\$14.36	\$35.67
Marble Finisher	6/1/2015		\$22.55	\$12.79	\$35.34
Marble Mason	12/1/2014		\$19.43	\$10.00	\$29.43
Millwright	6/1/2017		\$39.83	\$18.57	\$58.40
Millwright	6/1/2016		\$38.91	\$18.14	\$57.05
Operators (Class 01 - see notes)	6/1/2016		\$33.79	\$19.59	\$53.38
Operators (Class 02 -see notes)	6/1/2016		\$29.16	\$19.59	\$48.75
Operators (Class 03 - see notes)	6/1/2016		\$26.94	\$19.59	\$46.53
Painters Class 6 (see notes)	6/1/2016		\$27.38	\$17.58	\$44.96
Plasterers	6/1/2016		\$28.79	\$14.79	\$43.58
Plumbers	6/1/2017		\$39.45	\$21.02	\$60.47
Plumbers	6/1/2016		\$38.45	\$21.02	\$59.47
Pointers, Caulkers, Cleaners	12/1/2016		\$29.27	\$18.34	\$47.61
Pointers, Caulkers, Cleaners	6/1/2016		\$29.25	\$17.76	\$47.01
Roofers	6/1/2016		\$31.08	\$13.84	\$44.92
Roofers	6/1/2017		\$32.33	\$13.84	\$46.17
Roofers	6/1/2018		\$33.58	\$13.84	\$47.42
Roofers	6/1/2019		\$34.83	\$13.84	\$48.67
Roofers	6/1/2020		\$36.08	\$13.84	\$49.92
Sheet Metal Workers	7/1/2018		\$34.72	\$27.83	\$62.55
Sheet Metal Workers	7/1/2017		\$33.95	\$27.49	\$61.44
Sheet Metal Workers	7/1/2016		\$33.76	\$26.37	\$60.13
Sheet Metal Workers	7/1/2015		\$33.50	\$25.36	\$58.86
Sprinklerfitters	7/1/2017		\$37.57	\$19.37	\$56.94
Sprinklerfitters	1/1/2017		\$35.42	\$20.52	\$55.94
Steamfitters	6/1/2017		\$41.71	\$19.01	\$60.72
Steamfitters	6/1/2016		\$40.51	\$19.61	\$60.12
Stone Masons	6/1/2016		\$32.22	\$20.05	\$52.27
Stone Masons	12/1/2016		\$32.24	\$20.53	\$52.77
Terrazzo Finisher	12/1/2016		\$30.53	\$15.40	\$45.93
Terrazzo Finisher	6/1/2016		\$30.33	\$14.75	\$45.08
Terrazzo Mechanics	12/1/2016		\$30.18	\$17.30	\$47.48
Terrazzo Mechanics	6/1/2016		\$30.15	\$16.48	\$46.63
Tile Finisher	12/1/2016		\$24.59	\$14.38	\$38.97
Tile Setter	12/1/2016		\$30.27	\$18.51	\$48.78
Truckdriver class 1(see notes)	1/1/2016		\$27.62	\$16.60	\$44.22
Truckdriver class 2 (see notes)	1/1/2016		\$27.75	\$16.69	\$44.44
Truckdriver class 3 (see notes)	1/1/2016		\$28.23	\$16.98	\$45.21

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 17-01416 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter Welder	1/1/2019		\$34.97	\$18.42	\$53.39
Carpenter Welder	1/1/2017		\$33.35	\$17.14	\$50.49
Carpenter Welder	1/1/2018		\$34.12	\$17.77	\$51.89
Carpenters	1/1/2017		\$32.40	\$17.14	\$49.54
Carpenters	1/1/2019		\$34.02	\$18.42	\$52.44
Carpenters	1/1/2018		\$33.17	\$17.77	\$50.94
Cement Finishers	1/1/2018		\$31.04	\$19.90	\$50.94
Cement Finishers	1/1/2017		\$30.14	\$19.40	\$49.54
Cement Finishers	1/1/2019		\$31.94	\$20.50	\$52.44
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2016		\$33.18	\$29.13	\$62.31
Laborers (Class 01 - See notes)	1/1/2019		\$24.85	\$23.85	\$48.70
Laborers (Class 01 - See notes)	1/1/2018		\$24.85	\$22.35	\$47.20
Laborers (Class 01 - See notes)	1/1/2017		\$24.85	\$20.95	\$45.80
Laborers (Class 02 - See notes)	1/1/2017		\$25.01	\$20.95	\$45.96
Laborers (Class 02 - See notes)	1/1/2018		\$25.01	\$22.35	\$47.36
Laborers (Class 02 - See notes)	1/1/2019		\$25.01	\$23.85	\$48.86
Laborers (Class 03 - See notes)	1/1/2019		\$25.40	\$23.85	\$49.25
Laborers (Class 03 - See notes)	1/1/2017		\$25.40	\$20.95	\$46.35
Laborers (Class 03 - See notes)	1/1/2018		\$25.40	\$22.35	\$47.75
Laborers (Class 04 - See notes)	1/1/2019		\$25.85	\$23.85	\$49.70
Laborers (Class 04 - See notes)	1/1/2018		\$25.85	\$22.35	\$48.20
Laborers (Class 04 - See notes)	1/1/2017		\$25.85	\$20.95	\$46.80
Laborers (Class 05 - See notes)	1/1/2018		\$26.26	\$22.35	\$48.6
Laborers (Class 05 - See notes)	1/1/2019		\$26.26	\$23.85	\$50.1
Laborers (Class 05 - See notes)	1/1/2017		\$26.26	\$20.95	\$47.2
Laborers (Class 06 - See notes)	1/1/2018		\$23.10	\$22.35	\$45.45
Laborers (Class 06 - See notes)	1/1/2019		\$23.10	\$23.85	\$46.95
Laborers (Class 06 - See notes)	1/1/2017		\$23.10	\$20.95	\$44.05
Laborers (Class 07 - See notes)	1/1/2018		\$25.85	\$22.35	\$48.20
Laborers (Class 07 - See notes)	1/1/2017		\$25.85	\$20.95	\$46.80
Laborers (Class 07 - See notes)	1/1/2019		\$25.85	\$23.85	\$49.70
Laborers (Class 08 - See notes)	1/1/2017		\$27.35	\$20.95	\$48.30
Laborers (Class 08 - See notes)	1/1/2018		\$27.35	\$22.35	\$49.70
Laborers (Class 08 - See notes)	1/1/2019		\$27.35	\$23.85	\$51.20
Operators (Class 01 - see notes)	1/1/2019		\$31.89	\$21.68	\$53.57
Operators (Class 01 - see notes)	1/1/2017		\$30.69	\$19.98	\$50.67
Operators (Class 01 - see notes)	1/1/2018		\$31.29	\$20.78	\$52.07
Operators (Class 02 -see notes)	1/1/2019		\$31.63	\$21.68	\$53.31
Operators (Class 02 -see notes)	1/1/2018		\$31.03	\$20.78	\$51.81
Operators (Class 02 -see notes)	1/1/2017		\$30.43	\$19.98	\$50.41
Operators (Class 03 - See notes)	1/1/2019		\$27.98	\$21.68	\$49.66
Operators (Class 03 - See notes)	1/1/2018		\$27.38	\$20.78	\$48.16
Operators (Class 03 - See notes)	1/1/2017		\$26.78	\$19.98	\$46.76
Operators (Class 04 - See notes)	1/1/2017		\$26.32	\$19.98	\$46.30

Commonwealth of Pennsylvania Report Date: 2/24/2017 Department of Labor & Industry Page 4 of 5

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 17-01416 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Class 04 - See notes)	1/1/2018		\$26.92	\$20.78	\$47.70
Operators (Class 04 - See notes)	1/1/2019		\$27.52	\$21.68	\$49.20
Operators (Class 05 - See notes)	1/1/2018		\$26.67	\$20.78	\$47.45
Operators (Class 05 - See notes)	1/1/2019		\$27.27	\$21.68	\$48.95
Operators (Class 05 - See notes)	1/1/2017		\$26.07	\$19.98	\$46.05
Painters Class 1 (see notes)	6/1/2016		\$31.58	\$17.58	\$49.16
Painters Class 1 (see notes)	6/1/2017		\$31.98	\$18.43	\$50.41
Painters Class 2 (see notes)	6/1/2017		\$34.08	\$18.43	\$52.51
Painters Class 2 (see notes)	6/1/2016		\$31.58	\$17.58	\$49.16
Painters Class 3 (see notes)	6/1/2016		\$33.68	\$17.58	\$51.26
Painters Class 3 (see notes)	6/1/2017		\$27.58	\$18.48	\$46.06
Painters Class 4 (see notes)	6/1/2016		\$26.95	\$17.58	\$44.53
Painters Class 4 (see notes)	6/1/2017		\$27.27	\$18.43	\$45.70
Painters Class 5 (see notes)	6/1/2016		\$21.90	\$17.58	\$39.48
Painters Class 5 (see notes)	6/1/2017		\$22.16	\$18.43	\$40.59
Piledrivers	1/1/2018		\$33.55	\$18.55	\$52.10
Piledrivers	1/1/2017		\$32.75	\$17.95	\$50.70
Piledrivers	1/1/2019		\$34.30	\$19.30	\$53.60
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2016		\$39.62	\$31.18	\$70.80
Truckdriver class 1(see notes)	1/1/2019		\$28.99	\$19.43	\$48.42
Truckdriver class 1(see notes)	1/1/2017		\$28.10	\$17.42	\$45.52
Truckdriver class 1(see notes)	1/1/2018		\$28.52	\$18.40	\$46.92
Truckdriver class 2 (see notes)	1/1/2019		\$29.13	\$19.51	\$48.64
Truckdriver class 2 (see notes)	1/1/2017		\$28.24	\$17.50	\$45.74
Truckdriver class 2 (see notes)	1/1/2018		\$28.66	\$18.48	\$47.14
Truckdriver class 3 (see notes)	1/1/2019		\$29.59	\$19.82	\$49.41
Truckdriver class 3 (see notes)	1/1/2018		\$29.13	\$18.78	\$47.91
Truckdriver class 3 (see notes)	1/1/2017		\$28.71	\$17.80	\$46.51

PROPOSAL

Project No. N/A

To the Board of Public Education of the School District of Pittsburgh, Pa.

Directors:

The undersigned havin	g carefully examined the Contr	act Documents prepared by your I	Facilities
Division bearing the above P	roject Number and entitled	Wireless Access Upgrades	
		Construction	
which is shown, called for or	reasonably implied by all the pro	ereby offers and agrees to do all tovisions of the Contract Documents	Schools that work
		and will enter into con	
The undersigned herewit	n encloses a Bidder's Bond of the		
The undersigned here twenty (120) days after the defence this bid is not made in the association, organization or has not directly or indirectly directly or indirectly collude sham bid, or that anyone shindirectly, sought by agreen bidder or of any other bidder any other bidder, or to see interested in the proposed cobidder has not, directly or in pay any fee in connection tion, bid depository, or to an	by agrees that this bid may not ate set for the opening thereof. by certifies that he or it is the truinterests of or on behalf of an corporation; that the bid is genuified, conspired, connived, or agree all refrain from bidding; that the nent, communication or conferent, or to fix any overhead, profit, are any advantage against the pontract; that all statements contain directly, submitted his bid price of therewith, to any corporation, by member or agent thereof, or to	be withdrawn for a period of one me bidder for award of the contract we will yound is closed person, partnership, ne and not collusive or sham; that the derivation of the bidder of anyone else to be bidding has not in any manner, do not with anyone to fix the bid price or cost element of the bid price, or will be bidder or any breakdown thereof, or paid and partnership, company, association, any other individual except to such the bidder in his general business.	work; that company, the bidder and has not to put in a irectly or the of that of or anyone to, that the d will not organiza-
		Submitted by	
	Firm		
	Ву		(SEAL)
	Title		
	Address of Home Office:		

Phone

SUPPLEMENTARY FORM OF PROPOSAL **UNIT PRICES**

Project No. N/A	
To the Board of Public Education of the School District of Pittsburgh, Pa.	
The undersigned submits the following und SPECIFICATION for the above numbered Con	-
Name of Unit Item	Unit Price
Provide Wireless Access Drop - Acoustical Ceiling Tile Installation (includes 250' of 2 CAT6 4pr plenum cables terminated on both ends, mounted per drawing detail, routed	Added Deducted
above accessible ceiling)	XXXXXX
Provide Wireless Access Drop - Wall- Mounted Installation (includes 250' of 2 CAT6 4pr plenum cables terminated on both ends, mounted per drawing detail routed	
above accessible ceiling)	XXXXXXX
Provide 50 LF of 3/4" EMT conduit (includes 2-90 deg elbows and 2-4" square junction	
boxes, installed to structural ceiling) Provide 50 LF of Wiremold (or equal)	<u>XXXXXXX</u>
V2000BC surface raceway (includes 2-90 deg elbows and 2-4" square junction boxes,	
installed to plaster wall)	XXXXXXX
Submitte	d by
Firm	
Ву	
Title	
Address of Home Office	

MATERIALS/SUBCONTRACTORS LISTING

(To be completed by low bidder)

Should the bidder be the apparent low bidder, the following materials/ equipment/ subcontractors listing must be submitted within three (3) working days of the bid opening. If awarded the contract, the contractor will use the following: (fill in column where asterisk(*) appears on listing):

Equipment, Material		acturer me only)	Subcontractor (One name only)
Wireless Access Upgrades	(One na	ine omy)	(One name omy)
Morrow Intermediate School			
Project No. N/A			
Troject 10. 17/1			
CAT6 UTP Cable	*Berk-Tek (No subs	stitutions)	
Fiber Optic Cable	*Berk-Tek (No subs	stitutions)	
Connectivity Parts	*Hubbell (No subst	itutions)	
Copper Cable Test Equipment	*		
		Submitted by	
		Firm	
		By	
Address		<u>Title</u>	
		Phone	
		1 Hone	

