

ANNEX A

SPECIFICATIONS

FOR

ELEVATING DEVICES MAINTENANCE

ELEVATING DEVICES MAINTENANCE
SPECIFICATIONS

Section 1
General Requirements

Project Name: Fisheries and Oceans Canada Freshwater Institute
501 University Crescent, Winnipeg, Manitoba
Elevators #1 and #2 Long Term Elevator Maintenance Contract

Specification Number: ET025-171557

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**ELEVATING DEVICES MAINTENANCE
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**Section 1
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1. SCOPE

The Contractor shall furnish all necessary tools, (including but not limited to programming, diagnostic and site specific specialty devices), equipment, materials and labor to maintain, inspect, test, provide software updates and/or upgrades and service the elevating devices described in Section 2, Particular Requirements, of the Specifications.

2. PERFORMANCE

The Contractor shall maintain the elevating devices described in Section 2, Particular Requirements, of the Specifications using all reasonable care to maintain the equipment in proper and safe working conditions.

2.1 Elevating Devices, Maintenance Log

- .1 The Contractor shall maintain the PWGSC supplied Elevating Devices, Maintenance Log associated with each piece of equipment, in a manner that will identify the Contractor's conformance to 2.2 Maintenance Services below, and the applicable Codes and Standards, as described below in 2.4 Safety Codes. This Log may be used as proof of delivery should there be a discrepancy between services rendered and the services invoiced. The maintenance requirements and intervals provided within the Elevating Devices Log must be adhered to as a minimum. Should the contractor deem the maintenance requirements and intervals be increased, the contractor may do so but shall advise the Departmental Representative and the increased maintenance requirements and intervals must be noted in the Maintenance Log Book.
- .2 Any site specific examination/test frequencies for this contract will be provided in the Particular Requirements of this document.
- .3 The contractor shall provide an equipment specific Maintenance Control Program as per the requirements of the ASME A17.1/CSA B 44 Safety Code for Elevators (requirement 8.6.1.2.1). If any portion of the MCP is deemed more stringent than the Particular Requirements of this document then it shall be incorporated.

2.2 Maintenance Services

- .1 The Contractor shall regularly and systematically, at the frequency specified in Section 2, Particular Requirements, of the Specifications, examine, clean, adjust, calibrate and lubricate all components of the equipment. If conditions warrant, the Contractor shall repair or replace all components using only genuine replacement parts.
- .2 For the purposes of the contract "**Genuine Replacement Parts**" means only:
 - .1 parts made by the original manufacturer;
 - .2 parts approved for use by the original manufacturer; or
 - .3 parts approved for proposed application by the Departmental Representative in writing; the Departmental Representative reserves the right to have such replacement parts certified for their proposed application by an independent laboratory of its choice, at the expense of the Contractor, prior to granting approval.
- .3 The Contractor shall:
 - .1 provide lubricants, hydraulic fluids, car fluorescent ballasts starters, signal lamps, lamps on car top, all hydraulic equipment, cathodic protection;
 - .2 clean hoistways, pits, car tops, car ceilings, ceiling cavities, suspended ceilings and trusses.

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2.3 Safety Devices and Tests

- .1 The Contractor shall inspect and adjust all safety devices as often as necessary and perform all tests as required by the applicable Codes and Standards described in paragraph 2.4 below. Where regulations require the enforcing/inspection authority to witness such tests, the Contractor shall conduct the test in their presence.
- .2 The Contractor shall co-ordinate and assist the enforcing/inspection authority in the performance of their annual inspection and tests of equipment.

2.4 Safety Codes

- .1 The Contractor shall conform to, but not limit work to, the edition of Codes and Standards applicable at the time of entering into the Contract as follows:
 - .1 ASME A17.1/CSA B44, Safety Code for Elevators and Escalators (including all Appendices),
 - .2 CSA B44.1/ASME A17.5 Elevator & Escalator Electrical Equipment
 - .3 B44.2-10 Maintenance Requirements and Intervals for Elevators, Dumbwaiters, Escalators, and Moving Walks.
 - .4 National Building Code,
 - .5 National Fire Code,
 - .6 Provincial/Territorial Acts and Regulations and
 - .7 Municipal Bylaws,
 - .8 National Electrical Code.
- .2 Where concurrent regulations exist the most stringent set of regulations shall apply.

