

**Scope of Work
For
Elevator Preventative Maintenance and Repair
Washoe County Facilities Management-Community Services Department
3101 Longley Lane, Reno, Nevada 89502**

1. SCOPE OF WORK AND INTENT

These services shall be provided between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday for routine scheduled maintenance and inspection, and twenty-four (24) hours, seven (7) days per week emergency service if required by the County.

- A. The entire elevator system shall be maintained as hereinafter described, in accordance with the following detailed terms: Trained employees of the Contractor will use all reasonable care to keep the elevators in proper adjustment and in safe operating condition, in accordance with all applicable Federal, State, and local laws, ordinances and regulations.
- B. This Scope of Work establishes the minimum requirements for a full maintenance program, which shall be contracted for by the Owner with an approved Contractor. The full maintenance shall cover the elevator equipment as set forth in this Scope of Work. Reference to the word, Unit, in this Contract shall mean elevator, dumbwaiter or wheel chair lift.
- C. All elevators under this Contract shall be maintained in first class operating condition and must comply with all requirements of the latest revised edition (as of the date bid award) of the American Society of Mechanical Engineers (ASME) code for Elevators, Dumbwaiters, Escalators and Moving Walks (ASME A17.1-2013), ASME Inspection Manual (ASME A17.2 - 2014) and all other applicable laws including but not limited to State of Nevada regulations, ordinances, codes, etc. Should the State Elevator Inspector call for a re-inspection as a result of Contractor not performing to this contract, Contractor shall pay for the re-inspections costs. If the re-inspection is due to a building deficiency, then the Owner shall pay for the re-inspection.
- D. Repairs and replacement of major equipment and components not covered in the preventative Scope of Work are specifically excluded from the fixed price, e.g. motors and cables on traction elevators, hydraulic cylinders on hydraulic elevators, etc. and may be exempt from the requirements of the preventative maintenance stipulations as stated in this document. Washoe County on the replacement of major equipment or components has the option to utilize the awarded supplier or not.

2. PERSONNEL, SUPPLIES AND EQUIPMENT

The Contractor shall provide all equipment, labor, lubricants and parts for the satisfactory performance of the preventative maintenance and repair services as described herein. All repair

parts used shall be of manufacturer's origin and shall be covered by a warranty, unless specifically approved by the entities designated representative.

- A. Contractor shall maintain locally to the service area, a parts inventory sufficient to accommodate normal replacement requirements of all equipment subject to this Scope of Work. If, in the opinion of the County's Facility Operations Superintendent, the lack of available parts causes extended down time (24 hours or more) and parts are available from other local sources, the County may at its option, instruct the Contractor to purchase the necessary parts locally, at no additional cost to the County.
- B. If in the opinion of the County's Facility Operations Superintendent an unreasonable amount of time is consumed in restoring normal service because of parts procurement, payment for the month in which service is delayed may be reduced or cancelled.
- C. County shall reserve the right to require that the Contractor submit the names of all employees engaged in work or having access to the buildings in an inspecting or supervisory capacity and cause to be completed such questionnaires, fingerprint charts and personal history statements as may be required.
- D. County shall further reserve the right to have and exercise full and complete control over granting, denying, withholding or terminating clearances for the Contractor's employees. Employees whom the County deem careless, discourteous, or otherwise objectionable or who do not meet standards required for security or any other reason shall be prohibited from entering the building to perform work.

3. TROUBLE CALL ANSWERING SERVICE

The contractor shall provide 24-7 answering service at no additional cost. The contractor will utilize an answering service able to immediately dispatch local services.

- A. The Contractor shall include a listing of all trouble calls received from the affected agency, and responded to by the Contractor, on the monthly reports to be provided to the Washoe County and make such records available via an online portal.

4. NOTICES

All change notices under this Scope of Work, including accompanying Appendix, shall be in writing. Notice to Contractor shall be addressed to:

Dave Johnson, Sales Operations Manager
Kone Elevator
1325 Airmotive Way
Reno NV 89502

Notice to County shall be addressed to:

Scope of Work – Exhibit G
Elevator Preventative Maintenance and Repair

Pamela Mann, Purchasing and Contracts Manager
Washoe County Purchasing
P.O. Box 11130
Reno, NV 89520

5. **WORK HOURS**

- A. All preventative maintenance work shall be performed Monday through Friday between the hours of 7:00am and 5:00pm. Any regular time or overtime work not otherwise included in the contract shall be billed to the Owner after proper approval as an extra charge at the Contractor's billing rate as stated in Attachment A.
- B. The Contractor shall provide scheduled routine maintenance during regular hours for all elevators.

