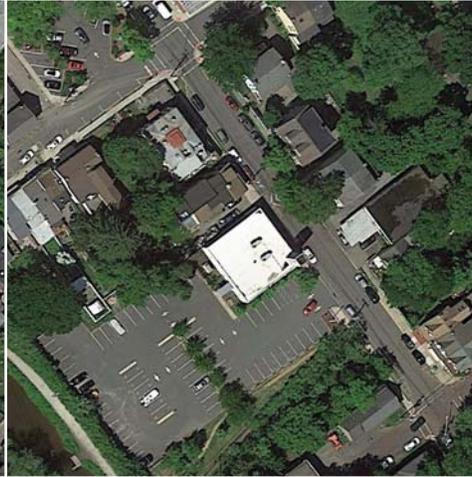




City Hall



Phillip L. Pittore Justice Center



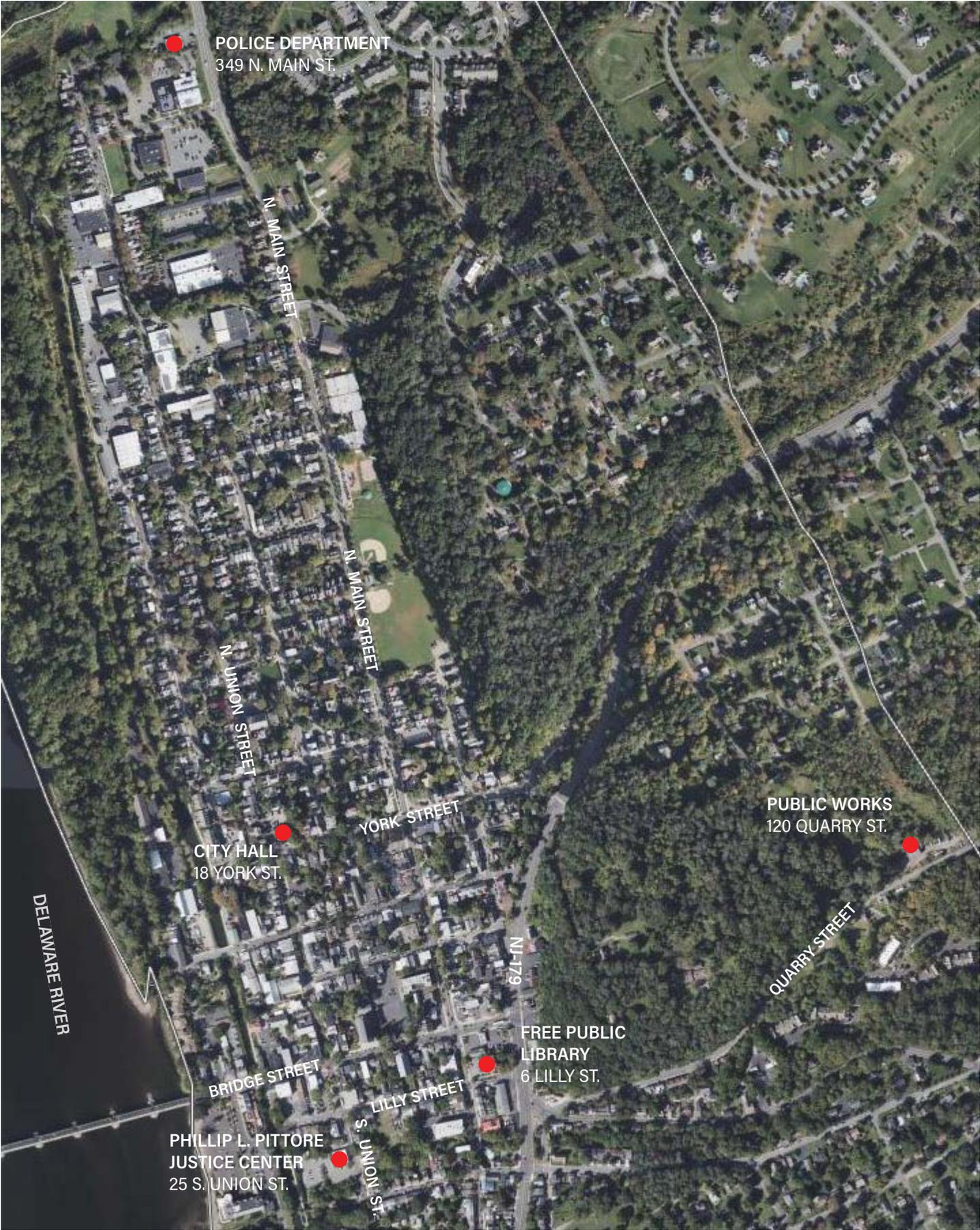
Public Library



Police Department



Public Works



CITY OF LAMBERTVILLE
HUNTERDON COUNTY

TABLE OF CONTENTS

	COVER	
	TABLE OF CONTENTS	03
1.0	ARCHITECTURAL REPORT SUMMARY	09
2.0	ARCHITECTURAL BUILDING ASSESSMENTS	11
	CITY HALL	14
	JUSTICE CENTER	46
	PUBLIC LIBRARY	62
	POLICE DEPARTMENT	88
	PUBLIC WORKS	118
3.0	CONSULTING ENGINEERS COLLABORTIVE INC., CEC STRUCTURAL ENGINEERING	133
4.0	WHITMAN ENGINEERS, INC. MEPF ENGINEERING	179
5.0	HARBOR CONSULTANTS CIVIL ENGINEERING	195
6.0	CONSTRUCTION COST ESTIMATES	223
7.0	REFERENCED DOCUMENTS	235

1

ARCHITECTURAL REPORT SUMMARY CITY OF LAMBERTVILLE

Investigating Team

The Musial Group Architecture
191 Mill Lane
Mountainside, NJ 07092
908-232-2860

- Noel S. Musial, A.I.A., PP, NCARB, President
- Noel S. Musial II, A.I.A., NCARB, Principal
- Larry Lane, A.I.A., Project Architect

Consultants

Structural Engineering

- CEC, Inc.
730 Boulevard
Kenilworth, NJ 07033

MEP Engineering

- Whitman Engineers, Inc.
100 Franklin Square Drive, Suite 200
Somerset, NJ 08873

Civil Engineering

- Harbor Consultants, Inc.
320 North Avenue East
Cranford, NJ 07016

CONDITIONAL STATEMENT

The statements and opinions expressed herein are solely for the use and information of the City of Lambertville, NJ. The opinions reflect the professional judgment of Registered Architects and Professional Engineers performing services that are usual and customary. These services are performed with care and skill ordinarily used by other Registered Architects and Professional Engineers when dealing with similar structures at the same time and in the same or similar localities. Conclusions drawn in this report are based on those conditions and surfaces that were accessible to the unaided visual observations of the Architect and Engineers. No warranties or guarantees can be inferred from, or implied by, the statements or opinions contained in this report. All estimate are conceptual and for planning purposes only.

EXECUTIVE SUMMARY

THE MUSIAL GROUP ARCHITECTURE and their consulting engineers have been commissioned by the City of Lambertville to conduct facilities condition assessment reviews of five municipal facilities in Lambertville, NJ. They include:

1. City Hall at 18 York Street
2. Phillip L. Pittore Justice Center at 25 South Union Street
3. Lambertville Free Public Library at 6 Lilly Street
4. Police Department at 349 North Main Street.
5. Public Works at 120 Quarry Street

Visual, non-invasive and non-destructive walk-through evaluations have been performed at all of the above listed sites to determine their condition, and to provide guidance related to cost and timing for repairs required both immediately and over time.

The team of professionals who participated in this evaluation included architects, structural engineers, mechanical engineers, electrical engineers, plumbing engineers and civil engineers as found in the list of the Investigating Team on the previous page. The findings from each trade are included in this report.

The findings in this comprehensive report can be used by the City to make decisions related to its Capital Improvement Plan.

PROJECT DIRECTORY

Client

City of Lambertville
18 York Street
Lambertville, NJ 08530

Andrew Nowick, Mayor
Julia Fahl, Mayor Emeritus
Cynthia Ege, CMR RMC City Clerk and Registrar
Lt. Robert Brown, Lambertville Police
Jennifer Sirak, Librarian
Lester Myers, Public Works



