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REPORT FOR:



**PEEKSKILL HOUSING AUTHORITY
PHYSICAL NEEDS ASSESSMENT FOR
BOHLMANN TOWERS**

Submitted by:
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AMP No. NY082000001

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ABBREVIATIONS

A	Amp
A/C	air-conditioning
ADA	Americans with Disabilities Act
BR	bedroom
CFL	compact fluorescent lamp
DHW	domestic hot water
ECM	energy conservation measure
EUL	expected useful life
°F	degrees Fahrenheit
gpf	gallon per flush
gpm	gallon per minute
hp	horsepower
HUD	Housing and Urban Development
HVAC	heating, ventilation, and air-conditioning
IFC	International Fire Code
kgal	kilogallon
kWh	kilowatt hour
LED	light emitting diode
MBH	Thousand British thermal units per hour
MMBtu	Million British thermal unit
NFPA	National Fire Protection Agency
PHA	Peekskill Housing Authority
PNA	physical needs assessment
UFAS	Uniform Federal Accessibility Standards
VCT	Vinyl Composition Tile

EXECUTIVE SUMMARY

Perez Architecture and 2RW Consultants, Inc. have been engaged by the Peekskill Housing Authority (PHA) to perform a physical needs assessment (PNA) for Bohlmann Towers. Constructed in 1958, the high-rise building consists of 144 dwelling units. Fourteen of these units are Section 504 designated for elderly/disabled residents. The focus of this PNA is to assess existing conditions and identify physical deficiencies and repair/replacement needs over the next 15 years.

This report details the team's observations and recommendations based on a review of past energy audit and PNA reports, data provided by PHA, interviews with facility management, and on-site observation of conditions.

General Observations

Based upon the site observations of Bohlmann Towers in July 2018, the site and building appear to be in generally satisfactory condition. However, some of the building systems and components in the sixty-year-old facility are at the end of their service lives. Additionally, some components have received heavy use and, although not nearing their typical end of service lives, are also approaching a point in which the Housing Authority should consider replacement.

Critical Needs / Immediate Threats

Critical Needs and immediate threats are conditions that threaten the health and safety of building occupants or the integrity of building systems. Immediate threats should be addressed by the Owner as soon as possible. Immediate threats identified during the July 2018 site visit include:

- Many occupied units showed more water/unidentified fungal growth problems at wall/ceiling of current shower units due to water leaks from above.
 - Substandard grouting/tile/caulking work in above bathrooms can cause this
 - Failing shower enclosures and shower bodies in units above can cause this
- There is exposed piping about ~5'6" from the floor near the exit doors at each stair landing. This does not conform to accessibility requirements for barrier free pathways.
- Sprinklers are not in individual units and the boiler room
- The building does not have a lightning protection system.
- The existing fuel-fired generator should be converted to a natural gas generator.
- There is significant corrosion around the base of metal railings on fall protection railing as well as stair rails on the southern side of the building.
- There is large cracking and washing out from under hardscape at north-eastern entrance to building. The Superintendent stated that a large oil tank was removed and the area under the hardscape was improperly backfilled.
- Walls in the basement stop short of the ceiling slab. As they are not constructed slab to slab, as is a building code requirement, a rated assembly is not achieved.
- Piping and conduit run between rooms in the basement are not properly fire stopped.
- Environmental tests were not provided. It is assumed that the Housing Authority does not have these. It is recommended that these be procured as soon as possible.

Capital Needs for Renovation

The PHA should plan and budget for replacement of a component/system:

- As it reaches the end of its Expected Useful Life (EUL).

- When it fails prematurely and cannot, or soon will not be, able to perform its intended function.

The following tables summarize the estimated capital needs for infrastructure renewal at Bohlmann Towers over the 15-year period from 2018 to 2032. Critical needs and immediate threats at Bohlmann Towers are estimated to cost \$1.7 million. The short-term physical needs are estimated to cost \$5.2 million with an additional \$6.7 million anticipated during Years 2 through 15. The preponderance of the capital needs through Year 15 are for building system and unit renewals. (All dollar amounts are in 2018 dollars).

Table 1 presents the critical needs/immediate threats that must be addressed as soon as possible. Table 2 presents the short-term physical needs that must be addressed within the next 12 months. Table 3 presents the long-term physical needs that must be addressed over the next 15 years. Table 4 and Table 5 present information on the specific costs of certain items that are short term and long-term physical needs, respectively.

Table 1: Critical Needs / Immediate Threats

Category	Cost
Remove Unidentified Fungal Growth in Unit Bathrooms	\$ 27,317
Exposed Piping in Common Area and Egress Locations	\$ 52,695
Install Sprinklers in Individual Units and Boiler Room	\$ 1,460,640
Install a Lightning Protection System	\$ 33,337
Convert the Existing Fuel-Fired Generator to a Natural Gas Generator	\$ 94,195
Repair Metal Railings on Northwestern Side of the Building	\$ 13,635
Backfill Under Hardscape at Northeast Entrance to the Building	\$ 17,620
Complete Wall Construction in Basement	\$ 49,040
Firestop Piping and Conduit Runs in Basement	\$ 7,225
Total	\$ 1,755,704

Table 2: Short Term Physical Needs

Category	Year 1
Site	\$ 145,340.64
Building Exterior	\$ 512,606.28
Building Systems	\$ 1,349,954.04
Common Areas	\$ 478,720.62
Units	\$ 2,702,239.93
Total	\$ 5,188,861.51

Table 3: Long Term Physical Needs

Category	Years 2-5	Years 6-10	Years 11-15	Total Needs
Site	\$ -	\$ 16,482.93	\$ 375,864.86	\$ 392,347.79
Building Exterior	\$ 61,249.80	\$ -	\$ 79,787.79	\$ 141,037.59
Building Systems	\$ 29,116.10	\$ 727,645.60	\$ 514,849.06	\$1,271,610.76
Common Areas	\$ 78,961.66	\$ 249,074.31	\$ 216,507.29	\$ 544,543.26
Unit	\$ 641,845.14	\$2,395,613.65	\$1,371,145.58	\$4,408,604.37
Totals	\$ 811,172.70	\$3,388,816.49	\$2,558,154.58	\$6,758,143.77

Table 4: Specific Costs of Additional Short-Term Physical Needs

Category	Cost
Reset Black Railing at Northwestern Courtyard	\$ 18,220
Repair and Reconstruct Rear Entrance Awning	\$ 36,786
Upgrade Interior Signage	\$ 8,750
Install Grease Shields at All Units	\$ 7,609
Replace Shower Bodies in All Units	\$ 837,277
Add Closets to Bedrooms in Certain Units	\$ 33,216
Recess Outlet and Switch Boxes that are Surface Mounted	\$ 207,360
Total	\$ 1,149,218

Table 5: Specific Costs of Additional Long-Term Physical Needs

Category	Cost
Pressure Wash Building Exterior	\$ 90,000
Repoint Building Exterior	\$ 325,350
Install Drip Pans at Window A/C Units	\$ 14,375
Replace Dropped Acoustical Tile Ceiling in Common Areas, Management Offices, Etc.	\$ 47,565
Install Corner Guards in Common Areas	\$ 3,645
Repair Concrete Masonry Unit Walls in Basement Service Areas	\$ 15,450
Remove and Repair Flooring in Basement Service Areas	\$ 42,224.50
Replace Cabinets, Countertops, and Appliances in All Units	\$ 2,038,995
Replace Fixtures and Finishes in Bathrooms in All Units	\$ 667,484
Replace Door Knobs with Lever Handles	\$ 32,242
Total	\$ 3,277,331

Bohlmann Towers has a number of systems that have reached the end of their expected useful lives. This fact is not to be interpreted as systems that have already failed. However, the PHA should budget and schedule for replacements immediately. A full list of systems that are past their expected service lives can be found in the Total Physical Needs Summary.

Cost estimates do not include the following:

- Preventative maintenance of building systems and components.
- On-going operating and maintenance costs for existing systems.
- Improvements to the facility to bring the site into compliance with present laws, regulations, codes, accessibility requirements, or other mandates or industry recommendations.
- Upgrades to improve marketability of the dwelling units.
- Environmental testing and problem remediation.
- Building system testing and remediation of problems.

These costs are a major component in the calculation of Deferred Maintenance as defined by the Statement of Federal Financial Accounting Standard 40 issued by the Federal Accounting Standards Advisory Board. Over the next 15 years, infrastructure renewal at Bohlmann Towers is estimated to cost \$13.3 million, of which over half will be required inside the dwelling units.

INTRODUCTION

Summary

Perez Architecture and 2RW performed a PNA for PHA. The assessment consisted of a building survey of dwelling units, maintenance, utility, laundry and other common spaces and a site survey. Table 6 summarizes the number and size of dwelling units at Bohlmann Towers.

Table 6: PHA Site and Unit List

Site	Gross Area	0BR	1BR	2BR	3BR	4BR	5BR	Total
Bohlmann Towers	126,477	16	38	8	56	19	7	144

In 2011, a building renovation was completed. During the renovation, there was a main lobby upgrade and windows and flooring throughout the common areas and units were replaced. The boilers were also replaced in 2011 and a fuel-oil to natural gas boiler conversion was done in 2015. All interior doors and locks were replaced in 2018.

Methodology

The primary authors of the PNA report are Perez Architecture and 2RW Consultants, Inc. Perez Architecture, founded in 1940, is a 100% Woman and Minority owned, multidisciplinary firm providing a full range of in-house services including architecture, design-build, construction, landscape architecture, planning, interior design, and real estate development. 2RW is a professional engineering firm, established in 1985, with more than 30 years of experience in multi-family design and analysis.

The PNA followed four major steps.

1. The Perez Architecture team conducted site visits to gather information about the properties. Perez visited a representative sampling of dwelling units at the site. Perez also visited community spaces, office spaces, and central mechanical rooms. A staff member of the management company accompanied Perez and 2RW during the field visit. The visit included an observation of the site, building envelope, space heating and cooling systems, ventilation, lighting, domestic hot water (DHW) systems, plumbing fixtures, ancillary systems, and appliances. Inventories and measurements of building systems conducted during the site visit have been compared to other documentation (drawings, previous energy audits and assessments, etc.) for verification.
2. Based on field observations, drawings, and previous PNAs an inventory of facility systems and components was prepared.
3. The building system and component inventory, replacement costs, and other data were determined.
4. The PNA report was prepared.

The PNA team used current editions of building codes, laws, regulations, and standards during preparation of this report.

DESCRIPTION OF EXISTING CONDITIONS

Bohlmann Towers, AMP NY082000001, 807 Main Street, Peekskill, NY

Property Description

Located at 807 Main Street in Peekskill, New York, Bohlmann Towers is an eight-story 144-unit residential building, built in 1958. A breakdown of the units by bedroom size is as follows:

Number of Bedrooms	0BR	1BR	2BR	3BR	4BR	5BR	6BR	Total	Common Space
Number of Units	16	38	8	56	19	7	0	144	Mechanical Room, Community Room, Offices
Square Footage	304	570	756	1,003	1,155	1,456	0	120,877	

In accordance with the agreement between PHA, NY and Perez Architecture dated July 6, 2018, a PNA was conducted for Bohlmann Towers.

A walkthrough visual observation of the property was completed on July 30, 2018 and included 100% of the site, common area, offices, mechanical and maintenance areas, and 10% of the dwelling units. As part of the overall PNA, review and recommendation for this site, the site amenities, unit size, layout, and functional obsolescence were given full consideration.

Site

PHA built Bohlmann Towers in 1958. The site appears to be well maintained, and generally in good condition. The 28,100 square feet of asphalt parking lots appear to be in good condition, and asphalt replacement is not immediately needed. The 20,200 square feet of pedestrian concrete walk ways are in good condition with only minimal repairs needed, save for one location where the pathway was undermined by a tank removal. Lawn areas appear to be well maintained, and trees appear to be pruned away from buildings so as not to damage the Towers building. A chain-link fence surrounds the site and appears to be in good condition. A wrought-iron fence surrounds public areas and appears to be in good condition. The iron railing in the Northwestern courtyard of the building is easily moved by hand in some areas. These stretches of railing need to be reinstalled with new footings. The hardscape behind the building will need more maintenance in the future as the trees planted inside of it continue to grow and the concrete pathways heave with the expansion of the root systems.

Accessibility

During an onsite walkthrough, the site and building items were reviewed for compliance with the Uniform Federal Accessibility Standards (UFAS) and Section 504 compliance requirements. Among the systems reviewed for compliance with accessibility standards were parking, accessible routes, and entryways. The housing authority makes reasonable accommodations at the project for ease of access by providing designated and conveniently located parking spaces.

Amenities

The site has 16 painted steel benches, three painted steel picnic tables, and two charcoal grills. The amenities appear to be in good condition.

Utilities

Electricity is provided by two separate meters, one for residents and one for common areas. Electricity is provided at 208V/3-phase. The main owner’s panel is rated at 800 amps. All switch gear is dated 1984.

Natural gas is provided to the building at a single point to two meters by a 2-inch pipe.

Water is provided to the building by a single water meter.

Site Observations

- When repainting the parking lot striping, the international symbol should be re-applied following the details outlined in UFAS.
- The Americans with Disabilities Act (ADA) Accessibility Guidelines do not specify a height for parking signs and the Uniform Accessibility Standards only require that the sign not be obstructed by a vehicle parked in the space. A height of at least 60 inches (measured to the bottom edge) is advised, allowing for sign space, although a higher height is better for signs at van spaces.

Building Exterior

Building exteriors and systems for Bohlmann Towers appear to be well maintained and in good condition. The nine-story high rise building, constructed of brick built over a basement with a pier and beam foundation, is in good condition. The Bohlmann Towers windows are double-pane, aluminum with a non-structural non-insulating panel between them. The windows were replaced in 2011 and are in good condition. The roof at Bohlmann Towers is flat built-up/bituminous membrane and was replaced in 2011. The exterior brick is in generally good condition and does not need immediate replacement. The storefront main entryway is made up of two metal, stainless steel doors and was replaced in 2011. They do not appear to be on an automatic opener. Occupants have key fob access.

Building Exterior Observations

Notable observations concerning the building exterior at Bohlmann Towers are as follows:

- The brick exterior is exhibiting staining and should be pressure washed.
- Some areas of grout on the building exterior are missing or damaged. These areas should be repointed.
- Window Air Conditioning units need to be installed with a drip pan or other method of keeping water from staining the brick face of the building.
- The canopy over the southern entrance to the building is exhibiting advanced signs of deterioration due to water infiltration over a long period of time. The roof is not sagging, which indicates that the structure is likely intact. However, the framing, finishing, and roofing materials all need to be replaced. It is recommended that all material be removed back to the structure, and the roof be re-built with an appropriate slope such that water does not collect on the roof.

Building Systems

Heating, Ventilation, and Air-Conditioning Systems (HVAC)

Space Heating

Space heating at Bohlmann Towers is provided from a central heating system, with two natural gas boilers located in the basement mechanical room. A fuel-oil to natural gas boiler conversion was done three years ago, including new burners. However, one burner requires repair. The Buderus Logano GE615 boilers are rated for 3,402 MBH input and 2,958 MBH output, with an efficiency of 82.7%. The boilers look to be in fairly good condition.

