Memorandum

To: Honorable Mayor and Members of the City Council
   Administration and Public Works Committee

From: David Stoneback, Public Works Agency Director
      Lara Biggs, Bureau Chief – Capital Planning / City Engineer
      Stefanie Levine, Senior Project Manager
      Anil Khatkhate, Project Manager

Subject: Sole Source Purchase for Modernization of Elevators at the Lorraine H. Morton Civic Center

Date: May 29, 2018

Recommended Action:
Staff recommends City Council authorize the City Manager to execute a sole source contract for elevator modernization at the Lorraine H. Morton Civic Center (LHMCC) with Otis Elevator Company (949 Oak Creek Drive, Lombard, Illinois 60148), in the amount of $456,779.00.

Funding Source:
Funding will be provided from the Capital Improvement Program (CIP) 2018 General Obligation Bonds in the amount of $456,779. A detailed funding breakdown is shown below.

<table>
<thead>
<tr>
<th>Project</th>
<th>Account</th>
<th>2018 Budget</th>
<th>Remaining Budget</th>
<th>Project Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Center – Elevator Upgrades</td>
<td>415.40.4118.65515 – 618005</td>
<td>$310,000</td>
<td>$310,000</td>
<td>$310,000</td>
</tr>
<tr>
<td>Civic Center – Elevator Upgrades *</td>
<td>415.40.4118.65515 – 618005</td>
<td>$150,000</td>
<td>N/A</td>
<td>$146,779</td>
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<tr>
<td>Total</td>
<td></td>
<td>$460,000</td>
<td></td>
<td>$456,779</td>
</tr>
</tbody>
</table>

*Per the 2018 Capital Improvement Program presentation and memorandum dated May 21, 2018, a future budget amendment will reflect increasing the funding for this project by $150,000.
Livability Benefits:
Built Environment: Enhance public spaces
Climate & Energy: Improve energy efficiency; Reduce greenhouse gas emissions
Health & Safety: Enhance resiliency to natural & human hazards

Background Information:
Originally constructed in two phases (1901 and 1924) as the Marywood School, the LHMCC was acquired by the City and converted to its current use as a Civic Center in 1977. The 1977 improvement included rehabilitation of the existing south elevator. In 1988, the north elevator was installed. Since that time, no major elevator-related improvements have been performed.

The City currently has a contract with Otis Elevator Company for maintenance. Over the past several years, due primarily to equipment age and wear, the elevators have required increasing levels of service to keep them functioning. Additionally, the elevators experience frequent breakdowns, resulting in trapped occupants and costly emergency repairs. In order to maintain function and reliability, a complete modernization or replacement of the elevators is needed at this time.

Analysis:
Staff extensively studied two options for this project (elevator replacement or modernization), comparing the pros and cons of each option to determine which solution to implement. The major disadvantage of replacing the elevators is the hoistway size. If replacement elevators are installed, the building and elevator code requires at least one elevator to accommodate a stretcher. As neither hoistway is currently large enough for this, installing replacement elevators would require significant structural modifications to the building. The primary advantage of elevator modernization is that the code requirement for a stretcher can be waived. Staff have reviewed this with the City’s code official and determined that a variance will be sought from State Fire Marshall. This will allow the size of the elevator cab and hoistway to remain the same. With the hoistway size remaining unchanged, overall project costs and operational impacts during construction will be greatly reduced. Elevator modernization will still include replacement of all major moving parts, and installation of new technology for operation, safety, and improved energy efficiency. Additionally, elevator modernization will include remote monitoring software which will detect failures and alert a field engineer of any problem detected. The detection and notification of failures will allow a field engineer to schedule repairs ahead of city staff calling for service. Finally, the modernization will include more visible lanterns so users waiting for the elevator can more easily see which cab is arriving.

There are a limited number of elevator manufacturers in the United States to utilize for this project. City staff currently works with three different elevator companies for maintenance, depending on the building. Of these three, the maintenance and repair services provided by Otis have been far superior to the other two companies while being less expensive. Otis is also the only company with remote monitoring and control options that allow them to address some problems without having a City staff person involved. For these reasons, staff is seeking to standardize on using Otis wherever practical. As Otis has been maintaining the LHMCC’s elevators for many years, they have extensive knowledge of the existing system and the repairs that have been
performed, and continuing to work with them will provide continuity of service for both the modernization project and future servicing requirements. Staff therefore recommends awarding a sole-source contract for elevator modernization to Otis Elevator Company for a total cost of $456,779.00.

Attachments:
Vendor proposal
TO:  Evanston Civic Center  
2100 Ridge Road  
Evanston, Illinois 60201  

FROM:  Otis Elevator Company  
949 Oak Creek Drive  
Lombard, Illinois 60148  

PROJECT LOCATION:  
Same as above  
South Geared Traction Passenger Elevator  
And South Hydraulic Passenger Elevator  

MACHINE NUMBER(S):  D40037 & D40329  
PROPOSAL NUMBER:  C197178 A01 & B01  

We will provide labor and material to furnish and install on the above referenced machine(s) the following:  

**ELEVONIC® RM-AC AND ELEVONIC HYDRO ACCEL CONTROL SYSTEM**

We propose to furnish labor and material to provide an Elevonic® RM-AC control system. It is a digital closed-loop microprocessor-based control system specifically designed to meet the particular needs of modernizing UMV traction elevators. The system is a distributed network of modular microprocessor control units and solid-state performance measurement devices. The system is integrated using serial-link communication. The control system has a Solid-State Safety Circuit. The measurement transducers constantly monitor the performance of every elevator function controlled by microprocessor. The control units evaluate this performance information and automatically adjust performance as necessary to correct variances within milliseconds. The “Relative System Response Plus” software dispatches elevators based upon real-time response to actual demands on the elevator group. The software is designed to maintain optimum elevator system performance by evaluating and reassigning hall calls within milliseconds of changes in elevator demand or performance. We will also furnish labor and materials to install a new Elevonic Hydro Accel control system on the existing hydraulic passenger elevator and duplex the two (2) systems together.