PRINCIPAL CONTRACTOR'S BID BOND

Project No. N/A

KNOW ALL MEN BY THESE PRESENTS, That
(hereinafter called the Principal) and
a corporation created and existing under the laws of the State of
, having its principal office in
lawful money of the United States of America, to be paid to the said School District, its successors and assigns, to which payment well and truly to be made, we do bind ourselves and each of us, our and each of our heirs, executors, administrators, successors and assigns firmly by these presents, and do hereby authorize and empower any attorney of any court of record to appear for us and for each or either of us and confess judgment against us or either of us and in favor of the School District of Pittsburgh, its successors or assigns for the amount of this bond together with an attorney's commission of five percent (5%) for collection and costs of suit, with release of all errors and waiver of all laws providing for stay of execution or exemption from levy and sale. Inquisition and extension upon any levy is hereby waived and condemnation agreed to.
Sealed with our seals and dated this day of
, A.D., 200

	pal has submitted a bid to The Board of District of Pittsburgh for
the Principal, in case such to Education, shall within ten day into a written agreement, furning Materialmen's Bond and do an aper-formed at or before the compliance with the contract failing so to do, shall save, keed District of and from all loss of Principal in this regard, then the remain in full force and virtue. IT IS FURTHER AGREED the sustained by said School Distipart of the Principal, shall be Business Affairs and the Assiby his duly authorized representations.	nat the amount of loss or damage rict by reason of any such default on the e determined by the Executive Director, stant Secretary of said School District or esentative, and his certificate as to the e shall be final and conclusive upon each
or us, and not subject to except	(Principal Sign Below)
	(Fillicipal Sign Below)
ATTEST:	(SEAL)
	(Surety Sign Below)
	(SEAL)

THE BOARD OF PUBLIC EDUCATION

SCHOOL DISTRICT OF PITTSBURGH FACILITIES DIVISION 1305 MURIEL STREET PITTSBURGH, PENNSYLVANIA 15203

AGREEMENT FOR CONSTRUCTION/RENOVATION

CONTRACT NUMBER: OF"[CONTRACT NUMBER]"
PROJECT NO: "[PROJECT NUMBER]"
PROJECT NAME: "[PROJECT NAME]"
SCHOOL: [SCHOOL]

This Agreement, made and entered into on May 30, 2013, is by and between the BOARD OF PUBLIC EDUCATION OF THE SCHOOL DISTRICT OF PITTSBURGH, PA, a school district of the first class A of the Commonwealth of Pennsylvania, duly organized and validly existing under the Constitution and laws of the Commonwealth, particularly the Public School Code of 1949, Act of March 10, 1949, P.L. 30, No. 14, as amended with offices at: 341 South Bellefield Avenue, Pittsburgh, PA 15213, hereinafter referred to as the "District."

A N D

"[CONTRACTOR NAME]", with offices located at: "[CONTRACTOR ADDRESS]" hereinafted referred to as the Contractor.

WITNESSETH THAT: WHEREAS, the Owner desires to have certain work performed on its premises and the Contractor has indicated to the Owner its ability to perform all of the said work in a manner satisfactory to the Owner.

NOW, THEREFORE, THE PARTIES HERETO, INTENDING TO BE LEGALLY BOUND HEREBY, AGREE AS FOLLOWS:

 Contractor shall provide all materials, perform all labor, and do all required to complete the following work at [LOCATION] location. Scope of work consists of: "[PROJECT SCOPE]".
 Contractor will perform all work under a single contract for general construction in strict

- compliance with the documents of the contract prepared by the Owner, all by reference thereto.
- 2. The Contractor shall begin work as noted in the contract documents.
- 3. The sum to be paid by the Owner to the Contractor for complete performance of this contract shall be "[PROJECT COST TEXT]" (\$"[PROJECT COST #]"). Payments shall be made by the Owner to the Contractor in the manner and at the times stipulated in the contract documents.
- 4. Contractor acknowledges and agrees that it is in compliance with the Immigration Reform and Control Act of 1986, as amended and Contractor and its employees are not illegal aliens.
- 5. This agreement shall embrace and include all of the contract documents as enumerated in Owner's Instruction to Bidders with like effect as if expressly incorporated herein. The specifications which are embraced in the contract drawing documents made part-of as Appendix A.
- 6. Authority to enter into this agreement was granted by the Owner at its legislative meeting held on "[BOARD DATE]".
- 7. Contractor and its employees who may have direct contact with children during the discharge of responsibilities under this contract shall obtain, at its own expense, and submit all criminal background reports required by 24 P.S §1-111, as amended, and child abuse clearances required by 23 Pa.C.S. §6355, as amended. All required reports and clearances must be submitted to the District contact person prior to performing any services under this contract. No payments shall be authorized unless all required reports and clearances have been received. Contractor further agrees to notify the School District within seventy-two (72) hours of any arrest or conviction of the any of its employees providing services under this Agreement during the term of the Agreement. A Contractor's

employee will be prohibited from providing services under this Agreement if required reports and clearances are not received or if any report or clearance indicates that a Contractor's employee has been convicted of a disqualifying crime

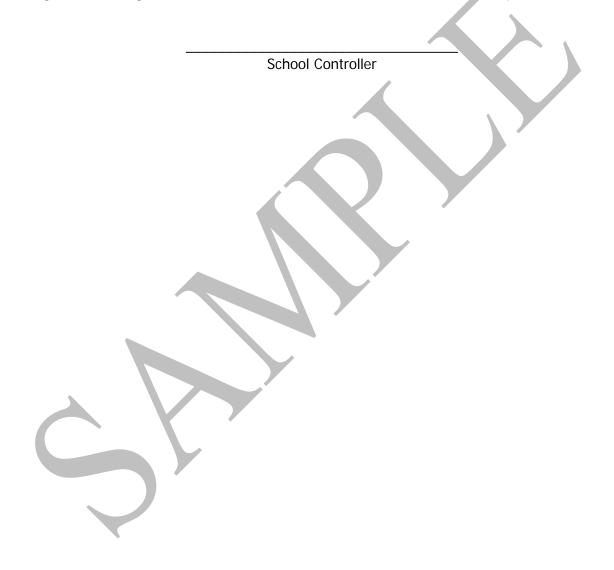
8. None of the terms of this agreement shall be changed except by written authority of the Owner, which written authority shall be expressed only in the form of a Resolution duly adopted by a majority of all the members of the Owner's Board of Directors and thereafter communicated to the Contractor.

IN WITNESS WHEREOF, the parties hereto have affixed their hands and seals the day and year first above written.

Contractor:	WITNESS/ATTEST:
Contractor Signatory	
Printed Name and Title	
ATTEST:	SCHOOL DISTRICT OF PITTSBURGH
Assistant Secretary	Board President
Approved:	
Facilities Division:	
	Date:
Contracts Manager	
Approved as to form:	
Solicitor	_

CERTIFICATION OF SCHOOL CONTROLLER

I, the undersigned, hereby certify the foregoing Contract and state that the amount of said contract, to-wit, the sum of "[AMOUNT TEXT]" has been charged against Account Number: "[ACCOUNT NUMBER]" in the annual estimate of school expenditures, on which said Contract is based, and that the number of said Contract in order of its date is number: OF"[CONTRACT #]".



THE BOARD OF PUBLIC EDUCATION

SCHOOL DISTRICT OF PITTSBURGH FACILITIES DIVISION 1305 MURIEL STREET PITTSBURGH, PENNSYLVANIA 15203

PERFORMANCE BOND Contract No: OF"[CONTRACT NUMBER]"

KNOWN ALL MEN BY THESE PRESENTS,			at:
	, a contractor,	as Principal,	hereinafter
referred to as "Contractor," and			
	7		
a corporation organized and existing under the law	s of the State of	Pennsylvania	and legally
authorized to transacts business in the Commonwe	ealth of Pennsylva	ania, hereinat	fter referred
to as "Surety," are held and firmly bound unto	the School Dis	strict of Pitts	sburgh, PA,
hereinafter referred to as "School District" in the su	ım of "[PROJECT	COST TEXT]	" .
WHEREAS, the Contractor has by written	agreement date	d	
entered into a contract with the School District of	f Pittsburgh, PA	at: 341 Sou	th Bellefield
Avenue, Pittsburgh, PA 15213, which contract is i	ncorporated here	ein by referer	nce thereto,
and is hereinafter referred to as the Contractor.			
NOW, WHEREFORE, the condition of this ob	ligation is such	that, if Cont	tractor shall
promptly and faithfully perform said Contract, the	en this obligation	n shall be nu	II and void;
otherwise it shall remain in full force and effect			

Whenever Contractor shall be, and be declared by School District to be in default under the Contract, the School District having performed School District's obligations thereunder, the Surety may promptly remedy the default, or shall promptly, at the direction and with the approval of the School District:

- (1) Complete the Contract in accordance with its terms and conditions, or
- Obtain a bid or bids for submission to School District and Surety of the lowest responsible bidder, arrange for a contract between such bidder and School District and make available at work progresses (even though there should be a defaulter a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price. The term "balance of the contract price," as used in this paragraph, shall mean the total amount payable by School District to Contractor under the Contract and any amendments thereto, the amount properly paid by School District to Contractor.

The said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wide affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

No right of action shall	accrue on this bond to or for the use of any person or
corporation other than the School	District named herein or the successors of said School District.
SIGNED this day of	, 2013.
CONTRACTOR:	ATTEST/WITNESS:
	BY:(Seal)
Contractor Signatory	(oca)
Printed Name and Title	
SURETY:(Typed Na	me of Surety)
	BY:
Signature of Surety	Attorney in Fact

or

THE BOARD OF PUBLIC EDUCATION

SCHOOL DISTRICT OF PITTSBURGH FACILITIES DIVISION 1305 MURIEL STREET PITTSBURGH, PENNSYLVANIA 15203

PAYMENT BOND Contract No: OF"[PROJECT #]"

KNOWN ALL MEN BY THESE PRESENTS,at
, a contractor, as Principal, hereinafte
referred to as "Contractor," and
a corporation organized and existing under the laws of the state of Pennsylvania and legally
authorized to transacts business in the Commonwealth of Pennsylvania, hereinafter referred
to as "Surety," are held and firmly bound unto the School District of Pittsburgh, PA
hereinafter referred to as "School District" for the use of any and every person, co
partnership, association, or corporation, who, whether as subcontractor or otherwise will
furnish materials or the use of machinery or supply or perform labor whether or not said
materials or use of machinery or labor will enter into and become component parts of the
work or improvements in the sum of "[PROJECT COST TEXT]" . WHEREAS, the
Contractor has by written agreement dated, entered into a
contract with the School District for Pittsburgh which contract is incorporated herein by
reference thereto, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that if the said Contractor shall promptly make payment of all just claims for materials or machinery furnished and labor supplied or performed in the prosecution and completion of the work to be done under the terms of said Contact, or any amendment or extension thereof, or addition thereto, to every person, firm, co partnership, association, or corporation, who whether as subcontractor or otherwise has furnished materials or the use of machinery or supplied or performed labor in the prosecution of said work, whether or not the said materials or use of machinery or labor entered into and because component parts of the work or improvements contemplated in said Contract, then this obligation shall be void: otherwise it shall be and remain in full force and effect.

Every person, firm, co-partnership, association or corporation who, whether as subcontractor or otherwise has furnished materials or supplied or performed labor or furnished machinery for use in the prosecution of the work, as above provided, and who has not been paid therefore, may sue on this bond in accordance with the provisions of (a) the Public School Code of 1949, as amended and/or (b) the Public Works Contractor's Bond Law of 1967, as amended, as the case may be; provided, however, that the School District shall not be liable for the payment of any costs or expenses of any suit.

The said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition, to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same, shall in any way affect its obligations under this bond and it does hereby waiver notice of any such change, extension of time, alteration or addition to the terms of the contract to the work or to the specifications.

SIGNED, SEALED AND DELIVERED this	_ day of,	2013.
CONTRACTOR:	ATTEST/WITNESS:	
(0)	BY:	
(Seal) Contractor Signatory		
Printed Name and Title		
SURETY:(Typed Name of Surety)		
	ay:	
Signature of Surety	Attorney in Fact	

CERTIFICATE OF COMPLIANCE

WITH THE

SUBSTANCE ABUSE POLICY

OF THE

SCHOOL DISTRICT OF PITTSBURGH

I,	, do hereby certify that I have read and
·	of the School District of Pittsburgh, and have s and/or subcontractors. I also declare that my
employees and/or subcontractors and their	r employees who will be performing tasks that
are high risk, safety sensitive or genu	inely implicate public safety, will pass ar
appropriate test for substance abuse prior t	to being permitted access to the School District
of Pittsburgh's workplaces.	
	NOTARY PUBLIC
Signature of Representative	Signature of Notary
Print Name & Title of Representative	
	(Seal and/or Stamp)
Print Name of Company	
Telephone Number of Representative	Date



A-1: CERTIFICATION OF EBE COMPLIANCE

I hereby certify that in submitting the attached bid that I have read and understand Sections 8.20 through 8.29 of the General Conditions of the contract documents regarding the Eligible Business Opportunity Program and the Eligible Business Enterprise (EBE) policy and procedures that have been supplied to me and which I have provided to my employees. I further certify that my employees and I will comply with these policies and procedures and will agree to an EBE participation goal of _______% of the total project contracted amount, including any subsequent change orders, to duly certified MBE, WBE, DBE or 8(a) firms that are acceptable to the School District of Pittsburgh.

I also certify that, should my company be the lowest qualified bidder (or among the lowest bidders determined by the School District), two (2) copies of all the required forms including Forms A-2 through A-4 and all other necessary documentation shall be fully completed and duly executed, signed and submitted to the Facilities Department and the Minority/Women Business Department within three (3) business days of notification by the School District. I fully understand that a request for the required forms (A-2 through A-4) is not a determination that I will be awarded the contract rather a further evaluation of my bid submission for compliance. I understand that the A-4 form is only necessary if I fail to meet the established EBE goal in its entirety. I further understand that failure to submit the required documentation in its entirety and fully completed shall result in a rejection of my bid.

If awarded this contract by the School District of Pittsburgh I certify that I will submit the required B-1 EBE Payment Compliance form on a monthly basis with all necessary documentation (including the front and back of all cancelled checks and corresponding invoices). I also certify that I am supplying the company contact information for use by the Facilities Department and the Minority/Women Business Department as the principal person for all questions or concerns regarding compliance with this bid.

