

INVITATION TO BID
from
COMMUNITY COLLEGE OF ALLEGHENY COUNTY
PURCHASING DEPARTMENT
800 ALLEGHENY AVENUE, PITTSBURGH, PENNSYLVANIA 15233

BID PROPOSAL NO. 1034

UPGRADE ELECTRICAL INFRASTRUCTURE AT CCAC FIELD HOUSE – ALLEGHENY CAMPUS

Sealed proposals will be received and publicly opened by a Purchasing Agent of the Community College of Allegheny County.

**Proposals must be received by the Purchasing Department, 800 Allegheny Avenue,
Pittsburgh, Pennsylvania 15233**

on or before 2:00 PM, on Tuesday, December 4, 2018

Proposals received after this deadline will be considered as a “late bid” and returned unopened to the offerer.

BID SCOPE

Provide all labor, material, equipment, permits and supervision required to upgrade electrical infrastructure at CCAC-Field House – Allegheny Campus in accordance with specification, terms and conditions contained herein.

A MANDATORY pre-bid meeting and site visitation will be held at 9:30 a.m. on Tuesday, November 27, 2018. The assembly point will be the CCAC Allegheny Campus Fieldhouse, proceed up to the top of the hill at intersection of Ridge Avenue at Brighton Road, Pittsburgh PA 15212.

For technical questions or to view site call Elaine Sadowski, Energy Manager at 412.237.3157.
For procedural questions, call Mike Cvetic, Director of Purchasing, at 412.237.3146

BID REQUIREMENTS (where checked)

Bid Bond. 10% of total base bid amount (Submit with Bid)

Performance Bond. 100% of total contract amount (Awardee Only)

Payment Bond. 100% of total contract amount (Awardee Only)

Master Services Agreement (Awardee Only)

No Lien Agreement (Awardee Only)

Insurance Certificate (Awardee Only)

BID BOND: Bid must include the required bid bond or certified check, which will be returned to the unsuccessful bidder approximately 45 days after the bid due date.

PERFORMANCE BOND: The successful bidder will be required to enter into a written contract with the College and to furnish a contractor's bond conditioned for the faithful and full performance of the contract with sufficient surety in the amount stated above. Any surety cosigning the contractor's bond shall be an Incorporated surety company approved by the Court of Common Pleas of Allegheny County. Bond with surety must be furnished within 20 days after receipt of the contract. The Board of Trustees reserves the right to reject any bond furnished where it is in the best interest of the College to do so.

The College requires Power of Attorney attached to bonds to be dated concurrently, sealed, and executed by a proper **live** (not facsimile) **signature**.

PAYMENT BOND: The bidder to whom the contract is awarded shall furnish a bond to guarantee the payment of third-party subcontractors involved in fullment of services rendered against College contracts. Such bonds shall be with sufficient surety and in the amount stated above. Failure on the part of the contractor to furnish such bond shall be just cause for cancellation of award.

NO LIEN AGREEMENT AND/OR INSURANCE CERTIFICATES: As required by the College, the No Lien Agreement and/or Insurance Certificate may be requested of the successful bidder.

THE BOARD OF TRUSTEES RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS.

COMMUNITY COLLEGE OF ALLEGHENY COUNTY

**INDEX TO SPECIFICATIONS
FOR
BID PROPOSAL NO. 1034**

**UPGRADE ELECTRICAL INFRASTRUCTURE AT CCAC
FIELD HOUSE - ALLEGHENY CAMPUS**

INVITATION TO BID

Cover Sheet

INDEX TO SPECIFICATIONS

INSTRUCTIONS TO BIDDERS

2 Pages

GENERAL CONDITIONS

7 Pages

RETURN BID PROPOSAL FORMS

BIDDER SIGNATURE FORM

Return Form 1.0

PRICE FORM

Return Form 2.0

NON-COLLUSION AFFIDAVIT

Return Form 3.0

& INSTRUCTIONS

1 Page

MINORITY PARTICIPATION GOALS

Return Form 4.0

EXTENSION OF CONTRACT EXECUTION REQUIREMENTS

Return Form 5.0

DOCUMENTS REQUIRED BY AWARDEE ONLY

PERFORMANCE BOND

Copy Attached

PAYMENT BOND

Copy Attached

MASTER SERVICES AGREEMENT

Copy Attached

NO-LIEN AGREEMENT

Copy Attached

INSURANCE REQUIREMENTS

Form B

INDEX TO SPECIFICATIONS

01000-1 thru 02070-12

DRAWINGS

EU E001, EU E002, EU E003, EU E102

The CCAC Purchasing Department is now publishing all bids via the CCAC website at https://www.ccac.edu/Bid-RFP_Opportunities.aspx. It will be each vendor's responsibility to monitor the bid activity within the given website ("Bid and RFP Opportunities") and ensure compliance with all applicable bid documents inclusive of any issued addenda. Failure to incorporate any applicable addenda in the final submittal may result in the rejection of your bid.

NOTE: FAX OR ELECTRONIC RESPONSES TO BID PROPOSALS ARE NOT ACCEPTABLE.

In the event a sealed bid is hand carried, it is the sole responsibility of the bidder to assure the bid is in possession of the CCAC Purchasing Department prior to the time set for opening.

COMMUNITY COLLEGE OF ALLEGHENY COUNTY

INSTRUCTIONS TO BIDDERS

1. All prices quoted shall be F.O.B. destination and include all freight and delivery charges to actual point of delivery.
2. **Bids that vary from specifications/addendum(s) may be rejected by the College.** Any and all changes to specifications will be issued by addenda via fax/mail. It is the responsibility of bidders to provide the College with company name, address, telephone, and fax numbers and contact names if applicable.
3. Bidders must be recognized dealers in specified materials and qualified to advise in the application and/or use of the materials. When requested, the bidder must satisfy the Community College of Allegheny County that they have the organization, capital, and stock availability and experience to fulfill their bid offer.
4. Bids may be rejected or award cancelled by the College if a bidder intends to sublet any/all of the required work.
5. Completely executed bid documents must be submitted in a **sealed envelope bearing the offering company's name and address; and, the bid number must appear on the sealed envelope.** No College representative will bear any responsibility for the premature opening of a bid which is not properly addressed and identified.
6. Whenever the words "Purchasing Agent" or a pronoun referring to a College Agent appears in either the specifications and/or Articles of Agreement, the Agent is acting only under the authority of and subject to the approval of the Board of Trustees of the Community College of Allegheny County.
7. The College reserves the right to award all or any items, separately or in a lump sum whichever is in the best interest of the College.
8. Bids for supplies shall be submitted to the College in accordance with the numbered item(s) on the price sheet. Unit prices(s) shall prevail where extension of prices is requested.
9. Contracts will not be awarded by the College to any corporation, firm, or individual that has failed in any former contract with the College to perform work or complete work or, in the College's sole judgment, to satisfactorily deliver or provide the quality of materials, fulfill a guarantee(s) or complete work in accordance with the schedule for such prior contract."
10. If the College Agent is of the opinion that the awarded work/products are unnecessarily delayed, the rate of progress of delivery is unsatisfactory, or that the corporation, firm, or individual contractor is willfully violating any of the contract requirements or conditions or is acting in bad faith, the College's Agent shall take whatever action necessary for the completion of the work and/or delivery of the products to the College. Resulting expenses to the College will be deducted from monies due the contractor and the bondsman will be held liable for any balance due at the completion of the contract.
11. Inspection of materials and workmanship of the contractor by a College Agent will not lessen the responsibility of the contractor from the obligation to perform and deliver satisfactory work/materials to the College. The contractor is expected to pay for the cost of tests for defective materials. This cost may be deducted from any monies due the contractor from the College.
12. The contractor will not receive instructions from a College Agent relative to the work or delivery until a contract has been duly signed and the bond, if required, is approved.
13. Companies may quote price(s) on work/material to any and all bidders and may also directly submit a bid to the College for the work/material.
14. When samples are requested by the College, the bidder must supply them free of charge. Samples will not be returned to the bidder.

15. The bidder is solely at risk when using unauthorized patented material.
16. Quantities requested by the College are for bidding purposes only. The College may purchase more or less than the estimated quantities.
17. The College reserves the right to reject any and all bids, and to waive minor discrepancies in the bids or specifications, when in the best interest of the College. The College may purchase any part, all, or none of the materials specified.
18. The College will reject materials that do not meet specifications, even if the bidder lists trade names, or names of such materials on the bid.
19. All prices quoted must be held firm for the contract period. Bids containing escalation or other clauses for price change may be rejected. Discounts or other uncalled for allowances quoted will not be considered in making the award and the bid may be rejected.
20. Unless otherwise specified, materials, supplies, and/or equipment must be delivered thirty (30) days from the date of the purchase order.
21. Unless otherwise specified, materials, supplies, and/or equipment must be new, current stock, and unused.

SIGNING OF AGREEMENT AND BOND

22. Successful bidders are required to sign Contract Articles of Agreement and bond forms as follows:

If trading as an Individual: All copies of Contract Articles of Agreement and bond(s) must be signed by the individual to whom the award is made and signature must be witnessed by the same witness.

If trading as a Partnership: All copies of Contract Articles of Agreement and bond(s) must be signed by **every partner** comprising the Partnership, regardless of number, and these signatures must be witnessed by the same witness.

If trading as a Corporation: All copies of Contract Articles of Agreement and bond(s) must be signed by the **President (or Vice President)** and attested by the Secretary or Assistant Secretary and Corporate seal must appear on all copies.

The County requires that Power of Attorney forms be attached to bonds, bear the same date as that appearing on the bonds and that the forms are sealed and executed by a proper **live signature**.

FICTITIOUS NAME REGISTRATION

23. To comply with a provision of the law regarding registration under the Fictitious Name Act of the Commonwealth of Pennsylvania, successful bidders trading as an **Individual or a Partnership** must submit a certified copy of their Fictitious Name Registration with their contract. Fictitious Name Registration forms are issued by the Office of the Prothonotary of Allegheny County, or the county in which the business is located.

PREVENTION OF DELAY

24. A contractor will be considered in **default** if the contractor has work performed or means employed in the carrying out of the contract that would in any way cause or result in a suspension or delay of, or strike upon the work to be performed of any of the trades working in or about the premises described, or in or about any other building of the Community College of Allegheny County.
25. When trade names or catalog numbers are used, bidders may quote on any equal (unless otherwise stated by the College) but such bids must show trade names and/or catalog numbers of the products.

COMMUNITY COLLEGE OF ALLEGHENY COUNTY

GENERAL CONDITIONS

FOR

CONSTRUCTION AND RENOVATION CONTRACTS

1. PERMITS

It is the responsibility of the contractor to obtain all permits and/or licenses required by Federal, State, County, City, or other local Municipalities or Authorities for work done or services performed under this contract.

2. ROLE OF CONTRACTOR

In the performance of the work hereunder, the contractor shall act as an independent contractor, and all of his agents, employees, and subcontractors shall be subject solely to the control, supervision, and authority of the contractor.

3. EMPLOYEES OF THE CONTRACTOR

It is understood that the contractor in signing the contract will employ only competent and first-class workmen and mechanics; that no workmen shall be regarded as competent and first-class except those who are duly skilled in their respective branches of labor.

4. BONDS

The College will accept only bonds written by surety companies authorized to do business in the Commonwealth of Pennsylvania and the County of Allegheny and included on the United States Treasury Department Annual List of Surety Companies published July first of each year. Limits for those companies appearing on the United States Treasury Department's list cannot be exceeded. This list is available for inspection in the Purchasing Department, Community College of Allegheny County, Administration Building, 800 Allegheny Avenue, Pittsburgh, Pennsylvania 15233. It is also available from the Surety Bond Branch, Financial Management Services, Department of the Treasury, Washington, D.C. 20226. Phone: 1.202.634.2214.

5. EQUAL OPPORTUNITY

Contractor and all subcontractors shall not discriminate against any employee or applicant for employment because of race, color, creed, national origin, or sex. Contractor and all subcontractors shall also comply with all applicable Federal, State, and local Fair Employment Practice Acts, or similar Acts, Rules, and Regulations and whether or not applicable will comply with the Federal Civil Rights Act of 1964. The Terms and Provisions of Executive Order 11246 and any Executive Order modifying or superseding same, are incorporated herein with respect to any work subject thereto.

The contractor and all subcontractors shall, in all solicitations or advertisements for employees placed by them or their behalf state all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, or national origin.

6. MINORITY & DISADVANTAGED PARTICIPATION GOALS

The College's goal is to obtain **15%** combined MBE/WBE/DBE (Minority-owned Business enterprise/Woman-owned Business Enterprise/Disadvantaged Business Enterprise) participation in the work. This is to be based on the dollar value of employment, subcontracts, supplies, goods, and services as a percentage of the total contract amount. The bidder/contractor must demonstrate to the College prior to award of the contract, and periodically thereafter throughout the term of the contract, their compliance and continued ability to comply with these goals.

The contractor shall submit with their bid (on Return Form 4.0) a completed Minority & Disadvantaged Contractor Commitment Plan that will contain the details of how they plan to comply with this goal should they be awarded the contract.

If the plan is not submitted in the bid or is not acceptable, the College may deem the bid non-responsive and may award the work to the next lowest responsive bidder with an acceptable plan. Thus, it behooves all bidders to formulate their M/W/DBE plan before submitting a bid.

Finding Certified M/W/DBE's - All subcontractors and suppliers of goods and services used to comply with this goal must be **certified** minority or disadvantaged firms. They may be certified by any recognized and reputable organization such as the following: African American Chamber of Commerce, Allegheny County, Port Authority of Allegheny County, City of Pittsburgh, Pittsburgh Regional Minority Purchasing Council, Commonwealth of Pennsylvania, United States Federal Government.

If the firm is not certified and desires to be certified, it is suggested that they contact one of the following organizations. These organizations may also be used as references for sourcing M/W/DBE firms.

Allegheny County
M/W/DBE Department
County Office Building Rm 204
542 Forbes Avenue
Pittsburgh, Pennsylvania 15219
412.350.4309

EMSDC
Regional Enterprise Tower
425 Sixth Avenue
Suite 401
Pittsburgh, Pennsylvania 15219
412.391.4423

Diversity Business Resource Center
700 River Avenue Suite 231
Pittsburgh, PA 15212
412.322.3272

African American Chamber of Commerce
Koppers Building
436 Seventh Avenue, Suite 2220
Pittsburgh, PA 15219
412.391.0610

A list of PA certified M/W/DBE firms can be found on the Internet at <http://www.paucp.com>.

The College expects all firms to demonstrate a good faith effort to include M/W/DBE's when bidding on College contracts. A good faith effort as defined by the Code of Federal Regulations (49CFR26) means "*efforts to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement*".

If you are not successful in securing M/W/DBE participation after a good faith effort is made, provide the following in your waiver request:

- A detailed account of your efforts;
- Your normal business practice and/or inventory profile; and
- An active diversity plan/policy

Reporting During and After Project Completion - The contractor shall submit with their monthly application for payment a written M/W/DBE Contractor Report demonstrating their compliance with the goal. The report shall state the dollar amount spent on labor, materials, services, and subcontracts and shall list firm names and vendor names. At the completion of the project, with final application for payment, the contractor shall submit a recap of their compliance which shall state the dollar amount spent on labor, materials, subcontracts, and services as a percentage of the total contract amount. Projects with shorter timeframes shall require a one-time only report at the completion of the project. Reports are to be accompanied by back-up documentation evidencing the business relationship with the M/W/DBE for the particular project (e.g.: copies of invoices, purchase orders, or evidence of payments).

