



**CITY OF NOVI CITY COUNCIL  
OCTOBER 10, 2022**

**SUBJECT:** Approval to award the Otis Elevator Company the City of Novi Public Safety building elevator modernization project in the amount of \$90,476 using a competitively bid contract through the OMNIA Partners Public Sector Purchasing Agreement.

**SUBMITTING DEPARTMENT:** Integrated Solutions – Facilities Division

<b>EXPENDITURE REQUIRED</b>	<b>\$90,476</b>
<b>AMOUNT BUDGETED</b>	<b>\$173,800</b>
<b>APPROPRIATION REQUIRED</b>	<b>\$0</b>
<b>LINE ITEM NUMBER</b>	<b>101-265.00-976.135</b>

**BACKGROUND INFORMATION:**

The existing elevator at the Public Safety Department is original to the building. It is the only mode of ADA-compliant transport from the first floor to the second floor of the building. As this elevator has aged, parts have become obsolete and are no longer easily replaceable, leading to increased service downtime. Calls for service include failure of the door opening, failure of the door to close, delayed travel, and noise issues. Since this elevator was installed, safety codes have become stricter, technology has rapidly advanced, and the overall safety of elevators has improved. Elevator modernization consists of updating the supporting machinery and controls to provide a safe and efficient method of transportation within the facility. Special consideration is also given to fire, life safety, and building codes throughout the process, as these requirements have changed since the original installation.

**RECOMMENDED ACTION:**

Approval to award the Otis Elevator Company the City of Novi Public Safety building elevator modernization project in the amount of \$90,476 using a competitively bid contract through the OMNIA Partners Public Sector Purchasing Agreement.

# OTIS

**DATE:** May 24, 2022

**TO:**

Novi Police Station  
45125 W 10 Mile Road  
Novi, MI 48375

**FROM:** Dylan Runions

**Otis Elevator Company**  
**M: 248-907-4649**

**PROJECT LOCATION:**

Same as above

**This contract is based upon OMNIA Partners Purchasing Agreement #2019.001563**

**MACHINE NUMBER(S):** Elevator D20382

**PROPOSAL NUMBER:** DLR05242022

We will provide labor and material to furnish and install on the above referenced machine(s) the following:

<b>CONTROLLER</b>	<b>OTIS HYDRACELL CONTROL SYSTEM</b> We propose to furnish labor and material to provide a hydraulic microprocessor-based control system. It is specifically designed to meet the particular needs of modernizing hydraulic elevators. The system is integrated by communications over serial links and discrete wiring.
Building Power Supply	480VAC, 3 phase power
Travel	Existing
Capacity	2500LBS
Speed	125 FPM
Stops	2 stops
Openings	2 openings
Operation	Simplex operation
Automatic Self Leveling	New
Emergency Power	N/A
<b>MACHINE ROOM EQUIPMENT</b>	
Controller	New
Power Unit	New, the machine room walls/door frame may require removal in order to remove the old pumping unit and bring in the new units
Shutoff Valve	New
Oil	New
Muffler	New
Soft Starter	New
Auto Safe	New
Fire Service Operation	New: Phase I,II
Victaulic Fittings	Retain

<b>FIXTURES</b>	
Car Operating Panel (per the latest state code)	New: Stainless Steel Finish applied
Car position Indicator	New
ADA Phone	New
Emergency Lighting	New
Inspection Operation	New
Independent Service	New
Fan Switch	New
Car Light Switch	New
Fire Service Cabinet (latest code)	New
Speech	N/A
Hall Stations (per the latest state code)	New: Stainless Steel Finish One Riser
Hall Lanterns	NA
Hall Position Indicator	NA
Hall Position Indicator/Hall Lantern Combo	New
Hoistway Access Switches (per the latest state code)	New
Hoistway Braille Marking	New
Hospital Priority Service	N/A
Car To Lobby	N/A
<b>DOOR EQUIPMENT</b>	
Close Loop Door Operator	New
Hoistway Door Locks	New
Hoistway Pickup Rollers	Retain: Rework as needed
Hoistway Door Tracks	Retain: Rework as needed
Hoistway Door Hangers	Retain: Rework as needed
Hoistway Door Rollers	Retain: Rework as needed
Car Door track	Retain: Rework as needed
Car Door Hangers	Retain: Rework as needed
Car Door Gate Switch	Retain: Rework as needed
Car Door Clutch or Van	New
Car Door	Retain
Hoistway Closers	Retain: Rework as needed
Hoistway Entrances	Retain
Hoistway Doors	Retain
Hoistway Sills	Retain
<b>HOISTWAY OPERATING EQUIPMENT</b>	
Car guides	Retain: Rework as needed
Landing System	New
Hoistway Upper Limits	New
Hoistway Lower Limits	New
Limit Cam	Retain
<b>CAB INTERIOR</b>	
Cab Allowance	Retain
Cab Shall	Retain
Header	Retain
Returns (left or Right or Both)	Retain
Cab Panels	Retain
Car Door	Retain
Cab Ceiling	Retain
Handrails (Back wall)	Retain
Flooring	Retain
Car Sill	Retain
Door Protection	New: Electronic

Cab Fan	Retain
<b>CAR EQUIPMENT</b>	
Top of Car Station	New
Car Frame	Retain
Platform	Retain
Sling	Retain
<b>WIRING</b>	
Hoistway Wiring	New
Travel Cables	New
Duct and Piping	New
Wiring	New: All wiring and electrical interconnections shall comply with governing codes. Insulated wiring shall have flame retardant and moisture-proof outer covering and shall be run in conduit, tubing or electrical wire ways. Traveling cables shall be flexible and suitably suspended to relieve strain on individual conductors.
<b>PIT EQUIPMENT</b>	
Plunger and Cylinder	Retain
Packing	Retain
Spring Buffers/channels	Retain
Stop Switch Station	New
Pit Floor	N/A
Too from Piping (machine room to Pit)	Retain
<b>OTHER</b>	
Warranty	New-One Year from date of state acceptance
Maintenance	Return to maintenance
Wiring Diagrams	New
Owner's Manual	New
Permits	New
State Inspection	New: The elevator contractor shall furnish all licenses and permits and shall arrange for and make all required inspections and tests.
Code (based on ANSI A17.1-2010)	New: The elevator equipment shall be furnished and installed in accordance with the applicable version of the ASME/ANSI A17.1/ CS-B44 Safety Code for Elevators and Escalators, An American National Standard, including the latest Supplement, and the Americans with Disabilities Act.
Smokes and Fire Alarm	By Owner
Building related work	All building related work by Owner. Owner should budget not less than 35% of the total elevator modernization to cover building related work to meet the latest elevator code.
Oil testing and disposal	By Owner
EPA number	By Owner
Oil Separator	N/A - By Owner

**MAINTENANCE:**

Upon completion of the modernization the units shall be returned to service.

**ADDITIONAL CONTRACT REQUIREMENTS:**

1. **CITY OF DETROIT CODE CHANGES ONLY:** for any city of Detroit elevator modernization project, the Owner will be required to obtain and provide the following items to the building department:
  - a) Apply for a building elevator modification permit: at such time the building department will inform the Owner of all required building related items to be completed for the elevator modernization.
  - b) Owners will be required to have electrical, mechanical, plumbing, fire alarm, structural, and any other permit or requirements to be met as requested by the building department.
  - c) The Owner will have to supply architectural drawings for an existing or newly built building to be submitted to the building department for the approved changes.

