

BID # 17- 10

CAMPUS ELEVATOR MAINTENANCE

SPECIFICATIONS

OWNER

Board of Trustees  
Middlesex County College  
2600 Woodbridge Avenue  
P.O. Box 3050  
Edison, New Jersey 08818-3050

NOTE: THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY. THIS IS NOT AN OFFICIAL BID DOCUMENT.

SECTION C

DETAILED TECHNICAL PROVISIONS

TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE</u>
1. Definition of Terms	C-1
2. Scope of Work	C-2
3. Materials	C-5
4. Workmanship	C-5
5. Work Area Clean Up	C-5
6. Schedule of Elevators	C-6
7. Site Visit	C-6
8. Guarantee	C-7
9. Hours of Work	C-7
10. Sole Responsibility	C-7
11. Compensation	C-7
12. Notice by Authority or Company to repair or replace	C-8
13. Record Keeping	C-8
14. Contract Period	C-8
15. Reports by Contractor	C-8
16. Errors and Omissions	C-9
17. Contractor's License	C-9
18. Schedule Preventive Maintenance Labor	C-9
19. Cleaning	C-9
20. Inspections/Test	C-9
21. Emergency Call Back Service	C-10
22. Performance Times, Leveling and Contract Speed	C-10
23. Protection of Work and Property	C-11
24. Safety	C-11

NOTE: THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY. THIS IS NOT AN OFFICIAL BID DOCUMENT.

MIDDLESEX COUNTY COLLEGE  
EDISON, NEW JERSEY  
CAMPUS ELEVATOR MAINTENANCE  
SPECIFICATIONS

1.1 DEFINITIONS OF TERMS

- A. The term "Owner," as used herein, refers to the person, organization, corporation or other entity representing building ownership and the relative responsibilities under this contract.
- B. The term "Authority," "Governing Authority (GA)", "Authority Having Jurisdiction (AHJ)," or references of similar import, as used herein, shall mean the local government agency responsible for enforcement of vertical transportation safety codes and local laws or their designated representative, private inspection agency, consultant or other licensed designee.
- C. The term "Contractor," "Elevator Contractor" or "Vendor" as used herein, refers to any persons, partners, firm, corporation or officer (s) of such companies having an agreement with the "Owner" to furnish qualified labor and materials for the execution of the services and maintenance work described herein.
- D. The term "Subcontractor," as used herein, refers to any persons, partners, firm or corporation having materials and/or labor for the execution of the work herein described.

1.2 ABBREVIATIONS AND SYMBOLS

- A. Abbreviations for associations, institutions, societies, reference documents and/or governing agencies, which may appear in the Contract Document, shall mean the following:

AIA	American Institute of Architects
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
BOCA	Building Officials and Code Administrators International, Inc. (Basic National Building Code)
A.H.J.	Authority Having Jurisdiction
G.A.	Governing Agency
NEC	National Electrical Code
OSHA	Occupational Safety and Health Administration

## 2. 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 the base bid and alternates and in a workmanlike manner. The College shall provide available plans and specifications of the elevator equipment and systems throughout the campus to the Contractor upon request. The College reserves the right to add additional elevators as becomes necessary at the rates bid under section D-1.

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

### B. Base Bid – Maintenance, Emergency Call Repairs, and Minor Repairs

The Contractor shall furnish labor, materials, tools, and equipment required to perform emergency repairs, preventive maintenance and servicing once each month to each of the fourteen (14) elevators located in thirteen (13) buildings on the campus and two (2) elevators located at 140 New Street, New Brunswick, NJ. The items listed below in Section 1.E are not included in this contract. The work shall also include, but not be limited to, cleaning, lubrication, periodic examination, and adjustments in the machine room, car top, hoistway, pit, car interior, and landings in a workmanlike manner. The Contractor shall furnish major repairs, parts, and equipment on a time and material basis using the hourly and material cost rates indicated on the form of proposal. All floor indicating lights inside the cab and outside the cab are to be repaired or replaced at no cost. All fire service indicating lights are to be replaced or repaired at no cost.

