

INCLUDED GOODS/SERVICES

Contractor shall perform equipment Full-Service Maintenance, Preventative Maintenance, testing, documentation and logging of all service visits, conduct repair services and other service components (hereafter "Elevator Services") as set forth in the Contract, shall furnish all materials and labor, and comply with all requirements according to currently adopted codes for the designated elevator, lift, or escalator equipment (hereafter "Equipment").

DEFINITIONS

"Full-Service Maintenance" shall refer to maintenance of Equipment where the Contractor performs systematic Preventative Maintenance, examinations, routine examinations, adjustments, testing, repairs and provides all materials, labor, supervision, diagnostic equipment, laptops, tools, supplies, weights, fluids, and other maintenance and repair services necessary to ensure regulatory compliance, prevent malfunctions or shutdowns due to normal wear and tear, to provide for continuous and safe operation of Equipment, and to prolong the life of all Equipment.

"Preventative Maintenance" shall refer to Contractor performing routine examinations, testing, adjustments, lubrication, repairs and like-for-like replacement of system component parts, furnishing all materials, labor, supervision, diagnostic equipment, laptops, tools, supplies, weights, fluids, and other goods and services necessary to ensure regulatory compliance, to prevent malfunctions or shutdowns due to normal wear and tear, to provide for continuous and safe operation of Equipment, and to prolong the life of all Equipment.

SPECIFICATION REQUIREMENTS

1. Equipment Pre-Maintenance Services

Contractor shall perform Equipment Pre-Maintenance Services at the start of a Purchaser's initial agreement term to ensure the Equipment is in good working order and/or brought into compliance with current codes and regulations. The Contractor shall make an initial inspection of the Equipment upon commencement of the Purchaser's agreement and report any deficiencies not previously identified by the prior Contractor. If any necessary corrections or repairs are identified within thirty (30) calendar days of the commencement of the Purchaser's agreement, the Contractor shall submit a T&M proposal using the Contractor's Time and Material rates; however, the Purchaser reserves the right to solicit offers from, and have corrections, or repairs made by other Contractors.

For Equipment covered under a Full-Service Maintenance, any repairs not identified by the Contractor and not reported to the Purchaser within the first thirty (30) calendar days of the commencement of the Purchaser's agreement, it is held that the Contractor has not found any deficiencies, and all repair work shall be at the Contractor's expense and shall become the responsibility of the Contractor to Repair under the Full-Service Preventative Maintenance provision of the Purchaser's agreement.

If Equipment was previously maintained by the same Contractor, any deficiencies identified in the initial inspection shall become the responsibility of the Contractor to Repair under the Full-Service Preventative Maintenance provision of the Purchaser's agreement.

2. Full Service Maintenance and Plan Frequency

	Maintenance Rate	Exclusions listed in Section 2.10
Full Service Maintenance and Required ASME Examinations/Tests (Including On-site response and Troubleshooting)	Included	N/A
Standby Services	Included	Time and Material (T&M) would apply
Repairs/Replacements	Included	Time and Material (T&M) would apply

Full Service Maintenance Plan Frequency: Purchaser's Purchaser Order will specify the frequency of the Full Service Maintenance visits. Purchaser's may request monthly, quarterly, or annual Services for regularly scheduled services and/or periodic Services, for each type of Equipment within a Region in accordance with ***Exhibit B – Prices for Goods/Services***. Contractor shall provide Purchaser, for its review and approval, a proposed schedule to perform the Elevator Services. Contractor shall obtain written authorized from Purchaser for changes to the agreed schedule.

2.1. Preventative Maintenance

Preventative Maintenance includes but is not limited to: a maintenance program for the Contractor to service all Equipment and associated parts. The work to be performed by the Contractor under the specifications shall consist of furnishing all material, labor, supervision, tools, supplies, and other expenses necessary to provide full-service maintenance, including applicable component adjustments at regular intervals and repair or replace all worn or defective components where necessary, and replacement of parts as herein specified for all equipment covered. Contractor shall systematically examine, adjust, lubricate, clean and when conditions warrant, repair or replace the parts and components and all other mechanical or electrical equipment, including, but not limited to the following elevator types also known as "Equipment":

- A. Passenger Elevator
 - i. Traction (roped)
 - Geared
 - Gearless
 - ii. Hydraulic
 - Conventional
 - Hole-less
 - Roped Hydraulic (hybrid of traction and hydraulic)
 - iii. Machine Room Less (MRL)
 - Traction
 - Hydraulic
- B. Service/Freight Elevator
 - i. Traction (roped)
 - Geared
 - Gearless
 - ii. Hydraulic
 - Conventional
 - Hole-less
 - Roped Hydraulic (hybrid of traction and hydraulic)

- iii. Machine Room Less (MRL)
 - Traction
 - Hydraulic
- C. Escalator
- D. Industrial. Typically used in industrial type warehouses.
 - i. Hoist
 - ii. Incline
- E. Lift
 - i. Wheelchair Lift
 - ii. Dumbwaiter
 - iii. Platform Lift

2.2.Full Service Maintenance Coverage

Contractor shall prepare and submit to Purchaser a detailed Full Service Maintenance schedule for all Equipment to be serviced within five (5) calendar days after execution of the Purchaser's Purchase Order. As a minimum, the Equipment shall be examined and maintained in accordance with currently adopted codes:

- A. Contractor shall include the following elements in the preventive maintenance procedures for the Equipment:
 - i. Provide operational checks of all Equipment car door safety edges/detectors. Contractor shall provide documentation of such checking in their machine room check charts.
 - ii. Provide check of directional lights, call registered lights and all other Equipment lighting fixtures.
 - iii. Furnish and replace all burned out bulbs on each visit.
 - iv. Maintain pit lighting, car top lighting and hoistway lighting.
- B. Contractor shall repair loose cab handrails and maintain fastening bolt tightness, repair and maintain communication equipment, cabinetry doors, and door hinges.
- C. **For Geared/Gearless Elevators** and according to currently adopted codes, Contractor shall:
 - i. Furnish lubricants and all Furnish lubricants and all cleaning supplies selected by Contractor to meet the manufactures and specific requirements of the equipment.
 - ii. Regularly and systematically examine, adjust, clean, lubricate as required, and if conditions warrant, repair, or replace:
 - Geared/Gearless hoist machine-including brake, armature fields, brushes, brush rigging, gear case, gears, bearings, hoist motor and sheaves
 - Hoist and governor ropes
 - Governor
 - Governor pit sheave
 - Controllers, selector, starters, dispatcher and relay panels
 - All bearings
 - All rotating elements
 - Contacts, relays and timers
 - Resistors and transformers