For heat distribution, the central heating system circulates hot water throughout the building using four Bell & Gossett pumps (7.5 hp) with Baldor Reliance motors.

The condition of baseboard convectors and control valves within the dwelling units varies, but some are in very poor condition, missing parts and/or dented. The control valves are non-electric controls. It is recommended that a building-wide replacement should be done within three to five years.

Combustion air vents appear to be original to the building and may not be sufficient for current code compliance.

Space Cooling

There is no central air-conditioning (A/C) at Bohlmann Towers. Residents provide window air-conditioners for space cooling in their apartments. These window A/C units can vary widely in capacity, efficiency and condition.

There are split-system A/C units to cool office areas and the health center. The outdoor unit is a 5-ton Goodman cooling unit and appears to be 20 years old. The split systems are controlled by local thermostats. Window air-conditioners serve maintenance areas and community rooms.

Ventilation

Exhaust ventilation for the Bohlmann Towers residences is provided by roof-mounted mushroom fans. The fans generally appeared to be in good condition, with a variety of ages and manufacturers. Each dwelling unit has a bathroom exhaust grill connected to the exhaust duct risers.

HVAC Observations

Important observations of the Bohlmann Towers HVAC systems are given below.

- Resident mounted A/C units should not be installed in windows, as it causes damage to the windows and exterior walls and are at risk of falling. Units should be installed through the wall.
- The hydronic baseboard units in the residences vary in condition, but generally are in need of replacement.
- There is no central A/C for the residences.
- There is no make-up air system which results in the building being negatively pressurized by the central exhaust fans.

Plumbing Systems

A four-inch water service for Bohlmann Towers enters the building via a meter pit located at the east side of the building and enters underground into the mechanical room. During the on-site inspection we observed shut-off valves, water meter, pressure reducing station, strainer, and bypass piping. A backflow preventer was not observed.

Sanitary drains in the building are cast iron. They appear to be original to the building.

Natural gas enters the building at the southwest corner of the generator room and serves the building's boilers. Gas risers provide natural gas to ranges in the apartments.

There are four porcelain, non-electric drinking fountains located in the building. They are approximately one foot, wall mounted and appear to be in good condition.

Plumbing Fixtures

Each apartment has a full bathroom with water closet, shower tub, and lavatory. Four-bedroom apartments also have a half-bathroom equipped with a water closet and lavatory, and five-bedroom apartments have a second full bathroom equipped with a water closet, lavatory, and shower stall. The toilets are 1.6 gpf and were replaced in 2012. Each kitchen has a single-basin stainless steel sink.

The office area, health center and maintenance shops also have bathrooms with water closets and lavatories. The maintenance staff bathroom includes a lavatory, shower, and sink. A kitchen serves the office area and is equipped with a single-basin stainless steel sink.

Domestic Hot Water

DHW at Bohlmann Towers is generated by the building boilers via a DHT heat exchanger (model no. B35Hx50mp), which was installed in 2011, and is stored in two 119 gallon Turbomax 100.9 DHW tanks, which replaced two existing storage tanks in 2011. Hot water is circulated from the water heaters throughout the building by two Wilo circulating pumps (model no. 2067591) that were installed around 2011.

Plumbing Systems Observations

Notable observations concerning the plumbing systems in Bohlmann Towers are as follows:

- Plumbing risers and sanitary stacks are original to the building and beyond or at the end of their expected service lives.
- Plumbing backups into the building's crawlspace were mentioned by the Superintendent. If the backups continue, a remote video pipe inspection is recommended to identify the cause.
- Dwelling units are equipped with 2.0 gpm showerheads and 2.2 gpm faucet aerators. Many tenants have replaced the authority provided showerheads with their own showerheads.
- The water storage tanks are relatively new and appear to be in good condition.
- Hot water is delivered between 110°F and 120°F.

Electrical Systems

Electrical Service

The electrical service to Bohlmann Towers is 1600A, 3-phase, four-wire and enters the building on the ground floor. The main panel boards and breakers associated with the power feed and central distribution are by Federal Pacific, which has been out of business for some time rendering their equipment obsolete.

The load centers in the apartments are Federal Pacific equipment as well and are in fair to poor condition, beyond their expected service lives.

Exterior Lighting

The exterior lighting at Bohlmann Towers consists of light emitting diode (LED) fixtures that were installed in 2012 and are in excellent condition. Photo-sensors are used as controllers for exterior lighting fixtures. There are 25 pole-mounted site fixtures that were installed in 2008. Site lighting includes both LED and metal halide.

Interior Lighting

The common areas including offices, community rooms, lobbies, corridors, hallways, and stairways in both public and ground floors are illuminated by T8 fluorescent lighting fixtures equipped with electronic ballasts. A few older T12 fluorescent fixtures remain in the ground floor maintenance areas.

Compact fluorescent exit signs are installed over exit doors and at the doorways into entrances to the stair towers and were installed in 1993.

Some emergency lighting is provided in the corridors.

Dwelling units are equipped with the following light fixtures:

- Kitchen: Surface-mounted circline fluorescent fixtures. One lamp inside the recirculating range hood.
- Dining: Surface-mounted circline fluorescent fixtures.
- Hallways: Surface-mounted circline fluorescent fixtures
- Bathroom: Wall-mounted compact fluorescent lamp (CFL) fixture above the lavatory mirror.

On-Site Generation

Bohlmann Towers has a fuel-oil fired emergency generator to provide back-up power to critical systems. The generator is a Kohler "Fast Response" model rated at 50 kW, 3-phase. The fuel-oil day tank adjacent to the generator is not equipped with a containment for spill protection. The generator has exceeded its useful life and should be replaced with a gas-fired generator, which does not require spill protection.

The generator supplies electricity through a Kohler switchgear panel that appears to be new and in excellent condition.

Lightning Protection

There is a lightning protection system installed on the elevator penthouse at Bohlmann Towers.

Fire Protection Systems

Bohlmann Towers is protected by a wet pipe sprinkler system serving the corridors, common areas, offices and maintenance areas of the building. The sprinkler system does not serve the boiler room. The current International Fire Code (IFC) 1105.3.3 requires any space with more than 400, 000 BTU/hr to be served by sprinklers; therefore, the current fire protection system is deficient.

The dwelling units do not have fire protection systems installed. The 2009 IFC requires an automatic sprinkler system for residential (R) buildings. As of 2015, the IFC (M101.1 and M102.1) requires an automatic sprinkler system to be retroactively installed in existing high-rise buildings and must comply with the National Fire Protection Agency (NFPA) standards. NFPA 13 – 8.15.8 requires sprinklers to be installed in individual units.

Dry standpipe systems are provided for the stairwells, and exterior fire department connections are located on several areas of the first and ground floors. The fire department connection located outside the main entrance appears to be original to the building. The connection is properly identified, however is behind a four-foot-high wrought iron fence. This limits accessibility by the fire department. A second modern Siamese hose connection is located on the side of the building. This connection is not properly labeled and is also behind a fence. The Siamese hose connection on the roof appears to be original to the building and is not properly labeled.

Fire Detection Systems

Bohlmann Towers is protected by a fire detection system and a manual pull alarm system. The fire detection system is by Edwards Systems Technology (now Edwards United Technologies). The main annunciator panel (model EST2) is located on the ground floor corridor in the maintenance shop area.

Smoke detectors are located in public spaces including corridors, elevator lobbies, the main lobby, offices, and the community center. Both horns and strobes with horns serve as signaling devices. All devices are hard-wired.

Manual fire pulls are located next to the exit doors at the stairways serving the residential floors and at doors to the building exterior on the first floor.

Smoke detectors are present in each dwelling unit as well, mounted to the ceiling in the kitchen / dining areas as well as in the hallways near the bedroom doors. Residential smoke detectors are hard-wired. The current fire code requires one smoke detector to be located in each bedroom. The handicap and elderly units are equipped with audio/visual smoke detectors.

Elevators and Conveyances

Bohlmann Towers is served by two cable elevators located at the central corridor. Each elevator shaft terminates in a brick penthouse on the roof. The elevators were replaced in 2013. The elevator signage is equipped with Braille characters for the hearing impaired.

Security Systems

Two different systems provide security for Bohlmann Towers: a camera surveillance system and electronic locks on exterior doors. Approximately 20 exterior cameras are located eight to ten feet above ground around the perimeter of the building. Interior security cameras are located in the laundry room, corridor intersections, stairwells, and the front lobby. An intercom system provides communication between the front exterior door and the individual dwelling units.

Emergency Call System

The handicap and elderly units do not appear to be equipped with an emergency call system.

Electrical Systems Observations

Notable observations concerning the electrical systems in Bohlmann Towers are as follows:

- Some dwelling units that have been recently renovated for resident turnover have had new LED fixtures installed in place of the fluorescent fixtures.

Waste Disposal

Waste disposal is handled using trash chutes and a trash compactor. The trash compactor was labeled not working and that trash should be taken directly to the dumpsters on site.

Common Areas

Common Areas located within Bohlmann towers, enclosing office areas, laundry facilities, and elevators are in fair condition. Ceiling tiles and common area flooring inside of the office areas are worn and unsightly. The laundry area is in fair condition with machines that are less than six years old. The vinyl composition tile (VCT) needs replacement in the laundry room. The two elevators for use by the tenants are approximately five years old and are in moderate condition.

Accessibility

The UFAS and Section 504 compliance requirements were studied and observed with site and building items during the onsite walkthrough, included parking, accessible routes, and entryways. The housing authority made reasonable accommodations to the project for ease of access by providing designated and conveniently located parking spaces. When repainting the parking lot striping, the international symbol should be reapplied following the details outlined in UFAS. ADA Accessibility Guidelines do not specify a height for parking signs and the Uniform Accessibility Standards only require that the sign not be obstructed by a vehicle parked in the space. A height of at least 60 inches (measured to the bottom edge) is advised, allowing for sign space, although a higher height is better for signs at van spaces.

Signage

Common area spaces and fire escapes are not identified with signs that have raised letters and Braille characters for sight impaired occupants.

Each apartment has apartment numbers located on the entrance doors. They are not equipped with raised letters and braille characters for the visually impaired.

Appurtenances and Finishes

Ceilings

Suspended acoustic, two by four lay-in tiles are the predominant ceiling system in Bohlmann Towers common areas on the ground floor. These systems are present in the community room, offices, and corridors. Gypsum wallboard ceilings are installed in the laundry rooms, public restrooms, lobby and vestibule. The ceilings of upper level corridor are pre-cast concrete. Hangers and other ceiling connections in the maintenance area of the first floor have caused some damage to the ceiling. The acoustic ceiling tiles exhibit their age. Tiles are marked by previous leaks.

Walls

Walls in public amenity generally are gypsum wallboard. Baseboards are vinyl. The walls in the lobby, vestibules and hallways are painted concrete masonry units. In service spaces, such as the mechanical and electrical rooms, walls are painted concrete masonry units. Many of the concrete masonry units in the service spaces are severely damaged.

Flooring

Floors in Bohlmann Towers public spaces are vinyl tile. Bare concrete floors are in the service areas and trash compactor room. Some ceramic tile exists in offices that are in the service space.

Interior Doors

Interior doors in public spaces are metal and have been recently replaced. The doors were installed with full height piano hinges. Door hardware is plated with a brass finish. The doors leading into egress paths have fire rating certification labels on the door jams. The rating conforms to what would be expected in this application.

Appurtenances

A wood handrail is installed along one wall of the main corridor of each floor. The handrail assists the elderly occupants who have mobility issues.

Stairs in the north and south stair towers are metal pan with concrete fill. Stair handrails are metal. The walls of the stair towers are unpainted concrete masonry units.

Common area surfaces and finishes in Bohlmann Towers generally are in satisfactory condition.

Common area signage is adequate and in good condition, but missing braille or raised letters.

Laundry

There is a large size laundry room with multiple electric washers and dryers. The dryers are vented to the outside of the building through ducts. The washers and dryer are in good condition and are maintained and owned by an outside company. The finishes in the room are failing due to heavy use.

Mailboxes

The horizontal, wall-mounted, locking mailboxes are located on the first floor.

Appliances

There is a staff kitchen equipped with a microwave; 30-inch, four-burner gas range; and GE two-door, top freezer refrigerator (model no. TBX18SASJLWH).

Common Area Observations

Notable observations concerning the common areas in Bohlmann Towers are as follows:

- Some walls do not continue all the way from floor to ceiling. Brick is placed on top of block to create a full wall
- Through-wall piping is not properly fireproofed, and the construction of the wall is haphazard.
- The lay-in tile ceilings have aged noticeably.
- Corners where two walls abut frequently exhibit damage.

Units

The dwelling units located in Bohlmann Towers were assessed with an overall condition of fair to good, dependent upon the period of time since the last turnover renovation. Unit kitchens are in fairly good condition and show signs of normal wear and tear. Building maintenance staff indicated that previous maintained was in poor quality. That, combined with heavy use, has led to the kitchens starting to fail prior to the end of service life. The cabinets, countertops, and appliances are in fair condition and should be considered for upgrading and replacement by the housing authority. Unit baths are in moderate condition and should be considered for modernization. As with the kitchens, these have exhibited heavy use and should be considered for replacement. The toilets installed throughout Bohlmann Towers are primarily 1.6 gpf type toilets. The bathtubs are in fair condition. Unit flooring is in poor

condition and should be replaced. The lighting throughout Bohlmann Towers is primarily fluorescent type which could be upgraded to energy efficient LED lighting.

Accessibility

At present, 14 of the apartments at Bohlmann Towers are designated as UFAS accessible. As such, the following is for information purposes only, as Bohlmann Towers appears to comply. UFAS Section 4.1.4, Occupancy Classifications, paragraph (11) Residential, states that accessible housing shall be provided for federally funded, multifamily housing, in "5% of the total, or at least one unit, whichever is greater, in projects of 15 or more dwelling units, or as determined by the appropriate Federal agency following a local needs assessment conducted by local government bodies or states under applicable regulations."