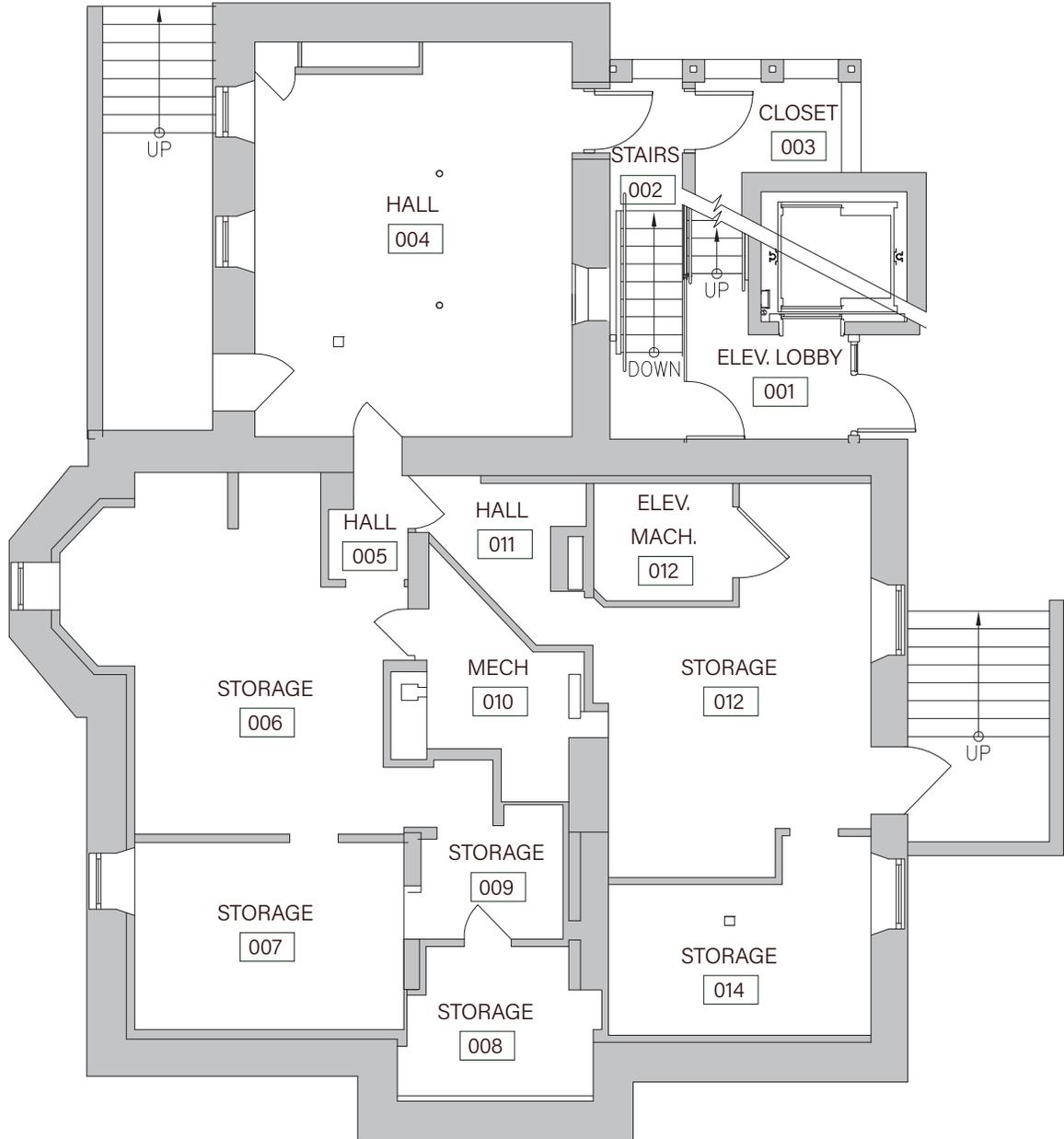
2

ARCHITECTURAL BUILDING ASSESSMENTS CITY OF LAMBERTVILLE

CITY HALL
18 York Street
Lambertville, NJ 08530

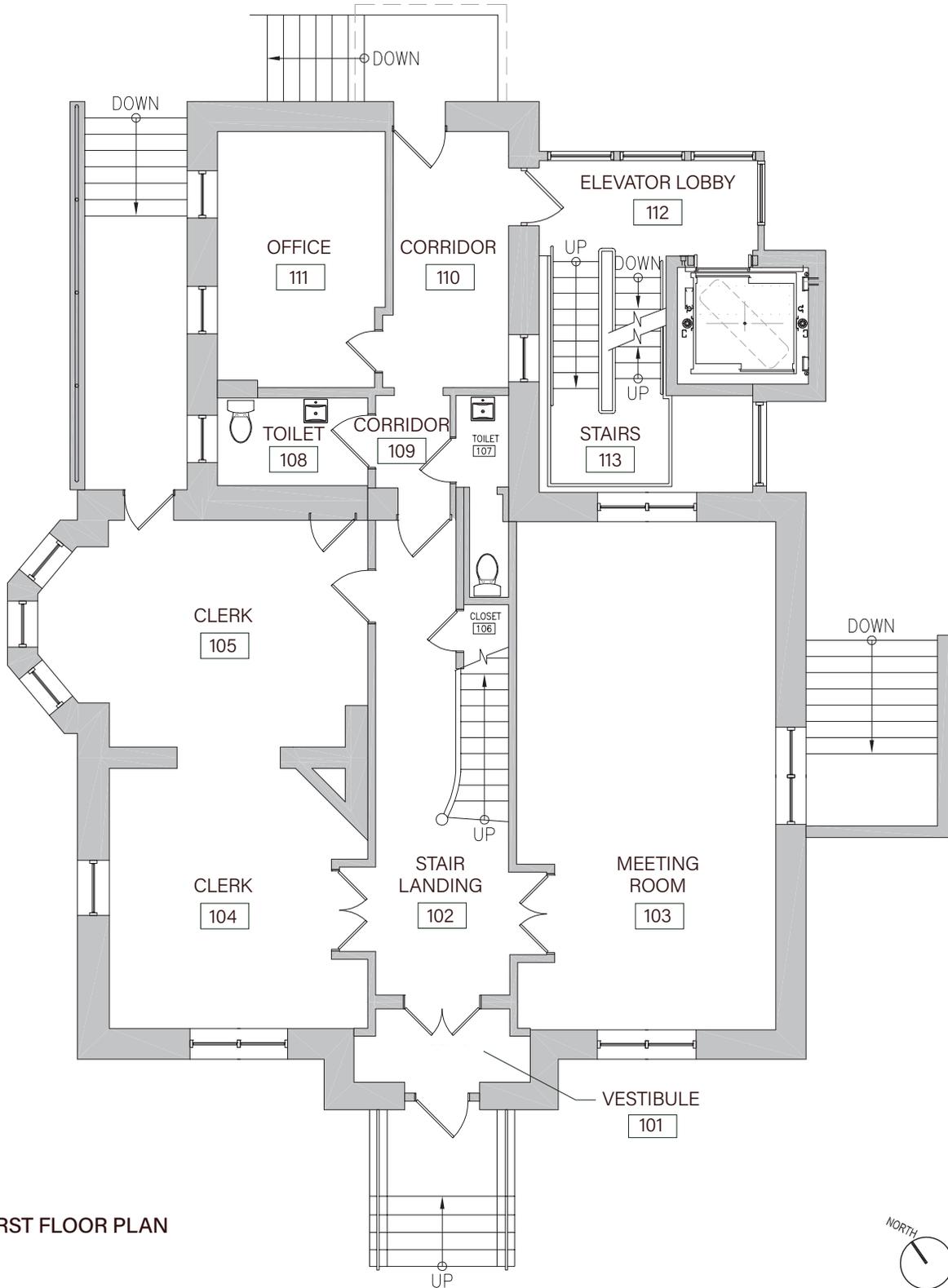


CITY HALL
18 York Street
Lambertville, NJ 08530

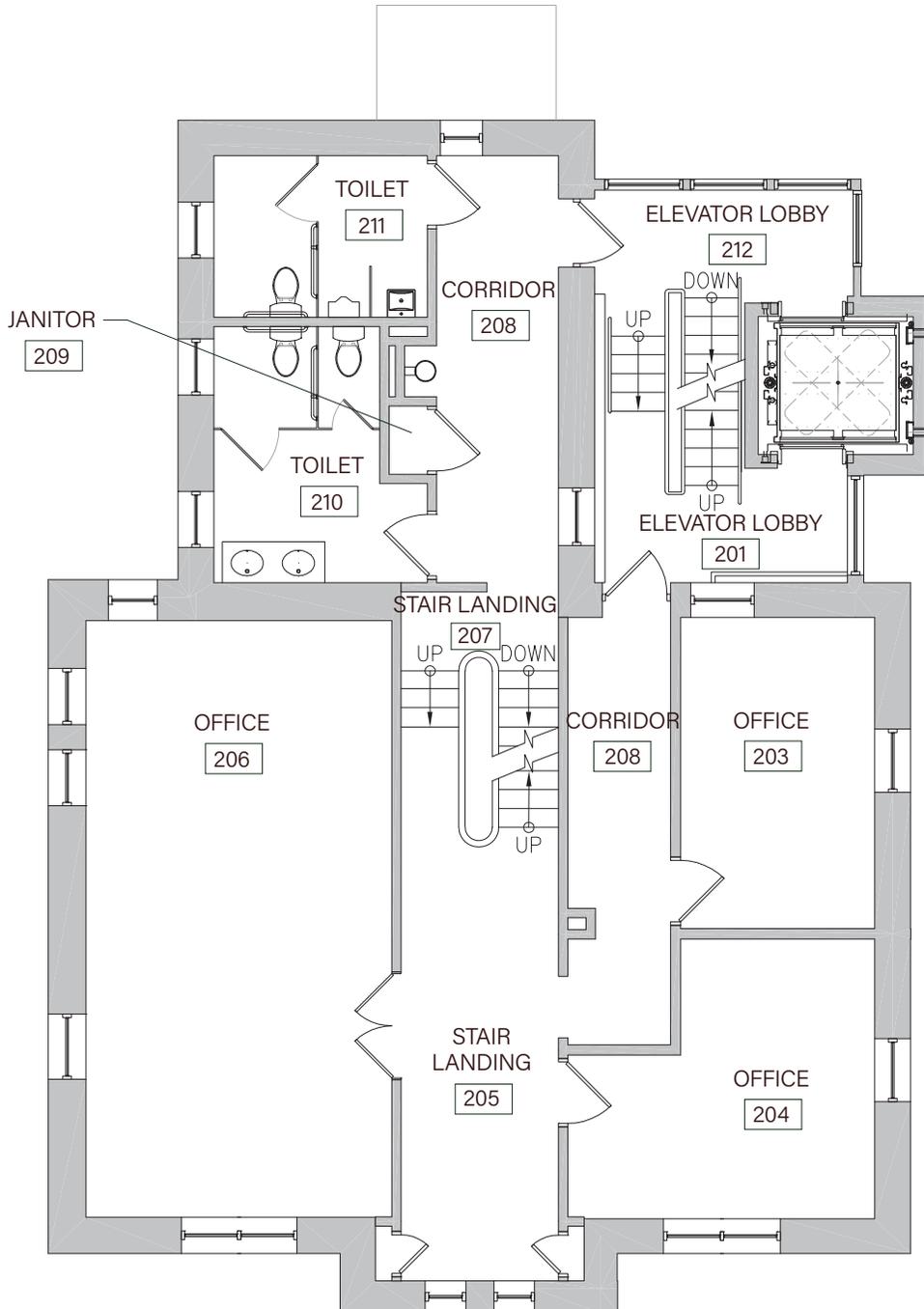


BASEMENT FLOOR PLAN



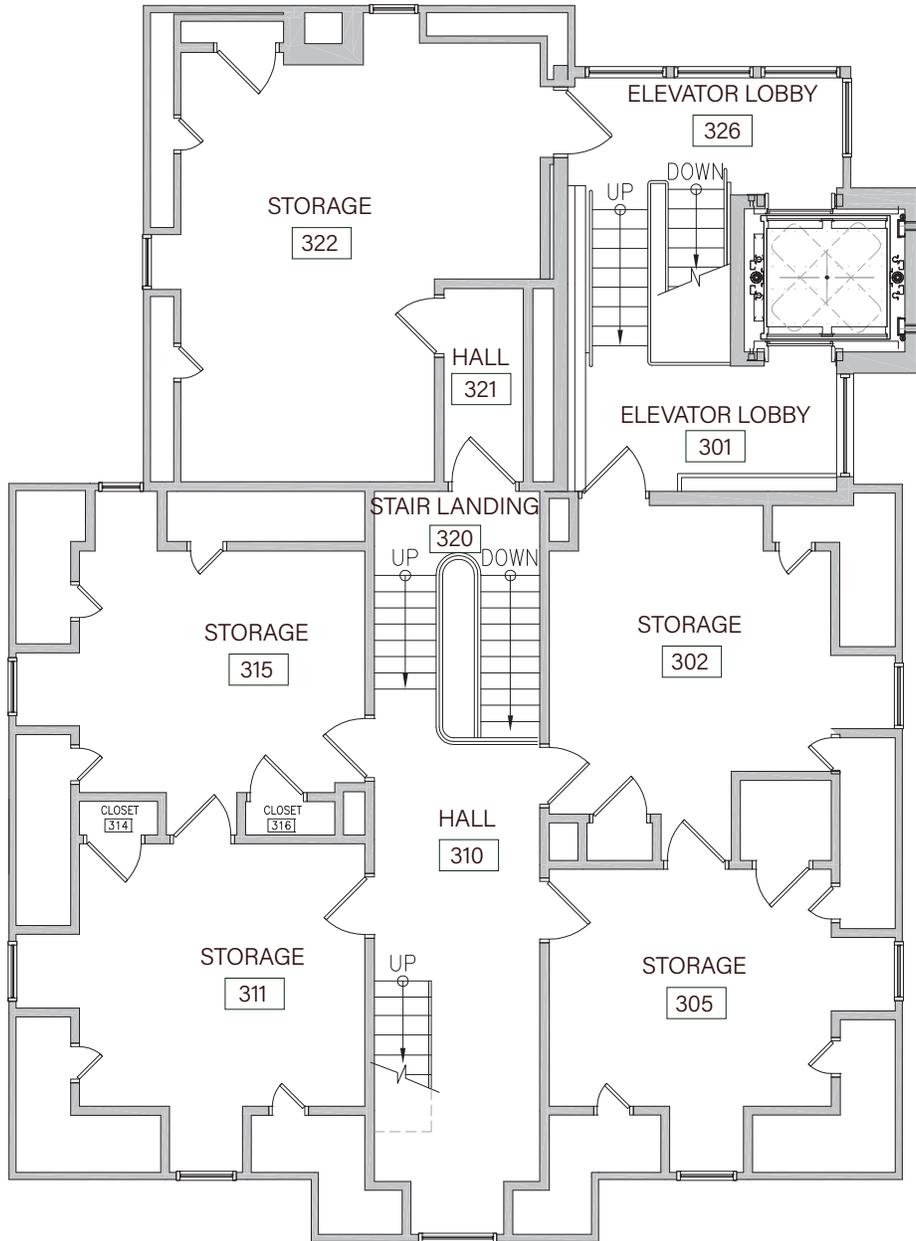


FIRST FLOOR PLAN



SECOND FLOOR PLAN





THIRD FLOOR PLAN



CITY HALL

Approximate Gross Area = 6,534 SF plus a basement and cupola.

Number of Floors = 5 levels, including a basement and a cupola.

The floors comprises of:

Basement with an approximate gross area of 2,191 SF.

First Floor with an approximate gross area of 2,204 SF.

Second Floor (with two levels) with an approximate gross area of 2,165 SF.

Third Floor (with two levels) with an approximate gross area of 2,165 SF.

Cupola with an approximate gross area of 46 SF.

Construction Type: According to City records, the building is built with stone and mortar walls. Per on-site visual observation, vertical walls behind the mansard roof and cupola were found to be built with wooden studs. The floors and roof are supported by wooden structural members. If the building is indeed built with masonry supporting walls per the City records, then the construction type would be Type III per the International Building Code, NJ edition. If the bearing walls are wooden studs, then the construction type would be considered Type V per the International building Code, NJ edition. Refer to the report by the structural engineer for more information about the structural elements in this building.