Failure to Comply With M/W/DBE Goals – If the contractor fails to make a good faith effort (as determined by the College) to comply with the College's 15% M/W/DBE goal or fails to meet their M/W/DBE commitment or to submit documentation as required by the College, the College may consider such non-compliance or breach of contract and any one or more of the following may occur:

- Rejection of the bid
- Forfeiture of bid guaranty
- Termination of the contract
- The imposing of sanctions as deemed appropriate by the College
- Contractor being barred from bidding on College contracts for up to three (3) years
- Or such other remedy as the College deems appropriate

7. FINANCIAL INTEREST

All bidders for construction must be established firms competent to perform the required scope of work. All bidders must satisfy the Community College of Allegheny County that they have the requisite organization, capital, plant, stock, ability, and experience to satisfactorily execute and contract in accordance with the provisions of the contract in which they are interested.

If the contractor's base bid is \$25,000.00 or more, the American Institute of Architects form, "Contractors Qualification Statement" form A305 - 1986 (or latest revision) may be requested by CCAC. This form is available from the American Institute of Architects, 1735 New York Avenue N.W., Washington, D.C. 20006. If requested by CCAC, a completed form A305 is to be submitted within 48 business hours and may be faxed to 412.237.3195.

8. EMPLOYMENT OF INDEPENDENT SUBCONTRACTORS

If you are a contractor to the College and the value of the base contract is \$25,000.00 or more, you must secure approval of all proposed subcontractors from the College prior to beginning work. Information on your proposed subcontractors is to be submitted on the form entitled Proposed Subcontractors.

Each proposed subcontractor to be employed must be an independent contractor "in fact" and must meet the following criteria:

- a. The subcontractor must have a Federal identification number.
- b. The subcontractor must perform these same services for others.
- c. The subcontractor must have an established place of business.
- d. The subcontractor must use their own tools and equipment.
- e. The subcontractor must pay all taxes and other items required by law to be paid by an employer with respect to compensation paid to their employees.
- f. The subcontractor must provide and maintain all insurance required by law and the College.

If the proposed subcontractor does not meet all of these criteria, they will not be approved.

9. VERBAL AUTHORIZATIONS

No verbal agreement or understanding with any officer, agent, or employee of the College either before or after the execution of the contract shall alter, amend, modify, or rescind any of the terms or provisions contained in any of the contract documents. This provision shall not limit or affect the right to make changes or variations in the work. Any changes must be authorized in writing.

10. APPLICABLE LAW, ACTS, AND ORDINANCES

The contractor(s) shall agree to abide by and be bound by all applicable provisions and regulations of all laws, acts, and ordinances relating to and regulating the hours and conditions of employment.

11. PENNSYLVANIA PREVAILING WAGE ACT

The Pennsylvania Prevailing Wage Act shall be incorporated into and made part of all College construction related contract(s) having an estimated value of \$25,000.00 or more.

It is the responsibility of the contractor to ensure that they have included the appropriate Pennsylvania prevailing wage rates in their proposal to the College. Failure to do this will not be a reason for the contractor to withdraw their bid or fail to perform the contract or to request additional payments from the College.

In accordance with the Prevailing Wage Determination Act, the contractor(s) shall:

- a. Pay no less than the wage rates including contributions for employee benefits as determined in the decision of the Secretary of Labor and Industry and shall comply with the conditions of the Pennsylvania Prevailing Wage Act approved August 15, 1961 (Act No. 442) as amended August 9, 1963 and/or subsequent amendments thereof (Act No. 342) and the regulations issued pursuant thereto.
- b. Apply all applicable provisions of the Acts and Laws to all work performed on the contract by the contractor(s) and subcontractor(s).
- c. Insert in each of his subcontracts all of the stipulations contained in these required provisions and such other stipulations as may be required.
- d. Assure that no workmen be employed on the public work except in accordance with the classifications set forth in the decisions of the Secretary. In the event that additional or different classifications are necessary, the procedure set forth in Section 7 of the above referenced Regulations shall be followed.
- e. Assure that all workmen employed or working on this contract shall be paid unconditionally regardless of whether any contractual relationship exists or the nature of any contractual relationship which may be alleged to exist between any contractor, subcontractor, and workmen not less than once a week without deduction or debate on any account either directly or indirectly except authorized deductions, the full amounts due at the time of payment computed at the rates applicable to the time worked on the appropriate classification. Nothing in this contract, the Act or these Regulations, prohibits the payment of more than the general prevailing minimum wage rates as determined by the Secretary to any workmen on public work.
- f. Each subcontractor shall post for the entire period of construction the wage determination decisions of the Secretary including the effective date of any charges thereof in a prominent and easily accessible place or places at the site of the work and at such place or places used by them to pay workmen their wages. The posted notice of wage rates must contain the following information:
 1. Name of project.
 2. Name of public body for which it is being constructed.
 3. The crafts and classifications of workmen listed in the Secretary's general prevailing minimum wage rate determination for the particular project.

4. The general prevailing minimum wage rates determined for each craft and classification and the effective date of any changes.
5. A statement advising workmen that if they have been paid less than the general prevailing minimum wage rate for their job classification or that the contractor and/or subcontractor are not complying with the Act or these Regulations in any manner whatsoever they may file a protest with the Secretary of Labor and Industry. Any Workmen paid less than the rate specified in the contract shall have a civil right of action for the difference between the wage paid and the wages stipulated in the contract, which right of action must be exercised within six months from the occurrence of the event creating such right.

- g. All subcontractors shall keep an accurate record showing the name, craft, and/or classification, number of hours worked per day, and the actual hourly rate of wage paid (including employee benefits) to each workman employed by him in connection with the public work and such record must include any deductions from each workman. The record shall be preserved for two years from the date of payment and shall be open at all reasonable hours to the inspection of the public body awarding the contract and to the Secretary or his duly authorized representative.
- h. Assure that apprentices shall be limited to such numbers as shall be in accordance with a bona fide apprenticeship program registered with and approved by the Pennsylvania Apprenticeship and Training Council and only apprentices whose training and employment are in full compliance with the provisions of the Apprenticeship and Training Act approved July 14, 1961 (Act No. 304) and the Rules and Regulations issued pursuant thereto shall be employed on the public work project. Any workman using the tools of a craft who does not qualify as an apprentice within the provisions of this subsection shall be paid at the rate predetermined for journeymen in that particular craft and/or classification.
- i. Pay wages without any deductions except authorized deductions. Employers not parties to a contract requiring contributions for employee benefits which the Secretary has determined to be included in the general prevailing minimum wage rate shall pay the monetary equivalent thereof directly to the workmen.
- j. Be advised that payment of compensation to workmen for work performed on public work on a lump sum basis, or a piece work system, or a price certain for the completion of a certain amount of work, or the production of a certain result shall be deemed a violation of the Act and these Regulations regardless of the average hourly earnings resulting therefrom.
- k. Each subcontractor shall file a statement each week and a final statement at the conclusion of the work on the contract with the contracting agency under oath and in form satisfactory to the Secretary certifying that all workmen have been paid wages in strict conformity with the provisions of the contract as prescribed by Section 3 of these Regulations; or, if any wages remain unpaid, to set forth the amount of wages due and owing to each workman respectively. The College shall require the contractor and all subcontractors to file weekly wage certifications utilizing form WH-347. (Reference: Section 10(a) of Act and Section 10 of Regulations). Prior to making final payment the College will require final wage certifications from all contractors and subcontractors.

12. PAYMENT TO CONTRACTORS

The College maintains the right to withhold a percentage of monies requested by contractors for work done under this contract in accordance with the American Institute of Architects Application for Payment form G-702 as indicated in Section 01152--Applications for Payment of the technical specifications.

13. INSURANCE REQUIREMENT

A properly executed certificate of insurance must be submitted with the signed Contract Articles of Agreement. The certificate of insurance must show that the contractor and subcontractors comply with the College's insurance requirements. The certificate of insurance must state that in the event any coverage shown is to be cancelled the College will be given a thirty day advance notice of the cancellation.

14. MINORITY BIDDERS

The Community College of Allegheny County hereby notifies all bidders that it will affirmatively ensure that minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

15. MODIFICATION AND WITHDRAWAL OF BIDS

- a. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.
- b. Bidders may withdraw their bid within two (2) business days of the bid opening only within accordance of Commonwealth of Pennsylvania public bidding law.

16. TAXES

CCAC is a governmental entity and is generally exempt from sales and use tax with respect to purchases of building machinery and equipment. A tax exemption certificate will be provided upon request. It is the bidder's responsibility to pay any/all applicable taxes on non-exempt equipment, supplies and services in accordance with applicable law.

17. PENNSYLVANIA STEEL PRODUCTS PROCUREMENT ACT

Contractor acknowledges that CCAC is a public agency subject to the requirements of the Pennsylvania Steel Products Procurement Act, 73 P.S. Section 1881 et. seq (the "SPPA"). Contractor therefore represents and warrants that any and all steel products purchased, used or supplied by it in the performance of the Contract will be melted and manufactured in the United States, and that its performance hereunder will otherwise comply with requirements of the SPPA at all times. Contractor further agrees to provide CCAC with documentation and/or certification of its compliance with the foregoing requirements, as required under the SPPA, and acknowledges that it shall not be entitled to receive payment hereunder until such documentation and/or certification has been provided.

18. MARKUPS ON CHANGE ORDERS

Markups on change order requests shall not exceed 15%. This would apply to overhead and profit, labor, materials, equipment, etc.

COMMUNITY COLLEGE OF ALLEGHENY COUNTY

RETURN BID PROPOSAL FORM

FOR

BID PROPOSAL NO. 1034

**UPGRADE ELECTRICAL INFRASTRUCTURE AT CCAC
FIELD HOUSE - ALLEGHENY CAMPUS**

Complete this form and submit with your bid.

- The undersigned agrees to comply with the Instructions to Bidders and Specifications for the price(s) quoted on the Return Price Form. Price(s) quoted include all allowable cash and/or credit discounts.
- The College may reject bids quoting unspecified discounts and/or allowances.

Submitted by:

Company Name Bidding
(Please print)

Contact Person at Company
(Please print)

Signature _____ Title _____
(Handwritten signature must appear here in ink.)

Address _____

Telephone Number (Include Area Code.) _____ Fax Number (Include Area Code.) _____

Trading as: (Check one.) **Please print.**

Individual Owner _____

Partnership Partner _____ Partner _____

Corporation Exact Name _____

State Incorporated _____

THE BOARD OF TRUSTEES OF THE COLLEGE RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS.

Rev: 1/01

RETURN FORM 1.0

BID PROPOSAL FORM – BID 1034
UPGRADE ELECTRICAL INFRASTRUCTURE AT CCAC
FIELD HOUSE – ALLEGHENY CAMPUS

BASE BID AND ALTERNATE FOR ALL ELECTRICAL WORK

The total lump sum for performing all electrical upgrade work as described in the contract specifications and shown on all Drawings shall be:

BASE BID \$ _____
(numerical)

\$ _____ DOLLARS
(alphabetical)

ADD ALTERNATE Panel PV (See Drawing E102)

\$ _____
(numerical)

\$ _____ DOLLARS
(alphabetical)

BIDDER'S NAME (please print) _____

COMPANY NAME:

RETURN FORM 2.0

COMMUNITY COLLEGE OF ALLEGHENY COUNTY

NON-COLLUSION AFFIDAVIT

Contract/Bid No. **1034**

State of _____ : s.s.

County of _____ :

I state that I am _____ of _____
(title) (name of my firm)

and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this bid.

I state that:

- (1) The price(s) and amount of this bid have been arrived at independently and without consultation, communication or agreement with any bidder or potential bidder.
- (2) Neither the price(s) nor the amount of this bid, and neither the approximate price(s) nor approximate amount of this bid, have been disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed before bid opening.
- (3) No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a bid higher than this bid, or to submit any intentionally high or noncompetitive bid or other form of complementary bid.
- (4) The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive bid.
- (5) _____, its affiliates,
(name of my firm)

subsidiaries, officers, directors and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract, except as follows:

I state that _____ understands and

(name of my firm)

acknowledges that the above representations are material and important, and will be relied on by the Community College of Allegheny County in awarding the contract(s) for which this bid is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the Community College of Allegheny County of the true facts relating to the submission of bids for this contract.

Signature _____ Title _____

(MUST BE SIGNED HERE IN HANDWRITING, IN INK.)

Sworn to and subscribed before me this _____ day of _____, 20_____

Notary Public _____ My Commission Expires: _____

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

1. This Non-collusion Affidavit is material to any contract awarded pursuant to this bid. According to the Pennsylvania Antibid-Rigging Act, 73 P.S. § 1611 et seq., governmental agencies may require Non-collusion Affidavits to be submitted together with bids.
2. This Non-collusion Affidavit must be executed by the member, officer or employee of the bidder who makes the final decision on prices and the amount quoted in the bid.
3. Bid rigging and other efforts to restrain competition and the making of false sworn statements in connection with the submission of bids are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the bidder with responsibilities for the preparation, approval or submission of the bid.
4. In the case of a bid submitted by a joint venture, each party to the venture must be identified in the bid documents, and an Affidavit must be submitted separately on behalf of each party.
5. The term “complementary bid” as used in the Affidavit has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of bids higher than the bid of another firm, any intentionally high or noncompetitive bid, and any other form of bid submitted for the purpose of giving a false appearance of competition.
6. Failure to file an Affidavit in compliance with these instructions will result in disqualification of the bid.

COMMUNITY COLLEGE OF ALLEGHENY COUNTY

MBE/WBE PARTICIPATION: CCAC encourages the participation of minority and women-owned businesses in all of its contracts and is committed to providing maximum opportunities for qualified minority and/or women-owned business enterprises ("MBE/WBEs") to participate in its work. Bidder agrees (1) if qualified, to take reasonable and timely steps to obtain appropriate certification as an MBE and/or WBE, (2) to ensure that MBE and/or WBEs are appropriately considered as subcontractors and/or suppliers under this Agreement; and (3) to report moneys spent for MBE and/or WBE subcontractors and/or suppliers for work as CCAC may from time to time reasonably request. CCAC's goal for MBE/WBE participation is 15%. Please provide documentation as to your firm's good faith effort to reach this goal by describing all applicable details of MBE/WBE participation that may be included in the resulting agreement.

COMMUNITY COLLEGE OF ALLEGHENY COUNTY

MINORITY PARTICIPATION GOALS – BID PROPOSAL NO. 1034

The following must be included with your bid.

Reference: General Conditions for Construction and Renovation Contracts - Item 6, Page 2 – Minority & Disadvantaged Participation Goals

A **15%** M/W/DBE work participation is established. Document your firm's good faith effort to obtain the **15%** Goal:

M/W/DBE Company	Contact Person	Phone Number	\$Amount or Objective %

I am an M/W/DBE. (ATTACH CERTIFICATION)

Total: _____

Bidder acknowledges that CCAC may communicate with listed firms to verify the extent of the contact.

Bidding Company's Name: _____

Signature: _____

Title: _____

Date: _____

Revised: 04/30/08

RETURN FORM 4.0

COMMUNITY COLLEGE OF ALLEGHENY COUNTY

BID PROPOSAL NO. 1034

COMMONWEALTH OF PENNSYLVANIA BID AWARD & RETENTION LAW ACT NO. 1978-317, SENATE BILL 68, NOVEMBER 26, 1978

EXTENSION OF CONTRACT EXECUTION REQUIREMENTS

In the event the contract(s)/purchase order(s) resulting from the above specified bid proposal is/are in excess of \$50,000.00, the above specified Act will apply.

This Act requires the awarding of a contract to the lowest responsible bidder within sixty (60) days of the date of bid opening and the execution of a contract within thirty (30) days after award by the College Board of Trustees. Thirty (30) day extensions of the date for award and for execution are permitted by the mutual written consent of the College and the successful bidder.

Due to the extent of the approval actions required prior to award and execution of any contract, it may not be possible for the College to complete contract award and execution within the sixty (60) day and thirty (30) day periods. Accordingly, each bidder is requested to indicate their agreement with a thirty (30) day extension of the sixty (60) day award date and thirty (30) day execution date by signing this form and returning it with their bid.