The following are the requirements of fully accessible dwelling units:

- Kitchen
 - Install a height-adjustable countertop in place of existing countertops in the work area.
 - Provide refrigerator with a bottom freezer.
 - Install a sink that has a depth no greater than 6.5 inches.
 - The sink should have a faucet with a goose neck and single lever controls.
 - Eliminate padding on the sink trap. Install padding on the trap.
 - Install electrical receptacles on the front of the counter.
 - Move all controls (light switches, range hood controls) to the front of the counter.
- Bathroom
 - Reconfigure the bathroom to provide a five-foot (minimum) turning radius for a wheelchair.
 - Provide a roll-in shower stall.
 - Install grab bars in the shower.
 - Provide a transfer bench.
 - Install an adjustable shower head.
 - Provide single lever controls for the shower.
 - Install a lavatory having:
 - A faucet with a gooseneck and lever handle control.
 - A padded the trap beneath the lavatory.
 - A sloped mirror above the lavatory.
 - Install bathroom accessories (toothbrush holder, glass holder, toilet tissue dispenser) in an accessible location.
 - Install grab bars in the vicinity of the lavatory.
- Electrical
 - Relocate the electrical load center so that the top of the panel is no more than 48 inches above the floor.
 - Verify that electrical receptacles, telephone jacks, and television jacks are at least 18 inches above the floor.
 - Verify that light switches are no more than 48 inches above the floor.
- Interiors
 - Main entry doors and frames shall have:
 - Fire rating equal to that required for the egress corridor.
 - Lever handles
 - Dead bolt mounted no higher than 48 inches above the floor.
 - A peephole should be provided at a height so that an individual in a wheelchair can see out.
 - Self-closer that requires no more than five pounds of force to open.
 - Doors would need to have a minimum width of 32 inches.
 - Install lever handles on all interior hinged doors.
 - Install open storage with accessible shelves.
 - Clothes rods cannot be more than 54 inches above the floor.

Appurtenances and Finishes

Ceilings

Ceilings in the Bohlmann Towers dwelling units are painted precast concrete with the exception of the bathrooms, where the ceilings are gypsum wallboard. Many of the bathroom ceilings exhibit water damage from leaks in the bathroom of the floor above. Many occupied units showed more water/unidentified fungal growth problems at wall/ceiling of current shower units due to moisture from above. Grouting/tile work or failing shower bodies in units above can cause this.

Walls

Unit walls are painted gypsum wallboard. Bath walls are a combination of tiles and gypsum wallboard. The water damage in bathrooms has caused many units to exhibit separation of the shower body from the tile and gypsum wallboard. Baseboard moulding and door frames are painted wood.

Floors

Apartment floors are vinyl tile throughout. Bathroom floors have ceramic tile throughout. Each unit has vinyl baseboard.

Interior Doors

The dwelling units have hollow core, white-painted wood doors. The handicap and elderly unit doors have lever handles. Many doors have been repaired by patching, a practice that is no longer allowed.

Appurtenances

The galley type kitchens have wood upper and lower cabinets and plastic laminate countertops. Some cabinets that looked to be recently installed are constructed of pressboard. Similar to the wood cabinets and laminate countertops, these will need a replacement in the near future. The cabinets and countertops appeared to be in satisfactory condition in most of the apartments visited during the site inspection.

Kitchens have one stainless steel, single basin sink with a double-handle, standard kitchen faucet. All bathrooms have vanities. The condition of the vanities varies from unit to unit.

Appliances

Apartments are equipped with 30-inch, four-burner gas ranges provided by the PHA. Accessible units are equipped with electric ranges. Each apartment has a recirculating range hood. The gas ranges were in good condition on average. There are no grease shields protecting the wall behind the range. All kitchens have a GE two-door, top freezer refrigerator (model no. GTH17DBC2RWW or comparable) provided by PHA. The 30-inch ranges were replaced in 2012, and the range hoods and refrigerators were replaced in 2007. They appear to be in good condition. The model numbers vary from unit to unit.

Unit Observations

Notable observations concerning the units in Bohlmann Towers are as follows:

- Generally, each bedroom in a dwelling unit has a closet. However, units in certain lines have a bedroom that does not have a closet.
- Door handles are knobs, not lever handles. Knobs are more difficult for the elderly occupants to operate.
- Tubs being installed directly onto the floors create problems during replacement as well as moisture problems for the unit below.
- Bathroom gypsum wallboard ceilings frequently have residual damage from leaks in the bathrooms above.
- There are no grease shields behind the gas ranges to protect the wall.
- Outlet boxes and switch boxes protrude from the wall surface.

CRITICAL NEEDS / IMMEDIATE THREATS

Remove Unidentified Fungal Growth Found in Unit Bathrooms

SUMMARY

Many of the bathroom ceilings and walls showed signs of moisture damage, including fungal growth of an unidentified type and source. It is recommended that the drywall that is exhibiting the fungal growth be replaced. This work does not require a design consultant.

It is recommended that extra care is provided when maintaining units due to the increase in moisture in these areas. The building should be vigilant in ensuring the proper functioning of the restroom ventilation. If these problems persist, an upgrade to the ventilation system may be necessary.



Figure 1: Examples of Bathroom Ceiling and Wall Water Damage

COST ESTIMATE

Table 7 presents the cost to remove and replace the affected drywall ceiling in each bathroom unit.

Table 7: Demolition, Installation, and Finish cost of new Drywall in Bathrooms

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Drywall replacement above shower units	3,360	SF	\$8.13	\$27,317

Exposed Piping in Common Areas and Egress Locations

SUMMARY

Exposed piping in stairwells and the ground floor elevator lobby are a safety hazard to tenants, visitors, and housing authority personnel. Wall mounted fire-protection piping in the stairwell corridors are at head level, and the overhead piping in the ground floor elevator lobby have a height of only 5 feet 6 inches at its lowest point

Obstacles at or below 6' – 6" and projecting more than 4" into the path of egress shall be outlined with markings not less than 1" in width comprised of a pattern of alternating equal bands, of luminous material and black, with the alternating bands note more than 2" thick and angled at 45 degrees. IBC 1025.2.5

Even if the building outlines the hazards, they still pose a threat to the residents. Measures should be taken to raise the piping connections in the hallway that are too low, and to raise the stairwell connections to a safe height.

This work will require a fire protection engineering design consultant. It is assumed that this work will be packaged with other engineering work.

Included in the cost estimate below is a lump sum cost for a fire watch. It is assumed that for the duration of time that the system is unavailable to allow the contractor to perform the work, that the building will require a fire watch for the safety of all residents and employees.



Figure 2: Exposed Piping Accessories in Stairwell and Elevator Lobby

COST ESTIMATE

Table 8 presents the cost estimate for relocating hallway water piping to 7'-0" above the finished floor.

Table 8: Piping Obstructions

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Relocation of piping connections	16	Each	\$2,927.50	\$52,695

Install Sprinklers in Individual Units and Boiler Room

SUMMARY

Bohlmann Towers does not have an automatic fire protection sprinkler system in individual units or the boiler room. The 2009 IFC requires an automatic sprinkler system for residential (R) buildings. As of 2015, the IFC (M101.1 and M102.1) requires an automatic sprinkler system to be retroactively installed in existing high-rise buildings and must comply with NFPA standards. NFPA 13 – 8.15.8 requires sprinklers to be installed in individual units.

The current International Fire Code (IFC) 1105.3.3 requires any space with more than 400, 000 BTU/hr to be served by sprinklers; therefore, sprinklers should be installed in the boiler room.

Note that the installation of an automatic sprinkler system would eliminate the need to upgrade egress corridor doors to maintain the corridors’ fire ratings, protect the boiler and generator rooms, and construct areas of refuge.

COST ESTIMATE

Table 9 presents the cost estimate to install sprinklers in the living units and boiler room.

Table 9: Install Sprinkler Systems in the Living Units and Boiler Room Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Sprinkler System	146,646	SF	\$21.94	\$1,460,640

Install A Lightning Protection System

SUMMARY

The National Fire Protection Association (NFPA), Section 780, “Standard for the Installation of Lightning Protection Systems “, publishes a protocol to assess the risk to a structure from lightning strikes, with the object of “... determining the risk of damage or injury due to lightning” (Annex L).

Annex L, Section L.1.1, lists several situations where “serious consideration” should be given to the installation of a lightning protection system regardless of the outcome of the assessment calculations. These include:

- Buildings housing large crowds,
- Continuity of critical service,
- High lightning flash sequence,
- Tall isolated structure,
- Building containing an explosive or flammable material,
- Building containing irreplaceable cultural heritage.

ASSESSMENT

Methodology

The Simplified Risk Assessment methodology (Section L.5) is based on two calculated quantities, the Annual Threat of Occurrence (N_d) and the Tolerable Lightning Frequency (N_c), as summarized below.

Annual Threat of Occurrence (N_d)

The Annual Threat of Occurrence, N_d , is the yearly lightning strike frequency to the structure. N_d is defined by the equation below:

$$N_d = N_g * A_e * C_1 * 10^{-6}$$

where

N_g is the lightning ground flash density (flashes/km²/year)

A_e is the equivalent collection area of the structure (m²)

$$A_e = (L * W) + [6 * H * (L + W)] + (9 * \pi * H^2)$$

L = building length (m)

W = building width (m)

H = building height (m)

C_1 is an environmental coefficient

Tolerable Lightning Frequency (N_c)

The Tolerable Lightning Frequency, N_c , is the “... measure of the risk to the damage of the structure ...”. N_c is defined by the following equation:

$$N_c = (1.5 * 10^{-3}) / C$$

where

$$C = C_2 * C_3 * C_4 * C_5$$

where

C_2 = Construction Coefficient

C_3 = Determination of Structure Contents

C₄ = Determination of Structure Occupancy

C₅ = Determination of Lightning Consequence

Values for C₂, C₃, C₄, and C₅ are tabulated in Standard 780, part L.5.2.

Risk Calculation

If the Annual Threat of Occurrence, N_d, exceeds the Tolerable Lightning Frequency, N_c, the NFPA recommends a lightning protection system for the structure.

Annual Threat of Occurrence Calculation Results

- 1) Lightning Ground Flash Density (N_g)

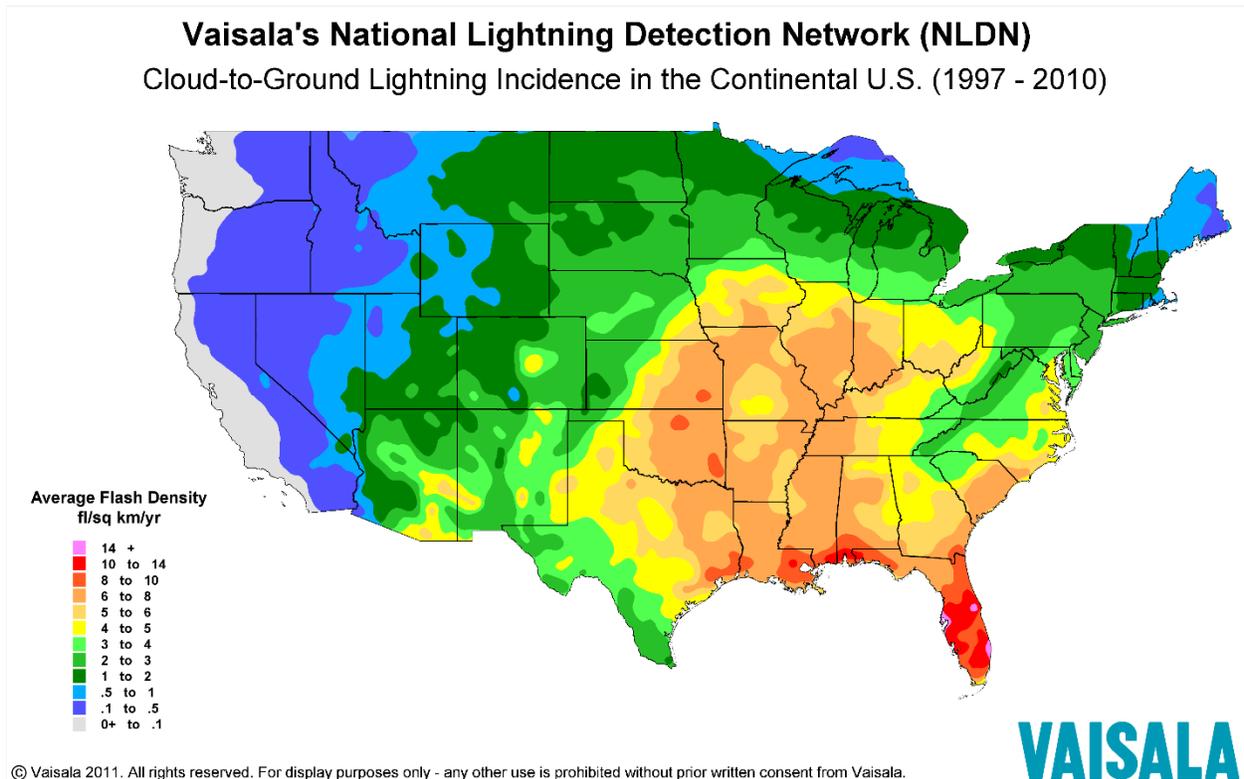


Figure 3: Vaisala's National Lightning Detection Network

- 2) Equivalent Collection Area (A_e)

L = 105.49 m

W = 14.37 m

H = 76.77 m

$$A_e = [(105.49) * (14.37)] + [6 * (76.77) * (105.49 + 14.37)] + (9 * \pi * 76.77^2)$$

A_e = 223,364.35

Table 10: Environmental Coefficient (C₁)

Relative Structure Location	C ₁
Structure surrounded by taller structures or trees within a distance of 3H	0.25
Structure surrounded by structures of equal or lesser height within a distance of 3H	0.5
Isolated structure, with no other structures located within a distance of 3H	1
Isolated structure on hilltop	2

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014
 (Note: Selection for this Analysis is highlighted)

- 3) Annual Threat of Occurrence (N_d)
 $N_d = (2.5) * (223,364.35) * (0.5) * (10^{-6})$
N_d = 0.27921

Tolerable Lightning Frequency Calculation Results

Table 11: Construction Coefficient (C₂)

Structure	Metal Roof	Nonmetallic Roof	Combustible Roof
Metal	0.5	1.0	2.0
Nonmetallic	1.0	1.0	2.5
Combustible	2.0	2.5	3.0

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014
 (Note: Selection for this Analysis is highlighted)

Table 12: Determination of Structure Contents (C₃)

Structure Contents	C ₃
Low Value and Noncombustible	0.5
Standard Value and noncombustible	1.0
High value, moderate combustibility	2.0
Exceptional value, flammable liquids, computer or electronics	3.0
Exceptional value, irreplaceable cultural items	4.0

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014
 (Note: Selection for this Analysis is highlighted)

Table 13: Determination of Structure Occupancy (C₄)

Structure Occupancy	C ₄
Unoccupied	0.5
Normally Occupied	1.0
Difficult to evacuate or risk of panic	3.0

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014
 (Note: Selection for this Analysis is highlighted)

Table 14: Determination of Lightning Consequence (C₅)

Lightning Consequence	C ₅
Continuity of facility services not required, no environmental impact	1.0
Continuity of facility serves required, no environmental impact	5.0
Consequences to the environment	10.0

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014

(Note: Selection for this Analysis is highlighted)

1) Tolerable Lightning Frequency (N_c)

$$C = (2.5) * (2) * (3) * (1) = 15$$

$$N_c = (1.5 * 10^{-3}) / 15$$

$$N_c = 0.0001$$

Conclusion: Since $N_d > N_c$ a lightning protection system is recommended.