Year of Original Construction = approximately 1868

HISTORICAL BACKGROUND

The City Hall building was originally built by one of Lambertville's first settler/farmer/landowner descendent and lawyer, Alexander Henry Holcombe, for his new bride. The building has stone exterior walls, decorative moldings, and slate mansard roof in keeping of the French Second Empire Style which flourished during the reign of Emperor Napoleon III in France (1852-1871). At that time, there was a double entrance door and a porch outside the first floor that stretched the full width of the building's front.

In the 1920's, the Holcombe family donated the building to the Catholic Church, St. John the Evangelist, The church used the building as a local Catholic social club.

Later, in the 1950's, the City of Lambertville obtained ownership of the building and has occupied it ever since. The building has housed all municipal services, including the court, and library until a few years ago. In late 1988, the library moved out of the second floor to leave room for the expansion of the City Hall. The police department occupied the basement until 2001.

In 1983, the building was listed as part of the Lambertville Historic District on the New Jersey and National Registers of Historic Places.

Between 2000 and 2017, grants helped fund the building's restoration. This included repairs to the structure, masonry, front doors, and windows. The slate roof was replaced. The exterior trim was restored. A new stair tower

with an elevator was added to the back to help the building become more accessible to the first, second, and third floors.

Currently, the basement, third floor and cupola levels are used for storage. The first and second floors house the clerk's, tax, finance, construction, and the mayor's offices.

The utilities include gas, electric, Comcast cable, public water and public sewer.

RECOMMENDATIONS

General Comments:

Windows: The existing exterior windows are predominately double hung units. The glass appears to be single pane annealed float glass and not tempered or laminated.

Per discussions with the end users, most of the windows do not open properly. Most windows will need to be repaired with new concealed counterweights and chains if the existing windows are to remain.

The thermal insulation properties of the existing windows are very low. In order to improve this, the windows could be replaced with ones having clear insulated tempered glass. Doing so may affect the historic integrity of the window's appearance. There appears to be one double hung window, which is part of a pair of windows, at the front of the building in Meeting Room 103 that has a storm window installed at the inside face of the window. The amount of thermal conductivity this storm window reduces at the existing window is unknown but not expected to be significant.

The existing windows need new screens installed. Although, this will affect the historic character of the building.

Most of the existing exterior windows have wooden shutters that fold back into pockets along the jamb of the windows. These shutters do not fold and store flush into the pockets properly in most locations. They need to be repaired.

Fire shutters at the windows near the elevator addition will need to be serviced and maintained.

Cob webs need to be cleaned from the exterior face of the transom window at the front entrance.

The existing paint that is peeling needs to be removed and the frames sanded and primed before repainting them on the outside faces.

Room Names and Interior Signage: Some of the rooms have signage with room names, room numbers, and braille. They are not all installed at the proper height per accessibility requirements, which is no higher than 48" above the finished floor. Signs have only been installed in rooms that are adjacent to the lobby of the most recent addition of the elevator. It is recommended that all rooms in the building to have signs matching the few already installed. They should all be installed at the required height and wall/door locations per code.

Because the existing signs are not continuous throughout the building, this report has established a continuous

set of room names and numbers that do not correspond to the room names and numbers on the existing room signs. This is for reference to this report only. The missing room signs may have a different set of room names and numbers when installed in the future.

Elevator: The elevator is hydraulic and was installed in 2010. It is handicapped accessible and appears to be in good working order.

Lighting: Some of the light fixtures have been upgraded to be LED or have been adapted with LED bulbs. In most rooms, the light fixtures are controlled with switches that should be replaced with new occupancy sensors to conserve more energy.

Wood Flooring: The existing wood flooring on the first floor should be lightly sanded and refinished. This is not a high priority and would require the carpet that is installed over the wood floor to be removed and replaced.

Fire Extinguishers: There are fire extinguishers distributed throughout the occupied spaces. They appear to have been serviced in April of 2021. Continue the scheduled service on a regular basis.

Interior Stairs: Wooden treads from the 2nd to the 3rd floor are showing wear and need to be sanded and refinished. The handrails and guardrails need to be fixed to the landing and stringers so they do not move laterally at the building's wooden stairs.

BASEMENT FLOOR:

Although the basement was the location of the police department until 2001, it is now unoccupied. Paper documents are stored in this area. The boiler, water heater, elevator equipment, computer server, and phone equipment are also located at this floor.

This floor level is not currently suitable to be occupied by office workers or any other uses requiring accessibility for the disabled. To access this floor, one must travel down stairs. Door widths and clearances in the corridors would need to be revised to comply with current handicapped requirements if this floor was to be occupied again.

The ceiling height in most of the basement is approximately 7'-0" and in some areas the ceiling height is 6'-0" which does not comply with the minimum required means of egress ceiling height of 7'-6" per code (IBC NJ 1003.2).

The following list of items would need to be addressed if this floor is to be occupied and if the above mentioned concerns were resolved:

- The existing finished flooring needs to be replaced.
- Storage boxes and files will need to be cleared away from egress paths.
- Egress doors will need to be defined. Currently, there are three egress doors from the main part of the basement. One door to an outside landing below grade does not swing the direction of egress. One door to the outside has a step up near the inside face of the threshold. The other door exits into the building addition below the elevator lobby.

- New LED lights with occupancy sensors need to replace the existing light fixtures and lighting controls.
- Repaint the walls, ceilings and built-in shelving.
- Replace doors with wider doors to comply with accessibility standards, if the basement is to be occupied
- Provide heating and cooling systems to serve any new room layouts, if the basement is to be occupied.
- Patch walls with gypsum board or other finished materials where gypsum board panels are missing from exposed stud walls.
- Maintain the require fire extinguishers located on the basement floor level per code.
- The floor would need to be accessible from the other floors.
- The ceiling height would need to conform to the minumum height allowed by code.

EXTERIOR ENTRANCE TO ELEVATOR LOBBY AT BACK OF BUILDING:

This part of the building was recently built and is still in good shape at the interior spaces. The lighting fixtures are LED. The finishes are currently in satisfactory condition.

FIRST FLOOR:

VESTIBULE 101

The dimensions of this space is not large enough for people to gather. It served mainly as a thermal air gap between the exterior door and the double doors that lead to the stair landing beyond.

- Per the handicapped code, the dimension between the edges of the double doors when opened 90 degrees should be at least 48" from the interior face of the door that swings to the outside. Instead, this dimensions is approximately 32". Therefore, it is not compliant with the handicapped code. But, if not altered, N.J.A.C.5:23-6.2(f) will allow this to remain as built.
- The room needs to be cleaned of cobwebs.
- The walls need to be repainted.
- There is approximately 4 SF of wall with cracks that need to be repaired.
- The mosaic tile is cracked and some tiles are missing near the walls. It is recommended to restore the existing mosaic to maintain its historic character instead of replacing all the tile on the floor.
- The glass in the double doors appear to be annealed float glass. Replacing this glass with tempered or laminated glass would is recommended for safety.
- The front door has an 8" long crack in its wood surface that needs to be repaired. Then, repaint the front door.
- The light fixture is surface mounted to the ceiling. This fixture should be replaced with an LED fixture that matches the historic character of the building. The ceiling around this fixture needs to be patched and painted.
- There is an electric wire traveling from the ceiling and over the decorative wood molding. This wire electrifies the lights mounted outside of the building. The wires should be concealed behind all finished ceilings and walls.

STAIR LANDING 102

This area receives a lot of traffic and will need to be maintained frequently with new paint.

- The wood base is showing some wear and should be repainted.
- The carpet over the tongue and groove wood finished flooring is in fairly good condition. 4" of the carpet's edge binding is needing repair. There is approximately 4 SF of the area where adhesive needs to be cleaned off of the wood flooring near the edge of the carpet.
- The double doors and case molding to the room 103 and to 104 need to be repainted.
- The inside face of a door that leads to a small storage room under the stairs needs to be repainted.
- The two radiators in this room have been painted and will need to be repainted in a few years.
- The light fixtures appear to match the historic character of the building and have LED bulbs. The switches that control these light fixtures have paint on them and should be replaced with occupancy sensors.

MEETING ROOM 103

- Approximately 4 SF needs to be repainted. The entire room will need to be repainted in the next 5 years.
- The walls around the controls for the ceiling fans need to be patched and painted.
- The pendant light fixtures are LED. The switches that control these light fixtures have paint on them and should be replaced with occupancy sensors and/or set on timers.
- An exit sign should be installed near the door.
- Emergency lighting should be installed in this room. This can be accomplished with emergency "bug eye" lights or connecting a battery pack to one of the pendant lights.
- Approximately 2 SF of the existing painted wood crown molding needs to be repaired and repainted.

CLERK AND REGISTRAR'S OFFICE 104

- Approximately 50 SF of the wall needs to be patched and painted.
- The carpet has wrinkles and will need to be stretched or replaced. It does not appear that the existing carpet was installed over a pad. Carpet padding will absorb impacts of furniture and foot traffic. Pads will also extend the life of the carpet, protect the subfloor, and increase the comfort of the office workers.
- The pendant light fixtures are LED. The switches that control these light fixtures have paint on them and should be replaced with occupancy sensors and/or set on timers.
- Built-in millwork near the double doors that lead to the stair landing 102 needs to be repainted in approximate area of 26 SF.
- Radiators need to be repainted.
- Cracked wooden window sill need to be replaced and repainted. They are approximately 18" x 48"
- The window casings need to be repainted.
- Approximately 50 SF of the walls need to be skimmed coated and repainted.
- The two pocket doors between rooms 104 and 105 need to be repaired and repainted. New hardware pulls should be installed.

CLERK AND REGISTRAR'S OFFICE 105

- Patch and paint at 6 LF crack in wall.
- The carpet has wrinkles and will need to be stretched or replaced. It does not appear that the existing carpet was installed over a pad. Carpet padding will absorb impacts of furniture and foot traffic. Pads will also extend the life of the carpet, protect the subfloor, and increase the comfort of the office workers.
- Patch and paint 4 SF of the ceiling.
- Repair and repaint 4 LF of wood crown molding.
- The pendant light fixtures are LED. The switches that control these light fixtures have paint on them and should be replaced with occupancy sensors and/or set on timers.
- Patch wood casing and door to Stair Landing 102 and repaint.

CLOSET UNDER STAIR 106

This room is used primarily to store building maintenance items. It is a minor space that is not fully finished. It would be a low priority to install a finished floor and to paint the walls in this room.

TOILET 107

This existing toilet is narrow and aligns with the width of the stair traveling above it. The finishes are currently in good condition.

- Patch ceiling crack near the water closet.
- Replace toilet paper roll holder with a more durable commercial grade accessory. The existing is a plastic accessory that is used for residences.
- Add a LED light in the water closet area. This part of the room is dark.
- The switches that control the light fixtures have paint on them and should be replaced with occupancy sensors.
- The switch that controls the exhaust fan has paint on it and should be replaced with a timer control.
- Repaint the door.

TOILET 108

This toilet is intended to be used as a handicapped accessible toilet. But, it does not have the minimum required depth dimension of 56" measured perpendicular from the rear wall, behind the water closet, to the radiator opposite from the water closet (ICC A117.1 604.1). There is an 18" vertical grab bar missing from the side wall (ICC A117.1 604.5.1) that cannot be installed because that side wall is a window.

- Replace vinyl wainscot.
- Repaint 4" wood base.
- Repaint walls without vinyl on it.
- Replace lighting with LED fixtures and control them with occupancy sensors.
- Replace the control of the exhaust fan with a timer control.
- Replace the existing blinds that are approximately 3'-0" wide x 7'-0" high.

CORRIDOR 109

- Repaint 10" high wood base (approximately 8 LF).
- Surface mounted LED to remain and be controlled with a new occupancy sensor.

CORRIDOR 110

- Repair and repaint cracks on southwest wall.
- Patch and repaint chip in wall near door to the elevator wall.
- Install emergency lighting.
- Replace lights with LED. The control for light fixtures should be replaced with occupancy sensors.

OFFICE 111

- Repair crack on wall
- Repair shutters so they will close flush into wall pockets.

ELEVATOR LOBBY 112 (LANDING 1)

- Exposed concrete floor has cracked that is approximately 6 LF. Patch and repair.

STAIRS 113

This area is generally in good condition.

SECOND FLOOR:

ELEVATOR LOBBY 201 (LANDING 2)

This area is generally in good condition.

