



REPUBLIC OF THE PHILIPPINES  
**DEPARTMENT OF BUDGET AND MANAGEMENT**  
 GENERAL SOLANO STREET, SAN MIGUEL, MANILA

**SUPPLEMENTAL/BID BULLETIN (SBB) NO. 5**

This SBB No. 5 dated April 16, 2019 for the Project, "Supply, Delivery, Fabrication, Installation, Testing, and Commissioning of Brand New Passenger Elevators for the DBM Arcache Building," is issued to clarify, modify or amend items in the Bidding Documents. Accordingly, this shall form an integral part of said Documents.

PARTICULARS	CLARIFICATIONS/AMENDMENTS
<i>Section VII. Technical Specifications</i>	<i>Section VII. Technical Specifications</i>
xxxx	xxxx
<i>Annex A</i>	<i>Annex A</i>
xxxx	xxxx
<b>1.05 SUBMITTALS</b>	<b>1.05 SUBMITTALS</b>
xxxx	xxxx
G. None	<b>G. Complete warranty documents, contact information of manufacturer and authorized service centers.</b>
	xxxx
<b>1.06 QUALITY ASSURANCE</b>	<b>1.06 QUALITY ASSURANCE</b>
A. Installer Qualifications: Engage the elevator manufacturer or an experienced Installer approved by the elevator manufacturer who has completed elevator installations similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.	A. Installer Qualifications: <del>Engage the Installation shall be done by the</del> elevator manufacturer or by a <b>competent technician</b> <del>an experienced Installer</del> approved by the elevator manufacturer who has completed elevator installations similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
xxxx	xxxx
<b>1.07 WARRANTY</b>	<b>1.07 <del>WARRANTY</del> MINIMUM WARRANTIES</b>
A. General Warranty: The elevator warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.	A. <del>General Warranty: The elevator warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.</del> <b>Product and Parts Replacement Warranty: One (1) year full product, parts replacement/supplies provision warranty against factory defects and ordinary wear and tear without cost to the Agency, subject</b>

B. Standard Elevator Warranty: Submit a written warranty signed by manufacturer agreeing to repair, restore, or replace defective elevator work within the specified warranty period.

1. Warranty Period: 12 months from date of Substantial Completion.

#### 1.08 MAINTENANCE SERVICE

A. Initial Maintenance Service: Beginning at Substantial Completion, provide 12 months' full maintenance service by skilled, competent employees of the elevator Installer. Include monthly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper elevator operation at rated speed and capacity. Use parts and supplies as used in the manufacture and installation of original equipment.

1. Perform maintenance, including emergency callback service, during normal working hours.
2. Include 24-hour-per-day, 7-day-per-week emergency callback service.
  - a. Response Time: 2 hours or less.

B. Continuing Maintenance Service: Provide a continuing maintenance proposal from Installer to Owner, in the form of a standard yearly (or other period) maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.

to Section A, Paragraph 1.08 hereof.

~~B. Standard Elevator Warranty: Submit a written warranty signed by manufacturer agreeing to repair, restore, or replace defective elevator work within the specified warranty period.~~

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#### 1.08 MAINTENANCE SERVICE

A. ~~Initial Maintenance Service: Beginning at Substantial Completion, provide 12 months' full maintenance service by skilled, competent employees of the elevator Installer. Include monthly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper elevator operation at rated speed and capacity. Use parts and supplies as used in the manufacture and installation of original equipment.~~ **One (1) Year Full Maintenance Service. Consistent with its full product and parts replacement warranty, the Contractor shall warrant and provide full maintenance services within 1 year from delivery/acceptance, without cost to the Agency. Services shall include a monthly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper elevator operation at rated speed and capacity. Replacement parts and supplies to be used shall be original and brand new.**

1. Perform maintenance, including emergency callback service, during normal working hours.
2. Include 24-hour-per-day, 7-day-per-week emergency callback service.
  - a. Response Time: 2 hours or less.

B. Continuing Maintenance Service: Provide a continuing maintenance proposal from Installer to Owner, in the form of a standard yearly (or other period) maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.