SCOPE OF WORK

General

- Design a lightning protection system in accordance with LPI and NFPA 780.
 - Size conductors to handle current flows per LPI protocols.
 - Submit calculations to Owner for review.
- Prepare scale drawings and specifications to illustrate the design
 - Drawings shall indicate the following:
 - Location of aerials
 - Size and location of conductors
 - Details illustrating conductor and aerial mounting techniques
 - Location and sizing of ground loops and rods
 - Drawings Shall be sealed by a professional engineer with a current license in the Commonwealth of Pennsylvania

INSTALLATION

- Install lightning protection system per the drawings, the codes and standards of the City of Philadelphia and the Commonwealth of Pennsylvania, and UL/LPI code requirements.
- Contractor shall secure building permits as necessary.
- Upon completion, an independent third party shall commission the installation, verifying conductor resistance and grounds.
- Upon satisfactory completion and testing of the lightning protection system, the Contractor shall post a framed UP/LPI certification of the system at a prominent location near the door onto the roof of the building.
- Contractor shall take care so that the roof warranty is not voided by the lightning protection system installation.
- Installation shall include restoration of the site to its original condition after installation of the ground loop.

COST ESTIMATE

Table 15 presents the cost estimate to install a lightning protection system on the entire building.

Table 15: Install Lightning Protection System Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Lightning Protection System	Each	1	\$33,337	\$33,337

Convert the Existing Fuel-Fired Generator to a Natural Gas Generator

SUMMARY

Bohlmann Towers has a fuel-oil fired emergency generator to provide back-up power to critical systems. The generator is a Kohler “Fast Response” model rated at 50 kW, 3-phase. The fuel-oil day tank adjacent to the generator is not equipped with a containment for spill protection. The generator has exceeded its useful life and should be replaced with a gas-fired generator, which does not require spill protection.

Natural gas-fired generators are cleaner burning and less expensive to operate than fuel-fired generators. Natural gas-fired generators typically have a lower Total Cost of Ownership than fuel-fired generators. Recent market research data from Frost & Sullivan North America shows a shift toward natural gas-fired generators. The data shows an increase of 28 percent in 2013 and 38 percent in 2016. This growth is driven by factors including a greater awareness of natural gas as a reliable fuel; increased concerns over diesel maintenance and refueling issues; expansion of utility demand response and interruptible rate programs; and a desire to be more environmentally responsible. A benefit particular to the Bohlmann Towers site is the availability of natural gas near the point of use for the generator since the boilers have previously undergone a conversion to natural gas.



Figure 4: Existing Fuel-Fired Generator

COST ESTIMATE

Table 16 presents the cost estimate to convert the existing fuel-fired generator to a natural gas generator.

Table 16: Convert the Existing Fuel-Fired Generator to a Natural Gas Generator Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Natural Gas Generator (50kW)	50	kW	\$1,703	\$85,125
Gas Service Piping (3")	200	LF	\$95.85	\$9,070

Repair Metal Railings on Southern Side of Building

SUMMARY

The hardscape on the southern side of Bohlmann Towers is utilitarian when compared to the northern side. The standard painted metal tube railing requires minimal maintenance and is installed in certain areas for three distinct uses; stair hand and guard railing, fall protection, and to keep pedestrians out of certain grassy areas. Overtime, the base of the railing has oxidized, in some areas worse than in others. It is recommended that the Housing Authority remove and replace the stair hand and guard railing and fall protection railing in kind.

We recommend that a civil engineering consultant be engaged to design this work. It is assumed that this work will be packaged with other exterior site work.



Figure 5 Exterior Railing

COST ESTIMATE

Table 17 presents the cost estimate to repair metal railings on the southern side of the building.

Table 17: Repair Metal Railings on Southern Side of Building Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Repair or Replace Railings	125	LF	\$109.08	\$13,635

Backfill Under Hardscape at NE Entrance to the Building

SUMMARY

In the recent past, an oil tank was removed from under the hardscape on the northeast side of the building. The pathway in question is the primary approach to the building from the sidewalk on Main St. Building maintenance staff advised that the contractor whom was hired to remove the oil tank chose to remove the tank by excavating under the walkway from the adjacent grass area, rather than removing the concrete walkway. Because of this, the contractor was unable to properly backfill under the walkway. Over time, this has resulted in a scenario in which the walkway is severely undermined as soil under the walkway has eroded. The concrete pathway is exhibiting serious cracking because of this. It is recommended that Peekskill Housing authority demolish the walkway in the area that has been undermined, properly backfill, provide a new gravel substrate, and provide a new concrete pathway.

This work will require a civil engineering design consultant. It is assumed that this work will be packaged with other exterior site work.



Figure 6 Hardscape at NE Entrance to the Building

COST ESTIMATE

Table 18 presents the cost estimate to backfill under the hardscape at NE entrance to the building.

Table 18: Backfill Under the Hardscape at NE Entrance to the Building

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Remove and Replace Concrete and Benches	5	SY	\$1,439	\$7,195
Backfill Area Under Concrete	15	CY	\$695	\$10,425

Complete Wall Construction in Basement

SUMMARY

Current building codes require rooms of certain use to have a fire rated separation from adjacent rooms. Being that Bohlmann Towers is built with a concrete superstructure, the slab construction provides that required rating above and below the spaces as is needed. In the basement, there are multiple rooms that require specific fire rating separations from adjacent spaces. The walls in these rooms, constructed of concrete masonry units, are not constructed from slab to slab in a manner that would achieve the required fire rated separation. The walls were constructed short of the ceiling slab, leaving gaps between the top of the concrete masonry unit walls and the ceiling slab. It is recommended that a survey be completed to ascertain the state of each wall and the code required fire rating wall separation for each room. Once the survey is complete, it is recommended that the open space between the top of the wall and the ceiling slab be infilled such that a proper rating is achieved in the rooms where it is necessary.

This work will require an architectural consultant. The primary cost of this work will be the survey to determine the wall type, required rating, locations of certain issues, and design for each issue. It is assumed that this work will be packaged with other work required to be completed by an architect.

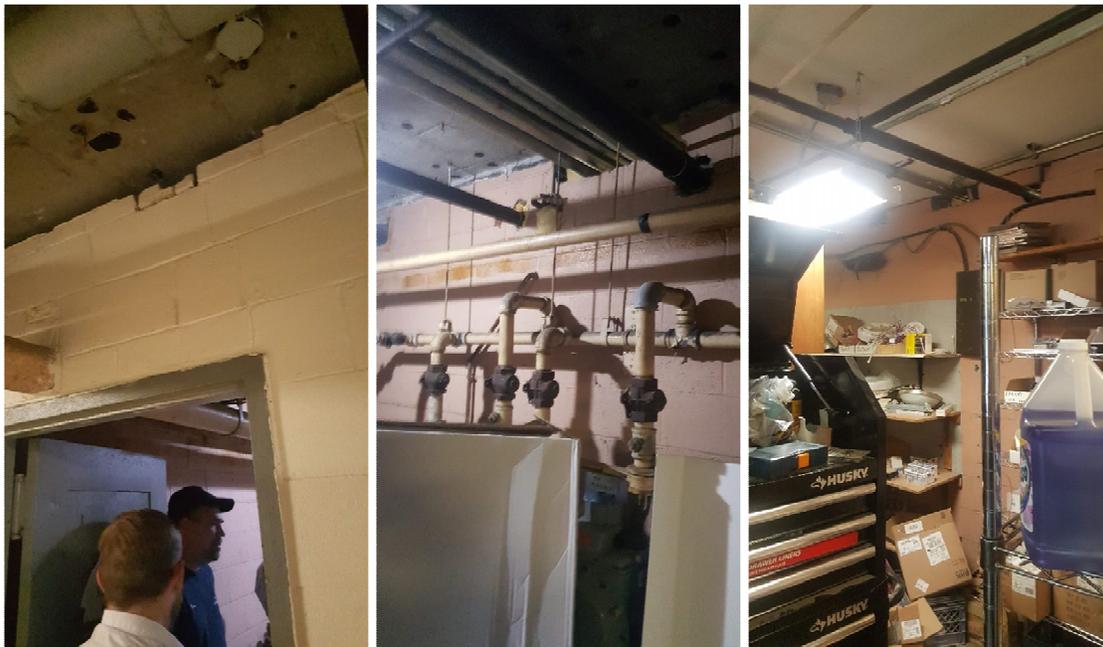


Figure 7 Complete Wall Construction in Basement

COST ESTIMATE

Table 19 presents the cost estimate to complete the wall construction in the basement.

Table 19: Complete Wall Construction in Basement

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Complete Wall Construction	1	Lump Sum	\$49,040	\$49,040

Firestop Piping and Conduit Runs in Basement

SUMMARY

Current building codes require rooms of certain type to have a fire rated separation from adjacent rooms. Being that Bohlmann Towers is built with a concrete superstructure, the slab construction provides that required rating above and below spaces as is needed. In addition to the issue above, whereby the walls are not constructed slab to slab, where walls are penetrated with piping, conduit, etc., the area around the pipe shall be fire stopped to ensure that the wall conforms to the required fire rated separation. It is recommended that a survey be completed to ascertain the code required fire rating wall separation for each room. Once the survey is complete, it is recommended that the penetrations caused by piping, conduit, etc. be appropriately fire stopped to ensure that wall is a complete fire rated separation.

This work will require an architectural consultant. The primary cost of this work will be the survey to determine the wall type, required rating, locations of certain issues, and design for each issue. It is assumed that this work will be packaged with other work required to be completed by an architect.

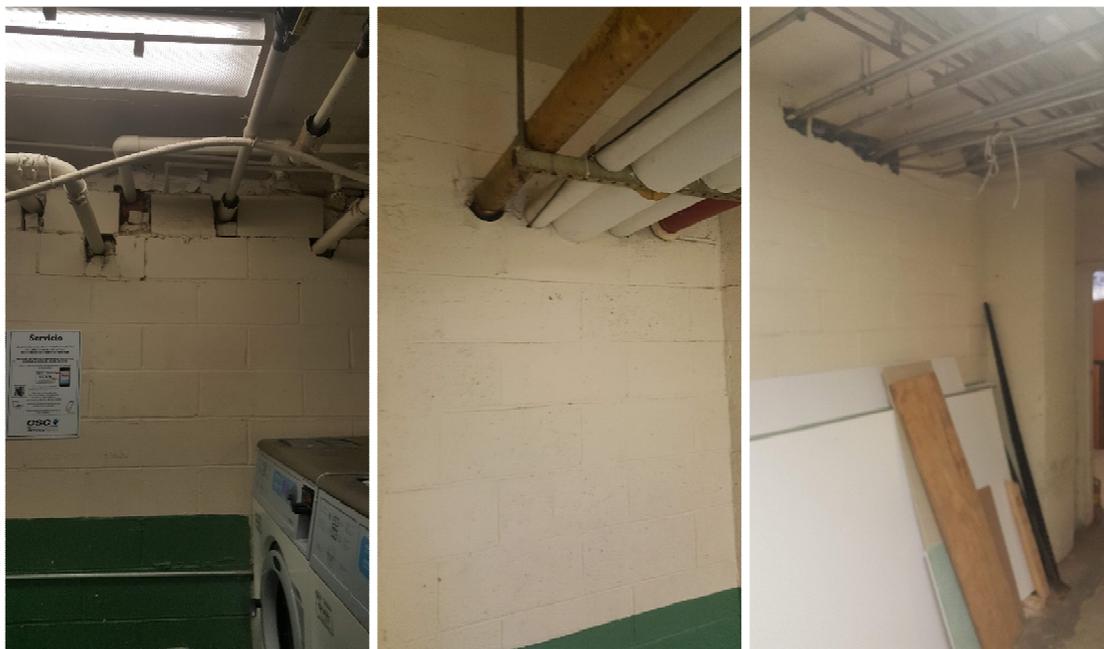


Figure 8 Firestop Piping and Conduit Runs in Basement

COST ESTIMATE

Table 20 presents the cost estimate to complete the firestop piping and conduit runs in the basement.

Table 20: Firestop Piping and Conduit Runs in Basement

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Firestop Penetrations	100	ea	\$72.25	\$7,225

Environmental Testing

SUMMARY

To satisfy code and regulatory requirements or HUD initiatives, environmental and health and safety tests are needed periodically. These tests will also be used to diagnose facility problems and/or assess facility condition.

The following diagnostic tests are required by law, code, or Standard.

- Asbestos Inspections
- Radon Gas Tests
- Lead-Based Paint Tests
- Potable Water Lead Tests
- Legionella in Domestic Hot Water Systems

ADDITIONAL SHORT-TERM PHYSICAL NEEDS

Reset Black Railing at Northwestern Courtyard

SUMMARY

The hardscape on the north side of Bohlmann Towers is bounded by metal railing that keeps people off of the grassy areas. This metal railing is kept in good condition by maintenance staff. It appears to be repaired and repainted as needed. On the northwestern side of the building, the railing is loose and easily moved by hand. Building maintenance staff advised that site water drains in this direction. Because of that, it is assumed that the soil has eroded in the area surrounding the point foundations for the railing. It is recommended that Peekskill Housing Authority remove and replace the point foundations and provide adequate drainage around the foundations such that the soil erosion does not occur again.

We recommend that a civil engineering consultant be engaged to design this work. It is assumed that this work will be packaged with other exterior site work.

COST ESTIMATE

Table 21 presents the cost estimate to reset the black railing at the northwestern courtyard.



Figure 9 Black Railing at Northwestern Courtyard

Table 21: Reset Black Railing at Northwestern Courtyard

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Reset Railing Posts	40	ea	\$455.50	\$18,220

Repair and Reconstruct Rear Entrance Canopy

SUMMARY

The canopy over the Southern entrance to the building is exhibiting advanced signs of deterioration due to water infiltration over a long period of time. The roof is not sagging, which indicates that the structure is likely intact. However, the framing, finishing, and roofing materials all need to be replaced. It is recommended that all material be removed back to the framing, and the roof be re-built with an appropriate slope such that water does not collect on the roof.

This work will require an architectural consultant. It is assumed that this work will be packaged with other work required to be completed by an architect.

COST ESTIMATE

Table 22 presents the cost estimate to repair and reconstruct the rear entrance canopy.



Figure 10 Rear Entrance Canopy

Table 22: Repair and Reconstruct Rear Entrance Canopy

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Demolish/Replace Canopy	200	sf	\$183.93	\$36,786

Upgrade Interior Signage

SUMMARY

In the publicly accessible areas of Bohlmann Towers, including common areas in the basement, and common hallways on each floor, there are signs indicating the use of rooms, fire egress stairs, and each apartment has apartment numbers located on the entrance doors. These signs are not equipped with raised letters and braille characters to assist in the wayfinding for the visually impaired. It is recommended that, at a minimum, signage with raised letters and braille characters be installed to assist in the wayfinding of the visually impaired when in public accessible common hallways.

This work will does not require a design consultant. An experienced sign manufacturer can design the signage to conform to accessibility requires.

COST ESTIMATE

Table 23 presents the cost estimate to upgrade the interior signage.

