

## 1. PURPOSE

The purpose of these specifications is the completion of a service type contract for one (12) month period. The College shall have the option to award two renewable (12) month periods beginning July 1, 2018 and July 1, 2019. After the award of the contract, the contractor shall provide emergency, scheduled preventive maintenance, and small job services defined by plans and/or narrative issued for each job, based on unit bid prices.

This contract is not intended to cover large capital projects, which may include work on the College's high voltage electrical distribution system during this service contract period.

## 2. DESCRIPTION OF FACILITIES

The campus of Middlesex County College consists of (31) buildings, including (7) residences, on a 175-acre campus. The facilities owned by Middlesex County College related to this contract include, but are not limited to, the 13.2 KV electrical distribution system consisting of a new main substation with metering equipment, breakers and transformers installed in 2010, dual underground 13.2 KV cable feeders and splices, underground 4,160 V cables and splices and building substation systems consisting of selector switches, transformers, breakers, and equipment typical for educational and office buildings.

## 3. WORK LOCATION

The intended work will be performed on the indoor, outdoor, and underground high voltage electrical distribution systems at the Middlesex County College Edison, New Jersey campus.

## 4. SCOPE OF WORK

### A. General

The contractor shall provide all the necessary labor, materials, tools, and equipment required to complete all work in the time specified for each job and in a workmanlike manner for the unit costs stated on the Form of Proposal. The College shall provide available plans and specifications of the equipment and systems throughout the campus to the contractor upon request.

The College does not guarantee the accuracy of this information. It shall be the responsibility of the contractor to verify this information, as well as to become fully familiar with all equipment and systems on the campus in order to proceed with all work in a safe and cost effective manner.

B. Emergency Maintenance

The contractor shall perform emergency maintenance services when requested by the College, within the time constraints stated in Section 6, to repair the high voltage electrical system and restore electrical service to the College. Services will be paid using the unit cost hourly labor rates for the actual hours worked on campus and any required markups for material, rentals and subcontractor if applicable. No payment will be made for travel time.

C. Preventive Maintenance

Preventive maintenance shall be initiated as requested by the College and completed by the contractor twice annually. The contractor shall provide the College with an all inclusive lump sum cost for the work provided. The contractor shall review any plans that may be provided and inspect the job site in order to provide this written cost. The contractor shall perform scheduled preventive maintenance services during electrical shutdowns, as scheduled by the College, during each contract period within the time constraints stated in Section 6. The preventive maintenance services shall include, but are not be limited to:

1. Removal and reinstallation of all enclosure covers
2. Inspecting all high voltage (13.2 KV & 4,160V) switchgear and transformers
3. Cleaning, by vacuuming and wiping with approved solvents, all high voltage switchgear and transformers
4. Tightening all cable and bus-bar connections
5. Lubricating all mechanical operating mechanisms
6. Replacing any defective and/or damaged parts from the College's stock during the PM visit
7. Clean, test and calibrate all equipment located in the College's main sub-station.
8. Assure the high voltage distribution is energized and functioning.
9. Provide oil sampling for substation and three 4160 volt transformers

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These preventive services will be performed at ten (10) of the following buildings and/or locations during the first scheduled shutdown of each contract year as determined by the college. The remaining ten (10) buildings and/or locations will be completed during the second scheduled shutdown of each contract year. This will result in each building being completed once every contract year.

(I = Indoor switch, O = Outdoor switch) (Emergency Generator Yes/No)

	<u>Building Name</u>	<u>Switch</u>	<u>Generator</u>
1.	Blue Colt Bookstore	O	N
2.	Centers I-IV	O	N
3.	Chambers Hall	I	N
4.	College Center	I	Y
5.	Crabiel Hall		Y
6.	Edison Hall	I	Y
7.	Facilities (Maintenance) Bldg. 229	I	N
8.	The Gateway Bldg.	O	Y
9.	Instructional Resources Center	I	Y
10.	Johnson Learning Center	O	Y
11.	L'Hommedieu Hall	I	Y
12.	Library	O	Y
13.	Main Hall	O	Y
14.	Performing Arts Center	I	N
15.	Physical Education Center (old section)	I	Y
16.	Physical Education Center (new section)	I	N
17.	Raritan Hall	O	N
18.	Technical Services Center	I	Y
19.	(3) 4160V Transformers – 10 Buildings	O	N
20.	13.2 KV Main Sub-Station	O	N
21.	South Hall	I	Y
22.	West Hall Center for Student Services	I	Y

The locations of these buildings and equipment are shown on the attached campus map.