Name of Company

Authorized Company Representative

Signature

Title

MUST BE SIGNED HERE IN HANDWRITING, IN INK

**COMMUNITY COLLEGE OF ALLEGHENY COUNTY
800 ALLEGHENY AVENUE, PITTSBURGH PA 15233**

Bond Number _____

PERFORMANCE BOND

Know all men by these Presents that we _____ **“TO BE COMPLETED ONLY BY AWARDEE”**
(hereinafter called “Principal”) as Principal, and _____
authorized to do business in the Commonwealth of Pennsylvania (hereinafter called “Surety”) as Surety, are held
and firmly bound unto the Community College of Allegheny County, through its Board of Trustees,
_____ in the sum of _____

to be paid to the said College aforesaid, its certain attorney, or assigns. To which payment will and truly be made,
said principal and said surety to bind themselves their respective successors or assigns jointly and severally, firmly
by these presents.

WITNESS our hands and seals, the _____ day of _____ 20____.

WHEREAS the above bounded _____
_____ has filed with the Community College of Allegheny County,
proposals for the _____

The Condition of the above Obligation is such that if the said _____
shall perform _____

In accordance with the agreement between _____
and the Community College of Allegheny County of even date herewith and the specifications and proposals
attached to and made part of the agreement, and shall indemnify and save harmless the said Community College of
Allegheny County from all liens, charges, demands, loss and damages of every kind and nature, whatsoever. Then
this obligation to be void, otherwise to be and remain in full force and virtue.

Attest: _____ (SEAL)
CONTRACTOR

_____ (SEAL)
SECRETARY PRESIDENT

Signed, Sealed and delivered in presence of

_____ (SEAL)
SURETY COMPANY

_____ (SEAL)
ADDRESS

_____ (SEAL)
TITLE

**COMMUNITY COLLEGE OF ALLEGHENY COUNTY
800 ALLEGHENY AVENUE, PITTSBURGH PA 15233**

LABOR AND MATERIAL

P A Y M E N T B O N D

KNOW ALL MEN BY THESE PRESENTS:

That we _____ **"TO BE COMPLETED ONLY BY AWARDEE"** _____

_____ as Principal
hereinafter called Principal, and _____

as Surety, hereinafter called Surety, are held and firmly bound unto the
COMMUNITY COLLEGE OF ALLEGHENY COUNTY, through its Board of Trustees as Obligee, hereinafter called Owner, for the use and benefit of claimants
as hereinbelow defined, in the amount of _____

Dollars (\$ _____),

for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these
presents.

WHEREAS, Principal has by written agreement, dated _____ 20_____, entered into a contract with Owner
for _____
in accordance with drawings and specifications prepared by _____

(Here insert full name, title and address)

_____ which contract is by reference made a part hereof, and is
hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal shall promptly make payment to all claimants as
hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it
shall remain in full force and effect, subject, however, to the following conditions:

- (1) A claimant is defined as one having a direct contract with the Principal or with a sub-contractor of the Principal for labor, material, or both used or
reasonably required for use in the performance of the contract, labor and material being construed to include that part of water, gas, power, light, heat, oil,
gasoline, telephone service or rental of equipment directly applicable to the Contract.
- (2) The above-named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in
full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or
materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums
as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
- (3) No suit or action shall be commenced hereunder by any claimant.
 - (a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: The
Principal, the Owner, or the Surety above-named, within ninety (90) days after such claimant did or performed the last of the work or labor, or
furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party
to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same
by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner or Surety, at any place where an office is
regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the
aforesaid project is located, save that such service need not be made by a public officer.
 - (b) After the expiration of one (1) year following the date on which Principal ceased work on said Contract, it being understood, however, that if
any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended
so as to be equal to the minimum period of limitation permitted by such law.
 - (c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the project, or any
part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not
elsewhere.
- (4) The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by
Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under
and against this bond.

Signed and sealed this _____ day of _____ 20_____

By _____
Witness _____ (Seal) Principal

By _____
Witness _____ (Seal) Surety

This bond is issued simultaneously with performance bond in favor of the Owner conditioned on the full and faithful performance of the Contract.

Original – January 1980

MASTER SERVICES AGREEMENT
Bid 1034
UPGRADE ELECTRICAL INFRASTRUCTURE AT CCAC
FIELD HOUSE – ALLEGHENY CAMPUS
“Awardee Only”

THIS MASTER SERVICES AGREEMENT ("Agreement") is made and entered into as of this _____ day of _____, 2018, by and between **Community College of Allegheny County**, with a business office located at 800 Allegheny Avenue, Pittsburgh, PA 15233 (hereinafter referred to as the "College"), and _____ (hereinafter referred to as "Contractor").

RECITALS

WHEREAS, the College has issued a Request for Quotation, Bid Solicitation, Request for Proposal, and/or a Purchase Order (hereinafter individually and collectively referred to as the "Order"), pursuant to

Bid Proposal No.	Awardee Only
-------------------------	---------------------

which College seeks to procure certain work and services, as more fully described on the Order; and

WHEREAS, Contractor has submitted a proposal to the College to provide the services described in the Order, a copy of which is attached hereto as Exhibit A (hereinafter the "Proposal") and incorporated by reference;

WHEREAS, the College desires to engage Contractor to provide the services, pursuant to and in accordance with the terms and conditions that this Agreement set forth herein.

NOW, THEREFORE, in consideration of the premises and covenants that this Agreement contains, the receipt and adequacy of which are hereby acknowledged, the parties, intending to be legally bound, agree as follows:

1. Term. The term of this Agreement shall be as specified in the Order unless otherwise stated in the section below. If no date is specified, this Agreement shall begin with the date first stated above and terminate upon satisfactory completion of the services described herein.

2. Services. Contractor shall fully and faithfully perform the work and services described in the Order and the Proposal and any specifications, scope of work or other documentation attached thereto. Contractor warrants that all work and services performed by or on behalf of it under this Agreement will conform to all terms and specifications set forth in the Order and in the Proposal.

3. Price/Fees: The College shall pay Contractor for the services and work performed by Contractor in accordance with the fees and/or prices set forth in the Proposal.

4. **Terms and Conditions:** This Agreement, and the services to be performed by Contractor hereunder, will be subject to and governed by College's Standard Terms and Conditions for the Purchase of Goods and Services ("Master Terms"), which are incorporated herein by reference. The Master Terms can be viewed and downloaded at <https://www.ccac.edu/client/twocolumn.aspx?pageid=28676>. By signing below, Contractor acknowledges its receipt and acceptance of the Master Terms.

5. **Insurance Requirements:** In addition to the Master Terms, Contractor shall comply with the insurance and indemnification requirements set forth on Exhibit B, which are incorporated herein by reference. Prior to commencing performance of the Services, Contractor shall furnish to the College a properly executed certificate(s) of insurance which evidence all insurance required by Exhibit B. Said certificate(s) of insurance shall be attached herein as Exhibit C.

6. **Assignment.** Contractor may not assign or subcontract this Agreement or its performance thereof, in whole or in part, without the College's prior written consent.

7. **Entire Agreement; Modification.** This Agreement, together with the Exhibits and other documents referenced and incorporated herein, sets forth the entire agreement of the parties on the subject matter hereof and supersedes all previous or concurrent agreements between them, whether oral or written. Any proposal, quotation, acknowledgment, confirmation or other writing submitted by Contractor to the College shall not be deemed to amend or modify this Agreement, and will be of no legal effect except to the extent that it serves to identify the work and services to be performed by the Contractor. This Agreement, and the terms set forth in the Master Terms, will control over any conflicting terms or provisions contained in any proposal, invoice or other documentation submitted by Contractor to College. The terms of this Agreement may not be modified or changed except by a writing that both parties sign. This Agreement shall inure to the benefit of the College and Contractor and the College's successors and assigns.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

AWARDEE ONLY – COMPANY NAME

**COMMUNITY COLLEGE
OF ALLEGHENY COUNTY**

By: _____

By: Joyce Breckenridge

Signature: _____

Signature: _____

Title: _____

Title: Vice President for Finance

Date: _____

Date: _____

Revised 3/3/15

EXHIBITS - The following Exhibits are attached hereto and made a part of this Agreement for all purposes:

- Exhibit A - Contractor's Proposal Response**
- Exhibit B - Insurance Requirements**
- Exhibit C - Contractor's Certificate(s) of Insurance.**
- Exhibit D – Performance and Payment Bonds**
- Exhibit E – No-Lien Agreement**

COMMUNITY COLLEGE OF ALLEGHENY COUNTY
800 ALLEGHENY AVENUE, PITTSBURGH, PA 15233

NO-LIEN AGREEMENT

"TO BE COMPLETED ONLY BY AWARDEE"

Bid 1034

Made the _____ day of _____, 20_____ between _____

Pittsburgh, Pennsylvania Contractor and Community College of Allegheny County,
Pittsburgh, Pennsylvania, Owner.

Whereas, by separate written contract dated and executed the day and year first above written. The Owner and Contractor have entered into a No-Lien Contract (herein described for convenience as the Contract) to furnish all labor, materials, supplies, tools, and equipment necessary to complete the Contract in accordance with the specifications prepared by the Owner, and the provisions on the Contract between the Owner and Contractor, as more particularly recited therein.

NOW, THEREFORE, in consideration of the execution of said Contract for the purchases of and delivery on the premises of the owner and terms and conditions thereof, the Contractor covenants and agrees as follows:

1. The contractor covenants and agrees that no mechanics' claims or liens shall be entered or filed by the Contractor or by any subcontractor or materialsman or by an other person against the building or property of the Owner described more particularly hereinafter, for or on account of any work or labor done, materials, supplies, tools and equipment furnished in, upon, or about the building and property of the Owner described more particularly hereinafter.
2. Any and all right of lien is hereby waived and the Contractor, all subcontractors, all materialsmen, all persons supplying labor, and/or materials and all other persons shall look exclusively to and hold the Contractor and not the property liable for any sums due, however arising.
3. The property as to which this No-Lien Agreement is filed is located at Community College of Allegheny County, _____.

Block/Lot _____

IN WITNESS WHEREOF, the parties hereto, with the intent to be bound legally thereby have duly executed this No-Lien Agreement the day and year first above written.

COMMUNITY COLLEGE OF ALLEGHENY COUNTY (OWNER)

CCAC - VICE PRESIDENT FOR FINANCE (revised 3/16/15)

(CONTRACTOR)

WITNESS

COMMUNITY COLLEGE OF ALLEGHENY COUNTY
800 ALLEGHENY AVENUE PITTSBURGH, PA 15233

INSURANCE REQUIREMENTS

FORM B

Indemnification. To the fullest extent permitted by law, Contractor shall defend, indemnify and hold harmless the Community College of Allegheny County (CCAC), its agents, officers, employees, and volunteers from and against all claims, damages, losses, and expenses (including but not limited to attorney fees and court costs) arising from the acts, errors, mistakes, omissions, work or service of Contractor, its agents, employees, or any tier of its subcontractors in the performance of this Contract. The amount and type of insurance coverage requirements of this Contract will in no way be construed as limiting the scope of indemnification in this Paragraph.

Insurance. Contractor shall maintain during the term of this Contract insurance policies described below issued by companies licensed in Pennsylvania with a current A.M. Best rating of A- or better. At the signing of this Contract, and prior to the commencement of any work, Contractor shall furnish the CCAC Purchasing Department with a **Certificate of Insurance** evidencing the required coverages, conditions, and limits required by this Contract at the following address: Community College of Allegheny County, Purchasing Department, 800 Allegheny Avenue, Pittsburgh, PA 15233.

The insurance policies, except Workers' Compensation and Professional Liability, shall be endorsed to name Community College of Allegheny County, its agents, officers, employees, and volunteers as Additional Insureds with the following language or its equivalent:

Community College of Allegheny County, its agents, officers, employees, and volunteers are hereby named as additional insureds as their interest may appear.

All such Certificates shall provide a 30-day notice of cancellation. Renewal Certificates must be provided for any policies that expire during the term of this Contract. Certificate must specify whether coverage is written on an Occurrence or a Claims Made Policy form.

Insurance coverage required under this Contract is:

- 1) **Commercial General Liability** insurance with a limit of not less than \$1,000,000 per occurrence for bodily injury, property damage, personal injury, products and completed operations, and blanket contractual coverage, including but not limited to the liability assumed under the indemnification provisions of this Contract.
- 2) **Automobile Liability** insurance with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with respect to Contractor's owned, hired, and non-owned vehicles.
- 3) **Workers' Compensation** insurance with limits statutorily required by any Federal or State law and **Employer's Liability** insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.
- 4) **Professional Liability** insurance (where applicable) covering acts, errors, mistakes, and omissions arising out of the work or services performed by the Contractor, or any person employed by the Contractor, with a limit of not less than \$1,000,000 each claim.

INDEX TO TECHNICAL SPECIFICATION FOR BID 1034

UPGRADE ELECTRICAL INFRASTRUCTURE AT CCAC FIELD HOUSE - ALLEGHENY CAMPUS

DIVISION 1 - GENERAL REQUIREMENTS		PAGE(S)
Sec	01000	Special Project Procedures
	01010	Summary of Project
	01031	Alteration Project Procedures
	01041	Project Coordination
	01045	Cutting and Patching
	01100	Alternates
	01152	Applications for Payment
	01153	Change Order Procedures
	01200	Project Meetings
	01300	Submittals
	01340	Shop Drawings, Product Data & Samples
	01400	Quality Control
	01500	Construction Facilities & Temporary Controls
	01540	Security
	01569	Construction Cleaning
	01600	Material and Equipment
	01650	Starting of Electrical Systems
	01660	Testing of Electrical Systems
	01670	Systems Demonstration
	01700	Contract Closeout
	01710	Cleaning
	01720	Project Record Documents
	01730	Operating and Maintenance Data
	01740	Warranties and Bonds
	01000-1	thru 01000-2
	01010-1	" 01010-8
	01031-1	" 01031-5
	01041-1	" 01041-3
	01045-1	" 01045-3
	01100-1	
	01152-1	thru 01152-4
	01153-1	" 01153-4
	01200-1	" 01200-2
	01300-1	" 01300-3
	01340-1	" 01340-2
	01400-1	" 01400-2
	01500-1	" 01500-2
	01540-1	
	01569-1	
	01600-1	thru 01600-5
	01650-1	
	01660-1	thru 01660-4
	01670-1	" 01670-2
	01700-1	" 01700-3
	01710-1	" 01710-2
	01720-1	" 01720-2
	01730-1	" 01730-5
	01740-1	" 01740-2

DIVISION 2 – SITE WORK

Sec 02070 Demolition 02070-1 thru 02070-12

DRAWINGS EU E001, EU E002, EU E003, EU E102

SPECIAL PROJECT PROCEDURES

SECTION 01000

Section 01000 - Page 01000-1

SPECIAL PROJECT PROCEDURES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract including General and Supplementary Conditions and all other Division 1 specification sections apply to work of this section.

1.02 SITE

- A. The location of the Project is the Fieldhouse (Monument Hill) of Allegheny Campus, 808 Ridge Avenue, Pittsburgh, PA 15212.
- B. The College will designate an area adjacent to the building for use by the Contractor for a dumpster, a staging area and/or for storage. Protection and security of materials is the responsibility of the Contractor.
- C. All Contractors must check in with Security at the Security Desk in the Physical Education Building with a valid photo ID. They will be issued a temporary contractor parking hang tag and will be permitted to park in Student Lot #4 (ALCO Lot #22) on Ridge Avenue.

1.03 USE OF PREMISES

- A. Interior spaces will be occupied throughout the construction phase.
- B. Prior to the start of work, Contractor shall develop a phasing schedule and Method of Procedure (MOP) for the implementation of the work. Owner will cooperate with the Contractor in providing access to a given area as work proceeds according to the phasing schedule.
- C. Contractor shall take all necessary precautions to minimize disruptions to the Owner's on-going operations and maintain a safe environment for the Owner's employees and customers.
- D. Protect furniture, equipment and existing finishes.
- E. Remove from the building on a daily basis all demolished materials and construction debris.