Table 23: Upgrade Interior Signage

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Accessible Door Signage	144	ea	\$50	\$8,750

Install Grease Shields at All Units

SUMMARY

Typically, the backsplash at the ovens in the units is the same material as the countertop. It is recommended that a full height stainless-steel metal grease shield be installed on the wall adjacent to and above all over the kitchen stove. This will extend the life of the wall, allowing for less invasive renovations to occur during turnover, while also safeguarding against the potential for a grease fire or major injury to occur if a catastrophe occurs while utilizing the kitchen stove. This work does not require a design consultant.



Figure 11 Oven and Backsplash

COST ESTIMATE

Table 24 presents the cost estimate to install grease shields at all units.

Table 24: Install Grease Shields at All Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Stainless Steel Grease Shield	144	Each	\$52.84	\$7,609

Replace Shower Bodies and Tubs in All Units

SUMMARY

Building maintenance staff noted that the shower bodies in the units are starting to fail. It was also observed during the assessment that the fiberglass shower surrounds are starting to fail and detach from the substrate. Without destructive probing, it is not clear why the shower bodies are starting to fail. Complicating matters is that in a 1981 renovation, the tubs were installed directly on the slab, which exacerbates issues that occur when removing failed shower bodies. Considering that the shower bodies are hidden in walls, the first time that the failure is noticed is when water damage is noticed in adjacent rooms or the unit below. In some cases, the water damage presented as a relatively minor leak and staining on the gypsum board walls, in other cases it is a fairly major flood. In both cases it causes a substantial inconvenience to the occupant of the unit that has the issue and to the occupants of adjacent units if the water damage impacts them. Further, once the leak has occurred, the effort and cost to repair is exacerbated as adjacent finishes; gypsum board, ceramic tile, or otherwise, need to be repaired. It is recommended that all shower bodies and tubs be replaced as soon as possible to avoid future water damage, tenant disruption, and undue costs incurred due to finish and equipment replacement.

It is recommended that a plumbing engineer be hired to perform the design services required for the shower body work. It is also recommended that an architect be hired to perform the design services for repairing, and replacing where necessary, tubs and finishes. It is assumed that this work will be packaged with other architecture and engineering work.

COST ESTIMATE

Table 25 presents the cost estimate to repair all of the shower bodies in all units. The cost estimates include the price of the fixtures.

Table 25: Replace Shower and Bathtubs in All Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Bathtub, Enameled Steel	170	Each	\$2,849.25	\$484,373
Shower Surround, Fiberglass	151	Each	\$1,452.92	\$219,391
Shower Body and Piping	170	Ea	\$785.37	\$133,513

Add Closets to Bedrooms in Certain Units

SUMMARY

Generally, each bedroom in a dwelling unit has a closet. However, it was observed during the assessment that units in the B line have a bedroom that does not have a closet. After further review of drawings provided by the Housing Authority, it appears that the E, O, and X lines also have bedrooms that do not have closets. Considering that this does not conform to the building code requirements for a bedroom, it is recommended that a closet be framed in each of these bedrooms.

It is recommended that an architect be hired to perform the design services for this work. It is assumed that this work will be packaged with other work required to be completed by an architect.

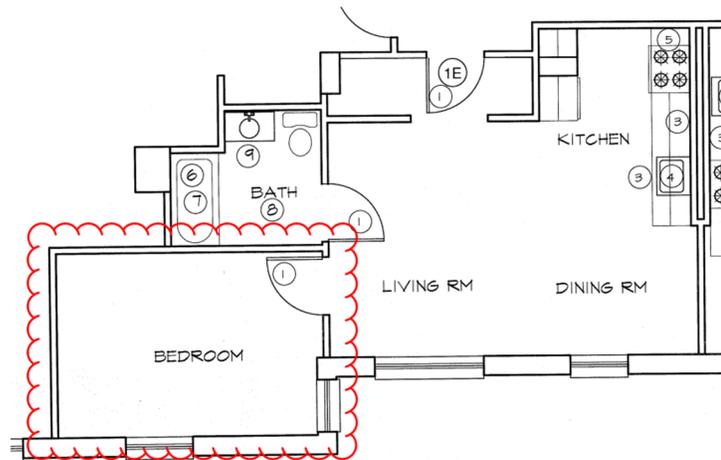


Figure 12 Unit E Floor Plan

COST ESTIMATE

Table 26 presents the cost estimate to add closets to the bedrooms in the Certain Units.

Table 26: Add Closets to Bedrooms in Certain Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Closet - Framing, Doors, Shelf and Hanging Rod	32	Each	\$1,038	\$33,216

Recess Outlet and Switch Boxes that are Surface Mounted

SUMMARY

As the years have passed since the building was constructed, and the occupants need for power has increased, capacity has been provided in the apartments in the form of surface mounted conduits and electrical boxes and switches. This creates scenarios where some wiring is in the wall and some is on the surface. It is recommended that all surface mounted wiring and boxes be recessed into the walls.

It is not recommended that an engineering design consultant be hired for this work. A licensed electrician and a carpenter should be able to perform the work.



Figure 13 Surface Mounted Conduit, Junction Boxes, Switches, and Outlets

COST ESTIMATE

Table 27 presents the cost estimate to recess Outlet and Switch Boxes that are Surface Mounted.

Table 27: Recess Outlet and Switch Boxes that are Surface Mounted

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Recess Conduit and Outlets, typical 4 per apartment	576	ea	\$360	\$207,360

ADDITIONAL LONG-TERM PHYSICAL NEEDS

Pressure Wash Building Exterior

SUMMARY

The façade of the building is largely brick of multiple colors and is in generally good condition. There is significant staining due to the condensate dripping from the window A/C units. The condensation from the A/C units drips either directly onto the wall below or drips onto the window sill of the unit below. This consistent dripping of condensation over the years has resulted in severe discoloration and, in some extents, organic material growth, on window sills or the brick face of the building. It is recommended that the building is pressure washed to remove this, and other latent dirt, that exists on the façade.

This work will does not require a design consultant. An experienced façade contractor shall be able to perform the work.



Figure 14 Typical Facade Condition

COST ESTIMATE

Table 28 presents the cost estimate to pressure wash the building exterior.

Table 28: Pressure Wash Building Exterior

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Pressure Wash Facade	900,000	sf	\$0.10	\$90,000

Repoint Building Exterior

SUMMARY

The façade of the building is largely brick of multiple colors and is in generally good condition. As with any building of this age, there appeared to be a relatively small amount of areas that would benefit from repointing. It is recommended that a qualified façade investigator be hired to review the entire condition of the façade and provide a repair report and details indicating specific areas where repointing is required.

COST ESTIMATE

Table 29 presents the cost estimate to repoint the building exterior.

Table 29: Repoint Building Exterior

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Repoint 5% of Building Exterior	45,000	sf	\$7.23	\$325,350

Install Drip Pans at Window A/C Units

SUMMARY

Building maintenance staff advised that the occupants purchase their own window a/c units and the building maintenance staff assists in installation. The A/C units appeared to be properly installed. However, even though properly installed, the condensation dripping and building up has caused staining and organic matter growth on the brick below the units. It is recommended that a drip pan be installed under each unit to assist in shedding the condensation away from the façade. Thus, extending the life of the façade. It is recommended that the installation occur from within the apartments. This work will does not require a design consultant.



Figure 15 Staining of Facade

COST ESTIMATE

Table 30 presents the cost estimate to install drip pans at window A/C units.

Table 30: Install Drip Pans at Window A/C Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Drip Pans	125	ea	\$115	\$14,375

Replace Dropped Acoustical Tile Ceiling in Common Areas, Management Offices, Etc.

SUMMARY

Suspended acoustic, two by four lay-in tiles are the predominant ceiling system in Bohlmann Towers common areas, management offices, community rooms, corridors, and similar spaces in the basement. There are documents indicating the acoustic ceiling tiles were replaced in 2010. However, they appear to be in worse shape than would be expected considering the recent installation. It is apparent that tiles have been replaced and that others are slated for replacement due to leaks or other similar damage. It is recommended that the ceilings be replaced throughout with a more resilient product to ensure a uniform appearance and a clean environment for all occupants.

This work will require an architectural consultant. It is assumed that this work will be packaged with other work required to be completed by an architect.



Figure 16 Typical Condition of ACT

COST ESTIMATE

Table 31 presents the cost estimate to replace the dropped acoustical tile ceiling in the common areas, management offices, and similar areas.

Table 31: Replace Dropped Acoustical Tile Ceiling in Common Areas, Management Offices, Etc.

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Suspended ACT Assembly	5,250	SF	\$9.06	\$47,565

Install Corner Guards in Common Areas

SUMMARY

As is typical in high traffic common areas, where two walls abut, there is significant damage. It is apparent that this has occurred over time and, to the extent possible, damage was repaired. To mitigate future damage, it is recommended that the corners be repaired, and stainless-steel corner guards be installed. This work will does not require a design consultant.

COST ESTIMATE

Table 32 presents the cost estimate to install corner guards in common areas.

Table 32: Install Corner Guards in Common Areas

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Paintable Corner Guards	162	ea	\$22.50	\$3,645

Repair Concrete Masonry Unit Walls in Basement Service Areas

SUMMARY

As is typical in service and maintenance areas, the concrete masonry unit walls have been severely damaged in certain areas over the years. To extend the useable life of the walls it is recommended that walls be parged and repaired to the greatest extent possible. In areas of consistent damage or high traffic use, the walls shall be covered in diamond plate metal panels. This work will does not require a design consultant.



COST ESTIMATE

Table 33 presents the cost estimate to repair concrete masonry unit walls in the basement service areas.

Table 33: Repair Concrete Masonry Unit Walls in Basement Service Areas

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Replace CMU	200	SF	\$62.25	\$12,450
Parge/Repair CMU	200	SF	\$15.00	\$3,000

Remove and Repair Flooring in Basement Service Areas

SUMMARY

The flooring in the majority of the service area is concrete. In certain adjacent areas, the floor has vinyl composition tile. The VCT is in terrible shape and the concrete floor in the service area is showing sever wear and tear over years of use. It is recommended that the VCT be removed, the flooring throughout shall be slightly grounded down to remove protrusions, stains, or other defects, and a new multi-coat epoxy sealant be installed to protect the concrete slab from future spills and damage. This work will does not require a design consultant. An experienced epoxy flooring installer shall be able to perform the work.



Figure 17 Damaged Flooring

COST ESTIMATE

Table 34 presents the cost estimate to remove and repair flooring in the basement service areas.

Table 34: Remove and Repair Flooring in Basement Service Areas

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Remove Flooring and Replace with Epoxy System	400	SF	\$9.75	\$42,224.50

Replace Cabinets, Countertops, and Appliances in All Units

SUMMARY

Unit kitchens are in fairly good condition and show signs of normal wear and tear. The cabinets, countertops, and appliances are in fair condition and should be considered for upgrading and replacement. Current building maintenance staff has done an admirable job over the recent years in repairing cabinets as units have turned over. However, the wear and tear of tenants and shoddy repair that occurred prior to the current building maintenance staff is apparent. It is recommended that the kitchen cabinets and countertops in all the units be replaced with quality materials that will stand up to normal wear and tear over the years. Additionally, it is recommended that appliances be replaced with new energy efficient items that will provide a reasonable ROI for the housing authority.

This work will require an architectural consultant. It is assumed that this work will be packaged with other work required to be completed by an architect.



COST ESTIMATE

Table 35 presents the cost estimate to replace cabinets, countertops, and appliances in All Units.

Table 35: Replace Fixtures and Finishes in Bathrooms in All Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Wall Cabinets	2,077	LF	\$432.60	\$898,510
Base Cabinets	1,600	LF	\$478.71	\$765,936
Countertops	1,404	LF	\$ 87.07	\$122,246
Range / Stove	144	Each	\$658.55	\$ 94,831
Range Hood	144	Each	\$218.46	\$ 31,458
Refrigerator	144	Each	\$875.10	\$126,014

Replace Fixtures and Finishes in Bathrooms in All Units

SUMMARY

The bathrooms are in moderate condition and should be considered for modernization. The toilets throughout Bohlmann Towers were installed in 2012 and are primarily 1.6 gpf type toilets. However, to the extent feasible, replacing with dual flush, super low flow toilets should be considered. It is recommended that the vanities, sinks, and ceramic tile floor and walls be replaced in the relatively near future. The tile flooring was replaced in 2011 and the sinks were replaced in 2012. However, they have seen heavy use by tenants and it is recommended they be considered for replacement again in the relatively near future.



Figure 18 Deteriorating Finishes and Fixtures

COST ESTIMATE

Table 36 presents the cost estimate to upgrade fixtures and finishes in bathrooms

Table 36: Replace Fixtures and Finishes in Bathrooms in All Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Toilet	170	Each	\$1,238.96	\$210,623
Sink with Fixtures	170	Each	\$1,006.75	\$171,148
Bathroom Vanity	170	Each	\$ 215.27	\$ 36,596
Ceramic Tile Floor	6,317	SF	\$ 27.75	\$175,297
Baseboard (Tile)	2,516	LF	\$ 29.34	\$ 73,820

Replace Door Knobs with Lever Handles

SUMMARY

The doors throughout the units are all operated with a standard knob. Knob handles provide a benefit in their affordability and availability but are generally harder to operate by the elderly and those with certain disabilities. It is recommended that the housing authority consider replacing all door knobs with levers to mitigate any of these issues.

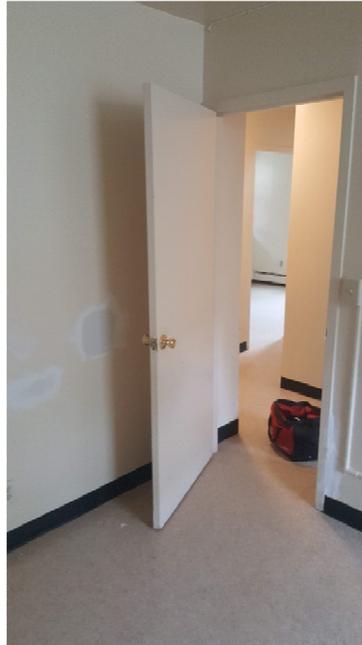


Figure 19 Door with Knob

COST ESTIMATE

Table 37 presents the cost replace door knobs with lever handles.