- Solid-state devices and all sub-components including batteries and backup batteries
 - In-car emergency lighting
 - Traveling cables
 - Firefighter's service equipment
 - Automatic power door operators, landing and car door hangers, landing and car door contacts, door protective devices, hoistway door interlocks, bottom door guides
 - Interlocks and door closers/closures
 - Car buffers
 - Car exhaust fan
 - Car-top inspection station
 - Limit and slowdown switches
 - Door protective devices and alarm bells
 - Car and corridor operating pushbuttons
 - Load weighing equipment
 - All hall lanterns, car position and hall position indicators, lobby control panels, car operating panels, and all other signal and accessory facilities furnished and installed as a part of the whole equipment
 - Car and counterweight roller guides
 - Batteries
 - Communication devices
- D. **For Hydraulic Elevators, Wheelchair Lifts, and Platform Lifts** and according to currently adopted codes, Contractor shall:
- i. Furnish lubricants and all cleaning supplies selected by Contractor to meet the manufactures and specific requirements of the equipment.
 - ii. Regularly and systematically examine, adjust, clean, lubricate as required, and if conditions warrant, repair, or replace:
 - Hydraulic pumps and associated plumbing
 - Hydraulic cylinder (part that is not in the ground), plunger, packing and packing head
 - Hydraulic fluid and piping, unless the piping is underground
 - Seismic valve and pit shut off valve
 - Hydraulic oil line couplings
 - All exposed hydraulic oil lines, brackets and stands
 - Controllers, starters, selector and relay panels
 - Pump motors
 - All bearings
 - All rotating elements
 - Contacts, relays and timers
 - Resistors and transformers
 - Solid-state devices

- In-car emergency lighting
- Firefighter's service equipment
- Automatic power door operators, landing and car door hangers, landing and car door contacts, door protective devices, hoistway door interlocks, bottom door guides, door closures, slide guides and rails
- Interlocks
- Car buffers
- Limit and slowdown switches
- Door protective devices and alarm bells
- Car and corridor operating pushbuttons
- Load weighing equipment
- All hall lanterns, car position and hall position indicators, lobby control panels, car operating panels, and all other signal and accessory facilities furnished and installed as a part of the whole equipment
- Electrical Traveling Cables
- Batteries
- Communication devices

E. **For Escalators** and according to currently adopted codes, Contractor shall:

- i. Furnish lubricants selected by Contractor to meet the manufactures and specific requirements of the equipment.
- ii. Regularly and systematically examine, adjust, clean, lubricate as required, and if conditions warrant, repair, or replace:
 - Machine, worm, gear, external gearing, drive chain, thrust bearing, main bearings, and brake assembly, coil, linings and component parts
 - Motor, motor windings, rotating elements and bearings. Contractor is obligated to remove and properly dispose any waste, oil, and hazardous materials in accordance to local, state and federal requirements
 - Controller, all relays, contacts, coils, resistance for operating and motor circuits, operating transformers, and operating rectifiers
 - Handrail, handrail drive chains, handrail brush guards, handrail guide rollers, alignment devices, steps, step tread, step wheels, step chains, step axle bushings, comb plates, floor plates and tracks
 - Upper drive, upper drive bearings, tension sprocket bearings, upper newel bearings and lower newel bearings
 - All balustrade, deck, skirt, skirt brushes and trim fastenings (screws, clips, etc.)
 - Under step lighting
 - All safety devices, including but not limited to, skirt switches, emergency stop switches, handrail switches, stop switches, broken chain switches, step out of position switches, missing step detectors, step up-thrust safety switches, and etc.
 - Maintain all accessory equipment, and if conditions warrant, repair or replace the following escalator components: escalator power unit, controller parts, electrical switches, wiring, bearing, governors and brakes, step and chain

wheels, chains and sprockets, steps and step treads, comb plates, safety device handrails.

- F. **For Oil Changes** recommended by Contractor during the Equipment Pre-Maintenance Services time frame in Section 1 above or upon Purchaser's request to change oil despite Contractor's test showing passing, Contractor:
- i. Provide the Purchaser with the following:
 - Age of Equipment
 - Date of last complete oil change
 - Approximate number of hours Equipment was used since last complete oil change
 - Manufacture's recommended oil change for specific Equipment
 - Equipment Model and Type
 - What signs and/or symptom Equipment is showing an oil change is required
 - Provide a copy of the oil analysis testing results
 - Provide current pictures to Purchaser
 - Provide estimate/quote on costs and anticipated time Equipment will be out of service
 - ii. Purchaser shall issue a Purchaser Order if approved to proceed.
 - iii. Contractor shall provide pictures to Purchaser after complete oil change.

2.3. Full Service Maintenance – Other Requirements

- A. Contractor must repair the elevator regardless of the reason for the shutdown and it is included in the preventative maintenance section and this is not a billable service and shall not be excused from equipment shut downs allegedly caused by "faulty or dirty" building incoming electrical power unless Contractor provides the fault log or documentation showing there was a power failure or power outage resulting in Equipment shut-down on date of service call.
- B. Contractor shall inspect of hoistway, pit equipment, car top, machine rooms, and interiors as part of scheduled preventive maintenance at no additional expense to Purchaser.
- C. Any and all remote monitoring equipment and on-going service shall be at the Contractor's total expense.
- D. Contractor shall assign an Elevator Technician to assist with heat and/or smoke detector testing in the hoistway (fire system testing), emergency generator tests.
- E. Contractor shall post the standard Preventive Maintenance schedule/chart and a Preventative Maintenance Log in the Equipment machine rooms and any designated areas. The Preventative Maintenance Log shall include all entries for routine and non-routine maintenance, and repairs. Entries shall include date Full Service Maintenance is complete, Elevator Technician or supervisor's name, brief description of Full Service Maintenance completed and the approximate time required for Full Service Maintenance. Contractor shall post the standard Preventive Maintenance schedule/chart and a Preventative Maintenance Log in the Equipment machine rooms and any designated areas. The Preventative Maintenance Log shall include all entries for routine

and non-routine maintenance, and repairs. Entries shall include date Full Service Maintenance is complete, Elevator Technician or supervisor's name, brief description of Full Service Maintenance completed and the approximate time required for Full Service Maintenance. The Preventative Maintenance Log and Full Service Maintenance schedule/chart shall be maintained for Purchaser's review and examination at any time. Purchaser may copy the Full Service Maintenance Log and Full Service Maintenance schedule/chart at any time. The log book will be made available to the Contractor at all times, including times when no designated Purchaser's personnel is/are present. Contractor shall provide Purchaser with a schedule, in either written or electronic form, (as preferred by Purchaser) of when Equipment will be taken out of service for Full Service Maintenance. Purchaser must approve any changes to this schedule in writing.