1.04 CONTACT PERSON

- A. For CCAC: Elaine C. Sadowski (412-237-3157)
- B. For Electrical Engineer: Casey Leman (412-325-4331)

SPECIAL PROJECT PROCEDURES

Section 01000 - Page 01000-2

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SUMMARY OF PROJECT

SECTION 01010

Section 01010 - Page 01010-1

SUMMARY OF PROJECT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Title of Project, Type of Contracts and Work of each Separate Contract
- B. Work by Others and Future Work
- C. Work Sequence
- D. Contractor use of Premises
- E. Owner Occupancy
- F. Owner-furnished Items
- G. Field Engineering
- H. Coordination
- I. Reference Standards
- J. Project Meetings

1.02 RELATED WORK

- A. General Conditions, Special Conditions, Instructions to Bidders
- B. Section 01041 - Project Coordination: Coordination of work of separate contracts

1.03 PROJECT: WORK COVERED BY CONTRACT DOCUMENTS

- A. A mandatory prebid meeting will be held at the construction site. The date and time is indicated on the Invitation to Bid sheet. All prospective bidders are required to attend.
- B. Work of a single Prime Electrical Contractor for **Project #17-CO-001a - Upgrade Electrical Infrastructure at Fieldhouse (Monument Hill) at Allegheny Campus** of the Community College of Allegheny County, Owner, further identified as the College or the Owner and to include the following:

SUMMARY OF PROJECT

Section 01010 - Page 01010-2

1. Perform all electrical work as indicated in the plans and specifications.
2. All electrical work not expressly mentioned in the specification and all work specified and not shown on the Drawings but obviously necessary to the proper execution of the same, shall be performed by the Contractor, as it is not the intent to delineate or describe every detail and feature of work. No additions to the Contract sum will be approved for any materials, equipment and/or labor to perform work hereunder unless it can be clearly shown to be beyond the scope and intent of the Drawings and Specifications and absolutely essential to the proper execution of the work.
3. Description of the Work: Work for this Project shall be accomplished by a Prime Electrical Contractor according to Pennsylvania statute. Work included in this Prime Contract shall include, but not be limited to the following:
 - a. Electrical Construction: The work to be performed under these Specifications and the accompanying Drawings comprises the furnishing of all labor, materials, tools, equipment and other services and facilities necessarily for the complete installation of, but not necessarily limited to the following:
 1. Remove the noted electrical equipment as designated on the Contract Drawings, unless noted to remain.
 2. Furnish and install all electrical service, hardware and equipment to support the new units and equipment as detailed on the Drawings.
 3. Cut and patch openings in existing ceilings and walls and repair as required to match the building conditions.
 4. Do all necessary testing and adjusting of new equipment and systems to ensure performance meets design criteria. Record and report all tests to the Owner.

SUMMARY OF PROJECT

Section 01010 - Page 01010-3

1.04 CONTRACTS

A. Perform work of single prime electrical contract with Owner to include the following: Electrical Construction.

1.05 ADMINISTRATIVE & PROCEDURAL SECTIONS APPLICABLE TO ALL PRIME CONTRACTS

A. Section 01010 - Summary of Project
B. Section 01031 - Alteration Project Procedures
C. Section 01041 - Project Coordination
D. Section 01045 - Cutting and Patching
E. Section 01152 - Applications for Payment
F. Section 01153 - Change Order Procedures
G. Section 01200 - Project Meetings
H. Section 01300 - Submittals
I. Section 01500 - Construction Facilities & Temporary Controls
J. Section 01540 - Security: Security Program
K. Section 01600 - Material & Equipment: Storage & Protection Product Options and Substitutions
L. Section 01650 - Starting of Electrical Systems
M. Section 01670 - Systems Demonstration
N. Section 01700 - Contract Closeout
O. Section 01710 - Cleaning
P. Section 01730 - Operations & Maintenance Data
Q. Section 01740 - Warranties & Bonds

1.06 TEMPORARY FACILITIES & SERVICES APPLICABLE TO PRIME CONTRACT

A. Section 01500 - Temporary Electricity, Temporary Lighting, Temporary Telephone, Temporary Water, Sanitation Facilities, Construction Aids and Temporary Enclosures.
B. Section 01500 - Construction Cleaning; Cleaning of Contract Work; delivery of debris to collection receptacles.

SUMMARY OF PROJECT

Section 01010 - Page 01010-4

1.07 CONTRACT FOR ELECTRICAL CONSTRUCTION
A. Contract and Reference Drawings: As listed on the Index.

1.08 WORK SEQUENCE
A. Construct work in stages to accommodate College's intended use of the facilities. Coordinate Progress Schedule and coordinate with College during the work so there is no disruption of existing services.
1. All work under this Contract shall be scheduled between the hours of 7 a.m. and 10 p.m., Monday through Friday. Specific dates have yet to be determined.
2. Each day all areas shall be returned to a condition that is acceptable to the College to conduct normal operations.
B. It is the intent of the College to occupy work areas to conduct normal operations and business during the normal work day. The Contractors shall schedule work so that it does not effect the College's day-to-day operations.
C. No disruption of existing services shall be permitted unless coordinated with the CCAC Project Manager. Contractor shall be responsible to restore services immediately to existing systems for any failure directly or indirectly due to work being performed under this Contract.

1.09 CONTRACTOR USE OF PREMISES
A. Contractor shall limit their use of premises to construction activities in the areas indicated and allow for College occupancy and use by the public of adjacent areas as well as construction areas during College's normal business hours.
B. Coordinate use of premises under direction of the Prime Electrical Contractor.
C. Assume full responsibility for protection and safekeeping of products under this Contract.
D. Obtain and pay for use of additional storage or work areas needed for operations under this Contract.

SUMMARY OF PROJECT

Section 01010 - Page 01010-5

- E. Contractor shall maintain safe egress and ingress to all areas of the building for occupants and visitors.
- F. The use of specific existing toilets within the building by the Contractor or their personnel will be permitted. Toilet areas are to be maintained by the Contractor.
- G. Contractor's personnel shall check in and out at the Security Desk in the Physical Education Building whenever they are on the premises.

1.10

OWNER OCCUPANCY

- A. Owner will occupy the premises during the entire period of construction for the conduct of his normal operations. Cooperate with College so as not to interfere or disrupt normal operations of the College. Any work which will require complete occupation of an area by the Contractor for accomplishment and not permit normal function of the College operations within the area will be accomplished outside of the regular College's working hours and must be scheduled not less than seventy-two (72) hours in advance.
- B. Contractor to minimize conflict and to facilitate Owner operations. Perform the work so as not to interfere with the College's operations including operation that will produce disruptive noise levels.
- C. The College reserves the right to occupy and to place and install equipment in completed areas of the building prior to Substantial Completion, provided such occupancy does not interfere with completion of the work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total work.
 - 1. A certificate of Substantial Completion will be executed for each specific portion of the work to be occupied prior to College occupancy.
 - 2. Prior to partial College occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed.

SUMMARY OF PROJECT

Section 01010 - Page 01010-6

1.11 FIELD ENGINEERING

- A. Provide field engineering services; establish grades, lines and levels by use of recognized engineering survey practices.
- B. Control datum for survey is first floor line as shown on Drawings. Locate and protect control and reference points.
- C. The Contractor shall obtain all required permits and submit copies of same to Project Manager.

1.12 COORDINATION

- A. The prime Electrical Contractor shall coordinate all the work of the various sections of Specifications to assure efficient and orderly sequence of installation of construction elements, as stated in the following paragraphs with provisions for accommodating items to be installed later. The Contractor shall prepare a Method of Procedure (MOP) document for approval by Owner, Engineer and Contractor and shall adhere to this document.
- B. Verify characteristics of elements of interrelated operating equipment are compatible; coordinate work of various sections having interdependent responsibilities for installing, connecting to and placing in service such equipment.
- C. Coordinate space requirements and installation of electrical work, which are indicated diagrammatically on Drawings. Follow routing shown for conduits as closely as practicable; make runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, maintenance and repairs.
- D. In finished areas conduits and wiring in the construction. Coordinate locations of fixtures and outlets with finish elements.

SUMMARY OF PROJECT

Section 01010 - Page 01010-7

1.13 REFERENCE STANDARDS

- A. For Products specified by association or trade standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. The date of the standard is that in effect as of the Bid date, except when a specific date is specified.
- C. Obtain copies of standards when required by Contract Documents. Maintain copy at job site during progress of the specific work.

1.14 PROJECT MEETINGS

- A. Attend project meetings throughout progress of the work: Construction meetings and progress meetings as required by Owner.
- B. Attendance: Job superintendent, major subcontractors and suppliers; Physical Plant Supervisor and Owner as appropriate to agenda topics for each meeting.
- C. Suggested Agenda: Review of work progress, status of progress schedule and adjustments thereto, delivery schedules, submittals, maintenance of quality standards, pending changes and substitutions and other items affecting progress of the work.

PART 2 PRODUCTS

2.01 PRODUCT QUALITY

- A. All products and materials provided for this Project shall be new, of the best quality available and similar to existing items and materials except where higher quality and characteristics are required to fulfill the intent of the Project.

SUMMARY OF PROJECT

Section 01010 - Page 01010-8

PART 3 EXECUTION

3.01 INSTALLATION

- A. All work shall be scheduled and coordinated with the Owner's Project Manager to meet the following requirements:
 - 1. Minimum practical interference with Owner's normal operations and special needs.
 - 2. Maintain reasonable heating capability during all hours when outside temperature is below 40 degrees F. unless otherwise permitted by Owner's Project Manager.
 - 3. Maintain reasonable cooling capability during all hours when outside ambient temperature exceeds 60 degrees F. unless otherwise permitted by Owner's Project Manager.
- B. All work shall be done using techniques that minimize dirt, disruption and down time in all areas and systems.

END OF SECTION

ALTERATION PROJECT PROCEDURES

SECTION 01031

Section 01031 - Page 01031-1

ALTERATION PROJECT PROCEDURES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Prime Electrical Contractor will coordinate work of trades and schedule elements of alterations and renovation work by procedures and methods to expedite completion of the work.
- B. In addition to demolition specified in Section 02070, and that specifically shown, cut, move or remove items as necessary to provide access or to allow alterations and new work to proceed. Include such items as:
 - 1. Repair or removal of hazardous or unsanitary conditions.
 - 2. Removal of abandoned items and items serving no useful purpose such as abandoned piping, conduit and wiring.
 - 3. Removal of unsuitable or extraneous materials not marked for salvage, such as abandoned furnishings and equipment, and debris such as rotted wood, rusted metals and deteriorated concrete.
 - 4. Cleaning of surfaces, and removal of surface finish as needed to install new work and finishes.
- C. Patch, repair and refinish existing items to remain to the specified condition for each material with a workmanlike transition to adjacent new items of construction.

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Project
- B. Section 01045 - Cutting and Patching
- C. Section 01300 - Submittals
- D. Section 01500 - Construction Facilities & Temporary Controls
- E. Section 01540 - Security
- F. Section 01710 - Cleaning

ALTERATION PROJECT PROCEDURES

Section 01031 - Page 01031-2

1.03 SEQUENCE AND SCHEDULES

- A. Schedule work as specified in Section 01010.
- B. Submit separate detailed subschedule for alterations work, coordinated with the Construction Schedules.
Show:
 - 1. Each stage of work, and dates of occupancy of areas.
 - 2. Date of Substantial Completion for each area of alterations work, as appropriate.
 - 3. Trades and subcontractors employed in each stage.

1.04 ALTERATIONS, CUTTING AND PROTECTION

- A. Assign the work of moving, removal, cutting and patching to trades qualified to perform the work in a manner to cause least damage to each type of work, and provide means of returning surfaces to appearance of new work.
- B. Perform cutting and removal work to remove minimum necessary, and in a manner to avoid damage to adjacent work.
 - 1. Cut finish surfaces such as masonry, tile, plaster or metals, by methods to terminate surfaces in a straight line at a natural point of division.
- C. Perform cutting and patching as specified in Section 01045.
- D. Protect existing finishes, equipment and adjacent work that is scheduled to remain from damage.
 - 1. Protect existing and new work from weather and extremes of temperature.
 - a. Maintain existing interior work above 60 degrees F.
 - b. Provide weather protection, waterproofing, heat and humidity control as needed to prevent damage to remaining existing work and to new work.
- E. The Contractor shall provide temporary enclosures as specified in Section 01500, to separate work areas from the existing building and from areas occupied by Owner and to provide weather protection.

ALTERATION PROJECT PROCEDURES

Section 01031 - Page 01031-3

F. Discoveries of construction, having a historic or private value shall remain in the possession of Owner.

1. Promptly notify Owner.
2. Protect discovery from damage from elements or work.
3. Contractor shall store items to be retained by Owner in a safe, dry place on site, or shall dispose of items which Owner releases.

PART 2 PRODUCTS

2.01 SALVAGED MATERIALS

A. Salvage sufficient quantities of cut or removed material to replace damaged work of existing construction, when material is not readily obtainable on current market.

1. Store salvaged items in a dry, secure place on site.
2. Items not required for use in repair of existing work shall remain the property of Owner.
3. Do not incorporate salvaged or used material in new construction except with permission of College.
4. Dispose of items which are not retained or scheduled for reuse.

2.02 PRODUCTS FOR PATCHING, EXTENDING AND MATCHING

A. General Requirements that work be complete:

1. Provide same products or types of construction as that in existing structure, as needed to patch, extend or match existing work.
 - a. Generally Contract Documents will not define products or standards of workmanship present in existing construction; Contractor shall determine products by inspection and any necessary testing, and workmanship by use of the existing as a sample of comparison.

ALTERATION PROJECT PROCEDURES

Section 01031 - Page 01031-4

2. Presence of a product, finish or type of construction requires that patching, extending or matching shall be performed as necessary to make-work complete and consistent to identical standards of quality.

PART 3 EXECUTION

3.01 PERFORMANCE

- A. Patch and extend existing work using skilled mechanics who are capable of matching existing quality of workmanship. Quality of patched or extended work shall be not less than that specified for new work.

3.02 ADJUSTMENTS

- A. Where existing construction is removed and must be replaced, patch floors, walls and ceilings, with finish materials to match existing exactly.
 1. Where removal of material results in adjacent materials becoming one, rework to provide smooth planes without breaks, steps or bulkheads.
 2. Where extreme change of plane of two inches or more occurs, request instructions from Owner as to method of making transition.

3.03 DAMAGED SURFACES

- A. Patch and replace any portion of an existing finished surface which is found to be damaged, lifted, discolored or show other imperfections, with matching material.
 1. Provide adequate support of substrate prior to patching the finish.
 2. Refinish patched portions or painted or coated surfaces in a manner to produce uniform color and texture over entire surface.
 3. When existing surface finish cannot be matched, refinish entire surface to nearest intersections.

ALTERATION PROJECT PROCEDURES

Section 01031 - Page 01031-5

3.04 TRANSITION FROM EXISTING TO NEW WORK

A. When new work abuts or finishes flush with existing work, make a smooth and workmanlike transition. Patched work shall match existing adjacent work in texture and appearance so that the patch or transition is invisible at a distance of five (5) feet.

1. When finished surfaces are cut in such a way that a smooth transition with new work is not possible, terminate existing surface in a neat manner along a straight line at a natural line of division, and provide trim appropriate to finished surface.

3.05 CLEANING

A. Perform periodic and final cleaning as specified in Section 01700.

1. Clean areas daily to a degree which will permit normal continued and unimpaired office and classroom functions and operations.

B. At completion of work of each trade, clean area and make surfaces ready for work of successive trades.

C. At completion of alterations work in each area, provide final cleaning and return space to a condition suitable for use by Owner.