CORRIDOR 202

- Install an exit sign with a directional arrow.
- Replace lights with LED. The switch that control the light fixtures should be replaced with occupancy sensors.
- The existing finished flooring is 9" x 9" tile that might be asbestos composite tile (ACT). If, in the future, this floor is to be removed and replaced, it is recommended that this tile be tested for asbestos. If it does contain asbestos, a trained professional who deals with hazardous materials should abate or encapsulate it per their recommendations while following all governmental regulations.

OFFICE 203

This room currently serves as the office of the Mayor.

- Replace lights with LED. The switch that control the light fixtures should be replaced with occupancy sensors.
- The existing finished flooring is 9" x 9" tile that might be asbestos composite tile (ACT). If, in the future, this floor is to be removed and replaced, it is recommended that this tile be tested for asbestos. If it does contain asbestos, a trained professional who deals with hazardous materials should abate or encapsulate it per their recommendations while following all governmental regulations.
- Patch vertical crack on walls, approximately 5 SF, and repaint all walls.
- Patch cracks on the ceiling, approximately 50 SF, and repaint the ceiling.
- Repaint the two window sills, approximately 12" deep x 48" wide.
- Window casings needs painting.

OFFICE 204

- Replace lights with LED. The switch that control the light fixtures should be replaced with occupancy sensors.
- Patch and paint walls and ceiling.
- Fan control is mounted on the wall at 4'-2" above the finished floor. This is 2" higher than allowed by the handicapped standards.
- Window casings needs painting.

STAIR LANDING 205

- Repair water damage on the walls and ceiling, then repaint, approximately 20 SF.
- Install missing 10" high painted wood base molding, approximately 3 LF.
- The existing finished flooring is 9" x 9" tile that might be asbestos composite tile (ACT). It is recommended that this tile be tested for asbestos. If it does contain asbestos, a trained professional who deals with hazardous materials should abate or encapsulate it per their recommendations while following all governmental regulations.
- Remove the existing globe light fixture that is not illuminating during site visit.
- The space has two pendant LED's that provide sufficient lighting for the room. The switch that control the light fixtures should be replaced with occupancy sensors.
- This room has two small closets with shelves that need to be painted. The doors to these closets need to be repaired so they will close securely without binding.

OFFICE 206

- The window over the window mounted air conditioner has paper files taped to the glass to block the sun from shining into the room. It is recommended to remove these files and install blinds over the window to control how much sunlight is allowed to enter the room through this window.
- Repair cracks on the walls, then repaint, approximately 20 SF.
- Small cracks throughout the ceiling needs to be patched. Repaint ceiling.
- The space has three pendant LED's that provide sufficient lighting for the room. The switch that control

the light fixtures should be replaced with occupancy sensors.

- A new Dutch door was built at the doorway that needs to be painted.
- Repaint the door case molding.
- The surface mounted electrical outlets are close to the floor and not mounted between 15" and 48" above the finished floor per handicapped requirements. Relocate outlets to comply.
- It appears that there is not enough convenience electrical outlets to serve all of the electronic equipment in this room. It is recommended to have at least one duplex every 12 LF along the walls at a minimum. Consideration to be taken as to which should be a designated circuit and how much space is available in the existing electrical panel to accommodate an increase of electrical outlets.

STAIR LANDING 207

- Patch and repaint walls and ceiling.
- Repaint exposed fascia below the floor at the stair landing.
- Light fixture to be LED and controls should be replaced with occupancy sensors.

CORRIDOR 208

- Clean and polish the vinyl composite floor finish.
- Light fixture to be LED and controls should be replaced with occupancy sensors.

JANITOR 209

- Repaint walls.
- Install 20 SF of plastic sheet at walls around the janitor's sink.
- Install an LED light that is controlled by an occupancy sensor.

WOMEN'S TOILET 210

- The ceramic floor tile is lifting up at the center of the room. This has loosen the tile from its mortar and grout. Repair and reinstall tile at areas of repair, approximately 30 SF.
- Reinstall missing insulation around the exposed piping under the lavatories.
- Replace existing light fixtures (1 sconce and 3 recessed ceiling lights) with LED and controls should be replaced with occupancy sensors.

MEN'S TOILET 211

- Replace existing light fixtures (1 sconce and 2 recessed ceiling lights) with LED and controls should be replaced with occupancy sensors.

ELEVATOR LOBBY 212 (LANDING 2R)

This area is generally in good condition.

THIRD FLOOR:

The third floor is not occupied. Except at the elevator landings 301 and 326, the entire third floor will need to be repaired and remodeled. The following comments do not pertain to the elevator landings 301 or 326.

- Remove the existing sheet flooring at the Stair Landing 310. Repair the subfloor where there might be water damage and where the existing sheet flooring is lifting.
- Install new finished flooring at all rooms that have exposed wooden subfloor. There is approximately 4 SF where the subfloor has been cut open and will need to be patched.
- Patch and paint all walls and ceilings. The plaster on wood lath should be repaired or laminated with new ceiling finish, such as painted gypsum board, at the ceiling of Stair Landing 310.
- Paint all doors, door frames, and window case moldings.
- The doors from Stair Landing 310 to rooms 302 and 305 are missing. The door between rooms 302 and 305 is missing. Doors to be installed at these areas unless the floor layout is revised.
- Repair water damaged walls and ceilings at rooms 305, 311 and 315, approximately a total of 50 SF.
- Install new LED light fixtures. Controls should have occupancy sensors.
- Install new electrical outlets.
- Install new communication outlets.
- Storage boxes and files will need to be cleared away from egress paths.
- Replace doors with wider doors to comply with accessibility standards.
- Provide heating and cooling systems to serve any new room layouts.
- Maintain the required fire extinguishers located on the basement floor level per code.
- Stairs to the Cupola needs code compliant handrails and spindles.
- The window at Stair Landing 310 has a desktop built into it at the window sill level. It is not in good condition and should be removed and rebuilt or replaced with a window sill.

CUPOLA:

The space within the cupola is not finished. It serves as an access to the roof and to house communication antennas.

- Repaint wood paneling walls.
- The ceiling has water stains. Repair any leaks and paint the wood paneling on the ceiling.
- Replace the existing light sconce with LED light fixtures.
- Wires are loose on the floor and could be a tripping hazard. They should be bundled and stored away from the walking surfaces.

EXTERIOR:**EXTERIOR FAÇADE**

The stone façade is in fair condition. There are some areas where the grout between the stone needs to be repointed. One area where the stone needs to be repointed is near the front entrance of the south façade.

There are significant cracks along the concrete base and cast stone band at the exterior wall around the elevator

hoist way. There are traces of efflorescence that has a white powder appearance on the concrete base. There are green stains on the cast stone band. This area needs to be cleaned and properly flashed to prevent water from passing behind the exterior finished materials. The cracks will also need to be patched. Refer to the structural engineer's notes.

The cast stone lintels and sills at the windows are stained with soil and will need to be cleaned and sealed.

The cast stone band at the 1st floor of the original building has open joints that will need to be repointed. This is particularly true at the bay window of the west façade and near the front entrance of the south façade.

EXTERIOR STAIRS

Front Stairs at the South Side: The stone under the east side of the stairs is missing some stone and will need to be patched. The concrete walking surfaces, including the treads and risers, is a separate pour from the concrete stringer which also has treads and risers. The concrete at the walking surface has settled lower than the stringers with open joints between the walking surfaces and the stringer. The handrails along the stairs and the guardrails at the landing are aluminum pipe. This occurs at both sides of the stairs and landing. The opening below the handrails and guardrails do not comply with the code (IBC NJ 1015.4). The handrails do not extend past the bottom riser a minimum of a tread depth (IBC NJ 1014.6). The height of the guardrails at the landing needs to be code compliant (IBC NJ 1015.3). The front door threshold is higher than the landing and has deteriorated. It is recommended that the stairs, handrails, and guardrails be replaced to be level and code compliant.

Stairs to the Basement at the West Side: the concrete risers and treads appear to be in fairly good condition. The top tread has an open joint that will need to be filled. The bottom landing needs to be cleaned of soil and debris. No drain was observed on the bottom landing. If one exist under the debris, it needs to be cleaned. Otherwise, the installation of a new drain at the bottom landing is recommended. The handrail and guardrails should be cleaned of rust and repainted. The handrail should be at both sides of the stairs and not at only one side as it exists today. The handrail should be at both sides The guardrail is not code compliant. But, the construction official might permit them to remain if not altered per the Rehab Code.

Back Stairs at the North Side: The stair, its landings, handrails, and guardrails are constructed of deteriorated wood and should be replaced.

Stairs to the Basement at the East Side: The stairs are concrete. There is vegetation growing between the joints of the stair treads and at the joint between the treads and risers that needs to be removed. All joints will need to be repointed. The bottom landing needs to be cleaned of vegetation, soil and debris. The existing drain will need to be cleaned. The concrete retaining wall around the lower landing is stained and cracking. This is probably due to hydrostatic pressure. The stains need to be cleaned and the cracks need to be repaired. Weeps holes can be installed at the concrete retaining wall to relieve the wall from the lateral loads of the hydrostatic pressures. Proper spacing of any new weep holes need to be considered so the structural integrity of the retaining wall is not compromised.

ROOF

The main roof is a modified bituminous, cap-sheet style membrane over board insulation. Most of the roofs have sufficient slope to drain with the exception of the one small section, near the elevator, that possibly has a clog in the downspout/rain-water-leader. Overall, the roofs appear to be in good condition. This roof should serve the building well with some minor immediate repairs. The repairs include blisters, open corner flashings and a clogged downspout. It is recommended to budget \$3,000 to perform the immediate repairs and allow \$1,500 per year for routine preventative repairs and housekeeping.

The roofing on the mansard roof and along the 3rd floor, except at the new elevator lobby, is slate. According to some records, it was replaced recently as mentioned above. Slate roofs can last 50 to 125 years depending upon the hardness of the slate and the quality of its installation. If maintained properly, this slate roof should last at least 40 more years.

The roof over the 3rd floor dormers appear to be lead and good condition.

The small lower roof over the northern entrance appears to be asphalt shingles that is flashed to the stone wall. It slopes away from the stone wall.

The roof penetrations and vertical transitions appear to be flashed correctly.

The brick chimney will need to be repointed in the next 5 to 10 years. The chimney cap is cracked and appears to have a metal liner installed within it. The mortar that connects the cap upon the brick chimney top is cracked and will need to be repaired sooner.

ROOF DRAINAGE

There is some ponding at the northern roof over part of the elevator lobby. It appears to pond most near a roof scupper that should be cleaned out.

There are Yankee gutters around the roof edges above the 3rd floor mansard roof. Other than the need for them to be regularly cleaned from leaves and other debris, they appear to be in fairly good condition.

Many of the downspouts from the roof gutters are not aligned with the downspout boot at the ground level. They need to be repaired and realigned. Some of these existing boots are filled with soil and will need to be cleaned out before connecting them to the downspouts. Other downspouts need a splash block where they spill onto the ground to avoid erosion near the foundation.

EXISTING CONDITION PHOTOS CITY HALL



Photo 1
Front facade along
York Street



Photo 2
West facade along N.
Union Street

Photo 3
Back facade



Photo 4
East facade





Photo 5
The concrete stairs to the front entrance is deteriorating. The stone support below the stairs is also in need of repair. The stairs and landing are missing 42" high guardrails per IBC 1015.2.



Photo 6
Front sidewalk is uneven and can be a tripping hazard

Photo 7
The ironwork along the sidewalk needs to be cleaned and repainted.



Photo 8
Cracks through the masonry wall, near the front entrance, needs to be repaired



Photo 9
Repoint masonry wall where stone is loose.





Photo 10
The boot connected to the rain leader has been damaged and needs to be replaced.



Photo 11
The drain line needs to be cleaned and the leader connected with a boot

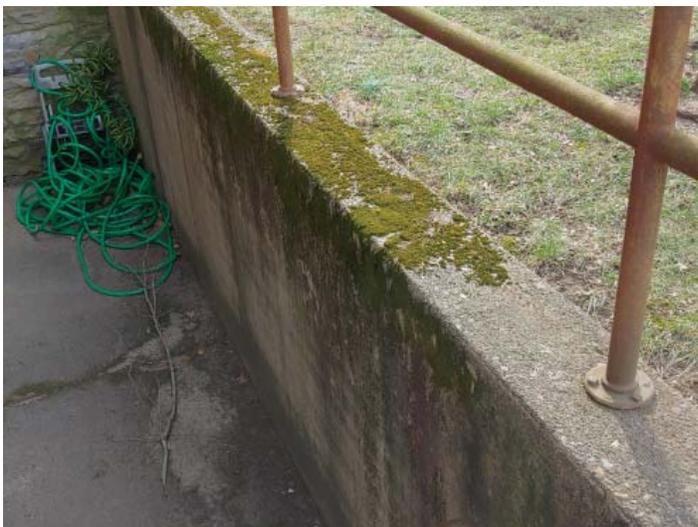


Photo 12
Remove organic growth from the concrete retaining wall and lower exterior stair landing. Repaint guardrail and handrails. Install a reliable device to manage the water hose.