BIDDER CONTACT SHEET

Name:		
Title of Responsible Party:		
Company Name:		
Business Address:		
Telephone Number:		
Facsimile Number:		
E-Mail Address:		
Web Address:		
Attest (if corporate bidder)	Name of Bidder	
	By: Name of Signor	
Date:	Title:	



A-2: LIST OF ALL PARTICIPATING SUB-CONTRACTORS

LIST <u>ALL</u> SUBCONTRACTORS. This form must be completed, executed and submitted by any Company responding to a bid for the Pittsburgh Public Schools. Failure to do so upon request will be grounds to disqualify your bid.

PLEASE NOTE:

A **Subcontractor** shall refer to any contractor, vendor, supplier, consultant, or other business entity that the Bidder will partner with and compensate to fulfill the requirements of the scope of work detailed in this solicitation as issued by the School District. A list of registered EBEs can be found at http://www.pps.k12.pa.us/14311012292510480/blank/browse.asp?A=383&BMDRN=2000&BCOB=0&C=54006. Please identify all subcontractors whose quotes were used to submit this bid/proposal.

	Subcon	tractor A	Subcon	tractor B	Subcont	cractor C
Name of Subcontractor						_
Address						
Name of Contact Person and Phone Number						
Scope of Work Please describe the type of work and/or type of supplies to be provided by the sub-contractor.	CIRCLE: labor supp	oly both	CIRCLE: labor supp	oly both	CIRCLE: labor supply	y both
Certified contractor? If so which EBE Type? [MBE, WBE, DBE, 8(a)]						
\$ Subcontract Amount -If a broker only, multiply by 10% -If a supplier only, multiply by 60% -If supply & labor, multiply by 100% Race/Gender of Owner	\$(Subcontract Amoun = \$	x% t) (Percent)EBE value	\$(Subcontract Amoun = \$	x% t) (Percent) EBE value	\$(Subcontract Amount) =\$	x% (Percent) _EBE value
Previous Year's Gross Receipts	☐ Less than \$500K ☐ \$500K - \$2 Million	☐ \$2 Mill - \$5 Million ☐ Over \$5 Million	☐ Less than \$500K ☐ \$500K - \$2 Million	S Mill - \$5 Million Over \$5 Million	☐ Less than \$500K ☐ \$500K - \$2 Million	\$2 Mill - \$5 Million Over \$5 Million
Total Bid Amount \$		o be Paid to All EBE Sub		- Over 33 Willion	Your EBE Commitmen	
Total to be paid to all Sub-Contractors:	\$	Total EBE \$ Va	alue \$		(Total EBE value)	/Total Bid Amount)
The undersigned will enter into formal, notarized agreements with each of the EBEs listed above for work in this schedule conditioned upon the award of a contract by the Pittsburgh Public Schools (PPS). Said agreements shall be forwarded to the M/WBE Department within three (3) business days of award and any failure to submit all of the notarized agreements within three (3) business days shall be grounds for determining the bid as non-compliant. Duplicate this form to make copies for additional information. Name of Bidder: Name of Project: Project #:						
Signature of Bidder (Owner/Auth	orized Representati	ve) Phone	e Number	E-mail A	ddress	Date





A-3: EBE INTENT TO PERFORM AS A SUB-CONTRACTOR

This form must be completed, signed and submitted by any Bidder who will use EBE firms in response to this solicitation issued by the District. Complete a separate form for <u>each EBE firm</u>. Failure to do so upon request will be grounds to disqualify your bid.

[THIS TOP PORTION SHOULD BE COMPLETED AND SIGNE	ED BY THE MBE, WBE, DBE, OR 8(a) C	ERTIFIED SUBCONTRACTOR]
1. Name of EBE firm		
2. Name of Bid	and Project number	·
3. My firm is currently certified and is in good standing	g. 🛘 Yes 🗆 No 🖵 In prog	gress of obtaining
Please provide proof of current certification at time of bid so WPMSDC, SBA, Port Authority or Pennsylvania's DGS.	•	
(ATTACH PROOF OF	CURRENT CERTIFICATION).	
 The undersigned is prepared to perform the following connection with the above project at the following of 		he material listed in
Type of Work and/or Supplies	Amount to be Paid	Projected Start and Completion Dates
value. Approximately% will be sub-subcontract contractors. The undersigned is has submitted a quote, is listed above, and plans to perform the scope of work ider District of Pittsburgh: BY:(Print - Name of Signature of Owner or Authorized Agent of EBE fin	s aware that they will be used for the ntified above if this bid is accepted arm) (Signature of Owner, President or Aut	nis project for the amount and approved by the School horized Agent of EBE)
DATE. / / DUONE.	EMAIL:	
DATE:		
[THIS BOTTOM PORTION SHOULD BE COMPLETED AN		NT SUBMITTING THE BID]
[THIS BOTTOM PORTION SHOULD BE COMPLETED AN HEREBY DECLARE AND AFFIRM that I am the	ID SIGNED BY THE AUTHORIZED AGE	-
[THIS BOTTOM PORTION SHOULD BE COMPLETED AN HEREBY DECLARE AND AFFIRM that I am the(Title of	ID SIGNED BY THE AUTHORIZED AGE	and a duly authorized
[THIS BOTTOM PORTION SHOULD BE COMPLETED AN HEREBY DECLARE AND AFFIRM that I am the	of bidder's authorized agent) able to make this d	and a duly authorized
I HEREBY DECLARE AND AFFIRM that I am the	of bidder's authorized agent) able to make this d	and a duly authorized eclaration and that I have
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[THIS BOTTOM PORTION SHOULD BE COMPLETED AN I HEREBY DECLARE AND AFFIRM that I am the	of bidder's authorized agent)able to make this does not not sis Intent to Perform form and no make the sents with each of the EBEs listed at ghappens	and a duly authorized eclaration and that I have aterial facts have been sove for work in this schedule ments shall be forwarded to I of the notarized agreements uplicate this form to make all EBE subcontractors (Email) gh Public Schools' Business on and belief. I understand 04, relating to unsworn
[THIS BOTTOM PORTION SHOULD BE COMPLETED AN I HEREBY DECLARE AND AFFIRM that I am the	of bidder's authorized agent)able to make this does not not sis Intent to Perform form and no make the sents with each of the EBEs listed at ghappens	and a duly authorized eclaration and that I have aterial facts have been sove for work in this schedule ments shall be forwarded to I of the notarized agreements uplicate this form to make all EBE subcontractors (Email) gh Public Schools' Business on and belief. I understand 04, relating to unsworn

The Pathway to the Promise.



A-4: GOOD FAITH EFFORTS (GFE) CHECKLIST

This form must be completed, signed and submitted with all relevant documentation by any bidder who has failed to meet the established EBE goal, in its entirety, for this project. Failure to successfully accomplish and document all seven (7) criteria will be grounds to disqualify your bid.

	saccessiany accomplish and accument an seven (7) en		z min se broarias to alequality your blar				
In accordance with the requirements for bidders under the Eligible Business Opportunity Program, and in consideration of the privilege to submit bids for contracts funded, in whole or in part, by the School District of Pittsburgh, I () representing ()							
regu) affirm that we have exercised the following good faith efforts in addition to our regular and customary solicitation process:						
	Mandatory Good Faith Efforts	R	equired Documentation				
1.	IDENTIFY POTENTIAL SUBCONTRACTING OPPORTUNITIES We have divided the contract into economically feasible segments that can be performed by a subcontractor.	a.	An itemization of services and materials necessary for this project; identify items made available to potential subcontractors and show the dollar value of percent of total bid amount for each subcontract opportunity				
2.	DEMONSTRATE YOUR INTENTION TO SELF-PERFORM ALL OR SOME PORTION OF THE LABOR We have the ability to and will self-perform the following portions of work for this project.	b.	A brochure, pamphlet or literature detailing your capabilities and A notarized statement, identifying the areas you can and will self-perform, and indicating that your submission is true				
3.	REQUEST ASSISTANCE FROM THE PPS' MINORITY/WOMEN BUSINESS DEPARTMENT We have contacted a representative of the District's Minority/Women Business Department to request assistance to meet the established goal for this project at least one (1) week before the bid due date.	b.	A copy of your phone log with contacts, dates, and times or A copy of any correspondence sent to representatives of the BOP and A copy of the fax transmission report, email, or registered mail receipt for each request sent to reps of M/WBE Department and A copy of any response received from representatives of the M/WBE Department				
4.	REQUEST ASSISTANCE FROM LOCAL AGENCIES We have contacted and attempted to utilize the services of at least two (2) available minority/women community organizations, contractors' groups, and/or trade associations at least three (3) days in advance. Some available organizations include but is not limited to the: Western Pennsylvania Minority Supplier Development Council (WPMSDC), African American Chamber of Commerce for Western Pennsylvania, M/W/DBE Governmental Committee, Diversity Business Resource Center (DBRC), National Minority Contractors Association, Allegheny County M/W/DBE Department, Pennsylvania's Department of General Services BMWBO, Small Business Administration, EXICO, and the Government Assistance Coordinating Office (GACO).	b. c.	A copy of your phone log with contacts, dates, and times and A copy of any correspondence, via U. S. mail or email, sent to these agencies and Responses received from representatives of these agencies and A copy of the fax transmission, email or registered mail receipt				
5.	CONTACT FIRMS THAT ARE CURRENTLY CERTIFIED AS MBEs, WBEs, DBEs or 8(A) FIRMS We have delivered written notice to at least three M/W/DBEs, with current certification, for each potential subcontracting opportunity for this contract at least one		A copy of the dated letter/email sent to each EBE firm and A copy of the fax transmission report, email or registered mail receipt for each letter sent				



(1) week in advance of the bid due date. Written notice

Required Documentation Mandatory Good Faith Efforts must include clear information as to the scope of work you want quoted, availability of plans, bonding requirements, and the last date and time for receipt of price quotations. This is the initial attempt. 6. **FOLLOW ATTEMPTS TO POTENTIAL EBE FIRMS** a. A copy of the email and/or fax transmission We have made at least three (3) follow-up attempts within report for each or a copy of your phone log that one (1) week period, by phone, email or fax, to with contacts, dates, times and results and contact each of the M/W/DBE firms that were sent an b. A copy of any correspondence sent initial written request. At least one attempt should be made by phone. A total of 4 attempts are required for mandatory efforts 5 & 6. 7. **REJECTION OF RESPONSIVE M/W/DBE FIRMS** a. A copy of the dated price quotes from all who We have provided a written explanation for rejection of expressed an interest in providing services or any potential EBE subcontractor, including the name of the materials for that portion of the project and firm proposed to be awarded the subcontract for materials b. A list on your letterhead, of all M/W/DBE firms and/or services for that portion of this project. rejected including the contact, phone number, and your reason(s) for rejecting the firm(s) Bidders may be exempted from using subcontractors for services they can and will self-perform for this project. This

Bidders may be exempted from using subcontractors for services they can and will self-perform for this project. This permission **will not** serve as an indication of compliance for the entire bid submission. The determination for compliance will be made based on the remaining scope of work and the successful documentation of all items on the Good Faith Efforts Checklist.

All actions listed above are mandatory and must be completed (except as provided above), and submitted with your bid, in order for your submission to be found compliant with the provisions of the Eligible Business Opportunity Program and therefore responsive. You may submit a narrative in addition to the mandatory actions, but not in lieu of, to explain any extenuating circumstances. For a list of our registered EBE firms feel free to visit our website at:

www.pps.k12.pa.us/mwbe/ (then click on link at left for EBE directory)

My signature on this document verifies that all submissions are true and accurate. By signing this form I fully agree, if awarded this contract, to continue to work to identify subcontract opportunities whereby EBE firms can participate on this project even after contract award. I will document this attempt by providing weekly updates of our continued efforts. I further agree to report any subcontracts that are entered into with new EBEs after contract award.

Full Company Name	Printed Name of Authorized Agent (bidder)		
Title of Authorized Agent	Signature of Authorized Agent		
Date	Area Code/ Phone Number		



SECTION 01010 SUMMARY OF WORK

PART ONE - GENERAL

1.01 <u>Description</u>

- A. Work Included: This Specification describes replacement of the existing electrical distribution system and associated work required by this Contract.
- B. It is intended that all work performed under this contract be performed as described by the Contract Documents and Specifications. The Structured Cabling Contractor, herein referred to as the Contractor, shall furnish all permits, materials, tools, labor, and equipment required to produce the results stated or implied by the Contract Specifications.
- C. Work under this contract shall include, but is not limited to the following:
 - 1. Refer to the General Conditions Instructions to Bidders, regarding approval of manufactures and subcontractors.
 - 2. Install Owner-furnished CAT6 4-pair plenum cable for two (2) horizontal drops to all Wireless Access Point (WAP) locations indicated. Provide termination of all horizontal drops at both ends.
 - 3. Provide raceway (conduit and/or surface metal raceway) system and/or J-hook system for routing of cabling from data rack to WAP location. Raceways / J-hooks to be sized to accommodate quantity of cables required.
 - 4. Install (1) Owner-furnished CAT6 12" patch cable for connection from patch panel to network switch for each data drop (2 data drops per WAP location). Only active drop will be patched to switch.
 - 5. Provide (1) CAT6 48 port patch panel for each existing IDF and MDF rack feeding new data drops.
 - 6. Install Owner-furnished WAPs (All WAPs to be furnished by Owner. Contractor to pick-up WAPs at PPS Central Operations).
 - 7. Install Owner-furnished network switches (All network switches furnished by Owner. Contractor to pick-up switches at PPS Central Operations).
 - 8. Provide end-to-end testing of all cables installed under this Project.
 - 9. Provide touch-up painting where required.

- 10. Work with the Owner's IT department for all scope items involving an interface with the Owner's local area network.
- 11. Provide a complete set of as-built drawings and documentation for the project.
- 12. Provide all miscellaneous items and work as defined herein and as indicated on the Contract Drawings.
- 13. This Project shall include a completion date for the scope of work items. The Contractor shall provide all necessary manpower (including evening and/or multiple shifts and work on weekends and holidays as necessary) to complete the Project by the date defined below and shall include said work as part of the Base Bid and at no additional cost to the Owner.
- D. Site Access Limitations: The Contractor shall keep all areas of the building grounds, driveways, parking lots, etc. free and open for the Owner's use during regular school hours and shall schedule all work to permit daily use of the construction area.
- E. Trades: This is a single prime Contract. "Contractor" as indicated herein shall mean "Structured Cabling Contractor" or "Subcontractor to the Structured Cabling Contractor" as required.