2.5 Operation

- .1 The Contractor shall maintain the original performance of the equipment within the limits outlined in the Codes and Standards described in paragraph 2.4 above, including but not limited to:
 - .1 rated speed,
 - .2 acceleration,
 - .3 deceleration,
 - .4 door opening and closing times and
 - .5 safeties and governor operation.

2.6 Group Dispatching System

- .1 The Contractor shall conduct periodic tests of the group dispatching system to ensure all circuits and time settings are properly adjusted to suit building traffic requirements, in accordance with the design capabilities of the system and applicable Codes.
- .2 Upon award of the contract and within the first three (3) months the contractor shall complete a traffic study of all group passenger elevators and provide statistical data to the Departmental Representative. In compliance with requests, by the Departmental Representative, the Contractor shall provide additional traffic studies that include relevant statistical data.

2.7 Exclusions

- .1 The Contractor is not required to make renewals or repairs due to:
 - .1 negligent operation or misuse of equipment by others and
 - .2 causes beyond the Contractor's control except those due to ordinary wear and tear of equipment.

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- .2 The Contractor is not responsible for
 - .1 refinishing, protecting, repairing or the replacement of the car enclosure, balustrades, car and hoistway door panels, frames and sills,
 - .2 cleaning, washing, waxing and polishing of car floors and
 - .3 the performance of safety tests additional to those specified in the contract, the installation of additional parts on the equipment nor the substitution of any parts with parts of a design different from those that constituted the equipment at the time the contract was signed, regardless of whether or not these measures are recommended or directed by an insurance company or by an enforcing/inspection authority.
- .3 Further exclusions may be specified in Section 2, Particular Requirements, of the Specifications.

2.8 Working Hours

The Contractor shall perform all work during the regular working hours (07:00 hours to 17:00 hours) of the regular working days (Monday to Friday excluding legal holidays), unless otherwise specified in Section 2, Particular Requirements, of the Specifications.

2.9 Answering Service

The Contractor shall provide a comprehensive answering service 24 hours a day, 7 days a week.

2.10 Callback Service

The Contractor shall provide callback service between regular examinations within the response time specified in Section 2, Particular Requirements, of the Specifications, at no additional cost. .

2.11 Stock of Parts for Maintenance Service

- .1 The Contractor shall maintain, in each building, an adequate stock of frequently replaced parts organized neatly in a cabinet.
- .2 The Contractor shall have available any part requiring replacement. The Contractor shall provide all parts promptly to ensure repair or replacement work is completed in an expeditious manner to minimize equipment outage time. Canada shall not assume responsibility for the safekeeping of parts stored on its premises.

2.12 Repairs

- .1 The Contractor shall immediately inform the Departmental Representative, in writing, of the need for repairs that are excluded from the contract.
- .2 Problem Solving Escalation Procedures: if, within the first four (4) hours of working on the equipment, the technician has not made significant progress in effecting repairs and returning the equipment to normal operation, the contractor shall make arrangements for a technician with the appropriate expertise to be on site without undue delay to facilitate the repair. This escalation process must not result in any additional costs to the Departmental Representative.
- .3 Disputes: in the event of a dispute over equipment operation, repairs, billing, invoices or any other item, work must continue during the dispute to ensure the operation and/or reliability of the equipment is not jeopardized.

