



EXECUTIVE SUMMARY

The building at 1819 W Pershing is partially utilized at this time, with the Board of Elections utilizing the fourth, floor and portions of the third, second and first floors, with storage uses by OEMC at part of the third floor, AIS at a portion of the second floor and CPD and CFD storage at the first floor. The basement is generally unused, and the fifth and sixth floors are not occupied. The assessment report will describe the existing conditions of the facility as assessed on site, focused primarily on interior conditions with some description of envelope and site conditions. Minimum code compliance requirements will be indicated with recommendations for bringing the facility into compliance. In addition, recommendations for additional work exceeding code minimums will be identified where appropriate. The intent for the 1819 Pershing facility is to bring the building into compliance with minimum building requirements with an emphasis on life safety requirements, as well as to address existing and future uses within the facility.

The primary document for assessing compliance for the facility is Title 14X – 2019 Chicago Minimum Requirements for Existing Building. Title 14X applies to all existing structures, whether any new construction or alterations are being performed. Title 14X focusses on structural safety, weather tightness and life safety compliance, as well as minimum standards for occupant use. All new work will be regulated by Title 14B Chicago Building Code and Title 14R Building Rehabilitation Code, while Title 14X dictates the minimum requirements at 1819 W Pershing where only corrections of existing non-compliant conditions are present.

ARCHITECTURAL: Code Deficiencies and Recommendations

Minimum code requirement modifications for the building interior are listed as outlined under Title 14X. All scope items are based on observation walkthroughs, and should not be expected to be exhaustive of all potential violations or deficiencies on site:

1. Per section 14X-3-304 interior surfaces must be maintained such that wall and walking surfaces are stable and secure. At most floor levels the existing concrete construction at floors and walls are in stable condition. Areas of concern include the following:
 - At Board of Elections renovations on the first, fifth and sixth floor levels decaying interiors and carpets leave unsafe environmental and walking conditions. It is recommended that unstable surfaces in these areas be demolished.
 - Floor at wall finishes at the fourth floor are damaged due to storage activities. Tile flooring should be removed at corridor areas, wall finishes patched and repaired
 - Floor Finishes at active toilet room at second floor are in poor condition, potential friable asbestos materials present.
 - Plaster deterioration at Stair B impedes egress route, should remove damaged finished and repair water infiltration at roof and parapets.
2. Per section 14X-3-306 handrails and guardrails are required to comply with minimum standards. At required stairs it is proposed that continuous metal grate panels be attached to the concrete stair structure similar to the security gates existing at some levels at existing stairs. Review of the condition with code officials may be sought to reduce guard protection requirements to limit to upper landings at stairs. The damaged handrail at Stair E basement will require repair.



