



119 Van Order Drive, Kingston, ON K7M 1B9 🏠 Fax (613) 546-9375 🏠 Phone (613) 546-5591 www.kfhc.ca

PUBLIC TENDER

PROJECT MANUAL

PT 24-04

LOCATION:	2075 Battersea Road Glenburnie, ON
WORK:	Elevator Modernization
PRE-BID MEETING:	Friday, July 26, 2024 11:00 a.m. Local Time Country Pines Apartments 2075 Battersea Road Glenburnie, ON
CLOSING:	Thursday, August 15, 2024 11:00:00 a.m. Local Time 119 Van Order Drive Kingston, ON

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Contractor Name and Address:

Closing Date Thursday, August 15, 2024
Time 11:00:00 a.m. Local Time
Description of Work Elevator Modernization
Address of Work 2075 Battersea Road Glenburnie, ON
Tender No. PT 24-04

PUBLIC TENDER BID ENVELOPE

DO NOT OPEN

Kingston & Frontenac Housing Corporation
119 Van Order Drive
KINGSTON, ON K7M 1B9
Attn: S. VanderSchoor

PLEASE PRINT THIS PAGE AND ATTACH IT TO YOUR BID SUBMISSION ENVELOPE

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NOTE:

Bidders must ensure that they receive all the contents listed above. Any omissions must be drawn to the attention of the Housing Office at least five (5) days prior to bid closing.

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END OF SECTION

1.0 SPECIAL CONSIDERATION

1.1 Pre-Bid Questions & Responses

1.1.1 Questions are to be submitted via email no later than 4:00 p.m. on Friday, August 2, 2024 to Scott Vanderschoor, Director of Assets & Development for Kingston & Frontenac Housing Corporation (KFHC), at svanderschoor@kfhc.ca with a copy to Karl Shaw of Solucore Inc. at kshaw@solucore.com.

1.1.2 Responses will be provided by 4:00 p.m. on Tuesday, August 6, 2024, if not before.

1.2 Cash Allowance

1.2.1 The Cash Allowance for Fire Signal Upgrades and HVAC Upgrades in Section 14100 Modernization Specifications is to be included in your contract price on Bid Form Section 00 03 00.

1.3 Bid Requirements

1.3.1 Submitted Bid Documents must include:

- Bid Form,
- Appendices A, B, and
- Schedule B from Section 14900

1.3.2 Bid Bond is not required for this Tender.

END OF SECTION

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Scott VanderSchoor
Kingston & Frontenac Housing Corporation
119 Van Order Drive
Kingston, ON K7M 1B9

Re: **PT 24-04**
Elevator Modernization
2075 Battersea Road
Glenburnie, Ontario

1.0 CONTRACT PRICE

.1 I/We _____
(Company Name)
having carefully examined the Bid Documents and visited the Project Site, and
having examined and complied with Section 00 10 00 Instruction to Bidders,
hereby offer to enter into a Contract to perform the work required in the Bid
Documents for the **STIPULATED PRICE** of

_____ Dollars (\$ _____) including payment of **all applicable federal,
provincial and municipal taxes.**

This Bid is firm, irrevocable and open to acceptance by the Owner for sixty
(60) days from the date of Bid closing.

.2 The following amount of HST **has been included** in the above STIPULATED
PRICE
\$ _____ **HST REGISTRATION NO.** _____.

.3 I/We agree to comply in all respects with the requirements set out in the Bid
Documents including **ADDENDA No.** _____ to **No.** _____ inclusive as issued
as supplements thereto. (If no addenda have been received, indicate 'NIL' in the
spaces provided).

.4 I/We agree to commence this work immediately upon being notified in writing to
do so by the Housing Corporation and that work will be done on a continuous
basis.

.5 I/We expressly warrant that the prices contained in my/our bid, whether as unit
prices or lump sums are quoted in utmost good faith on my/our part without any
collusive arrangement or agreement with any other person or partnership or
corporation and that I/we are not party or privy to any deceit tending to mislead
the Owner into accepting my/our bid as a truly competitive offer.

.6 I/We agree to complete all work required, acceptable to the Owner.

.7 I/We enclose a bid bond, certified cheque, bank draft or irrevocable letter of credit in the amount of **\$25,000.00** payable to the Owner and valid for sixty (60) days from the date of bid closing.

.8 Tax Compliance Declaration

I hereby certify that _____
 (name of company)

at the time of submitting this bid, is in compliance with all tax statutes administered by the Ministry of Finance for Ontario and that in particular, all returns required to be filed under all provincial tax statutes have been filed and all taxes due and payable under those statutes have been paid or satisfactory arrangements for their payments have been made and maintained.

2.0 SUBCONTRACTORS

.1 We submit a complete list of subcontractors we propose to use on this Contract and the Sections of the Work to be done by them.

.2 We reserve the right to substitute another subcontractor for the same work in the event that a subcontractor should withdraw his bid or become bankrupt. All subcontractor substitutions are subject to the Owner’s approval.

.3 Any such substitution, in order to be considered for approval by the Owners and/or Consultant, is contingent on the submission of conclusive evidence of withdrawal, bankruptcy or unsatisfactory performance.

.4 The Contractor is responsible for all costs incurred as a result of substituting one subcontractor for another.

.5 Tenders may not be considered unless the names of all subcontractors are listed in space provided.

SECTION	TITLE	NAME OF SUBCONTRACTOR

- 4.5 We understand that the lowest or any tender will not be necessarily be accepted and that selected items may be deleted from the Project as represented in the Bid Form.
- 4.6 We understand that the Owner reserves the right to waive minor defects or irregularities in the bid submission.
- 4.7 We understand that the Owner may withhold total and partial payment to cover third party liability claims as outlined in Tender Documents.
- 4.8 We agree to staff on-site activity within five (5) days of Award of Contract. We agree to complete The Work by the schedule specified by us in **Appendix B (2.1.1)**.
- 4.9 We understand that Contract time is of the essence and that any improvements to the schedule submitted with our bid will be considered prior to the award of the Contract. We therefore submit the following improvement to the completion date indicated in the tender package for consideration in evaluating our Bid **PT 24-04**.

5.0 BIDDER'S SIGNATURE AND COMPANY SEAL

SIGNED AND SEALED * this _____ day of _____, 2024.

Print full name

Contractor: _____

Signing Officer: _____

Address: _____

WSIB Account Number: _____

City: _____

Postal Code: _____

Telephone No: _____

Email: _____

Signature: _____

Printed Signature: _____

Email Address: _____

NOTE: BIDDERS ARE ADVISED THAT FAILURE TO COMPLETE THIS FORM WILL CAUSE DISQUALIFICATION.

* Affix Corporate Seal (if applicable).

END OF SECTION

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Bond No. _____ Project No. _____

Amount \$ _____

Know All Men By These Presents, that _____

As Principal, hereinafter called the Principal, and _____

_____ as Surety, hereinafter called the Surety, are held and firmly bound unto Kingston & Frontenac Housing Corporation as Obligee, in the amount of _____

_____ Dollars (\$ _____) lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the Principal has submitted a written proposal, (or tender) to the Obligee dated the _____ day of _____, _____, for _____

Now Therefore The Condition Of This Obligation in such that if the aforesaid Principal shall have the tender accepted within sixty (60) days from the closing date of the Call for Tenders and the said Principal will, within such reasonable time as may be allowed after notice of such acceptance, enter into a formal contract and give a good and sufficient bond to secure the performance of the terms and conditions of the contract, then this obligation shall be null and void; otherwise the Principal and Surety will pay unto the Obligee the difference in money between the amount of the bid of the said Principal and amount for which the Obligee legally contracts with another party to perform the work if the latter amount be in excess of the former.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond. Any suit under this Bond must be instituted before the expiration of six months from the date of this Bond.

The Testimony Whereof, the Principal has hereunto set its had and affixed its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signatures of its duly authorized officers, this _____ day of _____, A.D. _____.

Signed, Sealed and Delivered

in the Presence of:

Principal

Surety

END OF SECTION

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No.(the “**Bond**”) Bond Amount \$

.....
(name of the contractor*)

as a principal, hereinafter [collectively] called the “**Contractor**”, and

.....
(name of the surety company**)

.....
a corporation created and existing under the laws of

.....
(place of incorporation)

as a surety, and duly authorized to transact the business of Suretyship in the Province of Ontario and hereinafter called the “**Surety**”, are held and firmly bound unto Kingston & Frontenac Housing Corporation as obligee, hereinafter called the “**Owner**”, in the amount of \$

.....
(Bond Amount in figures)

hereinafter called the “**Bond Amount**”, for the payment of which sum the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally in accordance with the provisions of this Bond (the “**Obligation**”).

WHEREAS the Contractor has entered into a written contract with the Owner dated the

.....day ofin the year.....for

.....
(name of month)

.....
(title or description of the contract)

(the “**Original Contract**”) and, for the purpose of specifying the conditions of the Obligation, this contract together with amendments made in accordance with its terms are by reference made part hereof and are hereinafter referred to collectively as the “**Contract**”;

NOW THEREFORE the condition of this Obligation is such that if the Contractor shall promptly and faithfully perform the Contract then this Obligation shall be null and void; otherwise it shall remain in full force and effect, subject to the following terms and conditions:

1.0 WRITTEN NOTICE

- .1 The Owner may make a written demand on the Surety in accordance with this Bond, by giving notice to the Surety substantially in the form Schedule A (the “**Notice**”), shared when necessary. Except for a Pre-Notice Meeting in accordance with Section 2.1, the Surety shall have no obligation under this Bond until it receives a Notice.

- .2 Where the Surety includes two or more companies, the Notice may be delivered to the first listed Surety on behalf of all Sureties. The first listed Surety is hereby authorized to respond to the Notice on behalf of the Sureties, and the Owner is not required to give separate Notice to each Surety and is entitled to correspond with the first listed Surety on behalf of all Sureties.

2.0 PRE-NOTICE MEETING

- .1 The Owner may, at its sole discretion and acting reasonably, request a pre-Notice conference by notifying the Surety and the Contractor in writing that it is considering declaring the Contractor to be in default under the Contract (the "Pre-Notice Meeting"). This notice and request for a Pre-Notice Meeting by the Owner does not constitute a Notice under this Bond, nor under the Contract, nor is it a precondition to the giving of a Notice. Upon receipt of such request the Surety shall propose a face-to-face meeting, a telephone conference call or a meeting by any other form of electronic media between the Contractor, the Owner and the Surety to take place at a time and place mutually convenient for all parties within seven (7) business days (or such longer time as agreed by all parties) after the Surety's receipt of the Owner's request for a Pre-Notice Meeting in accordance with this Section. The Owner, the Contractor and the Surety shall make reasonable efforts to arrange and attend the Pre-Notice Meeting. In the event that the Owner delivers a Notice prior to the Pre-Notice Meeting, then the Pre-Notice is deemed to be retracted.
- .2 The purpose of a Pre-Notice Meeting is to allow the Owner, prior to exercising its other rights under this Bond, to express any concerns about the Contractor's performance pursuant to the Contract and to allow the Contractor to respond to such concerns. The participation of the parties in one or more Pre-Notice Meetings shall be without prejudice to their respective rights and obligations under the Contract, this Bond or applicable law, and neither the participation by any party in any Pre-Notice Meeting, nor any statement or position taken or information provided by any party during any Pre-Notice Meeting, may be relied on by any other party as a waiver or compromise of the rights or obligations of the Owner, the Surety or the Contractor under the Contract, this Bond or applicable law; including, but not limited to the Owner's right to declare the Contractor in default under the Contract and give Notice under this Bond.

3.0 SURETY'S INVESTIGATION AND RESPONSE

- .1 Upon receipt of a Notice from the Owner, the Surety shall promptly initiate an investigation of the Notice (the "**Investigation**"), using its best efforts, to determine if the Conditions Precedent have been satisfied and to determine its liability, if any, under the Bond.
-

- .2 Within the four (4) business days following receipt of the Notice, the Surety shall provide the Owner with an acknowledgement, substantially in the form set out as Schedule B (the “**Acknowledgement**”), identifying the date on which the Notice was received and requesting from the Owner the information and documentation (the “**Information**”) the Surety requires to continue the Investigation and, if necessary, request access to personnel who are knowledgeable about the circumstances of the Notice and to the Contract work site(s) where the work is being performed. Upon receipt of the Surety’s Acknowledgement, the Owner shall promptly, and in accordance with terms of the Contract, provide the Surety with the requested Information and access to personnel and the work site(s) within its possession or control.
- .3 The Surety shall within a reasonable time conduct the Investigation, but in any event no later than twenty (20) business days after receipt by the Surety of a Notice (or such longer period as may be agreed between the Surety and Owner), the Surety shall provide the Owner with its written response to the Notice, substantially in the form set out at Schedule C (the “**Surety’s Position**”), advising either that:
- a) The Surety accepts liability under the Bond and proposes to satisfy its Obligation by performing one of the options set out in Section 6.1; or
 - b) The Surety does not accept liability, providing its specific reasons; or
 - c) The Surety is unable to determine whether or not one or more of the Conditions Precedent has been satisfied and, in the Surety’s sole discretion, the Surety may propose a process for collaborating with the Owner in the advancement of the completion of the work so as to attempt to mitigate the Owner’s cost to complete the Contract.
- .4 The Surety shall also, if requested by the Owner to do so, meet with the Owner to discuss the status of the Investigation within five days following receipt of the request. This meeting may take place via a face-to-face meeting, a telephone conference call or a meeting by any other form of electronic media as may be mutually agreed to by the Owner and Surety.

4.0 NECESSARY INTERIM WORK

- .1 Prior to and during the Investigation, if the Owner must take action which is necessary to:
- d) ensure public or worker safety,
 - e) preserve or protect the work under the Contract from deterioration or damage, or
 - f) comply with applicable law,

The Owner may, acting with due diligence and provided written notice is subsequently provided to the Surety within three (3) Business Days of the commencement of such Necessary Interim Work provided that:

- i. Owner shall allow the Surety and/or its consultant(s) reasonable access to the Contract work site(s) during the course of the Necessary Interim Work for the purpose of monitoring the progress of the Necessary Interim Work;
 - ii. any such Necessary Interim Work shall be undertaken without prejudice to the rights of the Owner, the Contractor or the Surety under the Contract, this Bond or applicable law; and
 - iii. the reasonable costs incurred by the Owner in undertaking such Necessary Interim Work (to the extent they are not deducted in the calculation of the Balance of Contract Price in Section 9.1) shall be reimbursed by the Surety, subject to the Surety's liability being subsequently established and subject to such expenses being covered by this Bond. Any payments made by the Surety in respect of the Necessary Interim Work shall reduce the Bond Amount by the amount of any such payments.
- .2 Nothing in this section is intended to limit the ability of an Owner to take whatever steps are reasonably necessary in the public interest.
- .3 Subject to the foregoing provisions in Section 4.1, the Surety shall not raise the mere fact that the Necessary Interim Work proceeded as a defence to any claim by the Owner hereunder.

5.0 POST-NOTICE CONFERENCE

- .1 Upon receipt of a Notice, the Surety shall propose a face-to-face meeting, telephone conference call or a meeting by any other form of electronic media (a "**Post-Notice Conference**") with the Owner at a mutually convenient time and place within five (5) business days (or such longer period as may be agreed between the Surety and Owner). The Contractor may participate in a Post-Notice Conference at the invitation of the Surety.
- .2 The purpose of the Post-Notice Conference shall be to determine what actions or work, if any, the Owner believes must be done while the Surety is conducting the Investigation in order to effectively mitigate the costs for which the Owner is seeking recovery under this Bond (the "**Mitigation Work**"). Mitigation Work may be performed after Necessary Interim Work and throughout the period of investigation by the Surety.

- .3 Provided the Owner provides reasonable evidence to the Surety that Mitigation Work is necessary during the Investigation and that the anticipated costs are reasonable, the Owner may proceed with the Mitigation Work subject to the following conditions:
 - a) Owner shall pay the reasonable costs of the Mitigation Work;
 - b) Owner shall keep separate records of all amounts related to the Mitigation Work for which it intends to seek recovery under this Bond, including amounts to be set off against the Balance of Contract Price;
 - c) Owner shall allow the Surety and/or its consultant(s) reasonable access to the Contract work site(s) during the course of the Mitigation Work for the purpose of monitoring the progress of the Mitigation Work; and
 - d) the Mitigation Work shall be without prejudice to the rights or obligations of the Owner, the Contractor or the Surety under the Contract, this Bond or applicable law.
- .4 If the Surety objects to any part of the Mitigation Work, including without limitation the Owner's proposed Mitigation Work contractor(s), scope of work, cost or method of work, it shall immediately advise the Owner in writing of its objections and the reasons therefor. The Owner may still proceed with the Mitigation Work and the Surety's objections will be addressed through negotiation with the Owner or at the trial of any action brought pursuant to this Bond.
- .5 The reasonable costs incurred by the Owner in undertaking the Mitigation Work shall be reimbursed by the Surety, subject to the Surety's liability being subsequently established. Any payments made by the Surety in respect of the Mitigation Work shall form part of its Obligation under this Bond and shall reduce the Bond Amount by the amount of any such payments.
- .6 For greater clarity, any Necessary Interim Work being performed by the Owner pursuant to Section 4 may continue to be performed pending an agreement, if any, as to the Mitigation Work.
- .7 Subject to the foregoing provisions in this Section 5, the Surety shall not raise the mere fact that the Mitigation Work proceeded as a defence to any claim by the Owner hereunder.

6.0 SURETY'S OPTIONS

- .1 If the Surety has accepted liability pursuant to this Bond, the Surety shall promptly select and commence one of the following options:
 - a) remedy the default; or
 - b) complete the Contract in accordance with its terms and conditions; or
-

- c) obtain a bid or bids for submission to the Owner for completing the Contract in accordance with its terms and conditions and, upon determination by the Owner and the Surety of the lowest responsible bidder:
 - i. arrange for a contract between such bidder and the Owner; and
 - ii. make available as work progresses (even if there should be a default, or a succession of defaults, under the contract or contracts of completion, arranged under this paragraph) sufficient funds to complete the Contractor's obligations in accordance with the terms and condition of the Contract including any applicable value-added taxes for which the Surety may be liable, less the Balance of Contract Price; or
 - d) pay the Owner the lesser of: (1) the Bond Amount, or (2) without duplication, the Owner's Direct Expenses plus the Owner's proposed cost of completion of the Contract and any applicable value-added taxes for which the Surety may be liable, less the Balance of Contract Price.
- .2 The option selected by the Surety is referred to in this Bond and the Schedules as the "**Surety Option**".

7.0 OWNER'S DIRECT EXPENSES

- .1 Where the Surety is liable under this Bond, then the Surety shall be liable for the following fees and expenses, without duplication (the "**Owner's Direct Expenses**"):
- a) reasonable professional fees incurred by the Owner to complete the Contract which are a direct result of the Contractor's default and which would not have been incurred but for the default of the Contractor;
 - b) reasonable external legal fees incurred by the Owner to complete the Contract, which are a direct result of the Contractor's default and which would not have been incurred but for the default of the Contractor, with the exception of legal fees incurred by the Owner in defending a claim or action by the Contractor, or incurred by the Owner in pursuing an action against the Contractor;
 - c) reasonable, miscellaneous and out-of-pocket expenses incurred by the Owner to complete the Contract which are a direct result of the default of the Contractor and which would not have been incurred but for the default of the Contractor;
 - d) direct costs incurred as a result of an extension of the duration of the supply of services or materials used or reasonably required for use in the performance of the Contract, which are a direct result of the default of the Contractor and which would not have been incurred but for the default of the Contractor;
-

- e) reasonable costs of the Necessary Interim Work;
 - f) reasonable costs of the Mitigation Work; and
 - g) any additional fees and expenses agreed to by the Obligee, the Principal and the Surety.
- .2 For the purpose of Section 7.1(d), the “direct costs” incurred are the reasonable costs of performing the Contract during the extended period of time, including costs related to the additional supply of services or materials (including equipment rentals), insurance and surety bond premiums, and costs resulting from seasonal conditions, that, but for the extension, would not have been incurred.
- .3 Subject to any agreement to the contrary, between the Obligee, the Principal and the Surety, the Surety shall not be liable under this Bond for:
- a) any liquidated damages under the Contract;
 - b) if no liquidated damages are specified in the Contract, any damages caused by delayed performance or non-performance of the Contractor, except as provided in Section 7.1(d); or
 - c) any indirect or consequential damages, including but not limited to costs of financing, extended financing, hedging arrangements, loss of or deferral of profit, productivity or opportunity, or head office overhead costs.
- .4 If the Surety is liable under this Bond then, at the Owner’s option, Owner’s Direct Expenses may be deducted by the Owner from the Balance of the Contract Price as defined hereinafter or will be promptly reimbursed by the Surety subject to the other terms, conditions and limitations of this Bond and will reduce the Bond Amount.

8.0 CONDITIONS PRECEDENT

- .1 The Surety shall have no liability or Obligations under this Bond unless all of the following conditions precedent (the “**Conditions Precedent**”) have been satisfied:
- a) The Contractor is, and is declared by the Owner to be, in default under the Contract;
 - b) The Owner has given such notice to the Contractor of a default of the Contractor, as may be required under the terms of the Contract;
 - c) The Owner has performed the Owner’s obligations under the Contract; and
 - d) The Owner has agreed to pay the Balance of Contract Price to the Surety or as directed by the Surety.
-

9.0 BALANCE OF CONTRACT PRICE

- .1 The term “**Balance of Contract Price**” means the total amount payable by the Owner to the Contractor under the Contract, including any adjustments to the price in accordance with the terms and conditions of the Contract, or other amounts to which the Contractor is entitled, reduced by any amounts deducted by the Owner for the Owner’s Direct Expenses under Section 7.4 and all valid and proper payments made to or on behalf of the Contractor under the Contract.
- .2 The Balance of Contract Price shall be used by the Owner to first mitigate against any potential loss to the Surety under this Bond and then under the Labour & Material Payment Bond, when necessary, and the Owner shall assert all rights and remedies available to the Owner to the Balance of Contract Price and make payment of the Balance of Contract Price as directed by the Surety.

10.0 LIMITATIONS ON THE SURETY’S LIABILITY

- .1 Notwithstanding anything to the contrary contained in this Bond or in the Contract, the Surety shall not be liable for a greater sum than the Bond Amount under any circumstances.
- .2 The Surety’s responsibility to the Owner under this Bond in respect of any Surety Option or Owner’s Direct Expenses shall not be greater than that of the Contractor under the Contract.

11.0 RIGHT OF ACTION

- .1 No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Owner named herein, or the heirs, executors, administrators or successors of the Owner.

12.0 COMMENCEMENT OF ACTION

- .1 It is a condition of this Bond that any suit or action must be commenced before the expiration of two (2) years from the earlier of: (a) the date of substantial performance of the Contract as defined under the *Construction Act* (the “**Act**”); or (b) the date on which a Notice in respect of the default that is the subject of such suit or action is received by the Surety under this Bond.
- .2 The Owner, the Contractor and the Surety agree that any suit or action is to be made to a court of competent jurisdiction in Ontario and agree to submit to the jurisdiction of such court notwithstanding any terms to the contrary in the Contract.

13.0 COMMON LAW RIGHTS

- .1 The rights and obligations of the Owner, the Contractor, and the Surety under this Bond are in addition to their respective rights and obligations at common law and in equity.

14.0 APPLICABLE LAW

- .1 This Bond is governed by the laws of the Province of Ontario.

15.0 NOTICES

- .1 All notices under this Bond shall be delivered by registered mail, facsimile, or electronic mail at the addresses set out below, subject to any change of address in accordance with this Section. Any notice given by facsimile or electronic mail shall be deemed to have been received on the next business day or, if later, on the date actually received if the person to whom the notice was given establishes that he or she did not, acting in good faith, receive the notice until that later date. Any notice given by registered mail shall be deemed to have been received five (5) days after the date on which it was mailed, exclusive of Saturdays and holidays or, if later, on the date actually received if the person to whom the notice was mailed establishes that he or she did not, acting in good faith, receive the notice until that later date. A change of address for the Surety is publicly available on the Financial Services Commission of Ontario website (see: https://www5.fscso.gov.on.ca/Licensing/LicClass/eng/lic_companies_class.aspx). The address for the Owner or the Contractor may be changed by giving notice to the other parties setting out the new address in accordance with this Section.

The Surety:

[Surety corporate name]
[address]
[address]
[fax]
[email]

The Owner:

Kingston & Frontenac Housing Corp.
119 Van Order Drive
Kingston, ON K7M 1B9
F 613-546-9375
svanderschoor@kfhc.ca

The Contractor:

[Contractor corporate name]
[address]
[address]
[fax]
[email]

16.0 HEADINGS FOR REFERENCE ONLY

- .1 The headings and references to them in this Bond are for convenience only, shall not constitute a part of this Bond, and shall not be taken into consideration in the interpretation of this Bond.

IN WITNESS WHEREOF, the Contractor and the Surety have Signed and Sealed this Bond this _____ day of _____ in the year _____.

[Contractor proper name]

Witnessed by:

By: _____

Name: _____

Name of Witness: _____

Title: _____

Address of Witness: _____

I have authority to bind the corporation.

[Surety corporate name]

By: _____

By: _____

Name: _____

Name: _____

Attorney-in-fact: _____

Attorney-in-fact: _____

* IF THERE ARE TWO OR MORE COMPANIES IN PARTNERSHIP OR JOINT VENTURE, JOINTLY AND SEVERALLY BOUND, INSERT THE NAME OF EACH PARTNER OR JOINT VENTURE PARTY, AND INSERT THE WORD "COLLECTIVELY" AFTER THE WORD "HEREINAFTER" IN THE FIRST LINE.

** IF THERE ARE TWO OR MORE SURETY COMPANIES, JOINTLY AND SEVERALLY BOUND, INSERT THE "[Name of the surety company], a corporation created and existing under the laws of [Place of incorporation]," FOR EACH SURETY, FOLLOWED BY "each as a surety and each duly authorized to transact the business of Suretyship in the Province of Ontario and hereinafter collectively called the "Surety"".

*** INSERT THE CROWN, A MUNICIPALITY OR A BROADER PUBLIC SECTOR ORGANIZATION, AS APPLICABLE, OR SUCH OTHER PARTY DEEMED TO BE THE OWNER UNDER THE ACT, AND ENTERING INTO THE PUBLIC CONTRACT WITH THE CONTRACTOR.

This document is FORM 32 PERFORMANCE BOND UNDER SECTION 85.1 OF THE ACT, The "Construction Act of Ontario" as created by the Province of Ontario and provided to Kingston & Frontenac Housing Corporation by Surety Association of Canada May 11, 2018.

END OF SECTION

1.0 GENERAL

1.1 Definitions

- .1 "Owner" means **Kingston & Frontenac Housing Corporation**.

1.2 Instructions

- .1 Before submitting a bid, Bidders shall:
- .1 Examine and read the Bid Documents thoroughly.
 - .2 Examine the site and ascertain the extent and nature of all conditions, limitations, or building regulations affecting the performance of the Work. The site is open and available for review by the Bidders during normal business hours. Coordinate site access through the Director of Assets & Development. All dimensions are to be confirmed by on-site measurement by the Bidder.
 - .3 Confirm all utility services in the vicinity of the Work that will require protection and maintenance during the course of the Work.
 - .4 Consider the effect of regulatory requirements applicable to the Work.
 - .5 Study and correlate Bidder's observations with the Bid Documents.
 - .6 Immediately notify the Owner of all perceived omissions and discovered conflicts, errors and discrepancies in the Bid Documents.
 - .7 Be satisfied that Bidder understands the Bid Documents and is competent to undertake and complete the Work.
- .2 Bid shall include cost of all permits required (excluding the building permit), royalties, freight, government duties and taxes where applicable.
- .3 The Owner will obtain and pay for the Municipal Building Permit when required by the Ontario Building Code.
- .4 In the event of any change in any applicable tax made public after the date of tender closing, the Contract Price shall be adjusted by an amount equal to the increase or decrease in the cost of the Work to the Contractor brought about by the change in such tax.
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- .5 The Owner reserves the right to add or delete items to be performed under this Contract before and after the Contract is awarded without any penalty. Any revisions to the submitted Contract Price as a result of these deletions are to be solely based on the unit prices (or lump sum prices) quoted by the Bidder for those items.
- .6 The Bidder shall not engage in collusion of any sort and, in particular, shall ensure that no person or other legal entity other than the Bidder has an interest in the Bidder's bid. The bidder shall prepare the bid without any knowledge of, comparison of figures with, or arrangement with any other person or firm preparing a bid for the same work.
- .7 It is the Bidder's responsibility to provide all labour, material, equipment and supervision to complete the repairs outlined in these Bid Documents taking into account all site conditions, schedule and noise restrictions, work area restrictions, protection requirements, accessibility restrictions, etc. No extras will be entertained for inconveniences after award of the Contract.
- .8 Bidder shall read the Bid Documents in their entirety prior to bidding in order to be aware of all project requirements.
- .9 If the Bidder is a joint venture, each party to the venture must execute the bid under seal in the manner appropriate to such party.

1.3 Form of Contract

- .1 The Owner will issue an Award Letter which shall be the basis for acceptance of the Bid by the Owner and Award of the Contract to the Contractor. The Award Letter will describe information required by the Owner; namely, Performance Security and Insurance Certificate requirements.
- .2 Upon receipt of the documents outlined in the Award Letter, a Purchase Order or Contract Order, as amended by Section 00 72 13 General Conditions, will be raised by the Owner and issued to the Contractor.

1.4 Employment Equity

- .1 In accordance with the employment equity goals, the Owner encourages bidders to take an active role in supporting and facilitating opportunities for employment equity designated groups.
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1.5 Site

- .1 The Work is to be performed at 2075 Battersea Road, Glenburnie, ON, also known as Country Pines Apartments, owned by Kingston & Frontenac Housing Corporation.

1.6 Owner and Owner's Representative

- .1 The Owner is: Kingston & Frontenac Housing Corporation
119 Van Order Drive
Kingston, ON K7M 1B9
- .2 The Owner's Representative is: Scott VanderSchoor
Director of Assets & Development
613-546-5591 ext. 1560
svanderschoor@kfhc.ca
- .4 Any questions during the Bid Period shall be directed to the office of the Owner.
- .5 Addenda will be issued in all cases where questions result in changes or clarification to BID DOCUMENTS.

