

ADDENDUM NUMBER ONE
23rd STREET PUMP STATION ELEVATOR UPGRADE
CONTRACT NO. W-19-025-201
CITY OF CHATTANOOGA, TENNESSEE

The following changes shall be made to the Contract Documents, Specifications, and Drawings:

I. Q&A

Q? While we were reviewing the documents for the project above we noticed the following specification section is missing per the Table of Contents:

00717 Mobilization

Was this left out intentionally?

A. Section 00717 Mobilization is attached.

Q? It has to do with exactly what will the state elevator inspector require.

Will he make us spend the extra money to FULLY comply with the elevator code?

A. See updated Detailed Specifications attached.

November 21, 2019

/s/Justin Holland, Administrator
City of Chattanooga
Department of Public Works

ITEM 717

MOBILIZATION OF FORCES, SUPPLIES, AND EQUIPMENT

717.01 Description

This work shall consist of the mobilization and demobilization of the prime Contractor's and all Subcontractors' work forces, supplies, equipment, and incidentals at the project site. It shall include all Contractor and Subcontractor costs associated with obtaining performance bonds, insurance required by railroads, and other preconstruction costs incurred after award of the contract which are necessary costs to the project and are of a general nature rather than directly attributable to other pay items. All necessary preconstruction costs not attributable to a specific pay item shall be included in the contract lump sum price for Mobilization and not in any other pay item.

717.02 Method of Measurement

Mobilization will be measured by the unit for the completion of the work as described above, and payment will be made on a lump sum basis.

717.03 Basis of Payment

Partial payment for mobilization will be determined as indicated below. Upon completion of all work on the project, payment will be made of any amount bid for mobilization in excess of the total limit for partial payment.

Partial Payment Schedule

Percent of Total Contract Amount of Progress Estimate Exclusive of Mobilization	Percent of Mobilization Allowed
Not Less Than	
2%	30%*
5%	50%*
10%	80%*
25%	100%*

* % of lump sum bid price for mobilization or of the total limit for partial payment whichever is less.

Payment for mobilization will be made in accordance with the provisions set out above, which price shall be full compensation for organizing and moving all forces, supplies, equipment, and incidentals to the project site, regardless of the number of times such moves are made and also for all preconstruction costs incurred after award of the contract.

END OF DOCUMENT

ELEVATOR UPGRADE

**23rd Street Wastewater Pump Station
257 E. 25th Street
Chattanooga, TN 37408**

OWNER

**City of Chattanooga
Division of Waste Resources
455 Moccasin Bend Road
Chattanooga, TN 37405**

1.0 GENERAL

1.1 Scope

- A. Work Included: The specification included in this Section is intended to cover the upgrade of one (1) geared electric traction elevator as follows:
1. The elevators to be upgraded using all new non-proprietary microprocessor based control equipment.
 2. All work and material necessary to accomplish this installation in a complete and workmanlike manner. This work shall be done in accordance with the requirements of local codes which may govern the requirements of the installation. All terms in these specifications have the definition given in the latest edition of the Safety Code for Elevators and Escalators (referred to as the ASME A17.1 "Code"), including revisions and authorized changes in effect on the date of these specifications. In all cases where a device or part of the equipment is referred to in the singular number, it is intended that such reference should apply to as many devices as are required to complete the installation.
 3. All required hoisting and movement of elevator equipment, shall be the responsibility of the Elevator Contractor. The Contractor shall provide crane to move existing equipment out and new equipment into the machine room on the roof of the facility.

4. The new controller cabinet must be lockable and must be located in a control space for the controller and disconnects. The control space shall be manufactured by Kone, or an approved equal. The requirements shall be a Kone MRL type elevators, or an approved equal. The control space must have the disconnects located with the controller. If the contractor needs more width, how much more would be determined by the width of the disconnects and how far they would be located from the controller. It would be the responsibility of the contractor to obtain all measurements and provide any stamped electrical or mechanical drawings required to obtain all electrical and mechanical permits. See attached drawing of a KONE EcoSpace Configuration and Dimension drawing.

The contractor shall be responsible for determining the allowable space from the disconnects to the controller. The controller shall be 36"(W) X13"(D). The control space shall go on the wall to the right if you are facing the elevator.

The contractor shall be responsible to make sure the space has lighting and emergency lighting.