**a. Response time: 24 hours or less**

**C. In all cases, services under this Section shall only be done by a competent and accredited technician, as authorized by the manufacturer.**

**2.01 MATERIALS AND COMPONENTS**

xxxx

1. Passenger Elevator

Description	Car 1	Car 2
a) Series	Machine Room Less	
b) Model	Not earlier from 2017	
c) No. of Units	1	
Weight of Passengers	400 kgs	
Rated Speed	0.4 meters per second (mps)	1.0 mps
No. of Stops	2 stops (ground floor, mezzanine)	3 stops (ground, second, and third floors)
Opening	Through and through opening	One side opening
Width of Door opening	900mm	
Car Design	<ul style="list-style-type: none"> <li>- Stainless steel sheet ceiling</li> <li>- Indirect Lighting through milky-white plastic cover</li> <li>- Electric blower with plastic grille</li> <li>- Full mirror on side wall</li> <li>- Pattern-printed stainless steel sheet front wall and door</li> <li>- Inclined type in stainless steel hairline front return panel with integrated entrance column</li> <li>- Vinyl resin kick plate</li> <li>- Homogeneous granite tile floor</li> <li>- Extruded hard aluminum sill</li> </ul>	<ul style="list-style-type: none"> <li>- Stainless steel sheet ceiling</li> <li>- Indirect Lighting through milky-white plastic cover</li> <li>- Electric blower with plastic grille</li> <li>- Full mirror on rear wall and two side walls</li> <li>- Pattern-printed stainless steel sheet front wall and door</li> <li>- Inclined type in stainless steel hairline front return panel with integrated entrance column</li> <li>- Vinyl resin kick plate</li> <li>- Homogeneous granite tile floor</li> <li>- Extruded</li> </ul>

**2.01 MATERIALS AND COMPONENTS**

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Description	Car 1	Car 2
a) Series	Machine Room Less	
b) Model	Not earlier from 2017	
c) No. of Units	1	
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		hard aluminum sill
Display	<ul style="list-style-type: none"> <li>- Lighted Car Operating Panel with Inside Car Floor Indicator, not earlier from 2017</li> <li>- Lighted Outside Hall Position Indicator in every floor, not earlier from 2017</li> <li>- Display height accessible for handicapped</li> </ul>	
d) Control System	Inverter control and Data Network with multiple microprocessor modules	
Operation System	Simplex System	

		hard aluminum sill
Display	<ul style="list-style-type: none"> <li><del>- Lighted Car Operating Panel with Inside Car Floor Indicator, not earlier from 2017</del></li> <li><del>- Lighted Outside Hall Position Indicator in every floor, not earlier from 2017</del></li> <li><del>- Display height accessible for handicapped</del></li> </ul>	
d) Control System	<del>Inverter control and Data Network with multiple microprocessor modules</del>	
Operation System	<del>Simplex System</del>	


Description	Car 1	Car 2
a) Series	Machine Room Less	
b) Model	Not earlier than 2017	
c) No. of Units	1 unit	1 unit
Weight of Passengers	450 kgs	450 kgs
Rated Speed	1.0 meters per second	1.0 meters per second
Service Floor	Stops all floors	Stops all floors
Opening	Double Entrance <ul style="list-style-type: none"> <li>• Ground Floor – lobby side</li> <li>• Mezzanine – opposite side</li> <li>• Second Floor – lobby side</li> <li>• Third floor – lobby side</li> </ul>	Double Entrance <ul style="list-style-type: none"> <li>• Ground Floor – lobby side</li> <li>• Mezzanine – opposite side</li> <li>• Second Floor – lobby side</li> <li>• Third floor – lobby side</li> </ul>
Door Type	2 panels door side sliding	2 panels door side sliding
Car Guide Rail	T8K	T8K
CWT Guide Rail	T8K	T8K
Buffer Type	Hydraulic – Spring Buffer	Hydraulic Spring Buffer
Power Source	220 VAC, 3 phase, 60 Hz	220 VAC, 3 phase 60 Hz
Width of Door Opening	800mm	
Car Size	1100mm x 1400mm (interior clear dimension)	
Shaft Size	3500mm x 2100mm (min.)	

