



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

MARK PESTRELLA, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

March 20, 2023

IN REPLY PLEASE
REFER TO FILE: **BRC-2**

**NOTICE TO BIDDERS "D" FOR TWIN TOWERS CORRECTIONAL FACILITY
ELEVATORS PROJECT
SPECS. NO. 7675
LOW-BID SOLICITATION NUMBER: BRC0000394**

This Notice to Bidders "D" clarifies the Low-Bid Solicitation dated January 26, 2023, and is hereby made a part thereof.

PROJECT MANUAL:

1. Refer to Section 00 03 00, Form of Bid.

Delete: Specifications Section 00 03 00 in its entirety and **replace** with the attached revised Specifications Section 00 03 00, Form of Bid, which includes receipt of Notice to Bidders "A," "B," "C," and "D" (ATTACHMENT 1).

2. **Add:** **EXHIBIT 9. TTCF Elevator Interim Maintenance and Warranty Maintenance Specifications, dated 3-14-2023.**

3. Refer to Section 00 07 00 General Conditions, item 29 Payroll Records, A.

Add: The Contractor shall comply with the requirements of Section 1771.4 and Section 1776 of the Labor Code, State of California. The Contractor and its subcontractors shall furnish the records specified in Section 1776 directly to the Labor Commissioner in an electronic format, in the manner prescribed by the Labor Commissioner, on the Department of Industrial Relations website.

4. **Add:** ATTACHMENT 2, which is attached to this Notice to Bidders "D.": Response to Question 5 that updates the Project Manual.

QUESTIONS AND ANSWERS:

1. Question: Please verify hydraulic elevator Piston and Cylinder sizes as we did not have access to the pits. (This was discussed on the walk.)?

Answer: We are not replacing the piston on this project. The existing cylinder size is 6.520 in.

2. Question: Are there IT closets on the roof that all machine rooms can be tied into to make connection to the Sheriff's LAN for the security office desk?

Answer: There are no IT closets on the roof; there is a riser room adjacent to the machine room. The riser rooms have network switches in them, but not on every floor. (See plans Sheets; A-2.07-2.09, A-2.16-2.17, A-2.24-2.29).

3. Question: Your spec requires new pit ladders – if the 4.5" toe clearance cannot be met due to running clearance – should be price swing down ladders to gain this toe clearance?

Answer: Yes, County will accept swing down ladders if the code required 4.5" toe clearance cannot be met.

4. Question: Spec is asking for Shunt Trip disconnects. These are NOT required by the State of CA elevator code. These can be installed as requested but be aware that currently the State will NOT allow these units to trip and recall the elevators to the lobby. The State approved sequence is to shunt trip prior to the sprinklers and basically just shutting the cars down where they are at that time. This could strand or trap passengers. Are we to assume the Shunt Trips will be installed?

Answer: Assume the Shunt Trips will be installed.

-If the Contractor installs shunt trip disconnects – where will the shunt be located? Machine Room or electrical vault?

Answer: Refer to each tower's single line diagram for notation of shunt trip. (See sheets E-002 through 005).

5. Question: Are we bidding the cab interiors to match the drawings or are we including the \$25,000 per car allowance to make all bidding equal? (Spec says an allowance for cab interiors, cab doors, flooring, lighting and fan.) Answer: Please disregard the \$25,000 car allowance. Project manual calls out for the replacement of the elevator cabin interior finishes including all guard rails and floor covering. The project's scope is to include cab doors, lighting, and fan. Please see ATTACHMENT 2 for updated specifications.

6. Question: Will the elevator companies be able to work Overtime on evenings and weekends to meet schedule? As spec states no overtime on weekends or holidays.

Answer: Contractor, when selected, and at no added cost to the County, can request in advance and in writing from the County (Public Works and Los Angeles County Sheriff's Department) to allow multiple crews staggered shifts to meet project requirements, provide the County a more aggressive schedule or to recover scheduled lost time.

7. Question: Are we bidding for State elevator inspections and county inspections or just state?

Answer: The project requires State elevator inspections and County inspections. The County inspections are paid by the County. The State elevator inspections are to be paid by the Contractor. The selected Bidder will itemize and include in the Schedule of Values a separate line item for State inspections/fees.

8. Question: The sequence of cars to be worked on you supplied may be an issue in the rooms where there are 8 Machines located. Will we be able to modify the work sequence and the number of cars down at one time in these 2 rooms?

Answer: Bidders to submit their bids per the Project Manual provided by the County. If selected, contractor may submit proposed deviations from the Project Manual for County's review and approval.

All operations and facility functions are to be maintained during the construction of this project.

9. Question: In the "Information to Bidders" exhibit document, on page 58 it requires us to provide a "Lead Service Mechanic" and a "Regular Service Mechanic" to be assigned to the site. What I am not sure of is are they to be assigned full time from start of work on site through end of the warranty period?

Answer: Please note that the warranty period for each machine room starts after the substantial completion of the same machine room. Modernization crews will not be required to be on site after the last machine room of the project is accepted by the County. Service crews are not required be present on site on a full-time basis. Please refer to Section 00 04 05 Attestation of Additional Personnel Requirements, 1.22 Additional Personnel Requirements, "The Contractor shall comply with the following requirements throughout the entire duration of the project" and

- D. The Contractor shall provide a total of two (2) Elevator Construction/Modernization Supervisor/Leads on-site, one Supervisor/Lead per tower.
- E. The Contractor shall provide one (1) Elevator Maintenance Supervisor/Lead and one (1) Elevator Maintenance Mechanic, as per requirements in Exhibit 9, TTCF Elevator Interim Maintenance and Warranty Maintenance Specifications.

10. I see very contradicting language in the base spec for Maintenance on pages 20 and 21, and in the Alternates #4 and #5 for the Interim Maintenance Period. Please clarify which requirement is to be bid.

Answer: Bidder has provided further clarifications for this item. County will respond via a separate notice to bidders.

11. Question: The Notice to Bidders A extended the bid to March 8th. Due to the complexity of the bid, it is unlikely that we can effectively bid the project with bid receipt from 3rd party vendors as well as the accumulation of a project work schedule by this time. Can we get another 60-days?

Answer: Notice to Bidders "C" extends the bid due date from March 8, 2023, to **April 27, 2023**. Bids must be submitted no later than 11 a.m. electronically through Bid Express.

12. Question: The Sign-In sheet did not list but one (1) A/ B contractor for acting as prime. That prime has indicated that they will not be bidding the project and we are looking to determine if other primes have expressed interest including requesting bid documents for the project?

Answer: Sign-in sheets from the pre-bid conference/site visit on February 7, 2023, from the second site visitation on February 21, 2023, are posted on the Public Works website, listing "General Contractor," "Prime," and "GC." Also, when you click on an item in the "Documents" area, you have the option to input your information as a "Prime, Sub, or Supplier." The website is an electronic bulletin board for firms that would like their information available to others. Subcontractors must contact primary firms to become parts of their teams. Subcontractors may find their own primary firms that meet the requirements and invite them to bid on this project.

13. Question: If Elevator Contractors have \$3-7M+ contracts that are included as a part of a larger contract to an A/ B contractor that are collectively beyond the \$7M threshold acceptable as experience?

Answer: The answer is no. As per Section 00 04 00 Attestation of Contractor's Qualifications. "The General Contractor and Elevator Subcontractor must have completed within the last ten years, at least five similar elevator modernization projects with a construction value of at least 7 million dollars each in the State of California."

14. Question: Are direct +3.5M courthouse/ jail experience in Southern California acceptable as experience for the project?

Answer: The answer is no. +\$3.5M courthouse/ jail experience in Southern California is not acceptable. Per the requirements stated in Section 00 04 00 Attestation of Contractor's Qualifications for "similar elevator modernization projects with a construction value of at least 7 million dollars each in the State of California.

Notice to Proposers "D"
March 15, 2023
Page 6

15. Question: Will the Const/ MOD Super/ Lead identified in 00 04 05 be OK if a single foreman mechanic was identified as project lead and supported by remote project manager and superintendent?

Answer: No. The Contractor shall provide a total of two (2) Elevator Construction/Modernization Supervisor/Leads on-site, one Supervisor/Lead per tower. Superintendent and Project Manager must be onsite and dedicated solely to this project.

Kindly notify your subconsultants to this effect.

If you have any questions regarding this project, please contact Ms. Cheryl Wong of my staff at (626) 300-2330 or CWONG@dpw.lacounty.gov.

Very truly yours,

MARK PESTRELLA, PE
Director of Public Works



for

JOSE QUEVEDO, PE
Assistant Deputy Director
Business Relations and Contracts Division

JQ:cw

ATTACHMENT 1

REVISED FORM
SECTION 00 03 00, FORM OF BID
(Affirming receipt of Notice to Bidders A,B,C,and D)

Name of Bidder (Firm Name)

Vendor Identification Number

ATTACHMENT 1

SECTION 00 03 00

FORM OF BID TO BE USED BY BIDDERS

The undersigned proposes to furnish all materials, labor, and equipment required for the construction to complete the **BRC0000394 Twin Towers Correctional Facility Elevators Project**, in accordance with Drawings and Specifications **7675**, including addenda thereto, if any, adopted by the Board of Supervisors, and on file in the office of the Board of Supervisors, as follows:

The lowest bid price shall be determined by adding the following items: Lump Sum Base Bid in Words + Additive Alternate 1 to Additive Alternate 6 + [Extended Overhead Daily Rate x Multiplied by 60 days] = Total Lump Sum Bid. Preference as stated in Section 00 01 00, 1.30, will be applied to the Total Lump Sum Bid, if applicable, to determine the final total bid amount.

1. LUMP SUM BASE BID:

The lump sum base bid for the work, including Best Management Practices (BMP) and Construction and Demolition Debris Recycling, Mandatory Jobs Coordinator, LASD/County procedures, and requirements according to the Plans and Project Manual and other bid documents, will be:

(\$ _____) (_____)
Lump sum base bid in figures Lump sum base bid in words

2. ADDITIVE ALTERNATE #1 BID: MODERNIZATION OF ELEVATOR #19

Furnish all equipment, labor and materials required to modernize the elevator #19 per drawings and specifications. The amount to be added to the Lump Sum Base Bid will be:

(\$ _____) (_____)
Additive Alternate #1 bid in figures Additive Alternate #1 bid in words

3. ADDITIVE ALTERNATE #2 BID: MODERNIZATION OF ELEVATOR #20

Furnish all labor and materials required to modernize the elevator #20 per drawings and specifications with the following conditions:

Prior to the decommissioning of this elevator for modernization work, contractor shall make provisions for a temporary ADA compliance incline wheelchair lift platform to be installed in the stairway adjacent to elevator #20. Modify the existing stairway handrails as need to accommodate the installation of the incline wheelchair lift platform for a continuous rise of three (3) flights of stairs. At completion of elevator modernization, restore the handrails to the original condition as required. The amount to be added to the Lump Sum Base Bid will be:

(\$ _____) (_____)
Additive Alternate #2 bid in figures Additive Alternate #2 bid in words

4. ADDITIVE ALTERNATE #3 BID: MODERNIZATION OF ELEVATOR #21

Furnish all equipment, labor and materials required to modernize the elevator #21 per drawings and specifications. The amount to be added to the Lump Sum Base Bid will be:

(\$ _____) (_____)
Additive Alternate #3 bid in figures Additive Alternate #3 bid in words

5. ADDITIVE ALTERNATE #4 BID: INTERIM MAINTENANCE DURING CONSTRUCTION

As per the detailed scope of services described in “Exhibit 9- TTCF Elevator Interim Maintenance and Warranty Specifications”. A part of the bid documents. Contractor is to furnish all services, materials, labor, and equipment required for the facilities elevators continued operation and conduct all required elevator servicing to meet County and State operational requirements of the **EXISTING NON-MODERNIZED ELEVATORS** during construction as follows:

Provide a monthly unit price per elevator within each machine room. These services shall become effective at the start of and for the duration of the modernization for all elevators **WITHIN THE SAME ELEVATOR MACHINE ROOM**.