Elevator contractor is not responsible for any building related modifications and shall remain the Owners responsibility.

**2. PAYMENT AND SCHEDULE OF VALUES**

Contractor's acceptance of the payment terms is conditioned on the understanding that:

- a) Fifty percent (50%) down payment upon signing of the modernization contract
- b) 25% shall be due when material is ready to ship.
- c) The balance shall be paid on completion if the work is completed within a thirty-day period; If the work is not completed within a thirty-day period, monthly progress payments shall be made based on the value of any equipment ready or delivered, if any, and labor performed through the end of the month.
- d) Balance shall be paid within 7 days from project completion including any change orders and retainage if any.
- e) Project must be paid 95% before elevator can be turned over for public use.
- f) We reserve the right to discontinue our work at any time until payments shall have been made as agreed and we have assurance satisfactory to us that subsequent payments will be made when due; and any payment not made when due shall be subject to interest at the rate of one and one-half percent (1.5%) per month or the maximum permitted by law, whichever is less, plus reasonable attorney's fees and collection costs.
- g) Otis will not agree to any language referencing or implying "pay when paid." This contract is between Otis Elevator and referenced entity. The attached payment schedule ("Schedule of Values") is not contingent upon said entity's ability to be paid by others or any other factor or event not described above.
- h) Schedule of Values: see section near price.

**3. THE MATERIAL LEAD-TIME:** shall be 16-18 weeks per elevator/group after approvals. Once material is received we will schedule the work based on man power availability and sequence of work.

**4. ELEVATOR INSTALLATION TIME:** shall be 14-16 weeks per elevator not including building related work.

**5. MULTI-UNIT INSTALLATION CITY OF DETROIT AND STATE OF MICHIGAN:** for multi-unit installations you will be charged by the city of Detroit or the State of Michigan for temporary elevator use in events when the entire group is not 100% complete. Such cost will be billed to us and in returned we will bill you cost plus 10% markup. The temporary elevator cost will be billed on a quarterly. We will accumulate the charges and finalize the charges at the end of the project. A proposal will be submitted for time and material when the project is nearing completion.

**6. EMERGENCY POWER TESTING AND FIRE SERVICE OPERATION:** at the end of the project you will be required to test all elevators on generator back operation. In addition, you will be required to test the fire service

smokes and heat sensors on the back generator as well. All such testing will be completed on off hours. You will be billed for our time and the City of Detroit or State of Michigan elevator inspectors premium time charges. These charges are not included in our proposal. A proposal will be submitted for time and material when the project is nearing completion.

7. **PARKING:** Customer to provide parking for at least to people daily to perform work for elevator installation, modernization maintenance and or repair.
8. **SAFE ACCESS:** Owner to provide contractor with safe access to elevator machine room for the removal and delivery of new elevator equipment. From time to time Owner will be required to provide hoisting beams, remove doors, door frame, glass, walls, ceilings, roof or anything else required to accommodate the elevator installation.
9. It is agreed and understood any and all structural modification, machine room modifications, special build out, electrical, mechanical, fire suppression, and safety modifications required to meet the elevator code shall be the Owners responsibility. All building related work shall be the Owners responsibility.
10. **CRANE:** Provide crane to bring new material and removal of the machine room equipment to new machine room.
11. **WORK BY OTHERS SCHEDULING:** All "Work by Others" must either be completed prior to our manning the job or be properly scheduled as to not obstruct the progress of the project.
12. **SHOULD ADDITIONAL ITEMS:** Should additional items be required to complete the modernization and are not included in the above proposal, another proposal shall be submitted for your approval prior to completion of installation.
13. **PROJECT DELAYS:** Notwithstanding any other provision to the contrary, neither party shall be liable for any loss or delay due to any cause beyond such party's reasonable control; provided, however, that should such delay cause Otis to undertake extraordinary measures, including working on an overtime basis, to complete the project in a time period other than that specified in the contract project schedule, Customer agrees to pay for all expenses related to such extraordinary measures, including overtime expenses.
14. **RE-MOBILIZATION:** You agree to pursue and schedule the work by other trades in a timely manner so as to not interrupt our work. Should our crew(s) have to suspend work on the job to await the conclusion of work by others not party to this contract, we shall be entitled to a re-mobilization charge of Three Thousand (\$3,500)Three Thousand Five Hundred dollars. We shall also extend the stated durations to the extent that we are delayed.
15. **STORAGE:** You will provide suitable storage areas, adjacent to the elevator shafts, for our material and equipment during the course of the work. Added costs to Otis resulting from off-site storage or relocation of the storage facilities at your request shall be reimbursed by you. This space must secure and dry. Provide suitable on-site storage area for elevator equipment, with roll-able access to the elevator hoistway at the ground level. Suitable storage is defined as follows:
  - a. Dry and enclosed under a dried in building structure.
  - b. Provides roll-able access to the elevator hoistway at the ground level.
  - c. Is within 100 ft. of the hoistway.
  - d. Is larger than 25 x 20 ft.

Any warranties provided by Otis for elevator equipment are null and void if equipment is stored in a manner that does not comply with item a) of the above storage area definitions.

16. **OVERTIME:** Should Otis agree to work overtime, you agree to pay us overtime premium wages. If Otis is solely responsible for a delay, it may, at its own expense, work overtime to complete the work.

17. **TEMPORARY USE OF ELEVATORS:** Should any elevator be required for use before substantial completion, others shall provide the following items at no cost to Otis: temporary car enclosures, requisite signaling devices, lights in car and elevator operators together with any other special labor or equipment needed to permit this temporary usage. Otis shall be reimbursed for any labor and material that is not part of the permanent elevator installation and that is required to provide temporary elevator service. In addition, Otis' temporary acceptance form shall be executed before any elevator is placed in temporary service. The costs associated with the power, operation, maintenance, rehabilitation of the equipment and any Construction Permits/Fees required by governing authorities shall be paid for by others. When an elevator is used for temporary service, Otis may, as a result of the temporary service, extend the completion date. Otis shall provide notice of the extension at the time the elevator is made available for the temporary service.
18. **OPERATING ELEVATORS FOR OTHER TRADES:** If we are required to operate, an elevator to facilitate the work of other trades (i.e. sprinklers, smoke sensors, ledges, etc.) we shall be compensated for this lost time and the project schedule shall be modified.
19. **CUSTOMER PROVIDED INSURANCE:** You shall maintain "All Risk" insurance upon the full value of our Work and material delivered to the job site, at no cost to Otis.
20. **TERMINATION:** In the event our Agreement is terminated through no fault of ours, we shall be paid for all material furnished, or manufactured, and labor performed up to the date of termination, including a reasonable margin.
21. **OCCUPATIONAL HEALTH & SAFETY:** We agree to abide by Customer's Safety Policy as long as said policy is not in conflict with our own Safety Policy.
22. **COUNTERWEIGHT ASSEMBLY:** The existing counterweight assembly will be reused and checked for proper counter balance. If additional weight is required to achieve the proper counter-balance or the existing counterweight frame requires modification to accept the additional weight, the labor and material will be an additional cost to this proposal.
23. **HAZARDOUS MATERIALS:** You agree to notify Otis if you are aware or become aware prior to the completion of the work of the existence of asbestos or other hazardous material in any elevator hoistway, machine room, hallway or other place in the building where Otis' personnel are or may be required to perform their work. In the event it should become necessary to abate, encapsulate or remove asbestos or other hazardous material from the building, you agree to be responsible for such abatement, encapsulation or removal, and any governmental reporting, and in such event Otis shall be entitled to (i) delay its work until it is determined to Otis' satisfaction that no hazard exists and (ii) compensation for delays encountered.
24. **DISPOSAL:** The disposal of removed elevator components; machines, controllers, ropes, hydraulic fluid, oils, buffers and packing materials from the new equipment and any and all related materials shall be the sole responsibility of the Owner. If a dumpster is provided on site, we will deposit waste materials in the dumpster or at an agreed upon on-site location for removal by the owner.
25. **EPA NUMBER:** for hydraulic elevator modernizations or geared machine replacements, Owner must obtain an EPA number from the state to properly dispose of the hydraulic oil and gear oil.
26. **BARRICADES:** You shall be responsible to erect/maintain all barricades at all of Otis' elevator hoistway locations throughout the job site in strict conformance with good safety practices, the Code of Federal Regulations as governed by the Occupational Safety Health Act, and any other applicable regulations.
27. **SEARCHES AND TESTS:** Otis supports your efforts in attempting to maintain a safe, healthy and productive working environment; however, we cannot agree to authorize any party to search our employees or require our employees to submit to any tests. Otis will take appropriate action in the event that you advise us of any action by any of our employees that is contrary to the maintenance of a safe, healthy and productive workplace.