1.7 Consultant

- .1 The Consultant is: Solucore Inc.
343 Preston Street, 11th Floor
Ottawa, ON K1S 1N4
 - .2 The Consultant's Representative is: Karl Shaw
kshaw@solucore.com
(613) 569-0555
 - .3 Any questions during the Bid Period shall be directed to the office of the Owner and the Consultant.
 - .4 Addenda will be issued in all cases where questions result in changes or clarification to BID DOCUMENTS.
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1.8 Pre-Bid Closing Site Meeting

- .1 A **NON-MANDATORY** pre-bid closing site inspection and meeting will be held on site at **11:00 a.m. on Friday, July 26, 2024** for the benefit of all Bidders. Bidders should meet at **Country Pines Apartments, 2075 Battersea Road, Glenburnie, ON.**

1.9 Examination of Site

- .1 The onus shall be on the Bidder to investigate the Project Site and inform themselves before bidding of all physical and labour conditions and administrative practices prevailing at the project site.
- .2 The Bidder shall not claim at any time after the submission of their bid any misunderstanding of the terms and conditions of the Contract relating to the site conditions.
- .3 The Bidder shall make allowances as required for the installation of temporary services (heating and ventilators, etc.) into and out of the work area. No extra for this item will be entertained after bids have closed.

1.10 Bid Submission

- .1 Completed Bid Forms together with the required bid security, consents of surety and all supplementary bid submission material shall be delivered to the office of the Owner in a sealed envelope no later than **Thursday, August 15, 2024 at 11:00:00 a.m.** and addressed as follows:

Confidential: **Bid Submission**
Bid For: **Kingston & Frontenac Housing Corporation**
 119 Van Order Drive
 Kingston, ON K7M 1B9

Attention: **Scott VanderSchoor**
 Director of Assets & Development

Tender Number: **PT 24-04**
Tender Description: **Elevator Modernization**

- .2 Bidder's name shall be typed on the reverse side of the envelope.
- .3 Bids will be opened publicly at the office of the Owner.

- .4 Using the Bid Form provided, the bid shall be filled out in ink or typed, signed in longhand by a duly authorized company official, and sealed with the Bidder's corporate seal.
- .5 The Bid Form shall not be altered and all spaces for information will be completed.
- .6 The Owner may, after bid closing time and before Contract award, require any Bidder to submit, in a form prescribed by or acceptable to the Owner, supplementary information about any aspect of the Bidder's bid that, in the Owner's opinion, is necessary for bid evaluation purposes.
- .7 Failure to fulfil the requirements of the Bid Documents will result in disqualification at the sole discretion of the Owner.
- .8 Offers submitted after the specified time will be returned to the bidder unopened.
- .9 Verbal or electronically submitted information will not be accepted as part of the bid documents.
- .10 Bidders must not submit the entire tender specification documents with their bid submission forms.

1.11 Bonding Requirements

- .1 A bid deposit in the form of a certified cheque or bid bond made payable to the Owner in the amount of **\$25,000.00** shall accompany all bids.
- .2 The Bidder shall provide the Owner with performance security as outlined in Section 00 72 13 – General Conditions 1.3, a consent of surety to provide these bonds shall accompany the Bid, if applicable.
- .4 All bonds shall name the Owner as obligee.
- .5 The amount must be as stipulated and valid for a period of sixty (60) days from the date of Bid Closing.
- .6 The cost of bonds is to be included in the bid lump sum prices.

1.12 Sufficiency of Bid

- .1 The submission of a bid shall constitute an incontrovertible representation by the Bidder that:
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- .1 The Bidder has complied with all bid requirements.
- .2 The Bidder is qualified and experienced to perform the Work in accordance with the Bid Documents.
- .3 The bid is based upon performing the Work in accordance with the Bid Documents, without exception.
- .4 The price or prices stated in the bid cover all the Bidder's obligations under the Contract and all matters and things necessary for the performance of the Work in accordance with the Bid Documents.

1.13 Bid Irregularities

- .1 At the discretion of the Owner, bids that are unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations or irregularities of any kind may be accepted or declared informal.
- .2 At the discretion of the Owner, bids that fail to include or to comply with bid security, bonding or insurance requirements may be accepted or declared informal.
- .3 Informal bids may or may not be considered at the sole discretion of the Owner.
- .4 The Owner may accept or waive a minor and inconsequential irregularity, or where practicable to do so, the Owner may, as a condition of bid acceptance, request a Bidder to correct a minor and inconsequential irregularity with no change in bid price.
- .5 The determination of what is, or is not, a minor and inconsequential irregularity, the determination of whether to accept, waive, or require correction of an irregularity, and the final determination of the validity of a bid, shall be at the Owner's sole discretion.
- .6 Discrepancies between words and figures will be resolved in favour of words.

1.14 Bid Withdrawal and Acceptance

- .1 The Owner reserves the right to reject any or all bids as the interests of the Owner may require, without stating reasons therefore, and the lowest or any bid will not necessarily be accepted.
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- .2 A Bidder who has already submitted a bid may submit a further bid at any time up to the official closing time. The last bid that is received shall supersede and invalidate all previously submitted bids by that Bidder for this Contract.
 - .3 A bid may be withdrawn at any time before the bid closing time, provided the request is in the form of a letter received at the office of the Owner before the bid closing time.
 - .4 Withdrawn bids may be resubmitted in accordance with these bidding requirements providing the resubmitted bid is received at the office of the Owner before the bid closing time.
 - .5 A bid may not be withdrawn at or after bid closing time and shall be open to acceptance by the Owner until whichever of the following occurs first:
 - .1 Another Bidder has entered into a Contract with the Owner for performance of the Work.
 - .2 Sixty (60) days after the bid closing time.
 - .6 The sixty (60) day acceptance period shall commence at midnight at the date of bid closing and shall terminate at midnight of the sixtieth (60th) day thereafter. If the sixtieth (60th) day falls on a statutory holiday, such day(s) shall be omitted from the computation.
 - .7 The sixty (60) day acceptance period may be extended at the Owner's request and subject to the Bidder's written agreement to the extension.
 - .8 If a Bidder withdraws his Bid after the Bid closing or if the Bidder does not provide Performance Security, Certificate of Liability Insurance or any other document required; the Owner may retain the Bid Security for its use.
 - .9 In the case of an error in addition, the number shown in 1.1 of the Contract Price of the Section 00 03 00 Bid Form, shall be deemed to be the total bid price regardless of any other amount submitted by the Bidder.
 - .10 Evaluation of Bid

In evaluating the bids, the Owner may consider any criteria, with such consideration to be exercised by the Owner in its sole discretion, including the following:
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- .1 The Contract Price as determined from the base bid or from the alternate bid.
 - .2 The Owner's authorized budget for the Work.
 - .3 The Contract Time.
 - .4 The Bidder's ability to effectively manage and perform the Work and work with other subcontractors.
 - .5 The Bidder's understanding of the Work.
 - .6 The Bidder's Unit Prices, Allowances, and Separate Prices, if applicable.
 - .7 The Bidder's ability to present cost saving opportunities that may be appropriate and acceptable to the Consultant and the Owner.
 - .8 The Bidder's experience, competence and past performance in undertaking work similar to the Work, as well as that of its subcontractors.
 - .9 The Bidder's financial strength and capability.
 - .10 The experience, qualifications and abilities of the Bidder's supervisory personnel.
 - .11 Aesthetic changes resulting from the Bidder's proposed approach to the Work.
 - .12 Other criteria which the Owner, in its sole discretion, may consider appropriate to its evaluation.
- .11 Acceptance of Bid
- .1 The lowest or any bid need not be accepted by the Owner. The Owner reserves the right to accept or reject any or all bids at their sole discretion on any basis at any time without further explanation or to accept any bids considered advantageous to the Owner.
 - .2 The Bidder acknowledges and agrees that the Owner will not be responsible for any costs, expenses, losses, damages or liabilities incurred by the Bidder as a result of or arising out of submitting a bid for the proposed Contract, or due to the Owner's acceptance or non-acceptance of their bid.
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- .3 The Owner may also elect not to proceed with the Project.
- .4 Where all other factors are equal, lowest price shall govern. Where all factors are equal, including price, the Buyer shall select the successful Vendor based on a coin toss, which shall be conducted in the presence of the tied Prospective Vendors should they wish to attend. Award shall then be made to the winner of the coin toss.
- .5 In the event that three or more tied or identical Bids remain following evaluation, the Buyer shall select the successful Vendor based on a lottery draw, which shall be conducted in the presence of the tied Prospective Vendors should they wish to attend. The Award shall then be made to the winner of the lottery.

1.15 Canadian Content

- .1 The Owner reserves the right to give preference to materials, products and equipment of Canadian origin and manufacture.

1.16 Addenda

- .1 Direct all questions in writing to the Owner.
 - .2 Answers to queries are only binding when confirmed by written Addenda.
 - .3 Clarifications requested by Bidders must be submitted in writing to the Owner no less than four (4) days before the date set for receipt of the bids. Any reply will be in the form of an Addendum, a copy of which will be forwarded to known Bidders no less than two (2) days before the date set for receipt of the bids.
 - .4 Addenda may be issued by the Owner during the bid period. Any Addenda will be delivered by the Owner via e-mail or courier to all parties recorded by the Owner as having received the Bid Documents.
 - .5 All Addenda become part of the Bid and Contract Documents and the costs arising from any Addenda are to be included in the bid price.
 - .6 Each Bidder shall ascertain before bid submission that all Addenda issued by the Owner have been received and the Bidder shall indicate in the Bid Form the addendum number(s) of all Addendum received.
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1.17 Construction Schedule

- .1 Refer to schedule requirements outlined in Section 01 10 01 – General Requirements.
- .2 The Contractor will complete the work within the time specified in Section 01 10 01 General Requirements 1.2.1.
- .3 TIME IS OF THE ESSENCE OF THE CONTRACT.

1.18 Qualifications

- .1 Persons of Bidders submitting bids for this Project shall be actively engaged and experienced in the type of work required by these Bid Documents and the Bidder shall provide, on request, a statement of similar work performed by those persons.

END OF SECTION

1.0 GENERAL

1.1 Definitions

- .1 Whenever any of the following words or phrases are used in the contract, they shall have the meanings attributed to them, as follows:
 - .1 "Bid" means any bid, tender or offer submitted by a bidder pursuant to the Instructions to Bidders.
 - .2 "Owner" means **Kingston & Frontenac Housing Corporation**.
 - .3 "Contractor" means the person, firm or corporation identified on the Purchase Order or Contract Order responsible for the work.
 - .4 "Contract Price" means the total price including tax the Owner has agreed to pay the Contractor for the work stipulated in the Contract, and in any event shall not exceed the amount specified in the Purchase Order.
 - .6 "Business Day" means any day except a Saturday, Sunday or statutory holiday.
 - .7 "Building Code" means the Ontario Building Code (latest edition).
 - .8 "As detailed" means as shown on the drawings.
 - .9 "As specified" means as specified herein.
 - .10 "Provide" means supply and install.
 - .11 "Controlled" has the same meaning as in subsection 1 (5) of the Business Corporation Act.

1.2 Precedence of Documents and Interpretation

- .1 Whenever the words "shall" or "will" are used in the Contract, they have the meanings attributed to them in the Interpretation Act of Ontario.
- .2 Whenever words which have well known technical or trade meanings are used in the Contract, they are used in accordance with such recognized meanings.
- .3 The documents forming the Contract are complementary, and what is required by any one shall be as binding as if required by all.

The following documents all form part of the Contract:

- Instructions to Bidders
- Supplementary Conditions, if applicable
- General Conditions
- Bid Form
- Specifications with Appendices and Addenda
- Schedules
- Drawings
- Award Letter
- Purchase Order
- Contract Order

.4 In the event of conflict between documents, the following priorities shall apply:

- Documents of later date shall govern;
- Supplementary Conditions shall govern over General Conditions;
- General Conditions shall govern over Specifications;
- Specifications shall govern over Drawings;
- Figured dimensions shown on the Drawings shall govern even though they may differ from scaled dimensions.
- Drawings of larger scale shall govern over those of smaller scale of the same date.

1.3 Performance Security

.1 The Contractor shall provide performance security in favour of the Owner in order to secure the due and faithful performance of the contract. Such performance security will be as follows:

- .1 A Performance Bond issued by a Surety Company acceptable to the Owner in an amount equal to 50% of the Contract Price including tax.
 - .2 If the Contract Price including tax is less than \$1,000,000, the bond alternative forms of security must be equivalent to **20%** of the Contract Price. In each case, the following alternate forms of security are acceptable:
 - .1 an irrevocable letter of credit, bank draft, or certified cheque; or
 - .2 bearer or negotiable bonds of Dominion of Canada, Province of Ontario, or the Ontario Hydro Electric Power Commission (bonds to be assessed at market not face value); or
 - .3 such other collateral, excluding a letter of guarantee, as may be acceptable to the Owner.
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- .4 For contracts under \$100,000 in value, the alternate forms of security are reduced to 10% of the contract amount.
- .2 If the Contractor fails to meet these requirements within the time stipulated by the award letter, the Owner retains the right to terminate the contract and use the bid security towards damages.
- .3 Where security is in the form of a Performance Bond, the document will be retained by the Owner for a period of two (2) years from the date of substantial completion, after which it will be returned to the Contractor.
- .4 Where alternate security is provided, it will be returned to the Contractor ninety (90) days after completion of the work and correction of all deficiencies.
- .5 Where deficiencies involve seasonal work which must be postponed, sufficient funds will be retained from the contract amount to cover the cost of completing such deficiencies and the Performance Security returned to the Contractor. Where contract funds are not available, the Performance Security may be reduced to the amount required to cover the correction of the deficiencies and the balance of the security returned to the Contractor.

1.4 Insurance

- .1 Contractor must keep in force for the duration of the contract Public Liability and Property Damage Insurance in an amount not less than \$2,000,000. Without limiting the foregoing, such Insurance Coverage shall include Comprehensive General Liability; Contractual Liability; Personal Injury; and Contingent Liability with respect to Sub-Contractors. Submit proof of same in the form of an Insurance Certificate which lists Kingston & Frontenac Housing Corporation as an additional insured but only with respect to the operations of the named insured. Such Insurance Certificate must contain a firm undertaking to give the Owner thirty (30) days notice prior to any cancellation.
- .2 If the Contractor fails to meet the requirements of this item within the time stipulated by the award letter, the Owner retains the right to terminate the contract and use the Bid Security toward damages.

1.5 Workplace Safety & Insurance Board (WSIB)

- .1 Contractor will submit, evidence of compliance with all of the requirements of the Workplace Safety & Insurance Board (WSIB) of Ontario, including payments due thereunder. Such evidence must be furnished to the Owner before final payment is made.

1.6 Assignment of Contract or Proceeds of Contract

- .1 Contractor acknowledges that neither the Contract nor the proceeds thereof may be assigned without the written consent of the Owner.
- .2 Any contract entered into is binding upon the parties, their heirs and successors, and permitted assigns.
- .3 The contract cannot be assigned by the Contractor to any third party without the prior written consent of the Owner, which consent may be unilaterally withheld.

1.7 Taking The Work Out of the Contractors Hands

- .1 The Owner may, without any authorization, take all or part of the work out of the Contractor's hands and may employ such means as it may see fit to complete the work, including the use of Performance Security when applicable, in any of the following cases, namely:
 - .1 where the Contractor has made default or has delayed in commencing or in diligently executing the work or any portion thereof to the satisfaction of the person designated on the Purchase Order/Contract Order, and the Owner has given notice thereof to the Contractor, and has by such notice required the Contractor to put an end to such default or delay, and such default or delay continues for seven (7) days after such notice was communicated.
 - .2 where the Contractor has made default in the completion of the work, or any portion thereof, within the time limit for such completion by the Contract.
 - .3 where the Contractor has become insolvent.
 - .4 where the Contractor has committed an act of bankruptcy.
 - .5 where the Contractor has abandoned the work.
 - .6 where the Contractor has made an assignment of the Contract without the required consent of the Owner; or
 - .7 where the Contractor has otherwise failed to observe or perform any of the provisions of the Contract.
 - .2 Where the work or any portion thereof has been taken out of the Contractor's hands, the Contractor will not be entitled to any further payment, including payments then due and payable but not paid, and the
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obligation of the Owner to make payments shall be at an end, and the Contractor shall be liable upon demand therefore to pay the Owner an amount equal to all loss and damage suffered by reason of the non-completion of the work by the Contractor.

- .3 Where the work or any portion thereof has been taken out of the Contractor's hands and that portion is subsequently completed by the Surety, or by the Owner, the Owner will determine the amount, if any, of the holdback and progress claims of the Contractor unpaid at the time of taking the work out of his hands that in the Owner's opinion is not required for the purposes of the Contract and the Owner may, if it is of the opinion that no financial prejudice will result, pay that amount to the Contractor.
- .4 The taking of the work, or any portion thereof, out of the Contractor's hands does not operate so as to relieve or discharge the Contractor from any obligations under the Contract or imposed upon him by law, except the obligation to complete the physical execution of that portion of work so taken out of his hands.
- .5 The Owner may take the work out of the Contractor's hands if a construction lien has been filed against the project and the Contractor does not take immediate steps to have the lien removed.

1.8 Indemnification Claims

- .1 Contractor will indemnify and save harmless the Owner from all claims relating to labour and materials furnished or supplied in executing the Contract and from and against all claims, demands, losses, costs, damages, actions, suits or proceedings by whomsoever made, brought or prosecuted in any manner based upon, arising out of, related to, occasioned by or attributable to the activities of the Contractor in performing the Contract, or to an infringement or an alleged infringement by the Contractor of a patent of invention.

1.9 Subcontractors

- .1 On request, the Contractor will provide a complete and firm list of names and addresses of the subcontractors whom he will use for the work.
 - .2 Contractor agrees to:
 - .1 require his subcontractors to perform their work in accordance with and subject to the terms and conditions of the Contract Documents, and;
 - .2 be fully responsible to the Owner for acts and omissions of his subcontractors and of persons directly or indirectly employed by
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them as for acts and omissions of persons directly employed by him. The Contractor therefore agrees that he will incorporate all the terms and conditions of the Contract Documents into all subcontract agreements.

- .3 nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the Owner.

1.10 The Residential Tenancy Act

- .1 In accordance with the Residential Tenancy Act, access to premises of residents may only be gained by permission of the resident, or as necessary, upon the landlord giving notice to the resident specifying the time of entry not less than twenty-four (24) hours prior to the time of entry.
- .2 Contractor must schedule his work accordingly and shall advise the Owner not less than seventy-two (72) hours in advance of requested access to any residents' premises.

1.11 Laws, Notices, Permits and Fees

- .1 The laws of the municipality where the project is situated shall apply to the work.
 - .2 Contractor will obtain all permits, licences and certificates and pay all fees required for the performance of the work.
 - .3 The Owner will obtain and pay for **BUILDING PERMITS** when required.
 - .4 Contractor will not be responsible for verifying that the Contract Documents are in compliance with the applicable laws, ordinances, rules, regulations and codes relating to the work. If the Contract Documents are at variance therewith, or changes which require modification to the Contract Documents are made to any of the laws, ordinances, rules, regulations and codes by the authorities having jurisdiction subsequent to the date of tender submission, any resulting change in the cost shall constitute a corresponding change in the Contract Price. Contractor must notify the Owner in writing requesting direction immediately on any such variance or change.
 - .5 If the Contractor fails to notify the Owner in writing and obtain its direction as required above and performs any work knowing it to be contrary to any laws, by-laws, ordinances, rules, regulations, codes and orders of any authority having jurisdiction, he shall be responsible for and shall correct any violations thereof and shall bear all costs, expense and damages attributable to his failure to comply with the provisions of such laws, by-laws, ordinances, rules, regulations, codes and orders.
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1.12 Ontario Labour Conditions and Regulations

- .1 Persons employed on the work must be fully qualified to perform the work required. The Contractor will comply with the provisions of the Government Contracts Hours and Wages Act, the Construction Lien Act, R.S.O. 1990, c. C.30 including all subsequent updates, and the Ontario Health and Safety Act & Regulations for Construction Project.
- .2 The Contractor shall comply with Ontario Regulation 644/88 including all subsequent updates - Workplace Hazardous Materials Information System (WHMIS) wherever and whenever controlled products are used within the scope and duration of this Contract.
- .3 The Contractor will be responsible to ensure that the Ontario Human Rights Code is adhered to by the Contractor and all of their employees and subcontractors.

1.13 Toxic and Hazardous Substances

- .1 Prior to the Contractor commencing the Work, the Owner shall:
 - .1 take all reasonable steps to establish whether or not any toxic or hazardous substances are present at the Place of the Work, and
 - .2 provide the Contractor with written report indicating all toxic or hazardous substances of such findings.
- .2 If the Contractor:
 - .1 encounters toxic or hazardous substances at the Place of the Work, or
 - .2 has reasonable grounds to believe that toxic or hazardous substances are present at the place of the Work, the Contractor shall
 - .3 takes all reasonable steps, including stopping the Work to ensure that no person suffers injury, sickness or death and that no property is injured or destroyed as a result of exposure to the presence of the substances, and
 - .4 immediately reports the circumstance to the Owner in writing.

1.14 Award Letter and Contract Order

- .1 The Owner will issue an Award Letter which shall be acceptance of the Bid and award of the Contract to the Contractor. The Award Letter will describe information required by the Owner namely Performance Security and Insurance requirements.
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- .2 Upon receipt of the above, a Contract Order will be raised.

1.15 Completion Date

- .1 The Contractor will complete the work within the time specified in the Section 01 10 01 General Requirements 1.2.1.
- .2 TIME IS OF THE ESSENCE OF THE CONTRACT.

END OF SECTION

1.0 GENERAL

Except as otherwise specifically stated, all obligations set out herein shall be on account of the Contractor and at the Contractor's sole expense.

1.1 Description of Work

It is the Contractors responsibility to provide all labour, material, equipment and supervision to complete the work outlined in this specification, taking into account all site conditions, noise restriction, work area restrictions, protection requirements, accessibility restrictions, etc. No extras will be entertained for inconveniences after the award of this Contract.

In particular the work includes, but is not necessarily limited to the following:

1. The installation and maintenance of hoarding, dust protection and construction signage around each phase of the work as described herein.
2. The installation and maintenance of ventilation and exhaust systems into and out of the work area as described herein.
3. Repair/replace/restore all areas damaged by construction activity to a like-new condition; specifically, the Contractor shall repair all damage resulting from the Construction to the satisfaction of the Owner.
4. Final cleaning of site and the disposal all waste products and/or debris generated by the construction activity as well as any material present in the work area prior to the commencement of the Work. The areas requiring cleaning shall consist of all areas affected by the Work.

1.2 Work Sequence

- .1 The Work areas will be available as of **8:00 a.m. on Monday, August 19, 2024**. Contractor to confirm start date as per **Appendix B (1.2.1.)**.
- .2 Time and all time limits stated within the Bid submittal and Contract Documents are of the essence of the Contract. Contractor shall perform work expeditiously with adequate forces to complete the Contract Work within the time specified.

1.3 Construction Schedule

- .1 In conjunction with and in a form acceptable to the Owner/Consultant and the Owner, provide within five (5) working days after contract award, a schedule indicating the phasing and procedures required to complete the Work within the submitted timeframe.
- .2 The construction schedule shall reflect completion of all work under the Contract within the specified time and in accordance with these specifications.
- .3 The Contractor shall submit a revised schedule to the Owner/Consultant if, after commencing the Work, the schedule fails to reflect actual progress or the Contractor wishes to make a major change to their approach. The revised construction schedule must be submitted in advance of beginning a revised approach.

1.4 Contractor's Use of Site

- .1 The use of all equipment is to be restricted in accordance with noise by-laws as modified herein. Contractor has access to the work areas with quiet work proceeding around the clock if desired.
 - .2 Work will be carried out between the hours of 7:00 A.M. and 5:00 P.M. Monday through Friday. Work outside of these hours must be approved by the Owner.
 - .3 The Contractor has twenty-four (24) hour access to site; however, the use of the premises will be restricted due to user occupancy.
 - .4 The Contractor shall schedule their operation to minimize the interruption of the normal use of the site and building and to comply with laws, ordinances, rules and regulations relating to Work.
 - .5 The building is to remain open and operational through the Contract. It is the Contractor's responsibility to ensure the building remains operational and that areas outside those designated for closure remain available and safely accessible at all times.
 - .6 Do not unreasonably encumber the Place of Work with materials or equipment. Construction related debris shall not be permitted to accumulate on site where visible to building users. Remove daily if necessary.
 - .7 Do not overload the structure.
-

- .8 Do not close or obstruct or store materials in roadways, sidewalks or passageways without prior approval from the Owner. Do not interfere with safe passage to and from the building and adjacent public sidewalks and roads. Move stored products or equipment that interferes with building operations.
- .9 Take all precautions and provide all required protection to ensure the safety of the general public.
- .10 No storage of materials or equipment is allowed outside the designated work areas without the Owner's approval.
- .11 During transportation of materials or equipment through occupied areas, ensure the public, property, and finishes are protected from damage. All damage caused by the Contractor is to be repaired or rectified at the Contractor's expense.
- .12 Propane powered equipment not permitted within interior areas.
- .13 Arrange all construction access into occupied areas with the Owner to allow the Owner to provide proper notice, where required.
- .14 Maintain work areas and the vicinity clean and tidy to the satisfaction of the Owner and Consultant.
- .15 The Contractor is to obtain and pay for all permits required for completion of the Work, excluding the Building Permit. Do not start construction until the Building Permit has been issued. Provide copies of all other permits to the Owner and Consultant and post on site where required.

1.5 Walkthrough Inspection of Site

- .1 Prior to start of Work, the Contractor and Owner will perform walk-through inspection of the site to determine existing conditions. Owner to pay for elevator service personnel during inspection if applicable.
 - .2 The Contractor is to perform a thorough inspection of the site prior to the start of work and provide a written notice to the Owner that details all damaged property as well as all items that appear to be of poor working order or appearance (i.e. signs, fixtures, dirt, etc.).
 - .3 Upon receiving this notice, the Owner will review the validity of the items listed.
-

- .4 If written notice is not given within five (5) days of commencement of Work, it will be assumed that the Contractor has reviewed the site and has accepted the condition of the property as being free of damage.
- .5 Any damages not listed as part of the written notice of clause 1.5.2 above found after the completion of the work will be the sole responsibility of the Contractor to rectify. These rectifications shall be completed in a timely and satisfactory manner.
- .6 The project will not be considered substantially performed if the cost to correct these outstanding deficiencies is greater than the limits outlined in the Construction Lien Act.

1.6 Temporary Field Offices and Sheds

- .1 Provide or construct work sheds for storage of tools, equipment and materials, which may be otherwise damaged by weather.
- .2 Maintain sheds in a clean and orderly condition to the Owner's satisfaction.
- .3 Provide suitable hardware and locks on doors to sheds to reasonably secure them and keep locked when unsupervised.
- .4 Relocate sheds as required by the progress of the Work. Remove sheds from the Site when directed or when they are no longer required.

1.7 Electrical Power

- .1 Discuss available power with the Owner prior to bidding. Existing 110V power outlets may be used for small hand tools. No other power is available without prior written approval from the Owner. Alternatively, the Contractor may pay for alterations to the electrical system that are required to accommodate the Contractor's equipment. Co-ordinate alterations with the Owner and reinstate the system to the Owner's satisfaction upon completion.
- .2 Power consumption will be paid for by the Owner.

1.8 Water Supply

- .1 The Contractor shall pay for the cost of any connections or alterations that they require to perform the Work. Reinstall the system to the Owner's satisfaction upon completion of the Work.
 - .2 Water consumption will be paid for by the Owner.
-

1.9 Sanitary Facilities

- .1 Existing sanitary services, where available, may be used by the Contractor and his personnel on approval by the Owner. If not available at the specific project, the Contractor must provide this service at his own expense. Locate where agreeable to the Owner.

1.10 Construction Signage

- .1 Provide all required signage necessary to protect the public from the construction and work area, control pedestrian and/or vehicular traffic flow, and to inform users that construction activity is in progress. Signage is to be of a professional quality and design to the Owner's satisfaction.

1.11 Protection of Work and Property

- .1 The Contractor shall take all reasonable precautions necessary to protect the Work and property from damage during performance of the Contract and shall make good any damage to the Work or property caused by the Contractor or any of its Subcontractors.
 - .2 Ensure all property is protected from dust and damage. Interior areas that require access outside of working hours are to be cleaned at the end of each work shift to provide a functional environment for the user.
 - .3 Dust, dirt, construction debris, water and fumes from the Work must be contained so as not to affect areas that are to remain in operation outside of the designated work areas. Resulting damage caused by contamination is the responsibility of the Contractor.
 - .4 The Contractor is responsible for any damage to all property, mechanical equipment, motors, elevator equipment, fixtures, air intakes, etc., resulting from dust contamination from the Work.
 - .5 The Contractor shall completely enclose and ventilate the work areas (fresh air in and exhaust out) without allowing any dust to escape from the work area. The exhaust system must filter the dust out of the air before it is released into the atmosphere. All exhaust systems must be filtered and directed to the outside through ducting, which is to be installed in a manner acceptable to the Owner. Filters are to be cleaned and replaced regularly.
 - .6 Protection shall be provided for all entrance and exit-ways, floors, walls and all standing fixtures, air intakes and equipment rooms.
 - .7 Areas that are to be protected but still require access such as elevator lobbies and stairs will be hoarded using temporary vestibules.
-

Pressurization to be adjusted by Contractor (by providing necessary fans) to prevent dust from entering these areas.

- .8 Contractor shall patch and repair all finishes or painted surfaces damaged during the course of the Work. This includes surfaces damaged by tape, fasteners, or similar materials during hoarding and protection.
- .9 Contractor shall not keep secure doors open for extended periods without the Owner's permission. Any resulting damage caused to building finishes or equipment, and any resulting property losses due to compromised building security, shall be the responsibility of the Contractor.

1.12 Construction Barriers and Enclosures

- .1 All work areas are to be completely enclosed by hoarding and protection and only accessible to the Contractor and Owner.
- .2 Contractor shall supply and construct hoarding, barriers and enclosures as indicated in these specifications, on the drawings, and as directed by the Owner as the construction progresses.
- .3 Restrict access for unauthorized personnel by placing barricades or posting guards around areas of the Work. Unauthorized personnel shall mean the public and anyone not directly concerned with the execution, supervision or inspection.

1.13 Protection of Existing Exposed Facilities/Services

- .1 In general, no essential services such as electric power and domestic hot water supply are to be interrupted for more than one continuous hour, and no longer than three consecutive hours for the heating system during the heating season. In all cases, previous arrangements are to be made and approval obtained from the Owner.
 - .2 The Contractor shall make allowance in the price to cover all costs of temporary removal and replacement and/or relocation of existing electrical wiring and hardware required for completion of the Work.
 - .3 All exposed conduit, fixtures, attached devices, wet sprinkler fire system plumbing, mechanical system components, louvers and ducts are to be protected or Contractor to correct damages at their own expense. Contractor to promptly report any damage to the Owner.
 - .4 Prior to commencing the Work, contact the Owner to locate all protective or alarm systems and sensors. All services shall be protected against damage or interruption. Provide Owner with forty-eight (48) hours
-

minimum advance notice of any necessary interruption. All claims resulting from damage shall be the responsibility of the Contractor.