Table 37: Replace Door Knobs with Lever Handles

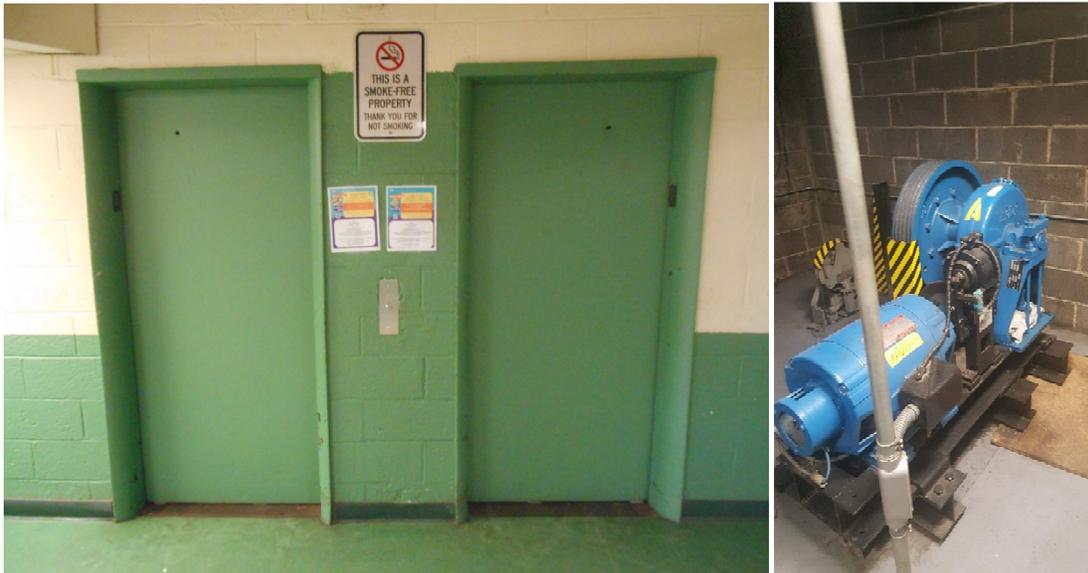
Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Interior Door Lever Handles	820	Each	\$34.18	\$24,575
Front Door Lever Handles	130	Each	\$75.12	\$ 7,666

PHYSICAL NEEDS ADDENDUM

Elevator Cab and Shaftway Door Replacement

SUMMARY

Based on information provided to the Perez and 2RW team, the elevators at Bohlmann have approximately 20 years remaining on their useful life, as determined by HUD’s mark-to market GPNA guidelines. In speaking with building maintenance staff onsite, it was not determined that there were any ongoing issues with the elevators. PNA criteria determines that capital needs greater than 15 years are typically not included. In this scenario, we have determined that it is advisable to include the cost of the elevators in the report, should the Housing Authority decide to replace the elevators within the next 15 years. Please note, this value is not included in the summary.



COST ESTIMATE

Table 38 presents the cost estimate to pressure wash the building exterior.

Table 38: Pressure Wash Building Exterior

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Replace Elevator Cabs and Shaftway Doors	2	ea	\$251,644	\$503,288

TOTAL PHYSICAL NEEDS SUMMARY

Basis for Cost Estimates

The cost estimates presented in the PNA report are largely based upon the values published by the RS Means Company in its suite of 2018 manuals. In areas where standard unit prices are not sufficient, such as recessing electrical conduit in apartments, estimates were built considering the material cost, labor rates, and estimated hours to complete the work. This type of estimating provides a more accurate cost for discrete areas of work where labor is the primary driver of the overall cost. The cost estimates are derived from applicable line items, modified by applying appropriate multipliers as documented in the following table.

Please note the following about the multiplier values:

- A contingency of 20% is utilized. This contingency amount is to intended cover the costs of incidental equipment (such as small valves, electrical connections to equipment, etc.) and minor hidden conditions. It is not intended to cover new components or systems not presently part of the building's major environmental remediation (e.g., asbestos removal), or accommodation/correction of a major hidden condition.
- Unless otherwise noted, the cost multipliers include design costs for architectural and engineering services.
- The cost estimating multipliers do not include identification, employee and occupant protection, abatement, encapsulation or transport of asbestos, lead paint, lead piping, or other hazardous materials that may be affected during project and implementation.
- These multipliers do not include the cost of construction management, commissioning or other professional services.

Cost Estimating Multipliers				
Source: 2018 Means Cost Estimating Manuals (Unless Noted)				
Description	Line No.	Architectural	Electrical	Mechanical
Professional Fees				
- Architectural	01-11-31.10-0090	16%	--	--
- Other Disciplines	01-11-31.30-0300/1100	--	10.1%	10.1%
Contingency				
- Conceptual Design	01-21-16.50-0020	20%	20%	20%
Construction Factors				
- Cut/Patch (Max)	01-21-53.50-0550	5%M / 9%L	5%M / 9%L	5%M / 9%L
- Dust Protection (Max)	01-21-53.50-0850	4%M / 11%L	4%M / 11%L	4%M / 11%L
- Equipment Curtailment (Avg. Min & Max)	01-21-53.50-1100/1150	2%M / 5.5%L	2%M / 5.5%L	2%M / 5.5%L
- Materials Handling/Storage	01-21-53.50-1450	6%	6%	6%
- Protect Existing Work (Avg. Min & Max)	01-21-53.50-1700/1750	3.5%M / 4.5%L	3.5%M / 4.5%L	3.5%M / 4.5%L
Job Conditions				
- Work Space Unavailable	01-21-55.50-1400	5% M,L	5% M,L	5% M,L
- Sales Tax (New York)	--	7.375% M,L	7.375% M,L	7.375% M,L
Insurance				
- Builders Risk (Avg. Min & Max)	01-31-13.30-0020/0050	0.44% M,L	0.44% M,L	0.44% M,L
- Public Liability	01-31-13.30-0600	2.02% M,L	2.02% M,L	2.02% M,L
- Worker's Compensation (Avg.)	01-31-13.30-1000	--	5.22%L	--
	01-31-13.30-1550	--	--	8.27%L
	01-31-13.30-1450	--	--	6.94%L (Plumbing)
	01-31-13.30-2100	11.53%L	--	--
Sub-contractor Overhead & Profit	01-31-13.80-0350	25%	25%	25%
Performance Bond (Max)	01-13-13.90-0100	2.5%	2.5%	2.5%
Permits (Avg. Min & Max)	01-41-26.50-0020/0100	1.25%	1.25%	1.25%
Geographic Multipliers				
- Site	.913M / 1.112L			
- All Other Disciplines (Avg.)		1.034M / 1.323L	0.975M / 1.7L	1.041M / 1.417L

*Avg: Average; L: Labor; M: Materials; Max: Maximum; Min: Minimum

Note: The cost estimating multipliers do not include identification, employee and occupant protection, abatement, encapsulation or transport of existing environmental, hazards such as asbestos-containing materials, lead-based paint, underground oil storage tanks, etc.

Component Inventory

Line ID	Component	Line Item	Install Year (in yrs)	Estimated Useful Life (in yrs)	Remaining Useful Life (in yrs)	Method	Total Quantity	Cost Per Quantity	One time replacement Cost (\$)
Site									
1007	Fencing and Gates	Chain Link - 4' High	2008	10	0	LF	515	\$ 23.32	\$ 12,009.80
1008	Fencing and Gates	Chain Link - 6' High	2008	10	0	LF	44	\$ 35.30	\$ 1,553.20
1014	Fencing and Gates	Wrought Iron - 4' High	2012	20	14	LF	1225	\$ 93.87	\$ 114,990.75
1210	Mailboxes/Project Signs	Site Signage	2010	20	12	Each	2	\$ 4,113.37	\$ 8,226.74
1211	Mailboxes/Project Signs	Site Signage - Letters	1958	20	-40	Each	20	\$ 119.13	\$ 2,382.60
1320	Parking Lots/Driveways/Roads	Parking Stripes And Curb Painting (Traffic Paint)	2007	10	-1	LF	2500	\$ 0.97	\$ 2,425.00
1331	Parking Lots/Driveways/Roads	Parking, Asphalt (Sealing)	2012	25	19	SF	28100	\$ 0.39	\$ 10,959.00
1370	Parking Lots/Driveways/Roads	Curbing - Concrete	1958	50	-10	LF	1750	\$ 26.67	\$ 46,672.50
1372	Parking Lots/Driveways/Roads	Traffic Signs	2010	20	12	Each	3	\$ 25.41	\$ 76.23
1449	Play Areas and Equipment	Site Furniture - Table and Chair Set	2008	20	10	Each	6	\$ 5,140.29	\$ 30,841.74
1450	Play Areas and Equipment	Site Furniture - Benches	2008	20	10	Each	36	\$ 3,868.94	\$ 139,281.84
1452	Play Areas and Equipment	Site Furniture - Picnic Table	2008	20	10	Each	2	\$ 8,754.53	\$ 17,509.06
1453	Play Areas and Equipment	Site Furniture - Outdoor Grill	1958	40	-20	Each	2	\$ 127.37	\$ 254.74
1456	Play Areas and Equipment	Trash Cans	2008	15	5	Each	12	\$ 1,355.32	\$ 16,263.84
1458	Play Areas and Equipment	Ash Tray	2008	15	5	Each	1	\$ 219.09	\$ 219.09
1610	Retaining Walls	Retaining Wall, Concrete	1958	50	-10	SF	340	\$ 121.62	\$ 41,350.80
1710	Walkways/Steps	Pedestrian Paving - Concrete	2010	25	17	SF	20200	\$ 9.46	\$ 191,092.00
1750	Walkways/Steps	Sidewalk Handrails	1958	75	15	LF	315	\$ 146.64	\$ 46,191.60
1810	Lighting	Pole Mounted Lighting	2008	20	10	Each	25	\$ 1,958.02	\$ 48,950.50
1910	Sanitary System	Site Sanitary Lines	1958	50	-10	LF	170	\$ 43.38	\$ 7,374.60
1920	Domestic Water	Site Water Lines	1958	40	-20	LF	170	\$ 132.90	\$ 22,593.00
1930	Storm Drainage	Site Drain Lines	1958	50	-10	LF	170	\$ 51.32	\$ 8,724.40
1940	Plumbing	Site Gas Lines	1958	75	15	LF	170	\$ 342.68	\$ 58,255.60
Site Subtotals									\$ 828,198.63
Building Exterior									
2223	Roofs	Built-up/Membrane	2011	20	13	SF	16727	\$ 4.77	\$ 79,787.79
2260	Roofs	Roof Drainage Interior (Roof Drains and Pipes)	2011	40	33	LF	675	\$ 1,409.37	\$ 951,324.75
2291	Floors	Floor Insulation	1958	50	-10	SF	16604	\$ 4.47	\$ 74,219.88
2292	Walls	Wall Insulation	1958	50	-10	SF	54210	\$ 2.65	\$ 143,656.50
2312	Walls	Brick or Concrete Block	1958	60	0	SF	53490	\$ 5.51	\$ 294,729.90
2343	Walls	Stucco	1958	75	15	SF	720	\$ 15.47	\$ 11,138.40
2370	Walls	Caulking & Sealant	2000	20	2	LF	13764	\$ 4.45	\$ 61,249.80
2421	Doors/Exterior	Solid Core (Wood or Metal)	2011	40	33	Each	9	\$ 3,711.31	\$ 33,401.79
2430	Windows	Windows	2011	50	43	SF	12735	\$ 105.23	\$ 1,340,104.05
2431	Windows	Storm/Screen Windows	2011	40	33	SF	12735	\$ 6.84	\$ 87,107.40
Building Exterior Subtotals									\$ 3,076,720.26

Line ID	Component	Line Item	Install Year (in yrs)	Estimated Useful Life (in yrs)	Remaining Useful Life (in yrs)	Method	Total Quantity	Cost Per Quantity	One time replacement Cost (\$)
Building Systems									
2510	Fire Protection	Smoke/Fire Detection Infrastructure	2011	15	8	SF	146646	\$ 3.26	\$ 478,065.96
2521	Communication Systems	Intercom System	2011	15	8	SF	146646	\$ 1.02	\$ 149,578.92
2610	Electrical Systems	Main Electrical Entrance/Switchgear	2016	20	18	Each	1	\$ 7,130.39	\$ 7,130.39
2620	Emergency Power	Emergency Generator (50 kW)	1958	25	-35	Each	1	\$ 92,828.98	\$ 92,828.98
2630	Lighting	Building Mounted Exterior Lighting	2012	6	0	Each	60	\$ 658.51	\$ 39,510.60
2631	Security	Security System	1958	15	-45	SF	31671	\$ 1.02	\$ 32,304.42
2640	Fire Protection	Fire Sprinkler System	1958	50	-10	SF	31671	\$ 18.34	\$ 580,909.48
2710	Elevators	Cable Elevators	2013	25	20	Each	2	\$ 482,236.55	\$ 964,473.10
2730	Elevators	Elevator Shaftway Doors	2011	20	13	Each	20	\$ 21,050.80	\$ 421,016.00
2811	Central HVAC	Central Vent & Exhaust (4-10 Stories)	1958	15	-45	Each	13	\$ 2,903.30	\$ 37,742.90
2831	Central HVAC	Heating Hot Water Circulation Pump	2011	15	8	Each	4	\$ 15,122.53	\$ 60,490.12
2839	Central HVAC	Boiler	2011	30	23	Each	2	\$ 260,461.81	\$ 520,923.62
2844	Central HVAC	Boiler Room Piping	1958	75	15	LF	72	\$ 86.64	\$ 6,238.08
2845	Central HVAC	Heat Exchanger	2011	35	28	Each	2	\$ 10,357.88	\$ 20,715.76
2846	Central HVAC	Boiler Room Valves	2011	40	33	Each	48	\$ 331.80	\$ 15,926.40
2847	Central HVAC	Boiler Temperature Controls	2011	50	43	Each	4	\$ 1,367.95	\$ 5,471.80
2848	Central HVAC	Hydronic Piping	1958	50	-10	LF	3330	\$ 122.10	\$ 406,593.00
2867	Central HVAC	Rooftop Exhaust Fans	2000	20	2	Each	13	\$ 2,239.70	\$ 29,116.10
2917	Domestic Water	Hot Water Storage Tank	2011	20	13	Each	2	\$ 19,324.02	\$ 38,648.04
2918	Domestic Water	DHW Circulating Pump	2011	20	13	Each	2	\$ 7,837.21	\$ 15,674.42
2920	Plumbing	Gas Distribution	1958	75	15	LF	220	\$ 42.57	\$ 9,365.40
2940	Sanitary System	Sanitary Distribution - Cast Iron	1973	40	-5	LF	3521	\$ 45.46	\$ 160,064.66
Building Systems Subtotals									\$ 4,092,788.15