6. **INSPECTION OF EQUIPMENT AND CONDITIONS AT JOB SITE**

- A. Prior to executing the Scope of Work, it shall be the responsibility of the Contractor to visit the job site and inspect each unit to establish to its satisfaction the condition of the elevator equipment to be maintained and any other conditions affecting the work to be performed. The elevators are offered in an “as-is condition”. No claim by the Contractor for compensation to remedy, replace or repair such previous existing conditions shall be allowed.

7. **WIRING DIAGRAMS**

- A. Contractor shall provide to the Owner a set of reproducible wiring diagrams covering all changes, modifications, etc., which take place during the contract term. These diagrams are to be furnished to the Owner immediately following modifications.

8. **CHECKING IN AND OUT AND COMMUNICATIONS**

- A. The Contractor's personnel shall report to the Owner's on site office prior to commencing work and check out after completing the work. This requirement applies to regular maintenance, repairs and callbacks. At time of check-in, the Owner shall provide Contractor's personnel with a list of any reported problems requiring the Contractor's attention. The Contractor shall sign in and out of logbooks in each machine room. The Contractor shall submit samples of the logbooks to the Owner for approval. In the event of an emergency such as an entrapment the Contractor shall go directly to the elevator

9. **TIME SHEETS**

- A. Each time a unit is serviced, inspected, repaired, etc., whether emergency or regular, a report on an approved form shall be submitted to Owner's representative. The time sheet or ticket shall include the date the work was performed, a description of the work performed, the unit number the work was performed on, along with the Owner name and number. Owner may at any time request that a copy of the work be provided to Owner prior to the monthly report. Acceptance of work is subject to approval by the assigned Owner Representative. Signing of daily work reports is not considered approval. A time ticket is needed for every service at the time service is completed and left at the building and all service call information must additionally be made available through the online portal.

10. SCOPE OF MAINTENANCE

- A. This specification provides for complete maintenance coverage including examinations, cleaning, painting, lubrication, adjusting, parts replacement, repairs, and testing on all parts of the elevator and miscellaneous equipment including, but not limited to: machines, bearings, armatures, field coils, commutators, brushes, gears, hoist ropes, compensation ropes or chains, governor ropes, thrust bearings, drive sheaves, sheave bearings, brake pulleys, brakes, brake coils, linings, motors, tachs, controllers, selectors, relays, contacts, hydraulic pump units, valves, pumps, rupture valves, dry and submersible motors, hydraulic tanks, hydraulic pistons, above ground jacks, above ground oil lines, mufflers, jack packing, synchronizing cables and related equipment, hydraulic safety brakes, solid state devices, computers, monitors, transformers, resistors, card reader interface panels, mainline disconnects including breakers and fuses, and all related control equipment.
- B. It also includes safety governors, governor sheaves, car safeties, deflector and secondary sheaves, bearings, car and counterweight buffers, car and counterweight guide rails, limit switches, roller guides, door operators, car and hall signal fixtures and all components, all car and hatch door equipment, contacts, interlocks, auxiliary door closing devices, infrared safety edges, fans, blowers, emergency lights, telephones, car frames, platforms, and all other elevator related devices. Contractor will change cab interior lights with bulbs furnished by the Owner during preventative service visits.
- C. A complete permanent record of inspections, maintenance, lubrication and call-back service for each elevator under service will be provided to Owner on an annual basis, as well as being kept in the appropriate elevator machine room(s). These records are to be available to Building Management at all times. The records shall indicate the reason the mechanic was in the building, arrival and departure time, the work performed, etc.; and, these records will be property of the Owner. The Contractor shall be responsible to relamp all lighting fixtures in the pit, machine room, and hoistway (excluding cab lighting) as required.