- .5 The Contractor shall restore landscaping beds in the area of work to their original plantable state after the work is complete. The Owner will arrange to remove and store for replanting, all landscaping including plants, shrubs, trees, etc. impacted by the work.

1.14 The Work, Work in Progress, Property and Persons

- .1 Protect the Work during construction from damage by weather.
 - .2 Protect existing buildings, walls, floors, ceilings, furnishings, equipment, plant materials, lawns, etc. from any damages resulting from performing work on this Contract. Any damages to be repaired without cost to the Owner.
 - .3 Protect new work from damages from any cause. All finished surfaces must be protected so that no marks or scratches mar the finished surfaces prior to acceptance of the work.
 - .4 Protect and be responsible for all new finished and unfinished work which is exposed and susceptible to vandalism or theft.
 - .5 Provide means for protecting occupied areas from water leakage between the removal and reinstallation of roofing systems, moisture barriers, sealants, etc.
 - .6 Take reasonable and required measures, including those required by authorities having jurisdiction, to protect the public and those employed on the Work from bodily harm.
 - .7 Comply with requirements of the Ontario Occupational Health and Safety Act and Regulations for Construction Projects.
 - .8 The Contractor shall be prepared to provide respirators, dust protection, ear protection, hard hats, etc. for those employed by the Owner at the Site.
 - .9 Direct all Subcontractors to protect their own work, existing property, adjacent public and private property and work of other Sections from damage while working.
-

1.15 Location of Existing Utilities

- .1 The contractor shall be responsible for arranging for the location of all existing utilities prior to construction and protection of it during construction.
- .2 Use the electrical service and water service at the site only as directed by the Owner.
- .3 Supply and pay for hoses, extension cords, special wiring or boxes as required.

1.16 Fire Protection

Contractor will:

- .1 Take necessary precautions to eliminate fire hazards and to prevent damage to the Work, building materials, equipment and other property both public and private having to do with the Work. Inspect the Work at least once a week for this purpose.
- .2 Store and locate products and equipment packed in cardboard cartons, wood crates and other combustible containers in orderly and accessible manner. Place approved types of firefighting equipment in vicinity of products packed in this type of crate or carton until permanent fire protection and equipment are available.
- .3 Store no flammable products such as paint or fuel in the parking garage without the Owner's permission in writing.
- .4 Ensure tarpaulins to be fire-resistant.
- .5 Ensure open fires or burning of rubbish or debris are not permitted on Site.

1.17 Overhead Protection

- .1 The Contractor shall erect and maintain pedestrian walkway including roof and side covers to protect the public and property from injury or damage.
 - .2 Minimum extent of overhead protection as designated on drawings.
 - .3 Minimum unobstructed overhead height of 2.4 metres. Minimum unobstructed width of at least 2 metre greater than the combined width or access doors and side lights at entrances. Minimum length shall provide protection for a clear distance of 10 metres horizontally from the nearest area of overhead work.
-

- .4 Overhead protection shall be capable of supporting any load likely to be applied to it, and capable of supporting a load of at least 2.4 kN/m².
- .5 Install and provide adequate temporary lighting within the entire length of the overhead protection. Type, quantity and attachment of light fixtures to be approved by Owner.
- .6 Apply plywood panels to sides vertically flush and butt-jointed. Paint sides of plywood enclosures in colors selected by Owner, with one coat primer to CGSB 1-GP-59M and one coat exterior paint to CGSB 1-59M + Amdt-Aug-84.
- .7 All overhead protection and enclosures to be marked with safety signage.
- .8 All overhead enclosures and protection to be maintained daily, keeping them clean, orderly and graffiti free.
- .9 Remove temporary facilities from site promptly when directed by Owner.

1.18 Site Enclosures

- .1 The Contractor shall erect and maintain site enclosures to completely enclose the Work area, to protect the public and property from injury or damage.
- .2 All enclosures to be marked with safety signage.
- .3 All enclosures and protection to be maintained daily, keeping them clean, orderly and graffiti free.
- .4 Remove temporary facilities from site promptly when directed by Owner.

1.19 Work Site Safety – Contractor is “Prime Contractor”

- .1 The Contractor shall, for the purposes of the Ontario Occupational Health and Safety Act, and for the duration of the Work and Contract:
 - .1 Be designated as “Prime Contractor” pertaining to safety at the “Work site”.
 - .2 Do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with the Act and its regulations, as required, to ensure the health and safety of all persons at the “Work site”.
-

- .2 The Contractor shall direct all subcontractors, workers and any other persons at the "Work site" on safety related matters, to the extent required to fulfill its "Prime Contractor" responsibilities pursuant to the Act.

1.20 Material and Equipment

- .1 Unless otherwise specified, Contractor shall provide, maintain and pay for all materials, tools, machinery, equipment, temporary facilities, controls and conveniences necessary for execution of the Work. All materials shall be new, of merchantable quality, and suitable for the intended purpose.
- .2 Unless otherwise specified, comply with Manufacturer's latest printed instructions for materials and installation methods. Notify the Consultant in writing of any conflict between the Contract Documents and Manufacturer's instructions. Deliver, store and maintain packaged materials with Manufacturer's seals and labels intact.

1.21 Coordination

- .1 Co-operate with the Owner and arrange for all work to be expedited with the minimum of inconvenience to all parties, and report in writing any difficulties encountered in expediting the work.
- .2 The Contractor is responsible for coordination of trades. Lines of demarcation between Contractor's work and trades' work are solely the responsibility of the Contractor. The Owner assumes no responsibility for division of the Work or for any jurisdiction regarding such division.
- .3 Contractor is responsible for coordination with the Owner of all on-site activity as it affects the operation of the building.
- .4 The Contractor is to notify the Building Inspector at least 72 hours in advance for site review where a Building Permit is required to perform the work. No work shall be covered or concealed until the Building Inspector has reviewed it, unless they have informed the Contractor that a site review will not be performed. Such review does not absolve the Contractor from their responsibility to perform the Work in accordance with the Contract Documents.

1.22 Waste Removal and Cleaning

- .1 The Contractor shall maintain the Place of the Work free from unsightly or hazardous accumulations of waste materials and rubbish, and shall perform all required cleaning during the Work. Area of work to be cleaned and swept daily.
- .2 All wastes, which create hazardous conditions, must be removed from the premises daily.
- .3 Disposal of all waste products to be performed in strict accordance with the product Manufacturer's Material Safety Data Sheet, and in accordance with the provincial Waste Control Regulations. Drainage systems shall not be used to dispose of Project wastes and materials.
- .4 Ensure all moisture sensitive equipment (i.e. exposed electrical and mechanical systems, etc.) are removed or protected against moisture infiltration during washing and dust-generating activities.
- .5 Remove all construction-related grease, dust, dirt, stains, labels, fingerprints, over-spray and other foreign materials immediately prior to the Consultant's final review. Return all adjacent areas, equipment, duct work, etc. to the Owner in a dust-free condition. Leave site in a neat and tidy condition at completion of the Work.

1.23 Superintendence and Workmanship

- .1 The Contractor shall provide a full time on-site Superintendent that is responsible for the quality, control, organization, and coordination of all phases of the Work. The Superintendent shall be in attendance at all site meetings.
 - .2 Superintendence shall be satisfactory to the Owner.
 - .3 Superintendence shall be deemed unsatisfactory and changes or additions to superintendence can be demanded by the Owner when control, organization, or coordination of the Work is not adequate, the quality of the Work does not meet the Contract Document requirements, directions given in accordance with the Contract Documents are not followed, or progress is behind schedule.
 - .4 Ensure that only experienced, skilled, and certified tradesmen are employed.
 - .5 Repair, replace or otherwise make good all unacceptable or defective work.
-

1.24 Administration of Project Meetings

- .1 The Contractor and Owner shall preside at meetings.
 - .1 A representative of the Contractor shall record the minutes, include significant proceedings and decisions, and identify "action by" parties.
 - .2 The Contractor shall reproduce and distribute copies of minutes to meeting participants, to affected parties not in attendance, and to the Owner.
- .2 The Contractor shall schedule and administer project meetings.
 - .1 Prepare agenda for meetings.
 - .2 Distribute written notice of each unscheduled meeting three (3) days in advance of meeting date to Owner and relevant Subcontractors.
- .3 The Contractor shall provide physical space and make arrangements for meetings on site.
- .4 Representatives of Contractor, Subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the party each represents.

1.25 Pre-Construction Kick-Off Meeting

- .1 The Contractor will be notified by the Owner as to the time and place of the Pre-Construction Kick-Off Meeting to discuss and resolve administrative procedures and responsibilities.
 - .2 Senior representatives of the Owner, Contractor, major Sub-contractors, and field inspectors will be in attendance.
 - .3 The Owner will review the extent of the work with the Contractor and determine responsibilities, schedules and sequence of activities.
 - .4 The Owner will convene meetings during the term of the contract, as agreed to at the Initial On-Site Meeting, or as necessary.
 - .5 Agenda to include the following:
 - .1 Appointment of official representative of participants in the Work.
 - .2 Schedule of work, progress scheduling.
-

- .3 Shop drawings and schedule of shop drawing submissions.
- .4 Requirements of temporary facilities, site signage, hoarding, dust protection, offices, storage sheds, utilities, fences.
- .5 Delivery schedule of critical equipment.
- .6 Site security.
- .7 Contemplated change orders, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements (GC).
- .8 Take-over procedures, acceptance, warranties.
- .9 Monthly progress claims, administrative procedures, holdbacks (GC).
- .10 Appointment of inspection and testing agencies or firms.
- .11 Insurances, transcript of policies (GC).

1.26 Progress Meeting

- .1 During course of Work the Contractor shall schedule progress meetings every two weeks. Further progress meetings may be scheduled by the Contractor or Owner as required to expedite the Work.
 - .2 The Contractor, major Sub-contractors involved in the Work, and Owner are to be in attendance.
 - .3 The Contractor shall notify parties minimum three (3) days prior to scheduled meetings of any changes to time or place.
 - .4 Agenda to include the following:
 - .1 Review, approval of minutes of previous meeting.
 - .2 Review of Work progress since previous meeting.
 - .3 Field observations, problems which impede construction schedule, conflicts.
 - .4 Progress, schedule, during succeeding work period.
 - .5 Corrective measures and procedures to regain projected schedule.
 - .6 Revisions to construction schedule.
-

- .7 Review of off-site fabrication delivery schedules.
- .8 Review submittal schedules; expedite as required.
- .9 Maintenance of quality standards.
- .10 Pending changes and substitutions, Notices of Proposed Change, Change Orders.
- .11 Review proposed changes for effect on construction schedule and on completion date.
- .12 Other business.

2.0 PRODUCTS

Not applicable

3.0 EXECUTION

Not applicable

END OF SECTION

1.0 GENERAL

1.1 Contract Close-Out Procedure

.1 Contractor's Review

- .1 The Contractor and their Subcontractors shall conduct a review of the work and correct all noted deficiencies.
- .2 The Contractor shall notify the Owner, in writing, of satisfactory completion of the "Contractor's Review" after the correction of all noted deficiencies and shall request an "Owner's Review".

.2 Owner's Review

- .1 The review team shall consist of the Owner and the Contractor. The Owner or their representative shall attend at their option.
- .2 The Owner will prepare a list of deficiencies noted during the "Owner's Review" and will issue the list to the Contractor.
- .3 The Owner will determine the value of work associated with any outstanding deficiencies noted during the Owner's Review. Payment of these retained funds will be withheld until the deficiencies have been rectified to the satisfaction of the Owner.
- .4 The Contractor shall correct all deficiencies indicated on the list in a timely and satisfactory manner.

.3 Final Review

- .1 The Contractor shall request a "Final Review" when the Contractor is satisfied that all deficiencies have been corrected. The request shall be made in writing.
- .2 The "Final Review" shall be conducted by the Owner and the Contractor.

.4 Certificate of Substantial Performance

- .1 The Contractor must submit a request in writing to the Owner for a Certificate of Substantial Performance.
 - .2 The Contractor shall comply with the following during Contract close-out:
-

- .1 The requirements of the Construction Lien Act.
- .2 The requirements of the Workers Compensation Act.
- .3 All other contractual requirements

.5 Total Performance

- .1 Immediately following the issuance of the Certificate of Substantial Performance, the Owner, in consultation with the Contractor, will establish a reasonable date for the “Total Performance of the Work”.
- .2 The Contractor shall supply all guaranties and review certificates in accordance with the requirements of the Contract Documents prior to the date established for “Total Performance of the Work”.

.6 Release of Holdback

- .1 The lien holdback amounts will be released pursuant to the Construction Lien Act.

2.0 PRODUCTS

Not applicable

3.0 EXECUTION

Not applicable

END OF SECTION

1.1 GENERAL

1.2 Payment and Holdbacks

- .1 For the purpose of the Construction Lien Act, R.S.O 1990, c. C.30, the Payment Certifier shall be the Owner, or any son the Owner may designate from time to time as required by the Construction Lien Act, R.S.O. 1990, c. C.30, who shall:
 - .1 Determine and certify substantial performance; and
 - .2 Determine completion.

1.3 Applications for Payment

- .1 The Contractor shall submit a detailed schedule of values for the various components of the work in a form to the satisfaction of the Owner for review within ten (10) days of Award of Contract. This schedule of values shall form the basis by which progress draws are evaluated for completeness of the work performed.
- .2 Applications for payment on account may be made MONTHLY as the work progresses and submitted to the Kingston & Frontenac Housing Corporation.
- .3 Before tax totals, all applicable taxes and totals must be shown separately on all invoices.

1.4 Evidence of Publication

- .1 Upon completion of the work, the Payment Certifier will issue a Certificate of Substantial Performance. Contractor must then provide the Owner with evidence acceptable to it of publication. Holdback will be released on the sixtieth (60th) day from date of publication.

1.5 No Additional Payment for Increased Costs

- .1 The amount payable to the Contractor under the Contract will not be increased or decreased by reason of any increase or decrease in the cost of the work brought about by any increase or decrease in the cost of plant equipment, labour, materials or wage rates.
-

1.6 Deductions for Uncorrected Work

- .1 If in the opinion of the Payment Certifier, it is not expedient to correct defective work, or for work not done in accordance with the Contract Documents, the Owner may deduct from the Contract Price the difference in value between the work as done and that called for by the Contract.

1.7 Warranty/Guaranty Period

- .1 The Contractor shall provide a one (1) year minimum warranty for all Work of the Contract.

1.8 Bonds

- .1 Bonding costs, including the expense of getting bonds executed, shall be borne by the Contractor.
 - .2 Provide the Owner with the following surety bonds within fourteen (14) days after Contract award:
 - .1 A Performance Bond to secure the due and proper performance by the Contractor of their obligations under the Contract in an amount equal to 50% of the Contract Price.
 - .1 The performance bonding period shall commence on the date of contract execution and end two (2) years from date of Substantial Performance.
 - .3 If a lien claim is filed against the title of the lands on which the work or any part thereof is performed in relation to the Contract by an entity other than the Contractor, the Contractor is to provide a Lien Bond to remove the registered lien claims and/ or certificates of action.
 - .4 Bonds are to be in favour of the Owner.
 - .5 Bonds are to name the Owner as Obligee. The Obligors are the Contractor and a Guarantee Surety Company unobjectionable to the Owner and not insolvent, bankrupt, in receivership or winding-up proceedings.
 - .6 Guarantee Surety Company is to be a properly licensed surety company registered and duly authorized to transact the business of suretyship in the Province of Ontario.
-

2.0 PRODUCTS

Not applicable

3.1 EXECUTION

3.2 Remedial Work Under Guaranty/Warranty

- .1 The Contractor shall perform any required warranty repair work for the duration of the warranty period at no extra cost.
- .2 Notice will be provided to the Contractor during the warranty period within thirty (30) days of the discovery of any defect in the Work. The Contractor shall take necessary steps to protect the area against further damage immediately upon receipt of notice and shall take corrective action to make good any damage incurred. The Contractor shall schedule repair work with the Owner and shall make every attempt to make good the defects within three (3) weeks of notice.
- .3 Remedy is to be at no cost to the Owner and is to include all labour, material, equipment, and supervision necessary to make good defective areas of the Work and any damages incurred to obtain access to defective areas.
- .4 The Contractor must reimburse the Owner for any resulting assessment costs incurred to define the extent of the defect and for costs incurred to test the repaired defect to confirm acceptability of repairs.
- .5 The Contractor must reimburse the Owner for all associated costs incurred due to closure of the areas requiring repair under warranty.
- .6 Warranty periods for areas requiring repair are to be extended by the amount of time-lapsed between issuance of notice and completion of remedial work. The warranty/guaranty period will then re-commence upon completion of the remedial work.
- .7 Warranties are not to be deemed to restrict any liability of the Contractor arising out of any applicable law.

END OF SECTION

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WORK PERFORMANCE REFERENCE

NOTE:

- (1) Reference must be from persons or companies for whom you have performed work within the last twenty-four (24) months. Also reference must be for work of the same nature as that called for in the contract.
- (2) If you have performed work for Kingston & Frontenac Housing Corporation within the past forty-eight months please use them as one of your references. Failure to do so may be cause for disqualification.

1. Name: _____
Address: _____
Telephone: _____

2. Name: _____
Address: _____
Telephone: _____

3. BANK REFERENCE

Name of Branch: _____
Address: _____
Telephone: _____

FIRM: _____

ADDRESS: _____

TELEPHONE: _____

Date

Signature

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1.0 INSTRUCTIONS TO BIDDERS

1.1. Invitations

- 1.1.1. Bidders are invited to submit tenders to complete the Work, in accordance with the following Contract Documents and Specifications: 14000, 14100 and 14900.
- 1.1.2. Bidders are required to review and examine the Contract Documents and Specifications and to undertake to comply with all terms and conditions contained therein.
- 1.1.3. Each Bidder shall be deemed to have carefully examined the Contract Documents prior to submitting a tender. Any discrepancies, omissions, errors, departures from standard practice, or other ambiguities must be reported to the Consultant, prior to submission. The Consultant may, in its sole discretion, issue any corrections, instructions, questions or answers by way of written addenda.

1.2. Completion of Work

- 1.2.1. The Bidder agrees to submit the approval drawings in _____ weeks from official award of contract. The Contractor shall commence the site work within _____ weeks from drawing approval. Furthermore, the Contractor agrees to turn over the car in _____ weeks from the date of site commencement. The Contractor shall substantially perform the modernization work as certified by the Consultant, in _____ weeks from the starting date or by no later than _____, 20 _____.

Bank/Address	Car 1
Passenger	_____

2.0 INFORMATION WITH BID

2.1. Flow Chart

- 2.1.1. The Bidder must provide the Owner and Consultant with the Work flow chart. The flow chart should consist of the following:
 - 1. The starting date.
 - 2. The sequence of the installation procedures.
 - 3. The length of time required to complete each of the procedures.
 - 4. The completion date.
-

2.2. Tender Form

2.2.1. The following information must be included in the Tender Form:

1. The model and manufacturer of the controller, its diagnostic capabilities and performance.
2. The model and manufacturer of the door operator, its capabilities and performance.
3. The model and manufacturer of the auxiliary braking device.
4. The model and manufacturer of the roller guides, landing system and fixtures.
5. Brochures, descriptions, and manuals (where applicable) for the major items.
6. Detailed start, progress and completion schedule for the work.

Description	Passenger Elevator
Controllers type	_____
Pump type / Model	_____
Motor type / Model	_____
Hydraulic Valve type/ Model	_____
Solid State Starters type	_____
Rupture Valve type	_____
Fixture type	_____
Fixture model	_____
Door Protective Device type	_____
Positioning System type	_____
Cab Sub-contractor (If required)	_____
The above equipment meets specification 14100	Mandatory field:
	Yes <input type="checkbox"/> or No <input type="checkbox"/>

2.3. Separate Prices

2.3.1. The Bidder submits the following separate prices. If the separate prices are accepted, the amount shall be added to the base bid price. From Section 14000 Article 2.0 subsection(s):

2.1 Maintenance: Interim	\$_____	per month
2.2 Maintenance: Warranty	\$_____	per month
2.3 Maintenance: Five Years	\$_____	per month
2.4 Compressed Scheduled Feb 20 to March 7 2025	\$_____	
2.5 Hydraulic Elevator Oil Coolers	\$_____	
2.6 Cab Renovation	\$_____	
2.7 New Jack	\$_____	

The above prices do not include applicable taxes

2.4. Additional or Hidden Costs

2.4.1. The Owner, through this Tender, has attempted to identify and price all costs associated with the Work. However, any additional or hidden costs which the Bidder may discover must be identified.

2.4.2. Bidders must include as part of the Tender over-time hours for the following, or for any other similar tasks needed to complete the Work:

1. Moving equipment into the building;
2. Activation and testing of the new hall buttons;
3. Testing of the emergency power;
4. Testing the fire recall and service;
5. Disrupting building lobbies;
6. Removing the car from service once the elevator is inspected and turned over;
7. Rewiring of the riser;
8. Installing of hoistway barricades;
9. Final wiring of dispatcher and transferring of the riser;
10. Any grinding, welding, torching, hammer drilling, noxious scent, disruption of lobby, overhead hazard, or similar work;
11. Carry out any noisy work in overtime; and
12. Any work requiring both elevators to be out of service at the same time.

2.5. Other

2.5.1. Escalation of the maintenance prices based on the labour index at the time will be allowed on the anniversary date of the contract. The current labour index is \$ _____ per hour which includes \$ _____ per hour for fringe benefits. The Bidder is to provide evidence of escalation upon request. The escalation shall not exceed 2% per year.

2.5.2. The overtime hourly rate payable by the Owner (if required) as outlined in Section 14000, Article 1.30 is \$ _____ per hour.

2.5.3. Provide the hourly labour rate for the maintenance work that's not included in the maintenance contract:

Worker Classification	Straight Time	Premium Time	Time & Half	Double Time
Helper Rate	\$	½ regular time	1.5 regular time	2 regular time
Mechanic Rate	\$	½ regular time	1.5 regular time	2 regular time
Adjuster Rate	\$	½ regular time	1.5 regular time	2 regular time
Crew Rate	\$	½ regular time	1.5 regular time	2 regular time

End of Section

Section

14000

2075 Battersea Road



Housing
CORPORATION

2075 Battersea Road

General Specifications

Section 14000

Job#: 2470058U002



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1. General

1.1. General requirements

1. Conform to the latest editions of the CAN/CSA B44-2019 and its applicable appendices and requirements as amended from time to time;
2. Conform to the latest requirements of all Technical Standards and Safety Authority requirements and all relevant TSSA Rulings;
3. Conform to 209/01 and all code adoption documents
4. Modernize the following equipment:

Building	Bank	Machine Type	Number of Devices
2075 Battersea Road	1	Elevator	1

5. all above device(s) are located at 2075 Battersea Road Kingston, ON.

1.2. Scope

1. Provide labour, materials, products, equipment, and services necessary for the modernization of the elevators in compliance with all relevant codes and barrier free access under Appendix E of the CAN/CSA B44-2019 Code.

1.3. Definitions of Terms

1. The term "Consultant", as used herein, refers to " Solucore Ottawa and Region Inc.".
2. The term "Owner", as used herein, refers to "Kingston & Frontenac Housing Corporation".
3. The term "Building", "Site" and "Location" refers to 2075 Battersea Road.
4. The term "Address" refers to 2075 Battersea Road Kingston, ON.
5. The term "Bidder", as used herein, refers to any person or company responding to the Specification Documents for the purpose of becoming the successful Contractor.
6. The term "Elevator Contractor" or "Contractor", as used herein, refers to any person or company contracted by the Owner to furnish labour and materials for the execution of the work herein described.
7. The term "Inspecting Authorities", as used herein, refers to authorized agents of governments charged with the responsibility of carrying out periodic inspections and tests on vertical transportation equipment.
8. The term "Provide", as used herein, means to supply and install new equipment.
9. "Non-Proprietary" shall mean that:



1. Any and all control equipment shall be provided with a comprehensive adjustment and troubleshooting manuals readily available on and downloadable from the manufacturer's website;
 2. Any training requests by a licensed elevator company maintaining the Non-Proprietary equipment shall be provided to licensed mechanics on demand within a time frame of no less than four weeks at costs not exceeding \$2,000 per person for a three day training course;
 3. Any and all software replacement shall be provided on demand; and
 4. All technical bulletins and upgrades shall be provided when requested by the company maintaining the equipment. The manufacturer of the Non-Proprietary equipment shall maintain all rights to source codes, confidentiality and intellectual property and where needed a non-disclosure agreement (NDA) can be required provided that the terms of the NDA are reasonably executable and complied with.
10. "Substantial Performance" or "Substantial Completion" shall be the point at which all the new equipment has been installed, inspected and passed by the Inspecting Authorities and the elevators are operating as a group with all required features operational, as per Specification Documents 14100. The Consultant shall certify the Substantial Performance of the work.
11. "Total Performance" per building means when the entire modernization is complete as required by the Specification Documents 14000, 14100 and is so certified by the Consultant. Notwithstanding the requirements of CCDC-2 (where used), and in addition to the foregoing, Total Performance shall be achieved when the elevator performance is in compliance with Section: Performance.
12. Any terms in the Specifications that are not otherwise defined shall have the definitions as given in the latest edition of the Code CAN/CSA B44-2019, including where applicable, the latest supplements, for elevators, dumbwaiters, escalators and moving walks.

1.4. Tender Submittal

1. Tenders shall be submitted on the forms provided; incomplete tender forms or the absence of any required information may be grounds for rejection of tenders.
2. In submitting the signed tender forms, the Contractor is acknowledging:
 1. Familiarity with the scope of work, codes, site conditions, and requirements of the contract documents;
 2. That the equipment provided will work as specified and intended to operate within the existing environment; and
 3. That all required measurements and site condition verifications were performed.



1.5. Organization Chart

1. Provide an organizational chart indicating the names, titles, and contact persons responsible for the modernization and construction project. Also provide an emergency service number.

1.6. Assignment

1. The Contractor shall not assign any work, payment or other obligation of the resulting contract without the written consent of the Owner.

1.7. Filling Out of Bid Form

1. Tenders shall be submitted on the forms provided 2470058U002; incomplete tender forms or the absence of any required information may be grounds for rejection of tenders.
2. In submitting the signed tender forms, the Contractor is acknowledging:
 1. Familiarity with the scope of work, codes, site conditions, and requirements of the contract documents;
 2. That where needed, the Contractor shall be solely responsible for all submissions, variances and application to the governing authority;
 3. That the equipment provided will work as specified and intended to operate within the existing environment; and
 4. That all required measurements and site condition verifications were performed.

1.8. Claims for Interim Payments

1. Payments shall be based on the percentage of materials and labour progress at the site based on the following breakdown:

Contract Break Down	1
After approved drawings	10%
Upon delivery of all material on site	40%
Labour Progress	50%
Total	100%

2. A standard 10% holdback shall apply to the above amount and claims shall be subject to standard lien holdback provisions for the place of work.

1.9. Warranty

1. The elevator Contractor shall warrant the materials and workmanship of the installation and will make good any defects not due to ordinary wear and tear or improper use or carelessness that may develop within one (1) year from the date of Substantial Performance of the project.



1.10. Liability Insurance

1. The Elevator Contractor shall provide, during the period this contract is in force, premises liability, including public liability insurance and property damage insurance in the amount of no less than \$5,000,000 per occurrence, to be covered against any claims for damage to property or for personal injury, including death, which may arise from operation under this contract, whether such operation is by yourself or by any sub contractor or anyone directly or indirectly employed by you. The certificate shall include the Owner, its nominee (if any) and Solucore Inc. as named additional insured and shall protect the Owner, its nominee (if any) and Solucore Inc. in respect of all claims, losses, costs and expenses, including those by the Contractor, as if the Owner, its nominee (if any) and Solucore Inc. were separately insured
2. The liability coverage under such insurance shall be not less than \$5,000,000 for any one person injured or killed, not less than \$3,000,000 for any one accident and not less than \$1,000,000 for property damage except that property damage under automobile coverage may not be less than \$500,000.
3. Upon completion of the contract, have in force a completed operations and products liability insurance, in the amount of \$5,000,000 inclusive, to be covered against any claims for damages to property or for personal injury, including death, which may arise after the premises liability is terminated. This insurance shall remain in force for a minimum period of two years after completion of the contract.
4. Submit certificates of such insurance to the Owner before work begins.
5. The certificates shall state that the insurance will not become ineffective without sufficient written notice to the Owner.
6. The Contractor shall carry a Workmen's Compensation Insurance, which shall include full legal compensation insurance for the protection of himself and his employees
7. Nothing in this Specification shall be construed to mean that the Contractor assumed any liability on account of accidents to persons or property, except those directly due to negligent acts or omissions of the Contractor, his employees, subcontractors, servants or agents.
8. The Contractor shall not be held responsible or liable for any loss or damage due to any cause beyond his control, including, but not limited to, acts of government, strikes, lockouts, fire, explosion, theft, floods, riot, civil commotion, war, malicious mischief or acts of God.

1.11. Hoarding

1. Provide hoarding for the protection of the public and workers at the site. The hoarding design provided to be approved by the Owner.
2. Install temporary barriers between the hoistways as required by code.



3. The hoarding shall cover the entire entranceway and should have signage design and verbiage approved by the Owner. If access is required at multiple floors, install the barrier on these floors.
4. Provide a solid barrier with fire retardant properties. Allow access only through a lockable (36"x72") door

1.12. Removal of equipment

1. The Contractor shall at its own expense remove all unused, replaced equipment and rubbish in the machine room.

1.13. Conduct

1. Supervise your personnel so that they present a neat appearance and their movement in the building is within the requirements of their work.
2. Provide uniforms or other obvious means of identification for personnel.
3. Materials, tools and other equipment shall be stored in areas designated by the Owner where space permits. The Contractor is responsible for equipment storage.
4. Any noisy work shall be performed at times suitable to the Owner and between the hours of 8 AM to 5 PM and shall be within the limits of the local municipal, city and provincial noise by-law.
5. If work is disruptive to the common areas, then approval of the Owner is required and the work should be provided after hours at no additional cost.
6. The rules and regulation shall be adhered to at all times while work is being performed on site. The Contractor shall endeavor to disseminate the information provided within the guideline to all field personnel and shall, at a minimum, meet or exceed the requirements of the Owner under the guidelines.
7. Parking and storage is not the responsibility of the Owner. The Owner may assist where possible in providing suitable space, but shall not be required to do so.
8. Provide the team members with proper tools and communicating equipment to eliminate loud vocal noises and shouting in the hoistway.
9. Comply with Owner's rules and regulation related to: signing, parking, storage, badges, clothing, music, language, use of facilities, etc...
10. The Contractor shall commit to regularly scheduled meetings with the Consultant and Owner to ensure that the modernization project is progressing as per the agreed schedule. The Contractor shall also provide support to the Consultant and disseminate information regarding the Work as requested and required by the Consultant.