Line ID	Component	Line Item	Install Year (in yrs)	Estimated Useful Life (in yrs)	Remaining Useful Life (in yrs)	Method	Total Quantity	Cost Per Quantity	One time replacement Cost (\$)
Common Areas									
3120	Local HVAC	Fan Coil Unit	2011	15	8	Each	3	\$ 3,840.91	\$ 11,522.73
3141	Local HVAC	Air Handling Unit	1998	15	-5	Each	1	\$ 3,141.48	\$ 3,141.48
3147	Local HVAC	Grilles, HVAC Supply and Return	1958	15	-45	Each	11	\$ 75.86	\$ 834.46
3149	Local HVAC	Air Distribution Ductwork	1958	15	-45	LF	182	\$ 62.13	\$ 11,307.66
3151	Local HVAC	Thermostat	1998	15	-5	Each	1	\$ 377.22	\$ 377.22
3152	Local HVAC	5 ton Split System Air Conditioner	1998	20	0	Each	1	\$ 15,054.32	\$ 15,054.32
3153	Local HVAC	Baseboard Radiator	1958	20	-40	LF	218	\$ 166.74	\$ 36,349.32
3154	Local HVAC	Window A/C	2008	10	0	Each	5	\$ 1,308.19	\$ 6,540.95
3160	Fire Protection	Smoke/Fire Detectors	2008	15	5	SF	31671	\$ 3.05	\$ 96,596.55
3172	Emergency/Fire Exits	Exit Signs/Lights	1993	20	-5	Each	61	\$ 861.61	\$ 52,558.21
3174	Lighting	Lighting Fixtures - 2'x2'	2011	20	13	Each	87	\$ 989.30	\$ 86,069.10
3175	Lighting	Lighting Fixtures - Surface Mounted Incandescent	2011	20	13	Each	34	\$ 454.04	\$ 15,437.36
3177	Lighting	Lighting Fixtures - Surface Mounted Fluorescent 1'x4'	2011	20	13	Each	138	\$ 398.68	\$ 55,017.84
3178	Lighting	Lighting Fixtures - Surface Mounted Fluorescent 2'x4'	2011	20	13	Each	71	\$ 453.21	\$ 32,177.91
3180	Domestic Water	Hot and Cold Water Distribution - Galvanized	1958	50	-10	LF	3200	\$ 34.54	\$ 110,528.00
3182	Domestic Water	Drinking Fountain	2011	10	3	Each	4	\$ 2,735.92	\$ 10,943.68
3193	Electrical	Electrical Distribution System	1969	50	1	SF	31671	\$ 2.03	\$ 64,292.13
3220	Floors/Stairs	Unfinished Stairs	2011	50	43	Riser	189	\$ 1,562.82	\$ 295,372.98
3230	Accessibility	Interior Railings	2010	50	42	LF	240	\$ 109.35	\$ 26,244.00
3310	Doors/Interior	Door, Interior	2018	30	30	Each	91	\$ 677.67	\$ 61,667.97
3311	Windows/Interior	Interior ReLites/Windows	1958	30	-30	SF	33	\$ 105.23	\$ 3,472.59
3312	Windows	Blinds and Drapes	2016	20	18	SF	425	\$ 16.94	\$ 7,199.50
3330	Ceiling	Suspended Acoustic Panel	1998	20	0	SF	15570	\$ 8.20	\$ 127,674.00
3350	Ceiling	Gypsum Board or Plaster	1958	75	15	SF	15281	\$ 6.74	\$ 102,993.94
3410	Floors	Concrete	1958	75	15	SF	16230	\$ 11.41	\$ 185,184.30
3420	Floors	Ceramic/Quarry Tile/Terrazzo	2011	75	68	SF	269	\$ 27.75	\$ 7,464.75
3430	Floors	Resilient	2011	15	8	SF	15172	\$ 5.47	\$ 82,990.84
3460	Floors	Baseboard (Wood or Resilient)	2011	15	8	LF	5289	\$ 6.83	\$ 36,123.87
3461	Floors	Baseboard (Tile)	2011	15	8	LF	138	\$ 29.34	\$ 4,048.92
3530	Walls	Wall Surface - Gypsum Board	1958	75	15	SF	6736	\$ 5.73	\$ 38,597.28
3540	Walls	Wall Surface - Masonry	1958	75	15	SF	41240	\$ 23.59	\$ 972,851.60
3580	Walls	Wall Surface - Ceramic Tile/Stone	1958	50	-10	SF	992	\$ 17.89	\$ 17,746.88
3610	Kitchen	Wall Cabinets	2011	15	8	LF	23	\$ 432.60	\$ 9,949.80
3611	Kitchen	Base Cabinets	2011	15	8	LF	17	\$ 478.71	\$ 8,138.07
3612	Kitchen	Countertops	2012	20	14	LF	11	\$ 87.07	\$ 957.77
3620	Kitchen	Sink with Fixtures	2007	35	24	Each	3	\$ 349.03	\$ 1,047.09
3630	Kitchen	Range/Stove	2007	15	4	Each	3	\$ 658.55	\$ 1,975.65
3640	Kitchen	Refrigerator	2007	15	4	Each	2	\$ 875.10	\$ 1,750.20
3710	Restrooms/Pool Structures	Public Toilet and Bath Accessories	2007	7	-4	Each	4	\$ 2,340.67	\$ 9,362.68
3720	Restrooms/Pool Structures	Public Restroom and Bath Plumbing Fixtures	2007	35	24	Each	5	\$ 3,809.93	\$ 19,049.65
3730	Restrooms/Pool Structures	Public Restroom and Bath Partitions	2007	35	24	Each	4	\$ 1,932.89	\$ 7,731.56
3810	Laundry Room	Laundry Sink w/Fixtures	2007	20	9	Each	1	\$ 1,863.58	\$ 1,863.58
3910	Trash Collection Areas	Chutes (Garbage)	1958	50	-10	Each	8	\$ 6,687.64	\$ 53,501.12
3920	Trash Collection Areas	Trash Compactors	2003	15	0	Each	1	\$ 33,413.21	\$ 33,413.21
Common Areas Subtotals									\$ 2,712,458.51

Line ID	Component	Line Item	Install Year (in yrs)	Estimated Useful Life (in yrs)	Remaining Useful Life (in yrs)	Method	Total Quantity	Cost Per Quantity	One time replacement Cost (\$)
Unit									
4134	Local HVAC	Thermostatic Control Valve	1997	20	-1	Each	538	\$ 495.72	\$ 266,697.36
4139	Local HVAC	Baseboard Convectors	1997	20	-1	LF	6873	\$ 166.74	\$ 1,146,004.02
4155	Local HVAC	Hydronic Piping	1958	50	-10	LF	8984	\$ 35.79	\$ 321,537.36
4160	Smoke Detectors	Smoke/Fire Detectors	2010	15	7	Each	533	\$ 334.97	\$ 178,539.01
4172	Lighting	Interior Lighting - Surface Mounted Incandescent	2011	20	13	Each	170	\$ 433.61	\$ 73,713.70
4173	Lighting	Interior Lighting - Surface Mounted Incandescent 1x4	2011	20	13	Each	461	\$ 398.68	\$ 183,791.48
4181	Domestic Water	Hot and Cold Water Distribution - Copper / PVC	1958	50	-10	LF	13212	\$ 30.40	\$ 401,644.80
4190	Electrical	Branch Panels	1958	50	-10	Each	144	\$ 2,915.12	\$ 419,777.28
4194	Electrical	Electrical Distribution System	2011	50	43	SF	137904	\$ 2.03	\$ 279,945.12
4308	Doors/Interior	Solid Core (Wood or Metal)	2018	40	40	Each	144	\$ 1,034.83	\$ 149,015.52
4309	Doors/Interior	Panel Door, Interior	2018	30	30	Each	576	\$ 434.60	\$ 250,329.60
4310	Doors/Interior	Door, Interior	2018	30	30	Each	820	\$ 677.67	\$ 555,689.40
4312	Windows	Blinds and Drapes	2013	20	15	SF	12705	\$ 16.94	\$ 215,222.70
4350	Ceiling	Gypsum Board or Plaster Ceiling	1958	75	15	SF	137904	\$ 6.74	\$ 929,472.96
4420	Floors	Ceramic/Quarry Tile/Terrazzo Flooring	2011	75	68	SF	6317	\$ 27.75	\$ 175,296.75
4430	Floors	Resilient Flooring	2011	18	11	SF	131587	\$ 5.47	\$ 719,780.89
4460	Floors	Baseboard (Wood or Resilient)	2011	15	8	LF	45495	\$ 8.44	\$ 383,977.80
4461	Floors	Baseboard (Tile)	2011	15	8	LF	2516	\$ 29.34	\$ 73,819.44
4530	Walls	Wall Surface - Gypsum Board	1958	75	15	SF	409896	\$ 5.73	\$ 2,348,704.08
4580	Walls	Wall Surface - Ceramic Tile/Stone	1958	75	15	SF	10064	\$ 17.89	\$ 180,044.96
4610	Kitchen	Wall Cabinets	2011	15	8	LF	2077	\$ 432.60	\$ 898,510.20
4611	Kitchen	Base Cabinets	2011	15	8	LF	1600	\$ 478.71	\$ 765,936.00
4612	Kitchen	Countertops	2012	20	14	LF	1404	\$ 87.07	\$ 122,246.28
4620	Kitchen	Kitchen Sink with Fixtures	2012	35	29	Each	144	\$ 784.16	\$ 112,919.04
4630	Kitchen	Range / Stove	2012	15	9	Each	144	\$ 658.55	\$ 94,831.20
4632	Kitchen	Range Hood	2007	15	4	Each	144	\$ 218.46	\$ 31,458.24
4640	Kitchen	Refrigerator	2007	15	4	Each	144	\$ 875.10	\$ 126,014.40
4710	Bathroom	Bath Accessories	2006	10	-2	Each	151	\$ 45.81	\$ 6,917.31
4705	Bathroom	Bath tub, Enameled Steel	1981	40	3	Each	170	\$ 2,849.25	\$ 484,372.50
4719	Bathroom	Shower, Fiberglass	1996	35	13	Each	151	\$ 1,452.92	\$ 219,390.92
4721	Bathroom	Toilet	2012	25	19	Each	170	\$ 1,238.96	\$ 210,623.20
4722	Bathroom	Sink with Fixtures	2012	35	29	Each	170	\$ 1,006.75	\$ 171,147.50
4740	Bathroom	Bathroom Vanities	1996	20	-2	Each	170	\$ 215.27	\$ 36,595.90
4750	Bathroom	Medicine Cabinets	1996	20	-2	Each	170	\$ 339.77	\$ 57,760.90
4760	Bathroom	Exhaust Fans	1958	10	-50	Each	170	\$ 266.50	\$ 45,305.00
Unit Subtotals									\$ 12,370,335.46
GRAND TOTAL									

Development Projection Outlook – Years 1 through 10

Category	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Site				Years 1 - 5	\$ 145,340.64				Years 6 - 10	\$ 16,482.93
Chain Link - 4' High	\$ 12,009.80	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Chain Link - 6' High	\$ 1,553.20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wrought Iron - 4' High	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Signage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Signage - Letters	\$ 2,382.60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parking Stripes And Curb Painting (Traffic Paint)	\$ 2,425.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Parking, Asphalt (Sealing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Curbing - Concrete	\$ 46,672.50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Traffic Signs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Furniture - Table and Chair Set	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Furniture - Benches	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Furniture - Picnic Table	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Furniture - Outdoor Grill	\$ 254.74	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trash Cans	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,263.84	\$ -	\$ -	\$ -	\$ -
Ash Tray	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 219.09	\$ -	\$ -	\$ -	\$ -
Retaining Wall, Concrete	\$ 41,350.80	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pedestrian Paving - Concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sidewalk Handrails	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pole Mounted Lighting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Sanitary Lines	\$ 7,374.60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Water Lines	\$ 22,593.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Drain Lines	\$ 8,724.40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Gas Lines	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Site Subtotals	\$ 145,340.64	\$ -	\$ -	\$ -	\$ -	\$ 16,482.93	\$ -	\$ -	\$ -	\$ -
Building Exterior				Years 1 - 5	\$ 573,856.08				Years 6 - 10	\$ -
Built-up/Membrane	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Drainage Interior (Roof Drains and Pipes)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Floor Insulation	\$ 74,219.88	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Insulation	\$ 143,656.50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Brick or Concrete Block	\$ 294,729.90	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stucco	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Caulking & Sealant	\$ -	\$ -	\$ 61,249.80	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Solid Core (Wood or Metal)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Windows	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storm/Screen Windows	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building Exterior Subtotals	\$ 512,606.28	\$ -	\$ 61,249.80	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Category	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Building Systems				Years 1 - 5	\$ 1,379,070.14				Years 6 - 10	\$ 727,645.60
Smoke/Fire Detection Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 478,065.96	\$ -
Intercom System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 149,578.92	\$ -
Main Electrical Entrance/Switchgear	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Emergency Generator (50 kW)	\$ 92,828.98	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building Mounted Exterior Lighting	\$ 39,510.60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39,510.60	\$ -	\$ -	\$ -
Security System	\$ 32,304.42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Sprinkler System	\$ 580,909.48	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cable Elevators	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Elevator Shaftway Doors	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Central Vent & Exhaust (4-10 Stories)	\$ 37,742.90	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heating Hot Water Circulation Pump	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,490.12	\$ -
Boiler	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Boiler Room Piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heat Exchanger	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Boiler Room Valves	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Boiler Temperature Controls	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hydronic Piping	\$ 406,593.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rooftop Exhaust Fans	\$ -	\$ -	\$ 29,116.10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hot Water Storage Tank	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DHW Circulating Pump	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Gas Distribution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sanitary Distribution - Cast Iron	\$ 160,064.66	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building Systems Subtotals	\$ 1,349,954.04	\$ -	\$ 29,116.10	\$ -	\$ -	\$ -	\$ 39,510.60	\$ -	\$ 688,135.00	\$ -

Category	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Common Areas				Years 1 - 5	\$ 557,682.28				Years 6 - 10	\$ 249,074.31
Fan Coil Unit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,522.73	\$ -
Air Handling Unit	\$ 3,141.48	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grilles, HVAC Supply and Return	\$ 834.46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Air Distribution Ductwork	\$ 11,307.66	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Thermostat	\$ 377.22	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5 ton Split System Air Conditioner	\$ 15,054.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard Radiator	\$ 36,349.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Window A/C	\$ 6,540.95	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Smoke/Fire Detectors	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 96,596.55	\$ -	\$ -	\$ -	\$ -
Exit Signs/Lights	\$ 52,558.21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting Fixtures - 2'x2'	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting Fixtures - Surface Mounted Incandescent	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting Fixtures - Surface Mounted Fluorescent 1'x4'	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting Fixtures - Surface Mounted Fluorescent 2'x4'	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hot and Cold Water Distribution - Galvanized	\$ 110,528.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Drinking Fountain	\$ -	\$ -	\$ -	\$ 10,943.68	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Electrical Distribution System	\$ -	\$ 64,292.13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Unfinished Stairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interior Railings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Door, Interior	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interior ReLites/Windows	\$ 3,472.59	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Blinds and Drapes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Suspended Acoustic Panel	\$ 127,674.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Gypsum Board or Plaster	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ceramic/Quarry Tile/Terrazzo	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Resilient	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 82,990.84	\$ -
Baseboard (Wood or Resilient)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,123.87	\$ -
Baseboard (Tile)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,048.92	\$ -
Wall Surface - Gypsum Board	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Surface - Masonry	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Surface - Ceramic Tile/Stone	\$ 17,746.88	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Cabinets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,949.80	\$ -
Base Cabinets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,138.07	\$ -
Countertops	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sink with Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Range/Stove	\$ -	\$ -	\$ -	\$ -	\$ 1,975.65	\$ -	\$ -	\$ -	\$ -	\$ -
Refrigerator	\$ -	\$ -	\$ -	\$ -	\$ 1,750.20	\$ -	\$ -	\$ -	\$ -	\$ -
Public Toilet and Bath Accessories	\$ 9,362.68	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,362.68	\$ -	\$ -
Public Restroom and Bath Plumbing Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public Restroom and Bath Partitions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Laundry Sink w/Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,863.58
Chutes (Garbage)	\$ 53,501.12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trash Compactors	\$ 33,413.21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Common Area Subtotals	\$ 478,720.62	\$ 64,292.13	\$ -	\$ 10,943.68	\$ 3,725.85	\$ 96,596.55	\$ -	\$ 9,362.68	\$ 141,251.50	\$ 1,863.58