The following is the list of elevator(s) in the same elevator machine room:

- i. Tower 1 (E908): Elevators 1, 2, 4, 5, 6, 7 & 8
- ii. Tower 1 (E1003): Elevators 9, 10
- iii. Tower 2 (S809): Elevators 11, 12, 13, 15, 16, 17 & 18
- iv. CTC (M6101): Elevators M1, M2 & M3.

Total Number of Elevators	19
Monthly Unit Price per Elevator	\$ _____/Elevator/Month

(Additive Alternate #4) = 19 x Monthly Unit Price per Elevator x 12 months

The amount to be added to the Lump Sum Base Bid will be:

(\$ _____) (_____)

Additive Alternate #4 bid in figures

Additive Alternate #4 bid in words

Durations listed herein are only for Bid evaluation purposes. Payments will be per actual durations.

6. ADDITIVE ALTERNATE #5 BID: WARRANTY MAINTENANCE

As per the detailed scope of services described in “Exhibit 9- TTCF Elevator Interim Maintenance and Warranty Specifications”. A part of the bid documents. Provide a monthly unit price per machine room.

Contractor is to furnish all services, materials, labor, and equipment required for the facilities elevators continued operation and conduct all required elevator servicing to meet County and State operational requirements of the newly replaced elevators **after modernization/replacement** of all elevators **WITHIN THE SAME ELEVATOR MACHINE ROOM** and after modernization/replacement of elevators in a single machine room. These services shall run concurrently with the required 12-month warranty period.

The amount to be added to the Lump Sum Base Bid will be:

- i. Tower 1 (E908): Elevators 1, 2, 4, 5, 6, 7 & 8
- ii. Tower 1 (E1003): Elevators 9, 10
- iii. Tower 2 (S809): Elevators 11, 12, 13, 15, 16, 17 & 18
- iv. CTC (M6101): Elevators M1, M2 & M3.
- v. Tower 1 (E1002): Elevator 3
- vi. Tower 2 (S902): Elevator 14

Machine Room	Total Number of Elevators (TNOE)	Monthly Price per Machine Room	Months	Total (TNOE x Monthly Price per Machine Room x Months)
Tower 1 (E908)	7	\$_____	6	\$_____
Tower 1 (E1003)	2	\$_____	26	\$_____
Tower 2 (S809)	7	\$_____	6	\$_____
CTC (M6101)	3	\$_____	26	\$_____
Tower 1 (E1002)	1	\$_____	2	\$_____
Tower 2 (S902)	1	\$_____	2	\$_____
(Additive Alternate #5)				\$_____

(\$ _____) (_____)
 Additive Alternate #5 bid in figures Additive Alternate #5 bid in words

Durations listed herein are only for Bid evaluation purposes. Payments will be per actual durations.

9. RECEIPT OF NOTICE TO BIDDERS: (IF APPLICABLE)

I hereby certify and declare that I have received, reviewed and incorporated Notice to Bidders **A** dated February 6, 2023, Notice to Bidders **B** dated February 9, 2023, Notice to Bidders **C** dated March 2, 2023, and Notice to Bidders **D** dated March 15, 2023 into my Bid.

Executed this day of _____ (Month, Day, and Year)

By: _____

(Authorized Signature of a Principal Owner, Officer, or Manager)

NOTE: Any alteration or addition to the Form of Bid may invalidate same. All blank spaces shall be filled out completely. Line out nonapplicable blanks. An incomplete form may invalidate bid. The County reserves the right to waive any informalities or to reject any or all bids or to accept any alternatives when called for. If the items are incorrectly calculated, the unit price shall prevail and the corrected total amount will be considered for alternates.

I (We) certify that on _____, 20____, License No. _____, license classification(s) _____, was issued to me (us), in the name of _____, by the Contractors' State License Board, pursuant to California Statutes of 1929, as amended, and that said license has not been revoked.

Firm Ownership Information

Check where applicable:

- 1. Minority-Owned
- Woman-Owned
- Disadvantaged-Owned
- Disabled Veteran-Owned
- LGBTQQ-Owned

- 2. An individual
- A corporation. Name state or territory of Incorporation _____
- A copartnership
- A joint venture

Race/Ethnic Composition

For statistical purposes only.

- Black/African American
- Hispanic/Latino
- Asian or Pacific Islander
- Native Americans
- Subcontinent Asian
- White

If a copartnership or joint venture, list names of individuals comprising same below

Date signed _____, 20____

Respectfully submitted,

Place _____
City and State

Firm Name (if applicable)

Bidder's address, E-mail address, and telephone:

Number and Street

Signature and Print Name

City and State

Title and E-mail Address

Telephone

Signature and Print Name

Fax

Title and E-mail Address

**TWIN TOWERS CORRECTIONAL
FACILITY
ELEVATORS PROJECT**

**450 BAUCHET STREET
LOS ANGELES, CALIFORNIA 90012
SPECS. NO. 7675; C.P. NO. 87672**

**ELEVATOR INTERIM MAINTENANCE
AND WARRANTY MAINTENANCE
SPECIFICATIONS**

03/14/2023

ELEVATOR MAINTENANCE SPECIFICATION

TABLE OF CONTENTS

PART 1 - GENERAL.....	1
1.1 REQUEST FOR ELEVATOR MAINTENANCE SERVICES.....	1
PART 2 - REQUIREMENTS.....	ERROR! BOOKMARK NOT DEFINED.
2.1 CONTRACTOR’S PRICE FOR INTERIM MAINTENANCE AND WARRANTY MAINTENANCE.....	1
2.2 CONTRACTOR’S OTHER SUPPORTING ENCLOSURES.....	1
PART 3 - MAINTENANCE SPECIFICATION REQUIREMENTS.....	2
3.1 DUTIES OF CONTRACTOR.....	2
3.2 CONTRACT INTENT.....	2
3.3 OBSOLESCENCE.....	2
3.4 TERM OF WARRANTY.....	3
3.5 NOTICE TO CURE/CANCELLATION.....	3
3.6 CONTRACTOR SERVICES.....	4
3.7 CONTRACTOR COMPLIANCE WITH LAWS.....	5
3.8 CONTRACTOR’S EMPLOYEES.....	5
3.9 HOURS AND MANNER OF WORK.....	6
3.10 MINIMUM MAINTENANCE HOURS AND PROCEDURES.....	8
3.11 SCHEDULING OF WORK.....	8
3.12 ELEVATOR CALLBACK FREQUENCY.....	8
3.13 PERFORMANCE REQUIREMENTS.....	9
3.14 REMOVAL OF UNITS FROM SERVICE.....	9
3.15 THE COUNTY’S RIGHT TO INSPECT AND REQUIRE WORK.....	9
3.16 EXCLUSIONS.....	9
3.17 REMOVAL OF PARTS.....	10
3.18 MACHINE ROOMS.....	10
3.19 WIRING DIAGRAMS.....	10
3.20 MAINTENANCE CONTROL PROGRAM.....	10
3.21 SPECIAL CONDITIONS.....	11
3.22 THE COUNTY’S RESPONSIBILITIES.....	13
APPENDIX A - EQUIPMENT ID, SCHEDULE, PERFORMANCE REQUIREMENTS, AND PRICING.....	14
APPENDIX B - KEY PERFORMANCE INDICATORS AND PERFORMANCE CRITERIA.....	16
APPENDIX C - DEFINITIONS.....	20
APPENDIX D - EXTENT AND SCOPE OF SERVICES.....	21
APPENDIX E - CODE-MANDATED TESTS.....	25

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

PART 1 - GENERAL

1.1 REQUEST FOR ELEVATOR MAINTENANCE SERVICES

- A. County of Los Angeles is requesting your firm to submit a price for interim preventive maintenance of the vertical transportation equipment throughout the duration of the project and a one-year warranty maintenance located at:

Los Angeles Twin Towers Correctional Facility Elevator Project
450 Bauchet Street
Los Angeles, California

1. Tower 1
2. Tower 2
3. Correctional Treatment Center (CTC)
4. Inmates Reception Center (IRC)

PART 2 - REQUIREMENTS

2.1 CONTRACTOR'S PRICE FOR INTERIM MAINTENANCE AND WARRANTY MAINTENANCE

- A. Having examined the Contract Documents issued by the County of Los Angeles, and having reviewed site conditions, applicable codes and all conditions affecting and governing the work, the Undersigned Contractor hereby offers to provide all engineering, labor, materials, transportation, services, and equipment necessary and incidentals to properly execute required work of the Contract Documents.
- B. Contractor is required to enter a cost figure for all pricing requested in Section 00 03 00 FORM OF BID.
1. Proactive preventive maintenance for all equipment, in full accord with the Maintenance Specification for Interim and Warranty Maintenance.
 2. **Interim Maintenance (Additive Alternate #4):** For each machine room, interim maintenance shall begin when first existing elevator in a machine room is taken out of service and continues until the last new elevator in the same machine room passes State inspection and is accepted by the County. Phasing schedule for taking-out existing elevators is provided in Exhibit #10 of the bid documents. If selected, any proposed changes by the contractor to the schedule provided in the Project Manual is subject to County's approval.
 3. **Warranty Maintenance During Construction (Additive Alternate #5):** For each machine room, warranty maintenance shall begin when the last new elevator in the same machine room passes State inspection and the machine room is Substantially Complete, as defined in the Project Manual, and continues for 12 months.

2.2 CONTRACTOR'S OTHER SUPPORTING ENCLOSURES

- A. Contractor acknowledges the Qualifications related to its bid contained within 00 04 00 Attestation of Contractors Qualifications and the Project General Requirement, Section 01 00 00

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

PART 3 - MAINTENANCE SPECIFICATION REQUIREMENTS

3.1 DUTIES OF CONTRACTOR

- A. Contractor shall furnish all supplies, materials, parts, labor, labor supervision, tools, scaffolding, machinery, hoists, equipment (including employee safety equipment), lubricants, and technical information to provide proactive full preventive maintenance service including, but not limited to, cleaning, lubrication, adjusting, parts replacement, repair, and callback service. All work shall be in conformity with highest standards and best industry practices, applicable laws, and all expressed and implied provisions of this Contract for the complete vertical transportation systems detailed in documents.