The preventive maintenance shall be performed and coordinated with the College's maintenance personnel, who will be performing similar services on the secondary side of the transformers in the building substations. The bidder must also coordinate its preventive maintenance work, including electrical shutdown, High voltage megger testing, and re-energizing of any electrical circuits, with any and all other electrical contractors performing electrical installations and/or repairs who may be working simultaneously on the Edison campus.

At the start and completion of each shutdown, the contractor shall test the entire electrical distribution system, i.e., open all switches and megger feeders #1 and #2 from the main substation to the furthest point on the system. If this testing indicates resistance levels below the cable manufacturer's recommended acceptable level, the contractor shall notify the College upon the completion of each test.

Provide written report of feeder megger and oil sample test results.

The preventive maintenance on the main sub-station equipment will be performed annually as part of one of the two scheduled preventive maintenance shutdowns.

D. Small Jobs

Small jobs shall be initiated in the form of a request by the College's Facilities Maintenance Department for a not-to-exceed cost estimate from the contractor based upon the unit costs in the bid response. The estimate is to include a detailed itemized cost breakdown of all materials and labor and be submitted in advance for approval by the Facilities Maintenance Department. The contractor shall review any plans that may be provided and inspect the job site in order to provide this written cost estimate.

The contractor shall perform these small job services when requested by the College in the time constraints stated in Section 6.

5. **QUALIFICATIONS**

The contractor shall include on the Form of Proposal, a listing of five (5) projects and/or service contracts similar in scope to this contract over a period of not less than three (3) years which have been satisfactorily completed or are currently in existence. Similar projects shall include working on systems with voltages of 13.2 KV or higher. The listing should include the firms for which the services were performed, a description of the services, and the name and phone number of references that may be contacted by the College. The Contractor shall hold a New Jersey State Electrical Contractors license. The contractor shall provide a list of a minimum of five employees qualified to perform medium voltage (MV) installations, terminations, and testing.

6. **EMPLOYMENT OF SUBCONTRACTORS**

If the bidder intends to use subcontractors for any portion of the work in the following categories: Electrical Work, Electrical Testing and Measurement, Rigging/Material Handling, or any others, the names of all the subcontractors to whom the bidder will subcontract must be included in the proposal.

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7. **TIME CONSTRAINTS**

A. Emergency Work

Emergency work requires a specific response to the Facilities Maintenance Department, Building 229, within two (2) hours of notice by telephone to the contractor's emergency numbers, and the ability of the contractor to mobilize and staff the job with sufficient forces to complete the work in a timely fashion. The contractor shall report to and sign in at the Facilities Management Building prior to beginning work.

B. Preventive Maintenance

Preventive Maintenance shall be performed during the scheduled electrical shutdowns on the Columbus Day and Good Friday Holidays, as directed by the College. The contractor shall provide sufficient manpower to complete the preventive maintenance within the time frame listed below.

- 5:00AM – 6:00AM College employees will shutdown and open all switchgear.
- 6:00AM –7:00AM The contractor shall megger feeders #1 and #2
- 7:00AM - 3:30PM The contractor shall provide preventive maintenance service for all High Voltage equipment.
- 3:30PM – 4:30PM The Contractor shall megger feeders #1 & #2
- 4:30PM – 5:30PM The College will energize all equipment.

Upon completion of preventive maintenance, testing, and energizing of equipment, a contractor's representative shall be assigned to remain on campus to witness and insure the proper operation of all equipment prior to leaving the campus.

In the event of rain, the College may elect to perform preventive maintenance on indoor equipment only, or postpone the preventive maintenance until another convenient date.

The contractor shall state the anticipated total number of workers required for each of the scheduled preventive maintenance service dates to complete the required work in the time specified above on the Form of Proposal.

The College reserves the option to cancel or reschedule these shutdowns by notifying the contractor (24) hours prior to the start of a scheduled shutdown. No subsequent claim for additional costs based on cancellation or rescheduling of the shutdown will be considered by the College.

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The contractor shall be ready to support this type of work with sufficient force to complete the work in the time allowed after the Notice To Proceed has been issued by the Director of Facilities Maintenance. The contractor shall report to and sign in at the Facilities Management Building prior to beginning work.