11. SCHEDULED MAINTENANCE

- A.** All preventive maintenance performed by the Contractor shall be scheduled unit by unit, prior to commencement of the work and subject to final approval of the Owner.
- B.** The preventive maintenance schedule, as prepared by the Owner/Contractor, shall show Owner name, unit serial numbers, examination frequency, examination hours and be keyed to a preventive maintenance schedule prepared for the specific equipment covered by this specification.
 - 1.** Examine: The Contractor shall examine the equipment on a regular interval as set forth in Section of this specification.
 - a)** When, as a result of an examination, corrective action is found to be the responsibility of the Contractor, the Contractor shall proceed immediately to make (or cause to be made) replacements, repairs and corrections. When such work is determined not to be the Contractor's responsibility, a written report, signed by the Contractor, shall be delivered to the Owner for further action.
 - b)** Items of an emergency nature shall be communicated to the Owner immediately and followed up in written form.
 - c)** Examinations of the equipment shall follow the manufactures standard service procedures and the minimum procedures as set forth in ASME A17.1 Part 8, 2013 or later editions.
 - 2.** Clean: The Contractor shall clean all of the elevator and escalator equipment as well as car and hoistway door sills and grooves, equipment rooms, pits, and hoistway rail equipment. Cleaning of the equipment shall occur at regular intervals sufficient in frequency to maintain a professional appearance and preserve the life of the equipment. Minimum interval shall be as set forth in the Elevator Maintenance Frequency and Task Section of this specification.
 - 3.** Paint: The Contractor shall paint the equipment, including the machine room, at intervals frequent enough to maintain a professional appearance, prevent rusting, and preserve the equipment. All paint shall be suitable for the purpose intended and be of a high quality. Application of the paint shall, in all circumstances, comply with applicable local codes and/or current ASME codes.
 - 4.** Lubricate: The Contractor shall lubricate all moving parts of the equipment. Lubricants shall be applied at intervals recommended by the equipment manufacturer or as dictated through use of the equipment. All

lubricants shall be suitable for the purpose intended and shall meet or exceed the minimum requirements specified by the manufacturer of the equipment to which the lubricant is applied.

5. Adjust: The Contractor shall adjust the equipment. Adjustments shall be made as necessary and when the operation of the equipment varies from its normal or originally designed performance standards, as a result of normal wear and use.
 - a) Adjustments shall be made by qualified individuals properly equipped with tools and instruments, employed by the Contractor. Adjustments shall be made at regular intervals frequent enough to maintain the elevator in optimum operating condition.
 - b) Parts or assemblies which have worn (or otherwise deteriorated) beyond "normal" adjustment limits shall be replaced as provided for under the "Replace" and/or "Repair" section of this specification.
6. Replace: The Contractor shall, when required, "replace" items covered under the contract during the course of scheduled preventive maintenance when in the reasonable opinion of Owner such replacement will prevent an unscheduled shutdown and/or ensure the continued normal operation of the unit or which otherwise will extend the useful life of the equipment. All replacements shall be made using original manufacturer's parts or Owner approved equal.
7. Replacement Parts: To assure the maximum use of equipment and minimum shutdown time for emergency repairs, the Contractor shall be required to have and maintain in his place of business or shop a supply of spare parts sufficient for normal maintenance and repair of the equipment. These spare parts and lubricants shall be equal to or better than original manufacturer's parts.
 - a) Motors, armatures, field coils, and any other component part must be delivered within five (5) working days.
 - b) Refurbished parts or parts that are equal to or better than genuine manufacturer's parts are acceptable and will be permitted, without prior approval.
 - c) Contractor to state, before the signing of contract, any parts claimed to be obsolete. If no parts are listed as obsolete, the Contractor will be required to replace all parts.
8. Repairs:

- a)** Repairs which are the responsibility of the Contractor:
 - (1)** Repairs shall be made by the Contractor to the equipment components covered by the Scope of Work. The Contractor shall make (or cause to be made) all repairs made necessary due to normal wear and use of the elevator system. The Contractor shall be responsible for all cost for labor, materials, expenses, and supplies that occur as a result of the stated repair.
 - b)** Repairs, which are the responsibility of the Owner:
 - (1)** Repairs shall be made by the Contractor, when authorized by the Owner where such repairs are not included in the contract. The Contractor shall make (or cause to be made) all repairs made necessary for any reason during the term of the contract. The Contractor shall supply all labor, materials, and supplies at the Contractor's billing rates as stated in this Scope of Work. On completion of all repair work, the Contractor shall submit to the Owner for payment an invoice detailing the nature of the work performed and related charges.
 - (2)** Prior to any repairs being made by the Contractor, the Contractor shall submit a written cost estimate to the Owner to obtain formal approval to proceed.
- 9.** Perform Periodic Tests: The Contractor shall, during regular business hours, perform periodic Safety Tests of the components, including monthly testing of Emergency Fire Service, telephone communications, emergency car light and alarm bell. The periodic tests shall be conducted at the frequency stated in the ASME A17.2 code and/or State Elevator unit and follow the procedures set forth in said code. Test results shall be recorded on forms supplied by or acceptable to the Owner and the State Elevator unit. Certified copies of the completed test forms shall be submitted to the Owner.
- a)** Periodic inspections as required by city, county, state, federal government and/or insurance agencies or representatives are included in this specification. One (1) and five (5) year tests, included. All tests are to be completed within 30 days of expiration date.
 - b)** The emergency telephone and their operation shall be covered by this Scope of Work.