- F. Contractor shall maintain one (1) complete set of wiring diagrams showing "as built" conditions with any changes or modifications to circuits resulting from control modifications, parts replacement or Equipment up-grade in each machine room as required by Labor and Industries and the Elevator Technicians to utilize when troubleshooting/testing/etc. When any modifications are made to diagrams, the modified drawings must be made. the original changes shall be maintained in the Equipment machine room. Purchaser retains sole possession of these wiring diagrams. Wiring diagrams shall be kept legible, neat, and orderly fashion in each machine room.
- G. Purchaser will provide wiring diagrams, if available. If Purchaser does not provide the wiring diagrams, Contractor shall work with Purchaser to provide the diagrams, at Purchaser's expense.
- H. Contractor shall be responsible for maintaining exterior of the machinery, and other parts of the Equipment, properly painted, identified, and presentable at all times.
- I. Contractor shall provide a lockable metal- parts cabinet in each Equipment machine room to store parts and materials like rags, fluids, etc. Contractor shall coordinate purchase and/or installation for purchase of the correct cabinet that is allowed in the elevator machine room with Purchaser, as needed. Contractor shall supply materials and supplies at the Contractor's cost plus for replacement parts from ***Exhibit B – Prices for Goods/Services*** sheet.
- J. Contractor shall be required to provide a member of their supervisory personnel, regularly engaged in examinations and supervision, to visit Purchaser's site at least annually to observe the quality of Maintenance and to make certain that the quality of Maintenance meets the specified and intended standards. The Supervisor shall schedule each visit with Purchaser. Purchaser may provide a member of their staff to accompany the Contractor during the on-site review of the Equipment machine rooms and equipment. Examinations and supervision by Contractor shall be at no cost to Purchaser. Contractor shall provide a written report of the results of this examination to the Purchaser's within fourteen (14) calendar days of the on-site examination Contractor must repair the elevator regardless of the reason for the shutdown and it is included in the preventative maintenance section and this is not a billable service and shall not be excused from equipment shut downs allegedly caused by "faulty or dirty" building incoming electrical power unless Contractor provides the fault log or documentation showing there was a power failure or power outage resulting in Equipment shut-down on date of service call.

2.4. General Equipment Services Requirements

- A. Equipment Services shall be conducted in a manner consistent with Purchaser's intent to provide uninterrupted service. The Equipment must provide reliable and safe transportation on a continuous basis, twenty-four (24) hours a day, seven (7) days a week, three hundred sixty-five (365) days per year. Having the Elevator Equipment running at all times is extremely important especially for public facing entities that provide essential services.
- B. Contractor shall notify Purchaser if Equipment Services will generate excessive noise and shall schedule such Equipment Services with Purchaser in advance.
- C. Overtime Elevator Services required or requested shall be scheduled and approved with the Purchaser in advance. Contractor needs to request whether the Purchaser wishes to pay for overtime, as in some cases, the Elevator Equipment may not need to be repaired after 6pm and can wait until the next day.
- D. All records and documents pertaining to the Equipment provided to Contractor by Purchaser shall be kept current and in good condition and shall be returned to Purchaser upon demand or upon termination the Purchaser's Purchase Order.
- E. Contractor shall Purchaser, prior to commencement of Equipment Services, with Safety Data Sheets (hereafter "SDS") for products Contractor intends to employ under the Purchaser's Purchase Order.
- F. Contractor will provide their own appropriate service manuals, adjusting manuals, and technical manuals for all Equipment for use by the Contractor during the term of the contract.
- G. Removal of Equipment from service shall be scheduled with Purchaser. Contractor shall notify Purchaser before any Equipment is removed from service and when such Equipment is placed back in normal service. Emphasis shall be placed on keeping the Equipment operating during the day. Contractor's Elevator Technician shall document and record in the MCP, the Purchaser's employee who was notified and approved the removal of Equipment.
- H. Downtime notification is required according to the following schedule:
 - i. **Emergency Shut Down.** Purchaser is to be notified immediately by phone, cell phone, or radio of emergency repairs or safety issues at time of detection. At minimum, a voice-mail and email message is required.
 - ii. **Short Shut Down.** Purchaser is to be informed in writing (e-mail acceptable) at least three (3) business days business days in advance when Equipment will be taken down for more than two (2) hours for non-emergency service/repair.
 - iii. **Major Shut Down.** Purchaser is to be informed in writing (e-mail acceptable) one (1) week in advance when an unit will be taken down for more than one (1) day for non-emergency service/repair.

- I. Contractor shall immediately shut down and remove the Equipment from service when it appears to Contractor to be unsafe or operating in a manner which might cause injury to anyone using said Equipment. Contractor shall provide Purchaser written notice of such action immediately, stating the reason the Equipment was placed out of service and corrective measures required to place the Equipment in service. Written notice shall be provided to Purchaser before Contractor's Elevator Technician leaves the jobsite.
- J. Contractor shall provide Purchaser with the names of Elevator Technician Mechanic, Elevator Technician Mechanic In Charge, and Apprentices ("Elevator Technicians") that will be performing the Equipment Services at least five (5) business days after Purchaser's Purchase Order start date. All Contractor's Elevator Technicians that perform may be required to pass a background and security check, provide fingerprinting forms, and complete security awareness training before performing Equipment Services. If there is a change in the Elevator Technician assigned to Purchaser, Contractor's supervisory staff must notify Purchaser prior to the replacement Elevator Technician's first visit.
- K. Purchaser reserves the right to request Contractor to replace any or all Elevator Technicians assigned to its buildings if it deems they are not performing in a satisfactory manner, or such personnel who refuse to comply with Purchaser's policies and guidelines.
- L. Contractor's Elevator Technicians shall wear clean, neat, well-maintained uniforms identifying them as employees of Contractor for ease of identification by Purchaser.
- M. Contractor's arrival and upon completion of Equipment Services or any time Contractor's Elevator Technician leaves the jobsite, Contractor shall inform Purchaser.
- N. Contractor shall be solely responsible for all means, methods, techniques, sequences, and procedures of the Equipment Services at no extra cost to Purchaser.
- O. Contractor shall follow L and I's requirements for "Lock out Tag Out" regulations and procedures. I Lock Out-Tag Out.
- P. Contractor shall maintain the entire Equipment system in a clean manner at all times. Contractor shall furnish a fireproof metal trash container in each machine room. coordinate purchase with Purchaser the correct trash container is allowed in the elevator machine room with Purchaser., as needed. Contractor shall supply materials and supplies at the Contractor's cost plus for replacement parts from **Exhibit B – Prices for Goods/Services** sheet. Contractor shall insure that all areas are clean and salvaged materials or scraps are removed before leaving jobsite. This includes but is not limited to: Removal of oily rags, removal of dirt, grease, and lint, maintaining the exterior of all Equipment free of lint, dirt, oil, grease, clean all machine room equipment including: floors, controller/selector, car top, hoistway door track, hanger, interlock, header, strut, hoistway side of sills, underside of car platform, car guides, car door operator, track, hangers, inside area of header, crosshead, guide rail/bracket, fascia, dust cover, pit and inside car station, hall station, lantern, and lobby panel. The cleaning must be to a minimum of Equipment industry standards and shall be to the full satisfaction of Purchaser. If Purchaser decides the cleaning level is below Purchaser's standards, Purchaser has the option of performing necessary clean-up actions or bringing in another contractor to do so, with prior notice provided to Contractor, if the Contractor fails to rectify any deficiencies within the specified timeframe. All costs of the cleaning by another contractor or by Purchaser shall be reimbursed by the Contractor. Contractor will be fully responsible for removal and disposal of all oils, greases, solvents and soiled

cleaning cloths/rags that are used in performing the Equipment Services. All material will be disposed of in accordance with all applicable present or future City, State and Federal Laws and Regulations.