C. Small Jobs

Small jobs shall be complete within a time frame that is mutually agreed upon between the College and the contractor. The College's need for continual operation will be the priority that governs this agreement. The agreed upon schedule shall be stated in the contractor's written cost estimate.

The contractor shall be ready to support this type of work with sufficient force to complete the work in the time agreed after the Notice To Proceed has been issued by the Director of Facilities Maintenance. The contractor shall report to and sign in at the Facilities Management Building prior to beginning work.

8. **MATERIALS**

A. General

The materials used under this contract shall be of quality acceptable to the College's Director of Facilities Maintenance or the designated representative and meet the existing codes and equipment manufacturer's requirements.

The contractor shall provide the necessary small equipment and supplies necessary typically required to perform the emergency, preventive maintenance, and small jobs. Typical small equipment shall include items such as vacuums, work lights, grounding cables, power tools, and portable generators. Supplies shall include items such as tumbler polish, chemical cleaners, gloves, rags, and tape. Note there will be no electric available for, work lights, power tools or equipment therefore portable generators are necessary for buildings without emergency generators.

The contractor's representative shall submit daily worksheets listing any additional special materials used to the Director of Facilities Maintenance or the designated representative for signature. These sheets will be the basis for computing and approving the material portion of the work of section 4b and 4d concerned based on the material markup in the bid.

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**9. EQUIPMENT AVAILABILITY**

The contractor must also provide or have ready access to all equipment that is necessary for excavation, rigging, cleaning and pumping out water in the manholes, portable generators, temporary lighting, or any other associated equipment required to provide the emergency, preventive and small job services required in these specifications. The College will not provide any equipment, tools, machinery, and vehicles to assist the contractor.

**10. LABOR**

The contractor's representative shall submit daily worksheets listing the labor for all work to the Director of Facilities Maintenance or the designated representative for signature. These sheets will be the basis for computing and approving the labor portion of the work of section 4b and 4d concerned based on the unit prices bid.

**11. PAYMENT**

Payment shall be based upon the unit prices bid for actual work performed on campus and the submittal of a requisition and/or invoice to the Director of Facilities Maintenance indicating all applicable labor, materials, rentals, and/or subcontractor costs incurred including copies of time records and invoices, for emergency work (4b); or up to the not to exceed amount for small jobs (4d). Completed preventive maintenance work by the contractor shall be billed to the College in payments equal to one half of the yearly amount bid, after the approval and completion of each scheduled shutdown.

**12. HOURS OF WORK**

Preventive maintenance shall be performed utilizing the work schedule as shown in section 6B of this document. The regular workday shall consist of 8 hours, between 7:00 AM and 4:30 PM. Hours in excess of 8 (eight) per day, or before or after the regular workday Monday through Friday, that are not shift work and all hours on Saturdays shall be paid at the overtime rate. If the contractor's hours differ from this, the contractor shall indicate them with its bid for approval by the College.

**13. HOLIDAYS**

Recognized holidays shall be New Year's Day, Presidents' Day, Memorial Day, July 4<sup>th</sup>, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Saturday holidays will be observed the preceding Friday, Sunday holidays observed the following Monday.

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14. **AWARD**

The bid award shall be made on the basis of a model of the unit costs for the base period (2017/2018) and/or all periods in any combination that yield the lowest total cost to the College. The model shall consist of the scheduled preventative maintenance; a foreman at 20 hours regular, 20 hours overtime and 4 hours holiday rate; a journeyman at 8 hours regular, 2 hours overtime and 2 hours holiday rate; an apprentice at 2 hours regular, 2 hours overtime and 1 hour holiday rate; material at \$500.00; rentals at \$1,000.00; and subcontractors at \$2,000.00.

15. **SITE VISIT**

Any interested parties who wish to schedule a site visit to tour the work areas and/or ask questions regarding these specifications may contact the following:

James DeTata  
Director of Facilities Maintenance  
732 906-2567  
732 906-4199 FAX

Any interested parties who wish to ask questions regarding the bidding procedure may contact the following:

David Fricke  
Director of Purchasing and Inventory  
732 906-2519  
732 906-4236 FAX

No subsequent claim for additional cost based on lack of full knowledge of the conditions and scope of work of this contract will be considered by the College.

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