3.2 INTENT

- A. The intent is to maintain the vertical transportation equipment to the highest industry standards using “industry best” practices by continuously preserving and maintaining the condition, appearance, and performance of the vertical transportation systems detailed herein. The purpose of the maintenance program specified herein is to provide the following:
 - 1. Safe, consistent, and reliable operation throughout the project.
 - 2. Conformance with these specifications.
 - 3. Maximum operational performance throughout the project.
 - 4. Maximum beneficial usage.
 - 5. Maximum life cycle.
- B. Contractor acknowledges the County is relying on Contractor’s professional expertise in performance of Services to achieve and comply with the intent stated above.
- C. Contractor accepts full responsibility for the equipment in each machine room, as it exists on the effective date of the start of modernization of the same machine room. Any open violations, due to an AHJ inspection, will remain the responsibility of the County to address. Contractor will leave equipment in a condition acceptable to The County, at the termination date.
- D. Contractor acknowledges the County provided free access to and sufficient time for adequate examination of the equipment. Contractor further acknowledges the specified vertical transportation equipment has been evaluated by Contractor, and Contractor has determined the equipment is in serviceable operating condition. The Contractor accepts full and complete responsibility for all the maintenance service, repair, cleaning, and testing of the specified vertical transportation equipment listed, in “as is” condition, in accordance with this document.

3.3 OBSOLESCENCE

- A. Definition of Obsolescence as to the existing elevators: A system, component, or part that is no longer repairable, re-buildable, supported, manufactured, available in-stock or supplied by the OEM (Original Equipment Manufacturer), non-OEM elevator systems parts supplier or other third-party parts supplier or fabricator in the same form, fit and function.
- B. During the term of the project, any system, component, or part not meeting the Definition of Obsolescence shall be covered as prescribed in this document. Systems, Components or Parts which are repairable or re-buildable as noted above shall be covered under the following conditions:

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

1. Part is repairable, in the same form and fit, either through the manufacturer or through any mutually approved third-party provider, up to the cost that the original part would have been at its latest available date.
 2. Part can be purchased or manufactured, in the same form and fit, up to the cost that the original part would have been at its latest available date.
- C. Should a part become obsolete, meeting the definition within this section, the Contractor shall submit the following:
1. A separate quotation to the County stating:
 - a. The cost of the obsolete part and the cost of the replacement part. The County shall only be responsible for the cost difference in parts.
 - b. The cost of labor to replace the obsolete part and the cost of labor to install the replacement part. The County shall only be responsible for the cost difference in labor.
 2. Documentation to substantiate the part is obsolete and attempts to locate third party providers has occurred for any material cost associated with the part.
 3. Documentation as to equipment changes required to replace the obsolete part with that of the new part for any labor costs associated with the part replacement.
 4. Accept the County's assistance to the contractor to procure and provide the obsolete part.
- D. If contractor, third party consultant, or the County receive a notice of "component or part obsolescence" from a third-party non-OEM elevator system parts supplier, not owned by or in any way affiliated with the contractor, during this project, then the County will evaluate a claim of obsolescence. Claim may include only the necessary retrofit material and only the additional portion of labor above and beyond what would have been required to replace the obsolete component or part with an OEM original component or part.
- E. No other claim for obsolescence of any kind will be considered by the County during this project.

3.4 TERM OF WARRANTY

- A. The warranty maintenance will run concurrently with construction and the 12-month warranty period beginning at substantial completion for individual elevators, or elevator machine rooms containing multiple elevators.

3.5 NOTICE TO CURE/CANCELLATION

- A. If Contractor violates any provision or fails to properly perform services required by this document on any unit, the County shall issue a Notice to Cure advising Contractor of deficiencies in writing.
1. Within two calendar days, unless otherwise agreed upon, Contractor will provide a formalized correction plan for all deficiencies at Contractor's expense and to the County sole satisfaction.
 2. In the event that deficiencies remain unresolved after the two-calendar day formalized correction plan response and a three day cure period, unless otherwise agreed upon in writing, the County may perform or cause to be performed all or any part of specified services, at the contractor's expense..
 3. The County shall have the right to consider this non-compliance and shall have the option to cancel the interim maintenance and/or the warranty maintenance without penalty.
- B. Failure to maintain performance requirements, maintenance procedures and meet KPI metrics may result in a Notice to Cure as outlined in this document.
- C. If a second notice to cure is issued, the County shall have the right to cancel the maintenance and/or the warranty service, with thirty calendar days' notice, at the County's convenience. The waiver by the

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

County of a breach of any provision of this Contract by Contractor shall not be construed as a waiver of any subsequent breach by Contractor.

- D. If the Interim Maintenance or the Warranty Maintenance are cancelled:
 - 1. Contractor agrees to take actions necessary to cause an orderly transition of Services to County forces or another contractor without detriment to the rights of The County or to continued operation of Property including, but not limited to, refraining from any interference or disruption of occupants or other contractors.
 - 2. Contractor shall immediately deliver to The County all as-built wiring diagrams, portable electronic diagnostic devices supplied or owned by The County, access codes owned by the County, and other materials and documentation related to and required to facilitate services required by this Contract or the Authority Having Jurisdiction.

3.6 CONTRACTOR SERVICES

- A. Services shall include all labor, transportation, supplies, materials, parts, tools, scaffolding, machinery, hoists, employee safety equipment, equipment, lubricants, supervision and all other work and materials expressly required in Appendix D, or reasonably inferred, whether or not expressly stated herein.
- B. Contractor shall coordinate and follow the directives of the County with respect to scheduling Services and any deliveries hereunder or at a time or times further specified in other provisions of Bid documents.
- C. Services shall be performed as follows:
 - 1. In conformance with the Contract and all provisions provided herein, including any appendices or attachments.
 - 2. In conformance with all applicable original equipment manufacturer's specifications.
 - 3. In conformance with the written Maintenance Control Program (MCP, see Section 3.20).
 - 4. In conformance with the County rules, policies, regulations, and requirements for work at the Property, as modified and supplemented during term of the project.
 - 5. By qualified, careful, and efficient employees in conformity with best industry practices.
 - 6. Diligently, to highest industry standards, in a complete and workman-like manner, free of defects or deficiencies.
 - 7. In such manner as to minimize any annoyance, interference, or disruption to occupants of Property and their invitees.
- D. Contractor shall, at a minimum, initiate, maintain, and supervise all safety precautions and programs in connection with Services, and comply with all applicable safety laws. Contractor shall take all reasonable precautions for safety of The County, The County's tenants, The County's employees, Contractor's employees, and other persons on or about the Property.
- E. Contractor shall repair, to satisfaction of The County, any damage to the Property and adjacent areas caused by performance of Services.
- F. Contractor's Additional Services:
 - 1. Attendance and assistance to facilitate access of the machine room(s), pit(s) and hoistway(s) for general building maintenance items not included as the Contractor's responsibility including but not limited to sump pump(s), lighting / lamping, fire life safety detection devices, etc. Contractor may require certain waivers for third party contractors/employees.
 - 2. Attendance and assistance to facilitate re-lamping of architectural lighting in equipment pits, hoistways, or elevator car tops. Contractor may require certain waivers for third party

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

contractors/employees. If re-lamping is required, Contractor shall respond within 48 hours during regular working hours.

3. Attendance and assistance to facilitate Emergency Power testing during regular working hours, as detailed within this document and appendices. If services are requested during overtime, the rate billed shall be the applicable overtime premium portion only of the hourly rates as detailed within these documents and appendices. The County will provide a minimum of two weeks' notice for overtime or regular time standby requests.
4. Attendance and assistance to facilitate Fire Service initiating devices. If services are requested during overtime, the rate billed shall be the applicable overtime premium portion only of the hourly rates as detailed within these documents and appendices. Contractor will provide a minimum of two weeks' notice for overtime or regular time standby requests.
5. Contractor shall conduct and log monthly fire service.

3.7 CONTRACTOR COMPLIANCE WITH LAWS

- A. Contractor agrees to comply with all current laws, codes, rules, and regulations set forth by appropriate authorities having jurisdiction in the locations where Services are performed that are in effect at the time of the project. In the event of differing testing requirements between this document and local codes or ordinances, the more stringent requirement shall prevail.
- B. Contractor must complete all applicable code and/or AHJ-mandated testing and work tasks.

3.8 CONTRACTOR'S EMPLOYEES

- A. Contractor shall have sole responsibility for the means, methods, techniques, procedures, and safety precautions in connection with performance of Services.
- B. Contractor shall be responsible for the supervision and execution of Services by its employees. An onsite condition review shall be conducted by the designated Supervisor of Contractor on an annual basis to ensure that all Services hereunder are performed properly. Contractor shall designate its Supervisor and inform The County of the person responsible for execution of Service. Supervisor shall notify The County of site inspection and provide The County with a written summary of findings within ten working days after completion of site review.
- C. Contractor agrees that its employees are properly qualified and will use reasonable care in the performance of Services. Contractor agrees that all work shall be performed by, and under the supervision of, skilled, experienced elevator service and repair persons directly trained, employed, and supervised by Contractor. Any and all employees performing work at the facility shall be satisfactory to The County (refer to exhibit # 8-TTCF Detention Facility Operations Plan). The County shall be given at least thirty calendar days' notice prior to making changes to site-specific mechanic/employees.
- D. If The County, in The County's sole opinion, determines, for any reason, that the qualifications, actions, or conduct of any particular Contractor employee has violated the Contract by performing unsatisfactory Services, interfering with operation of Property, bothering or annoying any occupants, other contractors, or subcontractors then at Property, or that such actions or conduct is otherwise detrimental to The County, then upon The County's notice, Contractor shall immediately provide qualified replacement persons.
- E. Contractor shall not engage any subcontractors or other parties to perform Services unless first approved in writing by The County. The County's acceptance of subcontractors or other parties shall not relieve, release, or affect in any manner any of Contractor's duties, liabilities, or obligations hereunder, and Contractor shall always be and remain fully liable hereunder.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

- F. Contractor employees are required comply with the conditions outlined in Exhibit #8-TTCF Facilities Operations Plan. Each employee shall be required to have on their person a company ID card and a County issued ID card for identification as a current company employee.
- G. Contractor represents and warrants that it has done all appropriate background check and investigations of employees and is solely responsible for the actions of their employees in the execution of Services.