1.2 Contractor shall be responsible for a turn-key job and include in his bid all related work in these specifications and any incidental costs required such as but not limited to:

A. Legal Hoistway:

1. Ensure hoistway walls are fire rated, patched and or fire caulked
2. Bevel any ledges that extended more than 2" into the hoistway.

B. Pit:

1. Add GFCI outlets to pit.
2. Clean out the sump
3. Provide proper lighting in pits with switches accessible from the doors.

C. Legal Machine Room (**New Location**):

1. Maintain machine room ventilation, cooling and heating. HVAC equipment to maintain minimum temperature of 65 degrees, maximum 90 degrees. Maintain maximum 85% relative humidity, non condensing. HVAC unit may be located within the bounds of the machine room if solely for the heating or cooling of that machine room.

D. Electrical (Services, Conductors and Devices):

1. Add new three-phase, fused mainline disconnect to provide main power feeders to the elevator controller. The disconnect shall be lockable "OFF". The disconnect to be located in a remote location on the 4th floor, agreed to by the State Elevator Inspector. The controller for the elevator shall be mounted down on the top floor rather than in the machine room overhead. A new disconnect shall be mounted close to the controller so that you can kill the power to work on it. The existing main-line disconnect will be left in the machine room and conduit and wiring shall be ran to feed the new disconnect. The City must have the ability to kill the power when you working on the machine (up in the machine room) or the controller (down at the top floor). The work involves just adding a disconnect to an existing

service, not a whole new service.

2. Add a Gas Meter Safety Device, for the depth to stop the elevator if the pump station housing below ground is filled with gases.
3. Add new single-phase fused, lockable "OFF", disconnect to provide 120V power feeders to car controller for elevator lighting and exhaust fan.
4. The existing three-phase fused disconnect in the overhead machine room will be retained and the mainline power from the disconnect will feed the new three-phase disconnect located near the controller.

1.3 PERMITS, TESTS, AND INSPECTIONS:

A. Elevator Contractor Shall Obtain and Pay for:

1. All necessary legal requirements, permits, licenses and inspection fees necessary to complete the elevator installation.
2. Perform tests as required by governing enforcing authorities and/or ASME A17.1 Safety Code for Elevators and Escalators, in accordance with procedures specified in ANSI/ASME A17.2 Inspector's Manual.
3. Perform all coordination and obtain written approval from the State Elevator Inspector.

1.4 MAINTENANCE:

- #### A. Elevator Contractor shall provide **twelve (12) months** of preventive maintenance and callback services on the elevator listed in this proposal upon completion of the upgrade work.

1.5 PROTECTION

1. Provide a code approved barricade in front of each entrance of the unit on which the work is being performed. These barricades are to be designed per OSHA requirements.
2. Removal and disposal of any and all hazardous waste or materials is to be per government regulations.

2.0 PRODUCTS

2.1 SUMMARY – PASSENGER ELEVATOR: RETAIN EXISTING OR PROVIDE NEW

GENERAL

Elevator Quantity: _____ One (1)
Elevator Scope: _____ Upgrade of existing elevator
Elevator Type: _____ Traction elevator
Elevator Application: _____ Overhead, geared machine

ANSI Code Version: _____ All material and installation provided as indicated in this scope of work will comply with 2005 ASME A17.1 and ASME A 17.3.

ADA requirements: _____ Not Applicable

Seismic Risk Zone: _____ None included

Machine Room Location: _____ Retain existing (directly over elevator hoistway)

Roping: _____ Retain existing (1:1)

Loading Class: _____ Retain existing

Rated Capacity: _____ Retain existing (1000 lbs.)

Rated Speed: _____ Retain existing (100 ft./min)

Power Characteristics: _____ Retain existing (480 volts, 3 Phase, 60 Hz)

Travel: _____ Retain existing (48'-0")

Landings: _____ Retain existing (Four (4))

Floors served: _____ Retain existing (1,2,3,4)

Front Openings: _____ Retain existing (Four (4))

Rear Openings: _____ Not Applicable

Overhead: _____ Retain existing

Pit depth: _____ Retain existing

Clear Hoistway Size: _____ Retain existing

Car Platform Size: _____ Retain existing

Clear Car Inside: _____ Retain existing

Cab Height: _____ Retain existing

Hoistway & Car Entrance Size: _____ Retain existing

Hoistway & Car Door Type: _____ Retain existing (Swing door & Folding car gate)

Elevator Submittal Drawings: _____ Provide for new scope

Elevator Permits: _____ Provide for only elevator portion of the project

Elevator Tests / Inspections: _____ Provide as required

Warranty Period: _____ Twelve (12) months from date of Final Acceptance on components that were replaced under this scope of work.