- c) The Contractor shall submit a request to the following address thirty (30) days prior to the expiration date of the elevator/related equipment operation permit and request the annual inspections:

**State of Nevada, Department of Business and Industry,
Division of Industrial Relations,
Occupational Safety and Health Administration Mechanical Unit
4600 Kietzke Lane, Suit F-151
Reno, NV 89502
Phone (775) 824-4650
Fax (775) 688-1664**

10. Callback Service: For the purpose of this specification, a "callback" is a request from the Owner to the Contractor, requesting the Contractor to go to a specific unit to correct any problem and/or condition, which in the Owner's opinion needs attention before the Contractor's next scheduled preventive maintenance visit.

- a) Additionally, a "callback" is work, which can ordinarily be performed by one person working alone at the job site for a period of time not exceeding four hours.
- b) Work required in excess of the basic four hours and/or which requires a second person shall be considered "Repair" work and shall be governed by the "Repair" provisions and specifications set forth elsewhere in this specification.
- c) Callback service during regular working hours:
- (1) The Contractor shall, without additional charge to the Owner provide callback service during normal working hours (Monday through Friday/7:00am to 5:00pm). The Contractor shall respond to a callback within one (1) hour of the time reported to the Contractor.
- d) Callback service during overtime working hours:
- (1) The Contractor shall be available for 24-hour callback service. Contractor shall bill for the overtime portion only if the call is performed during overtime. The Contractor shall respond to an overtime callback within One (1) hour of the time reported to the Contractor.
- e) Entrapments: Callbacks for entrapments shall be responded to by Contractor within 30 minutes of the call.

- f) The below listed locations will have 24 hour call back with no billable charge for overtime. All other locations shall be billed for the overtime portion only if the call is after-hours.

- (1) Emergency Operation Center - 5195 Spectrum, Reno

- (2) Correctional Center - 911 Parr, Reno

- 11. Improvements: if the owner chooses to modernize or upgrade any vertical transportation equipment, as defined by ASME A17.1, 2013, Part 8, the Contract may be cancelled, or entire buildings deleted from the Contract, with 30 days written notice if Contractor is not successful in being awarded the upgrades being considered by Owner.

12. **FAILURE TO PERFORM**

- A. Contractor shall guarantee all work required during the Contract period for the duration of the Contract, and for a period of ninety (90) days after the termination date. Should the Owner determine during the contract period or within thirty (30) days after termination that any required work has been performed improperly or not performed at all, the Contractor shall, after mailing of written notifications by the Owner, correct said difficulty within thirty (30) days. Failure to correct will be construed as default of the Contract and the Owner may secure others to perform the services and deduct the cost of these services from the contractual amount due under the Contract. If Contractor fails to perform at select locations, the Owner may cancel those locations only or they may cancel the entire Contract. When the Contractor is default for lack of performance the Owner has the sole discretion to cancel the entire Contract or cancel only the units where the Contractor is not performing adequately.
- B. All maintenance deficiencies brought to the Contractor's attention during the Contract period by the Owner which are the responsibility of the Contractor, shall be completed within thirty (30) days during the Contract period and on or before the abatement date of the report, or expiration of the contract period, whichever is less.
- C. The Owner may utilize an independent elevator consultant to perform random unannounced quality assurance audits throughout the term of the Contract. The Contractor shall correct any deficiencies reported by the consultant within 30 days of receipt of list. An independent consultant will verify /enforce the following:
 - 1. Contractor shall use all commercially available parts without propriety properties.

2. Copy write material shall be surrendered to the owner at no additional charge to the owner for the life of this Contract and for 90 days after the termination.
3. Under no circumstances shall the contractor use equipment that will require the use of:
 - (a) Proprietary equipment.
 - (b) Proprietary tools.
 - (c) Proprietary diagnostic software.
 - (d) Manufacture specific service / diagnostic tools

13. EQUAL OPPORTUNITY EMPLOYMENT STATEMENT

- A. The non-discriminatory clause contained in Executive Order 11246, as amended by Executive order 11375, relative to equal employment opportunity for all persons without regard to race, color, religion, sex, or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor, are incorporated herein.