28. **RE-INSPECTION COSTS:** Otis agrees to pay for the cost of one inspection after completion of the Work. Should additional inspections be necessary for causes not attributable to Otis, Customer agrees to pay for said inspections. All overtime cost associated with inspection of the elevator, including those imposed on us by City and state code authorities shall be considered as an extra.
29. **INSPECTIONS:** Because of the limited number of regulatory elevator inspectors available to inspect our Work, Otis cannot be responsible for delays attributable in whole or in part to the scheduling of elevator inspections.
30. **MATERIAL RESPONSIBILITY:** Material delivered to the jobsite is the property of the Owner and/or Customer. Otis maintains no responsibility for this material. The Customer is financially responsible for all cost to replace any damaged, stolen or missing material or equipment. Otis will not be responsible for deductibles on "Builder's Risk" insurance policies. Otis will provide a change order, police report and affidavits as needed to substantiate the claim. Otis will not procure replacement equipment until a signed change order is received.
31. **CONFINED SPACES:** The machine room, hoistway, pit and mezzanine ("Elevator Spaces") may be considered Permit- Required Confined Spaces as defined by the Occupational Safety and Health Organization ("OSHA"), 29 C.F.R. § 1910.146(b) and § 1926 Subpart AA. Otis has a documented process to control or eliminate hazards and classify such Elevator Spaces as non-permit required confined spaces. In the event that the customer/general contractor or unique site conditions or hazards (such as chemical manufacturing sites) require Otis to handle such Elevator Spaces as Permit-Required Confined Spaces, the customer/general contractor will be responsible for supplying, at its expense, all resources, including monitoring, permitting, attendants and rescue planning associated with handling such Elevator Spaces as Permit-Required Confined Spaces. The customer/general contractor is required to inform Otis of all known or potential hazards related to Elevator Spaces that Otis may be required to access prior to Otis performing any work in such spaces. Further, the customer/general contractor is required to communicate any changes in the conditions associated with such Elevator Spaces or activities in or around such spaces that could introduce a hazard into such spaces
32. **LOCK OUT TAG OUT** In furtherance of OSHA's directive contained in 29 C.F.R. § 1910.147(f)(2)(i), which requires that a service provider (an "outside employer") and its customer (an "on-site employer") must inform each other of their respective lock out/tag out ("LOTO") procedures whenever outside servicing personnel are to be engaged in control of hazardous energy activities on the customer's site, Otis incorporates by reference its mechanical LOTO procedures and its electrical LOTO procedures. These procedures can be obtained at [www.otis.com](http://www.otis.com) by (1) clicking on "The Americas" tab on the left side of the website; (2) choosing "US/English" to take you to the "USA" web page; (3) clicking on the "Otis Safety" link on the left side of the page; and (4) downloading the "Lockout Tagout Policy Otis 6.0" and "Mechanical Energy Policy Otis 7.0," both of which are in .pdf format on the right side of the website page. Customer agrees that it will disseminate these procedures throughout its organization to the appropriate personnel who may interact with Otis personnel while Otis personnel are working on site at Customer's facility.
33. **FORCE MAJUERE:** Otis shall not be in breach of this contract or be liable to the other party if it fails to perform or delays the performance of an obligation as a result of an event beyond its reasonable control, including but not limited to: strikes, lock-outs, industrial disputes, fire, flood, acts of God, war, insurrection, vandalism, sabotage, invasion, riot, national emergency, acts of terrorism, embargoes or restraints, extreme weather or traffic conditions, epidemic, legislation, regulation, or other act of any government or entity.
34. **LIMITATION ON DAMAGES :** Notwithstanding anything else in this agreement, in no event shall either party be liable for any indirect, incidental, collateral, special, punitive, liquidated or consequential damages or losses such as loss of revenues, loss of profits, or harm to business reputation, whether foreseeable and whether arising in contract, tort, strict liability or otherwise.

It is agreed and understood that these liquidated damages are the parties' sole and exclusive remedy for recovery of actual or direct damages that either party might seek for a breach of the Contract.



Neither parties liability to the other for any reason (except for personal injuries) arising from this Agreement shall exceed the value of the Agreement.

- 35. **EXAMINATION OF EQUIPMENT** : Except insofar as your equipment may be covered by an Otis maintenance or service contract, it is agreed that we will make no examination of your equipment other than that necessary to do the work described in this contract and assume no responsibility for any part of your equipment except that upon which work has been done under this contract.
  
- 36. **INSURANCE** : Otis agrees to maintain General Liability coverage in the amount of \$1,000,000 per occurrence and \$2,000,000 in the aggregate, Automobile Liability in the amount of \$1,000,000 Combined Single Limit for Bodily Injury and Property Damage, Worker's Compensation in statutory limits, Employer's Liability in the amount of \$1,000,000 for Each Accident, Each Employee – Disease, Policy Aggregate – Disease, and Excess Liability in the amount of \$10,000,000 per occurrence. Although Otis might actually maintain higher insurance limits, and might also have excess coverage, the Customer has no expectation of limits other than as set forth in this section.
  
- 37. **PRIVACY** : The products and/or services being provided may result in the collection of Personal Information. Otis and the Customer will comply with applicable Data Privacy Laws as they pertain to personal information processed in connection with activity under this Agreement. "Personal Information" shall mean information and data exchanged under this agreement related to an identifiable natural person. "Processing" of Personal Information shall mean the operation or set of operations whether automated or not, performed on Personal Information such as collecting, recording, organizing, structuring, storing, adapting, altering, retrieving, consulting, using, disclosing, sharing or erasing. "Controller" shall mean the party that determines the purposes and means of processing Personal Information. With respect to any Personal Information provided by you to Otis, you shall be the Controller and you warrant that you have the legal right to share such Personal Information with Otis and you shall be responsible for all obligations relating to that data, including without limitation providing notice or obtaining consent as may be required by law. Once you have lawfully provided Personal Information to Otis, you and Otis shall become co-Controllers. Otis may share such Personal Information internally, across borders and with service providers in accordance with applicable Data Privacy Laws. Otis transfers information subject to the Binding Corporate Rules of its Parent Company, United Technologies Corporation (UTC). Otis may store Personal Information provided by you on servers located and accessible globally by UTC entities and their services providers. The parties agree to cooperate and to take reasonable commercial and legal steps to protect Personal Information against undue disclosure. In this regard each party shall notify the other in the event of a data breach, which shall include the actual or unauthorized access to or possession of, or the loss or destruction of, Personal Information, whether intentional or accidental. The party whose system was compromised in the data breach incident shall be responsible for any notifications and associated costs. Should either party receive in any form, (i) a complaint or allegation indicating a violation of applicable data privacy law, (ii) a request seeking access to correct or delete Personal Information or (iii) an inquiry or complaint related to the processing of personal information, said party shall take reasonable commercial steps to immediately notify the other party.
  