Photo 13
The wooden stairs to the back of the building needs to be replaced or repaired. It appears to be separating from the building. A handrail is missing along the building side of the stairs.

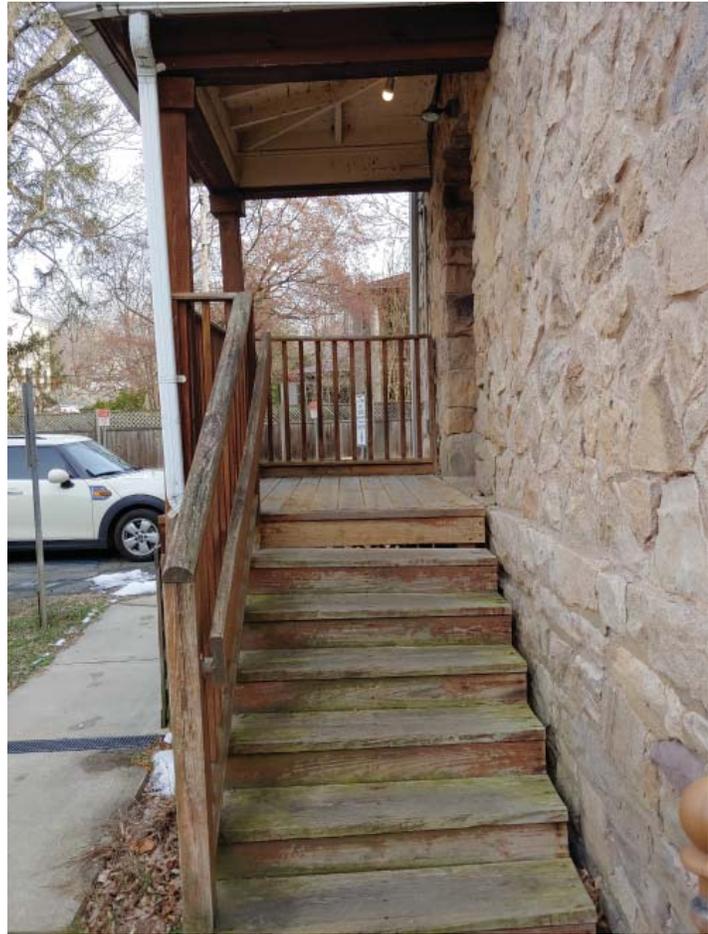


Photo 14
Clean ceiling over the wooden stair landing, remove bee hive, and repaint ceiling.

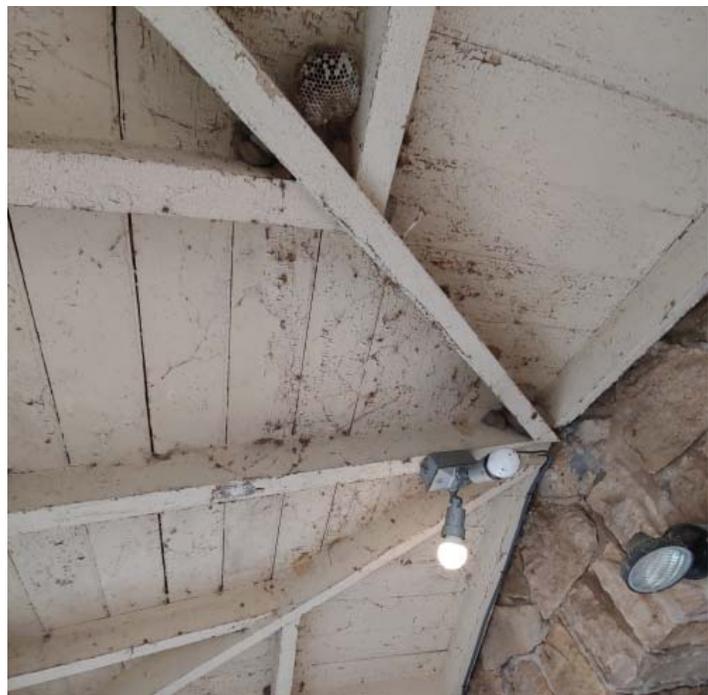




Photo 15
Damaged wall outside of the elevator shaft. The joints in the sidewalk is also expanding allowing vegetation to grow within the joints. There is mold growing on the base of the wall and on the precast concrete



Photo 16
Vegetation growing in an exterior stair, along the east facade, needs to be cleared away. The drainage at the bottom landing of the stairs needs to be cleaned and repaired.



Photo 17
Repair concrete retaining wall near exterior stairs along the east facade.

Photo 18

Photo in basement showing a beam with cracked drywall to be repaired, gypsum board missing along the bottom part of the stud wall, and surface mounted fluorescent light fixture that should be replaced with an LED light fixtures (typical throughout the building). More order of how the items are stored would benefit in having a more efficiently used space for storage.



Photo 19

Basement showing the stone foundation wall without insulation.



Photo 20

Basement showing how the floor and wall finishes need to be replaced.





Photo 21
The first floor vestibule needs restoration to the ceramic tile floor.



Photo 22
The light fixture in the first floor vestibule should be replaced with an LED light fixture that is controlled by a sensor. Aesthetically, the wires should be concealed and there should not be a large gap at the ceiling around the light fixture.



Photo 23
While the lights in the first floor conference room are LED fixtures, the light controls should be replaced with sensors.

Photo 24
Crown molding in the first floor conference room needs to be patched, repaired, and repainted.



Photo 25
Some of the built-in shutters will not fully close into the wall.



Photo 26
The annual fire door drop test record shows that the last test was over 3 years since the last test.

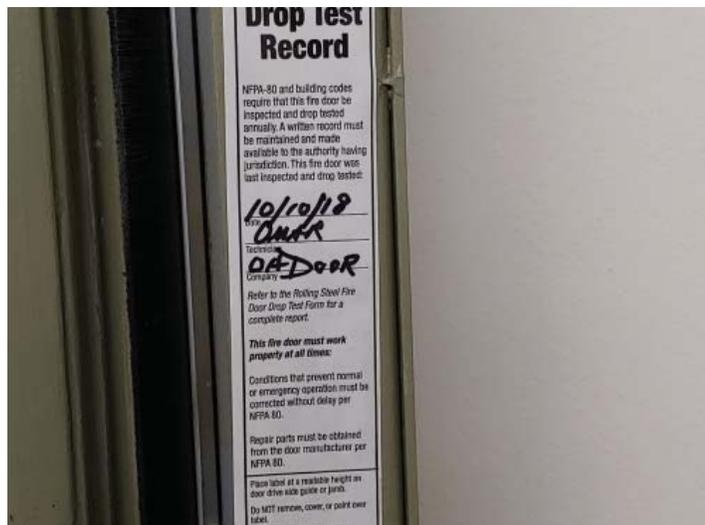




Photo 27
Water closet under the stairs at the first floor is not handicapped accessible per IBC NJ 1109.



Photo 28
Water closet at the first floor is not handicapped compliant with the vertical grab bar missing at the side wall and radiator within the 56" dimension required to the back wall of the water closet per IBC NJ 1109 and ICC A1171-2009: 604.3.2 and 604.5.



Photo 29
Repair water leak and ceiling tile in the clerk's office on the first floor.

Photo 30
Repair crack in wall in Office 111.



Photo 31
Repair and finish wall
between the Stair Landing
205 and Office 206.



Photo 32
Photo in Office 206. Provide
a wire management system
and install electrical outlets
to handicapped accessible
heights per ICC A1171-2009:
308.21.





Photo 33
Reinstall pipe
insulation in Toilet 210.



Photo 34
Photo at the second floor.
Repair and repaint at
cracked underside of the
winding stairs.



Photo 35
Photo taken at Stair Landing
320. Repair the stair tread
finishes and add floor
finishes to the landing.

Photo 36
Photo taken in Storage 322 but similar in Storage Rooms 302, 305 and 311. Subfloor exposed and floor finish is missing.



Photo 37
Photo taken in Storage 305. Walls to be repaired. Lighting to be replaced with LED fixtures with control sensors. Water leaks and ceiling to be repaired. Finishes on the ceiling, walls, and floor are missing.



Photo 38
Photo taken in Storage 315. The existing floor structure might not be designed to support heavy loads from shelves with boxes of paper. Refer to structural engineer's report.





Photo 39
The building needs to be waterproof and the water damage to the third floor ceiling at Hall 310 needs to be repaired.



Photo 40
Photo is towards the cupola from the outside roof. The sill and trim needs to be repaired and repainted. The door needs to be watertight. The path to the door at the cupola interior needs to be cleared. The roof appears to slope towards the cupola instead to the perimeter drains that will continue to cause the potential of water infiltration around the cupola. The roof should slope away from the cupola.

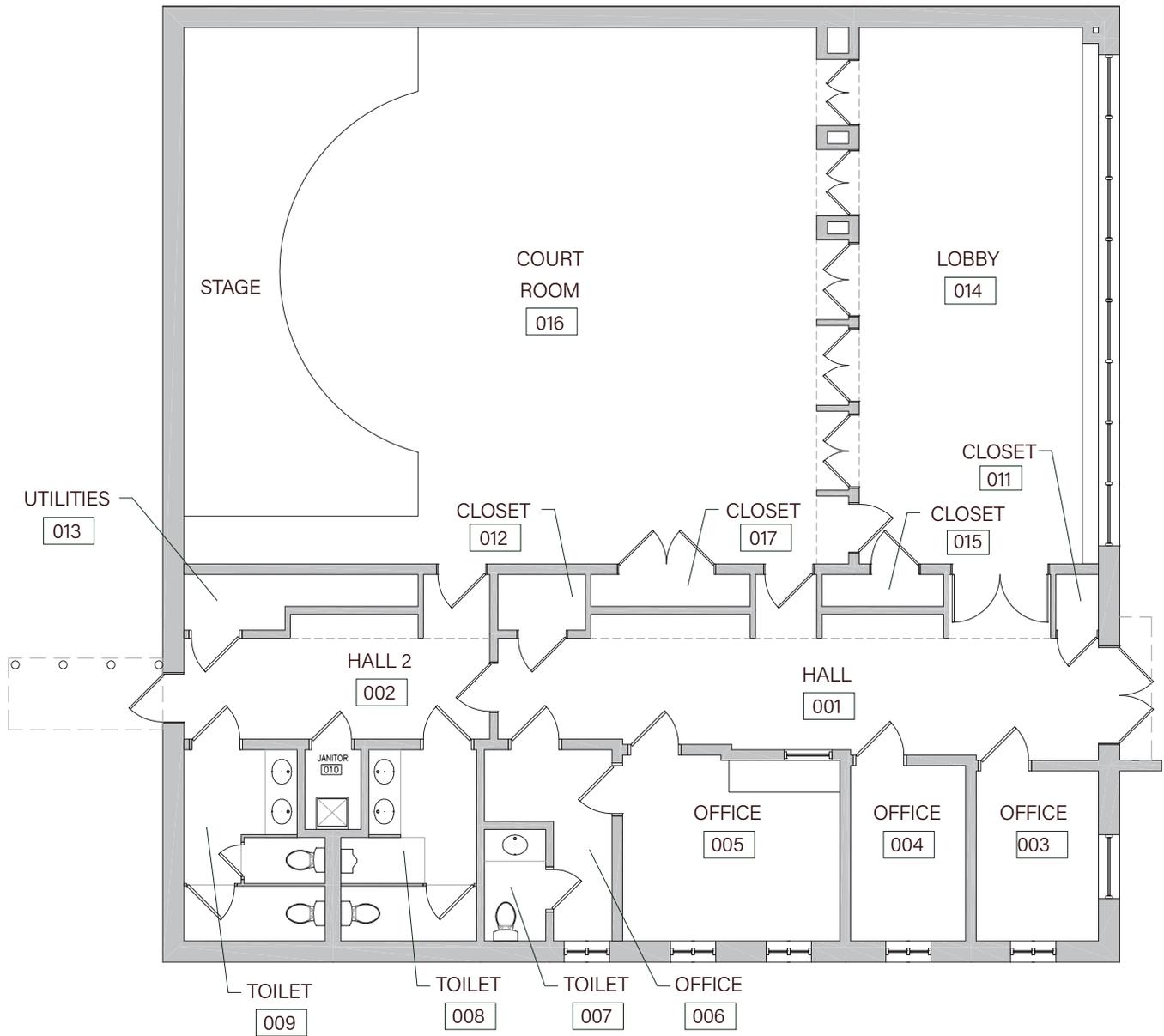


Photo 41
Frozen ponding water in on the roof is evidence that the roof drainage system needs to be cleaned.