- Q. Contractor shall maintain at all times the original Equipment speed in feet per minute. Perform all adjustments required to maintain the proper door opening and closing time, within limits of applicable codes. Check the operating system for each unit to ensure that unit is kept operating continuously and make necessary tests and corrections to ensure all circuits are correct and time settings are properly adjusted.
- R. Contractor shall maintain the following minimum Equipment performance requirements. If Contractor is not able to locate written documentation for the last speed test, Contractor shall include the Equipment performance requirements below in Section 1, Equipment Pre-Maintenance Services above during the initial pre-maintenance service visit.
 - i. Speed:
 - +/- 3% in both directions under all loading conditions for all geared/gearless elevators.
 - +/-10% in both directions under all loading conditions for hydraulic elevators.
 - ii. Door closing time:
 - Measured from start of door closing until the hoistway doors are fully closed, will be the maximum permitted by Code.
 - iii. Door dwell time.
 - As permitted by The Americans with Disability Act, as now or hereafter amended.
 - iv. Floor leveling accuracy.
 - As required by code.

In accomplishing the above requirements, Contractor shall maintain a comfortable elevator ride with smooth acceleration, retardation and a soft stop. Door operation shall be quiet and positive with smooth checking at the extremes of travel.

- S. Contractor shall not be responsible, unless directed by Purchaser in which costs shall be incurred by the Purchaser, for replacing equipment to meet changes in code requirements as may be recommended and/or directed by insurance companies, Federal, State, Municipal or other Governmental authorities. Should a full replacement of an elevator, escalator, chair lift and/or platform lift be required, Purchasing may facilitate a public works project. The successful Contractor may be responsible for the maintenance of the elevator, escalator, chair lift and/or platform lift and its associated equipment and parts in accordance with the manufacturer's warranty (typically one (1) year). At the conclusion of the warranty period, in accordance with the contents, the Full Service Maintenance, Contractor shall resume all maintenance activities associated with the maintaining the replaced elevator, escalator, chair lift and/or platform lift.
- T. Contractor shall not be responsible, unless directed by Purchaser in which costs shall be incurred by the Purchaser, for replacing equipment to meet changes in code requirements as may be recommended and/or directed by insurance companies, Federal, State, Municipal or other Governmental authorities. Should a full replacement of an elevator, escalator, chair lift and/or platform lift be required, Purchasing may facilitate a public works project. The successful Contractor may be responsible for the maintenance of the elevator, escalator, chair lift and/or platform lift and its associated equipment and parts in accordance with the manufacturer's warranty (typically one (1) year). At the conclusion of the warranty period, in accordance with the contents, the Full Service Maintenance,

Contractor shall resume all maintenance activities associated with the maintaining the replaced elevator, escalator, chair lift and/or platform lift.

- U. Contractor shall be responsible for giving immediate notice to the designated Purchaser of any condition, which the Contractor's employees discovers, that may present a hazard to either the Equipment or passengers.
- V. Contractor shall be responsible for keeping the exterior of the Equipment, machinery and other parts of the equipment subject to rust, painted with heat resistant enamel and presentable at all times. The motor windings shall be treated as needed with proper insulating compound as recommended by the motor manufacturer. Cleaning and re-finishing of the interior of the cars and exterior of hoist way door frames, if requested by Purchaser, shall be a Time & Material rate via a purchaser order.
- W. Contractor shall maintain all Equipment in hoistways, pits, machine rooms, and assigned elevator. Contractor shall maintain the work space in a clean, orderly condition, free of dirt, dust and debris; pits and machine spaces shall be kept dry and clean.

2.5. Full Service Maintenance Additional Requirements

Full Service Maintenance shall be performed during normal business hours and charged at a regular hourly rate, unless otherwise requested and approved by the Purchaser in advance. Normal business hours shall mean 6 am to 6 pm, Monday through Friday with the exception of holidays as stipulated by the International Union of Elevator Constructors' local labor agreement.

- A. Outside of normal business hours, the Purchaser shall call Contractor through its normal business telephone numbers. Contractor shall provide a reliable means of communication between Contractor's local office and the lead Elevator Technician.
- B. Working hours and unscheduled delays. There may be situations that require the Contractor to work other than normal hours and to suspend, postpone, or reschedule work. These situations are normal for large institutional purchasers on this contract. When the Contractor's access to a work area conflicts with a Purchaser's operational requirement, Contractor shall reschedule the work to minimize the disruption; this may require performing the work at times other than normal duty hours. Schedule delays imposed by the Purchaser must be communicated in advance to the Contractor. Purchaser will pay T&M if Contractor arrives to perform scheduled maintenance and is prevented from performing their duties due to the Purchaser. Elevator Services performed outside normal working hours shall be billed at the Overtime Rate.

2.6. Maintenance Control Program (MCP)

Contractor shall provide [Maintenance Control Program \(MCP\)](#) that are standardized and contains at a minimum the details on the L&I MCP document below

- **Hydraulic:** [Maintenance Control Program Documentation & Records Hydraulic Elevators \(F621-123-000\) \(wa.gov\)](#)
- **Electric:** [Maintenance Control Program Documentation & Records Electric Elevators \(F621-122-000\) \(wa.gov\)](#)

Contactor shall provide and complete a Purchaser's Maintenance Control Plan (hereafter "MCP"), for the Equipment according to currently adopted codes. The MCP shall at a minimum include examinations, Full Service Maintenance, and tests of Equipment at scheduled intervals in order to ensure that the installation conforms to the requirements of ASME A17.1/CSA B44 Section 8.6 and according to currently adopted codes. The MCP shall also include procedures for tests, periodic checkups, preventative maintenance, replacements, adjustments, and repairs for all SIL rated E/E/PES electrical protective devices and circuits and identify where unique or product-specific procedures or methods are required, to examinations or test Equipment.