3.9 HOURS AND MANNER OF WORK

- A. All work, including unlimited call-back service, shall be performed during the building's regular hours, as defined in the bid documents. Emergency callback service requested prior to 4:00 p.m. but answered after 5:00 p.m. shall be considered a regular one-hour callback; after which it shall be invoiced at the overtime premium portion only.
- B. Response Time for Callback Service:
 - 1. During regular time hours identified above, Contractor shall arrive at Property within 60 minutes from time of notification of equipment problem or failure by The County. For callbacks placed during regular time hours, the portion of work that could have been accomplished from the required arrival time of technician to the end of the defined workday shall not be billed at overtime rates.
 - 2. During the regular time hours identified above, Contractor shall provide adequate manpower at the Property in response to passenger entrapment calls within 60 minutes from time of notification by The County.
 - 3. During hours outside those identified above, Contractor shall arrive at Property within 120 minutes from time of notification of an emergency, including but not limited to, equipment problems.. For callbacks placed during regular time hours, the portion of work that could have been accomplished from the required arrival time of technician to the end of the defined workday shall not be billed at overtime rates.
 - 4. During hours outside those identified above, Contractor shall arrive at Property in response to passenger entrapment calls within 60 minutes from time of notification by The County.
- C. In the event the Contractor fails to comply with the requirements listed above, as it relates to an entrapment, the facility has the right to engage its LA County elevator technicians to safely remove passengers and secure the elevator. Such occurrence will not void any responsibilities detailed within this agreement or warranty for the newly modernized equipment.
- D. If additional work within the scope of this Contract is requested during overtime hours, The County shall pay the overtime premium portion only at the stated hourly rates.
- E. If additional work beyond the scope of work enumerated in this Contract is requested during regular hours, the regular time hourly rates shall apply at the stated hourly rates.
- F. If additional work beyond the scope of work enumerated in this Contract is requested during overtime, the rate billed shall be the regular time rate plus the applicable overtime premium at the stated hourly rates.
- G. Minor Shutdown: Minor shutdowns are equipment failures remedied by typical, readily available, in warehouse stock-able or adjustment related components. If a unit shuts down or is removed from service for repair, unless specifically excluded, Contractor shall be responsible for ensuring that minor shutdowns and/or breakdowns are repaired so the affected unit is not out of service for more than twenty-four total hours after contractor has been notified of the problem.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

1. Minor shutdowns and/or breakdowns including but not limited to issues such as door rollers, door belts, hoistway roller guides/slide guides, electrical or mechanical adjustments, fuses, relays, contacts, handrail guide rollers, comb plates, safety switches, etc.
 2. The County will allow time extensions to compensate for part/procurement issues associated with sole-source part/procurement. Contractor responsible for providing formal documentation/notification of delays.
 3. If Contractor fails to complete such repairs, Contractor shall complete such repairs on an overtime basis, as directed by The County at no additional cost to The County. The overtime portion shall not exceed two-man hours, exclusive of travel time.
- H. Regular Shutdown: Regular shutdowns are equipment failures remedied by typical, readily available systems, subcomponents which can be procured via standard stock, overnight delivery, etc. If a unit shuts down or is removed from service for repair, and unless specifically excluded, Contractor shall be responsible for ensuring that typical/average shutdowns and/or breakdowns are repaired so the affected elevator/unit is not out of service more than forty-eight total hours after contractor has been notified of the problem.
1. Regular shutdowns and/or breakdowns including but not limited issues such as wye-delta contacts, starter contacts, valves, pump motors, hydraulic packings, microprocessor boards, push buttons, etc.
 2. The County will allow time extensions to compensate for part/procurement issues associated with sole-source part/procurement (Contractor responsible for providing formal documentation/notification of delays).
 3. If Contractor fails to complete such repairs within the noted timeline, Contractor shall complete such repairs on an overtime basis, as directed by The County at no additional cost to The County. The overtime portion shall not exceed four team hours, exclusive of travel time.
- I. Major Shutdown: Major shutdowns are equipment failures remedied by major components requiring fabrication, equipment specific modifications/specializations, extended trucking/delivery due to size, etc. If a unit shuts down or is removed from service for an unplanned repair, unless specifically excluded by the terms of the Contract, Contractor shall be responsible for preparing a repair schedule within 48 total hours of the unit outage. Contractor shall be responsible for ensuring that major shutdowns and/or breakdowns are repaired so the affected unit is returned to service within the written approved schedule.
1. Major shutdowns and/or breakdowns including but not limited issues such as hoist ropes, worm gear, drive repair/replacement, etc.
 2. The County will allow time extensions to compensate for part/procurement issues associated with sole-source part/procurement. (Contractor responsible for providing formal documentation/notification of delay/s).
 3. If Contractor fails to complete such repairs per written approved schedule or if the repair exceeds fourteen calendar days, Contractor shall complete such repairs on an overtime basis, as directed by The County at no additional cost to The County. Overtime requirements shall be limited to eight team hours of overtime per day in addition to the regular time hours.
- J. If any unit is shut down due to equipment failure for more than 72 continuous hours, maintenance billing for that unit may be suspended until it is restored to beneficial usage, excluding scheduled equipment repairs. Suspended billing shall be calculated per unit, per day, and will not begin until the 72-hour period is exceeded.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

3.10 MINIMUM MAINTENANCE HOURS AND PROCEDURES

- A. Contractor agrees to furnish maintenance personnel for a minimum of one (1) hour per elevator each month, for on-site, routine, regular preventive maintenance for equipment listed in Appendix A (see detailed scheduled hours).
- B. Staffing: Contractor shall provide adequate and dedicated personnel suitable to The County, for the duration of the interim maintenance based on the required maintenance hours identified in Appendix A. During vacation periods, an alternate mechanic, suitable to The County, shall be assigned for maintenance.
- C. Preventative maintenance hours shall not include time expended for callbacks, unplanned repair work or billable work. Time spent assisting The County in performing tests of Firefighter's Emergency Operation or Standby Power Operation, and time spent accompanying The County or their Elevator Consultant in making tests, inspections, or reviews may be credited against these minimum hours, and no additional billing shall be accepted for such time expended.
- D. Contractor's Employees Shall:
 - 1. The County may require Contractor's employees to check in with designated personnel each time they enter the building. Upon arrival and departure all Contractor employees may be required to register in the log maintained at The County's location.
 - 2. The site maintenance logbook shall indicate the name of person or persons, time of arrival, purpose of visit, i.e., callback, preventive maintenance, scheduled repair, Supervisor's inspection, etc., and a brief description of work accomplished, including car and/or group designation, elevator, and time of departure.
 - 3. When departing the property, Contractor's personnel shall sign the maintenance logbook indicating as listed above under item D. 2.
 - 4. The County may elect to have any entries or time tickets documented via a manual or electronic log device provided by The County or supplied by Contractor.
 - 5. Contractor personnel shall comply with any other LASD security requirements, see Exhibit 8-TTCF-Dentention Facility Ops Plan Sample.
- E. Monthly, or as requested by the County Contractor shall meet with The County or its Designated Representative. The scope of this meeting shall include:
 - 1. A review of the previous monthly callbacks.
 - 2. A review of maintenance, including work performed, progress on any deficiency lists or other programs, and scheduled work requiring removal of elevators from service.
 - 3. A review of any reported complaints.
 - 4. Such other elevator-related items as may be appropriate.
 - 5. A review of on-site spare equipment or parts for the elevators.
 - 6. A review of maintenance hours.

3.11 SCHEDULING OF WORK

- A. Contract Repairs: All work detailed and accepted by The County at award of Contract as pre-maintenance repairs must be completed per the schedule agreed upon between Contractor and The County.

3.12 ELEVATOR CALLBACK FREQUENCY

- A. Callback frequency for the elevators covered under the Contract shall be subject to the provisions of the Contract.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

- B. Total callbacks for equipment failure on any elevator shall not be more than 4 per unit per year, as indicated in Appendix B.
- C. Callbacks due to vandalism or misuse of the equipment shall be included.

3.13 PERFORMANCE REQUIREMENTS

- A. Contractor acknowledges and agrees to maintain the minimum performance requirements for the gearless, geared, gearless machine-room-less (MRL), and hydraulic elevators designated and detailed in the tables in Appendices A and B.

3.14 REMOVAL OF UNITS FROM SERVICE

- A. Removing any of the vertical transportation from service during peak hours shall be coordinated with and approved by The County. Removal of elevators for routine maintenance during off-peak hours is expected, but notification to, coordination with, and approval by The County shall be required.

3.15 THE COUNTY'S RIGHT TO INSPECT AND REQUIRE WORK

- A. The County reserves the right to make, or cause to be made, audits, maintenance evaluations, inspections, or tests whenever it deems advisable or necessary to ascertain that the requirements of the Contract are being fulfilled.
- B. The Contractor agrees to furnish, without cost, personnel to accompany The County and/or its representatives during such inspections.
- C. Deficiencies noted shall be submitted in writing to the Contractor.
- D. If said deficiencies are not corrected at the time of the initial scheduled follow-up review, then Contractor shall be responsible for the cost of subsequent follow-up reviews at a cost of \$300/hour, portal to portal. The follow up audit will be scheduled no sooner than sixty days following delivery of the initial audit report.
- E. If deficiencies remain unresolved at the time of the follow up review, The County shall issue Notice to Cure.
- F. The County may retain a qualified vertical transportation consultant to perform any services and mediate disputes noted in this section or elsewhere in this Contract

3.16 EXCLUSIONS

- A. Contractor shall NOT be responsible for the following:
 1. Repair or replacement of building items, such as hoistway or machine room walls and floors, car enclosures, car finish floor material, hoistway and car entrance frames, car or hoistway sills, signal fixture faceplate surfaces, cleaning of car interiors, and cleaning of the portions of sills visible when the doors are open.
 2. Mainline and auxiliary disconnect switches, fuses, and feeders to control panels
 3. Jack casing, hydraulic cylinders, and underground or concealed piping.
 4. Lamps for car, machine room, and pit illumination
 5. Smoke and heat sensors and related life safety equipment.
 6. Standby power generators and associated contacts and relays and wiring to the elevator machine rooms, exclusive of wiring connections to elevator controller.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

7. Building paging/communication systems, including consoles, panels, and wiring to junction box on elevator controllers. However, Contractor shall maintain paging system and emergency telephone equipment and speakers in the cars and wiring from each such speaker to the machine room junction boxes.
8. Failure or fluctuations of property electric power, air conditioning, or humidity control.
9. Ingress by water or other material into machine room, hoistway, car enclosure, or pit.
10. Access control equipment, card readers and related devices, software, hardware, programming:
 - a. Exclusive of elevator traveling cables.
 - b. Termination points within elevator systems in control room and car.
11. Upgrades to control/dispatching systems, not to include software updates.

3.17 REMOVAL OF PARTS

- A. No parts or components required for the performance of Services on the vertical transportation equipment or required for its operation may be removed from the site without written approval from The County. This does not include renewal parts stocked on the job by Contractor but does include parts and components that were installed with and are a part of the elevator installation, and parts delivered to the property and paid for by The County, which shall remain its sole property until installed on the equipment. Parts removed as part of the modernization shall remain on site to be used in order to keep elevators in service.

3.18 MACHINE ROOMS

- A. Contractor shall place and keep in the machine rooms Underwriter's Laboratory rated metal parts cabinets. No open storage of parts or supplies shall be permitted.
- B. Machine rooms and parts cabinets shall be always kept clean and neat. Floors shall be painted on a continual basis, and maintained clean and free of dirt, debris, carbon dust, rags, parts, or other items.

3.19 WIRING DIAGRAMS

- A. Wiring diagrams shall be kept neatly folded and stored, except where mounted on boards, and shall be copied and replaced by the Contractor if damaged or unreadable.
- B. For each piece of equipment under service, Contractor shall maintain Property's complete set of straight-line wiring diagrams, showing "As-Built" conditions and any changes or modifications to circuits resulting from control modifications, parts replacement, or equipment upgrades. This includes all manuals supplied by a third-party controller manufacturer or as part of a non-proprietary specification requirement for a modernization or new installation. The County may reproduce these original or modified as-built drawings, manuals, and shall retain sole possession of this set of drawings or books in the event that the Contract is terminated, or if The County's set of drawings or manuals cannot be located at that time.

3.20 MAINTENANCE CONTROL PROGRAM

- A. Contractor shall prepare and provide a Maintenance Control Program (MCP) in compliance with the more stringent requirement of ASME A17.1 or the AHJ (Authority Having Jurisdiction) Code in effect. Instructions for locating this written program shall be posted on the controller cabinets, at least one per elevator, as required by ASME A17.1. Documentation of the MCP must be kept in a visible location in each machine room. When accepted by The County, Contractor's preventive maintenance schedule, including the Maintenance Control Program, and this procedure shall become a part of this Contract.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

- B. Contractor, on The County's behalf, shall conspicuously post written Maintenance Control Program (MCP) and code have required, related documents in each machine room or instructions for locating the MCP in or on the car controllers. Contractor shall maintain preventive maintenance history and testing logs in accordance with the MCP either in the machine room, building management office, or electronically within unit computer control system. Data shall be accessible by The County via manual log, web access and hard copy printout as always permitted by local code. Log or electronic printout shall include all entries for routine preventive maintenance, repairs, tests, callbacks, and Supervisor's inspection. Entries shall include date work is completed, Mechanic's or Supervisor's name, brief description of work completed, including unit number and number of units serviced, repaired, or inspected, and the approximate time required for work excluding travel time to and from property. The County shall be allowed to inspect and copy log or electronic printout and maintenance history and schedule at any time.