1.14. Information with Bid

1. Provide the following information with the bid:



1. The model and manufacturer of the controller, its diagnostic capabilities and performance.
2. The model and manufacturer of the machine, its capabilities and performance.
3. The model and manufacturer of the motor, its capabilities and performance.
4. The model and manufacturer of the hall station, its capabilities and performance.
5. The model and manufacturer of the car station, its capabilities and performance.
6. The model and manufacturer of the door operator, its capabilities and performance.
7. The model and manufacturer of the auxiliary braking device.
8. The model and manufacturer of the roller guides.
9. Brochures, descriptions, and manuals (where applicable) for the major items.
10. Detailed drawings and samples of all of the fixtures and exposed materials.
11. Detailed start, progress and completion schedule for the work.

1.15. Codes and Ordinances

1. Supply equipment and do work in accordance with building codes, by-laws, regulations and requirements of the local, provincial and federal authorities in effect at the time of the execution of the work.
2. Supply equipment and do work in accordance with the latest edition of the CAN/CSA B44-2019 Code (latest edition with relevant Sections and Supplements), and any other code, which may govern the requirements of the installation
3. Comply with the requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials.
4. Prior to submission of the bid and throughout the duration of work, give prompt notification in writing of any regulations or requirements known to be in process that might affect the acceptability of the work.
5. If changes in codes or regulations result in extra costs, those taking effect subsequent to the date of bid submission shall be treated as an extra to the contract.
6. The Rules and Laws of Ontario shall apply to this Tender.

1.16. Certificates of Inspection

1. Obtain and pay for certificates of approval and all other necessary permits and inspections.
2. Prior to Substantial Performance, arrange for and pay for a safety inspection of the equipment by a Government Authority.



3. Submit, prior to Total Performance, the approved safety inspection report.

1.17. Materials and Workmanship

1. Provide all new materials and equipment.
2. Install equipment in a neat, accurate, workmanlike manner.
3. Comply with the directives of the Consultant.

1.18. Trade Marks

1. Do not apply any trademarks to the car stations without the permission of the Owner.

1.19. Fixture Type and Finish

1. Provide fixtures and finishes as requested by Owner and wherever existing ones are currently provided. Also provide 5 complete sets (a set contains two keys) of keys (for each key type) to the Owner during the technical seminar.
2. Where Braille is specified, braille marking must meet the approval of the Owner.

1.20. Machine Guarding

1. Engineer proper machine guarding compliant with Municipal, State, Provincial and Federal Authority Having Jurisdiction (AHJ) over all moving components located in the machine room.
 1. This includes but is not limited to: governors; exposed armatures; brake arms; exposed electrical and high voltage components; rotating sheaves; exposed ropes; exposed rope brake or secondary safety brake; selectors; selector tape; secondary sheaves; secondary space with moving or rotating parts; and any other rotating equipment or space considered a pinching, sheering or electrical hazard.
 2. Provide inspection ports and access to allow visual inspection without dismantling.
 3. Provide components that prevent accidental pinching hazards.
 4. Provide equipment and components that can deflect a 150 lbs falling object.
 5. Electrostatically paint all guarding components light grey.
 6. Paint all moving parts behind the guarding in a bright yellow color.
 7. Submit the design to the Consultant and Owner for review within 14 days from award of contract.
 8. Provide an Engineer's Letter of Certification that the guarding provided at the site meets with all the requirements of the AHJ.

1.21. Electrical Diagrams

1. Supply wiring diagrams and data as required for the execution of the work herein



described including schematics for speed control, dispatching system, and interface printed circuit boards.

2. Incorporate, as part of the schematic diagrams, a reference index (road map) giving the location of electrical components and wiring interconnections for relay coils, relay contracts, field equipment, integrated circuits and other such devices, so that the position on the schematics of any of these items can be readily determined.
3. Supply, prior to the Total Performance inspection, three prints and one reproducible of the wiring and schematic diagrams revised to show changes that have been made.
4. If changes are subsequently made to the wiring or control, supply an additional two sets of marked-up prints of the schematics and field wiring diagrams showing the changes.
5. The wiring diagrams to be the property of the Owner
6. The wiring diagram shall be laminated and properly mounted on a clip board.

1.22. Maintenance Manual

1. Supply to the Owner prior to the Substantial Performance inspection, a maintenance manual as set out in the maintenance section of the specifications
2. The maintenance manual to be the property of the Owner.

1.23. Operation Manual

1. Supply to the Owner prior to the Total Performance inspection, three sets of manuals describing in detail the operation of the equipment including special features, dispatching sequences, and such items as intercom systems and security systems.
2. Set out in step-by-step form the operation for special features such as firefighter's service, independent service, code blue, emergency power service and special emergency service.
3. Supply, as part of the manual, drawings of operating panels (e.g. car panels, central control consoles) with descriptions of the function of switches and indicators.
4. The operation manual to be the property of the Owner.

1.24. Technical Seminar

1. At the time of Total Performance, arrange with the Owner to provide a seminar for the Owner's staff.
2. Include in the seminar a complete review of the documentation, operation of the equipment and demonstration of any special features.
3. Provide to the satisfaction of the Owner training on the use of the building management system when it is supplied.



1.25. Painting

1. Ensure that machine room floors, machine room equipment, hoistways equipment, oxidizing guide rails, top and bottom of car, pit as well as pit equipment are painted.
2. Paint with low odor paint products all visible sections of the pit steel. At a minimum, ensure that pit floors, pit hoistways equipment, rusted rails and pit steel are painted with Owner approved low odour, rust resistant paint.

1.26. Operating Environment

1. Arrange that the equipment be capable of operating normally and within the requirements of the Specifications when the ambient temperature is between 3.5 and 36 degrees Celsius (38 and 97 degrees Fahrenheit).
2. Arrange that the equipment be capable of operating normally and within the requirements of the Specifications when the supply voltage is within minus 10% and plus 10% of the nominal voltage and the frequency is within 5% of the nominal frequency.
3. The Current Total Harmonic Distortion (THD RMS Voltage) not to exceed 5.0% as per the IEEE 519 standards for filtering of SCR motor equipment. Where the drive does not meet this requirement, provide harmonic filters to meet this requirement.
4. Provide all necessary drive adjustments to allow for the operation of the elevators under emergency power condition in the event that the emergency power is not suitable to operate the elevators at nominal or rated speed.

1.27. Acceleration of Work

1. If the work falls behind the schedule submitted to the Owner, take action as necessary to meet the schedule, including, but not limited to, extra personnel and overtime work.
2. Pay any costs associated with this action unless the delay is caused by acts of government, civil commotion, malicious mischief, act of God or any cause beyond the control of the Contractor.

1.28. Test Data Form: Elevator

1. After completion of the work, and prior to Substantial Performance, submit a test data form certifying that the unit is complete and ready for inspection. Where the Owner has provided a specific data sheet (usually in the maintenance contract) populate said data sheet.
2. Arrange that the person responsible for the performance of the work sign this form.
3. Include a check list of the items in the Specifications as well as other performance data such as door times, operating times, starting, running, stopping currents and voltages, and in general, settings of any adjustable devices



4. List on this form safety devices, together with their settings and indicate whether they have been checked and adjusted.

1.29. Inspection of Elevators

1. The Consultant will make an acceptance inspection of each elevator after the government inspection test and before the elevator is put into service for the public. The Contractor shall assist the Consultant in the inspection
2. The Consultant will make an acceptance inspection of the complete elevator group and all group functions. The Contractor shall assist the Consultant in the inspection

1.30. Generic Maintenance

1. Arrange that the equipment can be maintained and adjusted by any competent elevator company without the use of proprietary tools, information or equipment or, if such tools, information or equipment are required, provide them.
2. Do not incorporate any running time, cycle counters or trip counters that would cause the equipment to shut down or alter its operation in any way.
3. Provide evidence that all parts needed to maintain and operate the elevating device(s) are available and can be ordered directly by the competition. Provide an affidavit of such claim as well as all supporting documents (catalogue), phone numbers, etc...
4. Provide all parts including motherboards at a non-exchange basis (i.e. the boards do not have to be exchanged to be secured). All parts shall be made available for purchase and be made available at commercially reasonable and competitive rates.
5. Provide all required laptops, computers and tools (including adjuster dongles and Bluetooth connectors to allow for adjusting and troubleshooting). Where training is required to provide such access, provide the training.
6. Provide training on demand (price for training shall be at commercially reasonable and competitive rates) to include adjusting and troubleshooting as well as setting up drives, landing systems, control features, encoders, floor tables, etc...

1.31. Non-Proprietary

1. All control equipment shall be Non-Proprietary.
2. Proof of non-proprietary shall be given in writing and documentation such as brochures and instruction manuals shall accompany the bid pricing
3. Contractor shall submit to the Owner proof substantiating the claim of Non-Proprietary equipment status.

1.32. Diagnostic

1. Provide Non-Proprietary diagnostics.



2. The control system shall provide comprehensive means of accessing the computer memory for elevator diagnostic purposes.
3. The controller shall have permanent indicators for important elevator statuses as an integral part of the controller.
4. Any tool required to change parameters such door dwell timing, nudging, securing floors etc. shall be included with the control equipment.

1.33. Modernization Flow Chart Schedule

1. Assign one team to perform the modernization.
2. Removal of a team during the modernization is forbidden and prohibited unless approved by the Owner. Failure to keep the teams on site is considered a breach of contract and is subject to financial remedies by the Owner.
3. Provide the Owner and Consultant with a modernization flow chart. The flow chart should consist of the following:
 1. The starting date.
 2. The sequence of the modernization procedures.
 3. The length of time required to complete each of the procedures.
 4. Length of time to complete the first car and each car thereafter.
 5. The completion date.
4. Following the award letter of intent, provide a complete technical brief on the mechanical and electrical requirements as well as heat dissipation and reactions
5. As such, the Owner at its discretion reserves the right to charge a penalty of \$500 per calendar day to an upset fee of \$20,000 upon the failure of the Contractor to meet the schedule submitted with the Bid.
6. Under no circumstances shall either party be liable for any loss, damage or delay due to any cause beyond either party's reasonable control, including but not limited to acts of government, strikes, lockouts, labour disputes, fire, explosion, theft, weather damage, flood, earthquake, riot, civil commotion, war, mischief or act of God.
7. In no event shall the Contractor have any liability for loss of profits, loss of business revenue, failure to realize expected savings, other commercial or other economic loss of any kind whatsoever or for any indirect, special or consequential damages.
8. If there is any delay beyond the Contractor's reasonable control or a delay caused by the Owner, the penalty outlined in the general conditions shall not apply for the delay period.



1.34. Conflict Resolution

1. Any disputes related to this contract shall be resolved utilizing an alternative dispute resolution by a mutually accepted arbitrator to be chosen by the Owner and the Contractor take out period within thirty (30) days after written notice by one of the parties demanding binding arbitration.
2. Neither one of the parties may unreasonably withhold consent to the selection of an arbitrator, and the Owner and the Contractor will share the cost of the arbitrator equally.
3. By mutual agreement, however, the Owner and the Contractor may postpone arbitration until both parties have completed some specified but limited discovery about the dispute. The parties may also agree to replace arbitration with some other form of binding alternate dispute resolution procedure.

1.35. Venue, Jurisdiction, and Jury Waiver

1. The venue of any judicial proceedings shall be in Kingston unless otherwise agreed by the Parties. Each Party irrevocably submits to the exclusive jurisdiction of the federal and provincial/territorial courts located in Kingston unless otherwise agreed by the Parties. Each Party waives to the fullest extent permitted by law, trial by jury of all Disputes arising out of or relating to this Agreement.

1.36. Attorneys' Fees

1. If legal action, including an alternative dispute resolution process, is necessary by either Party to enforce or interpret this Agreement or resolve a Dispute arising hereunder, the prevailing Party shall be entitled to recover reasonable attorneys' fees and costs, including fees on any appeal.

1.37. Waiver

1. No waiver of the terms, provisions, conditions and covenants of this Agreement shall be binding and effective unless the same shall be in writing signed by the Parties. A waiver of any breach of the terms, provisions, conditions and covenants of this Agreement shall be for that one time only and shall not apply to any subsequent breach.

1.38. Governing Law

1. The validity and interpretation of the Specifications, and of each clause and part thereof, shall be governed by the law of the Province/Territory of Ontario.

1.39. Words

1. No change or modification of the Contract shall be valid unless it is in writing and signed by the Contractor and the Owner.



1.40. Additional or Hidden Costs

1. The Owner through this Tender, hopes to identify and price all costs associated with the modernization. Therefore, any additional or hidden costs that the elevator Contractor is aware of must be identified.
2. Include as part of your tender over-time hours for the following or for any other similar tasks needed to complete the modernization:
 1. Testing of the fire recall and service;
 2. Loading and transporting of material to the machine room or floors if such work is disruptive to building common areas or space.

1.41. Workplace Safety and Insurance Board Coverage

1. The Contractor clearly understands and agrees that it is not, nor is anyone hired by it, covered by the Owner under the Workplace Safety and Insurance Act S.O. 1997, c16, Sch.A, as amended and the Contractor shall be responsible for and shall pay all dues and assessments payable under the Workplace Safety and Insurance Act, the Employment Insurance Act, S.C. 1996, c23 or any Act, whether Provincial or Federal, in respect of itself, its employees and operations, and shall furnish the Owner, if requested, with such satisfactory evidence that it has complied with the provisions of any such Acts. If the vendor fails to do so, the Owner shall have the right to withhold payment of such sum or sums of money due to that would be sufficient to cover its default and the Owner shall have the right to pay same.
2. The Owner is not the employer of the Contractor or its personnel under any circumstances whatsoever.

1.42. Occupational Health and Safety

1. The Contractor shall be designated as the Constructor for the purposes of the Occupational Health and Safety Act, R.S.O. 1990, c.0-1, as amended for this project and shall assume all the responsibilities of the Constructor as set out in that Act and its regulations. The foregoing shall apply notwithstanding that the Contractor is referred to as "Contractor" in this and other related document.
2. The Contractor agrees that any damages or fines that may be assessed against the Owner by reason of breach or breaches of the Occupational Health and Safety Act by the Contractor or any of its sub-contractors will entitle the Owner to set-off the damages so assessed against any monies that the Owner may from time to time owe the Contractor under this contract or any other contract whatsoever.

1.43. Non-Compliance

1. This agreement may be terminated without notice by the Owner upon non-performance of Contract terms; however, in doing so, the Owner does not waive its right to rely upon any obligations or commitments agreed to by the Contractor as part of this Contract. Specifically the Contractor will be liable for the Owner's acquisition



costs (including but not limited to administrative costs) exceeding the contract price required to obtain an alternative Contractor.

2. Where there is a question of non-performance, payment in whole or in part may be withheld at the discretion of the Owner. This action shall not prevent the Owner from taking early payment discounts otherwise applicable.

1.44. Security System

1. Assist the security contractor access the elevator car operating station, car top and provide wiring and power to re-install security cameras in the elevators at no additional charge.

1.45. Hoistway Access by Others

1. The contractor shall assist the Owner and its representative by providing access to the elevator hoistway so that installation of the life support systems can be expedited at no additional cost to the Owner.

1.46. Performance

1. The purpose of this modernization is to increase reliability and maintain the elevator performance. Notwithstanding any CCDC-2 requirements or other contractual terms and conditions to the contrary, the elevator modernization shall not be considered complete unless:
 1. The elevator(s) are performing in accordance with the specifications and performance table in 14100;
 2. The elevator(s) has been inspected by the AHJ with no outstanding directives;
 3. The elevator(s) operate a month without a callback or the group call back ratio is below .25 calls per elevator for the month; and
 4. Any work completed by other trades have been completed in full. Provide any AHJ inspections, certificates, permits, verification reports (if required) to the owner/consultant if the other trades were hired and directed by the elevator contractor.
2. The Contractor shall demonstrate compliance with the conditions noted in this section, prior to the date of claimed Substantial Performance.
3. If the Contractor can demonstrate that there were any extraordinary or extenuating circumstances which prevent it from meeting the specifications, the Owner and Consultant may, in their sole and absolute discretion, choose to waive their rights to rely upon the above terms and conditions.

1.47. Singular or Plural

1. Where words are used in the singular, the bidder shall not assume that it refers to one item and it is incumbent on the Bidder to qualify that only the singular was assumed. If



the Bidder does not provide the clarification, it shall be assumed that the price shall include the replacement of the existing equipment.

2. Provide pricing to perform all the work in accordance with industry standards and as approved by the Consultant. Where the cost carried to perform singular work had been assumed, the Contractor shall clarify the cost carried herein the Clarification Document.
 1. Example of singular and plural wording includes but is not limited to:
 - (a) Replacing one hall risers where two risers exist;
 - (b) Replacing one car station when the elevator has two (main and auxiliary) stations;
 - (c) Replacing the front door locks in the elevator shaft but not replacing the rear ones;
 - (d) Providing a car buffer but not the counterweight buffer because the specification referenced a buffer and all buffers;
 - (e) Replacing one compensating chain when the site has two compensating chains;
 - (f) Replacing the front buttons but not the rear buttons;
 - (g) Replacing a door operator or an infrared detector but the elevator has two door operators (front and rear);
 - (h) Other examples would include position indicators, car directional arrows, car and counterweight governors, etc...
 2. The Contractor shall not omit any work unless CLEARLY noted in the qualification document. The Consultant shall assume that singular and plural work will be performed.
 3. The Contractor shall omit the work when the Consultant specifically indicates that the work is not required. An example of such clarifications would include:
 - (a) Replace the front door operator only;
 - (b) Provide a singular riser only;
 - (c) Delete the auxiliary car station;
 - (d) Retain the existing counterweight governor;
 - (e) Etc...

1.48. Notice of Project

1. The Contractor must provide a Notice of Project to the Ministry of Labour (MOL) prior to starting the project as set out in section 6(1) of the Regulation for Construction Projects, O. Reg. 213/91.



2. Provide a copy of the Notice of Project, sign and post it in a conspicuous place at the site for review by the Consultant and a Ministry of Labour inspector.
3. Where applicable, ensure that each subcontractor on the project provides a completed approved registration form.
4. A Contractor who submits a report under subsection 51 (1) of the Act (notice of death or injury) or gives a notice under section 52 or 53 of the Act (notice of accident, etc.) shall also provide, within 14 days after the occurrence, a professional engineer's written opinion stating the cause of the occurrence.
5. Post in a conspicuous place at the project, and keep posted while work is done, a notice setting out:
 1. The Contractor's name, and if the Contractor carries on business in a different name, the business name
 2. The address and telephone number of the Contractor's head office or principle place of business in the province or territory.
 3. The address and phone number of the nearest office of the Ministry.
 4. Within 48 hours of selection for a project, the name, trade and employer of each H&S Rep or JHSC member.
6. Appoint a supervisor for each project with 5 or more workers working at the same time.
7. Establish written Emergency Procedures at a Project and ensure that they are followed in case of an emergency; Post them in a conspicuous place at the project; review them with JHSC or H&S Rep as applicable.
8. Ensure that each worker has ready access to a telephone or other system of two-way communication system on the project in the event of an emergency.
9. Keep records required by this regulation for at least one year after the project completion.
10. The Contractor shall keep the design of a horizontal life line system at the project while the system is in use.
11. The Contractor shall keep the design drawings on the project while the hoisting and rigging system is being used.
12. The Contractor shall give notice to the Ministry office located nearest the project, in person, by telephone, by fax or by electronic means before the first multi-tiered load hoisting operation is started at a project.
13. The Contractor shall make available to an inspector upon request a copy of the certification by the professional engineer who would have verified and certified the results of a test on the structural components of a scaffold and the corresponding rated load of the scaffold.



14. The Contractor shall keep at a project the design drawings and the written statement for a scaffold, while the scaffold is erected, for scaffolds designed by a professional engineer.
15. The Contractor shall keep a copy of the design drawings and the required statement on a project while the suspended scaffold or suspended platform that is subject to the requirements of the section is on the Project
16. The Contractor shall,
 1. Ensure that written measures and procedures for complying with this section are established and implemented, so that workers are adequately protected from electrical shock and burn; and
 2. Make a copy of the written measures and procedures available to every employer on the project.

1.49. Errors and Omissions

1. While the Consultant has used considerable effort to ensure an accurate representation of information in this RFP, the information contained in the RFP is supplied solely as a guideline for Bidders. The information is not guaranteed nor warranted to be accurate by the Consultant, nor is it necessarily comprehensive or exhaustive. Nothing in the RFP is intended to relieve the respondents from forming their own opinions and conclusions with respect to the matters addressed in the RFP.

1.50. Equipment Identification

1. Each elevator in the building shall be assigned with a unique alphabetic, numeric, or alphanumeric identification. The identification assigned shall be a minimum of 50 mm (2 in.) in height and have a contrasting color to its background. The following but not limited to, should be identified in the form of painting, engraving, or securely attached:
 1. Motor
 2. Controller
 3. Disconnecting means
 4. Crosshead (visible from landing)
 5. Car operating panel (min 13 mm / 0.5 in.)
 6. On both door jambs of every elevator entrance at the designated level, alternate level, the level where means necessary for test i.e. access switches (top & bottom).
 7. Buffers or pit channel (visible from the pit access door landing)
 8. All other locations where testing, inspection is performed.



2. Separate Prices

2.1. Maintenance: interim

1. Provide full maintenance of the elevators from the start of the modernization until Substantial Performance of the modernization. Provide 24-hour call back service.
2. Indicate the monthly rate for the interim maintenance; bearing in mind that one of the cars will be out of service.
3. The interim maintenance shall not be subject to adjustment or escalation.
4. Interim maintenance is subject to credit (discount the unit cost) for the unit or units out of service for the duration of the modernization work.

2.2. Maintenance: warranty

1. Provide warranty maintenance for twelve months from the time of Substantial Performance of the last group. Provide 24-hour callback service free of charge.
2. Indicate the monthly rate for the warranty maintenance, bearing in mind that any component failure and other related work not arising from normal wear and tear should be covered under warranty.

2.3. Maintenance: five years all elevators

1. Provide full maintenance for five (5) years for the elevators from the time of the expiration of the warranty.
2. Indicate the monthly rate for the five (5) year maintenance and the price for all units in each building.

2.4. Compressed Scheduled complete project from Thursday Feb 20th 2025 to Friday March 7 2025.

2.5. Hydraulic Elevators Oil Coolers

1. Provide new hydraulic oil coolers to be located outside the elevator machine room. Provide cold Weather Kit where the heat exchanger is installed outside the machine room or where the temperature gets below 10 degrees Celsius.
2. Includes all fittings and hardware needed for the installation of the oil cooler.
3. Provide all the remote piping/hoses to ensure proper and environmentally sound solution.
4. Provide equipment with the following criterion:
 1. Provide oil cooler with the capability of removing 17,500 BTU per hour at temperature change of 4.4 degrees Celsius.
 2. Provide a pump motor that is at least 3/4 HP in size.



- (a) Provide an eight (8) GPM cast iron pump that can operate at 75 PSI of pressure.
- (b) Provide a pump motor that can operate on 115 Volts AC, single phase and draws not more than 8 Amps.
3. Provide a fan motor that is at least 3/4 HP.
 - (a) Provide a fan capable of at least 1900 CFM.
 - (b) Ensure that the fan motor that can operate on 115 Volts AC, single phase power and draws not more than 4 Amps.
4. Provide a removable oil line filter that can remove debris as small as 10 micron.
5. Provide an indicator on the filter to indicate when the filter needs to be changed.
6. Provide an adjustable thermostat control that would allow the unit to activate and shutoff.
7. Limit the noise to no more than 80dBA at three (3) feet.

2.6. Cab Renovation

1. Only use materials and components reviewed by the Consultant and Owner. Provide samples, drawings or rendering for the Owner to review.
2. Review clearances, dimensions and materials and ensure compliance with local, federal and the latest edition of the CAN/CSA B44 requirements and regulations
3. Review material and design and ensure that it meets Barrier-Free requirements;
4. Where conflicts are identified between regulatory compliance and proposed design, identify the conflict and bring to the attention of the Consultant.
5. Flooring
 1. Provide new single sheet safety flooring (Altro Stronghold 30)
 - (a) Replace subflooring where needed
 - (b) Provide a minimum thickness of 3 mm
 - (c) Submit samples for Owner approval
6. Replace the car sills on all car doors. Include for the rear door as well where provided. Provide an aluminum sill suitable for the existing doors.
7. Ceiling
 1. Provide equally sized stainless steel panels with brushed #4 finishes:
 - (a) six high powered (7 Watts) LED light fixtures with natural light rendition, supported with black anodized aluminum frames.
 - (b) Provide high lumen output of no less than 150 lux at any point in the elevator cab.
 - (c) Provide a removable section at escape hatch.
 2. Provide new two speed fan and stainless steel vent.



3. Assist where requested to do so in the installation of a security camera. Provide power and coaxial cable to the desired location.
8. Side Walls
 1. Provide three (3) equally sized sections, properly distributed panels with plastic laminate from the handrail to drop ceiling separated by properly distributed and sized with vandal proof aluminum extrusions.
 2. Provide one (1) section, properly distributed with plastic laminate from the handrail to the kick plate separated by with vandal proof aluminum extrusions.
 3. Provide stainless steel corner reveals and kick-plates.
9. Cab Doors
 1. Clad the doors in 18ga. stainless steel.
 2. Provide new car door astragals.
10. Front an Rear Returns
 1. Clad the strike and post jambs as well as the header in stainless steel. Allow for the installation of car direction indicators.
11. Handrail
 1. Provide a single 2" wide stainless steel handrail located on all three sides of the cab wall meeting the latest barrier free requirement
 2. Provide cornered or turned in handrails in the corner and front side of the cab.
 3. Mount handrail on #4 stainless steel reveals.
12. Extras
 1. Provide one (1) complete set of protective pads, covering all four exposed wall surfaces, but leave access to the car buttons.
 2. Provide pad hooks on car.

2.7. New Jacks – (Cylinder and Plunger)

1. REMOVAL
 1. Remove the concrete mound in the pit.
 2. Remove the existing jacks in pieces.
 3. Ensure that little to no oil escape to the soil.
 4. Where applicable, secure the sump pump and hole to prevent oil escaping into the environment.
2. The Contractor shall be responsible for the removal of oil, but the Owner shall be responsible for providing a “Disposal Generator Number” (DGN). The Contractor shall assist the Owner where needed with the application of the DGN. This can include filling out of forms. Contractor is responsible for removal of all spoils. Any water drilling, suction or vacuuming shall be included in the base bid and shall NOT be considered as separate cost or extra to the base bid.
3. INSTALLATION



1. Install the jack unit.
 - (a) Set the jack units assembly so that it is plumb and true.
 - (b) Set jack units cylinder assembly plumb, centered accurately and shimmed to proper elevation, using centering lugs to prevent dislocation during filling.
 - (c) Backfill the casing with sand or pebbles, eliminating voids.
 - (d) Water Proofing Jack
 - (i) Supply a jack with a ring to interlock into the pit concrete and create a water seal;
 - (ii) Ensure that the ring is of the appropriate thickness and depth for the underground conditions;
 - (iii) Ensure that the cylinder is properly seated and plumb first;
 - (iv) Supply filler material to ensure that once the concrete is poured it will mostly be poured at the top of the cylinder;
 - (v) Pour concrete and seal the area around the cylinder ring; and
 - (vi) Properly interlock the new concrete with the existing pit floor using epoxy or other approved material to ensure that the cold pour does not allow water to penetrate the pit floor as well.

4. JACK SPECIFICATION

1. Provide new cylinder and plunger.
2. The cylinder shall be constructed of steel pipe of sufficient thickness and suitable for the operating pressure.
3. The top of the cylinder shall be equipped with a cylinder head with a drip ring to collect any oil seepage as well as an internal guide ring and self-adjusting packing.
4. Provide a low pressure return line to the tank to minimize the use of oil collection devices in the pit.
5. The plunger shall be constructed of seamless selected steel tubing or pipe of proper diameter machined true and smooth with a fine polished finish.
6. The plunger shall be provided with a stop ring electrically welded to it to prevent the plunger from leaving the cylinder.
7. Means shall be provided to bleed air from the jack unit.
8. Ensure that the plunger is free from knocking noise, vibrations or binding.
9. The plunger head shall be isolated from the platen to prevent electrolytic corrosion.
10. Where more oil is needed or bigger Victaulic pipe is required, include in your cost the replacement of such components.
11. The cylinder should be designed to minimize deflection and to operate without the use of followers.

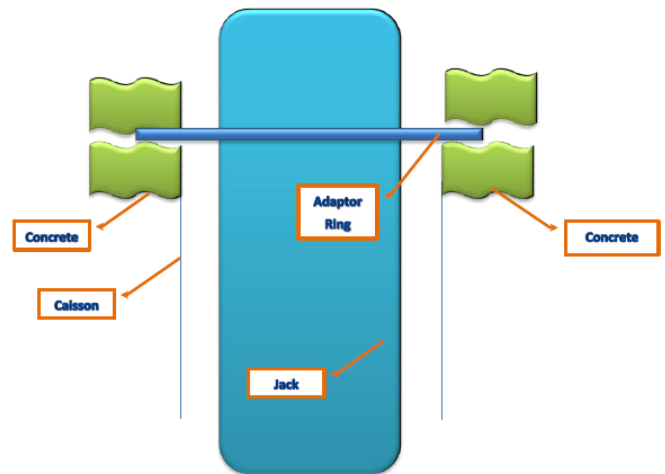
5. PVC INSTALLATION



1. A sealed PVC cylinder protection system or approved equal shall be installed.
 2. The system should be sealed as to prevent water from entering the system.
 3. The system shall provide a means to monitor the space between the PVC sleeve and cylinder wall and evacuate unwanted fluids, so as to prevent such fluids from remaining in contact with the cylinder.
6. RIDE QUALITY
1. The Contractor shall measure the existing ride quality. These measurements will be compared to the ride quality after the work is performed.
 2. In the event that the ride quality deteriorated by more than 1 mgs peak-peak with the 1999 ISO filter applied, the Contractor is required to correct the ride.
7. SYSTEM PRESSURE
1. Do not reduce the jack size.
 2. Retain or reduce the current full load Relief and bypass pressures.
 3. Where system pressure increases are unavoidable due to changes in piping, do not exceed the current limits by more than 5%.
 4. Provide all required engineering submission to the governing authority.
8. GATE VALVE
1. Provide a gate valve connected directly to the cylinder or rupture valve via a grooved connection.
 2. Provide a second gate valve located on between the cylinder and valve.
 3. Provide a gate valve equipped with ball type valve and orange handle to clearly identify it. Provide a lockable valve that can be secured with a lock-out/tag-out system.
9. WATER PROOFING JACK
10. Supply a jack with a ring to interlock into the pit concrete and create a water seal;



1. Ensure that the ring is of the appropriate thickness and depth for the underground conditions;
2. Ensure that the cylinder is properly seated and plumb first;



3. Supply filler material to ensure that once the concrete is poured it will mostly be poured at the top of the cylinder
4. Pour concrete and seal the area around the cylinder ring; and
5. Properly interlock the new concrete with the existing pit floor using epoxy or other approved material to ensure that the cold pour does not allow water to penetrate the pit floor as well.