1.02 <u>Drawings and Specifications</u>

- A. Specification Sections: As listed in Document 00003 (Table of Contents)
- B. Job Drawings: As listed in Document 00004 (Drawing Index)

1.03 Quality Assurance

A. The Contractor shall have a minimum of five (5) years experience as a prime Contractor in Structured Cabling construction work.

1.04 Work by Others

A. This Contract is all-inclusive of the work indicated on the Drawings and herein specified, and no separate contract work, supplementary labor or service will be provided by the Owner.

1.05 Schedule of Work

- A. Actual work on the site shall commence within five (5) days of Owner's notice to proceed.
- B. Work shall be completed in compliance with the time limit set by the "Instructions to Bidders".
- C. The normal work hours for access to the construction area during the Contract time period (when school is not in session) will be Monday through Friday, from 7:00 a.m. to 4:00 p.m.,

excluding holidays. When school is in session, all work shall be done after 3:00 p.m. unless noted otherwise. All work outside normal work hours shall be at the discretion of the Owner and must be authorized by the Director or Facilities or his Authorized Representative prior to start of work.

1.06 Conditions

A. All the conditions shown and/or specified, and the incidental conditions in or about the project site and structure, shall be considered mandatory parts of the Bidding and Contract Documents.

1.07 Alterations

- A. In all cases where the installation of new work displaces or must be worked to or into existing construction, such existing work shall be removed, altered, extended or restored by this Contractor in such manner and scope as may be required to complete the project, despite the fact that the existing work to be removed, altered, extended or restored may not be developed or labeled as such on the Drawing(s).
- 1.08 Shop Drawings and/or samples shall be submitted as necessary to establish compliance with the specified requirements.
 - A. Submittals are required for the following Trade Sections:
 - 1. Cable, raceways and boxes.
 - 2. Data communications components.
 - 3. Firestopping.
- 1.09 All submittals must be made to the Architect/Engineer, Quad Three Group, Inc., 3495 Butler Street, Pittsburgh, PA 15201, and must be done in a timely manner, with original signatures on all transmittals, and the required number of copies as specified in the contract documents. Exact contact information will be furnished at the Project kick-off meeting.

END OF SECTION 01010

SECTION 01350 DUST CONTROL

PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 1 GENERAL REQUIREMENTS that are hereby made a part of this Section of the Specifications.
- B. Equality of material, article, assembly or system other than those named or described in this Section shall be determined in accordance with the provisions of the CONTRACT AND GENERAL CONDITIONS.

1.02 SUMMARY

A. Where building related projects involve work that could potentially disturb asbestos or lead based paints, disturbances must be carefully controlled by accredited abatement contractors in accordance with applicable Federal, State and Local rules and regulation, and other applicable Sections in this Contract. The purpose of this procedure is to ensure that nuisance dust, not containing asbestos or lead, is controlled in an effective manner.

B. Section Includes:

- 1. Ensuring any maintenance, repair, construction or renovation activity that impacts building materials or creates dust is performed in such a way as to eliminate, minimize, contain and clean up any and all dust generated by the activity. The Contractor shall provide adequate means for the purpose of preventing dust caused by construction operations from creating a hazard, nuisance and from entering adjacent occupied areas throughout the period of the construction contract. This applies to work preparation, work activities and post-work activities.
- 2. This applies to, but is not limited to, the following types of dust generating activities:
 - a. Disturbing gypsum board, plaster or other surfacing materials.
 - b. Disturbing concrete, brick, masonry or wood containing materials.
 - c. Handing or disturbing fibrous building insulation.
 - d. Generating welding fumes.

PART 2 - EXECUTION

2.01 PRE-WORK ACTIVITIES

- A. The contractor shall ensure the following prior to commencing work:
 - Specific dust generating activities should be reviewed and associated controls shall be developed and addressed in the contractor's site specific project (safety) plan.
 - 2. Workforce, including sub-contractors, must be made aware of the site dust control requirements.
 - 3. Check the various work zones within the building and adjacent areas to confirm the areas are clean.
 - 4. Access to all active work areas shall be restricted to authorized contractors and PPS personnel.
 - 5. Dumpsters for debris shall be located away from operating HVAC outdoor air intakes and exterior doors to occupied areas where possible.
 - 6. For occupied buildings, dust generating activities shall be performed after normal hours of operations, unless prior permission if received from the Owner's Representative.

2.02 WORK ACTIVITIES

- A. Dust producing projects shall be classified as small scale, medium scale or large scale projects, as detailed in paragraph 2.03 Project Classification.
- B. For all dust generating activities, Contractor is required to have a designated site safety personnel to ensure dust control procedures are properly followed.
- C. Any dust related complaints brought to the Contractors attention, must be immediately reported to Owner's Representative, and an incident investigation must be initiated to prevent reoccurrence.
- D. Dust generation shall be eliminated or minimized through the use of proper engineering controls:
 - containment at source such as drilling wall surface through a wet sponge,
 - wet suppression,
 - use of high efficiency particulate air (HEPA) vacuum equipped tools,
 - use of HEPA filtration equipment to capture airborne particulate,
 - negative pressurization of work area relative to the occupied areas using HEPA filter equipped air machines to prevent migration of dust, etc.
- E. Minimize dust generation by using wet methods for cutting or sanding.
- F. Dust generating power tools shall be equipped with HEPA filtered dust collectors where practical. Power tools capable of generating dust without dust collection shall only be used in conjunction with suitable work area containment and with Owner's Representative approval.

- G. Walk-off mats shall be employed for medium and large scale dust generating projects at all worker entrances/exits. Purpose of these mats is to trap dust from equipment and shoes of personnel leaving the dust contaminated work zone. Mats shall be vacuumed daily, or more frequently as necessary, using HEPA filtered vacuums, or replaced to minimize migration of dust from the project site. Mats shall be of sufficient size to place both feet on mat at once.
- H. Eliminate demolition/renovation debris by bagging on site and/or the use of covered wheelbarrows or cart to transport debris to containers outside of the building.
- I. Contractor shall clean areas inside of construction areas daily to minimize dirt and debris from entering occupied spaces in the buildings.
- J. Contractors shall clean occupied areas adjacent to renovation site (such as hallways) immediately if construction debris or soil has caused an area to be notably dirtier than other similarly occupied areas.

2.03 PROJECT CLASSIFICATION

- A. Class A Small Scale Project: (Dust producing activities disturbing less than ten (10) linear feet or ten (10) square feet of material. These are small scale, short duration jobs generating minimal dust.
 - 1. Some examples include:

Installing wires or cables, sanding/repairing small section of wall, cutting out gypsum board to install receptacles, etc.

- 2. Carry out Work as follows:
 - a. Ensure that all furniture, fixtures and belongings in the work area are cleared to a minimum of 5 feet in all directions.
 - b. Restrict access to immediate work area. Keep all doors closed where practical. Post "Dust Hazard Area Do Not Enter" signs at all entrances to work area. In common areas use barrier tape to establish the regulated area.
 - c. Place a drop cloth of polyethylene sheeting immediately underneath the work area extending a minimum of 5 feet in each direction (unless flooring is easily cleanable).
 - d. Cover all air return or exhaust vents if within 5 feet of the work area with polyethylene sheeting and duct tape.
 - e. Complete the task, minimizing dust production, as prescribed in paragraph 2.02 Work Activities.
 - f. When the work is completed, wet-wipe polyethylene sheeting and flooring and if necessary, other areas close by with a damp rag.
 - g. Visually inspect the area for any remaining dust and wet wipe as necessary.

- h. If installed, remove polyethylene sheeting from air return and exhaust vents.
- i. Where practical, transport debris after hours using least congested and most direct routes. If any debris is spilled outside the work area, immediately clean/wet-wipe debris.
- j. Clean all tools and equipment before removal from the work area.
- B. Class B Medium Scale Project (Dust producing activities disturbing greater than ten (10) square feet and less than 300 square feet of material) with anticipated moderate dust levels that are typically one shift or more in duration.
 - 1. Examples include:
 - a. Sanding several sheets of gypsum board.
 - b. Electrical work above ceiling tiles where general debris is known above the ceiling.
 - c. Removing numerous ceiling tiles in an area.
 - d. New wall construction.
 - 2. Carry out the Work as follows:
 - a. Construct air-tight partition barriers, with 6-mil polyethylene sheeting, vinyl tapes, adhesives, as needed, reinforced by the construction of wood board barrier. Overlap and tape full length of joints, and seal off doors. Equip partitions with dustproof doors.
 - b. Complete all items specified under small scale projects.
 - c. While performing the work, limit the dust generated by removing the materials in sections, lightly misting the material as necessary. Debris shall be bagged immediately for disposal. In addition to wet wiping, HEPA filtered vacuum systems shall be employed where practical to limit airborne dust. Where needed, use HEPA filtration equipment to capture airborne dust.
 - d. When the task is completed, HEPA vacuum and/or wet wipe the polyethylene sheeting.
 - e. Prior to removing any temporary wall partitions from floor to ceiling or polyethylene barriers, a final inspection shall be performed by the Contractor's designated site safety personnel to ensure proper clean up has been completed. This inspection shall be documented by the Contractor and made available at the request of the Owner's Representative.
 - f. Establishment of containment may result in the accumulation of dust within the enclosure. As such, the need for decontamination would be greater than for small scale projects.
- C. Class C Large Scale Projects (Dust Producing Activities disturbing greater than 300 square feet of material with anticipated high dust levels and typically involves multiple work shifts.
 - 1. Examples include:
 - a. Major demolition or construction.
 - b. Extensive renovations to wall or ceiling surfaces.

c. Generating significant amounts of concrete dust.

2. Carry out the Work as follows:

- a. Construct air-tight partition barriers, with gypsum wallboard with joints taped on occupied side, and fire-retardant plywood on construction operation side. Construction vestibule and airlock at each entrance through temporary partition with not less than 48 inches between doors. Seal joints, perimeter and openings with plastic sheeting, weather-strip and vinyl tape. Equip partitions with dustproof doors.
- b. Complete all other items as prescribed under the Medium Scale Projects section.
- c. If the work produces dust that cannot be limited by removal in sections or misting and the work area configuration allows, use HEPA filtered negative air units with the intake directly across from the dust generating activity. Exhaust the HEPA unit outside the building. The contained area shall be kept under negative pressure relative to the surrounding areas. A minimum of -0.02 column inches of water pressure differential, relative to outside pressure, shall be maintained within the work area as evidenced by manometer measurements provide by the contractor on a continuous basis.
- d. If using a disposal cart or container to transport debris within the building, ensure the lid is tightly secured and the wheels are clean prior to exiting the work area.
- e. If local source capture is employed (i.e. HEPA filtered power tool) and no significant debris anticipated then treat as a medium scale project.
- f. The contractor must be able to show that the work zone is negatively pressurized in relation to adjacent occupied areas.
- g. Negative air units shall be left operating at the completion of cleanup, for the duration.
- h. Windows, doors, exhaust vents and supply intakes shall be sealed off in dust generating areas. Seals must be employed where necessary to prevent the spread of dust into adjacent areas.

2.04 OUTDOOR WORK WITH HIGH DUST, HAZARDOUS OR ODOROUS MATERIALS NEAR AIR INTAKES

- A. Locate construction equipment, generators, portable toilets, etc., away from air intakes and windows.
- B. Use or application of chemical/odorous materials shall be located at least 25 feet way from all outside air intakes (if feasible).
- C. When work including chemical/odorous materials must be done at or near air intakes, outside air intakes should be minimized or the task should be performed when the building is not occupied (such as evenings or weekends).

D. For long-term projects that use chemicals or produce combustion exhaust near air intakes, charcoal filters in the air handling units serving the occupied space of the building. For projects producing dust near the unit ventilator intakes, install filter media with minimum efficiency reporting value (MERV) of 8 to cover each air intake grills.

2.05 PARTICULATE MONITORING

A. Particulate monitoring may be employed during the handling of waste or contaminated soil or when activities on site generate fugitive dust from exposed waste or contaminated soil. Such activities shall also include demolition, the excavation, grading, or placement of clean fill, and control measures therefore should be considered.

Particulate monitoring may be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM_{10}) with the following minimum performance standards:

Object to be measured: Dust, Mists, Aerosols

Size range: <0.1 to 10 microns

Sensitivity: 0.001 mg/m³ Range: 0.001 to 10 mg/m³

Overall Accuracy: ±10% as compared to gravimetric analysis of stearic

acid or reference dust

Operating Conditions: Temperature: 0 to 40°C

Humidity: 10 to 99% Relative Humidity

Power: Battery operated with a minimum capacity of eight hours

continuous operation

Automatic alarms are required.

Particulate levels shall be monitored immediately downwind at the working site and integrated over a period not to exceed 15 minutes. Consequently, instrumentation shall require necessary averaging hardware to accomplish this task; the P-5 Digital Dust Indicator as manufactured by MDA Scientific, Inc. or similar is appropriate.

- B. The Contractor's Industrial Hygienist (IH) shall establish a site specific dust Action Level where needed. The Action Level should provide a real-time assessment of on-site air quality to assure both health and safety. The owner may also engage their own IH to conduct the particulate monitoring.
- C. The IH shall establish when additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect occupants and other site personnel and reduce the potential for

- contaminant migration. Corrective measures may include implementing additional dust suppression techniques.
- D. If the dust suppression techniques being utilized at the site do not lower particulates to an acceptable level (that is, below the Action Level and no visible dust), work must be suspended until appropriate corrective measures are approved to remedy the situation. At the exterior, the evaluation of weather conditions will be necessary for proper fugitive dust control when extreme wind conditions make dust control ineffective, as a last resort remedial action may need to be suspended.
- E. This provision does not supersede any specific requirements for methods of construction or applicable general conditions set forth in the Contract Articles with added regard to performance obligations of the Contractor.

2.06 NOTIFICATIONS

PPS or the Owner's representative may notify the Contractor verbally and/or in writing of any non-compliance with the foregoing provisions or of any environmentally objectionable acts and corrective actions to be taken. State or local agencies responsible for verification of certain aspects of the environmental protection requirements may notify the Contractor in writing, or through PPS, of any non-compliance with State or Local requirements. The Contractor is to be held responsible and shall immediately take corrective actions. If the Contractor fails or refuses to comply promptly, PPS or the Owner's representative may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor.

END OF SECTION

SECTION 09901 PATCHING AND PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to this section.