3.21 SPECIAL CONDITIONS

- A. Performance Requirements: Equipment must be maintained to perform in compliance with the following standards, as detailed in Appendices A and B.
1. Callback frequency.
 2. Callback response time.
 3. Mean time between callbacks.
 4. Availability.
 5. Maintenance actions, tasks, and/or maintenance hours.
- B. Contractor will provide Los Angeles County data downloads, on a minimum 24-hour cycle, Los Angeles County. This data will include but not be limited to the following requirements:
1. Callback/Repair Log containing the following:
 - a. Clients' individual unit identifier.
 - b. Service Provider's individual unit identification number.
 - c. Service Provider's individual Client code or identifier.
 - d. Date and time call was placed.
 - e. Date and time technician arrived.
 - f. Date and time unit was removed from service.
 - g. Date and time unit was returned to service.
 - h. Callbacks must be delineated by the following:
 - 1) Equipment failure (Contractor responsibility).
 - a) Controls.
 - b) Car door equipment.
 - c) Hoistway door equipment.
 - d) Hoistway electronics.
 - e) Mechanical systems.
 - 2) Misuse of equipment or vandalism.
 - 3) Entrapment.
 2. Maintenance Log containing the following:
 - a. Client's individual unit identifier.
 - b. Service Provider's individual Unit identification number.
 - c. Service Provider's individual Client code or identifier.
 - d. AHJ given ID number.
 - e. Date of maintenance action, including beginning and completion times.
 - f. Detail/number of maintenance tasks performed.
 - g. Maintenance minutes/hours expended by unit.
 - h. All AHJ required testing completion dates.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

3. This information shall be accessible via the Contractor's Application Programming Interface web service (API) calls initiated by the County.
 - a. The Contractor API will be accessible as a Web Service. The County will query the API on the frequency limit specified in contractor developer documentation which can be no less than five times a day to obtain updated Portfolio information on the sites/buildings/units under contract.
 - b. Specific information/documentation on how to access the API, including authentication, methods, data fields, and message schemas, will be available in a separate API Developer Guide.
 - c. Contractor will notify the County of any new API versions to be published ninety days in advance of go-live.
 - d. Data will be available for query on the contractor API for no less than twelve months after it is posted.
 - e. Data posted to the contractor API will be reasonable and accurate. Such as mechanic arrival times that occur after call times, work completed times that occur after mechanic arrival times, and reasonable amounts of time in-between these events
 - f. Further, Contractor retains all intellectual property rights in the Software including the API developed in connection with this Contract. The County and/or Lerch Bates shall not, and are not authorized to, alter, modify, copy, edit, format, create derivative works of the API or otherwise use software including the API except as expressly described within this contract.
 4. As the API is being developed and tested, the County will accept spreadsheet reporting for the above items on a not less than weekly frequency. Alternatively, contractor may provide the County access to data described above via contractor service portal.
- C. State inspection fees regarding operation of equipment covered by the Contract shall be paid by the Contractor. County inspection fees are covered by the County. However, fees for re-inspection due to Contractor's failure to expeditiously eliminate deficiencies covered by the Contract shall be paid by Contractor.
- D. The County may provide information to enable Contractor to render Services hereunder, or Contractor may learn information about Property or develop such information from The County. Contractor agrees:
1. To treat and to obligate Contractor's employees, subcontractors, and suppliers to treat as confidential all such information whether or not identified by The County as confidential.
 2. Not to disclose any such information or make available any reports, recommendations and/or conclusions which Contractor may make on behalf of The County to any person, firm or corporation or use the same in any manner whatsoever without first obtaining The County's written approval, except to the extent necessary in connection with performing Services or when required by law.
- E. Contractor shall not, during performance of the Contract, or thereafter, use or permit the use of The County's name or the name of any affiliate of The County, or the name, address or any picture or likeness of or reference to the Property in any advertising, promotional or other materials prepared by or on behalf of Contractor without the prior written approval of The County, as applicable.
- F. The County will not use Contractor provided software except in connection with the use and operation of the equipment. The County will not reverse engineer or otherwise attempt to obtain the source code of any software in object code form.
- G. Contractor's work shall not include any abatement or disturbance of asbestos containing material, presumed asbestos containing materials, or other hazardous materials, i.e., lead, PCBs (Printed Circuit

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

Boards), etc., collectively "HazMat." Contractor shall have the right to discontinue its work in any location where suspected HazMat is encountered or disturbed, and immediately notify the County

- H. Any HazMat removal or abatement shall be the County's sole responsibility and expense.
- I. Any component installed by the contractor during the term of the Contract shall become included in the general MCP and covered as any other standard component within the Contract.

3.22 THE COUNTY'S RESPONSIBILITIES

- A. Provide clear, safe, and convenient access to the Property and to elevator equipment rooms and pits.
- B. Maintain car lighting, telephone lines to controller terminals, equipment room electrical switch gear, and electrical feeders to elevator controllers and Firefighters' Control Room.
- C. Except for machine rooms under modernization, maintain equipment room heating and air conditioning systems to maintain a temperature range of 60°-90° F, non-condensing.
- D. Maintain fire alarm initiating devices in elevators, lobbies, machine rooms, hoistways, etc.
- E. Prohibit storage of Property equipment or supplies in elevator equipment rooms and obstruction of equipment room access corridors and doors.
- F. Maintain standby power generator systems and related switch gear and feeders.
- G. Except for machine rooms/areas under modernization, maintain equipment rooms, hoistways, and pits in a code-compliant and dry condition.
- H. Coordinate with Contractor regarding The County's required equipment retrofits, such as elevator security systems, new car interior finishes, car interior CCTV systems, etc.
- I. During building construction and/or retrofit, make provisions to limit infiltration of dust and debris into elevator equipment and equipment spaces.

ELEVATOR MAINTENANCE SPECIFICATION
SECTION 143250

APPENDIX A -
EQUIPMENT ID, SCHEDULE, PERFORMANCE REQUIREMENTS,

Tower 1, Machine room M908							
Car ID	Group ID	AHJ ID	Make	Type	Capacity	No of Stops	Speed
1	1-2	106521	Montgomery	Geared Traction	4500 lbs.	7	350 fpm
2	1-2	106522	Montgomery	Geared Traction	4500 lbs.	7	350 fpm
4	4	106524	Montgomery	Geared Traction	7500 lbs.	8	350 fpm
5	5-6	106525	Montgomery	Geared Traction	4500 lbs.	7	350 fpm
6	5-6	106526	Montgomery	Geared Traction	4500 lbs.	7	350 fpm
7	7-8	106527	Montgomery	Geared Traction	2500 lbs.	6	350 fpm
8	7-8	106528	Montgomery	Geared Traction	2500 lbs.	6	350 fpm

Tower 1, Machine room E1002							
Car ID	Group ID	AHJ ID	Make	Type	Capacity	No of Stops	Speed
3	3	100476	Montgomery	Geared Traction	7500 lbs.	9	350 fpm

Tower 1, Machine room E1003							
Car ID	Group ID	AHJ ID	Make	Type	Capacity	No of Stops	Speed
9	9-10	106529	Montgomery	Geared Traction	3500 lbs.	2	450 fpm
10	9-10	106530	Montgomery	Geared Traction	3500 lbs.	2	450 fpm

Tower 1, Machine room E110							
Car ID	Group ID	AHJ ID	Make	Type	Capacity	No of Stops	Speed
21	21	106534	Montgomery	Hydraulic	3500 lbs.	2	125 fpm

Tower 2, Machine room S809							
Car ID	Group ID	AHJ ID	Make	Type	Capacity	No of Stops	Speed
11	11-12	106531	Montgomery	Geared Traction	4500 lbs.	7	350 fpm
12	11-12	106532	Montgomery	Geared Traction	4500 lbs.	7	350 fpm
13	13-14	106523	Montgomery	Geared Traction	7500 lbs.	8	350 fpm
15	15-16	106535	Montgomery	Geared Traction	4500 lbs.	7	350 fpm
16	15-16	106536	Montgomery	Geared Traction	4500 lbs.	7	350 fpm
17	17-18	106537	Montgomery	Geared Traction	2500 lbs.	6	350 fpm
18	17-18	106538	Montgomery	Geared Traction	2500 lbs.	6	350 fpm

ELEVATOR MAINTENANCE SPECIFICATION**SECTION 143250**

Tower 2, Machine room S902							
Car ID	Group ID	AHJ ID	Make	Type	Capacity	No of Stops	Speed
14	13-14	100475	Montgomery	Geared Traction	7500 lbs.	9	350 fpm

Correctional Treatment Center (CTC), Machine room MSB							
Car ID	Group ID	AHJ ID	Make	Type	Capacity	No of Stops	Speed
M1	M1-M3	100878	Montgomery	Geared Traction	5000 lbs.	4	350 fpm
M2	M1-M3	100879	Montgomery	Geared Traction	5000 lbs.	4	350 fpm
M3	M1-M3	100568	Montgomery	Geared Traction	5000 lbs.	5	350 fpm

Inmates Reception Center (IRC), Machine room R1114							
Car ID	Group ID	AHJ ID	Make	Type	Capacity	No of Stops	Speed
19	19	106533	Montgomery	Hydraulic	5000 lbs.	2	125 fpm

Inmates Reception Center (IRC), Machine room R401							
Car ID	Group ID	AHJ ID	Make	Type	Capacity	No of Stops	Speed
20	20	106540	Montgomery	Geared Traction	3500 lbs.	3	350 fpm

ELEVATOR MAINTENANCE SPECIFICATION
SECTION 143250

APPENDIX B -
 KEY PERFORMANCE INDICATORS AND PERFORMANCE CRITERIA

A. Equipment KPI (Key Performance Indicator) Evaluation:

TARGET	MEASURED BY UNIT, GROUP, OR BUILDING PERFORMANCE
100%	Maintenance procedures completed
≤4	Callbacks per unit per year
≥90 days	Mean Time Between Callbacks: When a unit falls below the 90-day threshold it shall be considered as conditionally passing in subsequent months if the elevator has no callbacks during that month. Callbacks due to vandalism or misuse of the equipment shall be excluded from MTBC calculation.
≥99.5%	Equipment Availability
≤1	Not more than one entrapment per unit per quarter. Entrapments per unit per twelve-month rolling period. When a unit has had one entrapment in a twelve-month period, it shall be considered as conditionally passing if the elevator has had no entrapments in the current month.
>72 hrs.	Out of Service - any unit is shut down due to equipment failure for more than 72 continuous hours, maintenance billing for that unit may be suspended until it is restored to beneficial usage, excluding scheduled equipment repairs. Suspended billing shall be calculated per unit, per day, and will not begin until the 72-hour period is exceeded.