14. INDEMNIFICATION SCOPE OF WORK

- A. The Contractor shall indemnify the Owner against any and all liability, claims, expenses, costs and fees of whatsoever kind and nature for any injury to or death of any persons and for loss of or damage to any property in connection with or in any way incident to or arising out of the occupancy, use, service, operation, or performance of work pursuant to this Scope of Work resulting in whole or in part from negligent acts or omissions of the Contractor or Subcontractor. In addition, the Contractor shall pay any and all royalties and license fees associated with its service and shall defend all suits or claims for infringement of any patent rights and shall hold the Owner harmless from and shall indemnify the Owner against any and all liability, claims, expenses, costs and fees associated therewith.
- B. The entire paragraph above regarding indemnification and defense applies only to the extent that such bodily injury or property damage was caused by the negligence of the PROVIDER (or its subordinates), and not to the extent caused by others.

15. CONTRACT EXCLUSIONS

- A. The Contractor shall not be responsible for the following: The following items of equipment are the only items that are not included in this Scope of Work. All other equipment as itemized or not itemized in this Scope of Work are covered by this Scope of Work:
 1. Car enclosures including removable panels, door panels, plenum chambers, hung ceilings, light diffusers, fluorescent tubes and

fluorescent ballasts, handrails, mirrors, carpets, and tile flooring), hoistway enclosure, door panels, frames and sills. Underground hydraulic jacks and piping are excluded.

2. The actual telephone line to the elevator machine room is the responsibility of the owner.

16. EQUIPMENT COVERED BY THIS CONTRACT:

Refer to **Appendix G1** - Equipment Listing for Washoe County.

17. ELEVATOR MAINTENANCE FREQUENCY AND TASKS (PER UNIT)

A. GEARED/GEARLESS TRACTION

FREQUENCY: 4 WKS:

1. CLEAN AND INSPECT MACHINE, CONTROLLER, SELECTOR, MOTOR, AND GOVERNOR. CHECK LEVELING, STOP SWITCH, COMMUNICATIONS AND DOOR PRESSURE.
2. CLEAN AND INSPECT CAR TOP, OPERATING SWITCHES, DOOR OPERATOR AND CONTROLS, CAR DOOR HANGERS, GIBS, PHOTO EYES AND SAFETY EDGE. CHECK DOOR RESTRICTOR FOR PROPER OPERATION.
3. CLEAN AND INSPECT HOISTWAY DOOR HANGERS, INTERLOCKS, LINKAGE, PICK UP ASSEMBLY, DOOR GIBS, NON-VISION WING AND HOISTWAY SWITCHES.
4. CLEAN AND INSPECT GOVERNOR TENSION SHEAVE, CAR AND COUNTERWEIGHT BUFFERS, COMPENSATING SHEAVE ASSEMBLY. CLEAN PTT AND CHECK SAFETY PLANK AND TRAVEL CABLE LOOPS.

FREQUENCY: 8 WKS:

5. CLEAN MACHINE ROOM, CHECK COMMUTATORS AND BRUSHES, CLEAN AND ADJUST CONTROLLER AND SELECTOR CONTACTS AND RELAYS.
6. CHECK CAR AND HALL FIXTURE LAMPS, LEVELING AND FLOOR STOPS, ALARM BELL AND EMERGENCY STOP, INSPECT TRAVEL CABLE AND RETIRING CAM.

FREQUENCY: 12 WKS:

7. INSPECT ROPE SHACKLES, CAR AND COUNTERWEIGHT GUIDES, TM AND SLOW DOWN SWITCHES, ADJUST AND LUBRICATE AS REQUIRED, CHECK EMERGENCY LIGHT.
8. CHECK BRAKE OPERATION, SELECTOR DRIVE, MOTOR GENERATOR START AND RUN SWITCHES, BLOW OUT MOTOR AND MOTOR GENERATOR, CLEAN CONTROLS.
9. CLEAN CAR AND HALL STATION CONTACTS, CHECK DOOR CLOSING FORCE, CHECK AND LUBRICATE SAFETY EDGE LINKAGE PINS AND ADJUST, CHECK CAR AND HOISTWAY HANGER ROLLERS AND ADJUST UP THRUSTS.
10. CHECK MACHINE BEARINGS, LUBRICATE GOVERNOR LINKAGE, CHECK TRANSFORMERS, RECTIFIERS AND TIMERS.