Section 14100

2075 Battersea Road



Kingston & Frontenac
Housing
CORPORATION

2075 Battersea Road

Modernization Specifications

Section 14100

Job# 2470058U002

Elevator



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1. General

1.1. General Requirements

- 1. Conform to General Specifications 14000 and applicable appendices.

1.2. Type: Hydraulic

- 1. Provide modernization equipment for 1 elevator(s) at 2075 Battersea Road Kingston, ON.

1.3. Number of Elevators

- 1. Modernize 1 elevator(s) at 2075 Battersea Road Kingston, ON.

1.4. Speed

- 1. Maintain the existing speed of 140 fpm.

1.5. Capacity

- 1. Retain the existing capacity of 4000 lbs.

1.6. Openings and Stops

- 1. Retain existing stops outlined in the table below:

Car	Front Door Openings	Total Front Openings	Rear Door Openings	Total Rear Openings
1	1-3	3	1R	1

1.1. Related Work by Others

- 1. All work by others shall conform to governing codes. Any other work required to complete the installation or satisfy the regulatory authorities and not specifically listed herein shall be the responsibility of the elevator contractor. To complete the elevator modernization, the following items must be performed or installed by trades other than the elevator contractor:
 - 1. Provide suitable machine room ventilation to maintain the machine room temperature between 10°C(50°F) and 30°C(90°F).
 - 2. Provide where required new phone lines connected by a reputable telephone service provider.
 - 3. Provide a new internet connection point connected by a reputable telephone service provider for the in-car video requirements.



4. Provide where required machine room smoke detector wiring to the elevator controllers.
 - (a) Provide addressable smoke detectors to each floor in the elevator landings;
OR
 - (b) Provide a second conventional zone to each floor and connect the new smoke detector to the second zone (pull stations and heat detectors on one zone, smoke detectors on the other zone)
 - (c) The use of two wire detectors with relay bases is not an acceptable solution if connected to floor, as the relay will not function if a contact device is operated on the same circuit.
 - (d) If spare capacity is available, modify floor zones so manual stations are on separate zones.
5. Provide wiring and contacts to the elevator controllers for the operation of the special emergency service and emergency power as required by code.
6. Provide where required, new machine room door with frame capable of withstanding 1.5 hour fire rating.

1.2. Related Work by Others coordinated by the Elevator Contractor

1. All work by others shall conform to governing codes. To complete the elevator modernization, the following items must be performed or installed by trades hired, paid, and directed by the Contractor unless otherwise stated.
2. Items not included specifically in section 1.7 shall be covered under the scope of the elevator contractor. These items include but are not limited to:
 1. Provide new fused disconnect switch or circuit breaker for each elevator, with feeder branch wiring to each controller. The switches and size of wires to conform to the Canadian Electrical Code. The disconnect switches are to be mounted in a code approved location.
 2. Provide two separate branches/feeds of 110 volt, AC, 15 Amp fused, single-phase power supply with a fused disconnect switch for each elevator, with feeder wiring to each controller for car lights. Location to be in a code approved location.
 3. Provide where required a separate single-phase power supply of the same voltage as each elevator supply, with 15 Amp fused disconnect switch. Wiring to go to the first car of the group.
 4. Provide new code required machine room (200 lx) and pit (100 lx) lighting, and GFCI convenience outlets in the machine room and elevator pits. Light switches are to be mounted in a code approved location.
 5. Perform any cutting, patching and painting for the installation of new hall buttons, hall lanterns and main floor monitor panel.
 6. Provide where required proper grounding and ground fault interrupt receptacle in the pit and machine room.



7. Provide where needed dedicated ground wire to the three phase main disconnects.

1.3. Cash Allowances

1. Carry the following cash allowances
 - (a) Fire signal upgrades \$30,000
 - (b) HVAC upgrades \$11,000
2. Elevator contract will be assigned these upgrades to manage under the elevator modernization projects Contractor to carry all overhead, supervisor, coordination, profit as part of the modernization project.

1.4. Cutting and Patching

1. Any cutting, patching, painting or other restorative work required to accommodate the installation of the new equipment not specifically listed herein as work by others, shall be the responsibility of the Elevator Contractor.
2. Any cutting, patching, painting or other restorative work required to accommodate the installation of the new elevator equipment including the cylinder installation where applicable shall be the responsibility of the Contractor.
3. Prior to proceeding with any such work the Contractor shall obtain approval from the Owner.

1.5. Changes in Material and Work

1. Any change or substitution in the approved equipment must have prior written approval from the Owner.
2. Any changes in the approved work must have prior written approval from the Owner.

1.6. Description of Existing Equipment

NOTE: Consultant and the Owner DO NOT WARRANT that the following information is accurate or correctly reflected the status of the equipment.

2075 Battersea Road: 1

Attributes	1
Installation Number	68165
OEM Manufacturer	Dover
Current Contractor	TKE
Year Installed	1988
Control Manufacturer	Dover
Control Type	DMC-I
Elevator Classification	Passenger
Capacity (lbs)	4000
Contract Speed (fpm)	140
Motor Manufacturer	Dover



Motor Type	590AJ1
Machine Type	Submerged
Machine Manufacturer	Dover
Machine Model	EP-170-40
Drive Manufacturer	Dover
Drive Type	Pump
Drive Configuration	In-ground
Drive Method	Direct acting double bulkhead
Valve Type	Dover I-2
Cylinder Protection	PVC/HDPE
Secondary Door	Same as front door
Entrance Type	2SSO
Door Operator Type	Dover HD-85
Door Locks	Dover
Entrance Protection	SE
Arrival Signal	Car lantern
Secondary Entrance Type	2SSO
Secondary Door Operator Type	Dover HD-85
Secondary Door Locks	Dover
Secondary Entrance Protection	SE
Secondary Arrival Signal	Car lantern
Car Operating Panels	Main
Floors Served	1-3
Secondary Floors Served	1R
Fire Service	Not provided
Communication	Hands-free

1.7. Remote Conduit and Wiring

1. Any remote conduit and wiring interconnecting the elevator controllers and the lobby panel, elevator remote monitoring or an elevator management control system, or any other equipment provided under these specifications, and not specifically listed herein as being by others, shall be the responsibility of the elevator contractor.
2. Portions of this work may be sub-contracted with approval of the Owner. The Contractor is required to submit to the Owner the name of the Sub-contractor.

2. Modernization Elevator Product

2.1. New Equipment

1. Reservoir tank, Motors and Pump
2. Hydraulic Elevators Oil Coolers





3. Hydraulic Valve
4. Controller
5. Emergency Battery Lowering
6. Auxiliary Disconnect Micro Switch
7. MINI PI
8. Victaulic Piping & Coupling
9. Hydraulic pipeline identification, where required
10. Hydraulic Oil
11. Rupture Valve
12. Gate Valve
13. Hall Door Equipment
14. Traveling Cables
15. Wiring
16. Buffers, Pit Steel and Switches
17. Hall Lanterns
18. Position indicators
19. Hall Stations
20. Lobby Stations
21. CACF Room Panel
22. New Jack (Cylinder and Plunger)
23. Car Guides
24. Door Operators
25. Door Protective Device
26. Car Gate Switches
27. Car Door Clutch
28. Car Stations
29. Car Restrictor
30. Floor Passing Tone
31. Crosshead Data Plate
32. Car Top Solid State Reader Head
33. Cab Renovation
34. Car Door Equipment
35. Car Top Inspection Station

2.2. Refurbished Equipment



1. Car Slings

3. Machine Room

3.1. Reservoir tank, Motors and Pump

1. Replace gate valves.
2. Provide a self-contained unit consisting of the following items:
 1. Oil reservoir with tank cover capable of supporting 200 lbs and controller compartment with cover.
 2. An oil hydraulic pump.
 3. An electric motor.
 4. Oil control unit to comply with Section 3.2.
 5. Pump: Positive displacement type pump specifically manufactured for oil-hydraulic elevator service
 - (a) Pump shall be designed for steady discharge with minimum pulsation to give smooth and quiet operation.
 - (b) Output of pump shall not vary more than 10 percent between no load and full load on the elevator car.
 3. The drive shall be by direct coupling with the pump and motor submerged in the oil reservoir. Drive type shall be determined based primarily on the load on the car, travel, and speed.
 4. The motor shall be specifically designed for a heavy duty oil-hydraulic elevator service. Duty rating shall comply with specified speeds and loads.
 5. Power controller shall contain electrical contactors, electro-mechanical switches and thermal overload relays. Mount components in a NEMA 1 enclosure.
 6. Logic control system shall be microprocessor based and protected from environmental extremes and excessive vibrations.
 7. Provide a solid state soft starting device to comply with section 3.3.
 8. Provide new hydraulic oil.

3.2. Hydraulic Valve

1. Provide a new EECO /Maxton valve or equivalent to replace the existing one
2. Install new schedule 40 piping to accommodate for the installation of the new valve.
3. Provide a bi-direction two speed valve.
4. A control section including control solenoids shall direct the main valve and control:
 1. Up and down starting.
 2. Acceleration.



3. Transition from full speed to levelling speed.
4. Up and down stops.
5. Pressure relief.
6. Manual lowering.
5. All of these functions shall be fully adjustable for maximum smoothness and to meet contract conditions.
6. Relief valve shall be externally adjustable and be capable of bypassing the total oil flow without increasing back pressure more than 10 percent above that required to barely open the valve.
7. Provide a valve with pressure compensation for constant down speed control. This modification of the down piston assembly delivers constant Down Speed Control between no load and full load conditions.
8. Provide a certified valve that can operate reliably between 90 psi minimum and 800 psi maximum.
9. Provide a certified valve that can operate reliably between a temperature range of 800 F (270 C) minimum, 1500 F (650 C) maximum.

3.3. Controllers

1. Provide non-proprietary microprocessor controller designed to give the required operation as herein specified.
2. Provide a type 2 rated enclosure, adequately sized controller housing with appropriate venting and dust control vents.
3. Provide controller with the correct size wiring and relays.
4. Provide controller that will allow for the new Building Management System to interface with all elevating devices located in the building where required.
5. Provide a controller with a security system capable of locking out any floor or combination of floors by preventing the users from registering hall or car calls.
6. Ensure that the controller's diagnostics and parameter programming can be accessed at all times.
7. Install wiring on the controllers, whether control or field wiring, in a neat workmanlike manner and make connections to studs and terminals by means of solder or solderless lugs, or similar connecting devices.
8. Mark all components such as relays, contactors, fuses, printed circuit boards etc. clearly and permanently with designations as shown on the schematics.
9. Provide non-proprietary diagnostics.
10. The control system shall provide comprehensive means of accessing the computer memory for elevator diagnostic purposes.
11. The controllers shall have permanent indicators for important elevator statuses as an integral part of the controller.
12. The controllers shall have the capability to provide Remote Elevator Monitoring.



13. The controllers shall have the hardware to connect, interrupt, transfer power, and to protect the motor against overloads.
14. Provide means for the elevator system to restart and resume proper operation automatically in the event of a power failure.
15. The controllers shall be designed to accept as a minimum the re-programming of the following:
 1. Door Open Times.
 2. Door Close Times.
 3. Door Dwell Times.
 4. Hall Advance Time.
 5. Nudging time.
 6. Acceleration.
 7. Deceleration.
 8. Jerk Rates.
 9. Floor Parking and Options.
 10. Recall Levels.
16. The controller shall be provided with on-board diagnostics and status LEDs to aid in troubleshooting, adjusting and maintenance.
17. Permanent status LEDs shall be provided to indicate the following:
 1. Safety Circuit.
 2. Door Locks.
 3. Independent Service.
 4. Normal Service.
 5. Inspection Operation.
 6. Emergency Power.
 7. Out of Service.
 8. Drive Failure.
18. Provide on-board diagnostics to include an event monitor and fault log.
19. Do not include a system disabling maintenance timer or counter of any sort.

3.4. Emergency Battery Lowering

1. Provide a new and independent auxiliary power supply.
2. Provide proper NEMA rated enclosure independent of the controller.
3. Provide all the wiring and connections to the controller from the power supply.
4. Fasten the power supply to the new controller cabinet so that it is not easily removed.



5. Energize a relay output when the battery current exceeds a threshold during the emergency operation. The elevator controller can utilize this signal and change the direction of travel to reduce battery current. This leads to saving of energy, and more rescue operations per charge.
6. Provide a device with the following capabilities:
 1. Automatic charger with battery centric circuits that prevents overcharging.
 2. LED status display with load and battery bar graphs.
 3. Automatic voltage regulation.
 4. Intelligent battery management.
 5. Load Meter.
 6. Replace Battery Indicator.
 7. Self-testing.
 8. Sine-wave output.
 9. Site wiring fault indicator.
 10. User replaceable batteries.
 11. Wide input voltage range.
 12. Input voltage 120VAC.
 13. Output voltage 120VAC.
 14. LED status light for: "replace battery" and "overload indicators".
 15. Provide sufficient power to operate the elevator from the top landing to the lowest landing with intermediate stops.
 16. Provide sufficient power to the door operator, valve, emergency lighting, cab lighting, alarm buttons, door open button, safety circuits, down direction circuit and any other devices required for the proper operation of the elevator during power failure.
 17. Provide an additional auxiliary reserve power for no less than 10 minutes.

3.5. Auxiliary Disconnect Micro Switch

1. The micro switch should enable the auxiliary power to engage if the disconnect arm is in the "on" position but the power is not available.
2. The auxiliary switch should prevent the emergency power from engaging if the disconnect arm is in "off" position.

3.6. Solid State Starters

1. Provide solid state motor control starter with the following requirement:
 1. All digital control using a processor.
 2. Adjustable current limit starting Inside the Delta Electronic Motor.
 3. Overload Projection.



4. Capable of interfacing with 6 or 12 lead wye delta motors.
5. Detection capability of miswired motors.
6. Onboard 16 character LCD display for parameterization and diagnostic troubleshooting.
7. UL/CSA/CE certification.
8. Minimum capacity of (80) Starts/hour.

3.7. Victaulic Piping and Coupling

1. Replace the shutoff valve, Victaulic couplings and joints in the machine room and pit.
2. Replace the hydraulic pipes with Schedule 40 piping.
 1. Provide grooved piping suitable for hydraulic Victaulic fitting.
 2. Provide new pipes from the machine room to the pit.
 3. Ensure that all piping is above ground or is protected in PVC piping if buried.

3.8. Hydraulic pipeline identification, where required

1. Provide marking to accessible piping located outside the elevator machine room or hoistway labelled "Elevator Hydraulic Line" in letters that are at least 0.75 inches high in a contrasting color.
2. The marking shall be visible after installation and applied at intervals not greater than 9 feet.
3. Provide means to prevent the marking from peeling or fading away.
4. Heat resisting paint stencilled on the piping is the preferred method.

3.9. Hydraulic Oil

1. Clean the reservoir tank with rags. Do not add chemicals or additives to the tank.
2. Provide new hydraulic oil in the reservoir tank and also provide a marker to indicate the oil position when the elevator is at the lowest landing and levelled with the floor.

3.10. Rupture Valve

1. Provide a rupture valve of the ball-seat valve design.
2. Provide a rupture valve with a screw-type mounting method.
3. Provide a rupture valve that prevents uncontrolled movement of the cylinder if a pipe or hose burst occurs.
4. Provide a rupture valve that interrupts the flow of oil when the pressure difference in the valve exceeds a value that corresponds to the preloading pressure.
5. Provide a pipe rupture valve which opened automatically when the pressure at the pipe is higher than that at the cylinder.
6. Provide a valve that seals the opening passage leak-free.



7. Provide a rupture valve with settable closing flow.
8. Ensure that the design is of the leak-free closing type.
9. Ensure that the design allows for proper connection to the cylinder head.
10. Mount the rupture valve directly to the cylinder and without any isolation, gate valve or noise coupling in between.
11. Provide a valve with minimal spatial requirement and a compact design.
12. Attach the rupture valve directly to the cylinders.

3.11. Gate Valve

1. Provide a new ball type gate valve connected directly to the hydraulic control valve via a grooved connection.
2. Provide a new ball type gate valve connected in the pit to perform maintenance. Connect via a grooved connection.
3. Bleed the system to remove excess air.

4. Hoistway Equipment

4.1. Hall Door Equipment

1. Completely replace the existing hall door interlocks and pickup assemblies with new GAL hall lock assembly complete with pick-up rollers, beaks, locks, and contacts.
2. Where needed by code, relocate the ladder, pit switch and light switch locations to allow for pit access.
3. Replace any worn or damaged hall door parts including tracks where flat spots exist.
4. Replace all noisy, worn or damaged hall door rollers.
5. Provide new heavy duty Smartork spirators to allow the doors to close under all conditions. Achieve up to 10 lbs closing force in last 2 inches and 8.5 pounds in open.
6. Provide fire gibs and door safety retainers where needed and not already in place.
7. Supply the Owner with tactile hall entrance plates on both sides of the jamb. Install plates using permanent hardware.
8. Mark the inside of all hall doors with the correct floor designation as per code.
9. Provide an escutcheon emergency access hole on each elevator door complete with sleeve and unlocking mechanism to facilitate the rescuing of entrapped passengers.
10. Replace all missing the hall door rubber bumpers and ensure that they match the existing ones.
11. Provide car top access at the top and lowest landings. Install the keyed access in the hall jamb at the top landing and the lowest two landings. (Drilling the hall jamb shall be performed outside the normal service hours at times suitable to the Owner).
12. Replace missing or damaged sight guards.



4.2. Traveling Cables

1. Provide new elevator traveling cables. Cables to include spares: minimum of eight (8) shielded pairs of 20 AWG and two (2) coaxial cables.
2. Provide spare wires consisting of at least 10% of the total number of wires with a minimum of twenty (20) 18 ga. and two (2) 14 ga. spare wires.
3. The traveling cables should form a continuous run from the controller to the elevator cab. Do not terminate the traveling cables at a junction box under the car or in the hoistway.
4. Provide an independent and separate terminal block in the controller where special spares are terminated like the coaxial and shielded pairs. Provide a single, clear and neat labelling for the terminal block to indicate that it is for spares only.

4.3. Wiring

1. Provide new machine room, hoistway and car wiring in accordance with the Canadian Electrical Code.
2. Provide appropriate wiring for the building management system where required.

4.4. Buffers, Pit Steel and Switches

1. Provide each spring buffer with a marking plate showing its load rating and stroke and the number of springs.
2. Where the springs are removable, each spring shall be identified, and the assembly marking plate shall indicate this identification.
3. Markings shall be made in a permanent and legible manner.
2. Paint all the pit steel located underneath the car and counterweight buffer.
3. Ensure that the pit steel is painted with black rust inhibiting painted.

4.5. Hall Lanterns

1. Provide new hall lanterns to operate as per specification.
2. Install flush mounted lanterns. Do not provide bulky or surface mounted equipment that protrudes more than 1.0" from the face of the wall.
3. Provide electronic chimes and LED/LCD directional displays that are barrier free compliant.
4. Provide bi-color (green and red) displays equivalent to CEE ASB30-XX or Dupar uniblades. Consultant and Owner to decide.
5. Provide displays that are visible under all lighting conditions and can be seen within 180 degrees of the hall direction.
6. Provide addressable serial link lanterns with no more than three wires per landing.
7. Owner to approve the design and material of the hall lanterns.



8. Provide new flush mount hall lanterns on all cars at typical floors. The new lantern design should be identical to the Lobby hall lanterns in order to maintain uniformity of appearance throughout the building.
9. New lanterns must comply with Appendix E of the B44-19 Code.
10. The new hall lantern design must meet the approval of the Owner.
11. Provide an advance notice of 5 seconds prior to arrival of an elevator at the floor.

4.6. Hall Position Indicators

1. Provide Mini PI EMN43 position indicator located at the lobby and where existing position indicators are located. Install the position indicators above the door entrance.
2. Clad the existing door header or provide a flush mounted (with countersunk screws) insert with hairline seam to cover the existing indicator.
3. Provide fixtures, which conform to barrier free access.
4. Integrate a hall lantern and chime into the position indicator where possible, otherwise mount separately above door.
5. Provide a car directional indicator in the position indicator which displays the direction of the elevator at all times and in the absence of one, the last known direction.
6. Provide position indicators with characters at least 3" (75mm) in height to be clearly visible from the landing.
7. Ensure that the position indicator is visible in normal daylight and working properly.

4.7. Hall Stations

1. Provide hall station on all floor(s) to conform to barrier free access height. Ensure that the center of the button is located at 42" from the landing floor.
2. Provide hall stations in the same metal and finish as currently existing.
3. Include for engraving to meet code requirement.
4. Provide hall fixture at the lobby level to incorporate the special emergency service required under the new code.
5. Provide in each hall station two buttons (up and down) on the intermediate floors and one button on the terminal floor.
6. Provide stainless approved flush mounted DUPAR US91cc hall stations with Green and Red LED illumination.
7. Provide braille with an up and down arrow next to the buttons to meet barrier free requirements.
8. Include for the Owner to approve design, engraving (no smoking, or emergency use of elevator) and material of hall stations.
9. Comply with all aspects of Appendix E as noted in the CAN/CSA B44-19.

4.8. Rust Proofing



1. Remove the rust accumulating in the pit(s).
2. Rust proof all pit steel equipment (including but not limited to fascia, four bottom feet of the guide rails, governor idlers, counterweight guards and ladders) to remove existing rust accumulating on the equipment.
3. Also paint the apron/toe guard to reduce the accumulation of rust on both cars.
4. Use a solution and a scrub brush to remove all dirt and grime from the metal railing. Take steps to protect the environment and the health of your employees:
 1. Prevent solution from going into the drain.
 2. Provide all employees with appropriate gear and comply with worker's health and safety requirements including WHMIS training to your staff.
5. Use a metal scraper and a wire brush to remove loose paint or flaking rust. Then lightly sand all surfaces that you intend to paint. Where needed, use more aggressive sanding/grinding to smooth rough or rusty surfaces.
6. Sand or grind away rust using an electric drill equipped with a wire brush and/or a sanding pad and abrasive disks.
7. Spray or roll on a rust-inhibiting primer directly to the metal. Apply two coats.
8. Apply a low fume topcoat of paint using either a spray or a brush.

5. Elevator Cab

5.1. Car Slings

1. Clean and check the condition of the car sling and repair where needed.
2. Ensure that the weight of the car accurately reflects the weight on the new crosshead data tag.

5.2. Car Roller Guides

1. Provide new roller guide assemblies on the top and bottom of the car.
2. Provide roller guide assemblies with adjustable float and spring tension.
3. Provide ELSCO roller guide assemblies with rollers being a minimum of 6" in diameter.
4. Provide neoprene roller wheels.
5. Provide rollers with adjustable stops and solid spacers to eliminate "knee action".
6. Include a cover plate assembly over the rollers.
7. Provide fully adjustable guides for all rails up to ¾" width standard.

5.3. Door Operators

1. Provide new GAL MOVFE (ECI VFE2500) closed loop, heavy duty, solid-state door operator.
2. Provide non-linear, heavy duty, solid-state door operator.



3. Provide one ½ or ¾ hp motor and heavy duty sprocket, chain, belt, and sheaves.
4. Provide closed loop regulated speed performance.
5. Provide on site one hand-held keypad programming unit.
6. Provide and store the adjustments on the handheld unit.
7. Provide an operator with adjustable door obstruction reversal.
8. Provide optical cams with LED indicators.
9. Provide test switches for open, close, nudging and speed zone set up.
10. Provide universal inputs for open, close, and nudging.
11. Provide robust drive linkages to the car door.
12. Adjust the door closing force so that it does not exceed 30 lbs.
13. Provide a door operator that would automatically calculate the door weight and speed to regulate the kinetic energy. Where infrared detectors are used, the closing door system shall conform to the following requirements:
 1. The kinetic energy computed for the average closing speed as determined in accordance with 2.13.4.2.2 shall not exceed 10 J (7.37 ft-lbf).
 2. The kinetic energy computed for the actual closing speed at any point in the code zone distance defined by 2.13.4.2.2 shall not exceed 23 J (17 ft-lbf).
14. Replace the car door rollers.
15. Replace the car door track with GAL door equipment.

5.4. Door Protective Device

1. Provide new two dimensional (2D) and three dimensional (3D) combination infrared door detection systems on every car door.
2. The door re-opening device shall:
 1. Detect cylindrical target(s) approaching the entrance opening of the landing-side doors, at any point during the door closing operation, the doors shall re-open;
 2. Detect approaching objects up to a speed of 1 m/s (3 ft/s);
 3. Detect objects moving towards the entrance between 9" (225mm) – 20" (500mm) from the landing side of the door;
 4. Provide sensor technology not affected by reflected ambient light;
 5. Ignore stationary objects within the three dimensional (3D) zone, whilst still detecting movement towards the door; and
 6. Differentiate movement from the side of the three dimensional (3D) zone and movement approaching the doors.
3. If the door protective device detects a person or object in its path, at any point during the door closing operation, the doors shall re-open.
4. The infrared shall be equipped with red/green indicators to highlight door movement.



5. Provide a system with an eighteen foot range.
6. The detection device and door operation should be adjusted so that the doors re-open without striking any object or person.
7. Provide a three-dimensional electronic door detectors on all car doors with the following specifications:
 1. The infrared detector should provide complete door protection.
 2. Distance between beams not to exceed 1.50".
 3. Visible light immunity of 100,000 lux.
 4. Interleaved scan.
 5. Minimal number of sensors 80.
 6. Average response time of 90 ms.
 7. Nudging capable feature.
 8. Fault code.
 9. Audible noise emitted when beam interrupted.
 10. Sensitivity adjustment.

5.5. Car Gate Switches

1. Provide new car gate switches.

5.6. Car Door Clutch

1. Provide new GAL car door clutch or Otis skate (depending on the operational requirement of the locks).

5.7. Car Stations

1. Provide new full-length full width applied Car Operating Panel (COP). Panel to conform to barrier free access (CAN/CSA B44-19 Appendix E) and current code requirements.
2. Provide for a flush mounted installation of the COP with keyed fastening locks. Ensure that the COP is flushed with the new cladding. Note: the COP does not have to cover the jamb and can be located between the jamb and wall.
3. Provide heavy duty hinges that can support the weight of the COP.
4. The building name and logo, car number, government number and the capacity to be engraved in the appropriate place on the return panel.
5. Owner to approve the design and material of the car station.
6. Car stations to tentatively include the following features and layout:
 1. Hands-free emergency phone with one way video and messaging.
 2. Display and camera for the video and messaging system. (internet network with four (4) hour battery back up to be provided by the owner)
 3. CEE Electronics EMN57 Digital LCD car position indicator.



4. Car call buttons marked to correspond to floors served. Provide car call registration feedback.
5. Door open and door close buttons.
6. Provide a hands-free telephone system with automatic dialler integrated into the car station to meet barrier-free access as well as these requirements:
 - (a) Provide a push button identified as "Phone" to initiate communication along with a speaker.
 - (b) Identify the button with a raised international symbol for telephones and Braille markings.
 - (c) Arrange that the communication cannot be terminated from within the cab.
 - (d) Provide visual indication which is activated to acknowledge that the communication has been established. Extinguish the visual indication when the connection is terminated.
 - (e) Provide a display and buttons so that authorized/emergency personnel can communicate via messaging and obtain responses from a trapped passenger who cannot communicate verbally or is hearing impaired.
 - (f) Provide a camera to display video positioned to observe passengers at any location on the car floor.
 - (g) Provide four (4) hour battery backup for the entire communication system.
 - (h) Provide twin conductor shielded wiring from the cab to the elevator machine room.
 - (i) Terminate the wiring for all elevator in the machine room at a separate terminal block mounted on the side of a controller.
 - (j) Provide a master phone located in the lobby or other specified location.
 - (k) Connect and program the phone to the lobby rescue station (auxiliary lobby telephone equipment) to meet the new code requirements
 - (l) Provide equipment and wiring compatible with the building's telephone system.
 - (m) Use the lobby rescue station to connect to the elevators so that they can share one telephone line and someone calling into an elevator can select which elevator to call.
 - (n) Provide where needed a line seizure device, including installation, to connect elevator phones (i.e. such as office fax line).
7. Provide a fire fighter switch as follows:
 - (a) This key will be of a tubular, 7 pin, style 137 construction and shall have a biting code of 6143521. The key will be coded "FEO-K1".
 - (b) A three-position ("OFF," "HOLD," and "ON," in that order) key-operated switch shall be labeled "FIRE OPERATION"; provided in an operating panel in each car; and shall be readily accessible.



- (ii) Stay away from closing door.
- (iii) Nudging functions.
- (iv) Special emergency service.
- (v) Out of service condition.

5.8. Car Restrictor

1. Provide a new Unitec Uni-Lock™ CM Door Restrictor or equivalent.
 1. Provide a collapsible door restrictor which works in conjunction with a hoistway door angle to deter passengers from exiting the car outside the landing zone.
 2. Provide a collapsible door restrictor which uses no cords, coils or other moving parts to engage and disengage.
 3. Ensure that the car door remains locked when outside the door zone.

5.9. Floor Passing Tone

1. Provide a floor passing tone in the cab, which chimes as the elevator is passing a floor.
2. The sound should be field selectable and the volume adjustable.
3. The floor passing tone should have a disable function in the car station.

5.10. Crosshead Data Plate

1. Provide new crosshead data plate with the proper weight, date, capacity, speed and date of the elevator manufacturing and modernization.
2. Provide a tag 2.0" by 3.0" 0.12" thick aluminum with square corners, black background and silver copy.
3. Attach the tag to the crosshead using 3M adhesive backing and ensure that it is mounted on a clean background to resist casual removal.

5.11. Car Top Solid State Reader Head

1. Provide new solid state car top reader head.
2. Provide new rust resistant hoistway tape with magnetic targets.
3. Provide proper tensioning equipment to maintain the stability and strength of the hoistway tape.
4. Provide consistent stopping accuracy within 1/8".
5. Permanently secure the magnet to the steel tape.
6. Provide low friction guides to ride along the steel tape with no more than 1/8" tolerance.