- 38. **ARBITRATION** : Subcontractor agrees to submit to Non-Binding Arbitration by the American Arbitration Association but does not waive its rights to pursue other remedies available at law and equity.

**The information contained below is intended as a tool and an aid to the Owner/General contractor/Project Manager. The purpose is to ensure that elevator related work items are identified early in the construction process. This will allow other trades sufficient time to complete their work to permit a timely elevator installation and final inspection process.**

**Prior to scheduling for Code Inspection, all elevators as well as elevator related items must be completed and ready for final inspection. Otis will not be responsible for re-inspection fees or additional labor cost caused by the failure of other trades to perform as required.**

**The enclosed information is provided as a reference based on current code interpretations and experience. Local Code Authority interpretation may at times differ and obviously will govern.**

**WORK BY OTHERS SECTION:**

**ELECTRICAL REQUIREMENTS:**

1. **THREE PHASE POWER REQUIREMENTS AND MAINLINE DISCONNECTS:** Provide, 3 phases fusible, lockable heavy duty disconnect: Electrical disconnects shall be lockable in the open position and properly located within sight of the elevator devices as outlined in NFPA 70 Rule 620-51. All disconnects shall be properly fused or utilize a non-self-resetting circuit breaker. A lockable disconnect with overcurrent protection shall be located in the machine room serving the car lighting per NFPA 70 620-22 and 620-53. Advisory: The preferred location for electrical disconnects is near the jamb side of the machine room door in order to be readily accessible to qualified personnel.
  - ~~SHUNT TRIP MAINLINE DISCONNECTS:~~ Shunt Trip Power shall be removed from the main line disconnect prior to the application of the sprinkler, commonly referred to as "shunt trip operation." See ASME A17.1 Item 2.8.2 and NFPA 70 section 620; and NFPA 72 and 13.
  - Provide temporary power to elevator equipment as directed by elevator contractor. Electrical contractor will be required to run a temporary wire from the mainline disconnect to the new elevator controller to insure elevator contractor will be able to run and perform the new installation.
  - New Disconnect: The electrical contractor shall wire and pip all disconnects to the elevator control equipment or as directed by elevator contractor.
  - ~~Auxiliary Contact (for Emergency Return Unit only):~~ Provide in mainline disconnect an auxiliary contact for emergency return unit.
  - All circuit breakers must be labeled where they are feed from
  - Existing Cloth Wiring if any: All cloth wiring from and too the mainline elevator disconnect must be changed the latest code compliant wiring. Contact your electrical contractor for all details.

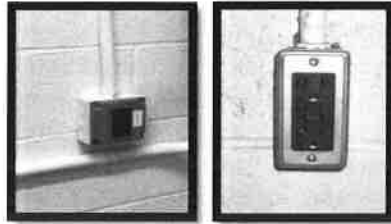


2. **ELECTRICAL CLEARANCES:** All electrical clearances shall be provided and maintained in front of the controller and disconnect at all times. Advisory: It is interpreted that machine room doors that swing into the electrical clearance area endanger worker safety and are prohibited and they shall meet the provisions of NFPA 70 Rule 620-5
3. **EARTH GROUND:** Provide an earth ground as required for each of the elevator disconnects per NFPA 70 Rule 620-81; 82; 83 and ASME A17.1 Item 2.8.2.3.
4. **CONDUIT AND PIPING:** All electrical conduit shall be properly secured and routed in a workman like manner. See NFPA 70 Rule 620-21.
5. **CAR LIGHT DISCONNECT:** A 20 amp 120volt fusible, lockable heavy duty emergency light disconnects shall be required for each elevator.
  - Electrical Contractor to wire and pip car light power to elevator controller as directed by elevator contractor.



6. **MACHINE ROOM RECEPTACLES:** Receptacles in the machine room and machinery spaces shall have GFCI protection either by a GFCI-type receptacle or a GFCI-type circuit breaker per NFPA 70 Rule 620-85. Warning signs shall be posted when there is power from more than one source per NFPA 70 Rule 620-52-see also 620-91 & 620-51. Receptacles in the machine room and machinery spaces shall have GFCI protection either by a GFCI-type receptacle or a GFCI-type circuit breaker.

- Replace all standard receptacles with a GFCI receptacle



- All circuit breakers must be labeled where they are feed from

7. **MACHINE ROOM LIGHTING:** Shall be (200 lx(19 fc)) and shall be properly guarded. Electrical control devices and machinery are well illuminated ASME A17.1 sec. 2.7.9. The light switch shall be located in the machine room and shall be placed near the machine room doorjamb. The required lighting shall not be connected to the load side of a GFCI.



8. **PIT LIGHTS:** A light for the pit shall be located so as to provide adequate lighting for the area. The switch shall be near the stop switch. The light shall be guarded. The required pit lighting shall not be connected to the load side of the GFCI. Lighting shall be (200 lx (10fc)) the light shall be guarded per ASME A17.1 Section 2.2.5. Provide two 2-foot LED guarded lights.

- Provide 2-2-foot LED lights for each elevator pit



9. **PIT GFCI RECEPTACLE:** A GFCI type receptacle: shall be provided in pits and on car tops. *When a sprinkler is present in the hoistway or pit area, all electrical conduits shall be enclosed in NEMA-4 and wiring shall be identified for use in wet locations.*



10. **PIT ELECTRICAL WIRING AND PIPING AND WHEN SPRINKLERS ARE PRESENT IN THE PIT:** When a sprinkler is present in the hoistway or pit area, all electrical conduits shall be enclosed in NEMA-4 and wiring shall be identified for use in wet locations.
11. **PIT RECEPTACLE:** Receptacles for sump pumps shall conform to NFPA 70 620-85. Drain or Sump Pump Drains shall be provided for all passenger, freight and LULA elevators. When a drain cannot be provided, a permanently installed sump pump shall be provided. The sump hole in the pit area shall be guarded with non-combustible material. All sump pumps are to discharge the fluid outside of the hoistway. The purpose of the sump pump is to prevent the accumulation of water in the pit area originating from the interior of the building. **See above for reference of pit receptacle.**
12. ~~**BACKUP GENERATOR:** Provide standby power unit and means for starting it that will deliver sufficient power to the elevator disconnect switches to operate one or more elevators at a time at full rated speed. Provide a transfer switch for each feeder for switching from normal power to standby power and a contact on each transfer switch closed on normal power supply with two wires from this contact to one elevator controller. Owner to verify all associated electrical requirements. —~~
- ~~A. — For installations having standby power, provide the standby power unit and means for starting it, and deliver to the elevator via disconnect switches in the machine room, sufficient power to operate one or more elevators at a time at full rated speed.~~
- ~~B. — A Power Transfer Switch for each power feeder to monitor both Normal and Standby Power conditions and to perform the transfer from one to the other. Switch to have two sets of normally closed dry contacts, one to be open when the switch is in the Standby Power position; the other to open upon initiation of power transfer and to close when transfer is complete. Switch to have an inhibit function which will delay transfer to Normal and/or Standby Power by an adjustable period of 0—300 seconds. Switch shall have a Phase Monitor feature, which prohibits the transfer of power between “live” sources unless the sources are in phase with each other. If a Shunt Trip device is provided, an additional Normally Closed contact is required from the emergency power source.~~
- ~~C. — Provide an adjustable programmable time delay of 1-10 seconds from generator power to normal power.~~