### C. Alternate 1- Maintenance, Emergency Call Repairs, Major Repairs, and All Parts

The Contractor shall furnish all labor, materials, tools, and equipment required to perform emergency repairs, preventive maintenance and servicing once each month and major repairs to each of the fourteen (14) elevators located in thirteen (13) buildings on the campus and two (2) elevators located at 140 New Street, New Brunswick, NJ. The items listed below in Section 1.E are not included in this contract. Repairs are defined as the repair and/or replacement of components which break and/or wear out due to normal use. The work shall also include, but not be limited to, cleaning, lubrication, periodic examination, adjustments and

NOTE: THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY. THIS IS NOT AN OFFICIAL BIDDING DOCUMENT.

MIDDLESEX COUNTY COLLEGE  
EDISON, NEW JERSEY  
CAMPUS ELEVATOR MAINTENANCE  
SPECIFICATIONS

replacement of worn or broken parts in the machine room, car top, hoistway, pit, car interior, and landings in a workmanlike manner. When an elevator is out of service or is not operating properly, the College will request the contractor to make an emergency repair. The contractor shall furnish all replacement parts and equipment needed to complete the emergency repair in a timely manner.

D. Alternate 2- No Load Pressure Test

The Contractor shall furnish all labor, materials, tools, and equipment required to perform a no load pressure test to each of the fourteen (14) elevators located in thirteen (13) buildings on the campus and two (2) elevators located at 140 New Street, New Brunswick, NJ. This test shall be performed once per year as required by the College. A letter of test certification stating the test results shall be provided to the College for each of the fourteen (14) elevators. The Contractor shall install a tag in each elevator machine room with the test type and date and provide a written report of all test results to the College.

The College will arrange for the Edison/New Brunswick Township(s) certified inspector to witness the test.

E. Alternate 3- Full Load Pressure Test

The Contractor shall furnish all labor, materials, tools, and equipment required to perform a full load pressure test to each of the fourteen (14) elevators located in thirteen (13) buildings on the campus and two (2) elevators located at 140 New Street, New Brunswick, NJ. This test shall be performed once per year as required by the College. A letter of test certification stating the test results shall be provided to the College for each of the fourteen (14) elevators. The Contractor shall install a tag in each elevator machine room with the test type and date and provide a written report of all test results to the College.

The College will arrange for the Edison/New Brunswick Township(s) certified inspector to witness the test.

F. Items Not Included in Contract

Items not included in this contract include refinishing or replacement of the car enclosure, car doors, hoistway enclosures, hoistway door panels, frames and stills, car flooring and floor covering, exhaust fans, main line power switches, breakers and feeders to the controller, underground and/or buried piping, jack casing and components deliberately damaged by vandalism as determined by the College. The Contractor shall furnish repairs, parts and equipment required to repair or replace these items on a time and material basis using the hourly and material cost rates indicated on the form of proposal.

Requests for this work which are not included in the contract shall be paid by the College at the appropriate rate stated in the bid proposal for the actual hours worked. The College will not pay costs for travel and/or minimum charges. The contractor will provide free estimates, based on the rates on the form of proposal, on all work not covered by this contract.

G. COVERAGE

The entire vertical transportation system(s) shall be maintained as hereinafter described, in accordance with the following detailed terms. Trained employees of the Contractor will use all reasonable care to keep the systems in proper adjustment and in safe operating condition, in accordance with all applicable codes, ordinances and regulations. The requirements are specified in the singular with the understanding that all provisions shall be applicable to all units indicated unless otherwise specified.

The specifications are written in the singular with the understanding identical work, materials and equipment shall be provided for all vertical transportation units identified unless otherwise specified.

With the exception of only those items specifically identified as being performed by others, the specifications are intended to include all material, labor, testing, and inspections needed to achieve work specified. Inasmuch as it is understood that any incidental work necessary to execute the services is also covered by the specifications, the contractor is cautioned to familiarize himself with the existing equipment and job site conditions. Additional charges for material or labor shall not be permitted for work, services or procedures covered herein.

MIDDLESEX COUNTY COLLEGE  
EDISON, NEW JERSEY  
CAMPUS ELEVATOR MAINTENANCE  
SPECIFICATIONS

3. MATERIALS

A. General

The materials to be used in the project include, but are not limited to lubricants and hydraulic fluid.