5.12. Car Door Equipment

1. Replace all car door rollers.



2. Replace worn or damaged astragals on the leading edge of the doors.

5.13. Car Top Inspection Station

1. Provide on top of the car, an inspection station consisting of:
 1. An emergency stop button (red color). The stop switch shall be permanently located on the car top and readily accessible to a person, while standing at the hoistway entrance normally used for access to the car top;
 2. Up and down continuous-pressure type inspection buttons (white color). A separate device of the continuous-pressure type labeled "ENABLE" shall be provided adjacent to the inspection operating devices. The inspection operating devices shall become effective only when the "ENABLE" device is activated. The inspection operating devices, shall be permitted to be of the portable type provided that:
 - (a) the "ENABLE" device, and a stop switch, in addition to the stop switch required with the stationary inspection station are included in the portable unit; and
 - (b) the flexible cord is permanently attached so that the portable unit cannot be detached from the car top.
 3. On-off inspection transfer switch (green switch). The transfer switch shall be located on the car top and shall be so designed as to prevent accidental transfer from the "INSPECTION" to "NORMAL" position;
 4. Duplex electrical outlet;
 5. Provide a secondary hand-held fluorescent trouble light; and
 - (a) Provide two 13 watt fluorescent "H" tube;
 - (b) Not less than eight foot CSA listed Cord; and
 - (c) Provide a handy clip for hanging or strong magnetic base for mounting.
 6. Primary car top lighting with a guard activated by an on/off switch.

5.14. Car Top Railing

1. Provide, on top of each car, metal railing to protect the elevator mechanic from falling.
2. Where a car top guard is installed but is not compliant, provide all required material and design to make car top guarding compliant.
3. Provide a substantial metal guard rail on the sides of the car top.
4. The guard shall consist of a top rail located approximately 42" above the car top and an intermediate rail located approximately 22" above the car top.
5. A five (5) inch toeguard shall be provided at the base of the guard.
6. The guard rails must be designed and installed to withstand a load of 550 N (125 lb.) applied perpendicular to the span in a horizontal at any point on the top rail and a vertical downward load of 1.5 kN per meter (100 lb. per foot) along the top rail.
7. The horizontal and vertical loads need not be considered to act simultaneously.



8. Alternatively eliminate the fall hazards with car top extensions covering any spaces larger than code limits.

6. Elevator Control and Dispatching

6.1. Grounding

1. Ground the control system and all field apparatus using color coded bonding wire.
2. The accidental grounding or a short circuit shall not defeat any safety device, and shall not allow the elevator to start or run if any hoistway door interlock or car gate switch is not made.

6.2. Door Operation

1. Door opening shall be automatic as the car arrives at a landing, and closes at the expiration of the door open timer. Doors shall remain open for a time period as follows:
 1. A car call time shall predominate when a car call only is being answered.
 2. The hall call time shall predominate when a hall call or both a hall call and car call are being answered.
 3. A short door time shall predominate after a door reversal from the door detector or the door open button.
 4. A short door time shall predominate on a hall call or car call after the beam of the door protective device has been broken.
2. The values for the door timers shall be independently field adjustable.

Car Groups	Maximum Door Opening	Maximum Door Closing	Maximum Car Call Door Dwell	Maximum Hall Call Door Dwell	Maximum Short Door Dwell Time
1	2.5 sec	4.0 sec.	3.0 sec.	5.0 sec.	3.0 sec.

6.3. Delayed Car Operation

1. If the elevator is delayed at a landing for a predetermined adjustable time while there are calls in the system, the car shall be removed from operation.

6.4. Door Nudging Operation

1. If the elevator doors are prevented from closing for a predetermined adjustable time, the door protective device shall become inoperative, and audible signal shall sound, and the door shall close at a reduced speed. Normal door operation shall resume at the next stop.

6.5. Door Failure Protection



1. If the doors fail to fully open or close within a predetermined adjustable period due to an obstruction, further attempts to open or close shall cease and the doors shall return to the open or closed position.
2. The control system shall allow three (3) more attempts at opening or closing the doors. If unsuccessful the control system shall remove the car out of the group and shut the car down temporarily until the problem is resolved.

6.6. Performance Criteria

1. The control equipment shall be capable of operating within the specified performance criteria.
2. Flight time shall be measured from the start of the door close cycle until the doors are 3/4 open at the next landing on a one floor run.

Car Groups	Maximum Flight Time	A95 Vertical Horizontal	Maximum Jerk	Maximum Acceleration	Levelling Accuracy	Speed Variation
1	11.0 sec.	6 mg	7.0 ft/sec ³	3.5 ft/sec ²	+/- 1/8"	+/- 2%

6.7. Noise Levels

1. Door operation noise level shall be taken during the door opening, closing, and reversal cycle.
2. The cab noise level shall be taken during a full run, bottom to top, and return.
3. The machine room noise level shall be taken with all cars operating.

Car Groups	Door Operation	Cab	Machine Room
1	62dBA	50dBA	80dBA

6.8. Independent Service

1. Provide a key switch in the car which, when actuated will take the car out of the group operation and allow operation from the car buttons only. Door operation shall be activated by constant pressure on the door close button.
2. Independent service operation shall de-activate the hall and in car lanterns.

6.9. Inspection

1. Provide a key switch in the car which, when actuated will take the elevator out of service. An inspection-operating fixture on top of the elevator will allow the elevator to be controlled on inspection mode as per code.

6.10. Anti-Nuisance

1. The anti-nuisance feature provided shall cancel all car calls when the elevator stops on two (2) floors with no interruption to the door beam.



6.11. Hall Lantern Operation

1. Provide electronic hall chimes.
2. Hall designation plates shall illuminate and produce an audible signal to indicate that the elevator has arrived.
3. The audible signal shall produce a unique sound for barrier free access.
4. The volume of the audible signal shall be field adjustable.
5. The designation plate lantern shall remain illuminated until the door dwell time has expired.
6. The lobby lantern shall only be illuminated on the assigned car.
7. The hall designation lantern shall provide a five (5) second advance signal before the arrival of the elevator.
8. The illumination shall be white unless otherwise noted by the Owner and clearly visible in daylight.

6.12. Levelling

1. The control circuit shall cause the car to stop automatically at floor level regardless of load or direction of travel within 1/8" with respect to the hoistway sill.
2. The control circuit shall correct for over travel, under travel and cable stretch return.

6.13. Manual Emergency Recall Operation: Initiation

1. Arrange that special emergency service is initiated by means of the two position special emergency service keyed switch marked "EMERGENCY RECALL" in yellow lettering, in the following way:
 1. By turning the switch to the "ON" position.

6.14. Automatic Emergency Recall Operation: Initiation

1. Please note: Provide the following provisions with the understanding that the building may not be able to provide the required signal. However, include in the pricing and programming of the controller with all these features with the knowledge that only manual recall may be installed. Under no circumstances shall automatic recall not be provided unless the owner has given specific written direction that only manual recall should be installed.
 1. Arrange that special emergency service is initiated by means of the three position special emergency service keyed switch marked "FIRE RECALL" in red lettering.
 2. Arrange its positions to be marked "RESET", "OFF", and "ON" (in that order), with the "OFF" position as the center position.
 3. The "FIRE RECALL" letters shall be a minimum of 5 mm (0.25 in.) high in red or a color contrasting with a red background.



4. Locate this switch in the lobby within sight of the elevator or all elevators in that group and shall be readily accessible.
5. An additional key-operated "FIRE RECALL" switch, with two-positions, marked "OFF" and "ON" (in that order), shall be provided, where permitted, only at the building fire control station if available.
6. All "FIRE RECALL" switches shall be provided with an illuminated visual signal to indicate when Phase I Emergency Recall Operation is in effect.

6.15. Automatic Emergency Recall Operation: Designated Floor

1. When special emergency service has been initiated, return the elevator to a designated floor, open the doors and maintain the doors opened.
2. In the event that special emergency service is initiated by the actuation of a device at the designated floor, return the elevator to an alternative designated floor approved by the enforcing authority.
3. Arrange the operation for this phase of special emergency service as follows:
 1. Reverse an elevator traveling away from the designated floor at the next available floor without opening its doors and cause it to proceed to the designated floor without stopping for car or hall calls.
 2. Close the doors of an elevator standing at a floor other than the designated floor under all operating modes, except on car-top maintenance, and cause it to proceed to the designated floor without stopping for car or hall calls.
 3. Give a visible and audible signal on the car.
 4. Render the emergency stop button, door protective device, door open, door close, and car and hall buttons inoperative.
 5. Park at the designated floor with the doors open.
 6. Where applicable, when on hospital service, the elevator shall conform to Section 2.27.3.1.6(h) of the B44-04 while Phase I Emergency Recall Operation is in effect. An elevator on firefighter emergency operation shall not be placed on hospital service.

6.16. Automatic Emergency Recall Operation: Car Operation

1. After the initiation of special emergency services and after the return to lobby procedure described above has been completed, arrange the circuits so that the elevator runs on special emergency service when the key switch in the car is in the "ON" position, using the same key as required for the return to lobby procedure above.



2. A three-position ("OFF", "HOLD", and "ON", in that order) key-operated switch shall be labeled "FIRE OPERATION"; provided in an operating panel in each car; and shall be readily accessible. The label "FIRE OPERATION" lettering shall be a minimum of 5 mm (0.25 in.) high in red or a color contrasting with a red background. It shall become effective only when Phase I Emergency Recall Operation is in effect and the car has been returned to the recall level. The switch shall be rotated clockwise to go from "OFF" to "HOLD" to "ON".
3. The key shall only be removable in the "OFF" and "HOLD" position. The "OFF", "HOLD", and "ON" positions shall not change the mode of operation within Phase II Emergency In-Car Operation until the car is at a landing with the doors in the normal open position.
4. When the "FIRE OPERATION" switch is in the "ON" position, the elevator shall be on Phase II Emergency In-Car Operation, for use by emergency personnel only, and the elevator shall operate as follows:
 1. The elevator shall be operable only by a person in the car.
 2. The car shall not respond to landing calls. Directional lanterns, where provided, shall remain inoperative. Car position indicators, where provided, shall remain operative. Landing position indicators, where provided, shall remain inoperative, except at the designated level and the building fire control station, where they shall remain operative.
 3. Door open and close buttons shall be provided for power operated doors. The door open and close buttons shall be labeled "OPEN" and "CLOSE".
 4. The opening of power-operated doors shall be controlled only by a continuous-pressure door open button. If the button is released prior to the doors reaching the normal open position, the doors shall automatically reclose. On cars with multiple entrances, if more than one entrance can be opened at the same landing, separate door open buttons shall be provided for each entrance.
 5. Open power-operated doors shall be closed only by continuous pressure on the door close button. If the button is released prior to the doors reaching the fully closed position, horizontally sliding doors shall automatically reopen, and vertically sliding doors shall automatically stop or stop and reopen. On cars with multiple entrances, if more than one entrance can be opened at the same landing, a separate door-close button shall be provided for each entrance.
 6. Opening and closing of power-operated car doors or gates that are opposite manual swing or manual slide hoistway doors shall conform to CAN/CSA B44-04 Section 2.27.3.3.1(d) and (e).
 7. All door reopening devices except the door open button shall be rendered inoperative. Full speed closing shall be permitted. Landing door opening and closing buttons, where provided, shall be rendered inoperative.



8. Every car shall be provided with a button marked "CALL CANCEL", located in the same car operating panel as the "FIRE OPERATION" switch, which shall be effective during Phase II Emergency In-Car Operation. When activated, all registered calls shall be canceled and a traveling car shall stop at or before the next available landing.
9. Floor selection buttons shall be provided in the car to permit travel to all landings served by the car, and they shall be operative at all times as required by code. Means to prevent the operation of the floor selection buttons or door-operating buttons shall be rendered inoperative.
10. A traveling car shall stop at the next available landing for which a car call was registered. When a car stops at a landing, all registered car calls shall be canceled.
11. Means used to remove elevators from normal operation, other than as specified in this Code, shall not prevent Phase II Emergency In-Car Operation.
12. No device, which measures load, shall prevent operation of the elevator at or below the capacity and loading required.

6.17. Automatic Emergency Recall Operation: Termination

1. Terminate special emergency service under the following conditions:
 1. All cars at the designated floor.
 2. All key switches associated with special emergency service in the "OFF" position.
 3. Smoke or heat sensing devices associated with special emergency service either in the normal status or the three-position special emergency service key switch turned to the off position for cancellation of special emergency service.
2. The special emergency operation shall comply with all current code regulation in force.

6.18. Power Selection

1. Provide emergency power operation with car selection switch to work on all elevators in the building capable of operating on the emergency generator.
2. When the key switch is activated, the selected car will be initially required to operate.
3. After the selected car is parked on the main landing with the doors opened, the next available car is selected until it is on the main floor with the doors opened. Then the last selected car is operated on emergency power.

6.19. Emergency Power

1. The elevator contractor shall provide an affidavit confirming the proper operation of the fire recall signals and emergency generator operation.
2. Provide provisions for emergency power. Provide blank removable plates in the panels to be replaced at a later date.
3. The elevator contractor shall provide contacts on the controllers to receive signals from the normal and emergency power contacts.
4. The transfer between the normal and the emergency power shall be automatic.



5. A signal light marked "ELEVATOR EMERGENCY POWER" shall be provided in the lobby at street level to indicate emergency power is in effect.
6. The emergency power operation shall be as follows:
 1. Upon loss of normal power and receipt of emergency power the elevators shall automatically return, one at a time, to the lobby floor, or other designated floor.
 2. Any car that is unable to move on command within a preset time interval shall be bypassed and another car shall be selected.
 3. After all cars, that were able to respond to the return to lobby command, have returned to the lobby, a car(s) shall be automatically selected to provide normal elevator service.
 4. Failure of the selected car to move shall cause power to be transferred to another car.
 5. Provide an emergency power selection switch marked "ELEVATOR EMERGENCY POWER" in red lettering at the lobby at street level.
 6. The selector switch shall have a position marked "AUTO" to permit automatic power selection, and shall be locked in that position.
 7. The selector switch shall have positions corresponding to the elevator identification for manual selection of emergency power operation.
7. The emergency power operation shall comply with all current code regulation in force.
8. Where the elevators' regenerative power interferes with the generator power (frequency, harmonics, etc...) causing building issues or elevators to shutdown, provide means to dissipate the regenerative power through dynamic breaking resistors.

6.20. Group Operation

1. Provide a simplex dispatcher based on a multi-tasking/multi-processing network of microcomputers.
2. As a minimum, a 32-bit embedded RISC controller which operates at 32 MHZ or faster shall be provided.
3. The dispatcher shall have the capacity for four megabytes or more of EPROM plus RAM, and shall provide up to eight industry standard serial communication ports for use with modems and other peripherals.
4. The dispatching system should monitor building traffic conditions including, but not limited to the following:
 1. Hall call demand.
 2. Number of assigned hall calls.
 3. Number of cars in operation.
 4. Number of car calls.
 5. Number of car stops.
 6. Car position.



7. Car direction.
 8. Anticipated direction of car travel.
 9. Car loading.
 10. Car status.
 11. Car motion status.
 12. Car door status.
 13. Call waiting time.
 14. Door opening time.
 15. Door closing time.
 16. Coincidence calls.
 17. Estimated time of car arrival.
5. Provide a dispatcher which evaluates real time data and selects the best car to serve any given hall call demand.
 6. Assignment of cars, by the dispatcher should be based on providing efficient handling of varying traffic demands in terms of passenger waiting time and passenger transit time.
 7. The dispatching algorithm shall minimize the mean waiting time, the maximum waiting time and the number of late calls.
 8. This algorithm shall cover all two-way traffic demands such as light, medium and heavy traffic situations.
 9. The algorithm shall compile the required physical and statistical data and parameters that are necessary to perform the above minimization tasks.
 10. The dispatcher software shall include sophisticated parking programs that provide flexible parking options allowing the user to select the most efficient parking configuration for a specific building.
 11. Parking floors shall be divided into two groups:
 1. Lobby parking floors. Lobby parking floors are the floors where a lobby function is performed.
 2. Non-lobby parking floors. Non-lobby parking floors are floors where the car performs a regular parking function.
 12. There shall be any number of user definable lobbies with four levels of priority to allow maximum system flexibility.
 13. More than one car could park at any lobby, and the number of cars that can park at any lobby shall be field programmable.
 14. There shall be 15 levels of priority for non-lobby parking floors. When all lobby parking floors are occupied, the next car that is ready to park shall park at the highest priority non-lobby floor.



15. If all the non-lobby parking floors are of the same priority, then the next car that is ready to park shall park at the closest non-lobby floor. The priorities for non-lobby parking floors shall be field programmable and more than one car could park at any non-lobby floor.
16. The group dispatcher shall allow eight different system configurations to be programmed by the user. The programmable parameters for each configuration shall include:
 1. The dispatching mode of operation.
 2. Lobby parking floors.
 3. Non-lobby parking floors.
 4. Lobby operation.
 5. Lobby and non-lobby parking delay timers.
 6. Long wait hall call threshold times.
17. The user can invoke any of these configurations, any time of the day. There shall be up to 16 time selections for these configurations.
18. The dispatching system software shall operate as a dynamically balanced system for two-way traffic. Depending upon the traffic pattern in the building, the dispatcher shall automatically modify the mode of operation to lobby up peak, demand up peak, or demand down peak.
19. The lobby up peak mode shall be capable of being initiated by using a switch input, by manual selection from the keyboard, by a timed configuration or by automatic monitoring of load weigher inputs and/or the number of up car calls registered at the main lobby floor(s).
20. The lobby up peak program shall handle heavy incoming traffic at one or two lobby landings, at the same time or at different times. This program shall assign one or more cars to the lobby depending on the lobby up peak classification for that particular lobby.
21. The first car at the lobby shall stay with its doors open or closed for a programmable length of time. If more than one car is assigned to the lobby, then all other cars shall stay at the lobby floor with their doors closed.
22. The loading car shall stay at the lobby landing for the duration of the up peak interval, unless dispatched by the loaded car input.
23. A peak participating car is a car assigned to participate in lobby up peak operation. Depending on the level of traffic, the system shall assign a variable number of cars for lobby up peak operation.
24. All non-lobby up and down hall calls shall be assigned to non-peak participating cars.
25. The selection of cars shall be done dynamically.
26. Demand up peak or down peak mode shall be capable of being initiated by using a switch input, by selection from the keyboard, by a timed configuration, or as automatically determined by the system.



27. The demand up or down peak program shall reverse the car's direction at its highest or lowest call and cause it to travel non-stop to the highest or lowest call in the building.
28. The cars shall collect up or down calls as they are encountered until the cars are loaded to a predetermined adjustable level that shall then cause the cars to bypass hall calls until they make a high or low call reversal.
29. The next down-traveling car shall stop, reverse direction at the floor above the floor at which the prior car's load switch operated and then collect up calls in the same manner as the previous car.
30. In the event of a malfunction of the dispatcher's communication with the other cars or failure in the network, the computers operating the individual car computers shall:
 1. Detect the malfunction and provide emergency dispatching of all in-service cars; or
 2. The dispatching assignment shall be transmitted to the next elevator in the group.
31. The system shall automatically remove any car from the group operation if the car is delayed from responding to its demand within a field adjustable time period. The system shall automatically restore any car back to system operation when the reason for the delay has been corrected.

6.21. Remote Monitoring System

1. Provide interactive Solutrak system software in the controller to integrate with and monitor all elevators.
2. Ensure that the elevator system can support Solucore's remote elevator monitoring (approved control manufacturers (MCE, GAL, or Smartrise)) that meets the intent of the following specifications:
 1. Provide a communications protocol that communicates to Solucore board and exchanges the information related to the operation, status and error logs from the elevator; or
 2. Where the elevator controllers are not approved as noted above, provide APIs directly from your elevator system to communicate and transmit real time elevator data to Solucore's servers. The data shall be committed to within 3 months of substantial completion. Failure to provide the required API and support to ensure data is transferred and read correctly within the prescribed time frame, the contractor shall commit to a monthly penalty of \$5,000 per month until the data is received. The commitment shall be provided in writing as part of the submission document otherwise, the bid shall not be considered.
 3. The APIs shall include elevator real time condition, operation, direction, status (automatic, idle, in service, out of service, not available or power failure, independent service, car top operation, Sabbath, Code Blue, Etc...), error code, fault logs, speed, group functions (FEO, EPO, Earthquake, etc...), maintenance tasks including CAT testing procedures, etc...

7. Elevator Maintenance



7.1. Hydraulic Elevator Maintenance

1. The elevator contractor agrees to sign the Owner's maintenance agreement.
2. The elevator contractor agrees to provide labour, parts, and services necessary to maintain 1 elevator(s) at 2075 Battersea Road Kingston, ON.
3. The elevator contractor agrees to maintain the elevators in accordance with the maintenance specifications as provided in Section 14900 of the Owner's maintenance agreement.

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Elevator Service Agreement

Owner: Kingston & Frontenac Housing Corporation

2075 Battersea

Division: 14900

Solucore Elevator Consulting 2024-07-12



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Elevator Service Agreement

THIS AGREEMENT made as of the .

BY AND BETWEEN:

Kingston & Frontenac Housing Corporation_ a company incorporated in Ontario
(hereinafter referred to as the "Owner" and "Manager")

Attention: Scott Vanderschoor

- and -

_____ a company incorporated in _____ (hereinafter referred to as the "Contractor")

THE OWNER AND THE CONTRACTOR, for good and valuable consideration the sufficiency of which is agreed, hereby agree as follows:

1. General Agreement and Administrative Details

1.1. Services

- 1.1.1. The Contractor shall provide and perform all full-inclusive, preventative elevator maintenance services as described in this Agreement and its Schedules herein (collectively, the "Services").
- 1.1.2. The Contractor shall do and fulfil everything indicated by this Agreement and its Schedules.
- 1.1.3. The Owner may appoint a Manager, other than the Contractor, who shall have authority to act on behalf of the Owner to the extent provided herein.
- 1.1.4. The Contractor shall be an independent contractor with respect to the Services to be performed under this Agreement. Neither the Contractor, its subcontractors or vendors, nor the employees of any of them employed in connection with such Services shall be deemed to be the agents, representatives, employees, or servants of the Owner or the Manager in the performance of Services hereunder, or any part thereof, or in any manner dealt with herein.
- 1.1.5. The Contractor shall have total control of the Services and shall effectively direct and supervise the Services so as to ensure conformity with this Agreement.
- 1.1.6. The Contractor shall be solely responsible for construction means, methods, techniques, sequences, and procedures and for co-ordinating the various parts of the Services under the Agreement.

1.2. Definitions, Term and Renewal of Agreement

- 1.2.1. The Contractor shall provide the Services for the specified term (the "Term") commencing on 12:00 AM (the "Commencement Date") and expiring on 11:59 PM (the "Expiry Date") unless otherwise terminated in accordance with this Agreement.



- 1.2.2. The Owner shall have the option of renewing this Agreement for an additional term of one (1) year, by giving written notice to the Contractor, in accordance with the provisions of this Agreement, at least ninety (90) days prior to the Expiry Date.
- 1.2.3. In the event that this Agreement is not renewed in accordance with Clause 1.2.2, the Contractor shall continue to perform Services in accordance with this Agreement, on a month-to-month basis, until the Agreement is renewed, terminated or expires.
- 1.2.4. The term “Elevator Consultant”, as used herein, refers to “[Solucore Inc.](#)”.
- 1.2.5. The term “Building”, “Site” and “Location” refers to the building indicated in **Schedule A**.
- 1.2.6. The term “Address” refers to the address of the Building.
- 1.2.7. The term “Inspecting Authorities”, as used herein, refers to authorized agents of governments charged with the responsibility of carrying out periodic inspections and tests on vertical transportation equipment.
- 1.2.8. The term “Provide”, as used herein, means to supply labour and material needed to maintain the elevating Device(s).
- 1.2.9. The term “Elevator” or “Device”, as used herein, means a licensed vertical transportation equipment as defined by the ASME A17.1/CAN/CSA B44 as amended from time to time (the “Code”).
- 1.2.10. The term “Designated City” as used herein, refers to “[Ottawa](#)” a city where the dispute and mediation shall take place.
- 1.2.11. Any terms in the Specifications that are not otherwise defined shall have the definitions as given in the latest edition of the Code or Standards (as hereinafter defined) as applicable, including where applicable, the latest supplements, for elevators, dumbwaiters, escalators and moving walks.

1.3. Fee

- 1.3.1. The fee be paid during the Term, by the Owner to the Contractor (the "Fee") in respect of the Services, shall be paid in equal monthly instalments (the "Monthly Instalments"), in accordance with **Schedule “B”** hereto, which Fee shall be inclusive of all applicable taxes and shall be subject to the annual revisions set out in clause 1.3.
- 1.3.2. The Contractor shall invoice the Owner in respect of the Monthly Instalment and in respect any overtime charges incurred in accordance with clause 1.3.5 herein, prior to the first day of every month of the Term provided conditions outlined in clause 1.4.3 are met. Subject to clause 1.5 and 1.6.4 herein, payment in respect of the invoices so rendered shall be made by the Owner within thirty (30) days of receipt of the invoice and related data.
- 1.3.3. The Fee may be revised annually on the anniversary date of this Agreement. The Monthly Instalment shall be increased or decreased in direct proportion to the change in the straight-time hourly rate of the Contractor (which hourly rate shall include all



compensation including all fringe benefits paid to its employees and agents); provided, however, that, in no event shall the Fee be increased by more than two (2%) per cent annually during the Term of this Agreement and the Owner is advised in writing ninety (90) days prior to the effective date of the increase.

- 1.3.4. The Owner shall be responsible to pay, in addition to the Fee, any new taxes as may be imposed on the Services or the Fee, after the Commencement Date, by any government or regulatory authority having jurisdiction.
- 1.3.5. Overtime charges, where applicable, shall be paid in accordance with the Contractor's then applicable rate schedule, which rate schedule shall be submitted annually 90 days before the anniversary date of this Agreement to the Owner, together with the price increase notice taking effect on the given anniversary date, if any.

1.4. Supervision Compliance and Reporting

- 1.4.1. The Services shall be performed by the Contractor in accordance with all applicable laws, rules, codes and regulations of any government or regulatory/industry authority having jurisdiction, and in a professional manner.
- 1.4.2. All employees and agents of the Contractor shall, at all times, wear attire or uniforms which are appropriate and suitable for the due performance of the Services. The Contractor shall provide uniforms clearly displaying the Contractor's name or logo, and any other means of identification of personnel.
- 1.4.3. The Contractor may be required to provide, in an electronic format acceptable and approved by the Owner, a monthly report outlining the number of callbacks, number of hours spent per unit, maintenance work description, and any other information as may be required by or for the Owner from time to time during the Term of the Agreement, including, without limitation, such reports and information as described in this Agreement and its Schedules. This monthly report shall be submitted by the Contractor with the invoice referred herein.

1.5. Non-Performance and Owner's Right to Terminate

- 1.5.1. No payment by the Owner for Services rendered herein shall constitute acceptance of any portion of the Services which are not in accordance with the terms and conditions herein, nor shall any such payment be construed as acceptance by the Owner of deficient work
- 1.5.2. In the event that the Services are not performed to the satisfaction of the Owner, or at all, or in the event that the Contractor becomes insolvent or adjudged bankrupt, or makes a general assignment for the benefit of creditors, the Owner shall be entitled to do the following, without prejudice to any other right or remedy the Owner may have:
 1. terminate this Agreement in accordance with the provisions of clause 1.6 herein;
 2. withhold from the Fee or Monthly Instalment an amount sufficient and reasonable to cover the cost of engaging a third party to rectify any deficiencies or complete



the Services, if deficiencies are not corrected within 30 days of issuance of a third party report; and/or

3. retain a third party to perform the Services, and thereafter set-off, as against the Fee or Monthly Instalment, any and all costs and expenses incurred by the Owner in connection therewith, the costs of the third party repairs to be agreed in advance by both parties.

1.5.3. Except in the case of the bankruptcy or insolvency of the Contractor or in the case where Contractor makes a general assignment for the benefit of creditors, the Owner shall give the Contractor 15 days' written notice to remedy the default to the satisfaction of the Owner and to comply with its obligations under this Agreement prior to exercising any of the forgoing rights.

1.5.4. In the event that any legislation, including, but not limited to the Code or Standard (latest edition), or an Elevating Devices Branch ruling causes an increase in the cost of the Fee, this Agreement may be terminated by the Owner on thirty (30) days' written notice to the Contractor. An Agreement for the Services may then be re-tendered by the Owner, in its sole discretion.

1.5.5. This Agreement may also be terminated by the Owner, at its sole discretion, and without any obligation whatsoever on the part of the Owner or its agents for the Contractor's damages, costs, or expenses, upon thirty (30) days' written notice to the Contractor to such effect, for the following reasons, without limitation:

1. the sale of the Building;
2. the permanent removal of the elevating equipment from service;
3. non-completion of Maintenance Services Code including without limitation, Code Section 8.6 MCP test in two consecutive months, or twice during a twelve month period, or CAT testing not being completed within 2 month of due date;
4. a major modernization undertaken in respect of the elevating devices;
5. a change in the ownership, management, or control of the Contractor; or
6. the number of callbacks as averaged over a twelve months (12) period is in excess of 1 callback per elevator every two months (or a callback ratio greater than 0.5) provided that the callbacks are equipment related and not act of God, misuse or vandalism.

1.5.6. This Agreement may be terminated on fifteen (15) days' written notice by the Owner, in the event that the Contractor materially defaults in the performance of its contractual obligations, on more than two occasions in a thirty (30) month period during the Term of this Agreement.

1.5.7. This Agreement may be terminated on fifteen (15) days' written notice by the Owner, in the event that the Contractor materially fails to provide diligent and accurate



supervision or does not satisfy the reporting requirement, both as outlined in clause 1.4.

1.6. Default Notice

- 1.6.1. In case of unsatisfactory performance or substantial non-performance of the Services by the Contractor, or, otherwise for the purpose of periodic review of the Services, the Owner may, at its sole discretion, retain the services of a recognized and independent professional elevator consultant (the "Elevator Consultant") to review and report upon the progress and adequacy of the Services. The report of the Elevator Consultant shall be binding on the parties.
- 1.6.2. If the Contractor is found to be in default of its obligations hereunder, including without limitation, if this finding is the result of the Elevator Consultant's report, the Owner shall notify the Contractor, in writing, that the Contractor is in default of its contractual obligations and shall instruct the Contractor to correct the default within fifteen (15) days, or within a mutually agreed upon time if the Owner so chooses.
- 1.6.3. In the event that the Contractor fails to correct the default within the time specified in Clause 1.6.2, or if applicable, within a mutually agreed upon time, to the satisfaction of the Owner and the Elevator Consultant, the Owner may, in addition to any other right or remedy the Owner may have, terminate this Agreement pursuant to Clause 1.5.3, upon a further fifteen (15) days' notice.
- 1.6.4. Notwithstanding any clause herein, while the Agreement is in effect the Contractor shall continue to perform the Services in accordance with the terms and conditions of this Agreement.
- 1.6.5. In the event that this Agreement is terminated, the Contractor shall be responsible for the costs of repair and remedy of all outstanding defects contained in the report of the Elevator Consultant or which are known to either of the parties at the time of termination.