1.2 SUMMARY

- A. This Section includes surface preparation, painting, and finishing of exposed interior items and surfaces.
 - 1. Surface preparation, priming, and finish coats specified in this section are in addition to shop priming and surface treatment specified under other sections.
- B. Paint exposed surfaces impacted by demolition or construction, except where a surface or material is specifically indicated not to be painted or is to remain natural. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Architect will select from standard colors or finishes available.
 - 1. Painting includes field painting exposed bare and covered pipes, hangers, and primed metal surfaces of electrical equipment.
- C. Painting is not required on prefinished items, finished metal surfaces, concealed surfaces, operating parts, and labels.
 - 1. Prefinished items not to be painted include the following factory-finished components:
 - a. Acoustic materials.
 - b. Finished electrical equipment.
 - 2. Concealed surfaces not to be painted include wall or ceiling surfaces in the following generally inaccessible areas:
 - a. Furred areas.
 - b. Pipe spaces.
 - c. Rooms not previously painted.
 - 3. Finished metal surfaces not to be painted include:
 - a. Anodized aluminum.
 - b. Stainless steel.
 - c. Chromium plate.

- d. Copper.
- e. Bronze.
- f. Brass.
- 4. Labels: Do not paint over Underwriter's Laboratories, Factory Mutual or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

1.3 DEFINITIONS

A. "Paint" includes coating systems materials, primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate, or finish coats.

1.4 SUBMITTALS

- A. Product Data: Manufacturer's technical information, label analysis, and application instructions for each material proposed for use.
 - 1. List each material and cross-reference the specific coating and finish system and application. Identify each material by the manufacturer's catalog number and general classification.

1.5 QUALITY ASSURANCE

- A. Single-Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer as the finish coats.
- B. Coordination of Work: Review other sections in which primers are provided to ensure compatibility of the total systems for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
 - 1. Notify the Engineer of problems anticipated using the materials specified.
- C. Material Quality: Provide the manufacturer's best quality trade sale paint material of the various coating types specified. Paint material containers not displaying manufacturer's product identification will not be acceptable.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: Subject to compliance with requirements, provide products by the following or alternatives of the quality necessary to meet the Specifications:
 - 1. PPG.

2. Sherwin Williams

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions under which painting will be performed for compliance with requirements for application of paint. Do not begin paint application until unsatisfactory conditions have been corrected.
 - 1. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.

3.2 PREPARATION

- A. General Procedures: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items in place that are not to be painted, or provide surface-applied protection prior to surface preparation and painting. Remove these items if necessary for complete painting of the items and adjacent surfaces. Following completion of painting operations in each space or area, have items reinstalled by workers skilled in the trades involved.
 - 1. Clean surfaces before applying paint or surface treatments. Remove oil and grease prior to cleaning. Schedule cleaning and painting so that dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- B. Surface Preparation: Clean and prepare surfaces to be painted in accordance with the manufacturer's instructions for each particular substrate condition and as specified.
 - 1. Provide barrier coats over incompatible primers or remove and reprime. Notify Architect in writing of problems anticipated with using the specified finish-coat material with substrates primed by others.
 - 2. Ferrous Metals: Clean nongalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council.
 - a. Blast steel surfaces clean as recommended by the paint system manufacturer and in accordance with requirements of SSPC specification SSPC-SP 10.
 - b. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
 - c. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by the paint manufacturer, and touch up with the same primer as the shop coat.
- C. Materials Preparation: Carefully mix and prepare paint materials in accordance with manufacturer's directions.

- 1. Maintain containers used in mixing and application of paint in a clean condition, free of foreign materials and residue.
- 2. Stir material before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.
- 3. Use only thinners approved by the paint manufacturer, and only within recommended limits.
- D. Tinting: Tint each undercoat a lighter shade to facilitate identification of each coat where multiple coats of the same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.
- E. Patching: Patch existing surfaces impacted during demolition and construction with durable seams that are as invisible as possible. Comply with specified tolerances.
 - 1. Inspect and test patched areas to demonstrate integrity of the installation.
 - 2. 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.
 - 3. Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing the patch after the area has received primer and second coat.

3.3 APPLICATION

- A. Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.
- B. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 - 1. Paint colors, surface treatments, and finishes shall match surrounding surfaces unless noted otherwise. The Architect reserves the right to choose as many colors in each room or area as he feel is necessary to achieve his design concept.
 - 2. Provide finish coats that are compatible with primers used.
 - 3. The number of coats and film thickness required is the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. Sand between applications where sanding is required to produce an even smooth surface in accordance with the manufacturer's directions.
 - 4. Apply additional coats when undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance. Give special attention to ensure that surfaces, including edges, corners, crevices, welds, and exposed fasteners, receive a dry film thickness equivalent to that of flat surfaces.
 - 5. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convector covers, covers for finned tube radiation, grilles, and similar components are in place. Extend coatings in these areas as required to maintain

- the system integrity and provide desired protection.
- 6. Omit primer on metal surfaces that have been shop-primed and touch up painted.
- C. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
 - 1. Allow sufficient time between successive coats to permit proper drying. Do not recoat until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure and where application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.
- D. Minimum Coating Thickness: Apply materials at not less than the manufacturer's recommended spreading rate. Provide a total dry film thickness of the entire system as recommended by the manufacturer.
- E. Electrical Work: Painting electrical work is limited to items exposed other the exterior of buildings and in finished (occupied) spaces and corridors. Painting is not required in concealed spaces or equipment rooms.
- F. Electrical items to be painted include but are not limited to:
 - 1. Conduit and fittings.
- G. Prime Coats: Before application of finish coats, apply a prime coat of material as recommended by the manufacturer to material that is required to be painted or finished and has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to assure a finish coat with no burn through or other defects due to insufficient sealing.
- H. Pigmented (Opaque) Finishes: Completely cover to provide an opaque, smooth surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- I. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not in compliance with specified requirements.

3.4 CLEANING

I. Upon completion of painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping, using care not to scratch or damage adjacent finished surfaces.

3.5 PROTECTION

A. Protect work of other trades, whether to be painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Architect.

- B. Provide "wet paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations.
 - 1. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 INTERIOR PAINT SCHEDULE

- A. General: Provide the following paint systems for the various substrates, as indicated.
- B. Gypsum Drywall, Plaster And Concrete Masonry Systems:
 - 1. Low Luster Acrylic Latex Enamel Finish: 2 coats.
 - a. Primer: Latex Interior White Primer.
 - b. Finish Coat: Low Luster Acrylic Latex Interior Acrylic Enamel Paint.

C. Ferrous Metal:

- 1. Semigloss Enamel Finish: 2 coats over primer with total dry film thickness not less than 2.5 mils.
 - a. Primer: Synthetic Rust-Inhibiting Primer.
 - b. Undercoat: Interior Enamel Undercoat.
 - c. Finish Coat: Interior Semigloss Odorless Alkyd Enamel.
- 2. Full-Gloss Enamel Finish: 2 coats over primer with total dry film thickness not less than 2.5 mils.
 - a. Primer: Synthetic Rust-Inhibiting Primer.
 - b. Undercoat: Interior Enamel Undercoat.
 - c. Finish Coat: Exterior Alkyd Gloss Enamel.

END OF SECTION

SECTION 16001 SUPPLEMENTARY CONDITIONS

PART ONE - GENERAL

1.01 Drawing(s)

- A. The Drawing(s) shows the general arrangement and extent of the work only. Determine the exact location and arrangement of all parts as the work progresses.
- B. In all details, the work shall be subject to the Owner's direction and approval. All work shall conform to its surroundings in best possible manner.

1.02 <u>Work</u>

- A. All work shown shall be new work provided under this Contract except that work labeled "present to remain" and that equipment labeled "to be furnished by others, but installed by the Contractor". Refer to applicable symbols on the drawings.
- B. For the purposes of this Contract, where the term "Electrical Contractor" is used, it shall mean the Prime "Structured Cabling Contractor".

1.03 Materials

A. All materials and equipment shall be produced by manufacturers of recognized reputation and have approval of "Underwriters' Laboratories". All new equipment shall show such labels when applicable.

1.04 Materials and Equipment

- A. The Contractor shall refer to the General Conditions Instructions to Bidders, regarding approval of manufacturers and subcontractors.
- B. Products are generally specified by ASTM or other reference standard, and/or by manufacturer's name and model number of trade name. When specified only by reference standard, the Contractor may select any product meeting this standard, by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the Contractor will use any product and manufacturer combination listed. When only one product and manufacturer is specified, this is the basis of the Contract, without substitution or exception, unless otherwise indicated.
- C. <u>Materials/Subcontractor Listing Form.</u> The Contractor shall complete the Materials/Subcontractors Listing Form indicating the materials he intends to provide. The Owner shall assume that the Contractor intends to furnish specified or indicated equipment and materials if the form is not completed.

1.05 Cutting, Patching, Repairing and Painting

A. Perform required cutting, drilling, and chasing to receive new raceways. In general, perform all patching and repairing necessary to restore to original condition, all surfaces that may become damaged during the installation. All work shall be executed by persons

- normally employed in the type of work to which they are assigned. Painting of finished surfaces will be done by the Contractor, unless noted otherwise.
- B. Paint all structural steel and all steel parts used for hangers and for supporting conduits or junction boxes with one (1) coat of "red" oxide primer before erection. After steel is in place, paint again with one (1) coat of "light grey" paint.
- C. In finished areas clean all exposed surface EMT, RGS and fittings, panelboard covers and trims etc., and paint two (2) coats of the best grade of oxide and oil paint, tinted to match same with the surrounding finish. Touch up any factory finishes for equipment furnished under this contract. Do not paint surface metal raceways (SMR).
- D. The Contractor is responsible for all cutting, patching, plastering and painting associated with the new installation.
- E. Where recessed fixtures are removed and replaced with new surface fixtures, install new junction boxes flush with the surface prior to the new plaster installation.

1.06 Clean Up

- A. Upon completion of the Contract, remove all workmen's appurtenances from the premises. Clean the premises of all debris caused by the electrical work and leave the installation clean and in a first-class operating condition.
- B. All discarded material shall be removed daily to the outside storage.

1.07 Storage of Material and Equipment

- A. Store electrical materials and equipment in a location approved by the Owner.
- B. Be responsible for the condition of all materials and equipment employed in the installation until final acceptance by the Owner.
- C. Be responsible for the replacement of all damaged or defective work, materials or equipment. Do not install sensitive or delicate equipment until major construction work is completed.
- D. Observe and conform to all applicable safety regulations required by the Owner and O.S.H.A.

1.08 Interpretation and Conflicts

- A. Bring any discrepancies determined or omissions found lacking in the Contract Documents to the Owner's attention before submitting the bid. After award of Contract, the interpretation of any conflict will be made by the Owner.
- B. The failure to question any controversial item will constitute acceptance by the Bidder who shall execute same to the satisfaction of the Owner after being awarded the Contract.
- C. If mention has been omitted pertaining to details, items or related accessories required for the completion of any electrical system, it is understood such items and accessories are

included in the Contract. After the Contract is awarded, claims based on insufficient data or incorrectly assumed conditions, or claims based on misunderstanding the nature of the work, will not be recognized.

1.09 Marking and Identification

- A. Clearly mark all new panels, circuit breakers, contactors, control devices and miscellaneous electrical apparatus for easy identification and for safety.
- B. Install nameplates which shall consist of a "white" plastic sheet laminated between two "black" sheets. Engrave through the top "black" layer to expose the "white". Use 3/8" high lettering. Punched tape is not acceptable as a marking device.
- C. Typewrite each circuit directory on a suitable card which shall fit into the holder in the panelboard door.
- D. Nameplates will be required for all panels, controls and switches which are out of sight of the items they control and elsewhere as directed by the Owner.
- 1.10 Removal of Existing Wiring, Devices, Equipment, Etc.
- A. Perform demolition in sequence required by phasing of renovation. See "Schedule of Work".
- B. De-energize, disconnect and remove all exposed raceways, devices, etc., on floors, walls and ceiling not indicated for re-use and raceway in partitions to be demolished.
- C. Remove wiring in existing raceways not re-used in the new system layout.
- D. Restore any existing circuit whose continuity has been interrupted by these alterations, even though it may not be indicated, and provide all necessary materials and labor to accomplish this.
- E. Remove, clean and store prior to re-use items indicated on the Drawing(s) to be relocated.
- F. Existing devices not shown or not indicated to be removed or replace, shall remain as is. If required, modify existing wiring to suit the new layout.

1.11 Location of Equipment and Raceway

- A. The Drawings are diagrammatic and indicate the general arrangement of equipment and raceways to be installed.
- B. Carefully investigate the structural and finished conditions of work accordingly.
- C. Actual locations of all equipment, junction boxes, conduit runs, etc., shall be determined at the site. Install all items to meet the various conditions in the building and make deviations necessary without additional cost.
- D. The arrangement of branch circuit runs to fixtures, receptacles, wall switches, as shown on the Drawings, are in accordance with field investigations made. Any variations required for

final arrangement shall be made by the Contractor, conforming to good installation practice. All conduit and wiring raceway extensions, including outlet boxes shall be included in the Contractor's work.

1.12 Wiring Methods

- A. All wire and cable shall be installed in new or existing raceways as indicated on the Drawing(s) unless noted otherwise.
- B. New raceways shall be installed as shown on the Drawing(s) or as specified.
- C. Existing raceways may be reused if indicated on the Drawing(s) as such.
- D. In finished areas, where raceways cannot be installed concealed, use surface metal raceways on existing walls unless otherwise noted.
- E. In unfinished areas, crawl spaces, shops, and Mechanical areas, and for concealed work, raceways shall be EMT, or RGS as indicated on the Drawing and run exposed parallel to the building lines.
- F. Metal clad cable may be used above accessible finished ceilings and in cavities of drywall partitions. Support cables from building structure. Do not lay cables on ceilings.
- G. The feasibility of removing and reinstalling wiring in existing raceways, where indicated, is not guaranteed. The Bidder shall make such investigation as he deems necessary, leaving all items in the same condition as found and shall include such allowance as he feels necessary for the installation of new exposed raceways to replace unusable raceways.
- H. Existing raceways, not required to be removed under demolition or removal, may be reused, subject to approval of the Owner. Raceways shall be modified as required to suit the new layout.
- I. Fasten new conduits to structure above suspended ceilings **DO NOT LAY** on suspended ceilings.