3. Per section 14X-3-307 Rubbish and Garbage shall be removed from all interiors, with items as identified in the report. This includes items at unoccupied floor areas at the first fifth and sixth floors and basement areas, as well as items within stairwells.
4. Per sections 14X-5-502.3.3 fire walls, barriers and partitions are required to be maintained including all penetrations in accordance with NFPA 80. The existing fire wall separations are not required by code due to building construction and have been removed in some locations. Existing fire shutters and fire doors to remain should be inspected and serviced to confirm proper operation in case of a fire, or propped open and removed if not required.
5. Per section 14X-5-502.4 opening protectives in fire walls or partitions must be maintained. Fire doors cannot be blocked or held open (unless by approved hold open devices) and must have operable closers and latches. Several egress doors have missing or damaged hardware that would prevent proper operation and require repair or replacement. The non-rated door at Stair E must be replaced with a rated door. For rated door that are currently held open a magnetic hold open attached to the fire alarm must be provided. For the stair enclosure opening protective doors may not be held open per code due to number of stories served.
6. Per section 14X-5-505 means of egress must comply with minimum requirements of 14B including occupant load and exiting capacity, and minimum number of exits from all spaces and areas. Of particular concern are existing exit stairs that are not useable, with doors sealed shut throughout the facility, and exterior exits not useable at grade. An appendix to this report provides exiting diagrams and load calculations for all floors as a portion of a building life safety analysis indicating exiting loading, travel distances and minimum required exits from all areas.
7. Per section 14X-5-505.6 a minimum of 1 foot candle of illumination required at the walking surface at all portions of the means of egress, with emergency illumination provided in accordance with Article 700 of Chicago Electric Code. While this is a very low level of lighting, within several egress stairs there was no operable lighting. At some floor areas there was minimal operable lighting. Refer to the electrical assessment section for additional lighting details including emergency lighting.
8. Per section 14X-5-505.8 all doors on an egress path must have a minimum 28" clear width. The doors leading into Stair C and Stair F do not comply with this requirement – the clear width from egress to hardware to door frame is less than 24" at Stair F when the egress doors are fully open. The doors at these stairs are in concrete openings and may be difficult to enlarge structurally. The recommendation is to build rated vestibules outside of these stairs at the 2nd through 6th floors and provide a single 36" wide entry door into the vestibule. Within the vestibule areas of refuge, and code required 2-way communication systems could be provided. The non-compliant doors would be removed within the stair enclosures to allow for adequate clear width.
9. Per section 14X-5-505.9.7 existing stairways must have tactile identification signage indicating stair and floor identifier and reentry information at every floor.
10. Per section 14X-5-505.9.9 doors in exit stairways connecting more than 4 levels must either not be locked from stairway side at any time or be equipped with a fail-safe electronic system to release manually and automatically in connection to an automatic fire alarm/protection system, including a 2-way communication system at every 5th floor. As this building qualifies as a high-rise any locked stairway doors must be automatically unlocked upon a signal from the fire alarm center. Currently all doors are locked or may be locked to prevent re-entry from the stairwell. At



a minimum, all door hardware will need to be replaced at any doors to remain to allow for re-entry at all stair levels, and if security restrictions are required then a fail-safe system will be required to allow for door usage. Reentry of doors from stairwells is the most critical category in the Life Safety Evaluation criteria.

11. Per section 14X-5-505.13 internally illuminated exit signage must be provided with backup power source. Existing lighting throughout the building is generally inoperative, missing or damaged, and without backup power source, and will require replacement throughout the building. See electrical assessment narrative for additional information.
12. Per chapter 14X-6 means of egress lighting required for the facility and mechanical or natural ventilation required. While existing windows are operable at some locations and there are a few operable exhaust fans, it is recommended that a building ventilation system be assessed for the entire facility.
13. Per chapter 14X-7 known electrical hazards must be abated
14. Per section 14X-10 Elevators must comply with Chicago Conveyance Device Code. An elevator assessment has not been prepared for the elevator in 1819 Pershing, however AIS utilizes a service contract for the facility. If a list of code required requirements cannot be provided by the service contract provided it is recommended that an independent elevator consultant provide a report for the facility to bring elevator C8 into compliance and assess the requirements to bring elevators C3 online.

ARCHITECTURAL: Recommendations for occupant use and security:

15. Due to heavy usage of floors for storage and observed blockage of means of egress during assessments, it is recommended that high visibility traffic coatings be added to floor areas to define storage areas and egress routes to ensure materials are not stored in a manner that would compromise life safety.
16. Close up guard station securely, remove door hardware and secure opening into Stair B.
17. It is recommended that all exit door glazing at north elevation be replaced to provide tempered glazing for safety reasons.
18. Existing toilet rooms are located within the maximum travel distance and floor level separation at all occupied floors at 1819 Pershing, however the conditions for the toilet rooms and plumbing fixtures are in poor and inoperative condition in some locations. It is recommended that updated toilet facilities complying with accessibility requirements.

ELECTRICAL: Power Distribution Scope of Work Recommendations:

19. Based on age and condition of existing distribution system it's recommended as follows:
 - Option 1: Existing distribution system in general is original to the building and already exceeded its life span. It is recommended to replace it in its entirety.