MACHINE ROOM

Machine Beams: _____ Retain existing

Hoist Ropes: _____ Provide new (3 @ 1/2")

Hoist Rope Shackles: _____ Provide new

Hoist Machine & Drive Sheave: _____ Provide new

Hoist Machine Bedplate Adapter: _____ Provide new as required

Hoist Motor: _____ Provide new AC flange mounted motor

Encoder: _____ Provide new

Motor Control: _____ Provide new

Ascending Brake: _____ Not required, per inspector

Sheaves and Rope Guards: _____ Provide new

Governor: _____ Retain existing

Governor Rope: _____ Retain existing

Governor Rope Shackles: _____ Retain existing

Elevator Control: _____ Microprocessor, Single Car Automatic Operation

Operation System: _____ Provide new

HOISTWAY AND PIT

Car and Counterweight: _____ Retain existing

Guide Rails/Brackets/Supports _____ Retain existing

Car Safety: _____ Retain existing

Counterweight: _____ Retain existing

Counterweight Guards: _____ Retain existing

Counterweight Roller Guides: _____ Retain existing

Traveling Cable: _____ Provide new

Selector System: _____ Provide new

Hoistway Wiring: _____ Provide new
 Hoistway Switches: _____ Provide new
 Pit Channels: _____ Retain existing
 Pit Buffers: _____ Retain existing
 Pit Stop Switches: _____ Retain existing

LANDINGS

Hoistway Entrances Doors & Frames: _____ Retain existing
 Hoistway Entrances Sills: _____ Retain existing
 Hoistway Entrances Sill Support Angles: _____ Retain existing
 Entrance Fascia, Toe Guards: _____ Retain existing
 Entrance Struts & Headers: _____ Retain existing
 Hoistway Door Closers: _____ Retain existing
 Hoistway Door Interlocks: _____ Retain existing
 HW Door Unlocking Devices: _____ Retain existing
 Hall Station Fixtures: _____ Provide one (1) new riser of surface mounted fixtures with #4 stainless steel finish at all landings

CAR

Platform / Inside Size: _____ Retain existing
 Car Sling & Platform: _____ Retain existing
 Car Platform Fireshield: _____ Retain existing
 Car Roller Guides: _____ Retain existing
 Emergency Alarm Bell: _____ Provide new that will ring when the car stop switch or alarm button is activated.
 Top Emergency Exit: _____ Retain existing
 Car Top Inspection Station: _____ Provide new
 Top of Car Light / Duplex Outlet: _____ Provide new
 Car Gate Switch: _____ Retain existing
 Car Enclosures (Structural Cab Walls & Top): _____ Retain existing
 Cab Wall: _____ Modify as required to install a new car operation panel.
 Car Gate: _____ Retain existing
 Car Sills: _____ Retain existing
 Car Flooring: _____ Retain existing
 Car Fan: _____ Not Applicable
 Car Finishes: _____ Retain existing
 Ceiling: _____ Retain existing
 Car Operating Panel: _____ Provide new with #4 stainless steel faceplate mounted in the cab. Provide with signage for capacity and number of passengers.
 Car Emergency Light: _____ Provide new incorporated in the new car operating panel.
 Car Operating Devices: _____ Provide new alarm button, emergency keyed stop switch and keyed light switch incorporated in the new car operating panel.
 Car Floor Pushbuttons: _____ Provide new incorporated in the new car operating panel.
 Car Braille Designations: _____ Provide new incorporated in the new car operating panel.
 Hands Free ADA Phone: _____ Provide new to be mounted in same location as existing phone.
 Certificate Frame: _____ Retain existing

2.2 PERFORMANCE: Adjust equipment as follows:

- A. Speed: +/- 3% under any loading condition or travel direction.