1.13 Temporary Light and Power

- A. Provide adequate general lighting and power outlets, as defined in the following, for the proper conduct of all the Contractor's work. Include all materials and lamps. Provide all maintenance, servicing, operating and supervision of these temporary facilities.
- B. Provide temporary services from the Owner's present services and distribution facilities in the building to provide the following:
 - 1. 120 volt, 15-amp receptacles, located such that a 50 foot extension cord will provide access from any area in the building.
 - 2. Maintain lighting levels and other requirements of O.S.H.A. Safety and Health Regulations for construction (latest revision).

- C. Existing lighting fixtures, outlets and branch circuit wiring may be used as supplement requirements as phasing of construction will permit.
- D. If any temporary electrical services or facilities other than those mentioned above are required, the Contractor requiring same shall pay the Electrical Contractor for the cost of such installation.
- E. If any Contractor does any work outside of the Electrician's regular working hours which requires the services of a Temporary Light Man, that Contractor shall pay the Electrical Contractor the cost of such Temporary Light Man.
- F. When temporary electrical wiring and service is no longer required, they shall be removed by the Contractor and he shall restore to original condition any part or parts of the building disturbed or damaged by the temporary installation.

1.14 Ordinances and Codes

A. Nothing contained in the Specifications or shown on the Drawing(s) shall be so construed as to conflict with any local, municipal or state laws and regulations, governing the installation of electrical or other contract work, and all such ordinances and regulations, including the latest rules of the National Electrical Code, the rules of the Inspection Department of the City of Pittsburgh, the National Electric Safety Code, and the Service Installation Rules of the Duquesne Light Company, are hereby incorporated and made a part of these Specifications, and shall be satisfied by the Contractor at no additional expense to the Owner. The Contractor shall secure City of Pittsburgh permits and inspection certificates for submission to the Owner.

1.15 Record Drawing(s)

- A. This Contractor shall keep a separate "record" set of prints of the Contract Drawings on the job. He shall neatly mark on the "record" set any and all installation changes. This "record" set shall be kept up to date through the conclusion of the Contract.
- B. The marking of this "record" set shall show all changes, as well as the actual plan location and elevation of all underground and concealed conduit. Drawing shall be delivered to the Owner before application for final payment.
- C. Engineer shall not be responsible for the accuracy of the record drawings, nor for any errors or omissions which may appear on the record drawings.

1.16 Demolition and Salvage

- A. The Contractor shall disconnect and remove all existing electrical equipment, lighting fixtures, exposed conduits, and conductors unless otherwise indicated, as required in the indicated areas. All concealed conduits to remain shall have the conductors removed therefrom. Exact scope of work shall be verified at the job site prior to bid and all costs shall be included in Contractor's bid.
- B. The Owner shall have the option to retain all electrical equipment, lighting fixtures, etc., in the condition found. All equipment, fixtures, etc., not retained by the Owner, shall be removed from the site. Deliver salvaged items boxed and tagged to Pittsburgh Public

- School Service Center, S. 13th and Muriel Streets, Pittsburgh, PA 15203, or as directed at site by Owner's Representative.
- C. Reconnect existing items that remain in use. Provide all materials and labor required to retain continuity of existing circuits that are disrupted by these alterations even though not indicated on the drawings.

1.17 Submittals

- A. Provide shop drawings as required in the Owner's General Conditions and as indicated below. Any deviation in items 'B' through 'J' shall result in rejection of submittals.
- B. Provide transmittal with each project (no multiple projects on one transmittal).
- C. Provide shop drawings in a bound brochure format, one for each set.
- D. Label cover of each brochure to identify project name, number and location.
- E. Shop drawings sheet shall be identified by letter or symbol. Highlight in Yellow: model number, corresponding pertinent data, voltage, etc., with other options required.
- F. Submittals shall be classified by groups typically such as:
 - 1. Lighting Equipment,
 - 2. Telecommunications
 - 3. Switchgear, etc.
- G. Submittals in each group shall be complete, no partials permitted.
- H. Shop drawings shall be checked, corrected and approved by the Contractor before being submitted to the Owner for approval. Before submitting shop drawings, the Contractor shall carefully examine them and shall certify by his stamp that to the best of his knowledge they comply with the Contract Documents. Where the shop drawings deviate from the requirements of the Contract Documents, the Contractor shall (1) correct the shop drawings as required, or, (2) where the deviations do not necessarily require correction, notify the Owner/Consultant of the deviations.
- I. Any required resubmittal will be evaluated and charged to the contractor at the normal hourly billing rate for the Design Engineer.
- J. Submit to the Engineer/Owner eight (8) sets of shop drawings or otherwise noted for the following equipment and obtain approval before ordering materials.
 - 1. Telecommunications devices and cables
 - 2. Wiring devices
 - 3. Raceways and boxes

1.18 <u>Standards of Material and Workmanship</u>

- A. All work shall be executed by persons skilled in the work to which they are assigned. This shall include plastering and painting.
- B. All materials and equipment in the work shall be new and of first quality, produced by manufacturers of recognized reputation for each line of material and equipment. The fact that materials or equipment offered are recently developed and untried may be sufficient justification for their rejection.

1.19 Protection of Work and Equipment

- A. This Contractor shall use the required safety precautions, methods and skills to prevent possible kindling of fires. He shall use fireproof blankets or other approved materials when cutting with a torch.
- B. When this Contractor is working in areas in which the building occupants have access, he shall provide suitable barricades around his operation.

1.20 Tests and Instructions

- A. Upon completion of the work, and as a condition for acceptance, test all new and existing systems in the presence of the Owner/Engineer.
- B. Operate each fixture, switch, and convenience outlet, to test for proper function and control.
- C. Correct all failures or improper conditions.
- D. Demonstrate to the Owner the proper care and maintenance of all new electrical items.

1.21 Guarantee

- A. The Contractor and his surety shall guarantee in writing for a period of two (2) years from the date of final acceptance that all materials, equipment and labor furnished by him are free from defects.
- B. The Contractor shall further guarantee that if any piece of material or equipment is found to be defective within the guarantee period because of faulty manufacture or faulty installation, in the opinion of the Owner, he will replace and install such material or equipment without any further expense to the Owner.

End of Section

SECTION 16110 RACEWAYS

PART ONE - GENERAL

1.01 <u>Description</u>

A. <u>Work Included</u>: Provide raceways of the types or forms as specified and as required to complete the new systems.

1.02 Product Handling

A. Each length of conduit must bear the manufacturer's name and date, and Underwriters' Laboratory label.

PART TWO - PRODUCTS

2.01 Materials

A. Conduit:

- 1. <u>Rigid Steel Galvanized (RSG)</u>: Galvanized standard weight, mild steel tubing, smooth inside and outside; minimum size 3/4".
- 2. <u>Electrical Metallic Tubing (EMT)</u>: Electro-galvanized, acid-proof and rust-proof finish; minimum size 3/4".
- 3. <u>Polyvinyl Chloride (PVC)</u>: Schedule 40 plastic conduit in 4" concrete encasement for underground only; minimum size 2".
- 4. Flexible Steel Conduit (FSC): "Greenfield", minimum size 1/2" or as indicated.
- 5. <u>Liquid-Tight Flexible Steel Conduit (LFC)</u>: "Sealtite", or approved equal; minimum size 1/2" or as indicated.

B. Surface Metal Raceways (SMR):

- 1. These raceways shall be used in finished areas. Size and numbers as shown are those of "Wiremold".
- 2. Surface metal raceway (SMR) shall be 700,2100,2400, G3000, G4000, G6000 series by Wiremold Company. Provide and install SMR and appropriate fittings to provide a safe and complete installation. Provide all fittings including, but not limited to, bushings to prevent wire abrasion, single and multiple gang boxes to accommodate device installation for both new work and extension of existing work, adapters from conduit to raceway, transitions to both larger and smaller SMR, 90 degree elbows, tees, fixture boxes and flexible sections to allow uninterrupted continuation of raceway along semi-circular or curved surfaces.
- 3. Surface metal raceways (SMR) colors shall be factory applied baked enamel;

- a. 700 ivory color.
- b. 2100 ivory color.
- c. 2400 ivory color.
- d. 3000 ivory color.
- e. 4000 ivory color.
- f. 6000 ivory color.
- 4. Verify color with project inspector. Indicate color furnished on Materials/Sub Contractor listing form. Color selection shall be confirmed by the Pittsburgh Public Schools inspector.
- 5. Unless otherwise indicated, provide surface metal raceways in accordance with wire requirements. Minimum 700 SMR shall be installed.

C. Fittings:

- 1. Conduit fittings and boxes for exposed work shall be cadmium-plated, cast malleable iron.
- 2. Couplings and connectors for RGS shall be threaded galvanized type.
- 3. Couplings and connectors for EMT shall be watertight compression-type, with insulated throats.
- 4. Locknuts 2" and smaller shall be standard weight type galvanized. Locknuts 3-1/2" and larger shall be plated cast metal.
- 5. Bushing 1" and smaller shall be plated malleable iron. Bushings 1-1/4" and larger shall be malleable iron with insulated inserts such as OZ-"B".
- 6. Connectors for LFC shall be liquid-tight with insulated throats.
- 7. Connectors for FSC shall be squeeze-type with insulated throats.

D. Cable Supports:

1. Data cabling in not run in raceways shall be supported by wide base cable supports that meet the requirements of EIA/TIA structured cable systems. Place supports at intervals not exceeding 60".

PART THREE - EXECUTION

3.01 <u>General</u> - Contractor raceway installation methods for:

- A. <u>Concealed Installation</u>: Conceal all raceways, except surface metal raceway in breathing wall spaces, floor, ceilings, walls, partition, etc., in such manner as not to interfere with structure of the building.
 - 1. Maximum conduit size imbedded in concrete floor slabs or walls shall be 1 inch diameter.
 - 2. Cover for conduits in cinder fill shall be concrete encasement of approved thickness.
 - 3. No horizontal raceways in solid walls or partitions.
 - 4. No raceways in spaces intended for lockers or other built-in equipment.
- B. <u>Surface Installation</u>: Run conduits and surface metal raceways only where shown or as indicated.
 - 1. Install all surface raceways parallel to the wall or ceiling lines.
 - 2. Route conduits in manner to avoid steam or hot water piping.
 - 3. Maintain minimum separation of 6" at unavoidable crossings and provide magnesia covering of 2" thickness between piping and conduit.
 - 4. Where conditions necessitate pulling of wires, provide mogul condulet body of screw cover box of sufficient size.
 - 5. Install surface raceways as tight to ceiling as possible.

C. Installation Requirements:

- 1. Run raceways continuous from outlet to outlet, from outlet to cabinet, junction box or pull box.
- 2. Enter and secure raceways in such a manner to completely enclose each wiring system and ground enclosure continuously from service entrance to all outlets.
- 3. Cut conduit to the proper length so that ends will fit into the outlet boxes without running threads.
- 4. Provide a conduit bushing and locknut on the inside and a locknut on outside where conduits terminate in distribution cabinets and pull boxes, outlet boxes, junction boxes, etc. Use a conduit reducer bushings at all points in which conduits are installed in knockouts of larger size.

5. Bends in Conduit:

a. Make field bends on 3/4" standard conduit, not less that 6" inside radius, keeping free of dents or flattening.

- b. Use manufactured elbows for shorter bends and also bends in 1" and larger conduit. A one-shot bender with proper shoes may be used.
- c. Use no more than four (4) 90 degree bends, or equivalent in any run of conduit.

6. Cutting of Conduit:

- a. Cut with a hacksaw to secure ends. Do not use a pipe cutter.
- b. Ream ends after threading and before installing conduits.
- c. Perform conduit cutting, threading or other pipe operations in the Basement of the building or as directed, <u>never</u> in finished rooms or corridors, etc.
- 7. <u>Clear Conduit</u>: Fish or blow through every run of conduit before plastering to guard against obstructions or omissions and plug ends carefully with tight fitting wood plugs or bushcaps to avoid filling with plaster, dust, etc. and to avoid the possibility of condensation.
- 8. <u>Fish Wire</u>: Leave No. 12 galvanized iron or steel fish wire in all raceways where permanent wiring is not being installed under contract, including conduits of the local telephone company and install No. 8 wire in conduits for public service.
- 9. <u>Size Conduit</u>: Install conduit making the total cross-sectional area of each raceway of sufficient size to permit ready installation or withdrawal of the conductors required therein and to permit dissipation of the heat generated without injury to the insulation of the conductors.

D. Connections:

- 1. Install grounding wedges with all conduit bushings used in the service equipment using approved grounding fittings to ground the service equipment to the cold water piping system and for water meter jumping.
- 2. Assemble conduit with threaded couplings and screw conduit tight until ends butt in the center of the coupling. On all surface conduit work, use cast metallic conduit fittings of suitable design and size with threaded conduit entrance hubs.
- 3. Fasten conduits with malleable straps.

End of Section

SECTION 16134 OUTLET BOXES

PART ONE - GENERAL

1.01 <u>Description</u>

A. <u>Work Included</u>: Provide metal outlet boxes of such form and dimensions best adapted to specified locations, use and number, size and arrangement of conduits connecting thereto. Boxes shall conform to requirements of NEC Article 370. The Owner reserves the right, without extra cost, to change the exact location of any outlet before it is installed, to any location within 25 feet of that shown.

PART TWO - PRODUCTS

2.01 Materials

- A. Boxes: Sheet steel, not less than No. 14 U.S.S. gauge, pressed steel, galvanized.
 - 1. <u>Fixtures</u>: Outlet boxes, ceiling or wall at concealed conduit, 4" octagonal or 4-11/16" square boxes, minimum 1-1/2" deep, using 3/8" fixture studs.
 - 2. <u>Wall Switches</u>: Outlet box, "gang" type, 4-1/2" wide.
 - 3. Receptacles: Outlet box, "gang" type, 4-1/2" wide.
 - 4. <u>In Concrete</u>: 4" octagonal box of depth from 2-1/2" to 6" to allow conduits to enter at sides.
 - 5. Exterior: Cast-aluminum or cast-steel box.
 - 6. <u>Exposed EMT or RGS</u>: Cast-iron or cast-aluminum boxes, complete with matching cover plates, shall be used in connection with exposed conduit work. Boxes shall be F.S. condulet type, as manufactured by Crouse-Hinds, Appleton, or approved equal.
 - 7. <u>Exposed SMR in Finished Areas</u>: Use SMR Boxes as manufactured by Wiremold. Gang sizes as required.
 - 8. <u>Wiring Devices Exposed EMT or RGS</u>: Cast-iron or cast-aluminum boxes, complete with matching cover plates, shall be used in connection with exposed conduit work. Boxes shall be F.S. condulet type, as manufactured by Crouse-Hinds, Appleton, or approved equal.
- B. <u>Large Capacity Boxes</u>: Outlet boxes, except those for wall switches, with more than six (6) No. 12, or five (5) No. 10 wires passing through or terminating in the box, shall be at least 4-11/16" square, and 2-1/8" deep, or may be concrete type box at least 1-1/2" deep if conditions permit.