1.7. Insurance

- 1.7.1. The Contractor shall obtain and maintain, at its sole cost and expense, during the Term of this Agreement comprehensive or commercial general liability insurance to respond to any and all incidents occurring on the Property as a result of the Contractor's presence or operations, in the minimum amount of \$5,000,000 per occurrence, including the following extensions: owners and contractors protective; products and completed operations; personal injury; occurrence basis property damage; blanket contractual, non-owned automobile liability.
- 1.7.2. In addition to the foregoing, in the event that the Services include the provision of any form of security to the Property, intentional acts coverage for prevention of bodily injury, including death, and property damage, personal injury coverage and wrongful detention coverage are required to be obtained and maintained by the Contractor, at its sole cost and expense, during the Term.



- 1.7.3. The Owner, and its nominee (if any), shall be Additional Insured on the Contractor’s “Owner’s and Contractor’s Protective Liability” policy. Such insurance shall include cross liability and severability of interest clauses, and shall contain a provision that the insurer will not cancel the insurance without first giving the Owner 30 days' prior written notice. The Contractor shall not cancel or materially change or fail to renew or otherwise default on any insurance described herein without first giving the Owner 30 days' prior written notice.
- 1.7.4. Any and all deductibles in the Contractor's insurance policies shall be borne solely by the Contractor and shall not be recovered or attempted to be recovered from the Owner.
- 1.7.5. In addition, all such insurance policies shall be non-contributing with, and will apply only as primary and not excess to, any insurance proceeds available to the Owner, or its nominee (if any).
- 1.7.6. Such insurance shall be with insurers acceptable to the Owner and a copy of all certificates of insurance shall be delivered to the Owner prior to the commencement of the Term.

1.8. Workplace Safety and Insurance Board Coverage

- 1.8.1. Neither the Contractor nor its agents or employees are covered by the Owner under the following applicable Provincial Workplace Safety and Insurance legislation, as amended (the “WSIA”):

Province	Applicable Workplace and Safety Insurance Legislation
Ontario	Workplace Safety and Insurance Act, 1997, SO 1997, c 16, Sch A

and the Contractor shall be responsible for and shall pay all dues and assessments payable under the applicable WSIA, the Employment Insurance Act, S.C. 1996, c23 as amended or any other legislation, whether Provincial or Federal, in respect of the Contractor, its employees , agents and operations, and shall furnish the Owner, at the start of the Agreement, and yearly thereafter, or at any time if requested, with such satisfactory evidence that it has complied with the provisions of any such legislation. If the Contractor fails to do so, the Owner shall have the right to withhold payment of such sum or sums of money due to Contractor that would be sufficient to cover Contractor’s default and the Owner shall have the right to pay any amounts due and owing or so assessed.

- 1.8.2. The Owner is not the employer of the Contractor or its personnel under any circumstances whatsoever. Nothing in this Agreement shall be construed to create anything other than an arms length relationship between the parties, and other than expressly written in this Agreement, no agency relationship exists between the parties.



1.9. Occupational Health and Safety

1.9.1. The Contractor shall be designated as the following terms according to the following for purposes of the applicable Provincial Occupational Health and Safety legislation, as amended (the “OHSA”), in respect of this Agreement:

Province	Applicable Occupational Health and Safety Legislation	Term
Ontario	Occupational Health and Safety Act, RSO 1990, c O.1	“constructor”

and shall assume all of the corresponding responsibilities as set out in the applicable OHSA and its regulations. The foregoing shall apply notwithstanding that the Contractor is referred to as “Contractor” in this and other related documents.

- 1.9.2. The Contractor agrees that any costs, damages or fines that may be assessed against, or incurred by, the Owner by reason of breach or breaches of the OHSA by the Contractor or any of its sub-contractors will entitle the Owner to set-off the costs, damages or fines so assessed against any monies that the Owner may from time to time owe the Contractor under this Agreement or any other contract or arrangement whatsoever.
- 1.9.3. The Contractor shall be solely responsible for safety on the site and for compliance with the rules, regulations and practices required by the applicable health and safety legislation, and shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Services.
- 1.9.4. By agreeing to maintain the Elevators in accordance with the terms and conditions of this Agreement, the Contractor hereby acknowledges that it has, in its employment, duly trained, competent and qualified mechanics, who are knowledgeable and experienced in all aspects of risk assessment and planning and otherwise in the performance of the Services.
- 1.9.5. The Contractor shall supervise its mechanics to ensure that all Services, including without limitation, inspections, testing and major work are performed in accordance with the Ministry of Labour's rules, regulations and practices. The Contractor shall routinely perform an evaluation of risk related to specific tasks and moving equipment.
- 1.9.6. The Contractor shall take all proper and reasonable steps and precautions in order to avoid hazardous situations, and shall train its employees and other personnel to work safely and in accordance with an established safety program.
- 1.9.7. The Contractor shall not, in any circumstance, use machine beams or structural components without identifying the proper loading capability of the structure.

1.10. Lien Claims

1.10.1. In the event that a claim for lien is registered against title to the Property for which the Owner may become liable, and the registration of which claim for lien results from any



action or failure to act on the part of the Contractor, or any party for whom the Contractor is responsible in law, the Owner shall have the right to retain, out of any Fee or Monthly instalment then due, or, thereafter to become due, an amount reasonable and sufficient to completely satisfy such claim, including, without limitation, the Owner's legal expenses and costs related to such satisfaction.

1.10.2. In the event that the Fee has been completely paid to the Contractor, prior to the time at which such claim for lien arises, the Contractor shall pay to the Owner an amount reasonable and sufficient to completely satisfy such claim, including, without limitation, the Owner's damages, losses, legal expenses and costs.

1.11. Indemnity and Liability

1.11.1. The Contractor shall indemnify and hold harmless the Owner, its agents, officers, directors, employees, representatives, affiliates and heirs from and against all claims, demands, losses, costs, damages, actions, suits or proceedings whether in respect to losses suffered by the Owner or in respect of claims by third parties that arise out of or are attributable in any respect to the Contractor's provision of Services, to the extent that they are caused by the Contractor's wrongful act or neglect or the wrongful act or neglect of anyone for whom the Contractor is responsible in law.

1.11.2. In the event that any damage is sustained to the Property by virtue of the negligent performance of the Services by the Contractor, its agents or employees, the Contractor shall, forthwith, reimburse the Owner for such damage or, shall, forthwith, restore the Property to the Owner's satisfaction, being the previous condition prior to such.

1.11.3. Under no circumstances shall either party be liable for any damage or delay where the cause was beyond either party's reasonable control, including, but not limited to, acts of government, material and labour shortage, strikes, lockouts, labour disputes, accidents, building fire or explosion, theft, weather damage, flood, earthquake, riot, civil commotion, acts of the public enemy, war, mischief or act of God (separately and collectively "Acts of Force Majeure").

1.11.4. Without limiting the generality of the foregoing, Despite Acts of Force Majeure, the Contractor shall continue to perform the Services to the extent possible, with a view to minimizing any inconvenience to the public and the Owner.

1.11.5. The Elevator and all related equipment shall, at all times, remain the property of the Owner and the Contractor shall not assume control, possession or management of any part thereof other than in the course of the rightful performance of the Services.

1.11.6. The Contractor shall have the right to remove any part of the Elevator's equipment for the sole purpose of repairing such equipment, at its own expense.

1.11.7. The Owner agrees to provide the Contractor with unrestricted, ready and safe access to all areas of the Building where any part of the Elevator are located and to keep all machine rooms and pit areas free from water, stored materials and excessive debris within Owner's control or knowledge.



1.11.8. In no event shall either party be liable for any consequential or special damaged

1.12. Sale of Building

1.12.1. The Owner shall not be liable to the Contractor, or to any other party, in respect of any obligations arising hereunder in the event of the sale of a Building.

1.13. Assignment

1.13.1. Neither party to this Agreement shall assign the Agreement or a portion thereof without the written consent of the other, which consent shall not be unreasonably withheld.

1.13.2. This Agreement shall enure to the benefit and be binding upon the parties hereto, their respective successors, executors, and administrators and permitted assigns.

1.14. Law of the Agreement

1.14.1. The validity and interpretation of this Agreement shall be governed by the laws of the Province of [Ontario](#).

1.15. Rights and Remedies

1.15.1. No action or failure to act by the Owner shall constitute a waiver of any right or duty herein, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach hereunder, except as may be specifically agreed in writing by the parties hereto.

1.16. Warranty

1.16.1. The Contractor shall guarantee the materials and workmanship of any installation required for the performance of the Services. The warranty is limited to the repair or replacement, at the Contractor's discretion, of defective materials and the correction of defective workmanship for defects that are reported to the Contractor during the term of this Agreement or within a period of 90 days following the termination or expiry of this Agreement. This warranty excludes damages due to external causes such as fire, water and weather, improper use, misuse, neglect, or work by others, except where such damages are directly related to the Contractor's provision of the Services.

1.17. Entire Agreement and Revisions

1.17.1. This Agreement, **Schedule A**, **Schedule B** and **Schedule C** form the entire agreement between the Parties on the subjects herein and must be read together.

1.17.2. This Agreement supersedes all prior negotiations, representations, warranties, arrangements, understandings or agreements, either written or oral, relating in any manner to the Services.

1.17.3. No change or modification of this Agreement shall be valid unless made in writing and signed by the Contractor and the Owner.



1.18. Notices

1.18.1. All notices and other communications shall be in writing and shall be personally delivered to an officer or other authorized representative of the other party, or sent by facsimile or by courier, charges prepaid, as follows:

If to the Owner:

Name: Kingston & Frontenac Housing Corporation

Address: 119 Van Order Drive Kingston, ON K7M 2N2

Email: svanderschoor@kfhc.ca *valid only with receipt confirmation*

Attention: Scott Vanderschoor - Director of Assets & Development

If to the Contractor:

Name: _____

Address: _____

Use the following methodology to send notices to Contractor:

Email: _____ *valid only with receipt confirmation*

Attention: _____

1.18.2. Any communication which is personally delivered shall be deemed to have been validly and effectively given on the date of such delivery if such date is a business day and such delivery was made during normal business hours of the recipient; otherwise, it shall be deemed to have been validly and effectively given on the next business day.

1.18.3. Any communication which is transmitted by facsimile shall be deemed to have been validly and effectively given on the date of transmission if such date is a business day and such transmission was made during normal business hours of the recipient; otherwise, it shall be deemed to have been validly and effectively given on the next business day.

1.19. Force Majeure

1.19.1. Neither the Contractor nor the Owner shall be held liable or responsible for any failure to perform or any delay in performing any obligations under this Agreement if and to the extent that such failure or delay is the result of any event beyond the reasonable control of such party, including, but not limited to, acts of government, civil commotion, malicious mischief, flood, fire, public emergency, revolution, insurrection, riot, war or act of God.

1.20. Dispute Resolution

1.20.1. The parties shall first attempt to resolve any dispute, claim or issue arising under this Agreement (a "Dispute") by a full exchange of information concerning the basis of the Dispute and discussion to resolve the Dispute. Thereafter, the parties shall resolve the Dispute through a two step dispute resolution process administered in the major city closest to where the Building is situated by an alternative dispute resolution services provider (the "Resolution Services Provider"). Notwithstanding the foregoing, the Owner may seek to resolve dispute relating to preserving or protecting Owner's



proprietary rights, or for extraordinary relief such as injunction or eviction, in accordance with any available course of remedy.

- 1.20.2. The parties shall first attempt to settle the Dispute by participating in at least ten (10) hours of mediation at the offices of the Resolution Services Provider. The complaining party must notify the other party that a Dispute exists and then contact the Resolution Services Provider to schedule the mediation conference. The mediator will then be selected in accordance with the rules of the Resolution Services Provider, but the mediator must not have any real or apparent conflict of interest. The mediation will be a nonbinding conference between the parties conducted in accordance with the applicable rules and procedures of the Resolution Services Provider. Neither party may initiate arbitration proceedings until the mediation is complete. Any mediation will be considered complete:
 1. if the parties enter into an agreement to resolve the Dispute;
 2. with respect to the party submitting the Dispute to mediation, if the other party fails to appear at or participate in a reasonably scheduled mediation conference; or
 3. if the Dispute is not resolved within five (5) days after the mediation is completed.
- 1.20.3. If any Dispute remains between the parties five (5) days after the mediation is complete, the parties shall submit the Dispute to final and binding arbitration (without appeal or review) in the Designated City administered by the Resolution Services Provider under its then current rules. The arbitrator must not have any real or apparent conflict of interest.
- 1.20.4. Arbitration must be initiated within one (1) year from the date on which the Dispute giving rise to the arbitration arose, and any party who fails to commence an arbitration within such one year period shall be deemed to have waived any of its affirmative rights and claims in connection with the Dispute and shall be barred from asserting such rights and claims at any time thereafter. Arbitration shall be deemed commenced by a party when the party sends a notice to the Resolution Services Provider, with a copy of the notice to the other party, identifying the Dispute and requesting arbitration. The arbitrator shall provide a reasoned opinion supporting his decision.
- 1.20.5. The parties agree to share equally the costs, including fees, of any mediator or arbitrator (referred to in this section as a “neutral”) selected or appointed under this section. As soon as practicable after selection of the neutral, the neutral or the neutral’s designated representative shall determine a reasonable estimate of the neutral’s anticipated fees and costs, and send a statement to each party setting forth that party’s equal share of the fees and costs. Each party shall, within ten (10) days after receipt of the statement, deposit the required sum with the neutral.
- 1.20.6. The venue of any mediation or arbitration shall be in the Designated City, unless otherwise mutually agreed by the parties.



1.20.7. The prevailing party in any arbitration shall be entitled to costs, and expenses relating to the arbitration, including reasonable legal fees, expenses, and disbursements, and fees, costs, and expenses relating to any mediation that did not result in a settlement and that pertains to the same issue decided under arbitration.

1.20.8. The provisions of this Section shall survive the expiration or earlier termination of this Agreement for any reason, regardless of whether a Dispute arises before or after termination of this Agreement, and regardless of whether the related arbitration proceedings occur before or after termination of this Agreement. If any part of this Section is held to be unenforceable, it shall be severed and shall not affect either the duties to mediate or arbitrate or any other part of this Section.

1.21. Venue, Jurisdiction, and Jury Waiver

1.21.1. The venue of any judicial proceedings shall be in the Designated City, unless otherwise agreed by the parties. Each party irrevocably submits to the exclusive jurisdiction of the provincial courts located in the Designated City, as the case may be, unless otherwise agreed by the parties. Each party waives to the fullest extent permitted by law, trial by jury of all disputes arising out of or relating to this Agreement.

1.22. Legal Fees

1.22.1. If legal action, including an alternative dispute resolution process, is necessary by either party to enforce or interpret this Agreement or resolve a Dispute arising hereunder, the prevailing party shall be entitled to recover reasonable legal fees and costs, including fees and costs on any appeal.

2. Elevator Maintenance Obligation Details

2.1. Standard of Care

2.1.1. The Contractor shall maintain all of the Elevators in the Building(s) to the latest Code Section 8.6 including all pertinent and required schedules and timing as required under the Code. In addition to the foregoing, the Contractor shall comply with the latest additions and revisions of the Municipal, Provincial, Federal and any other requirements as amended and noted by the authority having jurisdiction, which shall constitute the minimum standard of the Services to be provided by the Contractor (the "Standard"):

Province	Governing Statute	Governing Regulation(s)	Applicable Industry Codes/Standards
Ontario	<i>Technical Standards and Safety Act, 2000, SO 2000, c 16</i>	<i>Elevating Devices, O Reg 209/01 Codes and Standards Adopted by Reference, O Reg 223/01</i>	<ul style="list-style-type: none"> Any applicable director's order Elevating Devices Code Adoption Document as amended, published by the TSSA ASME A17.1-2019/CSA B44-19 Safety Code for Elevators and Escalators CSA Standard B44-19 section.8.6 Maintenance requirements and intervals for elevators,





			dumbwaiters, escalators, and moving walks <ul style="list-style-type: none"> • Reporting requirements for residential outage data.
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- 2.1.2. The Contractor shall maintain the Elevators with a view to minimizing wear and tear on the equipment and minimizing the shut-down time and frequency of breakdowns.
- 2.1.3. The Contractor shall comply with the requirements of the Agreement and schedules, including, without limitation, **Schedule C** and shall perform all the applicable tasks faithfully and with requisite skill and diligence.
- 2.1.4. In order to facilitate these objectives and the Services, the Contractor shall use only competent, trained and qualified persons, supervised by the Contractor's own competent and qualified supervisors and management, fully familiar with the latest Code and Standards, applicable federal, provincial/state and local codes, Health and Safety Regulations and Workplace Hazardous Materials Information System ("WHMIS") requirements as well as the existing elevator equipment in the Buildings, as manufactured, modernized and designed, directly employed and under their supervision, as per the Standards.
- 2.1.5. The Contractor hereby acknowledges having examined the Elevators and hereby represents and warrants:
1. that it is capable of maintaining, adjusting, repairing and servicing the Elevators;
 2. that it accepts the elevating devices in their current condition "as is" and shall maintain same at no additional charges in excess of the pre-maintenance costs where requested or identified prior to award;
 3. the Contractor warrant that there shall be no additional costs beyond the maintenance Fee unless the damage is due to vandalism, misuse or act of God; and
 4. that it has access to all parts, schematics, manuals and instructions necessary to maintain the Elevators to original performance and industry standards for the duration of this Agreement.
- 2.1.6. The Contractor shall, at all times, maintain the Elevators in good, reliable, smooth, quiet, efficient and safe working order and shall use barricades and all possible means to protect passengers or personnel from accidental use or tripping or any other hazard to life or limb.
- 2.1.7. The Contractor's employees and agents shall make all reasonable efforts to keep the Elevators in good, smooth, quiet and safe operating condition and shall report any defect which they cannot remedy within twenty-four (24) hours to the Supervisor, whereupon the Supervisor shall dispatch an adjustor/trouble shooter or a service crew on the next working day to correct such defect.



- 2.1.8. If an Elevator cannot be returned to service within twenty-four (24) hours, the Property Manager shall be notified immediately as to when such Elevator will be returned to service and what steps have been taken to avoid a recurrence of the defect in question.
- 2.1.9. The Contractor shall maintain the original speed and performance times of the Elevators to reasonable expectations and, in any event, to within maximum five per cent (5%) variance of original design and installation parameters, including acceleration and deceleration and door opening and closing, having regard to the type of equipment and to its configuration, and shall perform all necessary adjustments as required to maintain such performances within the limits of the Standard.
- 2.1.10. The Contractor shall check and verify all changes to the control, wiring or equipment to assure safe operation at all times, and maintain the levelling within the original capability and Code and Standards requirements of the Elevators.

2.2. Inclusions

- 2.2.1. Except for the exclusions described below, the Contractor shall, at least once per month, examine, clean, maintain, lubricate and, if necessitated by normal wear and tear, repair or replace all electrical and mechanical components required for the safe, quiet and reliable operation of the Elevators, and within normal conditions keep the elevating devices operating in a safe manner in full Code and Standard conformity, including without limitation, the following:
 1. Elevators:
 - (a) Machines, worms, gears, shafts, thrusts, sheaves, motors, generators, armatures, rotors, commutators, windings, coils, carbon brushes, brush holders assemblies, AC or DC drive units, SCR solid state drives, tacks, brakes, brake shoes and linings, coils, linkages, governors, idlers, compensating sheaves or chain systems, controllers and dispatchers, relays, resistors, capacitors, EPROMS, ELITE PIs, microprocessors, printed circuit boards, sockets, transistors, integrated circuit modules, filters, contactors, fuses, cab fans, control ventilation fans, overloads, power units, static units, phase protection mechanisms, selectors, steppers, contacts, brushes, all hoisting members (including but not limited to: Kevlar, para-aramid synthetic fiber, Nomex, Technora, steel ropes, cables, hoisting belts, governor cables), travelling cables, safety/tiller rope and selector cables or tapes, tape-heads, hall and car door hardware and switches, rollers, gibs, bearings, shafts, fan, pulleys, chains, linkage arms, eccentrics, retainers, door operators, infrared detectors, mechanical safety edges, telephones or other elevator communication systems, battery powered emergency lighting, photo-eyes, clutches, hoistway, cab sills, limit and safety switches, car and hall push buttons and lights, indicators and lights, car top inspection stations, car slings, platforms, stabilizer systems, safety planks, LCD screens, computer systems, peripheral devices, load weighing systems, compensating chains and cables, buffers, counter-weights, top of car maintenance stations including lights,



batteries, slippers or rollers, cylinders, pistons, heads, piping, couplers, hydraulic valve units, pumps, tanks, solenoids, Victaulic couplings, mufflers, gate valves, shackles, Crosbies, babbitts, babitted bearings or shackles, wedges, oil coolers, and all bearings.

2.2.2. General:

1. In addition, the Contractor shall keep the controllers clean and the wiring neat when replacing relays, diodes, resistors, static units or rectifiers.
2. All components shall be properly and securely mounted and the designations permanently marked.
3. All replacement parts of a different manufacture and or machined parts shall be properly adapted and when components are modified or modernized all redundant material and wiring removed and schematics up-dated to reflect changes.
4. All hall and car indicator lights, if not working, shall be checked and replaced monthly as part of the regular maintenance schedule. The Contractor shall clean the machine rooms and pits whenever required and the hoistways at least once every year.
5. Overflow oil, grease and dirt in the pits shall be disposed of in accordance with all applicable safety regulations and environmental standards.
6. The elevator machine room shall be maintained in a clean and tidy condition and the floor and walls shall be painted if soiled by the ropes as required with high quality floor paint.
7. Any water problems or other building items in the hoistway, machine rooms or pits shall be reported to the Property Manager in writing.
8. Any test to ensure that the elevator equipment is safe or to determine if the components are safe, such as full load test, full-load full-speed buffer test, cylinder leakage test (with or without weights), brake test under load, or other tests deemed necessary by the Contractor.

2.3. Exclusions

- 2.3.1. The Contractor shall not be responsible for the repair to any structural elements of the Buildings, hoistway, pit or machine room, architectural finishes, pit drainage, hall doors, hall sills and frames, car doors and car cabs, floors and floor tiles, cab lights, pit and machine room lights (except for changing light bulbs), machine room heating and ventilation systems, trusses, main disconnect switches and fuses or circuit breakers, emergency transfer switches, telephone line and signal, signal contacts for the fire department service and emergency power, hydraulic buried cylinders and buried piping.

- 2.3.2. This Agreement shall not include:



1. performance by the Contractor of any additional tests not listed in this Agreement or its Schedules or in the Code or Standards as amended from time to time;
2. replacement of misused, abused or vandalized parts or components;
3. installation of new additional parts or components; or
4. compliance with directives or recommendations of insurance companies involving work which is not specified in this Agreement.

2.3.3. In addition, the Contractor shall not be required to install new attachments on the Elevators or parts different from those now constituting the equipment, except as direct replacements of existing components and as per this Agreement.

2.4. Lubricants

2.4.1. The following manufacturer's approved lubricants shall be provided by the Contractor in the performance of the Services:

1. Gear oil (to be changed once a year), bearing oil or grease, hoist rope dressing (to be applied sparingly when needed), buffer oil (checked annually), dashpot oil, any door track and roller lubricants, rail oil, hydraulic oil (to be kept, cleaned and filtered, as needed) and all general lubricants.
2. Removal and disposal of oil, solvents and grease or similar substances shall be in accordance with the Standards, all applicable safety regulations and environmental standards and Workplace Hazardous Materials Information System (WHIMS).

2.5. Parts

2.5.1. The Contractor shall be responsible to ensure availability and have in constant supply frequently used and equipment-specific spare parts, lubricants and cleaning materials.

2.5.2. All other parts for the equipment shall be readily available from a central parts depot or available from manufacturers within thirty-six (36) hours, or otherwise shall be kept in constant supply of the Contractor.

1. Where the Contractor demonstrates an inability to provide replacement parts within 24 hours, the contractor shall purchase and maintain an inventory of spare printed circuits boards, encoders, brake pads, rollers, chains, sprockets, fuses, relays, transformers, valves, coils, contactors, locks, contacts, guide shoes, guide rollers, landing switches, limit switches, contact blocks, brake coil, packing, Victaulic seals, gaskets, sensors and small motors on site.
2. Section 2.5.2.1 does not apply to parts related to elevator motors, drives, cylinders, pistons, crown gear, drives or other major components that cannot be handled by a single mechanic capable of lifting thirty (30) pounds.

2.5.3. Light bulbs for indicators and push buttons shall be stored on site at the Building.

2.5.4. All replacement parts shall be original and genuine manufacturer's parts or, if not genuine manufacturer's parts, approved alternatives (as approved by Manager or



Elevator Consultant) which shall be designed to work with the existing circuitry, control and machinery, and not, in any event, be of a lesser quality.

- 2.5.5. Damaged or replaced parts, old oil, liquids and grease are to be removed from the Building and properly disposed of off-site in accordance with all applicable safety regulations and environmental standards.
- 2.5.6. All flammable liquids, rags and oils shall be stored in approved containers and all Safety Rules and WHIMS Regulations adhered to.

2.6. Obsolescence

- 2.6.1. The Contractor accepts the age of the Elevators and related equipment in the Buildings at the time of signing this Agreement and the Contractor agrees to maintain the Elevators, including all related and associated equipment (the "Elevator & Equipment"), during the Term, without the necessity to modernize the Elevator & Equipment due to obsolescence, except with the prior written consent of the Owner and as per written exceptions attached to the Agreement at **Schedule A**.
- 2.6.2. Should any equipment or part thereof become obsolete, such equipment or part thereof shall be replaced if damaged, excessively worn or broken, due to normal use and while properly and preventively maintained, provided the Owner's express written authorization has first been received by the Contractor. The foregoing is applicable only if replacement parts are not available or cannot be manufactured or machined by any of the common supply and parts dealers or machine shops.
- 2.6.3. Payment to Contractor for the material portion of the parts described in this Section 2.6, which cost in excess of the old original part's value, shall be the responsibility of the Owner, providing the Contractor obtained the prior written consent of the Owner for the price of such part(s). The Owner shall pay the actual invoice value of the new part less estimated value of the old part if it is purchased from the OEM or supplier with an accompanying written confirmation of the purchase, including the price the supplier is paying for same, plus applicable tax and a twenty percent (20%) profit and handling on the supplier's original cost to the Contractor.
- 2.6.4. Following the replacement of any such part as described in this Section 2.6, it shall become part of the existing equipment and shall be maintained as per the terms of this Agreement.
- 2.6.5. Printed circuit boards, motor drives, relays, LCD screens, contactors and infrared detectors are excluded from claims of Obsolescence as replacement parts are readily available or interchangeable.

2.7. Work Schedule And Hours

- 2.7.1. Unless otherwise requested by Owner, all maintenance and service work shall be performed during the Contractor's regular business hours from 7 a.m. to 5 p.m. on regular business days, Monday to Friday, excluding statutory holidays and International Union of Elevator Constructors (IUEC) declared holidays.



2.7.2. As a minimum, monthly maintenance visits and inspections as required by Code Section 8.6 shall be performed. The Contractor's own recommended schedule of maintenance shall become an additional part of this Agreement and shall be strictly adhered to and supervised by the Contractor. Additionally, the following periodic visits shall be applicable as follows:

1. For sites that are five stories or less and containing no more than three Devices, one monthly site visit shall be required;
2. For sites that are more than five stories but less than twelve stories and containing no more than seven Devices, two monthly site visits shall be required;
3. For sites that are more than five stories but less than twelve stories and containing more than seven Devices, weekly site visits shall be required;
4. For sites that are more than twelve stories and containing no more than six Devices, two monthly site visits shall be required;
5. For sites that are more than twelve stories and containing more than seven Devices, weekly site visits shall be required.

2.7.3. The Contractor shall provide real time information as described herein stating conformance to safety code and regulations and as required by the Owner, prepared by an employee of the Contractor:

1. The real time information shall be provided and available on Owner's demand based.
2. The real time information shall be transferred from the Contractor to the Consultant Database system by using web services application without any human intervention and in an approved electronic format. The Contractor shall provide the web services application and allow the Consultant to request the information at any time.
3. The real time information should include relevant required data and outlining the details of:

(a) Call backs:

- i. The information should include but not limited the date-time of call back, mechanic dispatched time, mechanic arrival time, description of the call, description of the repair, completion date, down time, callback code or category.

(b) Government Mandated Maintenance:

- i. The information should include but not limited the date-time of maintenance, mechanic name, description of the work, mandated maintenance status, number of hours spent per unit, maintenance code or category.

(c) Regular Maintenance activity:



- 2.7.8. If work other than Emergency Service and Minor Repairs or Adjustments is requested by the Manager to be performed outside the Contractor's regular working hours on Elevators noted in the "Importance Level" as "Regular" in **Schedule A**, the Owner agrees to pay the difference between regular and overtime rates at the Contractor's prevailing billing rates.
- 2.7.9. If work other than Emergency Service and Minor Repairs or Adjustments is requested by the Manager to be performed outside the Contractor's regular working hours on Elevators noted in the "Importance Level" as "Critical" in **Schedule A**, the Contractor agrees to perform the work at no additional charges. Where the elevators are noted as "Important" in **Schedule A**, the Contractor agrees to perform all major work non-stop (regular time and overtime until the unit is returned to service) at no additional charges.
- 2.7.10. Where the Contractor is required:
1. To remove an additional Device for Safety reasons (i.e. shutting down an operating device) to replace major component or perform maintenance work on the adjacent Device;
 2. To perform disruptive work to the common area or elevator lobby;
 3. To perform noisy work (20 dBA above ambient noise);
 4. To perform work which involves welding or smoke; or
 5. All full load testing required under Category 5 testing (CAT tests) of the CAN/CSA B44 Code.
- The work shall be performed during Building off hours (this can include weekends or other time acceptable to the Owner).
- 2.7.11. The Contractor shall inform the Manager and receive permission prior to removing any elevating device from service.

2.8. Minimum Monthly Labour

- 2.8.1. The Contractor will provide minimum monthly labour for maintenance of the equipment as follows:
1. For the gearless elevators: 4 man-hours per elevator.
 2. For the MRL elevators: 1.5 man-hours per elevator.
 3. For the geared elevators: 2.0 man-hours per elevator.
 4. For the hydraulic elevators: 1.0 man-hours per elevator.
 5. For the LULA elevators: 0.5 man-hour per LULA.
 6. For the Dumbwaiter elevators: 0.5 man-hour per dumbwaiter.
 7. For the handicap lift: 0.5 man-hour per lift.