ELECTRICAL: Interior Lighting Scope of Work Recommendations:

20. Due to different condition of existing lighting fixtures on each floor it's recommended as follows:
 - Basement –
 - Option 1: Replace existing lighting fixture with new 4' LED linear and provide new controls to meet 2018 IECC. (Approximately 1000 new fixture on this floor)
 - Option 2: Re-lamp and clean existing lighting fixtures. Provide new occupancy sensors to control lighting in the area.



- 1st Floor –
 - Option 1: Replace existing lighting fixture with new 4' LED linear and provide new controls to meet 2018 IECC. (Approximately 1000 new fixture on this floor)
 - Option 2: Re-lamp and clean existing lighting fixtures. Provide new occupancy sensors to control lighting in the area.
- 2nd Floor –
 - Option 1: Replace existing lighting fixture with new 4' LED linear and provide new controls to meet 2018 IECC. (Approximately 1000 new fixture on this floor)
 - Option 2: Re-lamp and clean existing lighting fixtures. Provide new occupancy sensors to control lighting in the area.
- 3rd Floor – Lighting fixture on this floor are in very poor condition
 - Provide new 4' LED linear and provide new controls to meet 2018 IECC. (Approximately 1000 new fixture on this floor)
- 4th Floor – Some of exiting lighting fixtures might be damaged by water on this floor
 - Replace exiting lighting fixture with new 4' LED linear and provide new controls to meet 2018 IECC. (Approximately 1000 new fixture on this floor)
- 5th Floor – Some of exiting lighting fixtures might be damaged by water on this floor
 - Replace exiting lighting fixture with new 4' LED linear and provide new controls to meet 2018 IECC. (Approximately 1000 new fixture on this floor)
- 6th Floor – Some of exiting lighting fixtures might be damaged by water on this floor
 - Replace exiting lighting fixture with new 4' LED linear and provide new controls to meet 2018 IECC. (Approximately 1000 new fixture on this floor)

ELECTRICAL: Exterior Lighting Scope of Work Recommendations:

21. Replace existing roof mounted lighting fixture with new LED fixture and provide new control to meet 2018 IECC. (Approximately 10 fixtures)
22. Replace existing wall mounted lighting fixture with new LED fixture and provide new control to meet 2018 IECC. (Approximately 8 fixtures)

FIRE PROTECTION: Fire Sprinkler, Fire Alarm and Voice Communication Recommendations:

23. Per section 14X-5-504.2.9 high-rise buildings are required to have automatic fire sprinkler systems throughout.
24. Per section 14X-5-504.4 existing high-rise buildings must be equipped with a standpipe system.
25. Per section 14X-5-504.5 portable fire extinguishers must comply with 14B-906 requirements for fire extinguishers which requires one fire extinguisher per every 11,250sf of floor area and maximum 75' of travel distance. While fire extinguishers were observed throughout the building, most extinguisher certifications expired in 2018 or before, with extinguishers in lower occupancy areas like the basement or unoccupied areas being far out of compliance. In some areas fire extinguishers were being used to prop fire doors open. It is expected that compliant fire extinguishers will be required throughout the facility.
26. Per section 14X-5-504.6 a fire alarm system must be provided. The fire alarm system must comply with all current code requirements of title 14B Chicago Building Code.



27. Per section 14X-5-504.7 voice communication systems are required in high-rise building consisting of both one way and two-way communication systems. This includes annunciator panels throughout the building and two way communication within the stairwells.