2.3 OPERATION: Provide new operation as follows:

- A. Operational Control: The following control equipment to be non-proprietary and at a minimum include the following –
 - 1. Provide the elevator with a new microprocessor based dispatch, car control and motor control system for single automatic simplex operation.

2.4 MACHINE ROOM EQUIPMENT: Retain existing or provide new equipment as follows:

- A. Machine: Provide new hoist machine and motor.
- B. Encoder: Provide new encoders shall be provided and mounted on the hoist machines.
- C. Controller: Provide new cabinet type, microprocessor based non-proprietary controller.
- D. Sleeves and Guards: Provide new machine sheaves and guards for sheaves and ropes.
- E. Machine Beams: Retain existing structural steel beams required for support of the elevator hoist machines.
- F. Governor: Retain existing
- G. Brake: Provide new

2.5 HOISTWAY EQUIPMENT: Retain existing or provide new equipment as follows:

- A. Guide Rails: Reuse existing guide rails and brackets. Thoroughly clean all rails. Tighten bracket bolts and guide clips for smooth and quiet operation.
- B. Buffers: Retain existing
- C. Counterweight: Existing counterweight shall be retained and all fastenings made secure.
- D. Hoist Ropes: Provide new
- E. Governor Ropes: Retain existing
- F. Normal and Final Terminal Stopping Devices: Retain existing
- G. Electrical Wiring: Provide new as follows:
 - 1. Conduit, Etc: Existing conduit and duct may be reused, or provide new if necessary.
 - 2. Traveling Cables: Flame and moisture-resistant outer cover. Include necessary shielded communication wires and car lighting circuits from machine room to car.
- H. Hoistway Entrance Hardware:
 - 1. Interlocks: RETAIN EXISTING
 - 2. Closers: RETAIN EXISTING
 - 3. Sills: RETAIN EXISTING

2.6 CAB:

1. Cab Shell: RETAIN EXISTING
2. Lighting: RETAIN EXISTING
3. Ceiling: RETAIN EXISTING.

2.7 SIGNAL FIXTURES

- A. Install new car operating panel in elevator cab wall.
- B. Install new surface mount hall stations at top, bottom and intermediate landings.

3.0 EXECUTION

3.1 SITE CONDITION INSPECTION:

- A. Prior to beginning the installation of equipment, examine the hoistway and machine room areas and verify that no irregularities exist that would affect quality of execution of work as specified. Contractor shall not proceed with installation until previous work conforms to project requirements.

3.2 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver and store materials in Manufacturer's original, unopened protective packaging to prevent soiling, physical damage or wetting.

3.3 FIELD QUALITY CONTROL:

- A. Work at the job site will be checked during the course of installation. Full cooperation with the Inspectors or Owner's representative is mandatory. Any corrective work they require shall be accomplished prior to performing further installation dependent upon or related to the required correction.
- B. Have Code Enforcing Authority acceptance inspection performed. Verification that such tests have been completed, all corrective work accomplished and installation approved for issuance of a permit to operate shall be required before acceptance of any unit.

3.4 ADJUSTMENTS:

- A. Lubricate all equipment in accordance with Manufactures instructions.
- B. Adjust motor, brake, controller, leveling switches, limit switches, stopping switches, interlocks and safety devices to achieve required performance.

3.5 CLEANUP:

- A. Keep work areas orderly and free from debris during progress of project.
- B. Clean machine room and pit equipment and floor of dirt, oil and grease.

3.6 ACCEPTANCE INSPECTION AND TESTS:

- A. General: Final acceptance of the installation shall be made only after all field quality control reviews and tests are complete, all submittals and certificates have been received and the Customer's representative is satisfied of the following:
 - 1. Workmanship and equipment comply with specifications.
- B. Performance Guarantee: Should the final tests reveal any defects, poor workmanship, or noncompliance with the requirements of the specified codes and/or any variance or noncompliance with the requirements of these specifications, the following work and/or repairs shall be completed at no expense to the Customer.
 - 1. Perform all work and furnish all materials and equipment necessary to complete the specified operation and/or performance.
 - 2. Perform all testing required by the Governing Code Authority and the Owner to verify the specified operation and/or performance.

3.7 OWNER'S INFORMATION:

- A. Diagnostic Test Equipment and Instructions: Controller has onboard diagnostic test devices, we will provide one set of all supporting information necessary for interpretation of test data and troubleshooting of system.