FREQUENCY: 26 WKS:

11. CHECK CONTROL AND MAIN LINE FUSES, VOLTAGE READINGS, MOTOR AND MOTOR GENERATOR WIRE CONNECTIONS, OVERLOADS, ARMATURE CLEARANCE AND BRAKE CORES.
12. CHECK CAR, SAFETY MECHANISM, GOVERNOR ROPE HITCH, HOISTWAY SWITCH ROLLERS, DOOR CLOSING DEVICES, INSPECT AND EQUALIZE HOIST ROPES.

FREQUENCY: 52 WKS:

13. DROP BRAKE SHOES, CLEAN, LUBRICATE AND ADJUST.
14. CHECK CAR FRAME, GUIDE RAIL AND BRACKET FASTENINGS, CLEAN GUIDE RAILS AND BRACKETS, OVERHEAD SHEAVES DOOR HANGERS, SILLS AND PITS.
15. ANNUAL LUBRICATION OF MACHINE BEARINGS, DEFLECTOR, COMPOUND AND COMPENSATING SHEAVES AND GOVERNOR TENSION SHEAVE BEARINGS.
16. ANNUAL CAR SAFETY TEST. CHECK BUFFER OIL LEVEL.
17. BLOW OUT MOTOR.
18. ADJUST MOTOR CONTROL AND CHECK LOGIC OPERATION.

19. SEISMIC SWITCHES AND DEVICES

FREQUENCY: 260 WKS:

- 20. FIVE (5) YEAR FULL LOAD SAFETY TESTS – MUST BE COMPLETED WHEN DUE**

B. HYDRAULIC

FREQUENCY: 4 WKS.

- 1. CLEAN AND INSPECT POWER UNIT, CONTROLLER, SELECTOR, VALVE, AND PUMP MOTOR. CHECK LEVELING, STOP SWITCH, COMMUNICATIONS AND DOOR PRESSURE.**
- 2. CLEAN AND INSPECT CAR TOP, OPERATING SWITCHES, DOOR OPERATOR AND CONTROLS, CAR DOOR HANGERS, GIBS, PHOTO EYES AND SAFETY EDGE. CHECK DOOR RESTRICTOR FOR PROPER OPERATION.**
- 3. CLEAN AND INSPECT HOISTWAY DOOR HANGERS, INTERLOCKS, LINKAGE, PICK UP ASSEMBLY, DOOR GIBS, NON-VISION WING AND HOISTWAY SWITCHES.**
- 4. CLEAN PIT AND CHECK TRAVEL CABLE LOOPS.**
- 5. CHECK OIL LEVEL AND JACK PACKING FOR PROPER SEAL. RECORD OIL LEVEL EACH MONTH IN A SPECIAL MACHINE ROOM LOG. RECORD AMOUNT OF ANY NEW OIL ADDED. IF NO OIL IS ADDED INITIAL THAT THE OIL LEVEL WAS CHECKED AND NO OIL WAS ADDED.**

FREQUENCY: 8 WKS.

- 6. CLEAN POWER UNIT, CHECK VALVE, CLEAN AND ADJUST CONTROLLER AND SELECTOR CONTACTS AND RELAYS.**
- 7. CHECK CAR AND HALL FIXTURE LAMPS, LEVELING AND FLOOR STOPS, ALARM BELL AND EMERGENCY STOP, AND INSPECT TRAVEL CABLE.**

FREQUENCY: 26 WKS.

- 8. CHECK CONTROL AND MAIN LINE FUSES, VOLTAGE READINGS, PUMP MOTOR AND VALVE WIRE CONNECTIONS.**

FREQUENCY 52 WKS.

9. CHECK CAR FRAME, GUIDE RAIL AND BRACKET FASTENINGS, CLEAN GUIDE RAILS AND BRACKETS, OVERHEAD SHEAVES DOOR HANGERS, SILLS AND PITS. PERFORM ANNUAL STATIC AND PRESSURE RELIEF TEST.
10. CHECK RUPTURE VALVE AND DEVICES
11. ANNUAL NO LOAD PRESSURE TEST.

FREQUENCY: 260 WKS.