		shaft interior dimension) see drawing and actual	
	Steel Beam	Separator beam, lintel beam, rail guide beam and elevator machine beam shall be included (all floors)	
	Car Design	<ul style="list-style-type: none"> <li>- Perforated powder coated aluminum ceiling panels with integrated LED Pin lights</li> <li>- Electric blower with plastic grille</li> <li>- Stainless steel hairline finish on side panels and mirrorized finish on door panels</li> <li>- Inclined type in stainless steel hairline front return panel with integrated entrance column</li> <li>- Vinyl resin kick plate</li> <li>- 2.5mm thick homogenous vinyl floor tile (anti-static)</li> <li>- Extruded hard aluminum sill</li> <li>- PWD hand rail stainless steel</li> </ul>	<ul style="list-style-type: none"> <li>- Perforated powder coated aluminum ceiling panels with integrated LED Pin lights</li> <li>- Electric blower with plastic grille</li> <li>- Stainless steel hairline finish on side panels and mirrorized finish on door panels</li> <li>- Inclined type in stainless steel hairline front return panel with integrated entrance column</li> <li>- Vinyl resin kick plate</li> <li>- 2.5mm thick homogenous vinyl floor tile (anti-static)</li> <li>- Extruded hard aluminum sill</li> <li>- PWD hand rail stainless steel</li> </ul>

	Display Panel	<ul style="list-style-type: none"> <li>- Lighted Car Operating Panel with inside Car Floor Indicator and Voice Floor Indicator, not earlier than 2017</li> <li>- Light Outside Hall Position Indicator in every floor, not earlier than 2017</li> <li>- Display height accessible for handicapped</li> <li>- With braille buttons (inside and outside the elevator car)</li> <li>- Emergency call button with intercom</li> <li>- Camera inside the car</li> <li>- Voice floor Indicator (PWD) all floors</li> <li>- Intercom handset to be placed at same CP location</li> </ul>
	d) Control System	Inverter control and Data Network with multiple microprocessor modules
	e) Operation Systems	Simplex System
	Attached is the Revised Section VII. Technical Specifications with revised Item 2.01 MATERIALS AND COMPONENTS of Annex A	

**Other matters:**

- The “No Contact Rule” shall be strictly observed. Bidders are not allowed to call or talk to any member of the Bids and Awards Committee, Technical Working Group or Secretariat effective April 23, 2019 right after the opening of bids.
- For guidance and information of all concerned.

  
**ACHILLES GERARD C. BRAVO**  
*Assistant Secretary*  
*Chairperson, DBM-BAC*

## ***Section VII. Technical Specifications (Revised)***

Bidders must state here either "Comply" or any equivalent term in the column "Bidder's Statement of Compliance" against each of the individual parameters of each "Specification."

<b>Item No.</b>	<b>Specifications</b>	<b>Statement of Compliance</b>
1.	I. General Specifications (see attached Annex A, Item 1.0) II. Products Specifications (see attached revised Annex A) III. Execution (see attached Annex A, Item 3.0) IV. Project Deliverables (see attached Annex A, Item 4.0)	

**I hereby certify to comply with all the above Technical Specifications.**

\_\_\_\_\_  
**Name of Company/Bidder**

\_\_\_\_\_  
**Signature Over Printed Name of Representative**

\_\_\_\_\_  
**Date**

**TECHNICAL SPECIFICATION**  
***(Revised)***

***ELECTRIC TRACTION ELEVATORS***

**1.00 GENERAL**

**1.01 SCOPE**

Furnish all materials, labor, equipment, plant, tools, required to complete and make ready for Use two (2) unit electric passenger elevator.

**1.02 RELATED DOCUMENTS**

The Drawings/Plans and general provisions of the Contract, including the entire Bid Documents and this Specification, apply to this Section.