PREPARATORY WORK INCLUDED IN THE CONTRACT SPECIFICATIONS

The following items must be performed by the contractor and the contractor shall be required to provide this work, if required, in accordance with the applicable codes and enforcing authorities:

- 1. ELECTRICAL POWER – Provide electrical power for light, tools, etc... during upgrade work as well as electric current for running, testing and adjusting the elevator.
- 2. FIRE ALARM SYSTEM – Provide a smoke and heat (if sprinkled) detector system, located as required with wiring from the sensing devices to each elevator controller. Smoke detectors are required in each elevator lobby, the machine room, and hoistway. This item shall be installed if required by the **State Elevator Inspector**.
- 3. CUTTING & PATCHING – Provide any cutting, patching and painting of walls, floors or partitions (including for hall signals, entrances and/or machine room access) if required.
- 4. HOISTWAY VENTILATION – ANSI A17.1 Code requires a means to prevent the accumulation of hot air and gasses at the top of the hoistway. This is done by pressurizing

the hoistway, or providing vents from the top of the hoistway to the outside of the building usually accomplishes this. Vents shall not be less than 3-1/2% of the area of the hoistway nor less than 3 sq. ft. for each elevator car, whichever is greater. The contractor may not vent the hoistway to the machine room. If the hoistway vents must run through the machine room, they must be enclosed to a fire rated structure and not violate clearances around the equipment

5. SUMP – In elevators with sumps pits the Contractor will provide a sump pump with metal piping to remove water or oil from the pit. Provide a flush grating over the sump hole.
6. SCHEDULING – All work by the Contractor shall be properly scheduled with the City as to not obstruct the operation of the pump station.
7. ASBESTOS – Should any asbestos be found to be present in the building which is related to any of the work, it shall be the responsibility of the Contractor to abate contain or prepare the workplace as safe for the contractors employees to work within or about. The contractor will be responsible for working with asbestos which may be disturbed or uncontained. The contractor will be responsible for any costs associated with delay of the job should asbestos be detected.
8. STORAGE – Provide dry, secure storage space adjacent to the hoistway(s).
9. DISPOSAL – Contractor shall provide a dumpster on-site, deposit all waste in the dumpster, and remove from site upon completion.

4.0 WARRANTY

The vendor shall provide a standard 1 year warranty

5.0 SERVICE

For the period of twelve (12) months following turnover of the units to purchaser, contractor shall provide preventive maintenance and callback services on the contracted equipment. This includes quarterly service visits during regular working days and hours. This includes visual inspections, lubrication, and greasing of the equipment and minor adjustments. Emergency callbacks for entrapments are included. Contractor shall monitor, at no additional charge, the required emergency phones in each elevator (lines by owner).

KONE EcoSpace™



Configurations and Dimensions

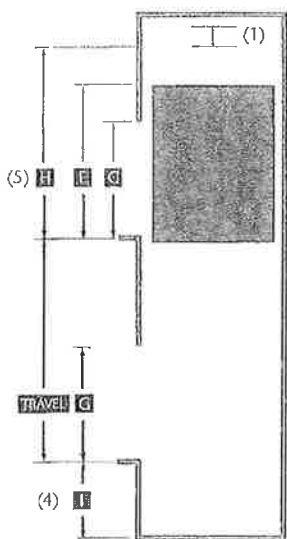
Max Travel
 48' (14.6 m)
Max Landings
 4
Speed
 150 fpm
 (.75 m/s)
Car Height
 8 or 10 ft.
 (2438 or 3048 mm)
Entrance Height
 7, 8 or 9 ft.
 (2134, 2438 or
 2743 mm)