A. The MCP procedures and intervals may also be based on the Purchaser's requirements as well as:

- i. Equipment age, condition, and accumulated wear
- ii. Design and inherent quality of the Equipment
- iii. Usage
- iv. Environmental conditions

The Manufacturer's recommendations for any SIL rated devices or circuits:

- The instructions for locating the MCP shall be provided in or on the controller along with instructions on how to report any corrective action that might be necessary to Purchaser.
- MCP shall be located in the elevator machine rooms and shall be in full document compliance with ASME and according to currently adopted codes. MCP documents shall be filled out in full and completely maintained and updated by Contractor's Elevator Technicians.

2.7. Service Tickets

- A. After each Equipment service call and regularly scheduled Full Service Maintenance, a legible ticket will be completed indicating the date of Equipment services, location, description and condition of Equipment being Serviced, Equipment services performed, parts replaced, total hours on the job and the Elevator Technician performing the Equipment Service. In the case of an Equipment shutdown or repair, the Service ticket will describe the cause of the Equipment failure and the action taken to correct the failure. Upon Purchaser's request, Contractor shall provide a report of all Service tickets. Contractor shall send or email Purchaser copies of all tickets, callback logs, extra billing, test reports, and repairs for a specified time period. Contractor will, upon request, provide Purchaser with written recommendations to minimize callbacks based on the analysis of the callback trends.
- B. All Service tickets shall be left with or completed electronically and emailed to the Purchaser or available via online portal after all visits. Copies of Service tickets shall be included with Contractor invoices.

2.8. Callbacks

For all items noted in Section 2.2, Full Service Maintenance Coverage that requires maintenance or repairs outside of the Contractor's scheduled onsite full service maintenance visit, shall continue to be considered a full service maintenance item to be maintained or repaired at no additional expense to Purchaser.

2.9. Contractor and Purchaser Meetings

When requested by the Purchaser, monthly or quarterly meetings as scheduled by the Purchaser, held at the Purchaser's location or held virtual or by telephone with the Contractor's primary site Elevator Technician and/or Contractor's primary invoicing point of contact and Contractors' escalation point of contacts for the following purposes.

- Review job progress, past performance, outstanding deficiencies, outstanding T&M work, quality of work, and approval and delivery of materials.
- Identify and resolve problems that impede planned progress.
- Coordinate the efforts of all concerned so that progresses on schedule to on time completion.
- Maintain a sound working relationship between the Contractor and the Purchaser, and a mutual understanding of the requirements.
- Resolve any invoicing and payment issues, or other pending concern or issue.

2.10. Full Service Maintenance Exclusions

The only circumstance where the Contractor shall not be obligated under this agreement to repair damage at no additional cost is where such damage was caused by fire or force majeure, except that which is caused by the Contractor or by the willful destruction of the equipment by the Purchaser, clients, employees, or visitors. With respect to repair for which the Contractor is not obligated under this section, the Purchaser will pay at Contractor's time and material rates for any Purchaser approved Time and Material (T&M) Proposals. Repairs **not** included in the Full Service Maintenance may be corrected by Contractor with prior written estimate from Contractor and with Purchaser issued Purchaser Order. All material required for the below-mentioned repairs will be paid on either a time and material (T&M) or not-to exceed basis as defined in the Contractor's proposal. The Contractor will be paid only for repairs that Purchaser issued a Purchase Order and actually required.

Examples of these are the following: Refinishing, repairing or replacing car enclosures, hoistway, enclosure, hoistway door panels, frames, and sills, and all power supply panels and feeders. Cost of repairs, replacements, or removal necessitated by any cause, other than ordinary wear, which is occasioned by negligence shall be determined by the Purchaser. Any repairs that are not the Contractor's responsibility in accordance with the Full Service Maintenance Service or Equipment Repair Services detailed below.

- Door knocked off the tracks/broken gibs
- Elevator left on independent, fire, attendant or emergency service
- Car door detector out of adjustment from doors being hit
- Elevator turned off inside the car and the door pulled shut, unless there is an actual elevator problem that is included in their Contract
- Car enclosure, including removable panels, door panels, car doors, suspended ceilings, handrails, car finish and flooring coverings, hoistway enclosures, hoistway entrance frames, sills, signal fixture faceplates, fire recall initiation devices, cleaning of car interior or underground hydraulic piping and the underground part of the hydraulic cylinder
- Any premaintenance repairs
- Elevator Services responses due to power outages, seismic, activity and/or nudging
- Force Majeure (elaborate; ie power bumps)

- Vandalism
- Miss-use

3. Equipment Testing and Audit Services

Contractor shall conduct any tests required by the State of Washington Elevator Inspector, by ASME safety code(s) for Equipment, and according to currently adopted codes and/or by any other governing or code agency. Contractor may also be requested to audit the Equipment and provide recommendations with no additional charges to the Purchaser under the Full Service Maintenance plan.

- A. Contractor shall conduct the following tests, and any other tests required by the State of Washington, Federal or any other Governing or Code Agency.
- B. Tests include (however not limited to) and shall be performed at no additional costs as all tests shall be included in the Full Service Maintenance plan.
 - i. Category 1 (also known as Cat 1) Testing performed every year;
 - ii. Category 2 (also known as Cat 2) Testing performed every two (2) years;
 - iii. Category 5 (also known as Cat 5) Testing performed every five (5) years
- C. All testing will be completed BEFORE the date that it is due. Equipment services shall include, but not be limited to:
 - i. Contractor shall provide examinations and testing of the Firefighter's Service-Phase I and Phase II and standby power operation, if installed as required by Authority Having Jurisdiction (AHJ). Unless approved by the Purchaser, any additional cost to complete the above examinations and testing shall be the responsibility of Contractor. Contractor shall maintain an up-to-date log of Firefighter's Service testing in the machine rooms and submit the results to Purchaser's authorized representative. Firefighter's Service testing shall be entered and recorded on a form supplied by Contractor and/or as required by the State of Washington, or both.
 - ii. Provide all testing as required by the State of Washington Elevator Inspector and required by the ASME A17.1 Safety Code and according to currently adopted codes for Equipment during normal elevator industry business hours, unless requested by the Purchaser. Elevator Services performed outside normal working hours shall be billed at the Overtime rates.
 - iii. Conducting tests as required by ASME A17.1, for Phase I and Phase II key switch testing and/or installations on Firefighters' Emergency Service Control System.
- D. Contractor shall check the dispatching systems and make necessary tests and adjustments to ensure that all circuits and time settings are properly adjusted, and all systems are performing as designed and installed. Contractor shall submit a written report of these results to Purchaser.
- E. Purchaser shall submit to Contractor all specifications which the Equipment is required to meet prior to Contractor performing the testing, including previous testing results if such tests have been performed in the past.
- F. Written test reports shall be submitted to Purchaser within 10 calendar days of actual testing.