**1.03 SUMMARY**

- A. This Section includes the following:
  - 1. Supply and Installation of two (2) units Machine Room Less (MRL) Electric Traction Elevator for passengers, as described in this Specification, complete and ready for use.
- B. Related Works: Coordinate with the General Contractor regarding all works that relate to the supply and installation of the two units elevators and their miscellaneous items and accessories.
- C. Miscellaneous Items and Accessories: This Contract includes the supply and installation of miscellaneous items and accessories; such as hoisting beams, separator steel beams, bolts and others needed to install the MRL Electric Traction Elevator ready for use.
- D. Supply and installation of Sump Pump for the elevator pit, complete and ready for use.
- E. Allowances: Coordinate with the General Contractor (structural and finishing works) and ensure the provision of the Electric Traction Elevator with the necessary manufacturer recommended allowances. "Allowances" include furnishing and installing wall, floor, and ceiling finishes; car doors; light fixtures; and handrails. Allowances also include cutouts, trim, and other provisions for installing elevator signal equipment in cars.
- F. Replacement: Replace Defective Elevator Works before acceptance and during Warranty Period as described in the Contract.



#### **1.04 DEFINITIONS**

- A. Electric Traction Elevators: Elevators in which cars are hoisted by wire ropes using electrically driven traction sheaves and are defined to include driving machines; cars; hoistway doors; guide rails; guide-rail brackets; roping; buffers; counterweights; signals; control systems; electrical wiring within elevator system; and devices for operations, safety, security, required performance at rated speed and capacity, and for complete elevator installation.
  - 1. Counterweight displacement switches, seismic switch, and other elevator safety equipment required by the "Code" for seismic risk zone 2 or greater are included.
- B. Defective Elevator Work: Operation or control system failures; performances below specified ratings; excessive wear; unusual deterioration or aging of materials or finishes; unsafe conditions; the need for excessive maintenance; abnormal noise or vibration; and similar unusual, unexpected, and unsatisfactory conditions.

#### **1.05 SUBMITTALS**

- A. General: Submit each item in this Article according to the Conditions of the Contract and this Specification.
- B. Product Data for each elevator including capacities, sizes, performances, operations, safety features, finishes, and similar information.
- C. Shop Drawings for each elevator showing plans, elevations, sections, and large-scale details indicating service at each landing, machine room layout, coordination with building structure, and relationships with other construction. Indicate variations from specified requirements, maximum dynamic and static loads imposed on building structure at points of support, and locations of equipment and signals. Include maximum and average power demands.
- D. Samples of exposed finishes for car, hoistway doors, and signal equipment; 3-inch (75-mm) square samples of sheet materials; and 4-inch (100-mm) lengths of running trim members.
- E. Maintenance manuals for each different electric traction elevator, including operation and maintenance instructions, parts listing with sources indicated, recommended parts inventory listing, emergency instructions, and similar information. Include all diagnostic and repair information available to manufacturer's and Installer's maintenance personnel. Submit for Owner's information at project closeout.
- F. Inspection and acceptance certificates and operating permits as required by governing authorities for normal, unrestricted elevator use.
- G. Complete warranty documents, contact information of manufacturer and authorized service centers.

#### **1.06 QUALITY ASSURANCE**

- A. Installer Qualifications: Installation shall be done by the elevator manufacturer or by a competent technician approved by the elevator manufacturer who has completed elevator

installations similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.

B. Regulatory Requirements: In addition to local governing regulations, comply with the applicable provisions of the following:

1. ASME A17.1, "Safety Code for Elevators and Escalators," referred to as the "Code."

**1.07 MINIMUM WARRANTIES**

A. Product and Parts Replacement Warranty: One (1) year full product, parts replacement/supplies provision warranty against factory defects and ordinary wear and tear without cost to the Agency, subject to Section A, Paragraph 1.08 hereof.

**1.08 MAINTENANCE SERVICE**

A. One (1) Year Full Maintenance Service. Consistent with its full product and parts replacement warranty, the Contractor shall warrant and provide full maintenance services within 1 year from delivery/acceptance, without cost to the Agency. Services shall include a monthly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper elevator operation at rated speed and capacity. Replacement parts and supplies to be used shall be original and brand new.

1. Perform maintenance, including emergency callback service, during normal working hours.
  2. Include 24-hour-per-day, 7-day-per-week emergency callback service.
    - a. Response Time: 2 hours or less.

B. Continuing Maintenance Service: Provide a continuing maintenance proposal from Installer to Owner, in the form of a standard yearly (or other period) maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.
 

- a. Response time: 24 hours or less

C. In all cases, services under this Section shall only be done by a competent and accredited technician, as authorized by the manufacturer.