**SECTION No.** | **TITLE**  
--- | ---  
SECTION I | OPERATION  
SECTION II | MACHINE ROOM EQUIPMENT  
SECTION III | SYSTEM OPERATING FEATURES  
SECTION IV | DOOR EQUIPMENT  
SECTION V | HOISTWAY EQUIPMENT  
SECTION VI | FIXTURES  
SECTION VII | WORK BY OWNER – NOT IN CONTRACT  
SECTION VIII | GENERAL REQUIREMENTS
SECTION IX ALTERNATES

SECTION I: OPERATION

DUTY

The present capacity and speed of the elevators will be retained as follows:

<table>
<thead>
<tr>
<th>Elevators numbered</th>
<th>Capacity (pounds)</th>
<th>Speed (Feet per Minute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRACTION D40037</td>
<td>2500</td>
<td>125</td>
</tr>
<tr>
<td>HYDRO D40329</td>
<td>2000</td>
<td>125</td>
</tr>
</tbody>
</table>

TRAVEL

The present travel of the elevators will be retained as follows:

<table>
<thead>
<tr>
<th>Elevators numbered</th>
<th>From floor to floor</th>
<th>Rise (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRACTION D40037</td>
<td>G to the 5th</td>
<td>70 feet 2 inches</td>
</tr>
<tr>
<td>HYDRO D40329</td>
<td>G to the 4th</td>
<td>53 feet 9 inches</td>
</tr>
</tbody>
</table>

STOPS AND OPENINGS

The present stops and openings will be retained as follows:

<table>
<thead>
<tr>
<th>Elevators numbered</th>
<th>Number of stops</th>
<th>Number of openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRACTION D40037</td>
<td>6</td>
<td>6 front</td>
</tr>
<tr>
<td>HYDRO D40329</td>
<td>5</td>
<td>5 front</td>
</tr>
</tbody>
</table>

POWER SUPPLY

The power supply of 480 volts, 3 phase, 60 hertz, alternating current will be retained with the new equipment arranged for this power supply.

The building must verify and sign a power confirmation prior to any equipment being ordered or engineered.

NEW OPERATION

The present control system will be changed to Elevonic® Microprocessor control.

NEW CONTROLLER

A microcomputer-based control system shall be provided to perform all of the functions of elevator motion and elevator door control. This shall include all of the hardware required to connect, transfer and interrupt power, and protect the motor against overloading. The system shall also perform car operational control.

Each controller cabinet containing memory equipment shall be properly shielded from line pollution. The microcomputer system shall be designed to accept reprogramming with minimum system downtime.
NEW OPERATION — GROUP CONTROL FOR TWO (2) CARS

The building shall be divided into three (3) zones with one car assigned to the “lobby” zone and the other car assigned to the top zone. Each car shall park in its assigned zone when there are no unanswered calls.

The lobby zone shall include the lobby, basements and adjacent floors above the lobby. The remainder of the floors shall be divided between the top zone and the middle zone. Either car may answer calls in the middle zone but neither car shall park in that zone.

Optimized response to hall calls shall be achieved by the Relative System Response Plus (RSR Plus®) dispatching software. This software dispatches cars by computing a relative system response for each registered hall call. The computation of each car’s RSR score to a call shall be based on service to previously assigned car and hall calls, car load, direction of travel, door and car motion status, coincidence of car and hall calls, etc. The car with the lowest RSR Plus score shall have the call assigned to it.

RSR Plus computations for each hall call are repeated several times a second and the hall call assignment might be changed if a more suitable car is found. Additionally, the RSR Plus dispatching software shall continuously evaluate the efficiency of its dispatching and shall vary the value of bonuses and penalties to optimize dispatching efficiency during peak demands.

A car arriving at a floor to park shall not open its doors. Cars shall open their doors only when stopping in response to a car or hall call.

A car without registered car calls, arriving at a floor on which both up and down hall calls are registered shall initially respond to the hall call in the direction that the car was traveling. If no car call or hall call is registered for further travel in that direction, the car shall close its doors and immediately reopen them in response to the hall call in the opposite direction. Direction lanterns, if furnished, shall indicate the change of direction when the doors reopen.

Direction lanterns, as applicable, shall indicate the change of direction when the doors reopen.

If for any reason the doors are prevented from closing and the car is unable to respond to a call, it shall lose its zone assignment and the call shall be transferred to the other car.

When a car is filled to a predetermined load setting, it shall no longer stop for hall calls.

When the Independent Service switch in the car operating panel is actuated, that elevator shall be disconnected from the hall buttons and operate independently from car buttons only.