- G. Purchaser shall receive fourteen (14) calendar days prior written notification of all tests so that an authorized representative of Purchaser may witness said tests. Safety precautions are understood to be of highest priority. Care will be taken to safeguard all surrounding building property during the testing. If during the testing, the actual testing fails the prescribed testing requirements in the current codes and/or ASME A17.1 and re-testing is required, Contractor shall pay all costs of Purchaser's representative to witness re-testing only if the failure of the test was due to the Contractor's acts, actions, omissions, negligence, or errors informing Purchaser of re-testing date. (Some tests require coordinating other Contractors that the Purchaser's pay for their time. For example, a shunt trip testing is one that requires electricians, elevator vendor and the fire system Contractors).
- H. Contractor shall audit the equipment as requested by Purchaser. The audit report will include recommendations for improvements and estimates of cost for labor and materials to complete the suggested improvements. Purchaser's Equipment can be audited for:
- i. **Code Compliance.** Evaluate current Code compliance of all Equipment. Monitor industry and Code developments and provide Purchaser with warning of anticipated Code changes to take effect during the fiscal year following the audit report. Recommend corrections, which should be made in the fiscal year following the audit report.
 - ii. **Equipment Performance.** Audit performance of all Equipment against its original parameters or specifications. Recommend corrections, which should be made in the fiscal year following the audit report.
 - iii. **Equipment Aesthetics.** Audit the physical condition and appearance of the Equipment visible to users and recommend upgrades, which should be considered to keep the Equipment appealing to users and current with building standards for colors and decoration schemes.
- I. Should a component fail during testing, Contractor shall be responsible to replace or repair the items necessary to return the Equipment to normal operation with no additional charges to the Purchaser under the Full Service Maintenance plan unless component is included in the exceptions and in this case when re-testing is required, re-testing will fall under the T&M charges.
- J. Contractor shall assign an Elevator Technician to assist with heat and/or smoke detector testing in the hoistway including however not limited to fire system testing, and shunt trip / emergency generator tests at no additional cost to Purchaser.

Purchaser reserves the right to make examinations and tests at their expense, when deemed necessary to ascertain that the Equipment Service requirements of the Purchaser's agreement are being fulfilled. If the examination identifies that Contractor is not compliant with the applicable Equipment Service requirements of this Contract, Purchaser will promptly notify Contractor in writing of the deficiencies identified. Contractor shall reimburse Purchaser for the cost of conducting the inspection and resolve all deficiencies at Contractor's total expense within fifteen (15) calendar days of written notification. Fees for re-inspection due to Contractor's failure to eliminate deficiencies in Equipment Services and Purchaser's Purchase Order shall be reimbursed by Contractor.

4. Equipment Repair Services

Except as specified in Section 2.10, Contractor shall make (or cause to be made) all repairs made necessary for any reason during the term of the contract. Prior to any repairs being made by the Contractor not covered under the Contract, Contractor shall submit a written proposal to the Purchaser and obtain a

Purchaser Order to proceed. Contractor shall supply materials and supplies at the Contractor's cost plus for replacement/refurbished parts from **Exhibit B – Prices for Goods/Services**. Contractor shall bill labor at the regular hourly rate from **Exhibit B – Prices for Goods/Services**. On completion of all approved and authorized repair work, Contractor shall submit to the Purchaser for payment an invoice detailing the nature of the work performed and related charges. The repair billing rate shall be set forth in **Exhibit B – Prices for Goods/Services** sheet.

- A. In the event the Equipment fails to operate properly, Purchaser will notify Contractor by telephone and request immediate repair. Contractor shall provide twenty-four (24) hours a day, seven (7) days a week telephone service, at no additional cost to the Purchaser. Contractor shall provide a list of cellular phone numbers for emergency contact in the event the answering service is ineffective. Contractor's management contract list shall be submitted to Purchaser within five (5) business days of Purchaser's Purchase Order start date.
- B. In the event the Equipment fails to operate properly, Purchaser will notify Contractor by telephone and request immediate repair. Contractor shall provide twenty-four (24) hours a day, seven (7) days a week telephone service, at no additional cost to the Purchaser. Contractor shall provide a list of cellular phone numbers for emergency contact in the event the answering service is ineffective. Contractor's management contract list shall be submitted to Purchaser within five (5) business days of Purchaser's Purchase Order start date.
- C. If any Equipment is shut down for more than ten (10) continuous business days after notification of a failure (except for pre-scheduled or major Equipment repairs) the monthly Full Service Maintenance unit billing, if applicable, shall be suspended until the individual Equipment is restored to service.
- D. If a safety or potential safety problem exists, Contractor shall immediately correct the problem. Contractor shall notify Purchaser verbally before the Contractor leaves Purchaser's facility, followed up with Contractor's written report to Purchaser stating the condition of the unit. Written notification of corrective measures undertaken shall be provided to Purchaser, in writing, as soon as possible, however must be within five (5) business day.
- E. In case of an Equipment accident, Purchaser shall immediately notify Contractor. The unit will not be placed in operation until an investigation is performed by Purchaser's Representative and/or the Washington Labor and Industries Equipment Inspector if the following conditions occur:
 - i. A person has been injured and requires first aid treatment.
 - ii. The unit is not safe to place in normal operating service because of obvious mechanical and/or electrical condition.
 - iii. There is a concern by the Contractor or Purchaser as to the possible continued malfunction if placed in service.

- F. Labor and Industries (L&I) Inspection Finding Report and Correction Notice ("L&I Report"). Purchaser shall forward a copy of the L&I Report notifying the Contractor of the L&I inspection findings report and list of corrections. Contractor shall provide Purchaser that date the Elevator Technician is scheduled to make the required L&I correction(s) within two (2) business days of notice from Purchaser. Contractor shall schedule Elevator Technician(s) to make the required corrections. The Contractor is responsible for addressing all Contractor applicable repairs to comply with L&I inspection report.
- G. Labor and Industries (L&I) Inspection Finding Report and Correction Notice ("L&I Report"). Purchaser shall forward a copy of the L&I Report notifying the Contractor of the L&I inspection findings report and list of corrections. Contractor shall provide Purchaser that date the Elevator Technician is scheduled to make the required L&I correction(s) within two (2) business days of notice from Purchaser. Contractor shall schedule Elevator Technician(s) to make the required corrections. The Contractor is responsible for addressing all Contractor applicable repairs to comply with L&I inspection report.
 - i. If the Contractor does not complete the repairs within the timeframe provided by L&I, Contractor shall keep the Purchaser updated on the status of the repair at least every five (5) business days and provide a credit to Purchaser the amount of the L&I fine paid by Purchaser due to the Contractor's late correction.
 - ii. If Purchaser does not promptly notify Contractor of L&I Inspection Finding Report within two (2) business days of receipt of L&I inspection report, Contractor will not be responsible to reimburse any fines.
- H. When corrective action is found to be the responsibility of the Contractor, Contractor shall proceed immediately to make replacements, repairs, and corrections. If Contractor fails to perform the Equipment Services required by the terms of the Purchaser's agreement, Purchaser may, after five (5) calendar days written notice to Contractor, perform or cause to be performed all or part of the Equipment services required thereunder. Contractor shall reimburse or provide a credit to Purchaser for any expense incurred therefore or Purchaser, at its election, may deduct the amount from any sum owed or to be owed Contractor. When such corrective action is determined not to be the Contractor's responsibility, a written report, including a cost estimate to remedy the deficiency, shall be provided to Purchaser by within twenty-four (24) hours not to exceed seventy-two (72) hours for further action by Purchaser. If the Purchaser elects to have the Contractor perform these services, Purchaser shall issue a separate Purchase Order beforehand. If a safety problem is noted, which is not within the Contractor's area of responsibility or expertise, written notice of such problem shall immediately be furnished to Purchaser by the Contractor.