12. FIVE (5) YEAR SAFETY & BUFFER TEST. MUST BE COMPLETED WHEN DUE

18. PERFORMANCE STANDARDS

- A. It is the intention of this Scope of Work that the elevator equipment be maintained so as to preserve the operating characteristics in line with the original design. Should the Owner find through its own investigation or that of its representative that these standards are not being maintained, the Contractor will be given thirty (30) days to restore the performance to the required level. Failure by the Contractor to restore the performance to the required level within the thirty (30) day period shall constitute sufficient cause for termination of the contract by reason of default, at the option of the Owner.
- B. The following are performance levels which are a part of the original design and which shall be maintained at all times.
 1. Contract speed of all elevators, shall be maintained, and floor-to-floor times shall be maintained as originally designed plus or minus 10 %.
 2. Leveling accuracy of all elevators shall be maintained at all times.
 3. Opening and closing times of all hoistway and car doors shall be maintained within limits of ASME A17.1 Code, yet assuring minimum standing times at each floor plus or minus 10%.
 4. Door reversals on all elevators equipped with mechanical safety shoes shall always be initiated within the stroke of the shoe. Light ray devices shall be operable at all times under normal operation.
 5. "Variable" car and hall door hold open times shall be maintained in accordance with original design and or local code requirements. Deviations from this will not be permitted.

6. Elevators operating under group supervisory systems shall operate at all times in accordance with original design specifications. The Contractor shall be required to periodically test these systems no less than annually and submit to the Owner test data indicating performance levels and proof that variable and fixed features are operating properly and all circuits and time settings are properly adjusted.
 7. Emergency fire service operation, seismic operation, telephone communications, emergency car light and alarm bell shall be periodically tested to be sure it is functioning properly as required by ASME A17.1 Elevator Code.
- C. As a minimum requirement, the performance levels for passenger cars shall be per **Appendix G1**. For the purpose of this contract, the following performance criteria shall apply:
1. Floor-to-floor time is the elapsed time in seconds from car doors starting to close until the doors are $\frac{1}{2}$ open at the next floor for side opening doors and $\frac{3}{4}$ open for center opening doors on a one (1) floor run of approximately 12'-0". For traction elevators if the one floor run is above or below 12'-0", .25 seconds should be added or subtracted for each foot above or below 12'-0". For hydraulic elevators if the one floor run is above or below 12'-0" .50 seconds should be added or subtracted for each foot above or below 12'-0".
 2. Door Open Time is the elapsed time in seconds from the time the car doors start to open after arriving at a landing until they are fully open.
 3. Door Close Time is the elapsed time in seconds from the time the car doors start to close after a call is initiated until they are fully closed with the interlock engaged. Speed must not exceed requirements as set forth in ASME A17.1 Elevator Code.

Appendix G1
Elevator Preventative Maintenance and Repair

Washoe County Elevator Group		Eleva tor No.	Brand	Type ⁽¹⁾	Capacity (lbs)	Speed (FPM)	Door Type	Door Size	# of Stops	F/R ⁽²⁾	Door Open	Door Close	Floor- to- Floor
Washoe Admin. Bldgs. 1001 E 9 th	Pass.	Bldg. A	Dover	Hydro. Pass.	2500	125	1SCO	42X84	3	2/F 1/R R- Key	1.6	2.4	15.5
	Pass.	Bldg. B	Delta	Hydro. Pass.	3000	120	1SCO	42X84	2	2/F	1.6	2.4	16.5
	Pass.	Bldg. C	Otis	Hydro. Pass.	3000	120	1SCO	42X84	2	2/F	1.6	2.4	15.5
	Pass.	Bldg. C	ESCO	Hydro. Frt.	4000	90	Bi-part	72X89	2	2/F	Cont. Press.	Auto	
	Pass.	Bldg. D	Delta	Hydro. Pass.	2500	120	1SCO	42X84	2	2/F	1.6	2.4	15.5
Parking Garage 220 S. Center	Pass.	1	Otis	Traction Pass.	2500	350	1SCO	42X84	6	G/2- 6 6/F	1.6	2.4	9.1
	Pass.	2	Otis	Traction Pass.	2500	350	1SCO	42X84	6	G/2- 6 6/F	1.6	2.4	9.1
Reno Library 301 S. Center	Pass.	1	Dover	Hydro.	2000	120	2SSO	36X78	6	3/R 3/R	15.5	2.1	3.4
Liberty Center 350 S. Center	Pass.	1	Otis	Traction Pass.	2500	350	1SCO	42X84	6	G/2- 6 6/F	1.6	2.4	9.1
	Pass.	2	Otis	Traction Pass.	2500	350	1SCO	42X84	6	G/2- 6 6/F	1.6	2.4	9.1