~~Should any electrical work become required to complete the modernization all such work shall be provide by owners or owner’s electrical contractor. —~~

13. **TWO-WAY 24-HOUR VOICE COMMUNICATION:** Shall be provided from the elevator car to a location that can take action. Advisory: Refer to the "ADAAG" guidelines for additional requirements for “hands free” telephone operation. At no expense to us, others are to provide a dedicated (non-PBX) touch-tone business telephone line terminated in the machine room for each elevator.
- The preferred method of providing a phone line is a non-PBX phone line. In others word an analog line ran directly to the elevator machine room piped to the elevator controller

- The second method maybe a voice over IP, this is not the preferred method. However, if ownership chooses to use this method it must have a power backup (i.e. UPS of some sort) method that can be sustained for a long period of time the line must ran directly to the elevator machine room piped to the elevator controller

~~14. REMOTE MONITORING POWER SUPPLY AND DISCONNECT:~~ Provide a separate 120 volt, 15 amp, single phase power supply with fused SPST disconnect switch or circuit breaker for remote monitoring capable of being locked in the open position.

~~15. REMOTE MONITORING MAINTENANCE TELEPHONE LINE REQUIREMENTS:~~ Provide one (1) outside telephone line to the elevator machine room that allows data calls to and from a toll free number at a dispatching center. The telephone line may be either a separate line dedicated to the remote monitoring maintenance equipment or may be an existing line that is shared between another telephone and the remote monitoring maintenance equipment.

~~16. INFORMATION DISPLAY POWER SUPPLY AND DISCONNECT:~~ Provide a separate 120 volt, AC, 15 amp, single phase power supply with fused SPST disconnect switch with duplex outlets in the machine room or other locations as required, for information display terminal and controller of information display when provided. Also provide one (1) pair of shielded/twisted conductors between controller and machine room.

~~17. VIDEO DISPLAY POWER SUPPLY AND DISCONNECT:~~ Provide a separate 120 volt, AC, 15 amp, single phase power supply with fused SPST disconnect switch with duplex outlets in the machine room and lobby or other applicable application, for power to each elevator video display panel and controller when a display system is provided.

~~18. REMOTE PANELS:~~ Provide required conduit, with adequate pull boxes and ells from the elevator hoistway(s) to the location or locations required to facilitate the installation of Lobby Panels, Fire Control Room Panels or Elevator Monitoring Systems. Size and number as specified by Otis. Leave a measured pull tape in the conduit. Otis to furnish and pull required conductors.

19. **EMERGENCY RETURN UNIT (ERU)** - If an ERU battery operated lowering device is being provided with your Hydraulic elevator modernization then others are to provide a separate auxiliary contact that positively opens when the main disconnect is switched OFF in either the existing lockable disconnect (if currently code compliant) or in a new code compliant lockable disconnect. If a Shunt Trip is provided, an additional contact must also be installed to prevent operation of the ERU when the Shunt Trip is activated.

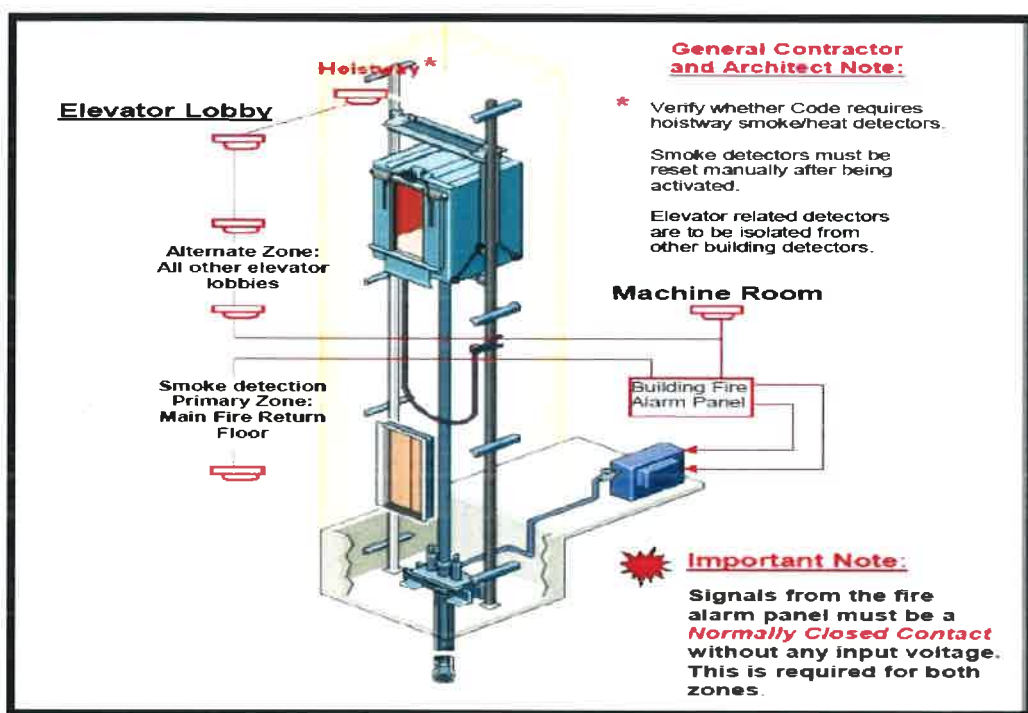
**FIRE ALARM SYSTEMS AND SPRINKLER REQUIREMENTS:**