5. Elevator Emergency Services

- A. Emergency Service Request is defined as an entrapment or requests for immediate service in situations that are a threat to life or limb and have potential for injury, entrapment, or serious damage to property or Equipment. Purchaser will notify Contractor of a situation, and by mutual agreement Contractor will immediately dispatch an Elevator Technician Mechanic.
- B. In the event a passenger is trapped in stalled Equipment, the procedures specified in the ASME A17.4, or 'Guide for Emergency Evacuation of Passengers from Elevators' or according to currently adopted codes shall be followed.

- C. Contractor shall within sixty (60) minutes (or otherwise specified timeframe as negotiated upon execution of the maintenance agreement) after receipt of Purchaser's request for any Emergency Service Request of the Equipment have a discussion with the Purchaser. After discussion with the Contractor, the Purchaser may elect to have the Contractor report for the Emergency Service Request to the site the next business day.
- D. The Contractor's time to appear On-site, investigate and troubleshoot the reason for the emergency service is included in the Contractor's Full Service Maintenance Rate. The Contractor may only invoice for Time and Material (T&M) (Section 7), to make repairs resulting from Callback service under the following condition:
 - i. The Equipment is covered under a Full-Service Maintenance plan and the work performed is not the responsibility of the Contractor (e.g., Repairs for vandalism, fire, force majeure, or by the willful destruction of the equipment by the Purchaser, clients, employees, or visitors.
- E. If any Equipment experiences a repeat call within a seven (7) calendar day period, the Purchaser may request another Elevator Technician to assist the regular Elevator Technician at no additional cost to the Purchaser. Should the same call for service reoccur within a seven (7)-day period after the arrival of an additional Elevator Technician, the Contractor shall escalate the matter and dispatch an Elevator Technician In Charge along with any diagnostic equipment necessary to determine the root cause of the problem at no additional cost to the Purchaser.

6. Equipment Standby Services

The Contractor, when requested and authorized by the Purchaser, shall provide standby Equipment services. When an Elevator Technician is required to open, standby, and close the Equipment for work not required to be done by an Elevator Technician, Contractor shall provide Equipment Standby Services when requested by Purchaser. Examples of Equipment standby services may include but are not limited to: Equipment with a glass enclosure/hoistway and the interior of it needs to be cleaned, winterizes Equipment, or when a Purchaser requests their contracted Contractor to provide an Elevator Technician on standby, etc.

- A. Purchaser requesting Equipment Standby Services shall provide Contractor with the following information:
 - i. Specific scope of work including estimated date and estimated hours.
- B. Contractor shall provide an estimate/ quote based on Purchaser's information:
 - i. Amount of hours by each type of Elevator Technician (Mechanic In Charge vs. Mechanic vs. Apprentice)
 - ii. Purchaser will send Contractor a Purchase Order with a not to exceed amount.

7. Time & Material ("T&M")

A Time and Materials (T&M) proposal to Repair/replace materials that are not covered by the Full-Service Preventative Maintenance plan. The Contractor shall within five (5) business days, submit a T&M proposal along with an itemized quote for material and labor to the Purchaser for any additional work not covered under the terms of this Contract. The Purchaser will decide how to proceed with all repairs. The Purchaser may proceed with the repairs using Contractor, Purchaser staff, or other contracted labor. No work should commence without the prior written approval of the Purchaser. Purchaser shall review and approval (signature of the Purchaser designee) are required for each item replaced/repaired/supplied under the T&M allowance.

The Contractor will submit a "Not to Exceed" cost for Repair, including labor and material. Any incurred cost over the approved "Not to Exceed" amount will not be paid. The Contractor may contact the Purchaser to discuss the Repair before submitting the T&M proposal; however, the Contractor shall provide written justification if a "Not to Exceed" quote is not provided within five (5) business days. If the Purchaser approves the T&M proposal, the Contractor will be given written notification of the approved T&M proposal by the Purchaser, to proceed with the work.

If the repair is of an urgent nature (if the failure of the equipment will impact safety or comfort or will consequently cause extensive or expensive damage or loss to other equipment and/or furnishings), the Contractor shall notify the Purchaser's representative immediately. If necessary, the Purchaser will direct the Contractor to perform tasks on an urgent basis. Subsequent to the urgent service, Contractor shall submit, on the completed T&M, a description of the urgent work performed with actual hours and material charged to the urgent work. All backup documentation described in Section 10, Invoicing and Payment, is required to be submitted with the urgent T&M for payment. The invoice for T&M work shall include documentation provided in Section 10.1 (g), Contractor Invoice:

- At the Purchaser's request, the Contractor shall provide training for Equipment operation as required under the T&M proposal. This training may include emergency lowering of the elevators, routine requirements, starting and operating procedures, response to alarms, and problem diagnostics (controls/mechanical). Training is to be provided on a T&M basis either on or off-site when Purchaser issues a Purchaser Order. The training shall be invoiced at the Elevator Technician straight time hourly labor rate.
- At the Purchaser's request, the Contractor shall submit a T&M proposal to assist in any Equipment related building/system shutdowns or maintenance, not covered elsewhere.

7.1. Time and Material ("T&M") for Fire Alarm and/or Security System Installation

The following tasks are to be performed after Purchaser's written approval of a T&M proposal in the event of fire alarm and/or security system installation:

As required, and directed by the Purchaser, the Contractor shall coordinate with the Purchaser's fire alarm and/or security system vendor during the installation of a new fire alarm and/or security systems at the Purchaser's premises. The Contractor shall perform the following under the T&M provision:

The following tasks are required to be performed at the Equipment machine rooms, elevator pits, elevator shafts, and elevator cabs:

- Contractor shall provide access to pit, and top of shaft, for demo and/or installation.
- Contractor shall provide Elevator Technicians to swing over primary recall to new system control relay.
- Contractor shall provide Elevator Technicians to swing over alternate recall to new system control relay.
- Contractor shall provide Elevator Technicians to swing over shunt relay to new system control relay system control relay.
- Contractor shall provide Elevator Technicians to swing over shunt status to new system control relay.
- Contractor shall provide Elevator Technicians to swing over alleviator room smoke relay to new system control relay.