The Contractor shall provide the product, where products are proposed other than those specified by the manufacturers, provide the product data to the College for its approval in a timely manner.

B. Storage

Materials and equipment shall be stored in areas that will be assigned by the College. All materials shall be labeled in accordance with New Jersey Right-To-Know regulations and their SDS's provided to the College's Safety Department. This area shall be the contractor's responsibility to keep neat and orderly during the duration of this contract. At the conclusion of this contract the storage area shall be returned to its original condition prior to the start of the contract.

4. WORKMANSHIP

All work shall be performed by skilled mechanics in a workmanlike manner typical of the trades involved. No work shall be performed under conditions unsuitable for best results.

Proper care should be taken to protect all areas surrounding the work areas so as not to cause any damage.

5. WORK AREA CLEAN UP

The Contractor shall be responsible for keeping premises free from accumulations of waste materials and rubbish each time service is performed and for the periodic removal of said waste material from the campus. At the conclusion of this contract the contractor shall remove all materials, equipment, and waste from the work areas and leave them in a clean and orderly fashion.

NOTE: THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY. THIS IS NOT AN OFFICIAL BID DOCUMENT.

MIDDLESEX COUNTY COLLEGE  
EDISON, NEW JERSEY  
CAMPUS ELEVATOR MAINTENANCE  
SPECIFICATIONS

6. SCHEDULE OF ELEVATORS

<u>BUILDING</u>		<u>TYPE</u>	<u>YEAR(warranty expiration)</u>	<u>MANUFACTURER</u>
Billy Johnson Hall	(BH)	Passenger	1990	CEMCO
Chambers Hall	(CH)	Passenger	1973/2010	Haughton / Various*
College Center	(CC)	Passenger	1967/2012	Otis / Amerivator*
College Center	(CC)	Freight	1967/2011	Otis / Various*
Crabiel Hall	(CB)	Passenger	2010	Thyssen Krupp
Johnson Learning Center	(JL)	Passenger	1976/2010	Burlington / Amerivator*
Inst. Resource Center	(IR)	Passenger	1998	Schindler
L'Hommedieu Hall	(LH)	Passenger	1975-2009	Haughton / Amerivator*
Library	(LI)	Passenger	1970/2010	Haughton / Amerivator*
Physical Education Center	(PE)	Passenger	1980	National
Raritan Hall	(RH)	Passenger	1985	CEMCO
Studio Theater	(PAC)	Passenger	2005	Thyssen Krupp
New Brunswick Center	(NBC)	Passenger	2000	Dover
New Brunswick Center	(NBC)	Wheel Chair	2000	National Wheel-O-Vator
West Hall (New)	(WE)	Passenger	2017	**Schindler 3300
South Hall (New)	(SH)	Passenger	2017	**Schindler 3300

\* Renovated/updated complete unit including car, controller, car station, pump and valve, reservoir tank and associated piping, pistons with Teflon liners. Guide rails not replaced.

\*\*These elevators are in warranty for the year 2016-2017. Their service would be for the second and third years 2017-2018, and 2018-2019.

7. SITE VISIT

All interested parties are advised to visit the site and inspect the elevators after registering at the Facilities Maintenance Department in the Facilities Management Building. Questions may be addressed to the College's Director of Facilities Maintenance at 732-906-2567.

No subsequent claim for additional cost based on lack of full knowledge of the existing conditions associated with this service contract will be considered.

MIDDLESEX COUNTY COLLEGE  
EDISON, NEW JERSEY  
CAMPUS ELEVATOR MAINTENANCE  
SPECIFICATIONS

8. GUARANTEE

The Contractor is required to guarantee all materials and workmanship for a period of twelve (12) months.

9. HOURS OF WORK

All scheduled work shall be performed during regular working hours of the regular working day of the elevator trade, 8:00 A.M. to 4:30 P.M., Monday through Friday, except union designated holidays.

Scheduled repairs and/or other major adjustment procedures necessitating removal of an elevator for an extended period of time must be scheduled through the Owner.