Appendix G1
Elevator Preventative Maintenance and Repair

Emer. Operation Center 5195 Spectrum	Pass.	1	Schind le	Hydro.	4000	125	2SSO	48X84	2	2/F	2.5	4.4	16.5
SPT- Admin. 5190 Spectrum	Pass.	1	Thysse n Krupp	Hydro.	2500	125	1SSO	42x84	2	2/F	1.6	2.4	15.5
Court Bldg (Main) 75 Court St.	Pass.	1	Otis	Traction	3000	200	1SCO	42X84	5	5/F	1.6	2.4	10.0
	Pass.	2	Otis	Traction	3000	200	1SCO	42X84	5	5/F	1.6	2.4	10.0
Handicap	WCL	3	Chone z	Screw	750	25	Sing Door	341/2 X83	2	1/F 1/R			
	Pass.	4	Otis	B/Tractio n	2500	100	1SCO	42X84	3	3/F	1.6	2.4	10.5
	Pass.	5	Otis	Traction	2500	200	2SSO	42X84	4	4/F	2.3	4.0	12.0
New Court Bldg. Mills Lane	Pass.	1	TKE	Traction	3500	400	1SCO	42X84	8	8/F	1.6	2.4	8.9
	Pass.	2	TKE	Traction	3500	400	1SCO	42X84	9	9/F	1.6	2.4	8.9
	Pass.	3	TKE	Traction	3500	400	1SCO	42X84	4	4/F	1.6	2.4	8.9
	Pass.	4	TKE	Traction	3500	400	1SCO	42X84	4	4/F	1.6	2.4	8.9
ISIS	Pass.	5	TKE	Traction	3500	200	1SSO	42X84	4	3/F 1/R	2.3	4.0	12.0
	Pass.	6	TKE	Traction	3500	400	1SSO	42X84	7	7/F	2.3	4.0	10.9
	Pass.	7	TKE	Traction	3500	400	1SSO	42X84	4	4/F	2.3	4.0	10.9
DUMBWAITER	Floor 1-3	1	Waupr im	Traction	300	50	Bi-Part		3	3/F			
DUMBWAITER	Floor 6-7	2	Waupr im	Traction	100	25	Bi-Part		2	2/F			

Appendix G1
Elevator Preventative Maintenance and Repair

Court House North 1 So. Sierra													
Judges Elevator	Pass.	1	Oil Lift System	Hydro	2500	200	1SSO	42X84	3	3/F	2.3	4.0	
Sally Port/Prisoner	Pass.	2	Oil Lift System	Hydro	4500	100	2SSO	42X24	2	1/F 1/R	2.3	4.0	
Prisoner/East	Pass.	3	Oil Lift System	Hydro.	2500	200	1SCO	42X84	3	3/F	1.6	2.4	
Prisoner/West	Pass.	4	Oil Lift System	Hydro	2500	200	1SCO	42X84	3	3/F	1.6	2.4	
Pass. Elevator	Pass.	5	Oil Lift System	Rope Hydro	3500	200	1SCO	42X84	3	3/F	1.6	2.4	
Pass. Elevator	Pass.	6	Oil Lift System	Rope Hydro	3500	200	1SCO	42X84	3	3/F	1.6	2.4	
Service Elevator	Service	7	Oil Lift System	Hydro.	3500	100	1SCO	42X84	4	4/F	1.6	2.4	
Dumbwaiter	D/W	1	Atlas	Traction	75	50	Bi-Part	-	2	2/F			
Dumbwaiter	D/W	2	Atlas	Traction	75	50	Bi-Part	-	2	2/F			
Correctional Center-(Jail) 911 Parr	Lobby	1	ESCO	Hydro	3500	125	1SCO	42X84	3	3/F	1.6	2.4	13.0
	Lobby	2	ESCO	Hydro	3500	125	1SCO	42X84	4	4/F	1.6	2.4	13.0
	Visitors Lobby	3	ESCO	Hydro	3500	125	1SCO	42X84	2	2/F	1.6	2.4	13.0
	Service	4	ESCO	Hydro	4000	120	2SSO	48X42	2	2/F	2.5	4.4	16

Appendix G1
Elevator Preventative Maintenance and Repair

	Dumbwaiter	5	MATOT	Cable	500	50	Bi-Part	30X39	2	2/F			
	Expansion Facility	6	Otis	Hydro	4500	120	2SSO	48X84	2	2/F	2.5	4.4	16
Coroner Office 10 Kirman	Passenger / Service	1	ESCO	Hydro	4000	75	2SSO	48X84	3	2/F 1/R	2.5	4.4	19.5
Washoe Little League 1100 Wedge Pky Reno, NV 89501	Handicap Lift	1	Access	Chain Drive	300	22	Swing	---	2	2/F	---	---	---