MECHANICAL: Scope of Work Recommendations

28. Local controls for the heating system should be provided within 1819 Pershing, as the facility is not operating efficiently, with exterior windows opened during the winter due to extreme heat at some areas. Additional discussion is included in the mechanical narrative.
29. Isolated temperature and humidity controls for sensitive archival materials for the Board of Education should be considered. A split system and some enclosure renovations may be required. Additional discussion is included in the mechanical narrative.
30. For the 2nd floor work area, the following scope of work is recommended due to the age and condition of existing air handlers:
- Demolish (2) suspended air handling units at the northeast and northwest corners of the occupied work area. Demolish associated pneumatic control panels, outside air louver, steam control valves, and associated steam isolation valves and traps. Demolish associated roof mounted condensing units and interconnecting refrigerant piping. Existing ductwork, steam, and condensate drain piping shall remain for connection to new work. Provide test and balance report of fan prior to demolition.
 - Provide (2) new outside air louvers in existing openings sized for minimum 7,500 CFM and (2) relief air louvers at code required distance away from the intake.
 - Provide (2) new suspended air handling units by Carrier, Trane, York, or Daikin. Provide with mixed air dampers, steam heating coil, DX cooling coil, economizer controls, variable speed belt drive supply fan, DDC controls, and vibration isolation hangers. Provide all new steam control valves and piping package. Units shall be nominally 7,500 CFM and 20 tons each. Connect to existing ductwork. Provide test and balance of existing duct systems.
 - Provide (2) new nominal 20-ton roof mounted condensing units and interconnecting refrigerant piping.
31. For the 4th floor archival storage area, the following scope of work is recommended:
- Provide (3) 4-ton wall-mounted precision DX cooling and humidification units with outdoor remote condensing unit. Provide with low ambient cooling down to -20F, hot gas reheat, SCR reheat coil, 5 lb/hr steam generator humidification, Merv 8 filters, and condensate pump with overflow switch. Provide manufacturer's controls with high/low temperature and humidity alarms. Units shall be by Data Aire or similar precision cooling manufacturer.

MECHANICAL: Existing AHU Scope of Work Recommendations

32. Although ventilation is not required on all floors due to current space utilization, existing AHUs in the core mechanical spaces on each floor may be rehabilitated to provide ventilation and heat. Provide the following renovation scope for all AHUs:
- Supply and Return Fans
 - Check fan wheel for proper rotation
 - Check bearings and other moving parts for proper lubrication



- Record motor data including motor make, horsepower, RPM, volts, phase, hertz, full load amperage, and service factor
- Adjust or replace loose or damaged belts
- Check motor starters and system fan controls for proper operation
- Provide test and balance report with all fan system deficiencies noted
- Heating Coils
 - Inspect heating coils and associated piping for leaks
 - Clean and comb heating coil fins
 - Check control valves and system heating controls for proper operation
 - Check control dampers for proper operation
 - Calibrate and adjust thermostats and system temperature sensors
 - Provide test and balance report with all heating system deficiencies noted
- Ductwork
 - Replace filters
 - Clean interior of ductwork
 - Securely fasten loose insulation
 - Clean and adjust supply diffusers
 - Clean and adjust outside air intakes

MECHANICAL: Recommendations – Code Required Toilet Rooms

33. Functional toilet rooms are required every other floor for men and women per a code analysis. Code required exhaust ventilation is required at a rate of 2 CFM per square foot for active toilet rooms.

**OPINION OF PROBABLE COST***

DIV.	DESCRIPTION	SUBTOTAL	MARGINS & ADJUSTMENT***	TOTAL COST	GFA \$/SF**
02	Existing Conditions	\$297,916	\$98,782	\$396,698	\$0.63
03	Concrete	\$147,893	\$49,038	\$196,931	\$0.31
04	Masonry	\$123,500	\$40,950	\$164,450	\$0.26
05	Metals	\$546,960	\$181,358	\$728,318	\$1.16
08	Openings	\$319,800	\$106,038	\$425,838	\$0.68
09	Finishes	\$33,984	\$11,268	\$45,252	\$0.07
10	Specialties	\$13,150	\$4,360	\$17,510	\$0.03
14	Conveying Equipment	\$278,000	\$92,178	\$370,178	\$0.59
21	Fire Suppression	\$4,616,580	\$1,530,744	\$6,147,324	\$9.77
22	Plumbing	\$1,015,171	\$336,606	\$1,351,777	\$2.15
23	Heating, Ventilation, and Air Conditioning	\$3,262,149	\$1,081,648	\$4,343,797	\$6.90
26	Electrical	\$7,136,124	\$2,366,162	\$9,502,286	\$15.10
28	Electronic Safety and Security	\$2,925,417	\$969,996	\$3,895,413	\$6.19
	TOTAL	\$20,716,644	\$6,869,126	\$27,585,770	\$43.85