B. Performance Criteria: Contractor agrees to maintain the following minimum performance requirements for the elevators listed in Appendix A. Equipment performance requirements indicated are the minimum standard and are not the sole criteria for judging Contractor’s performance. Consistent failure to meet performance requirements shall be grounds for cancellation of this Contract:

1. Floor to Floor Time: Floor-to-floor times are measured in seconds from start of doors closing, including a typical one-floor travel and until the elevator is approximately level with the next successive floor, either up or down, and the doors are 3/4 open for center-opening doors or 1/2 open for side-opening doors. (See following Tables 1-3.)
2. Door opening times are measured in seconds from start of car door open until doors are fully open. (See following Table 4.)
3. Door closing times are measured in seconds from start of door close to doors fully closed and shall be no less than the times shown per above schedule or those permitted by code. (See following Table 4)
4. Door closing force is measured at rest with the doors between 1/3 and 2/3 closed. Door closing force shall be no more than 30 lbf.
5. Door opening and closing shall be smooth and quiet, with smooth stops at the extremes of travel. Car and hoistway doors shall open flush with entrance jambs and each other.
6. Speed: Variance from rated speed, regardless of load, shall not exceed the following in either the up or down direction:
 - a. 3% for closed loop equipment.
 - b. 5% for open loop equipment.
 - c. +10%/-20% hydraulic equipment in the down direction with no load.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

7. Stopping Zone: Stopping zone is the measured variation in inches in vertical distance between the car sill and the landing sill when the car has stopped under any load condition Stopping accuracy shall be $\pm 1/4$ ".
8. Stopping accuracy shall be measured under all load conditions and maintained per this Contract. Standards shown are maximum allowable from no load to full load.
9. Acceleration and deceleration shall be smooth, with no noticeable "steps" or bumps to increase or reduce speed, and no objectionable vibrations.
10. Elevator cars shall travel smoothly and quietly through the hoistways.

TABLE 1: FLOOR-TO-FLOOR PERFORMANCE TIME REQUIREMENTS IN SECONDS FOR OVERHEAD TRACTION ELEVATORS

SPEED (FPM)	ACCEL. RATE (FPS ²)	DOOR TYPE AND OPENING WIDTH*								ADJUSTMENT PER FOOT OF TRAVEL FROM 12'-0" STANDARD** (SECONDS)
		SIDE-OPENING				CENTER-OPENING				
		36"	42"	48"	54"	36"	42"	48"	54"	
GEARED RANGE										
200	1.75	11.2	12.0	12.8	13.6	9.5	10.0	10.5	11.0	0.30
250	1.75	10.8	11.6	12.5	13.3	9.2	9.7	10.2	10.7	0.25
300	2.0	10.4	11.3	12.1	12.9	8.9	9.3	9.8	10.3	0.20
350	2.25	10.2	11.1	11.9	12.7	8.7	9.1	9.6	10.1	0.20
400	2.5	10.0	10.9	11.7	12.5	8.5	8.9	9.4	9.9	0.20
450	2.75	9.8	10.7	11.5	12.3	8.3	8.7	9.2	9.7	0.20
GEARLESS RANGE										
500	3.75	9.1	10.0	10.8	11.6	7.6	8.0	8.5	9.0	0.18
700	3.75	9.1	10.0	10.8	11.6	7.6	8.0	8.5	9.0	0.18
800	3.75	9.1	10.0	10.8	11.6	7.6	8.0	8.5	9.0	0.18
1000	3.75	9.1	10.0	10.8	11.6	7.6	8.0	8.5	9.0	0.18
1200	3.75	9.1	10.0	10.8	11.6	7.6	8.0	8.5	9.0	0.18
* Values are based on 7'-0" to 7'-6" high doors. For 7'-6" to 8'-6" high doors, add following factor; 0.5 second for widths up to 42" and 1 second for widths over 42".										
** Values are based on 12'-0" floor-to-floor height. Adjust using factors noted for variation from this standard.										

TABLE 2: FLOOR-TO-FLOOR PERFORMANCE TIME REQUIREMENTS IN SECONDS FOR MACHINE-ROOM-LESS TRACTION ELEVATORS

SPEED (FPM)	ACCEL. RATE (FPS ²)	DOOR TYPE AND OPENING WIDTH*								ADJUSTMENT PER FOOT OF TRAVEL FROM 12'-0" STANDARD** (SECONDS)
		SIDE-OPENING				CENTER-OPENING				
		36"	42"	48"	54"	36"	42"	48"	54"	
200	1.75	11.2	12.0	12.8	13.6	9.5	10.0	10.5	11.0	0.30
250	1.75	10.8	11.6	12.5	13.3	9.2	9.7	10.2	10.7	0.25
300	2.0	10.4	11.3	12.1	12.9	8.9	9.3	9.8	10.3	0.20
350	2.25	10.2	11.1	11.9	12.7	8.7	9.1	9.6	10.1	0.20

ELEVATOR MAINTENANCE SPECIFICATION
SECTION 143250

TABLE 2: FLOOR-TO-FLOOR PERFORMANCE TIME REQUIREMENTS IN SECONDS FOR MACHINE-ROOM-LESS TRACTION ELEVATORS										
SPEED (FPM)	ACCEL. RATE (FPS ²)	DOOR TYPE AND OPENING WIDTH*								ADJUSTMENT PER FOOT OF TRAVEL FROM 12'-0" STANDARD** (SECONDS)
		SIDE-OPENING				CENTER-OPENING				
		36"	42"	48"	54"	36"	42"	48"	54"	
400	2.5	10.0	10.9	11.7	12.5	8.5	8.9	9.4	9.9	0.20
450	2.75	9.8	10.7	11.5	12.3	8.3	8.7	9.2	9.7	0.20
500	3.75	9.1	10.0	10.8	11.6	7.6	8.0	8.5	9.0	0.18
700	3.75	9.1	10.0	10.8	11.6	7.6	8.0	8.5	9.0	0.18

* Values are based on 7'-0" to 7'-6" high doors. For 7'-6" to 8'-6" high doors, add following factor; 0.5 second for widths up to 42" and 1 second for widths over 42".

** Values are based on 12'-0" floor-to-floor height. Adjust using factors noted for variation from this standard.

TABLE 3: FLOOR-TO-FLOOR PERFORMANCE TIME REQUIREMENTS IN SECONDS FOR HYDRAULIC ELEVATORS										
SPEED (FPM)	DOOR TYPE AND OPENING WIDTH*								ADJUSTMENT PER FOOT OF TRAVEL FROM 12'-0" STANDARD** (SECONDS)	
	SIDE-OPENING				CENTER-OPENING					
	36"	42"	48"	54"	36"	42"	48"	54"		
50	21.5	22.5	23.5	24.5	19.5	20.0	20.5	21.0	1.2	
75	17.5	18.5	19.5	20.5	15.5	16.0	16.5	17.0	0.8	
100	15.5	16.5	17.5	18.5	13.5	14.0	14.5	15.0	0.6	
125	14.5	15.5	16.5	17.5	12.5	13.0	13.5	14.0	0.5	
150	13.5	14.5	15.5	16.5	12.0	12.5	13.0	13.5	0.4	

* Values are based on 7'-0" to 7'-6" high doors. For 7'-6" to 8'-6" high doors, add 0.5 second for widths ≤42" and 1 second for widths >42".

** Values are based on 12'-0" floor-to-floor height. Adjust using factors noted for variation from this standard.

TABLE 4: DOOR OPEN/CLOSE TIME REQUIREMENTS*													
DOOR WIDTH	HIGH-SPEED HEAVY-DUTY 2.5 FPS				MEDIUM-SPEED MEDIUM-DUTY 2.0 FPS				LOW-SPEED 1.5 FPS				
	Side-Opening		Center-Opening		Side-Opening		Center-Opening		Side-Opening		Center-Opening		
	Open	Close	Open	Close	Open	Close	Open	Close	Open	Close	Open	Close	
30"	1.8	3.1	1.3	2.0	2.0	3.1	1.4	2.0	2.3	3.1	1.6	2.0	
32"	1.8	3.2	1.5	2.2	2.1	3.2	1.5	2.2	2.5	3.2	1.8	2.2	
34"	1.9	3.4	1.5	2.2	2.2	3.4	1.5	2.2	2.7	3.4	1.8	2.2	
36"	2.1	3.4	1.5	2.2	2.2	3.4	1.6	2.2	2.8	3.4	1.9	2.2	
38"	2.1	3.5	1.6	2.3	2.3	3.5	1.6	2.3	2.9	3.5	2.0	2.3	
40"	2.2	3.8	1.6	2.3	2.4	3.8	1.7	2.3	3.0	3.8	2.0	2.3	

ELEVATOR MAINTENANCE SPECIFICATION
SECTION 143250

TABLE 4: DOOR OPEN/CLOSE TIME REQUIREMENTS*

DOOR WIDTH	HIGH-SPEED HEAVY-DUTY 2.5 FPS				MEDIUM-SPEED MEDIUM-DUTY 2.0 FPS				LOW-SPEED 1.5 FPS			
	Side-Opening		Center-Opening		Side-Opening		Center-Opening		Side-Opening		Center-Opening	
	Open	Close	Open	Close	Open	Close	Open	Close	Open	Close	Open	Close
42"	2.3	4.0	1.6	2.4	2.5	4.0	1.7	2.4	3.1	4.0	2.1	2.4
44"	2.3	4.1	1.6	2.5	2.6	4.1	1.7	2.5	3.2	4.1	2.1	2.5
46"	2.4	4.2	1.6	2.6	2.7	4.2	1.8	2.6	3.3	4.2	2.2	2.6
48"	2.4	4.6	1.6	2.7	2.7	4.6	1.8	2.7	3.5	4.6	2.2	2.7
50"	2.5	4.6	1.8	2.7	2.8	4.6	1.9	2.7	3.6	4.6	2.3	2.7
52"	2.6	4.8	1.8	2.8	2.9	4.8	1.9	2.8	3.7	4.8	2.3	2.8
54"	2.6	5.1	1.8	3.0	3.0	5.1	1.9	3.0	3.7	5.1	2.3	3.0
60"	2.8	6.1	1.8	3.2	3.2	6.1	2.1	3.2	4.1	6.1	2.6	3.2
66"	3.0	6.1	1.9	3.5	3.5	6.1	2.2	3.5	4.3	6.1	2.6	3.5
72"	3.2	6.6	2.0	3.7	3.7	6.6	2.3	3.7	4.7	6.6	2.8	3.7

* Values are based on 7'-0" to 7'-6" high doors. For 7'-6" to 8'-6" high doors, add 0.5 second to close time for widths ≤42" and 1.0 second close time for widths >42". Times are from closed to fully open or fully open to fully closed.

- C. Car Ride Quality and Noise: All elevators shall be maintained and adjusted to meet the performance requirements per the original specifications for the equipment at each site and within the following parameters:
1. Horizontal acceleration within the cars during all riding and door operating conditions shall not exceed 15 mg peak-to-peak for gearless elevators and 20 mg peak-to-peak for geared elevators, in the 1-10 Hz range. Measurement criteria shall be ISO 8041, peak-to-peak vs. A95 standard.
 2. Vertical acceleration and deceleration shall be constant and not exceed 4 feet/second² with an initial ramp between 0.5 and 0.75 seconds.
 3. Sustained jerk shall not exceed 6 feet/second³.
 4. Measured noise levels in any moving car outside the leveling zone shall not exceed 55 dBA under any condition including ventilation blower or fan on highest speed. Measured noise levels in the car within the leveling zone or when the car is stopped shall not exceed 60 dBA. There shall be no discernible sound in the elevator car from the machine, pump unit, ropes, sheaves, motor generator sets, platforms, cab walls, or car guides unless it is mutually determined by Contractor and The County that such sounds are attributable to the design of the equipment (provided such design exception shall not apply to the extent that Contractor has provided design or redesign Services under this Contract or a related Contract).