**2.00 PRODUCTS**

**2.01 MATERIALS AND COMPONENTS**

Include all items and systems comprising the standard features of the Elevator Model of choice, together with the following specifications.

A. ELECTRIC TRACTION ELEVATOR: TWO (2) units machine room less electric traction elevators, complete and ready to use, with the following descriptions:

Description	Car 1	Car 2
a) Series	Machine Room Less	
b) Model	Not earlier than 2017	
c) No. of Units	1 unit	1 unit
Weight of Passengers	450 kgs	450 kgs
Rated Speed	1.0 meters per second	1.0 meters per second

<b>Service Floor</b>	Stops all floors	Stops all floors
<b>Opening</b>	Double Entrance <ul style="list-style-type: none"> <li>• Ground Floor – lobby side</li> <li>• Mezzanine – opposite side</li> <li>• Second Floor – lobby side</li> <li>• Third floor – lobby side</li> </ul>	Double Entrance <ul style="list-style-type: none"> <li>• Ground Floor – lobby side</li> <li>• Mezzanine – opposite side</li> <li>• Second Floor – lobby side</li> <li>• Third floor – lobby side</li> </ul>
<b>Door Type</b>	2 panels door side sliding	2 panels door side sliding
<b>Car Guide Rail</b>	T8K	T8K
<b>CWT Guide Rail</b>	T8K	T8K
<b>Buffer Type</b>	Hydraulic – Spring Buffer	Hydraulic Spring Buffer
<b>Power Source</b>	220 VAC, 3 phase, 60 Hz	220 VAC, 3 phase 60 Hz
<b>Width of Door Opening</b>	800mm	
<b>Car Size</b>	1100mm x 1400mm (interior clear dimension)	
<b>Shaft Size</b>	3500mm x 2100mm (min. shaft interior dimension) see drawing and actual	
<b>Steel Beam</b>	Separator beam, lintel beam, rail guide beam and elevator machine beam shall be included (all floors)	
<b>Car Design</b>	<ul style="list-style-type: none"> <li>- Perforated powder coated aluminum ceiling panels with integrated LED Pin lights</li> <li>- Electric blower with plastic grille</li> <li>- Stainless steel hairline finish on side panels and mirrorized finish on door panels</li> <li>- Inclined type in stainless steel hairline front return panel with integrated entrance column</li> <li>- Vinyl resin kick plate</li> <li>- 2.5mm thick homogenous vinyl floor tile (anti-static)</li> <li>- Extruded hard aluminum sill</li> <li>- PWD hand rail stainless steel</li> </ul>	<ul style="list-style-type: none"> <li>- Perforated powder coated aluminum ceiling panels with integrated LED Pin lights</li> <li>- Electric blower with plastic grille</li> <li>- Stainless steel hairline finish on side panels and mirrorized finish on door panels</li> <li>- Inclined type in stainless steel hairline front return panel with integrated entrance column</li> <li>- Vinyl resin kick plate</li> <li>- 2.5mm thick homogenous vinyl floor tile (anti-static)</li> <li>- Extruded hard aluminum sill</li> <li>- PWD hand rail stainless steel</li> </ul>
<b>Display Panel</b>	<ul style="list-style-type: none"> <li>- Lighted Car Operating Panel with inside Car Floor Indicator and Voice Floor Indicator, not earlier than 2017</li> <li>- Light Outside Hall Position Indicator in every floor, not earlier than 2017</li> <li>- Display height accessible for handicapped</li> <li>- With braille buttons (inside and outside the elevator car)</li> <li>- Emergency call button with intercom</li> <li>- Camera inside the car</li> <li>- Voice floor Indicator (PWD) all floors</li> <li>- Intercom handset to be placed at same CP location</li> </ul>	
<b>d) Control System</b>	Inverter control and Data Network with multiple microprocessor modules	
<b>e) Operation Systems</b>	Simplex System	

### **3.00 EXECUTION**

#### **3.01 EXAMINATION**

- A. Examine elevator areas, with General Contractor present, for compliance with requirements, installation tolerances, and other conditions affecting performance of elevator work. Examine hoistways, hoistway openings, pits, and machine rooms, as constructed; verify critical dimensions; and examine supporting structure and other conditions under which elevator work is to be installed. Do not proceed with installation until unsatisfactory conditions have been corrected.
  - 1. For the record, prepare a written report, listing dimensional discrepancies and conditions detrimental to the performance of elevator work, and submit the report to the General Contractor, the Construction Manager and the DBM.