2.13 Cleaning and Painting

- .1 The Contractor shall thoroughly clean and paint within one (1) year of the commencement date stipulated in under Article "Period of Contract" of the resultant contract , and every three (3) years thereafter:
 - .1 all elevator machine room equipment and
 - .2 the elevator machine room floors including secondary spaces and pits

2.14 Wiring Diagrams, Adjustment Procedures and Operational Descriptions

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- .1 The Contractor shall prove to the satisfaction of the Departmental Representative:
 - .1 possession of complete schematic wiring diagrams,
 - .2 possession of detailed adjustment procedures, and
 - .3 possession of detailed operational descriptions of all equipment included in the contract.
- .2 The Contractor shall conspicuously post in every elevator machine room framed copies of approved laminated schematic wiring diagrams. The Contractor shall keep these diagrams up to date during the entire Term of the contract by indicating any change to circuitry. Engineer approved copy of the original and revised diagrams shall be provided to the Departmental Representative upon request. Where wiring diagrams, adjustments procedures and operational descriptions are available in electronic form, the Contractor shall update the documents in electronic form consistent with PWGSC standards and provide copies to the Departmental Representative upon request.

2.15 Reporting Requirements

- .1 The Contractor shall maintain, as a minimum, records of all maintenance activities, adjustments, verifications, tests, repairs and modifications for the duration of the contract, and provide them to the Departmental Representative upon request.
- .2 When malfunctioning elevating equipment cannot be returned to service within the same day, the Contractor shall provide, by the end of the following working day, a written report to the Departmental Representative describing the nature of the problem and the expected date of the service resumption.
- .3 When it is necessary to take all or part of the system(s) out of service, for inspections, tests and/or maintenance/service repairs etc., arrangements must be made with the Departmental Representative a minimum of seventy two (72) hours in advance. Details must be provided electronically to the Departmental Representative outlining the scope of the work to be done, anticipated time frame and the equipment involved.
- .4 The Contractor shall employ proven information collection and delivery techniques, methodologies and systems to meet PWGSC requirements.
- .5 The Contractor shall ensure that computer systems and information are protected with due regard to security, and ensure information disaster recovery and backup plans and procedures are in place.
- .6 Copies of all maintenance related work tickets and visitation records must be provided with the monthly invoicing for verification that the frequencies as stated in the contract have been met.

2.16 Environmental Protection

- .1 The Contractor shall ensure that;
 - .1 there is no contaminated waste left on site and
 - .2 disposal of all waste or volatile materials such as paints, oils, thinners, cleansers, etc. is completed through proper means and not waterways, storm or sanitary sewers

Building Name and Address: Freshwater Institute, 501 University Crescent, Winnipeg, Manitoba

Equipment Inventory:
Elevators #1 and #2 Dover Turnbull Elevator with modernized control overhead geared 1814 kg.

1.

SPECIAL EXCLUSIONS:

None
2.

PRO-RATION:

None
3.

SPECIAL LABOUR:

Contractor to provide a cost breakdown for each elevating device, per inspection, based on the EXAMINATION FREQUENCY requirements indicated in item 5 below.

Contractor must indicate the dollar value (on a per elevator basis) assigned to the 5 year full load tests, which was part of the overall price submitted.
4.

OTHER SPECIAL CONDITIONS:

A written Maintenance Control Program (MCP) shall be in place to maintain the equipment in compliance with the requirements of Clause 8.6. of the ASME A17.1-2010/B44-10 Safety Code for Elevators. The MCP shall incorporate as a minimum the examinations and frequencies of the CSA B44.2-10. (for exceptions see 6. Examination Frequency)

This program shall be available on site and, upon request, for review/acceptance by the Departmental Representative.

Note: Landing and car doors (4.5.1) of CSA B44.2-10 shall be carried out as a monthly requirement.
5.

EXAMINATION FREQUENCY:

Electric, Hydraulic Elevators and Dumbwaiters:

Shall be a minimum of 3 hours per monthly visit and shall be dedicated for the on-site maintenance of the devices within the inventory of this facility.

5. EXAMINATION FREQUENCY *cont'd*

Task inspections and frequency intervals as described in the “*CSA B44.2-10 Maintenance requirements and intervals for elevators, dumbwaiters, escalators, and moving walks*”, shall be adhered to as a minimum.