Emergency repair services shall be provided twenty four (24) hours per day, seven (7) days per week including weekends and holidays as further specified herein. Call for service other than scheduled maintenance shall be responded to within a 2 hour period. No extra charges will be made for additional services calls requested during these normal work hours. Requests for emergency work other than these normal working hours shall be paid by the College at the premium rate stated in the bid proposal for the actual hours worked. Costs for travel/or minimum charges will not be paid by the College.

10. SOLE RESPONSIBILITY

- B. The maintenance work shall be performed only by Qualified Technicians and Mechanics directly employed and supervised by the Contractor, who are experienced and skilled in maintaining vertical transportation units similar to those to be maintained under this specification and shall not be assigned or transferred to any agent or subcontractor without the express consent of the Owner.

11. COMPENSATION

Payment for services rendered shall be made on a monthly basis, pursuant to the College's payment and processing of bills.

Payment for Emergency Call-back services shall be invoiced separately based on the prices stipulated on the Form of Proposal.

12. NOTICE BY AUTHORITY OR COMPANY TO REPAIR OR REPLACE

The Contractor shall advise the Owner of all written recommendations of the governing authority or independent inspectors, consultants and insurance carriers employed by the Owner. However, Contractor is not to install any new attachments or parts unless directed by the Owner.

13. RECORD KEEPING

A complete permanent record of inspections, maintenance, lubrication and call-back service shall be kept in the machine room or other designated location at the site of work. These records are to be available to Owner at all times. The records shall indicate the reason the mechanic was in the building, arrival and departure time, the work performed, etc., and these records will be property of the Owner. Record keeping requirements shall include Contractor assigned maintenance personnel and scheduled preventive maintenance procedures, inspections, tests and third party assisted examinations. All records are to be provided to the owner at the conclusion of the contract.

14. CONTRACT PERIOD

The contract shall cover three (3) one (1) year time periods beginning with the base period on July 1, 2016 and ending on June 30, 2017. The optional effective renewal time periods are as follows:

- Base Period - July 1, 2016 to June 30, 2017
- 2nd Year Renewal Period - July 1, 2017 to June 30, 2018
- 3rd Year Renewal Period - July 1, 2018 to June 30, 2019

The contract may be renewed by the College for each of these renewal time periods with 30 days prior notice to the start of each renewal period.

The College reserves the right to cancel the contract for any reason with 30 days notice.

15. REPORTS BY CONTRACTOR

The Contractor shall, render a written monthly report of inspections, repairs or replacements made by the Contractor at the premises herein, itemized as to parts installed or services performed. The report shall be in a Excel spreadsheet listing , at a minimum, the date, time, mechanic's names who performed the work, the description of the problem, the status when the mechanic left the job, and its resolution.

Upon request of the owner, the contractor shall supply samples of lubricants, compounds, or other materials employed on inspections, maintenance and repairs, .

Contractor shall prepare and issue all required forms and/or reports relative to examinations, tests and inspections as specified herein.

16. ERRORS AND OMISSIONS

Contractor shall notify the Owner and Consultant in writing regarding any necessary services, coverage or items which may have been omitted from the maintenance specifications and any irregularities, discrepancies or duplications that could affect the full intent of the agreement.

17. CONTRACTOR'S LICENSE

If required by law, Contractor certifies that it is licensed in the state, municipality and/or local jurisdiction where the property is located to perform the elevator maintenance services, and that the license will be maintained current and valid for the initial Term and any renewal term of this service.

8. SCHEDULE PREVENTIVE MAINTENANCE LABOR

Contractor shall provide scheduled systematic examinations, adjustments, cleaning and lubrication of all machinery, machinery spaces, hoistways and pits. The Contractor shall include a minimum of two (2) hours per month per unit that is to be dedicated to routine preventive maintenance.

19. CLEANING

The Contractor shall during the course of all examinations remove and discard immediately all accumulated dirt and debris from the car top and pit area. Prior to each annual anniversary date of this Agreement, Contractor shall thoroughly clean down the entire hoistway of all accumulated dirt, grease, dust and debris each year.

20. INSEPCIONS/TESTS

The Contractor shall conduct Safety, Efficiency and Maintained Conditions surveys, inspections and tests as follows:

Semi-Annual quality control evaluations by a qualified supervisor to ensure and confirm the services and procedures as specified herein are properly executed relative to maintenance and performance standards for the systems serviced.