SECTION II: MACHINE ROOM EQUIPMENT

NEW AC DRIVE SYSTEM

The present motor drive system will be changed to a Variable Voltage Variable Frequency regenerative drive. The system shall include a step up or down transformer as required.

RETAINED MACHINE

The existing machine shall be retained.

NEW MOTOR FOR ALTERNATING CURRENT (AC) APPLICATION

A new 500 volt Alternating Current Variable Frequency 3 phase low slip motor will be provided.

RETAINED GOVERNOR

The present speed governor shall be retained and calibrated for the proper tripping speed.
NEW ROPE GRIPPER
A new rope gripper device shall be installed to prevent the elevator from over speeding in the up-direction, as per the latest requirement by ASME/ANSI A17.1 Safety Code for Elevators and Escalators, an American National Standard.

HYDRO POWER UNIT (NEW)

The existing power unit will be replaced with a new power unit. The new power unit consists of a positive displacement pump, motor, integral 4-coil control valve, oil tank and muffler. The pump and motor are submerged and are mounted to the tank with rubber isolators to reduce vibration and noise. The pump and motor are externally mounted and are belt driven. A muffler is provided to dissipate pulsations and noise from the flow of hydraulic fluid. The valve consists of up, up leveling, down and down leveling controls along with manual lowering and a pressure relief valve.

VALVE (NEW)

A new integral 4-coil control valve will be installed to replace the existing valve. The valve consists of up, up leveling, down and down leveling controls along with manual lowering and a pressure relief valve.

HYDRAULIC OIL (NEW)

New hydraulic oil will be installed in the power unit tank.

HYDRAULIC PIPING AND VICTAULIC FITTINGS (NEW)

We will install new hydraulic piping from the power unit to the cylinder with new Victaulic fittings and gaskets. New manual shut off valves will be installed in the opit and machine room.

SECTION III: SYSTEM OPERATING FEATURES

NEW AUTOMATIC SELF-LEVELING

The elevator shall be provided with automatic self-leveling that shall typically bring the elevator car level with the floor landings ± ¼” regardless of load or direction of travel. The automatic self-leveling shall correct for over travel or under travel and rope stretch.

NEW SPECIAL EMERGENCY SERVICE / FIRE RECALL OPERATION

Special Emergency Service operation shall be provided in compliance with the latest applicable revision of the ASME/ANSI A17.1 Code.

Special Emergency Service Phase I to return the elevator(s) non-stop to a designated floor shall be initiated by an elevator smoke detector system or a keyswitch provided in a lobby fixture.

The smoke detector system, if required, is to be furnished by others. The elevator contractor shall provide contacts on the elevator controller to receive signals from the smoke detector system.

A keyswitch in the car shall be provided for in-car control of each elevator when on Phase II of Special Emergency Service.

If an elevator is on independent service when the elevators are recalled on Phase I operation, a buzzer shall sound in the car and a jewel shall be illuminated, subject to applicable codes.

NEW INSPECTION OPERATION

For inspection purposes, an enabling keyswitch shall be provided in the car operating panel to permit operation of the elevator from on top of the car and to make car and hall buttons inoperative.

An operating fixture shall be provided on top of the car containing continuous pressure “UP” and “DOWN” buttons, an emergency stop button, and a toggle switch. This toggle switch makes the fixture operable and, at the same time, makes the door operator and car and hall buttons inoperative.
NEW ANTI-NUISANCE

An anti-nuisance feature shall be provided, which will reset car buttons and require re-registration if an excessive number of calls are registered for the measured load.

NEW HOISTWAY ACCESS SWITCHES

An enabling keyswitch shall be provided in the car operating panel to render all car and hall buttons inoperative and to permit operation of the elevator by means of an access keyswitch adjacent to the hoistway entrance at the access landing. The movement of the car away from the access landing, other than the lower terminal, by means of the access keyswitch at the landing shall be limited in travel and direction to that as specified for the upper landing in the latest applicable revision of the ASME/ANSI A17.1 Code.

NEW REMOTE ELEVATOR MONITORING MAINTENANCE

A microprocessor system that continuously monitors the Unit(s) on a 24-hour per day, year-round basis will be provided. The system will notify a dispatching center that the elevator is inoperative by sending a message via telephone line (Provided by others. See “Work By Others” section.) This makes it possible to have a mechanic dispatched rapidly in response to such a message.

The monitoring system will collect data on the equipment condition whether the operation of a Unit has been interrupted.

The monitoring equipment will remain the property of the elevator contractor.

For the telephone line requirements see the “Work By Others” section

NEW STANDBY POWER OPERATION (AUTOMATIC SELECTION IF APPLICABLE)

The elevators shall return automatically to the main floor at full rated speed, one at a time during emergency power operation. A car that is out of service for other reasons shall be bypassed and another car selected.

A manual selector switch shall be provided at the main floor. The switch will contain a contact position for each elevator and an “AUTOMATIC” position, permitting one selected elevator to remain on standby power or to provide power to an elevator that has been out of service when the elevators were being returned automatically.

SECTION IV: DOOR EQUIPMENT

NEW DOOR OPERATOR

A new door operator shall be installed.

Doors shall be power operated by means of a quality operator mounted on top of the car. The motor shall have positive control over door movement for smooth operation. Each car door shall be provided with a protective device.