	CAPACITY (kg)	FUNCTION TYPE	SEISMIC					
			NON-SEISMIC HOLDING (mm)	SEISMIC HOLDING (mm)	SEISMIC HOLDING (mm)	SEISMIC HOLDING (mm)	SEISMIC HOLDING (mm)	
Front Opening PASSENGER	2000 (907)	SSP	7'-4" (2235)	7'-8" (2337)	5'-9" (1753)	5'-8" (1727)	4'-3" (1295)	3'-0" (914)
	2500 (1134)	SSP-CO	8'-4" (2540)	8'-8" (2642)	5'-9" (1753)	6'-8" (2032)	4'-3" (1295)	3'-6" (1067)
	3000 (1361)	SSP-CO	8'-6" (2591)	8'-8" (2642)	6'-3" (1905)	6'-8" (2032)	5'-0" (1524)	3'-6" (1067)
	3500 (1588) ⁽⁷⁾	SSP-CO	8'-6" (2591)	8'-8" (2642)	6'-11" (2108)	6'-8" (2032)	5'-6 1/4" (1681)	3'-6" (1067)
Front & Reverse Opening PASSENGER	2000 (907)	SSP	7'-4" (2235)	7'-8" (2337)	6'-3 1/4" (1911)	5'-8" (1727)	4'-3" (1295)	3'-0" (914)
	2500 (1134)	SSP-CO	8'-4" (2540)	8'-8" (2642)	6'-3 1/4" (1911)	6'-8" (2032)	4'-3" (1295)	3'-6" (1067)
	3000 (1361)	SSP-CO	8'-6" (2591)	8'-8" (2642)	6'-11" (2108)	6'-8" (2032)	5'-0" (1524)	3'-6" (1067)
	3500 (1588) ⁽⁷⁾	SSP-CO	8'-6" (2591)	8'-8" (2642)	7'-5 1/4" (2267)	6'-8" (2032)	5'-6 1/4" (1681)	3'-6" (1067)

CLEAR OVERHEAD AND PIT DEPTH		
CAPACITY (kg)	PIT DEPTH (mm)	
	MINIMUM	MAXIMUM
2000 to 3500 (907 to 1588)	5'-0" (1524)	13'-0" (3962)

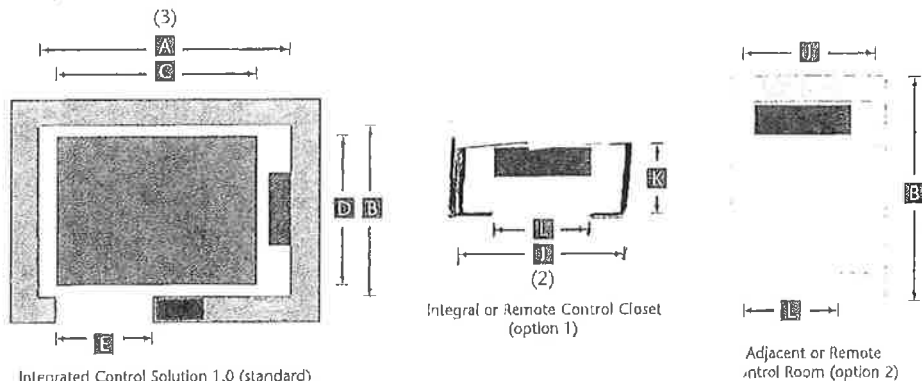
CONTROL SPACE				
CAPACITY (kg)	CONTROL ROOM SPACE	CONTROL ROOM WIDTH (mm)		
		MINIMUM	DEPTH	MAXIMUM
2000 to 3500 (907 to 1588)	Integral or remote closet	3'-8" (1118)	1'-8" (508)	3'-0" (914)
2000 to 3500 (907 to 1588)	adjacent room	5'-0" (1524)	dimension (B)	3'-0" (914)

Section View



Visit kone.us for the latest project-specific details, CAD drawings, CSI specifications, electrical data, reaction loads and building access requirements.

Plan Views



Notes

- (1) A hoist beam (by KONE) is required for installation (by others). Dimension reflects clear under hoist beam.
- (2) If an EBD (Emergency Battery Device) is required please contact your KONE Sales Professional for further detail regarding dimensions and .
- (3) The published holstway dimensions represent the minimum clear inside requirements. Construction efficiencies can be realized by increasing these dimensions by up to 2" (51 mm).
- (4) For pit depths less than 5'-0" (1524 mm) please contact a KONE Sales Professional.
- (5) All dimensions are based on an 8'-0" (2438 mm) cab with a 7'-0" (2134 mm) door. Alternate car and door heights are available, but will affect dimension .
- (6) Contact your local KONE Sales Representative regarding local code variations when utilizing the integrated, integral and remote closet options.
- (7) Stretch accessibility based on International and California Building Code specified 24 Inch by 84 Inch stretcher — with 5 degree radius corners. Elevator car must utilize a slide side door.