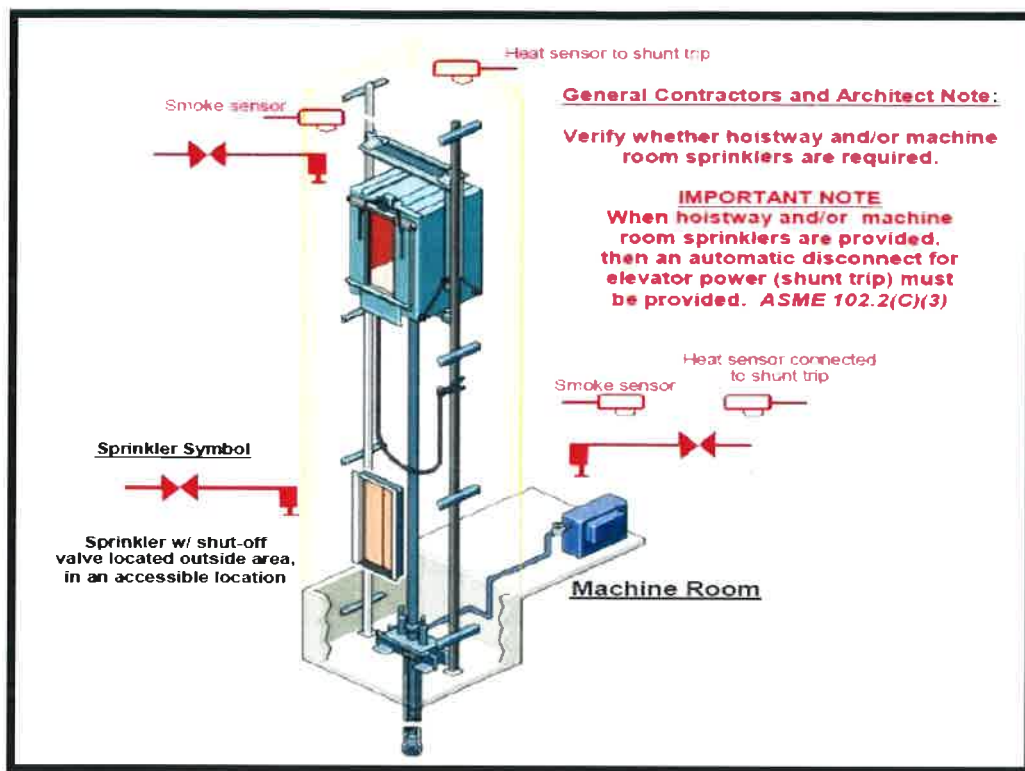
20. **FIRE-SERVICE INITIATING DEVICES (SMOKE DETECTORS):** Shall be properly located in the enclosed elevator lobbies and machine rooms. Initiating devices are required in the hoistway when a sprinkler head is located in the hoistway. Specific requirements for wiring methods and detector placement. Provide smoke detectors, located as required, with wiring from the sensing devices to the elevator controller(s) designated by the elevator contractor.

- A. For each group of elevators, provide a normally closed contact representing the smoke detector at the designated return landing.
- B. For each group of elevators, provide a normally closed contact representing all smoke detectors located in lobbies, hoistways, or machine rooms, but **not** the smoke detector at the designated return landing (see above) or the smoke detectors as described in i. & ii. below.
  - i. If a smoke detector is located in the hoistway at or below the lower of the two recall landings, it shall be wired to activate the same normally closed contact as the smoke detector located in the lobby at the lower of the two recall landings.

- ii. If machine rooms are located at the designated return landing, the smoke detectors located therein shall be wired to activate the same normally closed contact as the smoke detector at the designated landing.
  - (i) For a single unit or for a group of elevators having one common machine room and one common hoistway, provide one additional normally closed contact representing all machine room and hoistway smoke detectors.
  - (ii) If the group contains more than one hoistway and hoistway smoke detectors are installed, or if the group has more than one machine room, provide one normally closed contact for each elevator. The contact is to represent the smoke detector in the machine room for that particular elevator, and any smoke detectors in the hoistway containing that particular elevator.

21. **FIRE ALARM SYSTEMS:** In facilities without a building fire alarm system, these smoke detectors shall be connected to a dedicated fire alarm system control unit that shall be designated as "elevator recall control and supervisory panel" The "elevator recall control and supervisory panel" shall receive input and monitor the smoke detectors within the dedicated fire alarm system.





22. **SPRINKLERS IN MACHINE ROOMS:** Sprinklers may serve a machine room via a branch line, when the machine room is located above the roof of the building, risers, return pipes, and branch lines for the machine room sprinkler(s) shall be permitted to be located in the hoistway between the top floor and the machine room, but they shall not pass through the machine room.

- " Shunt Trip" Machine Room Power shall be removed from the main line disconnect prior to the application of the sprinkler, commonly referred to as "shunt-trip operation. Required in Ohio, City of Detroit. not required in the state of Michigan.
- Power shall be removed from the main line disconnect prior to the application of the sprinkler. The heat sensing devices shall be located within 2 feet of each sprinkler head. Smoke detectors shall not be used to activate shunt trip devices. Required in Ohio, City of Detroit. not required in the state of Michigan.
- Provide a machine room shut off valve with proper signage indicating "Elevator Machine Room Sprinkler Shutoff".



**23. SPRINKLERS NEW**

**CONSTRUCTION INSTALLATIONS:** The latest 2015 Michigan and Ohio building code does not require sprinklers in machine rooms or hoistways. Refer to the proper jurisdiction and enforcement agency.

24. **HEAT DETECTOR:** The heat sensing devices shall be located within 2 feet of each sprinkler head. Smoke detectors shall not be used to activate shunt trip devices. Required in Ohio, City of Detroit. not required in the state of Michigan.

- A. **IN MACHINE ROOMS:** provide a heat detector head within 2 feet of each sprinkler head. **You will need a heat sensor in the machine room**
- B. **IN HOISTWAYS:** provide heat detector head within 2 feet of each sprinkler head, but do not install smoke head. **Heat and smoke at the top of the hoistway.**
- C. **HOISTWAY OVERHEAD:** provide smoke detector only under Michigan code. You will be required to provide heat and smoke detectors. The smoke head may recall the elevator but not the heat detector.

25. **OLD AND EXISTING SPRINKLER REQUIREMENTS:** Sprinkler systems conforming to building code, may be installed in the hoistway, machine room, and machinery spaces. Sprinklers installed in elevator shafts and machine rooms shall meet the following requirements: 1) in hoistways a sidewall spray sprinkler shall be installed at the bottom of each hoistway, not more than 24 inches and not less than 12 inches above the floor of the pit. A guard shall be installed on the sprinkler head to prevent accidental tripping or activation. 2) In elevator machine rooms' automatic sprinklers of ordinary or intermediate temperature rating shall be provided. Each system shall have a readily accessible shut-off valve that is electronically supervised, located outside the protected area.

26. **SPRINKLERS IN HOISTWAY:** Sprinklers provided in the hoistway, (if required by the local jurisdiction), shall not to interfere with the required clearances on top of the elevator car or the moving equipment within the hoistway. Only branch lines shall be permitted to serve the hoistway, and the line may not serve more than one level. Sprinkler heads located in the pit area shall not be located more than 2 feet above the pit floor. Shunt trip devices are not required for pit sprinkler heads if the location of the sprinkler head is in conformance with the previous statement.

**Note: Provide sprinkler shutoff valve with proper signage indicating "Elevator hoistway shutoff valve". Signage and shutoff valves must be accessible and present where sprinklers are installed, i.e. top and bottom landings.**

**HEATING COOLING AND PLUMBING REQUIREMENTS:**

1. **MACHINE ROOM TEMPERATURE CONTROL:** Provide a suitable machine room with access and ventilation in accordance with all applicable codes and regulations. The machine room shall be maintained at a temperature between 45°F (7°C) and 90°F (32°C) to be measured 6 feet (1830 mm) above the floor and 1 foot (305 mm) out from any part of the car controllers, drives, and motors. Areas near the heat exhausts of the controllers, drives, and motors may be accepted from this requirement. Relative humidity is not to exceed 95% non-condensing. Local codes may require tighter temperature ranges. Please check with your local code authority for the exact requirements in your area. Machine rooms shall be provided with natural or mechanical means to keep the ambient air temperature and humidity in the range specified by the elevator equipment manufacturer to ensure safe and normal operation of the elevator ASME A17.1 Item 2.7.5.2.

**CONDITIONING:** is to be installed, provide the following:



Provide a properly sized air conditioning unit subject to heat release provided by elevator contractor.