Door operation shall be automatic at each landing with door opening being initiated as the car arrives at the landing and closing taking place after expiration of a time interval. An electric car door contact shall prevent the elevator from operating unless the car door is in the closed position.

Door operation (notification, open, close, hold-open time) shall be arranged to meet ANSI code and American with Disabilities Act Guidelines. Doors will be provided with evacuation deterrent devices on each hoistway door as required by code.

The time interval for which the elevator doors remain open when a car stops at a landing shall be independently adjustable for response to car calls and response to hall calls.

NEW LIMITED DOOR REVERSAL

If a person or object enters the zone of detection after the doors start to close, the doors shall stop and reopen to clear the detection zone. Once the opening is cleared, the doors shall resume closing at the preset speed.
NEW NUDGING OPERATION
If during a hall or car call the car doors are prevented from closing for a fixed time period, the door protective device shall be rendered inoperative, a buzzer shall sound on the car and the doors shall close at a slower speed. Operation of the door protective device shall resume at the next landing reached by the car.

RETAINED AND REFURBISHED INTERLOCKS
The present interlocks will be retained. A thorough examination will be made of the interlocks. All replacement components will be the original manufacture replacement parts or equal.

NEW DOOR-PROTECTION DEVICE
A solid state, infrared passenger protection device shall be installed on the car door. If any beam is interrupted, the door-reversal signal will cause the elevator doors to reopen instantly without touching the passenger. After a car stop is made, the door shall remain open for a predetermined interval before closing. If, while the door is closing, the matrix of invisible light beams is interrupted by a passenger entering or leaving the car, the door shall stop and reopen, after which the door shall again start to close.

RETAINED CAR DOOR TRACKS AND HANGERS
The present car door tracks and hangers shall be retained and inspected for proper alignment. Any adjustment required will be accomplished. Any worn rollers shall be replaced.

RETAINED HOISTWAY ENTRANCES WITH ALTERATIONS
The present hoistway entrances shall be retained and altered as follows: New Braille floor identification plates shall be installed on the side entrance jambs at each floor opening.

NEW HOISTWAY AND CAR DOOR PANELS
We shall install new Car and Hoistway door panels on both elevators. The door panels shall be clad in brushed stainless steel. 13 sets of doors in total (26 panels.

RETAINED HOISTWAY DOOR TRACKS AND HANGERS
The present hoistway door tracks and hangers shall be retained. Any worn hanger rollers shall be replaced.

NEW HOISTWAY DOOR RESTRICTORS
Folding hoistway door restrictors shall be installed per code requirements.

SECTION V:  HOISTWAY EQUIPMENT

NEW HOISTWAY OPERATING DEVICES
Terminal stopping devices shall be provided to slow or automatically stop the car at the terminal landings and to automatically cut off the power and apply the brake, should the car travel beyond the terminal landings.

NEW CAR ROLLER GUIDE ASSEMBLY (TRACTION CAR)
A new car roller guide assembly shall be installed.

NEW COUNTERWEIGHT ASSEMBLY (TRACTION CAR)
The existing sash counterweight shall be replaced with a new frame counterweight assembly.
RETAINED CAR FRAME AND SAFETY WITH TESTING (TRACTION CAR)
The existing car safety device, designed to stop the car if it attains a descending speed in excess of the preset contract speed, shall be retained. The following test will be performed: A governor overspeed test will be conducted to insure the safety is working properly and per code requirements.

The existing hydro car frame will be retained as is.

RETAINED ROPES (TRACTION CAR)
The existing hoist ropes shall be retained.

RETAINED PLATFORM
The car platform will be retained and reused in place.

NEW CAR INTERIORS
A new elevator car interior shall be provided. An allowance of $20,000.00 per elevator is included in the base price. The allowance includes all materials and labor to remove the old car interior an install the new one.

The allowance factors:

- Plastic laminate wall panels on the rear and two side walls
- Brushed stainless steel base and reveals
- Aluminum framed drop ceiling with white diffusers
- LED Lighting Package
- Handrails on rear and two side walls.

NEW LOAD-WEIGHING DEVICE (TRACTION CAR)
A new load weighing device set to operate at a predetermined fixed percentage of the car load shall be provided.

RETAINED FLOORING
The present flooring will be retained.

NEW PIT SWITCH
An emergency stop switch shall be located in the pit and accessible from the pit access door.

RETAINED BUFFERS
The existing buffers shall be retained.
SECTION VI:  FIXTURES OTIS M3 VANDAL RESISTANT TYPE WITH BRUSHED STAINLESS STEEL FINISHES

CAR FIXTURES:

**NEW CAR OPERATING PANEL**
A new car operating panel shall be furnished. The panel shall contain a bank of mechanical illuminated buttons marked to correspond with the landings served, an emergency call button, emergency stop button, door open and door close buttons, and a light switch. The emergency call button shall be connected to a bell that serves as an emergency signal. All buttons, when applicable, to be long life LED illumination.

**NEW EMERGENCY ADA COMPLIANT TELEPHONE**
A new ADA compliant emergency telephone shall be installed in the car operating panel.