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

APPENDIX C - DEFINITIONS

- A. The words or phrases shown below, which appear in this document are defined as follows:
1. AHJ: Authority Having Jurisdiction
 2. MCP: Maintenance Control Program as defined by AHJ-enforced version of ASME A17.1
 3. Pro-Active: Acting in anticipation of future problems, needs, or changes.
 4. Full: Complete, especially in detail, number, or duration; all that is wanted, needed, or possible
 5. Preventive: To anticipate or act ahead of; to keep from happening.
 6. Maintain/Maintenance: Keep in an existing state. Preserve from failure or decline.
 7. Unplanned Maintenance: Tasks and/or repairs that are required due to equipment failure due to either operational malfunction or testing failure. Causes that are specifically excluded in this Contract do not count as unplanned maintenance times.
 8. Planned Maintenance: Tasks and/or repairs that are scheduled, in advance, while the unit is operational. To be considered planned, the County must be notified of the intended repair and schedule, in writing, prior to the unit being out of service.
 9. Timely Replacement: Adequate inventory of commonly used spare parts and other components for elevators available within 4 hours.
 10. Tenant Sensitive Items: Anything concerning the elevators that tenants can see, hear, or feel.
 11. Callback: Any request by Property personnel for elevator service assistance, and those requests which elevator industry jargon would describe as a "callback."
 12. Mean Time Between Failures: The average time between out of service and return to service. This is calculated as the total time out of service/number of out of service events. In the context of this Contract, refers to Mean Time Between Callbacks.
 13. Repair Time Total: Cumulative time for all repairs over the last twelve months or a set calendar twelve-month period.
 14. Availability: Considers equipment down time vs. maximum equipment up time or usage time. This is calculated as "maximum availability - down time/maximum availability - 100" and is expressed as a percentage. The higher the percentage, the better the performance is. This percentage is only calculated vs. the time in the building or facility when the equipment is required to support building activity. The evaluation considers actual equipment availability vs. potential 100% availability. The availability also considers the amount of time a building or facility requires the equipment to be available on a daily, weekly, monthly, annual basis.
 15. Entrapments: An out of service elevator with passengers in the cab requiring the Contractor or other emergency personnel to release the passengers.
 16. Rebuild: To repair, especially to dismantle, rewind, machine, and/or reassemble with new parts.
 17. Fabricate: To construct or manufacture from prepared, standard, or custom components.
 18. Calendar Days: Any day appearing on the calendar, whether a weekday, weekend day, national holiday, state holiday, or other day.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

APPENDIX D - EXTENT AND SCOPE OF SERVICES

- A. Pro-Active, Full Preventive Maintenance: Contractor shall regularly and systematically, on a continuous basis, examine, clean, lubricate and adjust the vertical transportation equipment and provide unlimited callback service during regular working hours and, as conditions warrant, in accordance with accepted industry standards and the applicable manufacturer's published specifications and technical field notes, including those published internally within the manufacturer's organization, repair or replace all portions of the equipment, except those specifically excluded, including but not limited to the work and coverage described hereinafter.
- B. Elevators:
1. Basic Elevator Scope: The services shall include all work and materials expressly required herein or reasonably inferred, whether or not expressly stated herein, including, but not limited to the following:
 - a. Each visit shall include a visual inspection of the hoistways, machine rooms, pits.
 - b. Hoist machines, including worm gears, thrust bearings, drive sheaves, drive sheave shafts, and shaft bearings, tachometers, brake assemblies and pulleys, and all other components and parts of the machine and brake.
 - c. Hoist motors and power conversion devices, including motor windings, field coils, rotating elements (including armatures and commutators), brushes, brush holders, motor bearings, and all other related components and parts.
 - d. Controllers, drives, selectors and dispatching equipment, including all micro-processor and/or solid-state components, relays, resistors, capacitors, condensers, transformers, contacts, leads, dashpots, timing devices, computer devices, encoders, tach generators, steel selector tapes (or cables), mechanical and electrical driving equipment, and all other related components and parts.
 - e. Governors, including governor sheave shaft assemblies, bearings, contacts, governors' jaws, and all other related components or parts.
 - f. Rope brake devices, secondary braking devices, car, and counterweight safeties, including actuating mechanisms, jaws, and all other related components and parts.
 - g. Car and counterweight safeties, including actuating mechanisms, jaws, and all other related components and parts.
 - h. Hoistway equipment, including deflector or secondary sheaves and sheave bearings, car, and counterweight guide rails (excluding replacement), top and bottom limit switches, counterweights and counterweight guide shoes including rollers or sliding gibs, inductors, cams, tapes and all other related components and parts.
 - i. Hoistway entrance equipment, including hoistway door interlocks, hangers, hanger covers and tracks, hoistway door drive assemblies including vanes, drive blocks, clutches, pick-up assemblies and bearings, bottom door guides, auxiliary door closing devices (including cables, sheaves, and arms), door restrictor devices, and all other related components and parts.
 - j. Car and hoistway door gibs, including their attachments to the door panels.
 - k. Car equipment, including car guide assemblies, guide rollers or sliding car guides, car door restrictors, car top exhaust fan or blowers, car top 2:1 sheaf, load weighing or sensing switches, car top inspection stations, car top and bottom lights, car frames, car platforms, and all other related components and parts.
 - l. Car door operators, including door drive chains, sheaves or belts, car door hangers, hanger covers and rollers, car door contacts, all door protective devices (including screen type detectors, proximity edges, mechanical safe edges, and light rays), and all other related components and parts.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

- m. Pit equipment, including car and counterweight buffers, tape sheave assemblies, governor rope pit tension sheave assemblies, compensating rope sheave assemblies or other pit mounted compensation guides, pit lights, and light fixtures including re-lamping (bulbs furnished by The County), and all other related components and parts.
 - n. Alarm bells, emergency stop switches, emergency car lights, and batteries.
 - o. Car operating panels and their attachments to return panels, hall call pushbutton stations, car, and corridor signals and fixtures (including lighted surrounds or buttons), visual and audible signaling devices, remote status panels and switches, traveling cables and wiring and all other related components and parts.
 - p. Hoist, compensating, and governor ropes, chains or belts and their fastening means, and all other similar or related components and parts.
 - q. Seismic Devices, including seismic switches and contacts, derailment devices, and all other related components and parts.
 - r. Hydraulic: Elevator pump, motor, motor windings, roped hydraulic cables, governors, plunger single or multi-stage, all plunger packings, oil/fluid, V-belts, strainers, valves, mufflers, Victaulic fittings, seals, pit oil return units, emergency return unit, oil coolers, emergency return unit and battery. If there is a leak in the hydraulic tank, Contractor is expected to make all attempts to repair the leak. Replacement of the tank unit is the responsibility of the County.
2. Additional Elevator Scope of Work:
- a. Treat all motor windings, as needed, with proper insulating compound that has been approved by the motor manufacturers. Replace any cracked or badly worn field coil windings.
 - b. Keep all car tops, pits, and hoistways clean and free from dirt, oil, lint, debris, and stored items, and maintain each machine room in clean, neat condition.
 - c. Renew all wire ropes or hoisting belts as often as is necessary to maintain an adequate factor of safety. Maintain equal tension on all hoisting ropes or belts, and, where appropriate, shorten any hoisting device as necessary to provide continued safe operation and maintain normal traction.
 - d. Keep all wire ropes, hoisting belts, and guide rails clean and free from dirt, lint, rust, or accumulated grease, and keep rail shanks properly painted.
 - e. Repair or replace conductor cables/traveling cables and hoistway and machine room elevator wiring to prevent shutdowns and provide uninterrupted operation of elevator signals and uninterrupted elevator operation.
 - f. Disassemble machine brakes annually, unless otherwise agreed in writing, check for and replace worn parts, clean all retained parts, reassemble, lubricate, and adjust for proper operation.
 - g. Affix by stencil painting and maintain the appropriate elevator numbers on the car crossheads and on all equipment components in the machine rooms and pits, including hoist machines, motor generators, governors, control cabinets, buffers, and compensation sheave assemblies. These numbers shall be a minimum of 1½" high except on the governor or compensation sheave assembly, which may be less if a suitable flat surface of 1½" is not available.
 - h. Repair damage to car and hoistway door finish when caused by improper adjustment or maintenance of associated door equipment.
 - i. Replace burned out light tubes or bulbs, furnished by The County, in all machine room and pit light fixtures. Replacement of car light bulbs or tubes shall be The County's responsibility when accessibility is possible using standard hand tools from inside elevator cab.
 - j. Maintain the emergency telephone, telephone buttons, button contacts, speakers, and wiring from the machine room junction box, in a fully operational condition. Also maintain wiring for the car telephones from the cars to the machine room junction boxes.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

- k. 24/7 monitoring of the emergency communication devices per code requirements.
 - l. Maintain, in fully operational condition, the complete Elevator Status or Monitoring Panels in the main lobby Security Desk, and the complete elevator panel in the Fire Command Center, including all lenses, lights, switches, and all associated wiring from the panels to the machine room junction boxes.
 - m. Maintain, in fully operational condition, Elite type elevator position indicators.
 - n. Any panel that includes integral elevator information within the display.
 - o. Maintain the emergency telephone buttons, button contacts, speakers, and wiring to the machine room junction box, in a fully operational condition. Also maintain wiring for the car telephones from the cars to the machine room junction boxes.
 - p. Maintain, in fully operational condition, the complete Elevator Status or Monitoring Panels in the main lobby Security Desk, and the complete elevator panel in the Fire Command Center, including all lenses, lights, switches, and all associated wiring from the panels to the machine room junction boxes.
3. Additional Services:
- a. Cleaning:
 - 1) Contractor shall clean elevator equipment, machine rooms, hoistways and pit floors at regular intervals sufficient in frequency to maintain a professional appearance, prevent tracking of dirt, oil, grease, or carbon dust from car tops, pits, or machine rooms onto carpeted areas, and to preserve the life of the equipment.
 - 2) Contractor shall not be responsible for cleaning any equipment made necessary by events beyond its reasonable control or because of improper janitorial or building maintenance functions. Unusual conditions, such as on-going construction or “build-out” in the building may be reviewed with The County to determine responsibility for cleaning.
 - b. Lubrication:
 - 1) Lubricate the equipment at intervals recommended by the equipment manufacturer or as dictated by the use of the equipment. All lubricants shall be suitable for the purpose intended and shall meet or exceed the minimum requirements specified by the manufacturer of the equipment to which the lubricant is applied.
 - 2) Lubricants, cleaning fluids and all combustible liquid shall be stored in metal cabinets in the machine room and shall be disposed of in accordance with OSHA and EPA guidelines. MSDS data sheets shall be posted as required.
 - c. Adjustment: Adjust the equipment as necessary:
 - 1) To the specifications found in this Contract.
 - 2) When required to maintain performance standards specified in this Contract.
 - 3) When necessary, to preserve the useful life of a part or assembly.
 - 4) When necessary, to prevent or eliminate Tenant Sensitive items from becoming adversely noticeable to building’s tenants.
 - 5) Additionally, Contractor shall check and adjust the elevator dispatching systems and make necessary tests at such intervals as are required to ensure all systems are operating properly. If required to complete such system checks, this work shall be completed during overtime at no additional cost to The County.
 - d. Repairs and Replacements: Make repairs and/or replace all worn, damaged, or broken parts or components. Parts or components requiring repair shall be rebuilt to “as new” condition. Parts or components shall be replaced:
 - 1) When worn beyond normal adjustment limits.
 - 2) When necessary, to ensure continued normal operation.
 - 3) When necessary, to extend the useful life of the elevators or any of their components.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