- The air conditioning unit MUST be supplied with a heavy duty disconnect located in the elevator machine room and as directed by elevator contractor.
- The air conditioning unit MUST be supplied with a heavy duty disconnect located outside near the condensing unit and as directed by elevator contractor. The disconnect should not be of the pullout type. and as directed by elevator contractor.
- The air conditioning unit MUST have a permanently wire thermostatic control located in the machine room. Heating and cooling contractor MAY be able to install a wireless control, verify with state of Michigan or city of Detroit elevator inspector.



2. **WATER LINES IN HOISTWAY AND MACHINE ROOM:** Should water lines be present in the hoistway or machine room, they must be removed or a pan with a drain line attached to a drain shall be required.



3. **SUMP PUMP:** Drain or Sump Pump Drains shall be provided for all passenger, freight and LULA elevators. When a drain cannot be provided, a permanently installed sump pump shall be provided. The sump hole in the pit area shall be guarded with non-combustible material. All sump pumps are to discharge the fluid outside of the hoistway. The purpose of the sump pump is to prevent the accumulation of water in the pit area originating from the interior of the building. Furthermore, drains and sump pumps, where provided, shall comply with the Michigan plumbing code, R 408.40701 et seq. and shall be provided with a positive means to prevent water, gases, and odors from entering the hoistway. Subsoil drains shall not be connected or discharged to elevator pits or sumps. The Plumbing Code Section requires that the discharge line is not to be directly connected to the sanitary system but may be directly connected to the storm system. A check valve is to be installed in the sump discharge line.

- Sump pump must be size to move 3000 gallons per minute
- Existing Sump pump. Do not tie or tap off of existing outlet for your GFCI.
- The sump pump must have a grating/sump cover.
- Sump pumps are required whenever a sprinkler is present in the hoistway or evidence of storm water penetration into the pit.
- You will be required to seal the elevator pit whenever storm water has penetrated the elevator pit in addition to the installation of a sump pump.

4. **OIL AND WATER SEPARATOR SYSTEM CODE REQUIREMENTS:**

Three condition will initiate a oil separator requirement:

1. ~~Must have a sprinkler (or building) in the hoistway~~

- 2.— Sump pump
- 3.— Evidence of water in the pit

THESE ARE STATE RECOMMENDED OIL SEPARATOR COMPANIES

For system equipped with fire service operation owners will be required to install Oil Separators. When it comes to elevator projects with oil/water separator systems in the state of Michigan and City of Detroit, three manufacturers, with six products already approved by the State of Michigan. They are as follows:

Manufacturer: Liberty Pumps — Approval 1661PA

- Liberty Pumps ELV OilTector, Elevator Sump Pump Systems. This system uses a deep well sump that contains the oil below pit floor level.
- Liberty Pumps ELV OilTector, ELV Auto Valve OilTector, and ELV Duplex OilTector. The auto valve system has two solenoid valves and an oil collection tank. The duplex system has two pumps with one of the pumps discharging to an oil collection tank.

Manufacturer: See Water Inc. — Approval 1646PA

- Liquid Smart Pump Systems; OSSIM-30-OR and OSSIM-30-OR-2. This is two systems, similar to the Liberty two pump or two solenoid valve arrangement.

Manufacturer: Industrial Systems Inc. — Approval 1644PA

- Stancor Oil Alarm System with Oil Separation Technology. This is two systems, similar to the Liberty two pump or two solenoid valve arrangement.

Installation of each of these systems is subject to the following conditions of use and installation:

- All requirements of the Michigan Plumbing Code shall all be applicable.
- Shall be installed in accordance with the manufacturer’s installation instructions.
- Pumping shall not be terminated by alarm activation.
- Activated alarms shall take place within proximity to the elevator and at the building management site to assure responsible surveillance.
- The sump pump total dynamic head and the oil storage containment tank size and capacity are to be established by their Architect/Engineer or designer during the design phase of a project.
- This approval shall become void if the product no longer meets the requirements of the Michigan Plumbing Code or a change in design/designation occurs.

When installing one of these systems in an elevator pit, both a plumbing and an elevator permit are required. The plumbing permit will need to be pulled through the authority having jurisdiction, which may be a local entity. If outside the City of Detroit, the elevator permit will be pulled through the State’s Elevator Division. The system must be installed by a licensed plumber who is in the presence of a licensed elevator journeyman.

Relevant elevator codes are: ASME A17.7 of 2010; paragraphs 2.2.2.3, 2.2.2.4, 2.2.2.5, 2.2.2.6, and 8.6.4.7.4 (see Part 8 Scope and Notes). Should you have any questions, the BCC Elevator Division staff is always happy to help at 517-241-9337 or email [elevsafety@michigan.gov](mailto:elevsafety@michigan.gov). If you have questions regarding the above mentioned products and their approval, you may contact the Plumbing Division at 517-241-9330 or email [bccplbg@michigan.gov](mailto:bccplbg@michigan.gov).



5. **HOISTWAY VENTING:** For the hoistway, provide a motorized vent directly to the outside air: these conditions may apply to your building:
- If hoistway wall is the building wall, then provide a motorized vent with control means at the top of the hoistway and test switch as directed by elevator contractor. City of Detroit will require a smoke detector to be mounted in the hoistway, a test switch and means of disconnecting power. Check code for Ohio and Michigan for the proper application.
  - If hoistway wall is other, then wall then provide the necessary duct with a motorized control and testing means to exhaust to outside air. The vent shall be controlled according to your code jurisdictions. City of Detroit will require a smoke detector to be mounted in the hoistway, a test switch and means of disconnecting power. Check code for Ohio and Michigan for the proper application.
  - The vent is placed on the sidewall of the hoistway at the upper end of the enclosure. The vent is to be protected from the weather and nature. A typical vent is not less than 3 1/2 percent of the cross-sectional area of the hoistway, and in no case shall the vent be less than three square feet in area. If the vents must run through the machine room, they must be enclosed in a fire rated structure and not violate clearances around the elevator and building equipment.



**OTHER BUILDING REQUIREMENTS:**

1. ~~**HOISTING BEAM:** Provide a hoisting beam in the machine room over the existing hoistways capable of lifting a load of 10,000 LBS.~~
2. Provide adequate access to machine room.
  - You may be required to remove the machine room door in order for the elevator contractor remove the old equipment and bring in new equipment.
3. **CUTTING AND PATCHING:** Provide any cutting, including cutouts to accommodate machine-room equipment, hall-signal fixtures, patching, and painting of walls; floors, or partitions together with finish painting of entrance doors and frames, if required. Provide any structural modification that may be required at time of construction and modernization of the elevator equipment. From time to time, you may be required to provide a cutout in the machine wall, roof, and or ceiling to accommodate elevator material entry to the machine room.
4. **DROP CEILING:**  
Remove existing drop ceiling and replace with hard 2 hour fire rated ceiling.
5. **PROVIDE STAIRCASE LIGHTING:** provide staircase lighting to elevator machine room. these lights are to be placed outside the elevator machine room at the top of the staircase and at the bottom of the staircase.

- 6. **NON-ELEVATOR RELATED EQUIPMENT:** All non-elevator-related piping and equipment shall be prohibited from entering or passing through the machine room and hoistway.
- 7. **AN "ABC" TYPE FIRE EXTINGUISHER:** Shall be located in the room. The fire extinguisher should be sized for the room dimensions. Advisory: A minimum 10- Pound extinguisher is recommended per ASME A17.1 Item 8.6.1.6.5.