END OF SECTION

PROJECT COORDINATION

SECTION 01041

Section 01041 - Page 01041-1

PROJECT COORDINATION

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Prime Electrical Contractor will coordinate the work for the Project and expedite his work to assure compliance with schedules.

1.02 RELATED REQUIREMENTS

- A. Conditions of the Contract
- B. Section 01010 - Summary of Work
- C. Section 01045 - Cutting and Patching
- D. Section 01152 - Applications for Payments
- E. Section 01200 - Project Meetings
- F. Section 01300 - Submittals
- G. Section 01700 - Contract Closeout
- H. Section 01710 - Cleaning

1.03 CONSTRUCTION ORGANIZATION AND START UP

- A. Contractor shall establish on-site lines of communications:
 - 1. Obtain permits and approvals:
 - a. Building permits and special permits required for work or for temporary facilities.
 - b. Verify that subcontractors have obtained inspections for work and for temporary facilities.
 - 2. Control the use of site:
 - a. Supervise field engineering and site layout.
 - b. Allocate space for each subcontractor's use for field offices, sheds and work and storage areas.
 - c. Establish access, traffic and parking allocations and regulations.
 - d. Monitor use of site during construction.

Section 01041 - Page 01041-2

1.04

PRIME ELECTRICAL CONTRACTOR DUTIES

A. Construction Schedules:

1. Coordinate schedules of the subcontractors.
2. Schedule and hold coordination meetings with the subcontractors to review areas of work and potential problems with work and or schedules.
3. Coordinate the preparation of a detailed overall schedule of basic operations.
4. Monitor schedules as work progresses:
 - a. Identify potential variances between schedules and probable completion dates for each phase of work.
 - b. Recommend to Owner adjustments in schedule to meet required completion dates.
 - c. Adjust schedules as required.
 - d. Document changes in schedule, submit to Owner and to involved subcontractors.

B. Prepare coordination Drawings as required to resolve conflicts and to assure coordination of the work.

1. Submit to College.
2. Reproduce and distribute copies to concerned parties after College review.

C. Monitor periodic cleaning:

1. Enforce compliance with Specifications.
2. Resolve any conflicts.

D. Maintain Reports and Records at Job Site, make available to College.

1. Daily log of progress of work of each subcontractor.
2. Records:
 - a. As-built Drawings
 - b. Contracts
 - c. Purchase Orders
 - d. Materials and Equipment Records
 - e. Applicable handbooks, codes and standards.
 - f. Copies of Permits
3. Obtain information and maintain file of record documents.
4. Assemble documentation for handling of claims and disputes.

1.05 CONTRACTOR CLOSE OUT DUTIES

- A. At completion of work, conduct an inspection to assure that:
 - 1. Specified cleaning has been accomplished.
 - 2. Temporary facilities have been removed from site.
- B. Substantial completion:
 - 1. Conduct an inspection to confirm or supplement subcontractor's list of work to be completed or corrected.
 - 2. Assist College in inspection.
 - 3. Supervise correction and completion of work.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 01045

Section 01045 - Page 01045-1

CUTTING & PATCHING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements and limitations for cutting and patching of work.

1.02 RELATED SECTIONS

- A. Section 01300 - Submittals
- B. Section 01600 - Materials & Equipment: Product Options and Substitutions.
- C. Individual Product Specification Sections:
 - 1. Cutting and patching incidental to work of the Section.
 - 2. Advance notification to other Sections of openings required to work of those Sections.
 - 3. Limitations on cutting structural support members.

1.03 SUBMITTALS

- A. Submit written request in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather-exposed or moisture-resistant element.
 - 3. Efficiency, maintenance or safety of any operational element.
 - 4. Visual quality of sight exposed elements.
 - 5. Work of Owner or separate Contractor.
- B. Include in request:
 - 1. Identification of Project.
 - 2. Location and description of affected work.
 - 3. Necessity for cutting or alteration.
 - 4. Description of proposed work and products to be used.
 - 5. Alternatives to cutting and patching.
 - 6. Effect on work of Owner or separate Contractor.
 - 7. Written permission of affected separate Contractor.
 - 8. Date and time work will be executed.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Primary Products: Those required for original installation.
- B. Product Substitution: For any proposed change in materials, submit request for substitution under provisions of Section 01600.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Inspect existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching.
- B. After uncovering existing work, inspect conditions affecting performance of work.
- C. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Provide temporary supports to ensure structural integrity of the work. Provide devices and methods to protect other portions of Project from damage.
- B. Provide protection from elements for areas which may be exposed by uncovering work.

3.03 CUTTING AND PATCHING

- A. Execute cutting, fitting and patching including excavation and fill to complete work.
- B. Fit products together to integrate with other work.
- C. Uncover work to install ill-timed work.
- D. Remove and replace defective or nonconforming work.
- E. Remove samples of installed work for testing when requested.
- F. Provide openings in the work for penetration of mechanical and electrical work.

Section 01045 - Page 01045-3

3.04

PERFORMANCE

- A. Execute work by methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.
- B. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- C. Restore work with new products in accordance with requirements of Contract Documents. Fit work to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- D. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire resistant material to full thickness of the penetrated element.
- E. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.

END OF SECTION

ALTERNATES

SECTION 01100

Section 01100 - Page 01100-1

ALTERNATES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. This Section identifies each Alternate by number and describes the basic changes to be incorporated into the work, only when that Alternate is made a part of the Work by specific provisions in the Agreement.

1.02 RELATED REQUIREMENTS

- A. Bidding Documents: Method of quotation of the cost of each Alternate, and the basis of the Owner's acceptance of Alternates.
- B. Agreement: Incorporation of Alternates into the Work.
- C. Sections of the Specifications as listed under the respective Alternates.
- D. Referenced sections of specifications stipulate pertinent requirements for products and methods to achieve the work stipulated under each Alternate.
- E. Coordinate pertinent related work and modify surrounding work as required to properly integrate the work under each Alternate, and to provide the complete construction required by Contract Documents.

1.03 DESCRIPTION OF ALTERNATES

- A. As listed on the Drawings and Bid Proposal Form.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

APPLICATIONS FOR PAYMENT

SECTION 01152

Section 01152 - Page 01152-1

APPLICATIONS FOR PAYMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Submit Applications for Payment to Owner in accord with the schedule established by Conditions of the Contract and Agreement.

1.02 RELATED REQUIREMENTS

- A. Agreement between Owner and Contractor
- B. Conditions of the Contract
- C. Section 01153 - Change Order Procedures
- D. Section 01300 - Submittals
- E. Section 01700 - Contract Closeout

1.03 FORMAT AND DATA REQUIRED

- A. Submit itemized applications typed on AIA Document G702, Application and Certificate for Payment, and continuation sheets G702A to:

Allen & Shariff Engineering
Attn Casey Leman, LC Electrical Designer
700 River Avenue
Suite 600
Pittsburgh, PA 15212

- B. Provide itemized data on continuation sheet:
 - 1. Format, schedules, line items and value; those of the Schedule of Values accepted by Owner.

1.04 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Application Form:

1. Fill in required information, including that for approved Change Orders executed prior to date of submittal of application.
2. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
3. Execute certification with signature of a responsible officer of Contract firm.

APPLICATIONS FOR PAYMENT

Section 01152 - Page 01152-2

B. Continuation Sheets:

1. Fill in total list of all scheduled component items of Work with item number and scheduled dollar value for each item.
2. Fill in dollar value in each column for each scheduled line item when work has been performed or product stored.
 - a. Round off values to nearest dollar, or as specified for Schedule of Values.
3. List each approved Change Order executed prior to date of submission, at the end of the continuation sheets.
 - a. List by Change Order Number, and description, as for an original component item of work.

C. Retainage

1. The Contractor shall indicate a percentage of the completed work and stored material retained in each application for payment.
2. The retainage shall be calculated from Line Item 4 "Total Completed and Stored to Date" with the breakdown shown in Line Item 5a and 5b according to the following schedule:

<u>Contract Work Completed</u>	<u>Retained Amount</u>
0 - 100%	10%

3. The Contractor shall reduce the retainage as work progresses within the schedule as shown or may request in writing the reduction of retainage as job conditions warrant.
4. The College will reserve the right to approve or reject the reduction of retainage based upon the values shown in the Continuation Sheet G-703 which are in excess of the actual work completed or items which may effect the job progress or completion.

1.05

SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

A. When the Owner requires substantiating data, Contractor shall submit suitable information, with a cover letter identifying:

APPLICATIONS FOR PAYMENT

Section 01152 - Page 01152-3

1. Project
2. Application number and date
3. Detailed list of enclosures
4. For stored products:
 - a. Item number and identification as shown on application.
 - b. Description of specific material.

B. Submit one (1) copy of data and cover letter for each copy of application.

1.06 PREPARATION OF APPLICATION FOR FINAL PAYMENT

- A. Fill in Application Form as specified for progress payments.
 1. Use continuation sheet for presenting the final statement of accounting as specified in Section 01700 - Contract Closeout.

1.07 SUBMITTAL PROCEDURE

- A. Submit one (1) original notarized Application for Payment to Owner.
- B. When Owner finds Application properly completed and correct, he will process for payment.

1.08 REFUND OF SALES TAX

- A. Access to Accounting Records - The Contractor shall check all materials, equipment and labor entering into the Work and shall keep such full and detailed accounts as may be necessary for proper financial management under this Agreement and the system shall be satisfactory to the Owner. The Owner, its representative or regulatory agency 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.

APPLICATIONS FOR PAYMENT

Section 01152 - Page 01152-4

- B. Assignment of Refund Rights - 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 this 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.
- C. Contracts with Subcontractors - The Contractor agrees to include the "Access to Accounting Records" and "Assignment of Refund Rights" paragraphs in full in any contracts with subcontractors.

1.09

TAXES

- A. Owner is a governmental entity and is generally exempt from sales and use tax with respect to purchases of building machinery and equipment. A tax exemption certificate will be provided upon request. It is the successful Bidder's responsibility to pay any/all applicable taxes on nonexempt equipment, supplies and services in accordance with applicable law.

PART 2

PRODUCTS

Not Used

PART 3

EXECUTION

Not Used

END OF SECTION

CHANGE ORDER PROCEDURES

SECTION 01153

Section 01153 - Page 01153-1

CHANGE ORDER PROCEDURES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Promptly implement change order procedures.
 - 1. Provide full written data required to evaluate changes.
 - 2. Maintain detailed records of any work authorized to be done on a time-and-material account basis.
 - 3. Provide full documentation for Owner on request.
- B. Designate in writing the member(s) of Contractor's organization.
 - 1. Who is authorized to accept changes in the Work.
 - 2. Who is responsible for informing others in the Contractor's employ of the authorization of changes in the work.
- C. Only the Chief Facilities Officer of the Owner's Facilities Management Division or his designated representative can authorize changes to Contract.
- D. Only fully documented written change orders will be processed for payment. Any Work performed without this approval process will be at the Contractors' expense.
- E. Markups on change order requests shall not exceed fifteen percent (15%). This applies to overhead and profit, labor, materials, equipment, etc.

1.02 RELATED REQUIREMENTS

- A. Conditions of the Contract:
 - 1. Methods of determining cost or credit to Owner resulting from changes in Work.
 - 2. Contractor's claims for additional costs.
- B. Section 01152 - Applications for Payment
- C. Section 01300 - Submittals
- D. Section 01600 - Materials and Equipment
- E. Section 01700 - Contract Closeout

CHANGE ORDER PROCEDURES

Section 01153 - Page 01153-2

1.03 DEFINITIONS

- A. Change Order: Any change to the original Contract agreement.
- B. Construction Change Authorization, AIA Document G713: A written order to the Contractor, signed by Owner, which amends the Contract Documents as described, and authorized Contractor to proceed with a change which affect the Contract Sum or the Contract Time, for inclusion in a subsequent Change Order.

1.04 PRELIMINARY PROCEDURES

- A. College may initiate changes by submitting a Proposal Request to Contractor. Request will include:
 1. Detailed Description of the Change, Products, and location of the change in the Project.
 2. Supplementary or revised Drawings and Specifications.
 3. The projected time span for making the change and a specific statement as to whether overtime work is, or is not authorized.
 4. A specific period of time during which the requested price will be considered valid.
 5. Such request is for information only, and is not an instruction to execute the changes, nor to stop work in progress.
- B. Contractor may initiate changes by submitting a written notice to Owner containing:
 1. Description of the proposed changes.
 2. Statement of the reason for making the changes.
 3. Statement of the effect of the Contract Sum and the Contract Time.
 4. Statement of the effect on the work of separate Contractors.
 5. Documentation supporting any change in Contract Sum or Contract Time, as appropriate.

CHANGE ORDER PROCEDURES

Section 01153 - Page 01153-3

1.05 CONSTRUCTION CHANGE AUTHORIZATION

- A. College may issue a construction change authorization for Contractor to proceed with a change for subsequent inclusion in a Change Order.
- B. Authorization will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the Change, and will designate the method of determining any change in the Contract Sum and any change in Contract Time.
- C. Owner will sign and date the Construction Change Authorization as authorization for the Contractor to proceed with the changes.
- D. Contractor may sign and date the Construction Change Authorization to indicate agreement with the terms therein.

1.06 DOCUMENTATION OF PROPOSAL AND CLAIMS

- A. Support each quotation for a lump sum proposal with sufficient substantiating data to allow Owner to evaluate the quotation.
- B. On request provide additional data to support time and cost computations:
 1. Labor required
 2. Equipment required
 3. Products required
 - a. Recommended source of purchase and unit cost
 - b. Quantities required
 4. Taxes, insurance and bonds
 5. Credit for work deleted from Contract, similarly documented
 6. Overhead and profit
 7. Justification for any change in Contract Time
- C. Document request for substitutions for Products as specified in Section 01600 - Material and Equipment.

CHANGE ORDER PROCEDURES

Section 01153 - Page 01153-4

1.07 PREPARATION OF CHANGE ORDERS

- A. Owner will prepare each change order.
- B. Form: Change Order: AIA Document G701.
- C. Change Order will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change.
- D. Change Order will provide an accounting of the adjustment in the Contract Sum and in the Contract Time.

1.08 LUMP SUM/FIXED PRICE CHANGE ORDER

- A. Content of Change Orders will be based on, either:
 1. College's Proposal Request and Contractor's responsive Proposal as mutually agreed between Owner and Contractor.
 2. Contractor's Proposal for a change, as recommended by College.
- B. Owner will sign and date the Change Order as authorization for the Contractor to proceed with the Changes.
- C. Contractor may sign and date the Change Order to indicate agreement with the terms therein.

1.09 CORRELATION WITH CONTRACTOR'S SUBMITTALS

- A. Periodically revise Schedule of Values and Request for Payment forms to record each change as a separate item of work, and to record the adjusted Contract Sum.
- B. Periodically revise the Construction Schedule to reflect each change in Contract Time.
 1. Revise subschedules to show changes for other items of work affected by the changes.
- C. Upon completion of work under a Change Order, enter pertinent changes in Record Documents.

PART 2 PRODUCTS
Not Used

PART 3 EXECUTION
Not Used

END OF SECTION

PROJECT MEETINGS

SECTION 01200

Section 01200 - Page 01200-1

PROJECT MEETINGS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. College shall schedule and administer preconstruction meeting, periodic progress meetings and specially called meetings throughout progress of the work.
 - 1. Prepare agenda for meetings.
 - 2. Distribute written notice of each meeting.
 - 3. Preside at meetings.
 - 4. Record the Minutes: include significant proceedings and decisions.
 - 5. Reproduce and distribute copies of minutes after each meeting.
 - a. To participants in the meeting.
 - b. To parties affected by decisions made at the meeting.
- B. Representatives of Contractors, subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.