**PHILLIP L. PITTORE
JUSTICE CENTER**
25 S. Union Street
Lambertville, NJ 08530



**PHILLIP L. PITTORE
JUSTICE CENTER**
25 S. Union Street
Lambertville, NJ 08530



FLOOR PLAN



JUSTICE CENTER

Approximate Gross Area = 3,600 SF

Number of Floors = 1

Construction Type: Metal roof structure on masonry load bearing walls.

HISTORICAL BACKGROUND

The building originally opened as an ACME grocery store in 1951. It was the oldest ACME in the country when it closed in January of 1997. In 1998, the building was renovated to be Raspino's supermarket. It closed after being open only one year.

In December 2001, the city announced that they plan to buy the building.

In order to stabilize the bank of the Swan Creek stream that is adjacent to the property, over half of the existing building was demolished.

The city opened the building under the current name, Phillip L. Pittore Justice Center, in August 2004 after spending \$1.2 million.

Phillip L. Pittore was a City Commissioner, Mayor, Director of Public Affairs and Public Safety, Director of Revenue and Finance and Treasurer, a shoe store owner and had a large impact upon the city.

The current building is also used by the ACME Screening Room to exhibit film documentaries, to host guest speakers, and conduct post-film discussion programs.

In 2021, Hurricane Ida flooded the building. All of the floor finishes, much of the gypsum board on the walls (at least the bottom 36" portions from the floor), wall bases, and the built-in millwork in the court room were replaced.

RECOMMENDATIONS

General Comments:

At the time of the site visit, it appeared that the new finishes have not been cleaned thoroughly. Ceiling tile has been soiled from the unfiltered air blowing past them near air grilles. Some of the ceiling tile will need to be replaced. Air grilles and light fixtures will need to be cleaned.

Most of the interior light fixtures appear to be LED light fixtures. The light controls are predominately toggle switches. The switches should be replaced with motion sensors to be more energy efficient.

The exit signs and emergency lights are in good condition.

The doors and door hardware are in good condition.

INTERIOR SPACES:

HALL 001

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The 11'-6" high ceiling has acrylic panels that need to be cleaned.
- The lighting is behind the acrylic panels. If not LED light fixtures, they should be replaced to be LED fixtures.
- A fire extinguisher is mounted on the wall that was serviced April 2021.
- Two wall air grilles need to be cleaned.
- Exit signs and emergency lights are in good condition.

HALL 002

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The 12'-2" high painted GWB ceiling is in good condition.
- The drinking fountain needs to be repaired. It is also not handicapped accessible because its leading edges that are more than 27" above the finished floor protrudes more than 4" horizontally into the circulation path.

OFFICE 003

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The 9'-9" high acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition except approximately 40 SF of area that has a water stain and soil from the air grille. This area will need to be replaced.

OFFICE 004

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The 9'-10" high acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition except approximately 10 SF of area that has a water stain. This area will need to be replaced.

OFFICE 005

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The 9'-10" high acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition except approximately 4 SF of area that has a water stain. This area will need to be replaced.
- The built-in millwork is in good condition.

OFFICE 006

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The 9'-9" high acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition except approximately 8 SF of area that has a water stain. This area will need to be replaced.

TOILET 007

- The walls are painted GWB and a ceramic tile wainscot. The walls are in good condition.
- The floor is ceramic tile and in good condition.
- The room is not handicapped accessible. Grab bars/dimensional clearances required by code do not exist.
- The 8'-0" high acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition.
- The lighting is a combo fixture with LED light and exhaust fan. The grille on the fan needs to be cleaned.

TOILET 008

- The walls are painted GWB and a ceramic tile wainscot. The walls are in good condition.
- The floor is ceramic tile and in good condition.
- The 9'-0" high painted GWB ceiling is in good condition. It needs to be repainted where there are smudges near the air grilles.
- The air grilles in the ceiling need to be cleaned.
- One of the light fixtures is not illuminating. It should be repaired or replaced with an LED light fixture.
- The wall access panel near the water closet is rusted. It needs to be cleaned and repainted.
- Missing 18" vertical grab bar near the water closet.

TOILET 009

- The walls are painted GWB over a ceramic tile wainscot. The walls are in good condition.
- The floor is ceramic tile and in good condition.
- The 9'-0" high painted GWB ceiling is in good condition. It needs to be repainted where there are smudges near the air grilles.

- Missing 18" vertical grab bar near the water closet.
- Missing feminine napkin disposal.

JANITOR 010

- The walls are painted GWB and a ceramic tile wainscot. The walls are in good condition.
- The floor is ceramic tile and needs to be cleaned.
- The janitor sink needs to be cleaned.
- The framed platform above the janitor sink is missing GWB on the underside of the metal studs.
- There is a water heater on the framed platform above the janitor sink.
- There is unpainted GWB above the platform that should be painted.
- There is a fluorescent light sconce on the wall that is in good condition. It should be replaced with an LED light fixture.

CLOSET 011

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition

CLOSET 012

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The 7'-11" high acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition.

UTILITIES 013

- The gypsum wall board (GWB) walls are partially painted and are in good condition.
- The floor is exposed concrete and is in good condition.
- There is no ceiling in this room.

LOBBY 014

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The 11'-8" high acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition.
- The lighting are LED fixtures.

CLOSET 015

- The painted gypsum wall board (GWB) walls are in good condition.
- The 12" x 12" Vinyl Composite Tile (VCT) flooring is in good condition.
- The acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition.

COURT ROOM 016

- The painted gypsum wall board (GWB) walls are in good condition.
- The new wall to wall carpet is in good condition.
- The 11'-9-1/2" high acoustic composite tile (ACT) ceiling that is in a 24" x 24" grid is in good condition.
- The new millwork is in good condition.

EXTERIOR:

FRONT FAÇADE (PLAN EAST)

- The plywood of the soffit over the front entrance needs to be repainted.
- The wall sconces along the front façade need to be cleaned.
- The front façade is missing a metal cover over the waterproofing membrane. This is occurring near the southeast corner.
- The rod supporting the front entrance canopy needs to be repainted.
- It is expected that the glass and glass frame of the storefront is not designed to withstand the horizontal force of water if the water level rises to the height of the glass.

SIDE FAÇADE (PLAN SOUTH)

- The brick needs to be repointed in approximately 10 SF of area.
- Insect nest needs to be removed.
- Two bollards near the gas meter needs to be painted.
- Roof leader needs a splash block.
- The exterior insulation finishing system (EIFS) has been damaged at the southwest area and needs to be repaired.

BACK FAÇADE (PLAN WEST)

- The exterior insulation finishing system (EIFS) on the wall needs to be cleaned and painted.
- The metal columns supporting the canopy to the back door needs to be painted.
- The wood bench under the canopy needs to be sanded and refinished.
- The stone cap over the CMU retaining wall that runs perpendicular from the building needs to be

repointed. This wall is approximately 4'-0" high and 53'-6" long. This CMU wall needs to be repainted.

- The corrugated metal roof over the canopy is rusting and will need to be cleaned, repaired and sealed.
- Repair the flashing between the corrugated metal roof and the exterior wall of the building.

SIDE FAÇADE (PLAN NORTH)

- There are two areas (approximately 8 SF total) where the brick wall has openings that need to be patched and closed watertight.

ROOF

- The main roof is a 60-mil, white, TPO (thermoplastic-polyolefin) membrane over board insulation on a structural deck. The roof appears to be fairly new and in good condition. It may still be under warranty.
- Clean the debris from the rooftop including cinder blocks.
- Install splash block on slip sheets where water spills out onto the roof from the HVAC units.
- Wire brush, prime and aluminum coat rusted metal surface including HVAC curb adapters, exhaust fan and front canopy metal roof.
- Repair roof leak that has stained the ceiling at the southeast area of the building (under the ACME sign).
- Repaint the metal flashing over the ACME sign.

EXISTING CONDITION PHOTOS JUSTICE CENTER

Photo 1
East Facade at the
front entrance along S.
Union Street



Photo 2
South facade along
parking lot





Photo 3
West facade at back
entrance of building



Photo 4
Trim missing over
waterproofing at front
(east) facade

Photo 5
Plywood ceiling of the
front canopy needs to
be painted



Photo 6
Rod supporting the
front entrance canopy
needs to be painted

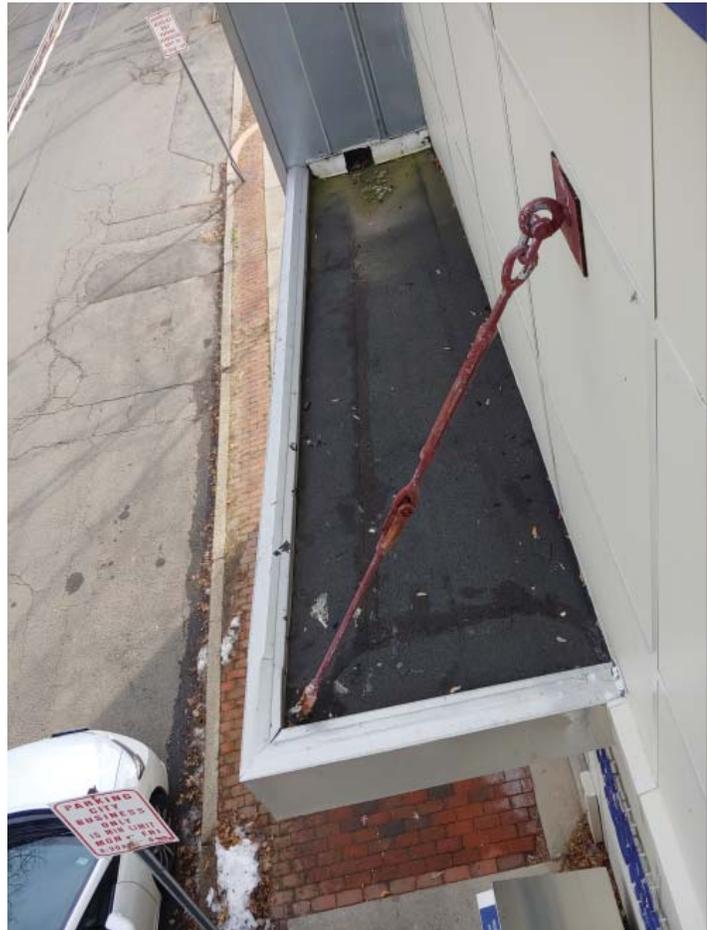




Photo 7
Patch masonry opening
on side (north) facade



Photo 8
Install splash block under rain
leader and attach to building with
weather resistant metal brackets



Photo 9
Clean and repoint
masonry wall along
sidewalk.

Photo 10
Remove rust and protect
corrugated metal canopy
from future rust at back
(west) facade



Photo 11
Repair flashing between the
corrugated metal canopy and
EIFS exterior building wall at
back (west) facade



Photo 12
Clean roof





Photo 13
Clean roof, remove
concrete masonry unit,
repaint pipe located
upon the roof



Photo 14
Wall and ceiling air grilles
need to be cleaned
throughout the building



Photo 15
Ceiling air grilles need to
be cleaned throughout the
building

Photo 16
Light fixtures should be replaced with LED light fixtures. In the meantime, the existing fixtures should be cleaned. This light fixture has trapped insects behind its lens.