**NEW EMERGENCY CAR LIGHTING**
An emergency power unit employing a 6-volt sealed rechargeable battery and totally static circuit shall be provided. The power unit shall illuminate the elevator car and provide current to the alarm bell in the event of normal power failure. The equipment shall comply with the requirements of the latest applicable revision of the ASME/ANSI A17.1 Code.

**NEW LED CAR POSITION INDICATOR**
An LED car position indicator shall be installed. The position of the car in the hoistway shall be shown by illumination of the indication corresponding to the landing at which the car is stopped or passing.

**NEW AUDIBLE SIGNAL (INDICATES PASSING OR STOPPING AT A LANDING)**
An audible signal shall sound in the car to tell passengers that the car is either stopping or passing a landing served by the elevator.

**NEW AUDIBLE VOICE SIGNAL**
Equipment shall be furnished to allow an audible announcement in each car of the name of the next selected landing at which the elevator will stop and the committed direction of travel. Several advisory messages shall also be available to indicate the need for elevator on special service or passenger delay of elevator.

HALL FIXTURES:

**NEW HALL BUTTONS**
New hall buttons shall be installed at each landing. An up button and a down button at each intermediate landing and a single button at each terminal landing shall be installed.

A call shall be registered by momentary pressure of a landing button. The button shall become illuminated and remain illuminated until the call is answered. All buttons, when applicable, to be long life LED illumination.

**NEW HALL LANTERNS**
Direction lanterns shall be provided at all hoistway entrances, with “UP” and “DOWN” indicators at intermediate landings and single indicators at terminal landings. When a car is stopping at a landing, the lantern indicating the direction that the car is traveling shall become illuminated prior to arrival of the car. A chime shall sound once for the “UP” direction and twice for the “DOWN” direction to announce the impending arrival of the associated elevator car.

**NEW COMBINATION HALL LANTERN/POSITION INDICATOR**
Combination hall lantern/position indicators shall be installed at the main / lobby landing.

**NEW PIT LADDER**
A new pit ladder shall be installed per the existing applicable code.
CONTRACTOR WORK

1 Hydraulic (5 stops) and 1 Traction (6 stops) Duplex Elevators:

1) Replace the 2 shunt trip disconnects with new heavy duty fusible disconnects. 480 Volt / 60 Amp. Interlock contacts for the Hydro mainline disconnect is included. Grounding conductor in the conduits included.

2) General duty lockable, fusible disconnects shall be installed for the existing 120 Volt cab circuit.

3) Replace the existing machine room lighting with 4 new guarded LED fixtures. A new emergency battery light also included.

4) Install approximately 4 GFCI receptacles in the machine room.

5) Telephone line with conduit connected to each elevator controller.

6) Install guarded LED lighting and GFCI receptacles in the elevator pits.

Fire Alarm Related Work:

1) At the top of the hoistway, we shall install a control module to operate the louver vent.

   The operable louver installation is by others.

   No more than 8 hours per hoistway not including inspections is estimated to complete the work.

2) Elevator recall exists but needs to be modified.

   Primary and alternate recall are existing to remain.

   Shunt trip is existing but not required because there are no sprinkler heads in any elevator equipment areas.

   We will repurpose the existing shunt trip control module to activate the “Fireman’s Flashing Hat” in the elevator cab.

3) Testing during regular hours included. NO OVERTIME INCLUDED.

4) *SimplexGrinnell cost included.
GENERAL

1) Install metal drip pans with a drain line under overhead piping in the machine room that is carry liquids.
2) Install fire dampers on the existing Hoistway vents.
3) Install a fire damper on the existing exhaust vent in the machine room.
4) Install beveled canting on the existing insulated Hoistway beams with fire rated green board.
5) Modify the existing machine room fencing and install a self-closing and locking access gate.
6) Install a barrier between the new control location and traction machine.
7) Provide cutting for the new hall fixtures.
8) Fire calk around any new penetration.
9) Otis assistance to run the elevators and gain access to the pit, hoistway and overhead is included.

Notes and exclusions:

1) Overtime hours are excluded unless specifically listed above.
2) Temporary power to any systems is excluded. Only permanent power is included in our proposal.
3) We exclude work related to the free air wiring in the machine room. If the AHJ requires conduit for the existing free air cable, we can provide a quote then.
4) *Regarding the fire alarm related work, SimplexGrinnell is consulted and contracted to provide “parts and smarts”. I rely on Simplex’s knowledge of their system they have in place to confirm compliancy. If SimplexGrinnell’s mistakes change my scope of work from what is listed in this proposal or any AHJ requires a change in scope, our price will be adjusted accordingly.
5) The proposal does not include any modifications to the hydraulic elevator Hoistway brick walls which are unfinished.
6) Any other items that the JHA may deem required will be an extra to the contract or be considered for a variance.

UNFORESEEN CONDITIONS ALLOWANCE

We have included an unforeseen conditions allowance of $60,000.00 in the base price to cover any unforeseen or unplanned additional items that may need to be addressed once the elevator modifications begin such as, asbestos abatement, structural conditions, changes to the elevator, fire or building codes, etc.