Important Note: Landing and car doors (4.5.1) of CSA B44.2-10 shall be carried *out as a monthly requirement*. Governors shall be manually examined monthly to ensure all parts are operating freely as per 8.6.19.3 of the ASME a17.1/CSA B44 Safety code for Elevators See tables provided on Page 3 & 4 of Particular Requirements, for minimum frequencies).

If the manufacturer or contractor deems that frequencies and intervals be increased they shall be permitted to do so, however there shall be no increase in maintenance costs.
6. CALLBACK SERVICE:

Include twenty four (24) hour per day seven (7) days per week callback service at no additional cost.
7. RESPONSE TIME:

For release of trapped passengers, on-site, response times are: thirty (30) minutes during regular working hour calls and within two (2) hour for after hour calls. All other trouble calls within one (1) hour

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**Section 2
Particular Requirements**

.8 MAINTENANCE TASK & FREQUENCY TABLE ELEVATORS:

Table 1
Elevator and dumbwaiter - Minimum maintenance frequencies
(see Clause 4.)

Note: All clause references provided below refer to CSA B44.210 *Maintenance requirements and intervals for elevators, dumbwaiters, escalators, and moving walks.*

Every month clause reference	Every 3 months clause reference	Every 12 months (clause reference)	Every 3 years (clause reference)	Every 5 years (clause reference)
Landing and car doors (4.5.1) Governors (see 8.6.19.3 of ASME A17.1/CSA B44)	Inspection of record of oil usage (4.30) Maintenance required by 8.6.1.2. of ASME A17.1/CSA B44 (4.1.3)	Ascending car overspeed protection (4.18) Auxiliary power lowering (4.20) Broken rope, tape, or chain switch (4.24) Car Emergency lighting systems (4.17) Cylinder and pressure piping (4.9) Cylinder corrosion protection monitoring means (4.32) Driving-machine brakes (4.6.1) Firefighters" emergency operation (4.23) Flexible hose and fitting assemblies (4.12) Governors (4.3.1 and 4.3.2.1) Landing and car doors (4.5.2) Low oil protection (4.11) Normal and final terminal stopping device (4.21) Plunger gripper (4.16) Pressure switch (4.10)	Pressure vessels (4.14) Unexposed piston rods (4.13)	Car and counterweight oil buffers (4.7) Driving -machine brakes (4.6.3 & 4.6.4) Emergency brake (4.29) Emergency terminal speed-limiting and stopping device (4.22) Governors (4.3.2.2) Inner landing zone (4.28) Leveling zone and leveling speed (4.27) Overspeed valves (4.15) Power opening of doors (4.26) Wire ropes (coated) (4.4.3(b))

.8 MAINTENANCE TASK & FREQUENCY TABLE ELEVATORS: *cont'd*

Table 1

Elevator and dumbwaiter - Minimum maintenance frequencies
(see Clause 4.)

Note: All clause references provided below refer to CSA B44.210 *Maintenance requirements and intervals for elevators, dumbwaiters, escalators, and moving walks.*

Every month (clause reference)	Every 3 months (clause reference)	Every 12 months (clause reference)	Every 3 years (clause reference)	Every 5 years (clause reference)
		Relief valve setting (4.8) Safties (4.2.1) Standby or emergency power (4.19) Two-way communication means (4.33) Wire ropes (4.4.1, 4.4.3(a), 4.4.4, and 4.4.5) Written checkout procedure of E/E/PES device (4.25) (<i>definition below</i>)		

Definition of E/E/PES **electrical/electronic/programmable electronic (E/E/PE)**: based on electrical (E), and/or electronic (E), and/or programmable electronic (PE) technology.
NOTE: The term is intended to cover any and all devices or systems operating on electrical principles.
EXAMPLE: Electrical/electronic/programmable electronic devices include
(a) electromechanical devices (electrical)
(b) solid-state nonprogrammable electronic devices (electronic)
(c) electronic devices based on computer technology (programmable electronic)