Mandated inspections and testing in accordance with ASME A17.1 Standards applicable per local law.

NOTE: THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY. THIS IS NOT AN OFFICIAL BID DOCUMENT.

If applicable, independent testing of Fire Emergency Operating Systems and/or Emergency Power System tests in accordance with local law requirements and ASME standards.

The Owner retains the right to have these tests performed on a not-to-interfere basis at any hour of the day and any day of the week; and the cost for overtime work shall be limited to the premium labor portion for work performed on an overtime basis.

## 21. EMERGENCY REPAIR SERVICE (24 HOURS, 7 DAYS PER WEEK)

Provide emergency repair service which consists of promptly dispatching qualified employees in response to requests from the Owner, by telephone or otherwise, for emergency adjustment or minor repairs on any day of the week, at any hour, day or night. If repairs cannot be made immediately, the mechanic shall notify the Owner as to the reason why and provide supplemental information regarding the restoration of services.

**An emergency repair is defined as when the elevator is out of service or not operating in its normal mode. Examples of emergency repairs include, but not limited to, elevator stuck between floors, people entrapped in the elevator, call buttons not working, elevator not leveling at the floor, elevator making unusual noises, elevator and hoistway doors not opening or closing completely, hydraulic oil leaking,**

Emergency repair service in response to passenger entrapments shall be provided within one-half ( $\frac{1}{2}$ ) hour during regular working hours and within one (1) hour during overtime periods.

Emergency repair services for out-of-service units that have been secured by the Owner shall be provided within two (2) hours.

Call-back services for non-essential system malfunctions that do not constitute an operational or other safety condition shall be provided during normal working hours of regular working days within eight (8) hours of the request for service.

## 22. PERFORMANCE TIMES, LEVELING and CONTRACT SPEED (ELEVATORS)

The control system shall be maintained to provide smooth acceleration and retardation. Contractor must maintain elevators in accordance with the original equipment manufacturer (O.E.M.) design performance specifications (including floor-to-floor times, door timing, rated speed, group supervisory system, etc.). The door close pressure must never exceed 30 pounds. The following performance schedule shall be adhered to:

**Contract Speed:** The contract speed shall be provided for the down direction travel with full-capacity load in the elevator car. The speed in either direction under any loading condition shall not vary more than 5% of the contract speed.

In accordance with the ASME A17.1 Code, the elevators shall be maintained and adjusted to safely lower, stop and hold the car with a load of 125% of the rated capacity.

**Leveling Accuracy:** The elevator shall be adjusted to provide accurate leveling within  $\frac{1}{4}$ "  $\pm$  of the floor level without releveling regardless of load.

Door Operating Times:

Door Type	Opening	Closing
4'-0" SS center opening	1.4 to 1.7 sec	2.8 to 3.4 sec
Door dwell time for hall calls:	4.0 sec with Advance lantern signals	
Door dwell time for hall calls:	5.0 sec without Advance lantern signals	
Door dwell time for car calls:	3.0 seconds	
Reduced non-interference dwell time:	1.0 seconds.	
Floor to Floor Time (Flight Time):	1.5.0 sec.	

23. PROTECTION OF WORK AND PROPERTY

The Contractor shall continuously maintain adequate protection of all his work from damage and shall protect the Owner's property from injury or loss. The Contractor shall make good any such damages, injury or loss, except such as may be directly caused by agents or employees of the Owner. The Contractor shall provide all barricades required to protect open hoistways or shafts per OSHA regulations. Such protection shall include any necessary guards or other barricades for employee protections during and after the maintenance procedure.

23. SAFETY

The Contractor shall be required to follow the rules and requirements of the Middlesex County College Contractor Guide and OSHA Regulations. Copies of the College guide are available from the Office of Environmental, Health, and Safety, Middlesex County College, during normal business hours. The College reserves the right to stop unsafe work practices. Delays and additional costs resulting from the stoppage of unsafe work practices are the responsibility of the Contractor.

NOTE: THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY. THIS IS NOT AN OFFICIAL BID DOCUMENT.