SECTION VII: WORK BY OWNERS – NOT IN CONTRACT

The following items must be performed by others and you agree to provide this work in accordance with the applicable codes and enforcing authorities:

1. AIR CONDITIONING - Provide suitable ventilation and cooling equipment, if required, to maintain the machine-room temperature between 45°F and 95°F. The relative humidity should not exceed 85 percent non-condensing.
2. BUILDING POWER - Provide electrical power for light, tools, hoists, etc. during installation as well as electric current for starting, testing and adjusting the elevator. Power of permanent characteristics to be provided to properly operate all of the elevators concurrently scheduled to be modernized. Power must be a 3-phase 4 wire system with ground and bonded disconnects. Grounded leg delta systems are not acceptable.
3. SPRINKLERS - Provide code compliant sprinkler system, as required, in the hoistway, pit and machine room as required by the local fire jurisdiction.
4. REMOTE MONITORING MAINTENANCE TELEPHONE LINE REQUIREMENTS - Provide one (1) outside telephone line to the elevator machine room that allows data calls to and from a toll-free number at a dispatching center. The telephone line may be either a separate line dedicated to the remote monitoring maintenance equipment or may be an existing line that is shared between another telephone and the remote monitoring maintenance equipment.
5. STANDBY POWER REQUIREMENTS (IF APPLICABLE) - Provide a standby power unit and a means for starting it that will deliver sufficient power to the elevator disconnect switches to operate one or more elevators at a time at full-rated speed. Provide a transfer switch for each feeder for switching from normal power to standby (emergency) power and a contact on each transfer switch closed on normal power supply with two wires from this contact to one elevator controller. Provide a means for absorbing power regenerated by the elevator system when running with overhauling loads such as full load down.

6. FIRE EXTINGUISHER - Provide fire extinguisher in elevator machine room.

7. NON-ELEVATOR MATERIAL IN HOISTWAY - Remove or encapsulate, as required, any non-elevator related pipes or wiring located in the elevator machine room or hoistway.

8. ASBESTOS – Should any asbestos be found to be present in the building which is related to any of our work, it shall be the responsibility of others to abate, contain or prepare the workplace as safe for our employees to work within or about. Otis will not be responsible for working with asbestos which may be disturbed or uncontained. Otis will not be responsible for any costs associated with delay of the job should asbestos be detected or require addressing by others for us to proceed. This includes but is not limited to re-mobilization charges which may be applied.

9. STORAGE - Provide dry, protected and secure storage space adjacent to the hoistway(s). Otis shall be compensated for material delivered that is stolen or removed from the jobsite.

10. OPERATING ELEVATORS FOR OTHER TRADES – If we are required to operate an elevator to facilitate the work of other trades (i.e. sprinklers, smoke sensors, ledges, etc.) then we shall be compensated for this lost time and the project schedule shall also be modified.

SECTION VIII: GENERAL REQUIREMENTS

RE-MOBILIZATION (PER OCCURRENCE PRICING)

You agree to pursue and schedule the work by other trades in a timely manner so as to not interrupt our work. Should our crew(s) have to pull off the job waiting on work by others not in our contract, we shall be entitled to a re-mobilization charge of Two Thousand Five Hundred ($2,500) Dollars. We shall also extend the stated durations to the extent that we are delayed.

ARBITRATION

Subcontractor agrees to submit to Non-Binding Arbitration by the American Arbitration Association but does not waive its rights to pursue other remedies available at law and equity.

PAYMENT AND SCHEDULE OF VALUES

You agree to be bound and pay in accordance with the supplied schedule of values. We shall be paid for our material delivery invoice prior to starting work. We shall be paid in full for all change orders and the base contract amount prior to scheduling an inspection and/or turnover of the elevators to you for use. Otis reserves the right to discontinue work or not turn over elevators unless payments are current.

   a. Our quoted price is based on the “Initial Payment” equaling sixty percent (60%) of contract award. This amount, PLUS a fully executed subcontract must be received prior to releasing equipment for manufacturing or scheduling any other work. Refer to the “Schedule of Values” below.

   b. Otis will mobilize after the “Material Delivery Payment” is received. See “Schedule of Values” below.

   c. Discount Schedule - “Initial Payment.” Based on the selected “Initial Payment” amount the below “Discount Schedule” shall be applied to the based contract amount:
**Discount Schedule**

<table>
<thead>
<tr>
<th>% Paid</th>
<th>% Discount</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>-1%</td>
<td></td>
</tr>
</tbody>
</table>

---

d. **Substantial Completion / “Progress Payments.”** This payment is due upon substantial completion of each modernized elevator. Substantial completion is defined as a functional elevator that is accepted by you for general use. Any agreed upon punch-list items will be corrected within a mutually agreeable timeframe. This payment, however, is still due upon substantial completion of each elevator modernization. The “Progress Payment” amount shown on the SOV is divided by the total number of elevators being modernized as a part of this contract. This amount is due within five (5) days of the elevator being turned over for general use.

e. Final payment shall be due five (5) days after acceptance of the elevator installation. Otherwise, warranties shall be suspended until payment in full is received.

f. All change orders must be executed and paid prior to scheduling a final inspection and turn over to customer.

g. Otis will not agree to any language referencing or implying “pay when paid.” This contract is between Otis Elevator and referenced entity. The attached payment schedule (“Schedule of Values”) is not contingent upon said entity’s ability to be paid by others or any other factor or event not described above.

h. **Schedule of Values**

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month of Project Award</td>
<td>30%</td>
<td>$137,034</td>
</tr>
<tr>
<td></td>
<td>“Initial Payment”</td>
<td></td>
</tr>
<tr>
<td>Month of Material Delivery</td>
<td>35%</td>
<td>$111,911</td>
</tr>
<tr>
<td></td>
<td>of Remaining Sub-Contract Balance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Material Delivery Payment”</td>
<td></td>
</tr>
<tr>
<td>Upon Substantial Completion of Each Elevator</td>
<td>“Progress Payments”</td>
<td>$207,834</td>
</tr>
</tbody>
</table>

**SCHEDULE**

Due to current market conditions the availability of elevator installation labor is limited. If this proposal is not accepted within 30 days, prior to acceptance of any award Otis reserves the unilateral right to decline the award based on a review of the project schedule and our labor availability/commitments.