- 8. **MACHINE ROOM DOOR:** The machine room door shall be self-closing and self-locking. The door shall always require a key to be opened from the outside, but can always be opened from the inside without a key ASME A17.1 Item 2.7.3.4.1. Machine room door (B-labeled) shall swing outward. Machine room doors must have a minimum height of 72 inch and minimum width of 30 inch. Machine room doors are to be fire rated. All holes around the door structure in the machine room are to be properly filled to maintain a fire rated enclosure and fire stopped.



- 9. **ENCLOSURE OF MACHINE ROOMS AND MACHINERY SPACES:** Machine, control equipment, sheaves, and other machinery shall not be exposed to the weather. Machine room and machinery space enclosures shall conform to section 2.7.1.1 or 2.7.1.2 of the A17.1 code. Access to these spaces shall not be through restrooms, lavatories, locker rooms, or associated vestibules. Where enclosed ceilings are required or provided they shall be of a solid type with no access panels. Drop type ceilings shall not be permitted. Machine rooms and machinery spaces shall not be used as a pass through or for access to other areas. Building access panels or doors are prohibited in these areas.

Machine rooms are to be fire rated. Holes around piping, structure or structure penetrations in the machine room are to be properly filled to maintain a fire rated enclosure and fire stopped.

- 10. **PIT LADDER:** For pits greater than 35 inches in depth, a pit ladder shall be provided with a handrail at least 48 inches above the landing, the rungs are to have at least 4 ½ inches of clearance and be not less than 12 inches in width with a 12 inch separation between rungs. The ladder shall be noncombustible and within 39 inches from the egress door. If pit depth is greater than 9' 10" (3000mm) [13' 9" (4191 mm) with no floor below bottom landing], a pit access door is required.

**FOR NEW CONSTRUCTION OR MAJOR MODERNIZATION SITES ONLY:**

- i. **Protection from Falls:**

As required by the Occupational Safety and Health Administration (OSHA) 1926.502 B) (1-3) a freestanding removable barricade at each hoistway opening at each floor. Barricades shall be 42" (1067mm) high, with mid-rail and kick board, and withstand 200 lbs of vertical and horizontal pressure.

- ii. **Protection from Falling Objects:**

As required by the Occupational Safety and Health Administration (OSHA) 1926.502(j) hoistway protection from falling debris and other trades materials by either:

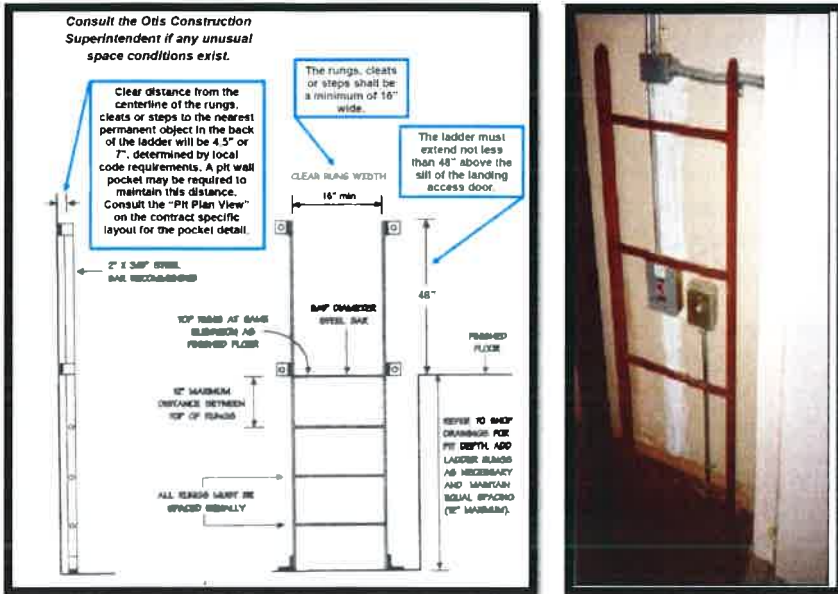
- 1. Full entrance screening/mesh in front of all elevator entrances

2. Secured/controlled access to all elevator lobbies (lock and key) with posted Notice "only elevator personnel beyond this protection."

**Notes:**

Items a.) and b.) can be integrated systems.

Hoistway barricades and screening shall be constructed, maintained and removed by others.



11. **LEDGES:** All offsets or ledges within the hoistway greater than 4 inches shall be tapered to not less than 75 degrees.



12. A pictograph sign is required to be posted over each elevator call station that indicate that in case of fire, occupants shall not use the elevator.
13. **HOISTWAY ADVISORY:** All holes in the enclosure are to be filled to maintain the fire rating of the hoistway. Entrance frames installed in drywall or masonry hoistways must be properly interfaced to maintain a proper fire rating.
14. **FLOORING:** Carpet used on elevator car floors shall have a Class A or Class B flame spread rating not to exceed 50 as tested in accordance with ASMT E-84. A letter from the manufacturer stating the flame spread rating may be required. It shall meet the following requirements:
  - A. Be securely attached to the car platform.
  - B. Have a tight weave and low pile.
  - C. Be installed without padding.

**ALTERNATES**

**ALTERNATE #1 - ACCELERATED SCHEDULE**

Reduce installation time by \_\_\_\_\_XXX Weeks

Price:

Please indicate your intention to choose this option by initialing here \_\_\_\_\_

**ALTERNATE # 2 – ADD YOUR ALTERNATES HERE**

Price: \_\_\_\_\_ Dollars

Please indicate your intention to choose this option by initialing here \_\_\_\_\_

**ALTERNATE # 3 – ADD YOUR ALTERNATES HERE**

Price: \_\_\_\_\_ Dollars

Please indicate your intention to choose this option by initialing here \_\_\_\_\_

**PAYMENT AND SCHEDULE OF VALUES**

<b>Schedule of Values</b>		
<b>Base Contract Amount:</b>		<b>\$90,476</b>
<b>Due Date</b>	<b>Description</b>	<b>Value</b>
Month of Project Award	50% "Initial Payment"	\$45,238
Month of Material Delivery	70% of Remaining Sub-Contract Balance "Material Delivery Payment"	\$31,667
Upon Substantial Completion of Each Elevator	"Progress Payments"	\$13,571

The extent of the work to be performed is either described above or in the attached specification which is incorporated into and made a part of this document.

**PRICE: \$ 90,476.00.00**  
**Ninety Thousand Four Seventy-Six 00/100 Dollars**

This price is based on a **fifty percent (50%)** downpayment in the amount of **\$ 45,238.**

This proposal, including the provisions printed on the pages following, shall be a binding contract between you, or the party identified below for whom you are authorized to contract (collectively referred to herein as :you:), and us when accepted by you through execution of this proposal by you and approved by our authorized representative; or by your authorizing us to perform work for the project and our commencing such work.

Submitted by: \_\_\_\_\_  
**Dylan Runions**

Accepted in Duplicate

**CUSTOMER**  
Approved by Authorized Representative

**OTIS ELEVATOR COMPANY**  
Approved by Authorized Representative

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Signed: X \_\_\_\_\_

Signed: \_\_\_\_\_

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Name of Company: \_\_\_\_\_

Principal, Owner or  
Authorized Representative of Principal or Owner

Agent \_\_\_\_\_  
(Name of Principal or Owner)