*This opinion of probable cost is for budgetary planning purpose. More accurate cost estimate will be presented upon full development of work scope. HMJV design team has no control over the actual cost of labor and materials, general contractor's, or any subcontractor's method of determining prices, or competitive bidding market conditions at this time. This opinion of probable construction cost is made based on the experience, qualifications, and best judgment of the professional familiar with construction industry at this time. HMJV design team cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from this or subsequent Opinions of Probable Cost.

** Gross Floor Area – 629,122 SF

***Margins & Adjustments -

- General Conditions = 10%
- Insurances & Bond = 2.5%
- Overhead & Profit = 4.0%
- Contingency = 10%
- Escalation = 3%

**SCOPE OF WORK INCLUDING BOE REQUESTED ITEMS FOR 1819 W. PERSHING BUILDING**

Items are based on a list received on July 30, 2021 from AIS. This list does not include any programming for 5th and 6th floor beyond items listed below.

<u>BOE Item</u>	<u>Status</u>	<u>Notes</u>
1) Fire Pump	Not required per CFD	1819 Uses Fire Pump in 1869 Building, which is acceptable to CFD. New <u>FA, Fire Main and Sprinklers Recommended by PBC for Installation.</u>
2) Roof	Not part of PBC Scope. Work currently on-going by AIS	A temporary roof membrane is planned for installation this year, until a permanent roof can be installed. Engineer has been contracted to design permanent roof. Design is expected to be complete this year, with installation of permanent roof happening next year.
3) Tuckpointing to include parapet work	Not part of PBC Scope. Work currently on-going by AIS	Building envelope Improvement including tuckpointing is in progress
4) Remediation of mold on the fifth and sixth floors and <u>asbestos remediation throughout (see Item 17 below)</u>	Not part of PBC Scope. Work currently on-going by AIS	Overall general plan for the building is to remediate 5th and 6th floors as needed
5) HVAC and control work	Part of PBC Scope	Ventilation will be designed per code requirements throughout the building. A new temperature control will be designed for existing heating system. For selected locations, a new mechanical system will be designed for offices and sensitive document storage area.
6) Freight elevator rebuilt	Part of PBC Scope	One elevator will be designed to be rebuilt.
7) Rear dock (one dock has been taken out of service while on the other dock the concrete is beginning to deteriorate)	Part of PBC Scope	A southwest rear dock will be renovated and put back into service
8) Window Replacement	Not part of PBC Scope. Work currently on-going by AIS	Building envelope Improvement including window replacement is in progress
9) Bathrooms	Part of PBC Scope	Bathrooms will be designed to meet the building code.



10) Vinyl tile replacement on the fourth and second floors	Part of PBC Scope	Tile replacement at select locations will be designed.
11) Painting needed throughout	Part of PBC Scope	Painting at select locations, i.e. offices, will be designed.
12) Lighting	Part of PBC Scope	Lighting will be designed per code requirements throughout the building.
13) Ceiling Tile Replacement	Part of PBC Scope	Painting at select locations, i.e. offices, will be designed.
14) Tunnel Repairs	Part of PBC Scope	Tunnel repair design is complete. Permitting is in progress.
15) All Fire Exits to Be Brought Into Compliance	Part of PBC Scope	Egress improvements, including fire exits and fire separations, will be designed per code.
16) Rebuild of Addiional Elevators	TBD	Returning additional elevators to services are being reviewed by PBC as part of programming efforts.
17) Asbestos (and HAZMAT) Remediation Throughout	Part of PBC Scope	Asbestos Remediation is planned to Be Completed for the building for designated projects.
Notes		
1) Abatement plans for building are to abate as necessary to support construction projects.		
2) Individual Improvements will require material testing and abatement as needed,		
3) PBC is completing Site assessment/programming and will be preparing formal cost estimates and proposed sequencing for the Work as project details are finalized.		