- 4) When necessary, to continue safe, dependable operation in accordance with ASME A17.1 and A17.2 Code.
 - 5) When necessary, to continue performance of the equipment in accordance with its original design.
 - 6) When necessary, to maintain the performance, standards specified in this Contract, including the elevator performance, smoothness, and quietness of operation.
 - 7) When more than one elevator requires repair, The County, upon consultation with Contractor, shall establish priorities of accomplishment.
- e. **Manufacturers' Parts and Lubricants:** In performing the Services, Contractor agrees to provide parts used by manufacturers of the equipment for replacement or repair, and to use lubricants obtained from and/or recommended by the manufacturer of the equipment. Equivalent parts or lubricants may be used if approved in writing by The County.
- f. **Adequate Parts and Parts Storage:**
- 1) Contractor shall maintain an adequate inventory of spare parts and components to permit timely replacement and repairs without delay. All parts, materials, lubricants, rags, cleaning fluids, combustible liquids, and other materials and supplies shall be kept and stored in U.L. rated metal cabinets, provided by Contractor, properly secured, in each machine room, unless code required clearances would be violated by the presence of such cabinets. All materials and supplies kept in these cabinets shall be neatly arranged, and cabinet doors shall be left in the fully closed position after each visit.
 - 2) Cabinets shall be sufficient in number and size to store all parts, materials, and supplies out of sight. No parts, materials, or supplies shall be stored on top of cabinets, on the floors, or any other place where they are visible.
- g. **Prompt Corrective Action:** When, as a result of an examination, a need for corrective action is apparent and the corrective action is within the scope of Contractor's responsibility, Contractor shall proceed immediately to make such replacements, repairs, and/or corrections. If Contractor reasonably believes the corrective action is not within the scope of Contractor's responsibility, and no safety or potential safety problem exists, Contractor shall deliver a written report to The County within seven (7) calendar days of the examination. If a safety or potential safety problem exists, Contractor shall immediately take corrective action at the least possible expense to The County, regardless of scope of responsibility, and make a prompt written report to The County.

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

APPENDIX E - CODE-MANDATED TESTS

- A. Contractor shall schedule, coordinate, and complete statutory Category 1, 3, and 5 tests and other equipment tests in accordance with the more stringent of the requirements of ASME A17.1 of the AHJ including but not limited to:
1. Annual no load slow speed test of car and counterweight safeties, governors, and buffers.
 2. Five-year, full load, full speed test of car and counterweight safeties, governors, and buffers.
 3. Monthly firefighters' service operational tests.
 4. Annual pressure relief tests on hydraulic elevators.
 5. Annual standby power operation tests on elevators.
 6. Monthly Operational Tests: battery pack car emergency lighting, monthly car emergency communication device, and battery pack car lowering devices or car rescue devices.
- B. Contractor shall schedule, coordinate, and complete all statutory tests. Contractor shall schedule said tests in the presence of local enforcing authority and/or persons designated by The County. Scheduling difficulties shall not exempt Contractor from performing tests in compliance with applicable Code or regulatory requirements.
- C. Contractor shall make "Periodic Inspections and Tests" in accordance with the more stringent of the requirements of ASME A17.1 or the AHJ.
- D. Contractor shall provide not fewer than fourteen calendar days prior notification to The County of its intention to perform any testing including Category 1 and Category 5 tests such that a representative of The County may witness the tests. Written reports of all "Periodic" tests shall be submitted to The County. The Contract Price shall include all such required tests during regular hours.
- E. The Elevator Contractor must assist with periodic inspection and testing of Standby Power Operation in accordance with the more stringent of ASME A17.1 or the AHJ. The County shall conduct tests during regular hours. Should The County require tests during overtime hours, the additional costs for tests performed in overtime shall be paid by The County in accordance with this Contract. If the elevators systems fail to work correctly during the testing procedure the elevator contractor shall make necessary corrections and be present at the next test to assure proper operation at no charge to the customer. The base hours spent providing this assistance during this overtime testing may be credited against the minimum hours required by Appendix A of this Contract.
- F. Category 1 tests shall be performed during regular hours. Category 5 tests shall also be scheduled during regular working hours. Should The County require tests during overtime hours, the additional costs for tests performed in overtime shall be paid by The County in accordance with Section 00310 Item 1.8 of this Contract.
- G. Contractor shall affix metal tags for all Category 1, and 5 tests in accordance with ASME A17.1-2004 or later, adopted by the AHJ.
- H. Contractor shall complete and submit all documentation required of elevator service provider by AHJ.
- I. Contractor is responsible for ensuring all equipment included under Contract is free and clear of all violations whether those violations are the result of AHJ-required testing or other inspections.
- J. Contractor's failure to execute statutory tests mandated by either national Codes or local jurisdictions or regulations within thirty calendar days of required time constraint shall make the Contractor responsible for any fines assessed by the AHJ. In the event the AHJ places the elevator out of service or

ELEVATOR MAINTENANCE SPECIFICATION

SECTION 143250

levies a fine because of missed statutory tests, no additional costs shall be paid by The County. To prevent missed required testing, the contractor shall schedule said tests in a timely manner with the building management.

- K. Before performing tests of the elevators, Contractor shall take all reasonable steps to verify that the equipment is in a safe condition for testing, shall check appropriate clearances, shall check basic operation of safety devices, and shall adhere to best practices in making the tests, including all safety procedures in general use by the Contractor or published by the Contractor or manufacturer of the equipment.
- L. Contractor shall be responsible for damages to elevator components as a result of any AHJ/code-required test if damage would have been prevented through proper maintenance of equipment or safety devices. See Section K above.
 - 1. This includes, but is not limited to, machines, buffers, sheaves, ropes, safety devices.
 - 2. Interior finishes are EXCLUDED from the contractor's responsibility.
- M. Submit Inspection reports to The County within ten (working days of completion of tests, confirming findings including corrective actions required and taken. When a deficiency is noted by the AHJ, for all items that are not covered under the service Contract, contractor shall submit a written proposal to The County within ten working days.

ATTACHMENT 2: Response to question #5.

- Item #1 Refer to Technical Specifications bid set dated 12-15-22 “Section 14 22 00 Vertical Transportation Electric Traction Elevator Modernization” and “Section 14 25 00 Vertical Transportation Hydraulic Elevator Modernization”, under paragraph 2.1 “Summary” for both sections:
- A. Where the disposition of all the entrances for all the cars are call for to be “Retain existing” in this paragraph, revise it to read: “Remove existing and provide new”
 - B. New elevator entrances type shall match the existing in operations.
 - C. New elevator entrances shall meet all the requirements for 1-1/2 hr. fire rating.
 - D. All new elevator entrance door panels shall be clad with 20 GA textured stainless steel by Rigidized Metals, pattern 5wl or approved equal.
- Item #2 Refer to Drawing bid set dated 12-15-22, sheet A-2.03, A-2.04, A-2.05, A-2.06, A-2.07, A-2.09, A-2.11, A-2.12, A-2.13, A-2.14, A-2.15, A-2.16, A-2.19, A-2.20, A-2.21, A-2.22, A-2.23, A-2.26, A-2.27 and A-2.28, under the heading of “Reference Notes for Interior Elevations”:
- A. Revised the reference note #3 from “Existing elevator door frame to remain” to read: “Existing elevator door frame to remain, clad over the existing elevator door frame with new 20Ga. A316 stainless steel sheet metal.”
- Item #3 Refer to Drawing bid set dated 12-15-22, Typical Elevator Cab Ceiling Plan 12/T-4.01 and 16/T-4.01 Typical Ceiling at Wall Details. In lieu of the Stainless-Steel T-Bar Frame Ceiling with Polycarbonate Diffuser Lenses, provide elevator ceiling with the following specifications:
- A. Elevator Cab Ceiling Systems
 1. Black welded steel frame w/ 24 GA. stainless steel panels, island style with 6 or 9 stainless steel panels based on the size of the cab. and LED lamps. Mounting Style Shall be Side Mount / Hanger Rod.
 2. Provide cutout in the ceiling panels as needed for other ceiling devices such as camera, air diffuser, fire detectors, etc. as needed.
 3. Place an emergency exit as needed to line up with the exit opening in the cab shell canopy. Verify in field for the location and provide shop drawings.
 4. Light fixtures shall be a combination of LED Downlights + Perimeter Lighting:
 - a. SMD 3528 flexible LED strips:
 - 300 LEDs per strip
 - Housing material: Extruded Aluminum
 - Mounting: Pre-installed in extruded Aluminum Channel



- Metal Finish: Clear Anodized
- Fixture Dimensions: Overall Height: 1.43”, Overall Depth: 2.1”
- Wattage: 1.6 W/lineal feet
- LED Quantify: 18.3/ft.
- Input Voltage; 12V
- Lumens: 68lm/ft
- Color temperature: 2,900-3,200K
- Rated Life: 50,000 hours
- Beam Angle: 120 degrees
- Compliance: ROHS & UL listed

Power supply:

- LED Driver
- Wattage: 60W
- Input Voltage: AC 120-240V
- Current 12.5 Amps
- Output Voltage: 12V AC and 12V DC
- Dimensions : 8”L x 14”W x 4”H (Nominal)
- Compliance: UL listed components.

b. Down Light

- MR16
- Housing Materials: Acrylic
- Mounting: Quick-Mount spring toggles, allow installation or removal from either side of face panel
- Fixture Dimensions: Overall Height: 1.73”, Overall Diameter: 1.96”
- Base type: GU5.3
- Dimmable: Down to 10%
- Wattage: 6W
- LED Quantity: 6/Lamp
- Input Voltage: 12V AC/DC
- Center beam Candlepower: 1,000
- Lumens: 450lm/lamp
- Color Temperature: 3.000K
- Rated Life: 25,000 hours
- Beam Angle: 25 & 35 degrees
- Compliance: ROHS and UL listed
- UV and IR radiation free



Power supply

- LED Driver
- Wattage: 70W
- Input Voltage: AC 120-240V
- Current: 5 Amps
- Output Voltage: 12V AC
- Dimensions : 8”L x 14”Wx 4”H (Nominal)
- Compliance: UL listed components

5. Battery Backup and Wiring Details

- When an elevator goes into sleep mode, the lighting inside the elevator temporarily turns off.
- If there is a power outage, the battery backup unit will run and illuminated the emergency lighting.
- The battery backup unit requires a dedicated uninterrupted supply of AC power.
- All lighting systems shall include a power supply, wire harnessing and an integrated LED dimmer and prewired with a 12ft. lead to allow for mounting to top of cab shell.

6. Minimum Light Reading in foot candles

At threshold, on the ground 37.5 fc
Center of Cab, on the ground 57.7 fc
Center of Cab, 36” above floor 75.4 fc.