Photo 17
Repair roof leak and water damaged ceiling tile



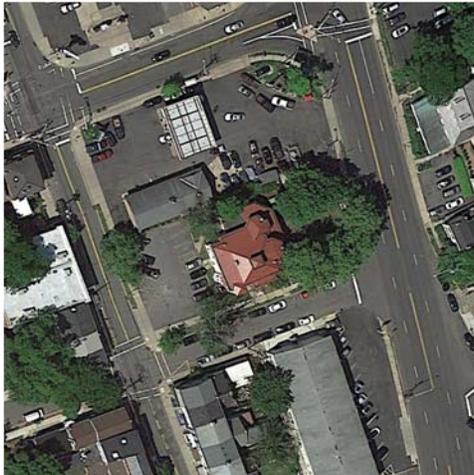
Photo 18
Janitor's mop service sink needs to be cleaned



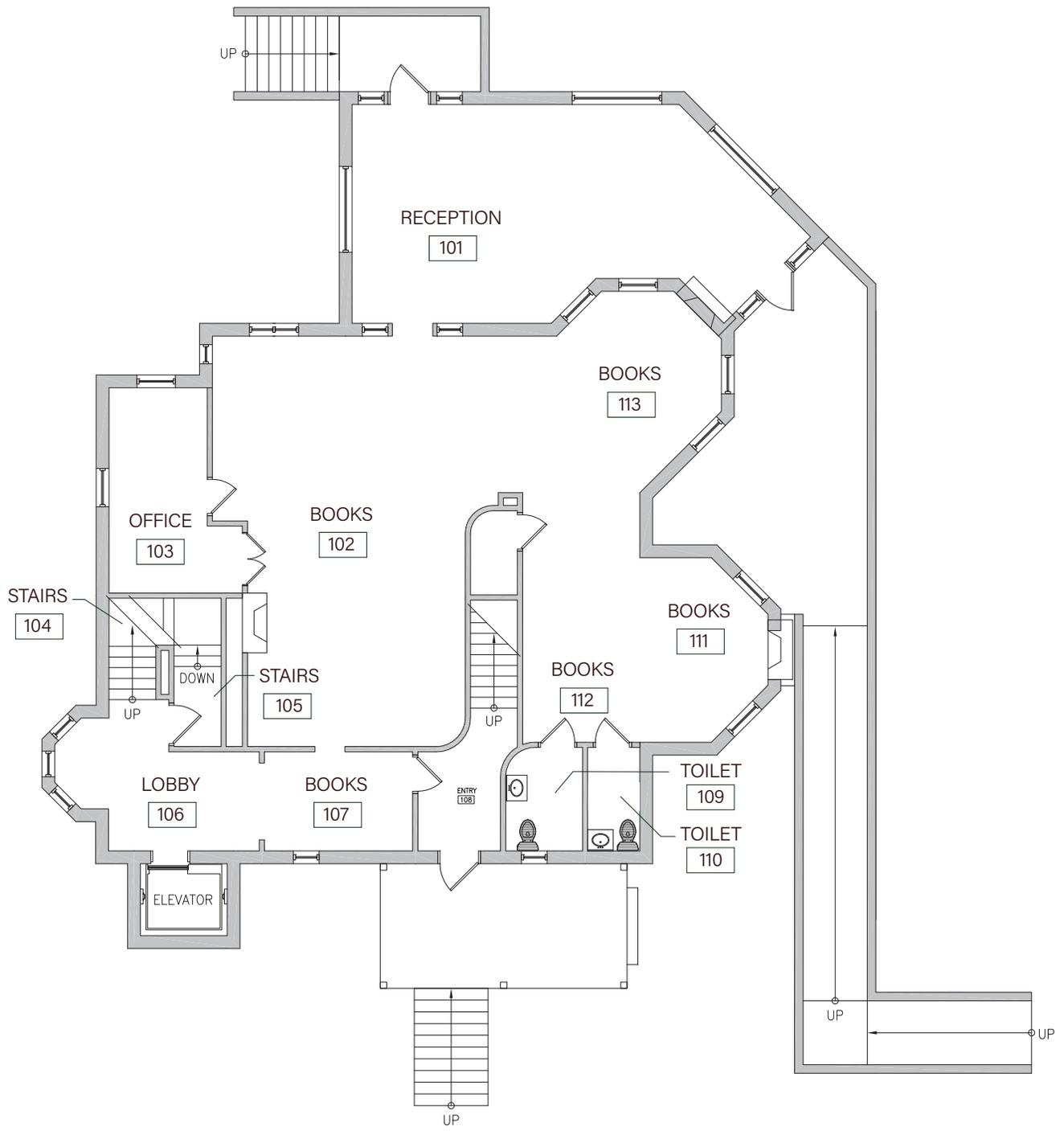


Photo 19
Replace damaged door hardware. This door stop is missing the rubber insert and the finish of the stainless steel casing is water damaged

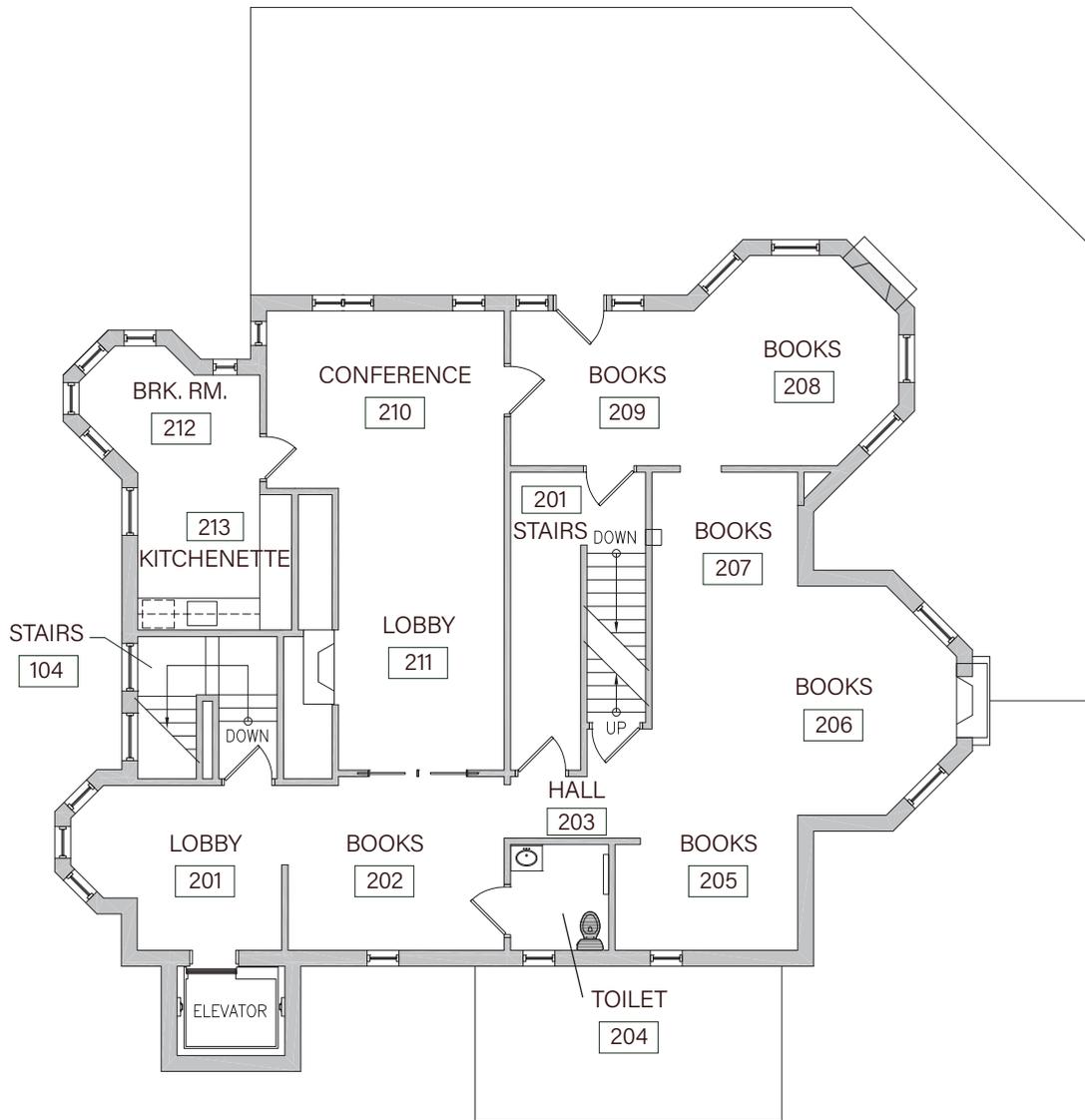
PUBLIC LIBRARY
6 Lilly Street
Lambertville, NJ 08530



PUBLIC LIBRARY
6 Lilly Street
Lambertville, NJ 08530



FIRST FLOOR PLAN



SECOND FLOOR PLAN



PUBLIC LIBRARY

Approximate Gross Area = 4,876 SF plus a basement and attic with a cupola

Number of Floors = 2 plus a basement and attic with a cupola.

The floors comprises of:

Basement with an approximate gross area of 2,057 SF

First Floor with an approximate gross area of 2,708 SF

Second Floor with an approximate gross area of 2,168 SF

Construction Type: Wood Structure on wood load bearing walls.

HISTORICAL BACKGROUND

The library structure was once a mansion. It was built between 1812 and 1830 for Dr. John Lilly. Hence, the building is also known as the Lilly Mansion. The building once had a large parcel of land surrounding it. Throughout the years, the most of its surrounding land was subdivided and sold.

As found in the Library website (<https://lambertvillelibrary.org/about-us>) After the property passed to relatives of the original owner, the building has "served as the Moose Lodge, as apartments, and as the offices of the Hunterdon County Nutrition Project for the Elderly, until the City purchased the dilapidated building in 1980 and installed the library on the first floor in 1988.

A major restoration was completed in 1993, including an elevator and steel structural work to support books on the second floor, which had been unusable without heating or plumbing or even doorknobs."

RECOMMENDATIONS

General Comments:

- Private funding helps to maintain the interior spaces. It is in relatively good condition.
- City funding helps to maintain the exterior spaces. It is in disrepair.
- There are sufficient numbers of exit signs, emergency lighting, and fire extinguishers. All are located sufficiently as well.
- The door hardware should be lever handles instead of knobs to be handicapped accessible. Some doors have lever handles and other do not.
- The interior doors are predominately wood and in good condition.
- The painted ceiling in most of the areas is approximately 9'-0" high.
- The elevator is in good condition. The interior cab dimensions are 4'-3" deep x 5'-8" wide.
- Most rooms are in satisfactory condition. There are some rooms that have scuff marks on the walls that need to be repainted (particularly near the floor).

INTERIOR SPACES:

BASEMENT

- Approximately half of the basement is used for long term storage for the library. This is the area that was visited. All comments about the condition of the basement was based upon the view of this area.
- The other half of the basement is a private residential apartment that was not viewed during the site visits.
- All surfaces need to be cleaned.
- The walls are masonry and stone. There was no evidence of water infiltration during the site visit.
- Install insulation between floor joints above.

FIRST FLOOR

- The walls are painted gypsum wall board (GWB) or plaster and in good condition.
- The finished floors are wall to wall carpet. There are some stains in some areas that will need to be cleaned.
- The ceiling in the Reception 001 is painted beaded board and is in satisfactory condition.
- The ceiling in the other parts of the first floor is painted GWB or plaster and in good condition.
- An arch over the passage between Books 011 and 012 is cracked and will need repair.
- The lighting is predominately fluorescent and should be replaced with LED light fixtures.
- The walls in Toilets 109 and 110 have painted GWB over a ceramic wainscot. All appear to be in good condition.
- The Toilet 009 is not fully handicapped compliant. A horizontal grab bar behind the water closet and a vertical grab bar beside the water closet is missing. The lavatory is not mounted at the required handicapped height for accessibility. The top of the lavatory should be 34" above the finished floor. The bottom of the lavatory should be clear from furniture and 32-1/2" above the finished floor. The faucet handle should be handicapped compliant.
- The Toilet 010 is not fully handicapped compliant. It is missing similar items as does the Toilet 009. In addition, it does not have the dimensional clearances between the plumbing fixtures and adjacent items.
- The ceramic tile floor in the Toilets 109 and 110 are in good condition.

STAIRS 104 (UP TO THE SECOND FLOOR)

- The walls are painted gypsum wall board (GWB) or plaster and in good condition.
- The finished floors are wall to wall carpet and in good condition.
- The handrails are missing along the outside walls of the stairs.
- The handrails that are installed are not continuous.
- The wall sconce is fluorescent and should be LED lighting fixtures.