- 2.8.2. The above noted hours cannot include major work performed by a service team initiated as part of a preventative maintenance program.
- 2.8.3. The above noted hours cannot include callbacks or minor repairs converted to maintenance hours (i.e. maintenance hours performed as part of a callback). Where callbacks coincide with the maintenance work a minimum of two (2) hours shall be deducted from the maintenance hours for the callback.
- 2.8.4. Major hours spent on mandated maintenance such as annual inspections and testing shall be added to the above hours and be considered topped up hours.
- 2.8.5. Travelling time shall not count as part of the hourly fulfilment.
- 2.8.6. On an annual basis, two weeks following the anniversary date of the Agreement, the Contractor shall provide to the Owner a detailed inventory of hours printed directly from the database and not manipulated or adjusted by human intervention. For contractual hours shorted, the Owner shall be compensated \$150 per hour for every hour not provided contractually from the Agreement amount. Failure to provide the breakdown of hours will result in suspension of Fees by the Owner until this requirement is met.

2.9. Responsibilities, Reporting, Standards

- 2.9.1. The Contractor shall render the Services and shall respond to all calls from the Owner for any conditions that require adjustments or repair.
- 2.9.2. However, it shall be the responsibility of the Owner to notify the Contractor of any observations of poor levelling of cars at landings, erratic operation of car doors, hall doors, door safety edges or infra-red screens, erratic or excessively noisy operation or any other readily apparent situation deemed to be potentially dangerous or unsafe, and the Owner shall immediately remove the Elevator from public use until such time as the Contractor's representative arrives to perform the Services.
- 2.9.3. The Contractor shall not assume the management or control of the Elevators and shall not be held responsible for any of the above conditions when not working in, on or about the Elevator, or for any situation which would not reasonably be revealed by the inspections required to be performed hereunder.
- 2.9.4. The Contractor agrees to inspect the Elevators for Code and Standard compliance and shall report in writing to the Owner any and all noted deficiencies, report forthwith any accidents, incidents or unsafe conditions to the Manager, in writing, as well as to authorities having jurisdiction and/or Elevating Devices Regulators.
- 2.9.5. The Contractor will not be responsible for any inspection reports performed by the local governing authority or Consultants' reports prior to commencement of the Agreement Term, but will perform all required Services hereunder in a diligent and timely manner.
- 2.9.6. The Contractor shall check in with the Building Manager, or where available, with the security office. Parking is the responsibility of the Contractor.



- 2.9.7. Upon entering or leaving the Building, the Contractor must report to the security office and sign in/out of the 'elevator log book', including arrival/departure time. In all cases, Elevator mechanics are expected to arrive in proper uniform. The Contractor will be required to wear badges while on site.
- 2.9.8. Where voluntary compliance is prescribed by the Standards to complete an inspection report, the Contractor is required to complete the report in the time provided and where additional time is required, the Contractor shall request reasonable extension periods. When completed, the Contractor shall submit the voluntary reporting of compliance.
- 2.9.9. The Contractor shall include in the Fee an allowance for a quarterly management meeting conducted by the Manager and its Consultant to discuss callbacks and issues related to the Elevator service.
- 2.9.10. The Contractor shall be responsible for reprogramming the phone(s) on the commencement date where requested by the Owner. The Contractor shall provide twenty-four (24) hour phone service.
- 2.9.11. The Contractor shall be responsible for damage caused to the elevator during all testing provided that the damage is not architectural finishes inside the elevators caused from falling mirrors, paneling or ceiling. Should safeties or buffers fail to perform due to the quality of the adjustment or maintenance, it shall be the responsibility of the Contractor to repair damage caused to the elevator cab and components. The Contractor is required to ensure that the elevators are performing as intended by Code and as such repairs for damages caused by negligent testing (i.e. without verifying that the parts are operating as intended) shall be the responsibility of the Contractor. The Owner shall be responsible for failure to building elements, structural components, pit flooring, machine room and hoistway walls.
- 2.9.12. The Contractor shall be responsible for re-inspection costs levied by the governing authorities for deficiencies noted in their report. The re-inspection fees shall be deducted from the Fee.
- 2.9.13. The Contractor shall complete all reporting requirements for residential outage data as required in Ontario with TSSA. All reporting to be copied to the "Owner/Manager" at the same time.

2.10. Dispatching

- 2.10.1. The Contractor shall, not less than twice per year, or when dispatching is not functioning to its potential, intent or design, check the dispatch system and conduct necessary tests to determine that all circuits and timers are fully functional and that the basic dispatching is working properly.
- 2.10.2. All dispatching relays and circuits, timers, parking sequence and spacing systems, call answering and generator shut-down mechanisms shall be tested on an on-going basis.



2.10.3. Fire safety service and emergency power operation shall be tested quarterly with the key switches and simulated under actual emergency power supply and transfer performed outside the normal Building hours.

2.11. Logbook and Tests

- 2.11.1. The Contractor shall fully comply with all applicable rules and regulations and in accordance with the Standard during the Term hereof. The Contractor's employees shall up-date the log sheet allocated to each Elevator on a monthly basis, and shall perform at a minimum all required tests as per the Code and Standard and state in the log requirements at the intervals required. If the Contractor does not provide a monthly report to the Owner, the Owner reserves the right to withhold from the Fee or Monthly Instalment the cost to engage the services of a third party elevator Consultant to ensure that the work is being performed on the elevating devices group in question to the Standard required.
- 2.11.2. If the tests are successful, the log book in the machine room shall be duly signed and dated for each individual test or task. The Contractor shall also be responsible for keeping copies of all log book entries, which entries shall be made available for inspection within forty-eight (48) hours of a request by regulating authorities or the Owner.
- 2.11.3. The Contractor shall test the fireman's service and emergency power at least once every 6 months and sign for this test as an additional item on the logbook. The Contractor shall provide at the request of the Manager, access to the elevator shaft to test the smoke detector and/or heat sensor at no additional cost to the Owner.
- 2.11.4. Should any test fail, the Contractor shall report the same to the Authorities and to the Owner, including the reason for the failure and remedies which have been taken to rectify the problem.
- 2.11.5. The Contractor's employees shall up-date the on-site log book on an on-going basis and shall submit a time sheet on every visit, clearly stating the times and the work performed.
- 2.11.6. Unscheduled maintenance, repairs and call-backs shall also be recorded in detail.
- 2.11.7. The Contractor shall provide assistance (where required by the Consultant and Owner) at no cost, to conduct joint inspections and testing of elevators.

2.12. Wiring Diagrams And Changes

- 2.12.1. The Contractor warrants that it has access to, and will maintain, the wiring diagrams, keep them clean, properly stored, legible, up-dated, protected and corresponding to the Elevators and all the circuits at all times.
- 2.12.2. Any changes to the circuits are to be made only in accordance with all applicable Standards, safety codes and regulations, and all drawings respecting such changes shall be properly marked and the Owner notified in writing.



- 2.12.3. Where changes are performed to the elevator equipment, submit an Owner’s manual outlining the changes performed, revised ladder diagrams and applicable government submissions.
- 2.12.4. The safety circuits schematics shall be verified and permanently mounted on site in the machine room.

2.13. Equipment Performance Table

2.13.1. The Elevator equipment shall be maintained in a new, good and workmanlike manner, and to the following performance criteria unless otherwise stated in Schedule “A”. At any time the Owner can request proof of performance and the Contractor shall provide a table of performance based on the values below as no additional charge and within 5 (five) business day from the time of request.

Door Type	Door Open Time(sec.)	Door Close Time(sec.)	Operating * Time(sec.)
36" CO	1.3	2.3	7.3
42" CO	1.5	2.5	7.5
48" CO	1.7	2.7	7.7
36" 2SSO	2.2	3.5	8.9
42" 2SSO	2.4	3.7	9.1
48" 2SSO	2.6	3.9	9.3
36" SSSO	2.5	3.6	9.0
42" SSSO	2.7	3.8	9.2

Door Dwell	Times
Car call:	1.0 - 1.5 sec
Hall call:	2.5 - 3.5 sec
Advance Hall Call:	3.0 - 5.0 Sec

* - These operating times are for gearless equipment installed in 1981 or later. For geared equipment add 1.0 second. For equipment installed prior to 1981 add 0.5 second.

CO - centre opening.

2SSO - two speed side opening.

SSSO - single speed side opening.

2.13.2. Comply with the Owner’s requirements for ride quality using an EVA-625 designed and built by Physical Measurement Technologies Inc. (PMT). Apply an ISO 1999 filter to “clean” the raw data:

Ride Quality	X-axis	Y-axis	Z-axis
Peak-Peak	10 mgs	10 mgs	10 mgs
A95	6 mgs	6 mgs	6 mgs

	Geared	Gearless	Hydro
Acceleration	3.5 (f/s ²) max	4.5 (f/s ²) max	4.5 (f/s ²) max
Jerk	7 (f/s ³) max	9 (f/s ³) max	9 (f/s ³) max
Noise – Doors	62 (db)		



2.13.3. Comply with the Laws and the ISO18738 standard (Measurement of Ride Quality) for the evaluation of vibration and sound that is experienced by users of elevators. Ride quality is fundamentally an evaluation of the function of the lift system. The following are the general measurement methodologies established in ISO 18738, and adopted by Solucore:

1. Place instrument in centre of elevator, Microphone at 3.0 to 3.5 feet above the floor;
2. X-axis perpendicular to the guide rails or across from the door;
3. One operator in the elevator, maximum two persons;
4. Record full run from the lowest landing to the top floor;
5. Recording starts prior to car door(s) closing and ends after they are fully open; and
6. Ride quality measurements shall be reported to include: maximum peak-to-peak and typical vibration levels (A95) for each axis, sound levels, jerk, acceleration and velocity.

2.14. Accident Reporting

2.14.1. In the event of an injury to any person working on or using the equipment, the Contractor shall take whatever action is necessary and appropriate in the circumstances to aid the injured person, and to prevent further injury to others, then advise the Owner immediately giving a verbal report, then submit to the Owner within twelve (12) hours of the accident signed written reports from each of the maintenance personnel involved.

2.14.2. The owner will make effort to inform the contractor of any incidents or accidents involving a third party, and will take steps to preserve all related video footage (if any), in addition to preserving any other relevant details or records.

2.15. Shutdowns

2.15.1. Where callbacks are excessive (callback ratio per building greater than 0.5), the Owner reserves the right to request that an adjuster conduct testing and troubleshooting, on a monthly basis, until the callbacks reach an acceptable level.

2.15.2. If a Device is shutdown or taken out of regular service, due to unscheduled equipment failure or malfunction and for more than seventy-two (72) continuous hours, the following applies:

1. The Contractor shall communicate the nature of the problem to the Consultant in writing and provide a proposed remedy with schedule for returning the Elevator back into service;
2. An escalating daily discount as described herein shall apply (noted in percentage of the total monthly Agreement value that shall be refunded), to a maximum of the total monthly Agreement value, if a malfunction continues beyond the 7th day from the time it was reported (provided that the delay is within the Contractor's direct control) as follows:



Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16	Day 17
10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

3. Where the device repair is not possible due to difficulties with proprietary elevator equipment, the Owner reserves the right to contact a third party to assist in the repairs at the Contractor's cost.

2.16. Charges For Additional Work Not Included In Agreement

- 2.16.1. The Contractor agrees that charges for vandalism, misuse, overtime callbacks or any other work not included in this Agreement, will be charged at the Contractor's regular posted billing rates less 10% or the below stated rates, whichever is less.

The following hourly charge rates will apply:

Worker Classification	Straight Time	Premium Time	Time And Half	Double Time
Helper Rate	_____	½ regular time	1.5 regular time	2 regular time
Mechanic Rate	_____	½ regular time	1.5 regular time	2 regular time
Adjuster Rate	_____	½ regular time	1.5 regular time	2 regular time
Crew Rate	_____	½ regular time	1.5 regular time	2 regular time

- 2.16.2. Billing rates shall apply at the commencement date of this Agreement
- 2.16.3. Straight time charges apply for work performed during the regular work week. Premium rates shall apply to all overtime work covered under the Agreement. The Owner pays the premium portion and the Contractor pays for the straight time portion. Overtime at time and ½ will be charged for all overtime work unless the work is considered to be a repair involving 2 employees of the Contractor, in which case double time charges will apply. Double time charges will also apply on Sundays and statutory holidays in the Province in which the Property is located. These rates may be adjusted when the monthly Fee is adjusted and they will not increase more than 2% at any adjustment date.
- 2.16.4. Time tickets detailing all additional work must accompany all invoices.
- 2.16.5. No truck charges, fuel surcharges or any other charges shall be applied to invoices other than travel time on chargeable time tickets not exceeding one (1) hour.
- 2.16.6. Calls shall be placed by the Owner to ensure that the Contractor is aware of unsafe conditions or elevator problems. These callbacks can at times be intermittent in nature where the elevator can be operating on arrival. The Contractor shall not charge for what can be considered nuisance calls and in return the Owner shall take the necessary steps to eliminate unverified callbacks.

2.17. Compliance with Directives

- 2.17.1. The Contractor shall comply with directive issued by AHJs or Consultant within the prescribed period in the report. Where there are no prescribed dates, the Contractor



shall complete critical and safety items within seven (7) days and important items within fifteen (15) days and the remaining items within ninety (90) days.

2.17.2. Failure to comply with 2.17.1, and if an additional report is issued with open items to be address by the Contractor, the owner reserves to the right to back charges assessed by the AHJ if any.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date above written.

by

Kingston & Frontenac Housing Corporation (the "Owner" and "Manager")

Per: _____

Name : _____

Title: _____

by

_____ (the "Contractor")

Per: _____

Name : _____

Title: _____



SCHEDULE “A” to ELEVATOR FULL INCLUSIVE PREVENTATIVE MAINTENANCE AGREEMENT
BUILDING IDENTIFICATION AND ELEVATOR GROUPINGS

The Agreement applies to the Buildings located at: 2075 Battersea Road, Glenburnie, Ontario

Canada (the “Address(es)”).

The following describes the importance level of each elevator grouping in the Building and the additional requirements relating to Services on each elevator grouping:

Elevator Grouping	Importance Level	Hour of Operation
<u>Passengers</u>	Regular	Normal working hours (7:00 am to 5:00 pm) unless 2 or more of the elevators in each elevator bank is out of service; then overtime maintenance work (crew or mechanic) is included in the maintenance Agreement for causes that are not related to vandalism, misuse or act of God.
_____	Important	Normal working hours (7:00 am to 5:00 pm) unless noted elevating device(s) is/are out of service; then overtime work is included in the maintenance Agreement for causes that are not related to vandalism, misuse or act of God.
_____	Critical	After hours only. All work shall be performed at times acceptable to Owner and is likely between the hours of 8:00 pm and 6:00 am including statutory holidays and weekends. Elevator maintenance for Critical elevators must be scheduled in advance.

The following exceptions to the Services described herein are agreed however, in the case of conflict between the terms of this Agreement and its Schedules and this **Schedule A**, the terms of this Schedule A shall prevail:



SCHEDULE “B” to ELEVATOR FULL INCLUSIVE PREVENTATIVE MAINTENANCE AGREEMENT
PAYMENT INSTALMENTS

This **Schedule “B”** may be amended from time to time in accordance with the Agreement terms.

Site Name / Bank Name	Number of Devices	Monthly Instalments (Pre-tax)	TAX	TOTAL
<u>2075 Battersea Rd.- Interim</u>	<u>2</u>	\$ _____	\$ _____	\$ _____
<u>2075 Battersea Rd. - Warranty</u>	<u>2</u>	\$ _____	\$ _____	\$ _____
<u>2075 Battersea Rd. - Long Term</u>	<u>2</u>	\$ _____	\$ _____	\$ _____

Maintenance Specifications – Section 14900





SCHEDULE “C” to the ELEVATOR FULL INCLUSIVE PREVENTATIVE MAINTENANCE AGREEMENT FURTHER PARTICULARS OF SCHEDULED MAINTENANCE SERVICES

The Contractor shall, as part of the “Services” do the following at the intervals indicated:

During testing, inspections, and maintenance, the Elevator shall not be made available to the public. Immediately upon completion, the Elevator shall be restored to its normal operating condition in conformance with the applicable requirements.

- C1. Provide a logbook for the Building Manager for the purpose of noting all burnt light bulbs and fixtures as well as all minor issues for the purpose of assisting the elevator Contractor to pinpoint issues that otherwise would have to be logged as a callback. This logbook is meant to assist the Contractor in addressing ongoing deficiencies with respect to the fixtures in the building but is not meant to absolve the mechanic from inspecting and identifying elevator issues.
 - C1.1 The mechanic shall check in with the Building Manager at the start of each visit and discuss the planned maintenance for the day;
 - C1.2 The mechanic shall at the conclusion of each site visit check in with the Building Manager and provide a report on the completed tasks achieved during the day’s visit; and
 - C1.3 The reports can be verbal but shall be provided in writing where requested by the Manager.
- C2. Provide a maintenance logbook (maintenance control program) specifically designed for each device (as per the Code and Standards) to be kept in a secure location. The location of the logbook shall be on site and shall be maintained relatively up-to-date irrespective of electronic logbooks. The device logbook shall be maintained for a period of seven years.

Monthly Checks

- C3. Review the deficiency logbook and ensure that all LEDs, incandescent light fixture and other illuminating fixtures (position indicators, lanterns, etc...) are working as intended.
- C4. Review the deficiency logbook for Elevator levelling issues and at a minimum inspect the levelling accuracy of all devices in both directions for 10% of the landings per device.
- C5. Check the brushes in the generators, motors and any other direct current rotating device (stepper motor, selector motor, door operator motor, etc...).
- C6. Inspect all fuses and ensure that no wire jumpers are installed on fuses.
- C7. Inspect the overload and ensure that the overload is within the nominal limit and not at the maximum adjustment value.
- C8. Inspect the building management system and verify that the system is connected to the elevators.
- C9. Perform the following work at intervals not less than one month:
 - C9.1 Wipe the controllers (inside lower tray, the back and vacuum the components);
 - C9.2 All landing and car-door mechanical and electrical components shall be maintained to ensure safe and proper operation, as follows:
 - C9.2.1 Interlocks, locks, contacts, stop switches, pit switches and emergency escape contact (stops the elevator if the lock is opened, fastened properly);
 - C9.2.2 Door reopening devices (stopping the door operator in time, beams working properly, nudging is working);
 - C9.2.3 Vision panels (no visible cracks, frame is secured);
 - C9.2.4 Hoistway access switches (working properly in both directions);



- C9.2.5 Eccentrics and retainers (proper clearance, securely fastened);
- C9.2.6 Door gibs (secured and attached to the door panel and the fire tabs are provided);
- C9.2.7 Pickup rollers (no significant damage is detected-specifically no missing pieces);
- C9.2.8 Clutch/retiring cams and assemblies;
- C9.2.9 Hangers (ensure that the door panel clearance is good, no rust of weak welding points and the bolts are properly and securely fastened);
- C9.2.10 Interconnecting means (wires are not frayed and nuts are not loose);
- C9.2.11 Closers (ensure that the wires are not frayed and the pressure is adequate to close the door(s) under all conditions);
- C9.2.12 Sight guards; and
- C9.2.13 Astragals and bumpers.

- C10. Inspect the safety circuit and ensure that no jumpers are attached.
- C11. Inspect the reverse phase relay for jumpers and proper operation. Also check the operation of timers and specifically dash pot oil timers.
- C12. Inspect the error logs and review the data log buffer for errors and faults. Note the repetitive ones and report back to the Building Manager the repetitive issues and your plan to address them.
- C13. Check the pits for water accumulation, dust and oil.
- C14. Check the star-delta or softstart contactor to ensure proper operation.

Rope Elevators

- C15. Governors shall be examined and operated by hand to determine that all parts, including the rope-grip jaw and switches, operate freely, are not excessively worn, and are free of paint. All parts of the machinery and equipment, where provided, requiring lubrication shall be maintained as follows with lubricants of a grade and quality as recommended by the manufacturer:
 - C15.1 Wire ropes, where provided, shall be lubricated as recommended by the Elevator manufacturer.
 - C15.2 Governor ropes, where provided, shall not be lubricated unless recommended by the Elevator manufacturer.
 - C15.3 Elevator guiding members, where required, shall be lubricated. A means shall be provided at the base of the guiding members to collect excess lubricant.
 - C15.4 All moving parts of carriage safety mechanisms shall be kept clean and free of rust and dirt and shall be lubricated.
- C16. Clean the car top(s) and hoistway.
- C17. Inspect and check the door closing force, door speed and operation.
- C18. Visually inspect the brake pads, pins and drum (note excessive wear, heat or for noise). The driving-machine brake shall be tested to ensure proper operation after dismantling, cleaning, replacement of brake linings or any other component, or any change affecting the operation or adjustment of the brake.
 - C18.1 The driving machine brake, shall be tested to ensure proper operation after dismantling, cleaning, or replacing of brake linings or any component; or
 - C18.2 any change affecting the operation or adjustment of the brake.
- C19. Test the alarm button and phone for proper operation.

Hydraulic Elevators



- C20. Provide an oil logbook and record the oil level on a monthly basis (regardless of the cylinder type). Also empty the oil bucket in the pit (shut elevator down and replace packing (if the bucket is overflowing) every 30 days).
- C21. The valve bypass seal is secured and intact.
- C22. Record the monthly oil level at the time of the inspection and the oil temperature.
- C23. Note in the oil logbook the amount of oil collected from drip containers and if the amount of oil loss has increased.
- C24. Inspect and check the door closing force, door speed and operation.
- C25. Clean the car top(s) and hoistway.
- C26. Clean the reservoir tank (outer surface) and wipe any excess oil accumulating on it.
- C27. Ride the elevator from the top to the bottom and note any bouncing, vibrations or odour. Correct the issues noted or prepare a work order where needed.
- C28. Test the alarm button and phone for proper operation.

Annual Tests

The monthly, quarterly and six monthly work shall be performed a prescribed basis. In addition to the periodic work, also perform the following work every year:

- C29. All required CAN/CSA B44-2013 Category one (CAT1) testing.
- C30. Car emergency lighting systems shall be tested.
- C31. Emergency fire service and emergency power system shall be tested.
- C32. All parts relating to free-fall, overspeed, and uncontrolled low-speed protection devices shall be examined annually to determine whether they are in safe operating condition.
- C33. The power closing force on horizontally sliding doors shall be tested to a maximum 135 N.
 - C33.1 Test for compliance with restrictions on opening of passenger elevator car doors; and
 - C33.2 Test door closing time in accordance with the recommended closing times.
- C34. Check the mechanical limits.
- C35. Check the controller fans.

Rope Elevators

- C36. Wire ropes shall be inspected and maintained in accordance with A17.6-2010 Standard on Elevator Suspension, Compensation and Governor Systems. At a minimum, the following procedure shall be performed:
 - C36.1 From the rope data tag, determine
 - C36.1.1 Nominal rope diameter; and
 - C36.1.2 Rope construction (i.e., the number of strands and the number of wires per strand).
 - C36.1.3 Equalize the ropes.
 - C36.1.4 Check the sheaves for unusual wear or uneven wear.
 - C36.2 Establish the length of a rope lay using the following guidelines:

Nominal rope diameter, in	3/8	7/16	1/2	9/16	5/8	11/16	3/4
Rope lay length, in	2-1/2	2-7/8	3-1/4	3-5/8	4-1/16	4-1/2	4-7/8

- C36.3 Measure the rope diameter.
- C36.4 Establish whether the rope is affected by corrosion (e.g., rust, red dust) or is rough.
 - C36.4.1 For ropes with visible red dust “rouge”, the ropes shall be replaced within 60 days of such discovery.



- C36.4.2 For ropes with rust (surface rust) provided that the ropes are not rouged as well, the ropes can be lubricated and treated as prescribed in the code.
- C36.5 Count the number of broken wires per rope lay. For preformed ropes, perform a more rigid inspection.
- C36.6 Inspection to identify hairline breaks on flat spots of worn wires.
- C36.7 Establish whether broken wires are equally distributed in all wire strands or concentrated in one or two strands.
- C37. For governors that cannot be sealed, the tripping speed shall be tested.
- C38. Replace ropes with eye loops/Crosbies to wedge shackles when rope replacement becomes necessary. Include the cost of the wedge shackles in the contract.

Hydraulic Elevators

- C39. The relief valve setting shall be tested annually. The test shall be done by applying pressure from the pump after:
 - C39.1 Closing the main shutoff valve; or
 - C39.2 Inching the empty car upward to engage the plunger stop ring.
- C40. The relief valve setting shall be resealed if it is altered or if the seal is broken.
- C41. Cylinders that are exposed shall be visually inspected. Cylinders that are not exposed shall be tested for leakage. After a minimum of 15 min, a change in car position that cannot be accounted for by visible fluid leakage or temperature change shall indicate a leak in the unexposed portion of the cylinder or the piping.

Five Year Tests

The monthly, quarterly, six monthly and annual work shall be performed a prescribed basis. In addition to the periodic work, also perform the following work every five years:

Rope Elevators

- C42. All required CAN/CSA B44-2013 Category five (CATCAT5) testing.
- C43. For sealable governors; each time the seal on the governor is disturbed; or when inspection indicates that a retest is necessary, the governor shall be spin tested. The governor shall be resealed after the test.
- C44. Oil buffers shall be tested as specified at intervals not exceeding five years to ensure that the buffer is operating as intended.
- C45. Full-load tests shall be carried out on elevators to ensure proper operating of the safeties as well as the proper stopping distance is noted.

Lifts for Persons with Physical Disabilities

Lifts for Persons with Physical Disabilities shall be maintained at frequencies not less than 2 months. Applicable monthly checks shall be performed on Lifts every two months. Where Lifts are not used frequently and agreed to by the Owner in writing, the maintenance visits may be extended to quarterly visits. The Owner's instructions shall be posted in the logbook.

- C46. Wire ropes other than governor ropes shall be replaced when one of the following conditions is identified:
 1. the rope has lost 10% or more of its nominal original diameter;
 2. no corrosion is identified and the number of breaks in a rope lay exceeds the following:



Maximum number of breaks			
Drive machine	Rope constructio	Wire breaks	Breaks in one or two
Traction or roped	6 × 19	2	8
	6 × 21	2	8
	6 × 25	2	8
	7 × 19	30	9
	8 × 19	32	10
	8 × 21	32	10
	8 × 25	32	10
	Drum	Any	12

- corrosion is identified and the number of broken wires in a lay exceeds 50% of the breaks shown in item (b).

Tolerances on Nominal Noncircular Elastomeric Coated Steel Suspension Members Sizes					
Load on Suspension Member, kN	Tolerance				
	Width		Thickness		Flatness
	Min.	Max.	Min.	Max.	
0 to 10% MBF	-5%	+5%	-5%	+5%	3%

Replacement of all noncircular elastomeric coated steel suspension members shall conform to the requirements ASME A17.6 section 3.7 and specifically 3.7.1.1 through 3.7.1.6.

The noncircular elastomeric coated steel suspension member shall be replaced when

- the steel cords, strands or wires break through the elastomeric coating;
- the elastomeric coating has been worn so that any steel cord is exposed to wear; or
- there is evidence of red rouging on any part of the noncircular elastomeric coated steel suspension member except where continuous monitoring of the steel cords for the residual strength criteria of ASME A17.1/CSA B44, requirement 2.20.8.3 is applied. (In noncircular elastomeric coated steel suspension members manufactured with transverse slots, rouging will first be evident in the slots, however not all red discoloration is rouging).

If any one member is replaced due to wear, the complete set of similarly utilized members on that elevator shall be replaced.

- Governor ropes shall be replaced if one of the following conditions is identified:
 - The rope diameter is less than 10% or more of its nominal original diameter; or
 - The number of broken wires in a rope lay exceeds 75% of the maximum number of breaks in the table above.

Perform the Following Checks on Every Visit as applicable to the Lift:

- Carriage emergency lighting systems shall be tested.
- If one belt or the entire chain of a set is visually worn, stretched or damaged, the entire set shall be replaced.
- Sprockets and toothed sheaves shall also be replaced if worn or if the chain damaged any of the teeth of the sheave.
- Reciprocating ball screws shall be kept clean and free of dirt accumulation. Lubrication shall be applied as per the original equipment manufacturer’s instructions. The ball nut shall be examined for signs of wear or damage to the ball transfer tube.



- C52. Racks shall be kept lubricated as required by the duty of the lift and as per the original equipment manufacturer's instructions.
- C53. Racks shall have their attachment points examined for tightness and stability.
- C54. Racks shall be examined for excess wear and physical damage, such as chipping or deformation.
- C55. Pinions shall be examined for wear and physical damage, such as chipping and dents. The pinion attachment to the gear reducer shall be examined for stability and alignment with the rack.
- C56. The backup safety nut if provided shall be examined, lubricated, and tested by hand for proper operation. Other types that do not normally operate directly on the screw shall be examined to ensure they are in place as per the original equipment manufacturer's instructions.
- C57. For Acme thread drive screws, ensure that they are kept clean and free of dirt and debris accumulation. The automatic thread lubricators shall be examined for proper operation and adjusted as required to ensure an adequate flow of lubricant is available to the screw during operation. Automatic thread lubricators should be monitored on every visit.
- C58. Drive chains shall be examined for wear, including chain links if provided.
- C59. Drive chains shall have the chain tension adjusted as required to ensure proper operation.
- C60. Drive chains shall be correctly aligned with the chain sprockets.
- C61. Drive chains sprockets shall be examined for wear and physical damage.
- C62. Rope chains or rope sprockets shall be examined for wear, including rope links, where provided. The rope tension should also be adjusted as required to ensure proper operation.
- C63. Rope chains or rope sprockets shall be correctly aligned and sprockets shall be examined for wear and physical damage. It should also be lubricated as recommended by the original equipment manufacturer.

Maintenance Tasks:

Maintenance tasks required under MCP are found in:

- C64. 8.6.4 = traction elevators
- C65. Hydraulic elevators use appropriate section 8.6.4 & section 8.6.5
- C66. 8.6.6 = Rack and pinion, screw column, hand
- C67. 8.6.7 = Incline, LULA, private residence, side walk, rooftop, special purpose, elevators used for construction.
- C68. 8.6.10 = Dumbwaiters

Intervals

- C69. Under this Agreement, the visits shall not be less than 30 days per Elevator, while 60 days for Lifts for persons with physical disabilities provided that the Lift falls under CSA-B355 shall be acceptable. The logbook shall reflect this minimum requirement.
- C70. It is also understood that typically, the maintenance procedures and intervals shall be based on Section 2.7.2. However, the following requirements shall be used to reduce the 30 days visit requirement and not to increase the number of days per visit:
 - Equipment age, condition, and accumulated wear
 - Design and inherent quality of the equipment
 - Usage
 - Improved technology
 - The manufacturer's recommendations for any SIL rated devices or circuits.