1.02 RELATED REQUIREMENTS

- A. Instructions to Bidders
- B. Section 01300 - Submittals
- C. Section 01720 - Project Record Documents
- D. Section 01730 - Operating and Maintenance Data

1.03 PRECONSTRUCTION MEETING

- A. Schedule within 15 days after date of Notice to Proceed.
- B. Location: Project site.
- C. Attendance:
 - 1. Project Manager
 - 2. Physical Plant Supervisor
 - 3. Contractor's Superintendent
 - 4. Major Subcontractors as Appropriate
 - 5. Project Engineer
 - 6. Others as appropriate

PROJECT MEETINGS

Section 01200 - Page 01200-2

D. Agenda:

1. Distribution and discussion of:
 - a. List of major subcontractors and suppliers.
 - b. Projected Construction schedules.
2. Critical work sequencing.
3. Major equipment deliveries and priorities.
4. Project Coordination
 - a. Designation of responsible personnel.
5. Procedures and processing of:
 - a. Field Decisions
 - b. Proposal Requests
 - c. Submittals
 - d. Change Orders
 - e. Applications for Payment
6. Distribution of Contract Documents
7. Procedures for Maintaining Record Documents
8. Use of premises:
 - a. Office, Work and Storage Areas
 - b. Owner's Requirements
9. Construction Facilities, Controls and Construction Aids
10. Temporary Utilities
11. Safety and First-aid Procedures
12. Security Procedures
13. Housekeeping Procedures

1.04

PROGRESS MEETINGS

- A. Schedule regular periodic meetings, as required.
- B. Hold called meetings as required by progress of the work.
- C. Location of the meetings: Project field office.

PART 2

PRODUCTS

Not Used

PART 3

EXECUTION

Not Used

END OF SECTION

SUBMITTALS

SECTION 01300

Section 01300 - Page 01300-1

SUBMITTALS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures
- B. Construction Progress Schedules
- C. Schedule of Values
- D. Shop Drawings
- E. Product Data
- F. Samples
- G. Manufacturer's Certificates

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Project
- B. Section 01152 - Applications for Payment: Submittal of Applications
- C. Section 01600 - Material and Equipment: Manufacturers' Instructions Substitutions and Product Options: Contractor's List of Products
- D. Section 01700 - Contract Closeout: Closeout Submittals

1.03 PROCEDURES

- A. Deliver submittals to Project Manager at address listed in Section 01152, paragraph 1.03, A.
- B. Transmit each item under AIA Form 810. Identify Project, Contractor, subcontractor, major supplier; identify pertinent Drawing sheet and detail number, and Specification section number, as appropriate. Identify deviations from Contract Documents. Provide space for Owner/Engineer review stamps.
- C. Submit initial Project schedule, progress schedules, schedule of values, shop Drawings and product data as required no later than 15 days after award of Contract. After review by College, revise and resubmit as required. Submit revised schedules with each Application for Payment reflecting changes since previous submittal.
- D. Comply with progress schedule for submittals related to Work progress. Coordinate submittal of related items.

SUBMITTALS

Section 01300 - Page 01300-2

- E. After College review of submittal, revise and resubmit as required, identifying changes made since previous submittal.
- F. Distribute copies of reviewed submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.

1.04

CONSTRUCTION PROGRESS SCHEDULE

- A. Submit horizontal bar chart with separate bar for each major trade or operation, identifying first work day of each week.
- B. Show complete sequence of construction by activity, identifying work of separate stages and other logically grouped activities. Show projected percentage of completion for each item of Work as of time of each progress Application for Payment.
- C. Show submittal dates required for Shop Drawings, Product Data, and Samples and Product delivery dates.
- D. Submit progress schedule in duplicate.

1.05

SCHEDULE OF VALUES

- A. The Schedule of Values must be provided to and accepted by the Owner prior to any approval of payment.
- B. Submit typed schedule of AIA Form G703.
- C. Format: Table of Contents of the Project Manual. Identify each line item with number and title of the major Specification sections.
- D. Include in each line item a directly proportional amount of Contractor's overhead and profit.
- E. Provide a subschedule for each separate stage of Work.
- F. Revise schedule to list change orders, for each application for payment.

1.06

SHOP DRAWINGS

- A. Submit the number of opaque reproductions which Contractor requires, plus three copies which will be retained by College.

SUBMITTALS

Section 01300 - Page 01300-3

1.07 PRODUCT DATA

- A. Mark each copy to identify applicable Products, models, options and other data; supplement manufacturers' standard data to provide information unique to the Work. Include manufacturers' installation instructions when required by the Specification section.
- B. Submit the number of copies which Contractor requires, plus three copies which will be retained by College.

1.08 MANUFACTURERS' CERTIFICATES

- A. Submit certificates, in duplicate.

1.09 MBE & WBE UTILIZATION

- A. Submit monthly MBE and WBE reports for Contractor.
- B. These are to be submitted to the Project Manager with the Contractor's Request for payment on a monthly basis.

1.10 EEO

- A. Submit monthly reports as required showing number of employees for Contractor and subcontractors.
- B. These are to be submitted to the Project Manager with the Contractor's Request for Payment on a monthly basis.

1.11 CERTIFIED PAYROLLS

- A. Contractors, subcontractors and all lower tier subcontractors shall submit to the Project Manager weekly certified payrolls.

PART 2 PRODUCTS
Not Used

PART 3 EXECUTION
Not Used

END OF SECTION

SECTION 01340

Section 01340 - Page 01340-1

SHOP DRAWINGS, PRODUCT DATA & SAMPLES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for submittals.

1.02 SHOP DRAWINGS

- A. Present in a clear and thorough manner. Title each drawing with Project name and number; identify each element of drawing by reference to sheet number and detail, schedule or room number of Contract Documents.
- B. Identify field dimensions; show relation to adjacent or critical features, work or products.

1.03 CONTRACTOR REVIEW

- A. Review submittals prior to transmittal; determine and verify field measurements, field construction criteria, manufacturer's catalog numbers and conformance of submittal with requirements of Contract Documents.
- B. Coordinate submittals with requirements of Work and of Contract Documents.
- C. Sign or initial each sheet of shop drawings and product data and each sample label to certify compliance with requirements of Contract Documents. Notify College in writing at time of submittal of any deviations from requirements of Contract Documents.
- D. Do not fabricate products or begin work which requires submittals until return of submittal with Engineer's acceptance.

1.04 SUBMITTAL REQUIREMENTS

- A. Transmit submittals in accordance with approved Progress Schedule and in such sequence to avoid delay in the Work.

SHOP DRAWINGS, PRODUCT DATA & SAMPLES

Section 01340 - Page 01340-2

- B. Coordinate submittals into logical groupings to facilitate interrelation of the several items:
 - 1. Finishes which involve College selection of colors, textures or patterns.
 - 2. Associated items which require correlation for efficient function or for installation.
- C. Submit one (1) reproducible transparency and one (1) opaque copy of shop drawings.
- D. Submit number of copies of product data and manufacturer's instructions Contractor requires, plus three (3) copies which will be retained by College.

1.05 COLLEGE REVIEW

- A. College will review shop drawings, product data and samples and return submittals within three (3) workdays.

1.06 DISTRIBUTION

- A. Duplicate and distribute reproductions of shop drawings, copies of product data and samples which bear College stamp of approval, to job site file, Record documents file, subcontractors, suppliers, other affected Contractors and other entities requiring information.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

QUALITY CONTROL

SECTION 01400

Section 01400 - Page 01400-1

QUALITY CONTROL

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. General Quality Control
- B. Testing Laboratory Services

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Work
- B. Section 01300 - Submittals: Submittal of Manufacturer's Instruction

1.03 QUALITY CONTROL, GENERAL

- A. Maintain quality control over suppliers, manufacturers, products, services, site conditions and workmanship to produce work of specified quality.

1.04 WORKMANSHIP

- A. Comply with industry standards except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B. Perform work by persons qualified to produce workmanship of specified quality.
- C. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration and racking.

1.05 MANUFACTURERS' INSTRUCTIONS

- A. Comply with instructions in full detail, including each step in sequence. Should instructions conflict with Contract Documents, request clarification from Owner before proceeding.

1.06 MANUFACTURERS' CERTIFICATES

- A. When required by individual Specifications Section, submit manufacturers' certificate, in duplicate, that products meet or exceed specified requirements.

QUALITY CONTROL

Section 01400 - Page 01400-2

1.07 MANUFACTURERS' FIELD SERVICES

- A. When specified in respective Specification Section, provide qualified personnel to observe field conditions, conditions of surfaces and installation, quality of workmanship, test and to make appropriate recommendations.
- B. Representative shall submit written report to Owner listing observations and recommendations.

1.08 TESTING LABORATORY SERVICES

- A. Each Contractor shall employ and pay for services of an Independent Testing Laboratory to perform inspections, tests and other services required by individual Specification Sections, of his portion of the work.
- B. Services will be performed in accordance with requirements of governing authorities and with specified standards.
- C. Reports will be submitted to Owner in duplicate giving observations and results of test, indicating compliance or noncompliance with specified standards and with Contract documents.
- D. Contractor shall cooperate with Testing Laboratory personnel; furnish tools, samples of materials, design mix, equipment, storage and assistance as requested.
 1. Notify Owner and Testing laboratory 24 hours prior to expected time for operations requiring testing services.
 2. Make arrangements with Testing Laboratory and pay for additional samples and tests for Contractor's convenience.

PART 2 PRODUCTS
Not Used

PART 3 EXECUTION
Not Used

END OF SECTION

CONSTRUCTION FACILITIES & TEMPORARY CONTROLS

SECTION 01500

Section 01500 - Page 01500-1

CONSTRUCTION FACILITIES & TEMPORARY CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary Utilities: Electricity and sanitary facilities.
- B. Temporary Controls: Barriers, protection of the Work and water control.
- C. Construction Facilities: Access roads, parking and progress cleaning.

1.02 RELATED SECTIONS

- A. Section 01700 - Contract Closeout: Final cleaning.

1.03 TEMPORARY ELECTRICITY

- A. Connect to existing power service. Power consumption shall not disrupt Owner's need for continuous service.

1.04 TEMPORARY SANITARY FACILITIES

- A. Existing designated facilities located at campus may be used during construction operations. Maintain daily in clean and sanitary condition.

1.05 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas to allow for Owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
- C. Protect nonowned vehicular traffic, stored materials, site and structures from damage.

1.06 PROGRESS CLEANING

- A. Maintain areas free of waste materials debris and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing and continue cleaning to eliminate dust.
- D. Remove waste materials, debris and rubbish from site daily and dispose off-site.
- E. Broom and vacuum clean interior areas used or trafficked by Contractor in performance of construction on a daily basis.

1.07 PROTECTION

- A. Provide temporary partitions, ceilings and/or coverings as required to separate and protect Owner's occupied areas to prevent penetration of dust and moisture and to prevent damage to existing office and computer equipment.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECURITY

SECTION 01540

Section 01540 - Page 01540-1

SECURITY

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Provide a project security program to:
 - 1. Protect Work, stored products and construction equipment from theft and vandalism.
 - 2. Protect Project premises from entry by unauthorized persons.
- B. Protect Owner's operations at site from theft, vandalism or damage from Contractor's work or employees.
- C. The Contractors shall comply with all security regulations of the College and such regulations and/or directives issued by the College shall be absolute.
- D. The Contractors shall not cause the security of the College's buildings, occupants and contents thereof to be jeopardized in any way and shall be responsible for any losses incurred because of such actions.
- E. The Contractor shall secure his tools and equipment in a location mutually agreeable to himself and the College. The College shall not be responsible for its security.
- F. All material required for the Project shall be stored as directed in an area provided at the site.

1.02 RELATED REQUIREMENTS

- A. Section 01200 - Project Meetings
- B. Section 01600 - Storage and Protection of Products

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

CONSTRUCTION CLEANING

SECTION 01569

Section 01569 - Page 01569-1

CONSTRUCTION CLEANING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Cleaning and disposal of waste materials, debris and rubbish during construction.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 CLEANING

- A. Maintain areas under Contractor's control free of waste materials, debris and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from grounds and/or remote spaces prior to leaving the site.
- C. Clean interior areas daily to provide suitable conditions for Owner-occupied areas.

3.02 DISPOSAL

- A. Remove waste materials, debris and rubbish from worksite in Contractor-supplied container(s).

END OF SECTION

SECTION 01600

Section 01600 - Page 01600-1

MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Products
- B. Workmanship
- C. Manufacturers' Instructions
- D. Transportation and Handling
- E. Storage and Protection
- F. Substitutions and Product Options

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Project
- B. Section 01300 - Submittals: Submittal of Manufacturers' Certificates
- C. Section 01700 - Contract Closeout: Operation and Maintenance Data & Warranties.

1.03 PRODUCTS

- A. Products include all material, equipment and systems.
- B. Comply with Specifications and referenced standards as minimum requirements.
- C. Components required to be supplied in quantity within a Specification section shall be the same and shall be interchangeable.
- D. Do not use materials and equipment removed from existing structure, except as specifically required or allowed by Contract Documents.

1.04 WORKMANSHIP

- A. Comply with industry standards except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B. Perform work by persons qualified to produce workmanship of specified quality.
- C. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration and racking.

MATERIAL AND EQUIPMENT

Section 01600 - Page 01600-2

1.05 MANUFACTURERS' INSTRUCTIONS

- A. When work is specified to comply with manufacturers' instruction, submit copies as specified in Section 01300, distribute copies to persons involved and maintain one set in field office.
- B. Perform work in accordance with details of instruction and specified requirements. Should a conflict exist between Specifications and instructions, consult with Owner.

1.06 TRANSPORTATION AND HANDLING

- A. Transport Products by methods to avoid Product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry.
- B. Provide equipment and personnel to handle Products by methods to prevent damage.
- C. Promptly inspect shipments to assure that Products comply with requirements, quantities are correct and Products are undamaged.

1.07 STORAGE AND PROTECTION

- A. Store Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive Products in weather-tight enclosures.
- B. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.
- C. After installation, each Contractor shall provide coverings to protect all installed products from damage due to traffic and construction operations, remove when no longer needed. ALL damaged products shall be replaced at no cost to the College.

1.08 PRODUCT OPTIONS

- A. Within fifteen (15) days after date of award of Contract, submit complete list of major Products and equipment proposed, with name of manufacturer, trade name and model.

B. Options:

1. Products specified only by reference standard: Any Product meeting that standard.
2. Products specified by naming several manufacturers: Products of any named manufacturer meeting Specifications.
3. Products specified by naming one or more manufacturers and "or equal": Submit a request for substitution for any manufacturer not specifically named.
4. Products specified by naming only one manufacturer: No option, product substitution will not be considered.

1.09

SUBSTITUTIONS

A. Where drawings and specifications call for materials of certain manufacturers, the contract shall be based on materials specified. If the Contractor wishes to offer substitutions for consideration, he must request approval ten (10) days prior to bid opening and abide by Section 15500, paragraph 1.07. Any substitutions made after the bid is received will not be accepted. A bidder intending to furnish an alternate in place of the item or equipment specified is required to submit a written request to the College along with the following items no less than ten (10) business days prior to bid opening date.

1. Provide all current published specification data sheets on all components highlighting the comparable specifications to the specified items.
2. Provide third party testing data that shows physical and performance attributes of the proposed equipment with those of the specified product.
3. Provide a copy of the specified warranty: Sample copy of manufacturer's warranty that meets all requirements stated in this specification. Furnish manufacturer's affidavit that project warranty requirements shall be enforced. Standard manufacturer's warranty that does not meet requirements specific to this project will be rejected.