- C. <u>Plaster Covers</u>: Raised plaster cover at all outlet boxes in concealed conduit work at plastered surfaces. For wall switches, provide plaster covers of gang-type, oversized to take over-sized "gang" boxes.
- D. <u>Masonry, Tile and Marble Walls</u>: "Sectional Switch" boxes or long machine screws are not approved. Use boxes of "GW" Series.

E. Floor Boxes:

- 1. Adjustable watertight floor box with appropriate accessories.
 - a. Single Gang Box: Brass cover plate and rubber gasket.
 - b. <u>Double Gang Boxes</u>: Brass cover plate and rubber gasket.
 - c. <u>Box with Convenience Outlet indicated</u>: Brass nozzle containing duplex receptacle.
 - d. <u>Box with Signal or Telephone Outlet</u>: Brass nozzle.
- 2. Carpet flanges for boxes installed at locations where carpet is installed.

F. Plates:

- 1. Blank or Bush Hole Plates: Provide .040-gauge stainless steel.
- 2. <u>Blank Plates</u>: Blank plates shall be provided at all outlets not receiving switches, receptacles, fixtures, or other devices.
- 3. <u>Flush Outlets</u>: Provide each single-gang tumbler switch, receptacle or other device with a .040 gauge stainless steel flush plate, and each multiple gang tumbler switches, receptacles, or other devices with .060 gauge stainless steel plate.
- 4. <u>Surface Outlets</u>: Provide switches, receptacles or other devices installed in surface conduit fittings with .060 gauge sheet steel condulet type plates having rounded corners. Plates shall be as made by Appleton, Crouse-Hinds, or approved equal.

PART THREE - EXECUTION

3.01 General

- A. <u>Outlet Boxes</u>: Permit no open holes other than for entering conduits. Use approved knockout closers.
- B. <u>Wall Switches</u>: Where ganged, use box one gang larger than required by indicated number of switches. Install switch leg raceway entrance in the top, one at each end, in order to take advantage of additional wire space provided.
- C. <u>Outside Fixtures</u>: Where necessary, provide an outlet box inside of building to serve as a pull box for the interior box. Provide box on inside wall with suitable plate finished to

match neighboring hardware. Provide suitable support for fixture, which may be part of box or attached thereto, as directed.

D. <u>Outlets in Masonry, Tile or Marble Walls</u>: Install flush with surface. Properly arrange work so that others may neatly trim the wall facing material, to the end that flush plates shall entirely cover the opening and yet be secured to the box cover in an approved manner.

3.02 Location of Outlets

- A. Ceiling outlet boxes shown located on a steel beam, shall be moved to an approved point near the location shown, if possible. Where necessary to mount box on beam, bend conduit close to and down around the steel beam, entering the box from the side. Secure box on underside of beam with machine screws, or provide ceiling-type box of sufficient size to protect beyond each edge of steel beam and conduit brought in back of the box.
- B. <u>Improperly Located Outlets</u>: If an outlet is installed at location not approved, it shall be relocated where directed at the expense of the Contractor.

C. Standard Heights:

1. Unless otherwise called for, locate outlet boxes in walls with center line at the following standard heights above the finished floor line:

Wall Switches
Standard Convenience Outlets in Boiler, Coal, Switchboard and Transformer Rooms, and all other Service Rooms
Standard Convenience Outlets Elsewhere
Combination Convenience Outlets
Special Convenience Outlets
Special Purpose Outlets
Hotplate Outlets
Private and Public Telephone (Desk Type) 1'-6"
Program Clock or Instrument
Program Bells in Play Rooms
Program Bells Elsewhere9'-0"*
Fire Alarm Bell(As per A.D.A., N.F.P.A. Requirements)As Directed
Fire Alarm Audible/Visual Devices(As per A.D.A., N.F.P.A. Requirements)

Fire Alarm Sending Stations	3'-6'
Electric Clocks in Play Room	12'-0"
Electric Clocks Elsewhere	8'-6"
Special Signal Outlets and Pushbutton Outlets	3'-6'
Motor Control Equipment	4'-6'
Panic Switches	3"-6'
If standard heights must be changed to most building conditi	ione the Contractor

- 2. If standard heights must be changed to meet building conditions, the Contractor shall use new dimensions as directed.
- 3. *Where new ceilings are installed equipment indicated by asterisk shall be installed 1'-0" below finished ceiling.

End of Section

SECTION 16190 SUPPORTING DEVICES

PART ONE - GENERAL

1.01 Description

A. <u>Work Included</u>: Provide approved anchoring, supports, shelves, racking and brackets for all raceways and equipment provided under this contract.

PART TWO - PRODUCTS

2.01 Materials

- A. Fastenings and attachments such as screws, bolts, nuts, washers, etc., shall be non-ferrous silicon bronze, galvanized or cadmium-plate steel. Where not obtainable in non-ferrous metals or in steel with protective coating, supports shall be painted with rust-inhibiting paint. Material shall be protected against deterioration from age, weather and dampness. Screws, bolts, nuts, etc., subject to weather shall be stainless steel.
- B. Channel bars and rods shall be Kindorf Galv-Krom, or approved equal.
- C. Lead alloy expansion sleeves shall be Ackerman-Johnson, or approved equal.

PART THREE - EXECUTION

3.01 General

- A. Holes shall be drilled only with carbon-type drill bits in masonry, tile or marble walls. Holes in hollow masonry or plaster walls for acceptance of hangers shall be drilled. In no case shall star-type drills be used. Wooden, fiber or plastic plugs will not be permitted.
- B. Lighting fixtures, outlet boxes, and equipment shall be supported adequately by means of 3/8" diameter long winged toggle bolts. On solid walls, use expansion sleeves. Outlet boxes and equipment shall be similarly mounted.
- C. Raceways where suspended shall be securely supported by channel bars and rods as made by Midland Ross Corporation, or approved equal. Where strap fasteners are used, only malleable iron pipe straps will be permitted. In no case may raceways be supported by bailing wire, perforated straps, spring steel, or plastic type straps.
- D. Equipment shall be supported with channel-type supports of adequate strength and rigidity.

End of Section

SECTION 16191 FIRE STOPS AND SEALS

PART ONE - GENERAL

1.01 Description

A. Work Included: Provide through penetration fire stop systems to prevent the spread of fire through openings made in fire-rated walls or floors to accommodate through penetrating items such as conduit, busway, cables and cable tray. Fire stop shall restore floor and wall to original fire rated integrity and shall be waterproof.

PART TWO - MATERIALS

A. Standards

The fire stop systems and products shall have been tested in accordance with the procedures of UL 1479 (ASTM E814-81) and material shall be UL classified as Fill, Void or Cavity Materials for use in through penetration fire stops. The fire stop system shall comply with NEC Paragraph 300-21. All work shall comply with NFPA 101-Life Safety Code, latest edition.

B. <u>Manufacturer</u> – Nelson Electric, 3M Company, AD Fire Protection System and IPC Flame Safe-International Protection.

C. <u>Materials</u>

- 1. Putty Flameseal Putty #AA423.
- 2. Fiber Ceramic Fiber #AA401 (10 lb. box) or #AA417 (2 lb. bag).
- Oversized Openings:
- 4. Wall Use Ceramic Board #AA402 (1" x 18" x 12") or #AA403 (1" x 36" x 48").
- 5. Floor Use Support Wire #AA404.

PART THREE - INSTALLATION

A. Ratings

The Contractor shall be responsible for verifying the fire rating of all walls and floors having electrical penetrations.

B. Locations

The following locations within the building require the installation of a fire stop system to maintain the fire resistance rating of the penetrated barrier:

- 1. All conduit through penetrations of fire-rated walls.
- 2. All conduit through penetrations of floors.

- C. Flameseal installations shall be in accordance with manufacturer installation details for normal and oversized openings.
- D. Contractor shall secure installation details from manufacturer.

End of Section

SECTION 16790 DATA COMMUNICATION CABLING AND DEVICES

PART ONE - GENERAL

1.1 STIPULATIONS

A. The specifications sections "General Conditions", "Summary of Work" and "Supplementary Conditions" forms a part of this Section by this reference thereto and shall have the same force and affects as if printed herewith in full.

1.2 SUMMARY

A. This Section includes wire, cable, connecting devices, installation, and testing for wiring systems to be used as signal pathways for high-speed data and video transmission for security system equipment. The intent is to provide a complete data and video infrastructure, with all equipment and devices, whether specifically specified or not, for a fully operational system.

1.3 DEFINITIONS

- A. EMI: Electromagnetic interference.
- B. IDC: Insulation displacement connector.
- C. IDF: Intermediate Distribution Frame
- D. LAN: Local area network.
- E. MDF: Main Distribution Frame
- F. PVC: Polyvinyl chloride.
- G. UTP: Unshielded twisted pair.

1.4 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification.
- B. Product Data: Include data on features, ratings, and performance for each component specified. This includes evidence of compliance of each component as indicated in the "Quality Assurance" article.
- C. Shop Drawings: Include dimensioned plan and elevation views of each individual component. Show equipment assemblies, method of field assembly, workspace requirements, and access for cable connections.

- 1. System labeling schedules, including electronic copy of labeling schedules, as specified in Part 3, in software and format selected by Owner.
- 2. Wiring diagrams. Show typical wiring schematics including the following:
 - a. Workstation outlets, jacks, and jack assemblies.
 - b. Patch panels.
- D. Cable Administration Drawings: As specified in Part 3.
- E. Product Certificates: For each type of product, component, cable, connector, and terminal equipment, signed by product manufacturer indication compliance with specification.
- F. Qualification Data: For firms, installers, manufacturers, and testing equipment specified in the "Quality Assurance" article to demonstrate quality, capabilities and experience. Provide evidence of applicable registration or certification. Provide equipment brand, model, serial number and last calibration data for testing equipment.
- G. Field quality-control test reports: Provide field test and observation reports indicating and interpreting test results relative to compliance with performance requirements of the installed systems as specified.
- H. As Built Drawings: Provide as-built communication drawings indicating cabling runs and outlet identification specified in this section. This includes horizontal cabling, backbone cabling telecommunication outlet locations. Use individual colors for each type of cable, outlet, etc. Provide final testing documentation for copper cabling.
- I. Provide a hard copy and CD copy of final comprehensive communication schedules for the Project in the software format selected by the Owner. Each telecommunication room shall have a hard copy, wall mounted schedule in frame indicating communicationcabling schedule for that room.
- J. Provide initial and final comprehensive test reports for all cabling (copper and fiber as applicable) specified in this section.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: System installer shall have a minimum of 5 years successful low voltage voice and data (copper and fiber as applicable) installations. Provide evidence of 5 successful projects of equivalent scope and size. The system installer shall be a certified installer for the component manufacturer.
- B. Manufacturer Qualifications: Engage in firms experienced in manufacturing components listed and labeled under ANSI/TIA-568-C.0 (latest draft), and who comply with this specification.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

- 1. Listing and Labeling Agency Qualifications: A "Nationally Recognized Testing Laboratory" (NRTL) as defined in OSHA Regulation 1910.7.
- D. Comply with NFPA 70, ANSI/TIA, UL, and the local code requirements of the Authority Having Jurisdiction.

1.6 COORDINATION

- A. Coordinate layout and installation of data communication cabling with the Owner, telecommunications, and security equipment suppliers.
 - 1. Meet jointly with telecommunications, LAN equipment suppliers and Owner to exchange information and agree on details of equipment arrangements and installation interfaces.
 - 2. Record agreements reached in meetings and distribute to other participants.
 - 3. Adjust arrangements and locations of distribution frames, cross-connects and patch panels in equipment rooms and wiring closets to accommodate and optimize arrangement and space requirements of the LAN equipment.
 - 4. Obtain IP addresses from Owner's IT department for all IP devices as instructed by the Owner.
 - 5. Provide field device MAC addresses in Excel spreadsheet form to Owner's IT department upon installation of applicable field device.

PART TWO - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: The Pittsburgh Public Schools has initiated specific standards for data networks. All rack components, shall be in accordance with the standards listed in Attachment A at the end of this section. NO SUBSTITUTIONS WILL BE ALLOWED FOR ANY OF THE LISTED EQUIPMENT AND MATERIALS.

2.2 SYSTEM REQUIREMENTS

A. General: Coordinate the features of materials and equipment so they form an integrated solution. Match components and interconnections for optimum performance.