This proposal is bid with the understanding that materials will be ordered with sufficient lead time (as outlined in our approvals package) to allow delivery prior to TBD. If Otis is unable to order materials in a timely manner due to delays on behalf of the owner and/or general contractor, or if delivery is requested after TBD, the owner and/or general contractor.
contractor will be responsible for all cost increases incurred by Otis. An extra charge will be assessed for any double handling or re-transportation of elevator material required by the general contractor/owner or agent thereof.

**LEAD TIME AND DURATION**

We anticipate approximately 14 weeks manufacturing time from receipt of approvals and down payment.

Thereafter, we expect the modernization to take approximately 15 weeks to modernize both elevators, one car at a time. All work will be performed during our regular working hours of our regular working days.

It is agreed that we do not assume possession or control of any part of the equipment but such remains yours exclusively as the owner (or lessee) thereof.

We shall not be liable for any loss, damage or delay due to any cause beyond our reasonable control including, but not limited to, acts of government, strikes, lockouts, fire, explosion, theft, floods, riot, civil commotion, war, malicious mischief or act of God. Under no circumstances shall we be liable for consequential damages.
The extent of the work to be performed is either described above or in the attached specification which is incorporated into and made a part of this document.

**PRICE:** $ 456,779.00

Four Hundred Fifty Six Thousand Seven Hundred Seventy Nine Dollars

This price is based on a thirty percent (30%) downpayment in the amount of $ 137,034.

This proposal, including the provisions printed on the pages following, shall be a binding contract between you, or the party identified below for whom you are authorized to contract (collectively referred to herein as ‘you’), and us when accepted by you through execution of this proposal by you and approved by our authorized representative; or by your authorizing us to perform work for the project and our commencing such work.

Submitted by: ______________________________

N. Gross / sab

Accepted in Duplicate

CUSTOMER

Approved by Authorized Representative

Date: ______________________________

Signed: X ______________________________

Print Name: ______________________________

Title: ______________________________

Name of Company: ______________________________

☐ Principal, Owner or Authorized Representative of Principal or Owner

☐ Agent (Name of Principal or Owner)

OTIS ELEVATOR COMPANY

Approved by Authorized Representative

Date: ______________________________

Signed: ______________________________

Print Name: ______________________________

Title: ______________________________

Name of Company: ______________________________
**TERMS AND CONDITIONS**

The work shall be performed for the agreed price plus any applicable sales, excise or similar taxes as required by law. In addition to the agreed price, you shall pay to us any future applicable tax imposed on us, our suppliers or you in connection with the performance of the work described.

This quotation is subject to change or withdrawal by us prior to acceptance. We warrant to you that the work performed by us hereunder shall be free from defects, not inherent in the quality required or permitted, in material and workmanship for one (1) year from the date of substantial completion. Our duty and your remedy under this warranty are limited to our correcting any such defect you report to us within the warranty period by, at our option, repair or replacement, provided all payments due under the terms of this contract have been made in full. All parts used for repair or replacement under this warranty shall be good quality and furnished on an exchange basis. Printed circuit boards used for replacement parts under this warranty may be refurbished boards. Exchanged parts become our property.

We shall perform the work during our regular working hours of our regular working days unless otherwise agreed in writing. You shall be responsible for providing suitable storage space at the site for our material.

You shall obtain title to all the equipment furnished hereunder when final payment for such material is received by us. In addition, you shall be granted a license to use any software incorporated into any such equipment solely for operating such equipment. Any drawings, illustrations or descriptive matter furnished with the proposal are submitted only to show the general style, arrangement and dimensions of the equipment.

Payments shall be made as follows: A down payment of sixty percent (60%) of the price shall be paid after we have completed processing your equipment requirements, and orders are placed; the balance shall be paid on completion if the work is completed within a thirty day period. If the work is not completed within a thirty day period, monthly progress payments shall be made based on the value of any equipment ready or delivered, if any, and labor performed through the end of the month less a five percent (5%) retainage and the aggregate of previous payments. The retainage shall be paid when the work is completed. We reserve the right to discontinue our work at any time until payments shall have been made as agreed and we have assurance satisfactory to us that subsequent payments will be made when due. Payments not received within thirty (30) days of the date of invoice shall be subject to interest accrued at the rate of eighteen percent (18%) per annum or at the maximum rate allowed by applicable law, whichever is less. We shall also be entitled to reimbursement from you of the expenses, including attorney's fees, incurred in collecting any overdue payments.