MATERIAL AND EQUIPMENT

Section 01600 - Page 01600-4

4. Any equipment submitted as an equal to specified standard must also submit a list of three (3) jobs where the proposed equipment has been used in similar applications as that which is specified, and within a one hundred (100) mile radius from the location of the specified job. In addition the three (3) jobs must be at least two (2) years old and be available for the engineer, owner or owner's representative to inspect.
5. Any deficiencies in performance, warranty terms or improper submittal procedure shall constitute grounds for immediate rejection. Equipment submitted as possible equals to the specified standard system must meet or exceed all criteria specified. Manufacturer's standard procedures, warranties, etc. that do not meet criteria of the specification will constitute grounds for immediate rejection.
6. Consideration will be given to only those equipment's that have approval prior to the scheduled bid opening date. The College reserves the right to be the final authority on the acceptance or rejection of any proposed alternate equipment.

B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.

C. Request constitutes a representation that Contractor:

1. Has investigated proposed Product and determined that it meets or exceeds in all respects, specified Product.
2. Will provide the same warranty for substitution as for specified Product.
3. Will coordinate installation and make other changes which may be required for Work to be complete in all respects.
4. Waives claims for additional costs which may subsequently become apparent.

- D. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals without separate written request, or when acceptance will require substantial revision or Contract Documents.
- E. Owner will determine acceptability of proposed substitution, and will notify Contractor of acceptance or rejection in writing within a reasonable time.

PART 2 PRODUCTS

2.01 PENNSYLVANIA STEEL PRODUCTS PROCUREMENT ACT

- A. Contractor acknowledges that CCAC is a public agency subject to the requirements of the Pennsylvania Steel Products Procurement Act, 73 P.S. Section 1881 et. Seq (The "SPPA"). Contractor therefore represents and warrants that any and all steel products purchased, used or supplied by it in the performance of the Contract will be melted and manufactured in the United States, and that its performance hereunder will otherwise comply with requirements of the SPPA at all times. Contractor further agrees to provide CCAC with documentation and/or certification of its compliance with the foregoing requirements, as required under the SPPA, and acknowledges that it shall not be entitled to receive payment hereunder until such documentation and/or certification has been provided.

PART 3 EXECUTION

Not Used

END OF SECTION

STARTING OF ELECTRICAL SYSTEMS

SECTION 01650

Section 01650 - Page 01650-1

STARTING OF ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Provide material and labor required to perform start-up of each respective item of equipment and system prior to beginning of test and adjust procedures.
 - 1. Provide information and assistance required, cooperate with test and adjust services.
- B. Comply strictly with specified manufacturer's procedures in starting up electrical systems.

1.02 RELATED REQUIREMENTS

- A. Section 01041 - Project Coordination
- B. Section 01660 - Testing of Electrical Systems

1.03 ADJUSTMENTS

- A. Provide such periodic continuing adjustment services as necessary to insure proper functioning of electrical systems after occupancy of the Project, and for a period of one year after date of Project completion.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not used

END OF SECTION

TESTING OF ELECTRICAL SYSTEMS

SECTION 01660

Section 01660 - Page 01660-1

TESTING OF ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Contractor will employ and pay for services of a qualified manufacturer's recommended organization to perform specified services.
 - 1. Employment of the organization shall in no way relieve Contractor's obligation to perform work of the Contract.

1.02 RELATED REQUIREMENTS

- A. Section 01041 - Project Coordination
- B. Section 01650 - Starting of Electrical Systems
- C. Section 01730 - Operating and Maintenance Data

1.03 DESCRIPTION

- A. Perform testing of Owner-furnished equipment and system.
- B. Provide instruments required for testing and adjusting operation.
 - 1. Make instruments available to College Engineer to facilitate spot checks during testing.
 - 2. Retain possession of instruments, remove from site at completion of services.

1.04 QUALITY ASSURANCE

- A. The organization which performs the service shall be certified to perform services required for the Project.
- B. Within fifteen (15) days after award of Contract, transmit to College the name of the organization proposed to perform the services.

TESTING OF ELECTRICAL SYSTEMS

Section 01660 - Page 01660-2

- C. Comply with applicable procedures and standards of the manufacturer.
 1. Perform services under direction of the supervisor who is designated and qualified under certification requirements of manufacturer.
 2. Maintenance of instruments shall be in accord with requirements of the manufacturer and histories for each instrument shall be available for examination.
 3. Accuracy of measurements shall comply with requirements of the manufacturer.

1.05

SUBMITTALS

- A. Preliminary:
 1. Submit three (3) copies of documentation to confirm compliance with Quality Assurance provisions:
 - a. Manufacturer's representative and personnel training and qualifications.
 - b. Specimen copy of each of the report forms proposed for use.
- B. At least fifteen (15) days prior to starting field work, submit the number of copies which the Contractor requires plus three (3) copies which will be retained by the College's Engineer:
 1. A set of report forms filled out as to the design and the installed equipment.
 2. A complete list of instruments proposed to be used, organized in appropriate categories, with data sheets for each. Show:
 - a. Manufacturer and model number.
 - b. Description and use when needed to further identify the instrument.
 - c. Size or capacity range.
 - d. Latest inspection date.

TESTING OF ELECTRICAL SYSTEMS

Section 01660 - Page 01660-3

3. College's Engineer will review submittals for compliance with Contract Documents, and will return one (1) set marked to indicate:
 - a. Discrepancies noted between data shown and Contract Documents.
 - b. Additional, or more accurate, instruments required.
 - c. Request for specific instruments.
- C. At least fifteen (15) days prior to Contractor's request for final inspection, submit the number of copies which the Contractor requires plus three (3) copies which will be retained by the College's Engineer of final reports, on applicable reporting forms for review.
 1. Schedule testing of parts of the systems which is delayed due to occupancy or other conditions beyond control of the Contractor, as early as the proper conditions will allow, after consultation with College's Engineer.
 2. Submit reports of delayed testing promptly after execution of those services.
 3. Form of Final Reports:
 - a. Each individual final reporting form must bear the signature of the person who recorded data and that of the manufacturer's representative of the organization.
 - b. When more than one (1) certified manufacturer's representative performs services, the firm having managerial responsibility shall make the submittals.
 - c. Identify instruments of all types which were used, and last date of each inspection.

1.06

JOB CONDITIONS

- A. Prior to start of testing, verify that required "Job Conditions" are met:
 1. Systems installation is complete and in full operation.
 2. Conditions are within a reasonable range relative to design conditions.

TESTING OF ELECTRICAL SYSTEMS

Section 01660 - Page 01660-4

3. Lights are turned "on" when lighting is included.
4. Special equipment such as computers and electronic equipment are in full operation.

B. Verify that requirements for preparation for testing have been met for elements of each of the systems which require testing.

1.07 PROCEDURES, GENERAL

- A. Comply fully with the procedural standards of the manufacturer under whose standards service will be performed.
 1. Execute each step of the prescribed procedures without omission.
 2. Accurately record the required data.

1.08 COORDINATION

- A. Coordinate services with the work of the various trades to ensure rapid completion of the services.
- B. Promptly report to College Engineer any deficiencies noted during performance of services to allow immediate corrective action.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SYSTEMS DEMONSTRATION

SECTION 01670

Section 01670 - Page 01670-1

SYSTEMS DEMONSTRATION

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for demonstration of equipment operation and instruction of Owner's personnel.

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Project: Work Sequence.
- B. Section 01650 - Starting of Electrical Systems
- C. Section 01700 - Contract Closeout: Operation and Maintenance Data and Section 01730 - Operating and Maintenance Data
- D. Individual Sections: Specific requirements for demonstrating systems and equipment.

1.03 QUALITY ASSURANCE

- A. Manufacturer to provide authorized representative to demonstrate operation of equipment and systems, instruct Owner's personnel and provide written report that demonstrations and instructions have been completed.
- B. Owner will provide list of personnel to receive instructions, and will coordinate their attendance at agreed-upon times.

1.04 SUBMITTALS

- A. Submit preliminary schedule for Owner's approval, listing times and dates for demonstration of each item of equipment and each system, two (2) weeks prior to proposed dates.
- B. Submit reports within one (1) week after completion of demonstrations, that demonstrations and instructions have been satisfactorily completed. Give time and date of each demonstration, and hours devoted to demonstration, with a list of persons present.

PART 2 PRODUCTS

Not Used

SYSTEMS DEMONSTRATION

Section 01670 - Page 01670-2

PART 3 EXECUTION

3.01 PREPARATION

- A. Verify equipment has been inspected and put into operation in accordance with Section 01650; testing and adjusting has been performed in accordance with Section 01600 and equipment and systems are fully operations.
- B. Have copies of completed operation and maintenance manuals at hand for use in demonstrations and instructions.

3.02 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of equipment and systems to Owner's personnel two (2) weeks prior to date of final inspection. For equipment requiring seasonal operation, perform instructions for other seasons within six (6) months.
- B. Use operation and maintenance manuals as basis of instruction. Review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- C. Demonstrate start-up operation, control, adjustment, trouble-shooting, servicing, maintenance and shutdown of each item of equipment.
- D. Prepare and inset additional data in operations and maintenance manuals when need for additional data becomes apparent during instructions.

3.03 TIME ALLOCATED FOR INSTRUCTIONS

- A. The amount of time required for instruction of each item of equipment and system is that specified in individual sections or where not specified a minimal of one (1) eight- (8) hour day for each equipment section.

END OF SECTION

CONTRACT CLOSEOUT

SECTION 01700

Section 01700 - Page 01700-1

CONTRACT CLOSEOUT

PART 1 GENERAL

- 1.01 REQUIREMENTS INCLUDED
 - A. Closeout Procedures
 - B. Final Cleaning
 - C. Project Record Documents
 - D. Operation and Maintenance Data
 - E. Systems Demonstration
 - F. Warranties
- 1.02 RELATED REQUIREMENTS
 - A. Conditions of the Contract: Fiscal provisions, legal submittals and other administrative requirements.
 - B. Section 01010 - Summary of Project
- 1.03 CLOSEOUT PROCEDURES
 - A. Comply with procedures stated in General Conditions of the Contract for issuance of Certificate of Substantial Completion.
 - B. Owner will occupy designated portion of Project for the purpose of conduct of business under provision stated in Certificate of Substantial Completion.
 - C. When Contractor considers Work has reached final completion, submit written certification that Contract Documents have been reviewed, work has been inspected and that work is completed in accordance with Contract Documents and ready for Owner's inspection.
 - D. In addition to submittals required by the conditions of the Contract, provide submittals required by governing authorities, and submit a final statement of accounting giving total adjusted Contract Sum, previous payments and sum remaining due.

CONTRACT CLOSEOUT

Section 01700 - Page 01700-2

1.04 FINAL CLEANING

- A. Execute prior to final inspection.
- B. Clean all interior surfaces, remove temporary labels, stains and foreign substances, wash and polish transparent and glossy surfaces, vacuum carpeted and soft surfaces, grilles, registers and ductwork. Clean all equipment and fixtures to a sanitary condition. Clean drainage systems.
- C. Remove waste and surplus materials rubbish and construction facilities from the Project and from the site.

1.05 PROJECT RECORD DOCUMENTS

- A. Store documents separate from those used for construction.
- B. Keep documents current; do not permanently conceal any work until required information has been recorded.
- C. At Contract Closeout, submit documents with transmittal letter containing date, Project title, Contractor's name and address, list of documents and signature of Contractor.

1.06 OPERATION AND MAINTENANCE DATA

- A. Provide data for all material and equipment used or installed.
- B. Submit two (2) sets prior to final inspection, give names, addresses and telephone numbers of subcontractors and suppliers. List:
 1. Appropriate design criteria
 2. List of equipment
 3. Parts list
 4. Operating instructions
 5. Maintenance instructions, equipment
 6. Maintenance instruction, finishes
 7. Shop Drawings and Product Data
 8. Warranties

CONTRACT CLOSEOUT

Section 01700 - Page 01700-3

1.07

WARRANTIES

- A. Provide triplicate copies. Execute Contractor's submittals and assemble documents executed by subcontractors, suppliers and manufacturers. Provide table of contents and assemble in binder with durable plastic cover.
- B. Submit material prior to final application for payment. For items of Work delayed materially beyond Date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

PART 2

PRODUCTS

Not Used

PART 3

EXECUTION

Not Used

END OF SECTION

CLEANING

SECTION 01710

Section 01710 - Page 01710-1

CLEANING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Execute cleaning, during progress of the Work and at completion of the Work.

1.02 RELATED REQUIREMENTS

- A. Conditions of the Contract
- B. Each Specification Section: Cleaning for specific Products of work.
- C. Section 01010 - Summary of Project.

1.03 DISPOSAL REQUIREMENTS

- A. Conduct cleaning and disposal operations to comply with codes, ordinances, regulations and antipollution laws.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces. Submit MSDA sheets in advance.
- B. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 EXECUTION

3.01 DURING CONSTRUCTION

- A. Execute cleaning to keep the Work site and adjacent properties free from accumulations of waste materials, rubbish and debris, resulting from construction operations.

CLEANING

Section 01710 - Page 01710-2

- B. Use on-site containers for the collection of waste materials, debris and rubbish.
- C. Remove waste materials, debris and rubbish from the site and dispose of in legal disposal units at the site.

3.02 DUST CONTROL

- A. Clean interior surfaces and restore all disturbed areas daily.

3.03 FINAL CLEANING

- A. Contractor: Clean all interior areas.

END OF SECTION

SECTION 01720

Section 01720 - Page 01720-1

PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Each Contractor shall maintain at the site for the Owner one record copy of:
 - 1. Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other Modifications to the Contract
 - 5. Approved Shop Drawings, Product Data and Samples
- B. At the completion of the work, the Contractor shall deliver to the Engineer the complete set of documents, including changes made to that date on which he shall have recorded as required by the General Conditions, changes or discrepancies between the Drawings and the actual locations or dimensions of member, materials or equipment in the buildings whether architectural, mechanical or electrical.

1.02 RELATED REQUIREMENTS

- A. Section 01300 - Submittals
- B. Section 01730 - Operating & Maintenance Data
- C. Section 01740 - Warranties

1.03 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store documents and samples in locked cabinet and secure storage space apart from documents used for construction.
- B. File documents and samples in accordance with CSI 16 Division format.
- C. Maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.
- D. Make documents and samples available at all times for inspection by Owner.

1.04

RECORDING

- A. Label each document "Project Record" in neat large printed letters.
- B. Record information concurrently with construction progress.
 - 1. Do not conceal any work until required information is recorded.
- C. Drawings, legibly mark drawing in red or various colors to record actual construction:
 - 1. Location of exterior and internal communication construction, referenced to visible and accessible features of the structure.
 - 2. Changes made by Field Order or by Change Order.
 - 3. Details not on original Contract Drawings.
- D. Specifications and Agenda: Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and Supplier of each Product and item of equipment actually installed.
 - 2. Changes made by Field Order or by Change Order.

1.05

SUBMITTALS

- A. At Contract close-out, deliver Record Documents to the Owner.
- B. Accompany submittals with transmittal letter in duplicate, containing:
 - 1. Date
 - 2. Project title and number
 - 3. Contractor's name and address
 - 4. Title and number of each Record Document
 - 5. Signature of Contractor of his authorized representative.

PART 2

PRODUCTS

Not Used

PART 3

EXECUTION

Not Used

END OF SECTION

OPERATING AND MAINTENANCE DATA

SECTION 01730

Section 01730 - Page 01730-1

OPERATING AND MAINTENANCE DATA

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under Contract.
 - 1. Prepare operating and maintenance data as specified in this Section and as referenced in other pertinent sections of the Specifications.
- B. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems.

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Project
- B. Section 01300 - Submittals
- C. Section 01700 - Contract Closeout
- D. Section 01720 - Project Record Documents
- E. Section 01740 - Warranties

1.03 FORM OF SUBMITTALS

- A. Prepare three (3) copies in form of an instructional manual for use by Owner's personnel.
- B. Format:
 - 1. Size: 8-1/2" x 11"
 - 2. Text: Manufacturer's printed data, or neatly typewritten.
 - 3. Drawings:
 - a. Provide reinforced punched binder tab, bind in with text.
 - b. Fold large Drawings to size of text pages.
 - 4. Provide fly-leaf for each separate product, or each piece of equipment.
 - a. Provide type description of product, and major component parts of equipment.
 - b. Provide indexed tabs.