2.3 MOUNTING ELEMENTS

A. Raceways and Boxes: Comply with Division 16 Section "Raceways" and "Outlet Boxes".

- 2.4 TWISTED-PAIR CABLES, CONNECTORS, AND TERMINAL EQUIPMENT
 - A. Intrabuilding Copper Cabling:
 - 1. Horizontal Voice and Data Copper Cabling (Rack to outlet or end device):
 - a. Manufacturer: Berk-Tek LANmark-1000 per Attachment A (**To be furnished by Onwer for installation by this contractor.**)
 - B. UTP Cable Connecting Hardware: Comply with Category 6 ANSI/TIA-568-C.0 (latest draft). IDC type, using modules designed for punch-down caps or tools.
 - 1. Manufacturer: Hubbell per Attachment A (no substitutions)
 - 2. IDC Terminal Block Modules: Integral with connector bodies, including plugs and jacks where indicated.
 - 3. IDC Connecting Hardware: Consistent throughout Project.
 - 4. Type: Four pair, 8 position, RJ45 568B wired Category 6 jack.
 - C. Patch Panels: Modular 48 port, 568B wired panel, complying with Category 6 of ANSI/TIA-568-C.0 (latest draft), housing multiple-numbered jack units with IDC-type connectors at each jack for permanent termination of pair groups of installed data cables.
 - 1. Manufacturer: Hubbell per Attachment A (no substitutions).
 - 2. Number of Jacks per Field: One for each four-pair UTP cable, plus spares and blank positions adequate to satisfy specified expansion criteria.
 - 3. Modular ports shall comply with FCC CFR 47 part 68 subpart F and IEC60603-7.
 - 4. Manufactured by an ISO 9001 and 14001 Certified Manufacturer.
 - 5. Contacts shall have a minimum of 50 micron of gold plating over nickel contacts.
 - 6. Rear cable management bracket with strain relief, port designation icons and port designation labels (front and rear).
 - 7. Mounting: Rack.
 - 8. Color: Black
 - 9. Provide quantity as required to terminate all data cables, plus spares and blank positions adequately to satisfy specified expansions criteria.
 - D. Jacks and Jack Assemblies for UTP Cable: Snap-in, modular, color-coded, 8 position, RJ45 receptacle units wired 568B, with integral IDC-type terminals complying with Category 6 of ANSI/TIA-568-C.0 (latest draft).
 - 1. Manufacturer: Hubbell per Attachment A (no substitutions)
 - 2. Color: As indicated in Part 3.
 - E. UTP Patch Cords: Four-pair, high performance stranded modular cables, 12 inches in length, flame retardant jacket, complying with Category 6 of ANSI/TIA-568-C.0 (latest draft), factory terminated with RJ45 plug at each end.
 - 1. Manufacturer: Allen-Tel per Attachment A (To be furnished by Onwer for installation by this contractor.)

2.5 NETWORK SWITCHES

A. Existing or furnished by Owner for installation by Contractor.

2.6 IDENTIFICATION PRODUCTS

- A. Comply with Division 16 Section "Supplementary Conditions" and ANSI/TIA 606-B "Administration Standard for Commercial Telecommunications Infrastructure".
 - 1. Cable Labels: Self-adhesive vinyl or vinyl-cloth wraparound tape markers, with environmental protection, machine printed with thermal printer and alphanumeric cable designations.
 - 2. Color code telecommunications infrastructure in accordance with ANSI/TIA 606-B "Administration Standard for Commercial Telecommunications Infrastructure".

PART THREE - EXECUTION

3.1 EXAMINATION

A. Examine pathway elements intended for cables. Check raceways, cable trays, and other elements for compliance with space allocations, installation tolerances, hazards to cable installation, and other conditions affecting installation. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Wiring Method: Install wiring in raceway and cable tray except within consoles, cabinets, desks, counters and except in accessible ceiling spaces where unenclosed wiring method may be used. Use UL-listed plenum cable in environmental air spaces, including plenum ceilings. Conceal raceway and cables except in unfinished spaces.
- B. Install cables using techniques, practices, and methods that are consistent with Category 6 rating of components and that ensure Category 6 performance of the complete channel, end to end including patch cords and station cables.
- C. Install cables without damaging conductors, shield, or jacket.
- D. Do not bend cables in handling or in installing, to smaller radii than minimums recommended by manufacturer.
- E. Splicing of cables is not permitted.
- F. Pull cables without exceeding cable manufacturer's recommended pulling tensions.
 - 1. Pull cables simultaneously if more than one is being installed in same raceway.
 - 2. Use pulling compound or lubricant if necessary. Use compounds that will not damage conductor or insulation.

- 3. Use pulling means, including fish tape, cable, rope, and basket weave wire or cable grips, that will not damage media or raceway.
- 4. Pull requirements shall comply with ANSI/TIA-568-C.0 relative to pulling tension.
- G. Install exposed cables parallel and perpendicular to surfaces or exposed structural members and follow surface contours where possible.
- H. Secure and support cables at intervals not exceeding 60 inches and not more than 6 inches from cabinets, boxes, fittings, outlets, racks, frames, and terminals. Cable shall be supported independently of other systems (such as mechanical piping, ductwork, electrical conduits, etc.), using J-hooks, bridal rings, or other approved techniques. Use nylon cable tie wraps to secure cables, except as noted otherwise. Properly installed tie wraps shall not deform or crimp the cable sheath.
- I. Wiring within Telecommunication Rooms and Enclosures: Provide conductors of adequate length with 10'-0" slack at terminal points. Manage, support, and train slack neatly in cable trays and racks. Use lacing bars to restrain cables, to prevent straining connections, and to prevent bending cables to smaller radii than minimums recommended by manufacturer. Use velcro type straps to secure cables in Telecommunication Rooms.
- J. Separation of Wires: Comply with ANSI/TIA-568-C.0 rules for separating unshielded copper data communication cabling from potential EMI sources, including electrical power lines and equipment. Cable tray dividers shall separate voice, data, and video cables.
- K. Make terminations only at indicated outlets, terminals, cross-connects and patch panels.
- L. Firestop all penetrations. This includes all wall / floor sleeves, innerduct ends, and cable tray penetrations. See Section 16191 "Fire Stops and Seals."
- M. Use cables, connectors and components compatible with media types to provide a complete solution for the optimal system performance.

3.3 CABLE COLOR CODING

- A. Horizontal Cables shall match the color of each application as follows:
 - General Ports Blue
 - Wall Phones Purple
 - Security Red
 - Wireless Green
 - Video White
 - Audio (to include clocks) Gray

3.4 IDENTIFICATION

- A. In addition to requirements in this Article, comply with applicable requirements in Division 16 Section "Supplementary Conditions" and ANSI/TIA-568-C.0, "Administration Standard for Commercial Telecommunications Infrastructure", Class 4.
- B. System: Use a unique, three-syllable, alphanumeric designation for each cable. Label cable, jacks, connectors, and terminals to which it connects with same designation. Use logical and systematic designations for facility's architectural arrangement.
 - 1. First syllable identifies and locates equipment room or wiring closet where cables originate.
 - 2. Second syllable identifies and locates cross-connect- or patch-panel field in which cables terminate.
 - 3. Third syllable designates type of media (copper or fiber as applicable) and position occupied by cable pairs or fibers as applicable in field.
- C. Workstations: Label cables within outlet boxes.
- D. Within Connector Fields in Equipment Rooms and Wiring Closets: Label each connector and each discrete unit of cable-terminating and connecting hardware. Where similar jacks and plugs are used for both voice and data communication cabling, use a different color for jacks and plugs of each service.
- E. Cables, General: Label each cable within 4 inches of each termination, where it is accessible in a cabinet or junction or outlet box, and elsewhere as indicated. The cable will have a distinct identifier that is unique throughout the building. It will indicate the origination point, termination point and cable number. An example for a horizontal wire is: TR01.1.17/RM101.5C, where the wire originates at the Telecommunications Room 01 on patch panel 1, port 17; terminates at room 101, modular jack position 5 which is located in the Ceiling. An authorized representative of Pittsburgh Public Schools, prior to implementation, must approve any labeling scheme employed.
- F. Cable Schedule: Post in prominent location in each telecommunication room. List incoming and outgoing cables and their designations, origins, and destinations. Protect with rigid frame and clear plastic cover. Furnish an electronic copy of final comprehensive schedules for Project, in software and format selected by Owner.
- G. Cable Administration Drawings: Show building floor plans with cable administration point labeling. Identify labeling convention and show labels for telecommunications closets, backbone pathways and cables, entrance pathways and cables, terminal hardware and positions, horizontal cables, work areas and workstation terminal positions, grounding buses and pathways, firestopping locations and equipment grounding conductors. Follow convention of ANSI/TIA-568-C.0. Furnish electronic record of all drawings, in software and format selected by Owner.
- H. All labels shall correspond to as-built plans and final test reports.

3.5 FIELD QUALITY CONTROL

A. Horizontal Copper Testing:

- Inspect for physical damage and test each conductor signal path for continuity and shorts. Test for faulty connectors, and terminations. Perform a Category 6 channel test for each cable in accordance with ANSI/TIA-568-C.0 (latest draft). Testing shall be performed with an approved Level IV UTP field test device. The following is a list of acceptable field test devices.
 - a. Fluke.
 - b. Microtest.
 - c. Hewlett Packard / Agilent.
 - d. Wave-Tek.
- 2. Each installed channel shall perform better than the list of minimum requirements specified below. Note that testing parameters are currently under review by ANSI/TIA. Therefore, at the time of installation, provide cable testing in accordance with the latest parameters available from ANSI/TIA.
- 3. The maximum channel length shall not exceed 100m (328 feet).

3.6 CLEANING

A. On completion of system installation, including jacks, outlets and equipment, inspect exposed finish. Remove burrs, dirt, and construction debris and repair damaged finish, including chips, scratches, and abrasions. Clean all areas affected by this installation.

3.7 INSPECTION, ACCEPTANCE AND TITLE

- A. Inspection and Acceptance will be at destination and upon successful installation unless otherwise provided. Title to or risk of loss or damage to all items shall be the responsibility of the successful Vendor until acceptance by Pittsburgh Public Schools unless loss or damage result from negligence by Pittsburgh Public Schools. If the materials or services supplied to Pittsburgh Public Schools are found to be defective or not conform to the specifications, Pittsburgh Public Schools reserves the right to cancel the contract upon written notice to The Vendor and return products at The Vendors expense based upon the terms of the contract..
- B. Pittsburgh Public Schools shall at all times have access to the work wherever it is in preparation or progress and The Vendor shall provide proper facilities for such access and for inspection.
- C. The Vendor shall not close up any work until Pittsburgh Public Schools has inspected the work. Should The Vendor close up the work prior to inspection by Pittsburgh Public Schools, The Vendor shall uncover the work for inspection by Pittsburgh Public School at no cost to Pittsburgh Public Schools and then recover the work according to the specification(s) contained herein.
- D. The Vendor shall notify Pittsburgh Public Schools in writing when the work is ready for inspection. Pittsburgh Public Schools will inspect the work as expeditiously as possible after receipt of notification from The Vendor. Any delay experienced by The Vendor due to delayed response from Pittsburgh Public Schools will not be held against The Vendor in determining success of meeting established deadlines.

3.8 MANUFACTURER WARRANTY

- A. Materials and workmanship hereinafter specified and furnished shall be fully guaranteed by The Vendor for twenty-five (25) years from transfer of title against any defects. Defects which may occur as the result of faulty materials or workmanship within one year after installation and acceptance by Pittsburgh Public Schools shall be corrected by The Vendor at no additional cost to The Owner. The Vendor shall promptly, at no cost to The Owner, correct or re-perform (including modifications or additions as necessary) any non-conforming or defective work within one year after completion of the project of which the work is a part. The period of The Vendor's warranty for any item(s) so described herein are not exclusive remedies, and Pittsburgh Public Schools has recourse to any warranties of additional scope given by The Vendor to The Owner and all other remedies available at law or in equity. The Vendor's warranties shall commence with acceptance of/or payment for the work in full. The Vendor shall provide Pittsburgh Public Schools with a sample certification form to be submitted by The Vendor to the manufacturer to procure the manufacturer's certification and warranty.
- B. On completion of the work said certification and warranty will be provided to Pittsburgh Public Schools in writing before final payment is made to The Vendor. All electronics installed as part of this undertaking will have a five (5) year warranty from the manufacturer and said warranty will be in writing.
- C. It The Vendor procures equipment or materials under the contract, The Vendor shall obtain for the benefit of The Owner equipment and materials warranties against defects in materials and workmanship to the extent such warranties are reasonably obtainable.
- D. The Vendor shall pass along to The Owner any additional warranties offered by the manufacturers, at no additional costs to Pittsburgh Public Schools, should said warranties extend beyond the period specified therein.
- E. This warranty shall in no manner cover equipment that has been damaged or rendered unserviceable due to negligence, misuse, acts of vandalism, or tampering by Pittsburgh Public Schools or anyone other than employees or agents of The Vendor. The Vendor's obligation under its warranty is limited to the cost of repair of the warranted item or replacement thereof, at The Vendor's option. Insurance covering said equipment from damage or loss is to be borne by The Vendor until full acceptance of equipment and services.

PART FOUR - SUPPLEMENTAL INFORMATION

A. Attachment A is a list of PPS Information Technology Standards. The Contractor shall utilize the makes and models of components as identified in the list unless otherwise indicated herein or in other sections of this specification.

(SEE ATTACHMENT A – FOLLOWING PAGES)

END OF SECTION

Attachment A - PPS Information Technology Standards

(ALL ITEMS ON THIS LIST MUST BE ORDERED TO MAKE A COMPLETE INSTALLATION UNLESS NOTED OTHERWISE)

Please see notes for each item as they pertain to various scenarios All items on this list may not be required on this project.

Section	Manufacturer	Description	Item Number	Minimum	Notes
Metals	Chatsworth	84" high x 19" wide four post data distribution rack	15053-703	As Needed	This rack is only to be installed in locations where a Telecommunications room (TR) is Located.
Metals	СРІ	2U Horizontal Cable Manager	30530-719	As Needed	One cable manager must be ordered for every 48 ports installed in rack. If Installing a new patch panel or switch for any reason no matter the quantity, a cable manager must be provided for that install.
Metals	Oberon	Access point enclosure	1020-00	As Needed	corridors.
Wire	Berk-Tek	LANmark-1000	6P4P24-BL-P-BER-AP	BY OWNER	TO BE FURNISHED BY OWNER FOR INSTALLATION BY THIS CONTRACTOR
Wire	Hubbell	1' Patch Cable	HC6GN01	BY OWNER	TO BE FURNISHED BY OWNER FOR INSTALLATION BY THIS CONTRACTOR
Connectivity	Hubble	Unloaded 48 Port Patch Panel	UDX48E	As Needed	When installing less than 48 ports to a rack location this patch panel must be used.
Connectivity	Hubble	Keystone Jacks - 25 Pack	HXJ6W25	As Needed	To be installed at the Communications Outlet (CO)
Connectivity	Hubble	Keystone Jacks - 25 Pack	HXJ6BK25	As Needed	To be installed with the Unloaded patch panels
Connectivity	Hubble	Plate - i-Frame style	IMF1W	As Needed	
Connectivity	Hubble	Plate Module - 2 Port	IM2K1W	As Needed	2 port module is to be centered within i-Frame plate. All COs are to have no more than 2 - 2 port modules installed for a total of no more than 4 physical jacks.
Connectivity	Hubble	Plate Module5" Blank	IMB05W	As Needed	To be isntalled so that 2 port modules may be centered on i- Frame Plate.