Category	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Unit	Years 1 - 5					Years 6 - 10				
	\$ 3,344,085.07					\$ 2,395,613.65				
Thermostatic Control Valve	\$ 266,697.36	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard Convectors	\$ 1,146,004.02	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hydronic Piping	\$ 321,537.36	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Smoke/Fire Detectors	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 178,539.01	\$ -	\$ -
Interior Lighting - Surface Mounted Incandescent	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interior Lighting - Surface Mounted Incandescent 1x4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hot and Cold Water Distribution - Copper / PVC	\$ 401,644.80	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Branch Panels	\$ 419,777.28	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Electrical Distribution System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Solid Core (Wood or Metal)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Panel Door, Interior	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Door, Interior	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Blinds and Drapes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Gypsum Board or Plaster Ceiling	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ceramic/Quarry Tile/Terrazzo Flooring	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Resilient Flooring	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard (Wood or Resilient)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 383,977.80	\$ -
Baseboard (Tile)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 73,819.44	\$ -
Wall Surface - Gypsum Board	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Surface - Ceramic Tile/Stone	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Cabinets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 898,510.20	\$ -
Base Cabinets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 765,936.00	\$ -
Countertops	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Kitchen Sink with Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Range / Stove	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 94,831.20
Range Hood	\$ -	\$ -	\$ -	\$ -	\$ 31,458.24	\$ -	\$ -	\$ -	\$ -	\$ -
Refrigerator	\$ -	\$ -	\$ -	\$ -	\$ 126,014.40	\$ -	\$ -	\$ -	\$ -	\$ -
Bath Accessories	\$ 6,917.31	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bathtub, Enameled Steel	\$ -	\$ -	\$ -	\$ 484,372.50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Shower, Fiberglass	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Toilet	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sink with Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bathroom Vanities	\$ 36,595.90	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Medicine Cabinets	\$ 57,760.90	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Exhaust Fans	\$ 45,305.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Unit Subtotals	\$ 2,702,239.93	\$ -	\$ -	\$ 484,372.50	\$ 157,472.64	\$ -	\$ -	\$ 178,539.01	\$ 2,122,243.44	\$ 94,831.20
GRAND TOTAL	\$ 5,188,861.51	\$ 64,292.13	\$ 90,365.90	\$ 495,316.18	\$ 161,198.49	\$ 113,079.48	\$ 39,510.60	\$ 187,901.69	\$ 2,951,629.94	\$ 96,694.78

Development Projection Outlook – Years 11 through 15

Category	2028	2029	2030	2031	2032
Site				Years 11 - 15	\$ 375,864.86
Chain Link - 4' High	\$ 12,009.80	\$ -	\$ -	\$ -	\$ -
Chain Link - 6' High	\$ 1,553.20	\$ -	\$ -	\$ -	\$ -
Wrought Iron - 4' High	\$ -	\$ -	\$ -	\$ -	\$ 114,990.75
Site Signage	\$ -	\$ -	\$ 8,226.74	\$ -	\$ -
Site Signage - Letters	\$ -	\$ -	\$ -	\$ -	\$ -
Parking Stripes And Curb Painting (Traffic Paint)	\$ 2,425.00	\$ -	\$ -	\$ -	\$ -
Parking, Asphalt (Sealing)	\$ -	\$ -	\$ -	\$ -	\$ -
Curbing - Concrete	\$ -	\$ -	\$ -	\$ -	\$ -
Traffic Signs	\$ -	\$ -	\$ 76.23	\$ -	\$ -
Site Furniture - Table and Chair Set	\$ 30,841.74	\$ -	\$ -	\$ -	\$ -
Site Furniture - Benches	\$ 139,281.84	\$ -	\$ -	\$ -	\$ -
Site Furniture - Picnic Table	\$ 17,509.06	\$ -	\$ -	\$ -	\$ -
Site Furniture - Outdoor Grill	\$ -	\$ -	\$ -	\$ -	\$ -
Trash Cans	\$ -	\$ -	\$ -	\$ -	\$ -
Ash Tray	\$ -	\$ -	\$ -	\$ -	\$ -
Retaining Wall, Concrete	\$ -	\$ -	\$ -	\$ -	\$ -
Pedestrian Paving - Concrete	\$ -	\$ -	\$ -	\$ -	\$ -
Sidewalk Handrails	\$ -	\$ -	\$ -	\$ -	\$ -
Pole Mounted Lighting	\$ 48,950.50	\$ -	\$ -	\$ -	\$ -
Site Sanitary Lines	\$ -	\$ -	\$ -	\$ -	\$ -
Site Water Lines	\$ -	\$ -	\$ -	\$ -	\$ -
Site Drain Lines	\$ -	\$ -	\$ -	\$ -	\$ -
Site Gas Lines	\$ -	\$ -	\$ -	\$ -	\$ -
Site Subtotals	\$ 252,571.14	\$ -	\$ 8,302.97	\$ -	\$ 114,990.75
Building Exterior				Years 11 - 15	\$ 79,787.79
Built-up/Membrane	\$ -	\$ -	\$ -	\$ 79,787.79	\$ -
Roof Drainage Interior (Roof Drains and Pipes)	\$ -	\$ -	\$ -	\$ -	\$ -
Floor Insulation	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Insulation	\$ -	\$ -	\$ -	\$ -	\$ -
Brick or Concrete Block	\$ -	\$ -	\$ -	\$ -	\$ -
Stucco	\$ -	\$ -	\$ -	\$ -	\$ -
Caulking & Sealant	\$ -	\$ -	\$ -	\$ -	\$ -
Solid Core (Wood or Metal)	\$ -	\$ -	\$ -	\$ -	\$ -
Windows	\$ -	\$ -	\$ -	\$ -	\$ -
Storm/Screen Windows	\$ -	\$ -	\$ -	\$ -	\$ -
Building Exterior Subtotals	\$ -	\$ -	\$ -	\$ 79,787.79	\$ -

Category	2028	2029	2030	2031	2032
Building Systems				Years 11 - 15	\$ 514,849.06
Smoke/Fire Detection Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
Intercom System	\$ -	\$ -	\$ -	\$ -	\$ -
Main Electrical Entrance/Switchgear	\$ -	\$ -	\$ -	\$ -	\$ -
Emergency Generator (50 kW)	\$ -	\$ -	\$ -	\$ -	\$ -
Building Mounted Exterior Lighting	\$ -	\$ -	\$ 39,510.60	\$ -	\$ -
Security System	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Sprinkler System	\$ -	\$ -	\$ -	\$ -	\$ -
Cable Elevators	\$ -	\$ -	\$ -	\$ -	\$ -
Elevator Shaftway Doors	\$ -	\$ -	\$ -	\$ 421,016.00	\$ -
Central Vent & Exhaust (4-10 Stories)	\$ -	\$ -	\$ -	\$ -	\$ -
Heating Hot Water Circulation Pump	\$ -	\$ -	\$ -	\$ -	\$ -
Boiler	\$ -	\$ -	\$ -	\$ -	\$ -
Boiler Room Piping	\$ -	\$ -	\$ -	\$ -	\$ -
Heat Exchanger	\$ -	\$ -	\$ -	\$ -	\$ -
Boiler Room Valves	\$ -	\$ -	\$ -	\$ -	\$ -
Boiler Temperature Controls	\$ -	\$ -	\$ -	\$ -	\$ -
Hydronic Piping	\$ -	\$ -	\$ -	\$ -	\$ -
Rooftop Exhaust Fans	\$ -	\$ -	\$ -	\$ -	\$ -
Hot Water Storage Tank	\$ -	\$ -	\$ -	\$ 38,648.04	\$ -
DHW Circulating Pump	\$ -	\$ -	\$ -	\$ 15,674.42	\$ -
Gas Distribution	\$ -	\$ -	\$ -	\$ -	\$ -
Sanitary Distribution - Cast Iron	\$ -	\$ -	\$ -	\$ -	\$ -
Building Systems Subtotals	\$ -	\$ -	\$ 39,510.60	\$ 475,338.46	\$ -

Category	2028	2029	2030	2031	2032
Common Areas				Years 11 - 15	\$ 216,507.29
Fan Coil Unit	\$ -	\$ -	\$ -	\$ -	\$ -
Air Handling Unit	\$ -	\$ -	\$ -	\$ -	\$ -
Grilles, HVAC Supply and Return	\$ -	\$ -	\$ -	\$ -	\$ -
Air Distribution Ductwork	\$ -	\$ -	\$ -	\$ -	\$ -
Thermostat	\$ -	\$ -	\$ -	\$ -	\$ -
5 ton Split System Air Conditioner	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard Radiator	\$ -	\$ -	\$ -	\$ -	\$ -
Window A/C	\$ 6,540.95	\$ -	\$ -	\$ -	\$ -
Smoke/Fire Detectors	\$ -	\$ -	\$ -	\$ -	\$ -
Exit Signs/Lights	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting Fixtures - 2'x2'	\$ -	\$ -	\$ -	\$ 86,069.10	\$ -
Lighting Fixtures - Surface Mounted Incandescent	\$ -	\$ -	\$ -	\$ 15,437.36	\$ -
Lighting Fixtures - Surface Mounted Fluorescent 1'x4'	\$ -	\$ -	\$ -	\$ 55,017.84	\$ -
Lighting Fixtures - Surface Mounted Fluorescent 2'x4'	\$ -	\$ -	\$ -	\$ 32,177.91	\$ -
Hot and Cold Water Distribution - Galvanized	\$ -	\$ -	\$ -	\$ -	\$ -
Drinking Fountain	\$ -	\$ -	\$ -	\$ 10,943.68	\$ -
Electrical Distribution System	\$ -	\$ -	\$ -	\$ -	\$ -
Unfinished Stairs	\$ -	\$ -	\$ -	\$ -	\$ -
Interior Railings	\$ -	\$ -	\$ -	\$ -	\$ -
Door, Interior	\$ -	\$ -	\$ -	\$ -	\$ -
Interior ReLites/Windows	\$ -	\$ -	\$ -	\$ -	\$ -
Blinds and Drapes	\$ -	\$ -	\$ -	\$ -	\$ -
Suspended Acoustic Panel	\$ -	\$ -	\$ -	\$ -	\$ -
Gypsum Board or Plaster	\$ -	\$ -	\$ -	\$ -	\$ -
Concrete	\$ -	\$ -	\$ -	\$ -	\$ -
Ceramic/Quarry Tile/Terrazzo	\$ -	\$ -	\$ -	\$ -	\$ -
Resilient	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard (Wood or Resilient)	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard (Tile)	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Surface - Gypsum Board	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Surface - Masonry	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Surface - Ceramic Tile/Stone	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Cabinets	\$ -	\$ -	\$ -	\$ -	\$ -
Base Cabinets	\$ -	\$ -	\$ -	\$ -	\$ -
Countertops	\$ -	\$ -	\$ -	\$ -	\$ 957.77
Sink with Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -
Range/Stove	\$ -	\$ -	\$ -	\$ -	\$ -
Refrigerator	\$ -	\$ -	\$ -	\$ -	\$ -
Public Toilet and Bath Accessories	\$ -	\$ -	\$ -	\$ -	\$ 9,362.68
Public Restroom and Bath Plumbing Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -
Public Restroom and Bath Partitions	\$ -	\$ -	\$ -	\$ -	\$ -
Laundry Sink w/Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -
Chutes (Garbage)	\$ -	\$ -	\$ -	\$ -	\$ -
Trash Compactors	\$ -	\$ -	\$ -	\$ -	\$ -
Common Area Subtotals	\$ 6,540.95	\$ -	\$ -	\$ 199,645.89	\$ 10,320.45

Category	2028	2029	2030	2031	2032
Unit				Years 11 - 15	\$ 1,371,145.58
Thermostatic Control Valve	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard Convectors	\$ -	\$ -	\$ -	\$ -	\$ -
Hydronic Piping	\$ -	\$ -	\$ -	\$ -	\$ -
Smoke/Fire Detectors	\$ -	\$ -	\$ -	\$ -	\$ -
Interior Lighting - Surface Mounted Incandescent	\$ -	\$ -	\$ -	\$ 73,713.70	\$ -
Interior Lighting - Surface Mounted Incandescent 1x4	\$ -	\$ -	\$ -	\$ 183,791.48	\$ -
Hot and Cold Water Distribution - Copper / PVC	\$ -	\$ -	\$ -	\$ -	\$ -
Branch Panels	\$ -	\$ -	\$ -	\$ -	\$ -
Electrical Distribution System	\$ -	\$ -	\$ -	\$ -	\$ -
Solid Core (Wood or Metal)	\$ -	\$ -	\$ -	\$ -	\$ -
Panel Door, Interior	\$ -	\$ -	\$ -	\$ -	\$ -
Door, Interior	\$ -	\$ -	\$ -	\$ -	\$ -
Blinds and Drapes	\$ -	\$ -	\$ -	\$ -	\$ -
Gypsum Board or Plaster Ceiling	\$ -	\$ -	\$ -	\$ -	\$ -
Ceramic/Quarry Tile/Terrazzo Flooring	\$ -	\$ -	\$ -	\$ -	\$ -
Resilient Flooring	\$ -	\$ 719,780.89	\$ -	\$ -	\$ -
Baseboard (Wood or Resilient)	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard (Tile)	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Surface - Gypsum Board	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Surface - Ceramic Tile/Stone	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Cabinets	\$ -	\$ -	\$ -	\$ -	\$ -
Base Cabinets	\$ -	\$ -	\$ -	\$ -	\$ -
Countertops	\$ -	\$ -	\$ -	\$ -	\$ 122,246.28
Kitchen Sink with Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -
Range / Stove	\$ -	\$ -	\$ -	\$ -	\$ -
Range Hood	\$ -	\$ -	\$ -	\$ -	\$ -
Refrigerator	\$ -	\$ -	\$ -	\$ -	\$ -
Bath Accessories	\$ 6,917.31	\$ -	\$ -	\$ -	\$ -
Bath tub, Enameled Steel	\$ -	\$ -	\$ -	\$ -	\$ -
Shower, Fiberglass	\$ -	\$ -	\$ -	\$ 219,390.92	\$ -
Toilet	\$ -	\$ -	\$ -	\$ -	\$ -
Sink with Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -
Bathroom Vanities	\$ -	\$ -	\$ -	\$ -	\$ -
Medicine Cabinets	\$ -	\$ -	\$ -	\$ -	\$ -
Exhaust Fans	\$ 45,305.00	\$ -	\$ -	\$ -	\$ -
Unit Subtotals	\$ 52,222.31	\$ 719,780.89	\$ -	\$ 476,896.10	\$ 122,246.28
GRAND TOTAL	\$ 311,334.40	\$ 719,780.89	\$ 47,813.57	\$ 1,231,668.24	\$ 247,557.48