#### **3.02 INSTALLATION**

- A. Comply with manufacturer's instructions and recommendations.
- B. Welded Construction: Provide welded connections for installing elevator work where bolted connections are not required for subsequent removal or for normal operation, adjustment, inspection, maintenance, and replacement of worn parts. Comply with AWS standards for workmanship and for qualifications of welding operators.
- C. Coordination: Coordinate elevator work with work of other trades for proper time and sequence to avoid construction delays. Use established benchmarks, lines, and levels to ensure dimensional coordination of the Work.
- D. Sound Isolation: Mount rotating and vibrating equipment on vibration-isolating mounts designed to effectively prevent transmission of vibrations to structure and thereby, eliminate sources of structure-borne noise from elevator system.
- E. Lubricate operating parts of systems, including ropes, as recommended by manufacturers.
- F. Alignment: Coordinate installation of hoistway entrances with installation of elevator guide rails for accurate alignment of entrances with cars. Where possible, delay final adjustment of sills and doors until car is operable in shaft. Reduce clearances to minimum, safe, workable dimension at each landing.
- G. Leveling Tolerance: 1/8 inch (3 mm), up or down, regardless of load and direction of travel.
- H. Set sills flush with finished floor surface at landings. Fill space under sills solidly with nonshrink, nonmetallic grout.

#### **3.03 FIELD QUALITY CONTROL**

- A. Acceptance Testing: Upon nominal completion of elevator installation and before permitting use (either temporary or permanent) of elevators, perform acceptance tests as required and recommended by the "Code" and governing regulations and agencies.

- B. Operating Test: Load elevators to rated capacity and operate continuously for 30 minutes over full travel distance, stopping at each level and proceeding immediately to the next. Record temperature rise of elevator machines during 30-minute test period. Record failure of elevators to perform as required.
  - 1. Perform operating test specified above on one elevator of each type, capacity, speed, and travel distance.
- C. Advise Owner, Architect, and authorities having jurisdiction in advance of dates and times tests are to be performed on elevators.

### **3.04 DEMONSTRATION**

- A. Instruct Owner's personnel in proper use, operation, and daily maintenance of elevators. Review emergency provisions, including emergency access and procedures to be followed at time of failure in operation and other building emergencies. Train Owner's personnel in procedures to follow in identifying sources of operational failures or malfunctions. Confer with Owner on requirements for a complete elevator maintenance program.
- B. Make a final check of each elevator operation with Owner's personnel present and just prior to date of Substantial Completion. Determine that operation systems and devices are functioning properly.

### **3.05 PROTECTION**

- A. Temporary Use: Do not use elevators for construction purposes unless cars are provided with temporary enclosures, either within finished cars or in place of finished cars, to protect finishes from damage.
  - 1. Provide full maintenance service by skilled, competent employees of the elevator Installer for elevators used for construction purposes. Include preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper elevator operation at rated speed and capacity. Use parts and supplies as used in the manufacture and installation of original equipment.
  - 2. Provide protective coverings, barriers, devices, signs, or other procedures to protect elevators. If, despite such protection, elevators become damaged, engage elevator Installer to restore damaged work so that no evidence remains of correction work. Return items that cannot be refinished in the field to the shop, make required repairs and refinish entire unit, or provide new units as required.
- B. Provide final protection and maintain conditions, in a manner acceptable to elevator manufacturer and Installer, that ensure elevators are without damage or deterioration at the time of Substantial Completion.

### **4.00 PROJECT SCHEDULE/DELIVERABLES**

- A. Roughing in Installation: shall be completed within 15 days after receipt of NTP, includes mobilization
- B. Securing of Permit to Operate: shall be completed within 45 calendar days after receipt of NTP

Supply, Delivery, Fabrication, Installation, Testing and Commissioning of Equipment: shall be completed within 45 calendar days after receipt of NTP includes restoration works