Any material removed by us in the performance of the work shall become our property. Our performance is conditioned upon securing any required approvals for the installation of any equipment provided hereunder and your providing our workmen with adequate electrical power at no cost to us with a safe place in which to work, and we reserve the right to discontinue our work in the building whenever in our opinion working conditions are unsafe. If overtime work is mutually agreed upon and performed, an additional charge thereof, at our usual rates for such work, shall be added to the contract price. The performance of our work hereunder is conditioned on your performing the preparatory work and supplying the necessary data specified on the front of this proposal or in the attached specification, if any. Should we be required to make an unscheduled return to your site to begin or complete the work due to your request, acts or omissions, then such return visits shall be subject to additional charges at our current labor rates.

We shall retain a security interest in all material furnished hereunder and not paid for in full. You agree that a copy of this Agreement may be used as a financing statement for the purpose of placing upon public record our interest in any material furnished hereunder, and you agree to execute a UCC-1 form or any other document reasonably requested by us for that purpose.

Except insofar as your equipment may be covered by an Otis maintenance or service contract, it is agreed that we will make no examination of your equipment other than that necessary to do the work described in this contract and assume no responsibility for any part of your equipment except that upon which work has been done under this contract.

Neither party shall be liable to the other for any loss, damage or delay due to any cause beyond either parties reasonable control, including but not limited to acts of government, strikes, lockouts, other labor disputes, fire, explosion, theft, weather damage, flood, earthquake, riot, civil commotion, war, mischief or act of God.

We do not agree under our warranty to bear the cost of repairs or replacements due to vandalism, abuse, misuse, neglect, normal wear and tear, modifications not performed by us, improper or insufficient maintenance by others, or any cause beyond our control. We shall conduct, at our own expense, the entire defense of any claim, suit or action alleging that, without further combination, the use by you of any equipment provided hereunder directly infringes any patent, but only on the conditions that (a) we receive prompt written notice of such claim, suit or action and full opportunity to assume the sole defense thereof, including settlement and appeals, and all information available to you for such defense; (b) said equipment is made according to a specification or design furnished by us; and (c) the claim, suit or action is brought against you. Provided all of the foregoing conditions have been met, we shall, at our own expense, either settle said claim, suit or action or shall pay all damages excluding consequential damages and costs awarded by the court therein and, if the use or resale of such equipment is finally enjoined, we shall at our option, (i) procure for you the right use of the equipment, (ii) replace the equipment with equivalent noninfringing equipment, (iii) modify the equipment so it becomes noninfringing but equivalent, or (iv) remove the equipment and refund the purchase price (if any) less a reasonable allowable charge for use of the equipment.

The EXPRESS WARRANTIES SET FORTH IN THIS AGREEMENT ARE THE EXCLUSIVE WARRANTIES GIVEN: WE MAKE NO OTHER WARRANTIES EXPRESS OR IMPLIED, AND SPECIFICALLY MAKE NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE; AND THE EXPRESS WARRANTIES SET FORTH IN THIS AGREEMENT ARE IN LIEU OF ANY SUCH WARRANTIES AND ANY OTHER OBLIGATION OR LIABILITY ON OUR PART. Under no circumstances shall either party be liable for special, indirect, liquidated, or consequential damages in contract, tort, including negligence, warranty or otherwise, notwithstanding any indemnity provision to the contrary. Notwithstanding any provision in any contract document to the contrary, our acceptance is conditioned on being allowed additional time for the performance of the Work due to delays beyond our reasonable control.

Your remedies set forth herein are exclusive and our liability with respect to any contract, or anything done in connection therewith such as performance or breach thereof, or from the manufacture, sale, delivery, installation, repair or use of any equipment furnished under this contract, whether in contract, in tort, in warranty or otherwise, shall not exceed the price for the equipment or services rendered.

It is agreed that after completion of our work, you shall be responsible for ensuring that the operation of any equipment furnished hereunder is periodically inspected. The interval between such inspections shall not be longer than what may be required by the applicable governing safety code. By accepting delivery of parts incorporating software you agree that the transaction is not a sale of such software but merely a license to use such software solely for operating the unit(s) for which the part was provided, not to copy or let others copy such software for any purpose whatsoever, to keep such software in confidence as a trade secret, and not to transfer possession of such part to others except as a part of a transfer of ownership of the equipment in which such part is installed, provided that you inform us in writing about such ownership transfer and the transferee agrees in writing to abide by the above license terms prior to any such transfer.

Our work shall not include the identification, detection, abatement, encapsulation or removal of asbestos, polychlorinated biphenyl (PCB), or products or materials containing asbestos, PCB’s or other hazardous substances. In the event we encounter any such product or materials in the course of performing work, we shall have the right to discontinue our work and remove our employees from the project until you have taken the appropriate action to abate, encapsulate or remove such products or materials, and any hazards connected therewith, or until it is determined that no hazard exists (as the case may require). We shall receive an extension of time to complete the work hereunder and compensation for delays encountered as a result of such situation.

This Agreement constitutes the entire understanding between the parties regarding the subject matter hereof and may not be modified by any terms on your order form or any other document, and supersedes any prior written or oral communication relating to the same subject. Any amendment or modifications to this Agreement shall not be binding upon either party unless agreed to in writing by an authorized representative of each party. Both parties agree that any form issued by you that contains any terms that are inconsistent with those contained herein shall not modify this Agreement, nor shall it constitute an acceptance of any additional terms.