Note: The existing fire alarm system may not currently provide a connection to the elevator controller for elevator machine room smoke. In addition, the existing elevator shunt controller may not provide a status to the existing system for shunt status.

Contractor shall provide Elevator Technician(s) to swing over existing speaker in cab, and at elevator controller, in order to connect to new system. Note: Speaker may not currently exist inside elevator cars. In that case, a new dedicated feed will need to be provided by the Elevator Contractor inside existing travel cable.

8. Equipment Inventory, Replacement Parts, Repair Parts, and Obsolete Parts

All Equipment Repairs Services shall require a written estimate from Contractor approved by Purchaser prior to completing repairs.

8.1. Inventory

Contractor shall mark and identify all lubricating oils and cleaning solvents that are stored onsite. All storage cans shall be Code approved. All unmarked cans shall be removed from the Purchaser's premises. Machine rooms shall not be used for storage of materials or items that do not pertain to the Full Service Maintenance of the Purchaser's Equipment.

8.2. Replacement Parts

The Contractor shall provide all replacement parts and equipment. A replacement part is an individual piece of the equipment; equipment is made up of several parts. All replacement parts shall be new as specified by the original manufacturer or new after-market parts that are accepted by the Elevator industry as equal or better. In any instance where replacement parts specified by the original equipment manufacturer or after-market parts of equal or better quality are no longer available, an "equal" item may be acceptable, provided advance written approval of the item is obtained from the Authorized User. If no such "equal" item can be found, the Contractor shall refer to Section 8.3, Obsolete Parts. Any parts, materials, components, and equipment provided by the Contractor during the final year Purchaser's contract period shall be fully warranted for a one-year period from the date of installation.

- A. In performing the Equipment Services, Contractor agrees to provide only manufacturer approved parts used by the manufacturers of the Equipment for replacement or repair, and to use only those lubricants obtained from and/or recommended by the manufacturer of the Equipment. If Contractor wishes to provide parts or lubricants other than recommended by the Equipment manufacturer, Contractor shall, in writing, state the type proposed and the specifications to the Purchaser for review and written approval. These replacement parts shall not be considered an upgrade of Equipment and shall be provided by Contractor at no additional cost to the Purchaser. NOTE: This is considered standard maintenance.
- B. Contractor shall use commercially reasonable efforts to procure replacements parts in the most expeditious manner available.
- C. Parts requiring repair shall be rebuilt to "as new" condition.

- D. If the replacement part is not available, see Obsolete Parts Section 8.3.
- E. Contractor shall provide a written repair quote or estimate for Purchaser's written approval and authorization prior to repair work. Repair quotes/estimates shall have the following information.
 - i. Specific scope of work
 - ii. Amount of hours by each type of Elevator Technician (Mechanic In Charge vs. Mechanic)
 - iii. Labor rate to include prevailing wage plus % mark up rate
 - iv. Parts / Materials descriptions
 - v. Parts / Materials cost plus % markup rate
 - vi. Estimate/Quote shall not require a deposit or advanced payment

8.3. Obsolete Parts

Obsolete Parts shall be defined as the inability to purchase, and/or otherwise repair, parts of the system no longer produced by the original equipment manufacturer or a third-party after-market supplier. Claims of component obsolescence shall not be allowed when replacement parts, components, or assemblies of equivalent design and functionality are available.

In the event of component obsolescence, as defined in above paragraph, the condition shall be reported to the Purchaser with the following information:

- A. Alternative equipment, or component parts renewal options, for the restoration of the system due to obsolescence:
- B. Procurement and installation time for restoration of system service:
- C. Any safety code requirements that will be triggered by the alternative equipment, or component renewal (i.e., including filing, tests, and approvals):

Contractor(s) shall provide written documentation if the replacement part is no longer available and determined to be obsolete, and that the Contractor has exhausted all research in obtaining such replacement parts to include manufacturer statement or information on obsolete parts. Such research would be the review of all firms as listed in the latest edition of Elevator World - "The Source". All local supply firms, including other Equipment contractor's must also be researched for availability of replacement parts. Contractor should also research options of rebuilding, refurbished and/or aftermarket parts as well as checking with other Companies before seeking and sourcing brand new and/or before an upgrade. If the replacement part is available and approved by the Purchaser in writing, Contractor shall invoice the Purchaser the cost plus mark up for such replacement part. Contractor shall provide all documentation of the replacement costs. If Contractor installs a replacement part different than the original Equipment manufacturer, the new replacement, Contractor shall provide, in writing, the manufacturer, type, and model of the proposed replacement part.

Any necessary Repairs for obsolescence work shall be submitted under Section 7, Time and Material (T&M). The Contractor shall submit a T&M proposal to the Purchaser for approval prior to performing any T&M repairs. The T&M proposal must include a detailed explanation of the obsolescent part, the alternative equipment or component, and any necessary retrofitting required. The approval and payment of the T&M proposal repair shall be based on the following:

- If an alternate replacement part is available Contractor shall provide all documentation of the replacement costs to the Purchaser. If Contractor installs a replacement part different than the original Equipment manufacturer, the new replacement shall not be of the "proprietary" type and

Contractor shall provide, in writing, the manufacturer, type, and model of the proposed replacement part.

- The cost of the alternative equipment, or component parts, and any miscellaneous material necessary for repairs or retrofitting, to replace an obsolete part, shall be listed in a T&M proposal and will be listed in detail as a material cost subject to the material cost markup for Purchaser approval.
- Any additional labor hours and costs necessary for any modifications, retrofits, and other additional work deemed necessary to install the replacement of obsolete parts, or renewal components, that are above and beyond the time that would be normally necessary for installing a standard manufacturer's replacement part or component, to complete the repairs.
- For Equipment covered by a Full-Service Maintenance, Contractor shall be responsible for the labor hours that would be normally necessary if a manufacturer's replacement component was available and installed.

8.4. Microprocessors

- A. Contractor shall maintain, in stock, available for immediate usage, an inventory of replacement parts for any microprocessor/solid state equipment used for each system. This includes all solid-state boards located in the machine room, fixture stations, car tops or any other location. Circuit board may be very hard to find and in a timely manner do to age of elevator.
- B. Contractor's Elevator Technician(s) shall carry diagnostic equipment designed to analyze programming and microprocessor functions and malfunctions on all non-proprietary equipment.
- C. Purchaser shall pay for all costs if the original manufacturer must be brought onsite to re-program the system or be required to place the equipment in service.