OPERATING AND MAINTENANCE DATA

Section 01730 - Page 01730-2

5. Cover: Identify each volume with type or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS".
List:
 - a. Project # and Project Title
 - b. Identity of separate structure as applicable.
 - c. Identity of general subject matter covered in the manual.
- C. Binders:
 1. Commercial quality three-ring binders with durable and cleanable plastic covers.
 2. Minimum ring size: One inch.
 3. If multiple binders are necessary to encompass scope of Project, correlate the data into related consistent groupings.
- D. Copy contents of each complete manual on disk or flashdrive and submit with written documentation.

1.04

CONTENT OF MANUAL

- A. Neatly typewritten table of contents for each volume, arrange in systematic order.
 1. Contractor, name or responsible principle, address and telephone number.
 2. A list of each product required to be included, indexed to content of the volume.
 3. List, with each product, name, address and telephone number of:
 - a. Subcontractor or installer.
 - b. Maintenance Contractor, as appropriate.
 - c. Identify area of responsibility of each.
 - d. Local source of supply for parts and replacement.
 4. Identify each product by name and other identifying symbols as set forth in Contract Documents.
- B. Product Data:
 1. Include only those sheets which are pertinent to the specific product.
 2. Annotate each sheet to:
 - a. Clearly identify specific product or part installed.

OPERATING AND MAINTENANCE DATA

Section 01730 - Page 01730-3

- b. Clearly identify data applicable to installation.
- c. Delete references to inapplicable information.

C. Drawings:

- 1. Supplement product data with Drawings as necessary to clearly illustrate:
 - a. Relations of component parts of equipment and systems.
- 2. Coordinate Drawings with information in Project Record Documents to assure correct illustration of completed installation.
- 3. Do not use Project Record Documents as maintenance Drawings.

D. Written text, as required to supplement product data for the particular installation:

- 1. Organize in consistent format under separate headings for different procedures.
- 2. Provide logical sequence of instructions for each procedure.

E. Copy of each warranty, bond and service contract issued.

- 1. Provide information sheet for Owner's personnel, give:
 - a. Proper procedures in event of failure.
 - b. Instances which might affect validity of warranties.

1.05

MANUAL FOR MATERIALS AND FINISHES

A. Submit three copies of complete manual in final form.

B. Content: For architectural products, applied materials and finishes:

- 1. Manufacturer's data, giving full information on products.
 - a. Catalog number, size, composition.
 - b. Color and texture designations.
 - c. Information required for reordering special manufactured products.

OPERATING AND MAINTENANCE DATA

Section 01730 - Page 01730-4

2. Instructions for care and maintenance.
 - a. Manufacturer's recommendation for types of cleaning agents and methods.
 - b. Cautions against cleaning agents and methods which are detrimental to product.
 - c. Recommended schedule for cleaning and maintenance.
- C. Additional requirements for maintenance data: Respective sections of Specifications.

1.06 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Submit three copies of complete manual in final form.
- B. Content:
 1. Description of system and components parts.
 - a. Function, normal operating characteristics, and limiting conditions.
 - b. Complete nomenclature and commercial number of replaceable parts.
 2. Maintenance procedures:
 - a. Routine operations
 - b. Guide to "trouble-shooting"
 - c. Adjustment and checking
 3. Manufacturer's printed operating and maintenance instructions.
 4. List of original manufacturer's spare parts, manufacturer's current prices and recommended quantities to be maintained in storage.
- C. Prepare and include additional data when the need for such data becomes apparent during instruction of Owner's personnel.
- D. Additional requirements for operating and maintenance data: Respective sections of Specifications.

OPERATING AND MAINTENANCE DATA

Section 01730 - Page 01730-5

1.07 INSTRUCTIONS OF OWNER'S PERSONNEL

- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in operation, adjustment and maintenance or products, equipment and systems.
- B. Operating and maintenance manual shall constitute the basis of instruction.
 - 1. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

WARRANTIES

SECTION 01740

Section 01740 - Page 01740-1

WARRANTIES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Compile warranties.
- B. Review submittals and verify compliance with Contract Documents.

1.02 RELATED REQUIREMENTS

- A. Project Contract Articles
- B. Conditions of the Contract
- C. Section 01700 - Contract Closeout
- D. Section 01730 - Operating & Maintenance Data

1.03 SUBMITTAL REQUIREMENTS

- A. The Prime Electrical Contractor shall assemble warranties, service and maintenance contracts, executed by each manufacturers, suppliers and subcontractors.
- B. Number of original signed copies required: Three (3) each.
- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item:
 1. Product or work item
 2. Firm, with name of principle, address and telephone number
 3. Scope
 4. Date of beginning of warranty, service and maintenance contract and expiration date
 5. Duration of warranty or service maintenance contract shall not be less than one year from date of Owner's acceptance.
 6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure
 - b. Instances which might affect the validity of warranty or bond.
 7. Contractor, name of responsible principle, address and telephone number.

WARRANTIES

Section 01740 - Page 01740-2

1.04 FORM OF SUBMITTALS

- A. Prepare in duplicate packets.
- B. Format:
 - 1. Size 8-1/2" x 11", punch sheets for standard three-ring binder.
 - a. Fold larger sheets to fit into binders.
 - 2. Cover: Identify each packet with types or printed title "Warranties". List:
 - a. Title of Project
 - b. Name of Contractor
- C. Binders: Commercial quality, three-ring, with durable and cleanable plastic covers.

1.05 TIME OF SUBMITTALS

- A. For equipment or component parts of equipment put in to service during progress of construction:
 - 1. Submit documents within 10 days after inspection and acceptance.
- B. Otherwise make submittals within 10 days after Date of Substantial Completion, prior to final request for payment.
- C. For items of work, where acceptance is delayed materially beyond Date of Substantial Completion, provide updated submittals within 10 days after acceptance, listing date of acceptance as start of warranty period.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

SECTION 02070

Section 02070 - Page 02070-1

DEMOLITION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. This Section includes the following:

1. Demolition and removal of selected portions of a building.
2. Demolition and removal of selected site elements.
3. Patching and repairs.

B. Related Sections: The following Sections contain requirements that relate to this Section:

1. Division 1 Sections
 - a. Summary of Work for use of the building and phasing requirements
 - b. Cutting and Patching for cutting and patching procedures for selective demolition operations.
 - c. Schedules and Reports for selective demolition schedule requirements
 - d. Construction Facilities & Temporary Controls for temporary utilities, temporary construction and support facilities, temporary security and protection facilities, and environmental protection measures for selective demolition operations
 - e. Contract Closeout for record document requirements
2. Division 2 Sections
 - a. Building Demolition for demolition of buildings, structures, and site improvements
 - b. Selective Demolition for Interiors for partial demolition of the interior of a building undergoing alterations and for the removal, salvage, or reuse of materials in new construction

- c. Tree Protection and Trimming for protecting trees remaining on site
- d. Site Clearing for site clearing and removing above- and below-grade improvements
- e. Earthwork for soil materials, excavating, backfilling, and site grading
- 3. Division 15 Sections for cutting, patching, or relocating mechanical items
- 4. Division 16 Sections for cutting, patching, or relocating electrical items as noted on Drawings.

1.03

DEFINITIONS

- A. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the Owner's property.
- B. Remove and Salvage: Items indicated to be removed and salvaged remain the Owner's property. Remove, clean, and pack or crate items to protect against damage. Identify contents of containers and deliver to Owner's designated storage area.
- C. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in the same locations or in locations indicated.
- D. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Engineer and/or Owner, items may be removed to a suitable, protected storage location during selective demolition and then cleaned and reinstalled in their original locations.

1.04

MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain the Owner's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.
- B. Historical items indicated remain the Owner's property. Carefully remove and salvage each item in a manner to prevent damage and deliver promptly to the Owner.
- C. Historical items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to the Owner, which may be encountered during selective demolition, remain the Owner's property. Carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to the Owner.
 - 1. Cooperate with Owner's archaeologist or historical adviser.

1.05

SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections, for information only, unless otherwise indicated.
- B. Proposed dust-control measures.
- C. Proposed noise-control measures.
- D. Schedule of selective demolition activities indicating the following:
 - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity.
 - 2. Interruption of utility services.
 - 3. Coordination for shutoff, capping, and continuation of utility services.
 - 4. Use of stairs.
 - 5. Detailed sequence of selective demolition and removal work to ensure uninterrupted progress of Owner's on-site operations.

Section 02070 - Page 02070-4

6. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
7. Locations of temporary partitions and means of egress.

- E. Inventory of items to be removed and salvaged.
- F. Inventory of items to be removed by Owner.
- G. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction and site improvements that might be misconstrued as damage caused by selective demolition operations.
- H. Record drawings at Project closeout according to Section 01700 - Contract Closeout.
 1. Identify and accurately locate capped utilities and other subsurface structural, electrical or mechanical conditions.
- I. Landfill records indicating receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

1.06

QUALITY ASSURANCE

- A. Demolition Firm Qualifications: Engage an experienced firm that has successfully completed selective demolition work similar to that indicated for this Project.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Predemolition Conference: Conduct conference at Project site to comply with preinstalation conference requirements of Section 01200 -Project Meetings.

1.07

PROJECT CONDITIONS

- A. Owner will occupy portions of the building immediately adjacent to selective demolition area. Conduct selective demolition so that Owner's operations will not be disrupted. Provide not less than seventy-two (72) hours' notice to Owner of activities that will affect Owner's operations.

DEMOLITION

Section 02070 - Page 02070-5

- B. Owner assumes no responsibility for actual condition of buildings to be selectively demolished.
 - 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Asbestos: It is not expected that asbestos will be encountered in the Work. If any materials suspected of containing asbestos are encountered, do not disturb the materials. Immediately notify the Engineer and the Owner.
 - 1. Asbestos will be removed by Owner under a separate contract.
- D. Storage or sale of removed items or materials on-site will not be permitted.
- E. Dumpster and disposed materials laydown area to be located on Owner's property, in an area with sound/firm base. Location selected and approved by Owner only.

1.08

SCHEDULING

- A. Arrange selective demolition schedule so as not to interfere with Owner's on-site operations.

1.09

WARRANTY

- A. Existing Special Warranty: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition unless otherwise noted, by methods and with materials so as not to void existing warranties.

PART 2 PRODUCTS

2.01 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
 - 1. Where identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 2. Use materials whose installed performance equals or surpasses that of existing materials.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with the intended function or design are encountered, investigate and measure the nature and extent of the conflict. Promptly submit a written report to the Engineer.
- E. Survey the condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective demolition.
- F. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.02 **UTILITY SERVICES**

- A. Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Do not interrupt existing utilities serving occupied or operating facilities, except when authorized in writing by Owner and authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and to governing authorities.
 - a. Provide not less than seventy-two (72) hours' notice to Owner if shutdown of service is required during changeover.
- B. Utility Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services serving building to be selectively demolished.
 - 1. Owner will arrange to shut off indicated utilities when requested by Contractor.
 - 2. Arrange to shut off indicated utilities with utility companies.
 - 3. Where utility services are required to be removed, relocated, or abandoned, provide bypass connections to maintain continuity of service to other parts of the building before proceeding with selective demolition.
 - 4. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal the remaining portion of pipe or conduit after bypassing.
- C. Utility Requirements: Refer specifications and drawings for shutting off, disconnecting, removing, and sealing or capping utility services. Do not start selective demolition work until utility disconnecting and sealing have been completed and verified in writing.

3.03

PREPARATION

- A. Drain, purge or otherwise remove, collect and dispose of chemicals, gases, explosives, acids, flammables or other dangerous materials before proceeding with selective demolition operations.
- B. Employ a certified, licensed exterminator to treat building and to control rodents and vermin before and during selective demolition operations.
- C. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct streets, walks or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- D. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around selective demolition area.
 - 1. Erect temporary protection, such as walks, fences, railings, canopies and covered passageways, where required by authorities having jurisdiction.
 - 2. Protect existing site improvements, appurtenances and landscaping to remain.
 - 3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
 - 4. Provide temporary weather protection, during interval between demolition and removal of existing construction, on exterior surfaces and new construction to ensure that no water leakage or damage occurs to structure or interior areas.
 - 5. Protect walls, ceilings, floors and other existing finish work that are to remain and are exposed during selective demolition operations.
 - 6. Cover and protect furniture, furnishings and equipment that have not been removed.

- E. Erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.
 - 1. Construct dustproof partitions of not less than nominal **4-inch** studs, **5/8-inch** gypsum wallboard with joints taped on occupied side, and **1/2-inch** fire-retardant plywood on the demolition side.
 - 2. Insulate partition to provide noise protection to occupied areas.
 - 3. Seal joints and perimeter. Equip partitions with dustproof doors and security locks.
 - 4. Protect air-handling equipment.
 - 5. Weatherstrip openings.
- F. Provide and maintain interior and exterior shoring, bracing or structural support to preserve stability and prevent movement, settlement or collapse of building to be selectively demolished.
 - 1. Strengthen or add new supports when required during progress of selective demolition.

3.04

POLLUTION CONTROLS

- A. Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
 - 1. Do not use water when it may damage existing construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.
- B. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 1. Remove debris from elevated portions of building by chute, hoist or other device that will convey debris to grade level.
- C. Clean adjacent structures and improvements of dust, dirt and debris caused by selective demolition operations. Return adjacent areas to condition existing before start of selective demolition.

3.05

SELECTIVE DEMOLITION

A. Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete Work within limitations of governing regulations and as follows:

1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition work above each floor or tier before disturbing supporting members on lower levels.
2. Neatly cut openings and holes plumb, square and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
5. Maintain adequate ventilation when using cutting torches.
6. Remove decayed, vermin-infested or otherwise dangerous or unsuitable materials and promptly dispose of off site.
7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
8. Locate selective demolition equipment throughout the structure and remove debris and materials so as not to impose excessive loads on supporting walls, floors or framing.

9. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
10. Return elements of construction and surfaces to remain to condition existing before start of selective demolition operations.

B. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain, using power-driven masonry saw or hand tools; do not use power-driven impact tools.

C. Break up and remove concrete slabs on grade, unless otherwise shown to remain.

D. Remove resilient floor coverings and adhesive according to recommendations of the Resilient Floor Covering Institute's (RFCI) "Recommended Work Practices for the Removal of Resilient Floor Coverings" and Addendum.

1. Remove residual adhesive and prepare substrate for new floor coverings by one of the methods recommended by RCFI.

E. Remove air-conditioning equipment without releasing refrigerants.

3.06

PATCHING AND REPAIRS

A. Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.

B. Patching is specified in Section 01045 -Cutting and Patching.

C. Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.

1. Completely fill holes and depressions in existing masonry walls to remain with an approved masonry patching material, applied according to manufacturer's printed recommendations.

D. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction to remain in a manner that eliminates evidence of patching and refinishing.

- E. Patch and repair floor and wall surfaces in the new space where demolished walls or partitions extend one finished area into another. Provide a flush and even surface of uniform color and appearance.
 - 1. Closely match texture and finish of existing adjacent surface.
 - 2. Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
 - 3. Where patching smooth painted surfaces, extend final paint coat over entire unbroken surface containing the patch after the surface has received primer and second coat.
 - 4. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - 5. Inspect and test patched areas to demonstrate integrity of the installation, where feasible.
- F. Patch, repair or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

3.07

DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on site.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.08

CLEANING

- A. Sweep the building broom clean and use wet mop on completion of selective demolition operation.

3.09

DEMOLITION SCHEDULE

- A. Remove salvaged items as previously indicated and remove and reinstall items as previously indicated.

END OF SECTION