SECOND FLOOR

- The walls are painted gypsum wall board (GWB) or plaster and in good condition.
- The finished floors are wall to wall carpet. There are some stains in some areas that will need to be cleaned.
- The ceiling in the other parts of the first floor is painted GWB or plaster. There are some water damage needs to be repaired in Lobby 201.
- Toilet 204 is not fully handicapped accessible. A vertical grab bar beside the water closet is missing. This room has a sheet finished flooring that will be easy to keep clean.
- The Break Room 212 and Kitchenette 213 has vinyl composite tile flooring that is in good condition..

STAIRS 201 (UP TO ATTIC/CUPOLA)

- The wooden stairs need to be repainted.
- Repair, patch, and paint missing plaster near light switch.
- Replace lighting with LED fixtures
- Restore the weather deteriorated wood framed windows at the Cupola.
- Replace the glass in the windows of the Cupola with insulated glass.
- Clean bird droppings and other debris from the Cupola area.
- Install seals around the operable windows at the Cupola.
- The glass needs to be reinstalled and the wood frame needs to be stripped and repainted in some areas of the Cupola.
- Replace damage insulation in the attic.

EXTERIOR

General Comments:

- It is very possible that the existing paint on the outside surfaces (both brick, precast stone, metal and wood) contains lead. If so, someone who is properly certified to work with hazardous materials, like lead, needs to be involved while updating the exterior finished surfaces.
- All exterior surfaces that have been painted is in need of repainting.
- The windows are not insulated. Storm windows or fully replaced windows would help at saving energy.
- The brick needs to be repointed.
- Remove vegetation growing onto the building.

FRONT FACADE (PLAN NORTH)

- The stairs that lead up to the front entrance of the first floor is in disrepair.
 - o The treads and risers are pour in place concrete. It is in fair condition.
 - o The wooden stringer supports the end newel posts, balusters and handrail. This entire unit is

- o separating from the concrete stairs.
- o Plants are growing in the gap between this unit and the stairs and needs to be removed.
- o The stair to the front entrance needs to be rebuilt and repainted.
- o There is a large joint between the concrete sidewalk and the concrete stairs that needs to have plants removed and then filled with joint filler.
- o Replace any rotted wood.
- o Clean mold from the stone plinths below the balusters.
- o Repair or replace the wood guardrail.
- o Repair the concrete stair landing that is cracking.
- o Repair the concrete base of the landing guardrail. There are cracks and mold that needs to be repaired and removed.
- The beaded board soffit has water damage. Approximately 30 SF needs to be patched and painted.
- The fascia needs to be repainted.
- The columns along the old porch needs to be repainted.
- The light fixtures should be replaced with LED light fixtures.
- Repaint the brick chimney.

SIDE FACADE (PLAN EAST)

- All wall and ceiling surfaces need to be repainted.
- Repaint the brick chimneys.
- Clean stains on wall under metal roof porch. Clean roof drains to prevent overflow onto brick wall.
- Install splash blocks under rain leaders.
- In some areas, the leader spills over underground drain conduit. Clean conduit and reconnect the leaders with a boot at the connection.
- Repair, patch and paint deteriorated plaster beside the handicapped ramp.
- Fill joints in concrete along the handicapped ramp.
- Replace the deteriorated plywood over the hatch under the back porch.
- Repair the parging over the stone foundation wall.

BACK FACADE (PLAN SOUTH)

- The back porch has approximately 30 SF deteriorated wood planks that need to be replaced.
- Repair and replace deteriorated structural support of the back porch wood planks.
- The back porch has a wood guardrail and balusters that are deteriorated and needs to be replaced.
- Repaint the back porch ceiling which is the wooden support of its roof.
- Repaint the door at the back porch.
- Paint the metal handrails along the stairs up to the back porch.
- Replace the sidewalks along the street, to the basement, and to the stairs of the back porch.
- Paint the plywood panel under the back porch.

- Eliminate the one step that leads to the basement from the sidewalk as it can be a tripping hazard.

SIDE FACADE (PLAN WEST)

- Repair the erosion under the foundation at the northwest area (under the turret).
- Repair crack in brick near the turret.
- Repair the leader that is not connected well between the metal and PVC leaders.
- Paint the door at the basement level.
- Replace lighting with LED light fixtures.
- Some of the wood window sills do not have any paint upon them. As all surfaces are needing to be repainted, surfaces with no paint will deteriorate in a much more rapid pace.
- The brick near the stairs to the front entrance needs to be repointed.
- The wood columns at the front entrance needs to be repaired where they are splitting apart and repainted.

ROOF

- If maintained and kept clean, the standing seam metal roof should last for a very long time.
- The rubber roof over the old porches appear to be in fair condition. If there are any known leaks, an infrared scan can be used to determine the extent of the wet insulation.

EXISTING CONDITION PHOTOS PUBLIC LIBRARY

Photo 1
Side (West) Facade
along S. Main Street
parking lot. See notes
in the photos below of
items on the west wall.



Photo 2
Partial front (North)
facade. See notes in the
photos below of items
on the north wall.





Photo 3
Side (East) facade. See notes in the photos below of items on the east wall.



Photo 4
Back (South) facade. All surfaces need to be repainted. The plywood hatch cover at the right side of the porch needs to be replaced. Some of the porch floor planks and guardrail need to be replaced. Repaint the stair handrails. Repoint stone foundation wall, parge and repaint. Repoint masonry wall and repaint.

Photo 5

Photo is towards the west façade. Repaint exterior wall, window frames and trim, door and door frame. Replace incandescent light with an LED light fixture. Repoint brick where joints are opening. Repair the erosion found at the left corner of this photo. Remove organic growth from the concrete pad near the door. Replace windows with insulated windows. Reroute the wiring so it is concealed from view and the outdoor elements.



Photo 6

Repoint and repaint brick. Re-parge over foundation and paint. Replace windows with insulated windows. Repaint window sill and trim.



Photo 7

Photo is towards the west façade and shows the window that needs to be replaced with an insulated window, trim to be painted, brick to be repointed and painted.





Photo 8
Repair erosion under the
corner of the building along
the west façade.



Photo 9
Repoint and repaint brick
on the west wall and near
the stairs to the front
entrance. Repaint the
columns above.



Photo 10
Repaint the columns near
the front entrance and
around to part of the east
façade.

Photo 11
Repair or replace stairs to main entrance at the north façade. Stairs need to be repainted. Repoint and repaint the brick shown beyond on the west façade. Remove all organic growth from the building.



Photo 12
The stringer is separating from the concrete stairs to the front entrance. Stairs to be rebuilt.

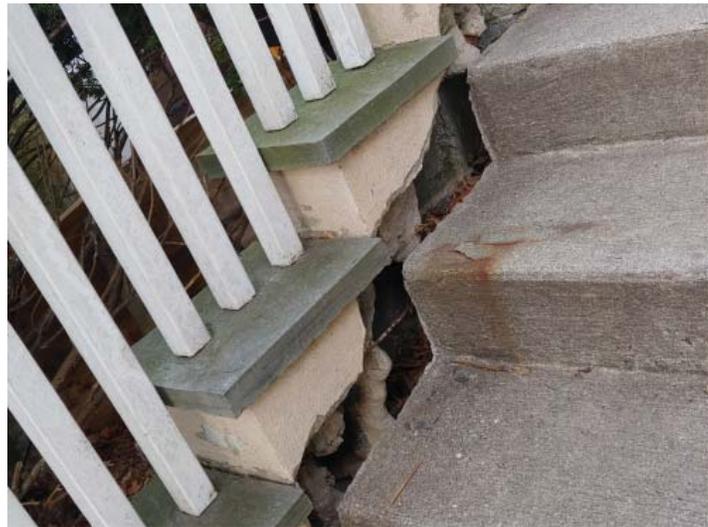


Photo 13
Repair or replace guardrail and posts. Remove the organic growth. Repair the cracking concrete landing.





Photo 14
Photo at the northeast corner of the building. Repair cracks on the columns and repaint. Repair wood soffit and repaint. Seal around the penetration of the leader at the soffit. Paint exterior surfaces.



Photo 15
Photo at the northeast corner of the building. Repoint brick and at open joints of the cast stone window sill. Remove organic growth on the building. Repaint the windows, brick, and grille.

Photo 16
Remove organic growth on the building. Repoint and repaint brick. Install splash blocks under the rain leaders.



Photo 17
Remove organic growth on the building. Repoint and repaint brick. Clean out underground drain pipe. Connect rain leader to the underground drain pipe with a boot covered over the joint.



Photo 18
Remove organic growth on the building. Repoint and repaint brick. Repaint guardrail, spindles, and columns.





Photo 19
Repair low wall cracks and repaint at the handicapped ramp at the southeast side of the building. Remove the dirt at the ramp and seal between the sidewalk and ramp without a rise or drop more than 1/2" to be handicapped accessible.



Photo 20
Repair the side walls of the handicapped ramp. Replace the sconce lights with LED. Fill open joints along the concrete ramp.



Photo 21
Remove organic growth on the building. Repoint and repaint brick. Repaint guardrail, spindles, and columns.

Photo 22

Sidewalk along the south side of the building is uneven and blocked by garbage cans. Build a bin for the garbage cans away from the sidewalk. Replace the sidewalk with a new sidewalk that is level and without uneven joints that can be a tripping hazard. See notes above about the restoration of the handicapped ramp partially shown in this photo.



Photo 23

Photo of the east side of the rear porch. Repoint stone foundation wall, parge and paint. Repoint and repaint brick. Replace the painted and weather deteriorated hatch cover next the porch. Patch over masonry foundation wall. Replace damaged porch floor and repaint. Repaint the support of the porch roof. Repaint porch ceiling.



Photo 24

Photo along the wall between the wall with the porch and handicapped ramp. Repoint and repaint brick.





Photo 25
Photo of the east side of the rear porch. Repoint stone foundation wall, parge and paint. Repoint and repaint brick. Replace the painted and weather deteriorated hatch cover next the porch. Patch over masonry foundation wall. Replace damaged porch floor and repaint. Repaint the support of the porch roof. Repaint porch ceiling. Seal where conduits pass through the foundation walls.



Photo 26
Photo of the back porch. Replace damaged guardrail, wooden planks at the porch, support of the porch floor, and guardrail. Paint all surfaces. Replace window with an insulated window.



Photo 27
Photo of the back porch. Replace damaged guardrail, wooden planks at the porch, support of the porch floor, and guardrail. Paint all surfaces.

Photo 28
Photo of the back porch.
Replace damaged guardrail,
wooden planks at the porch,
support of the porch floor, and
guardrail. Paint all surfaces.

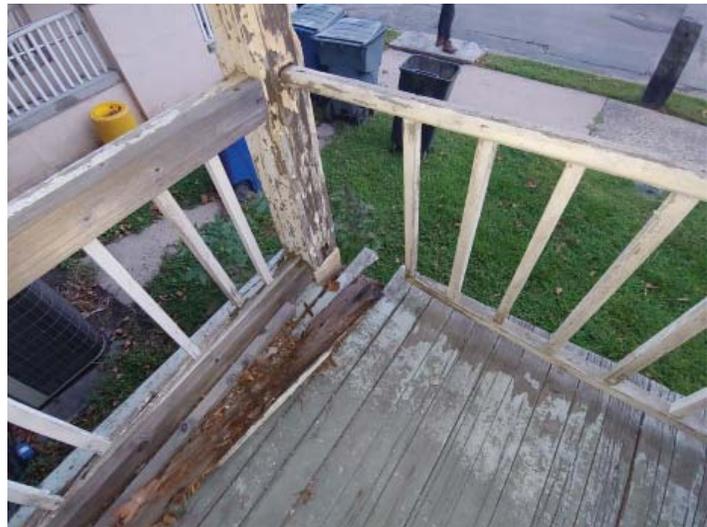


Photo 29
Photo of the back porch. Seal
the exposed unfinished wood
stair risers and treads to extend
the expected use of the existing
stairs. Repaint the stair handrails.
Repaint plywood under the porch.
Repair and repaint guardrail. If
the guardrail is to be replaced, it
will need to have balusters closer
than the existing balusters so a
4 inch diameter sphere cannot
pass between them. Replace the
deteriorated sidewalk up to the
stairs and down to the basement.



Photo 30
Repair and repaint the wood
planks at the back porch. Seal
or paint the wood stairs treads
and riser. Repaint handrails
and guardrails. This photo also
captures the large gaps in the
sidewalk that is not handicapped
accessible beyond. The sidewalk
needs to be replace along the
south side of the building.

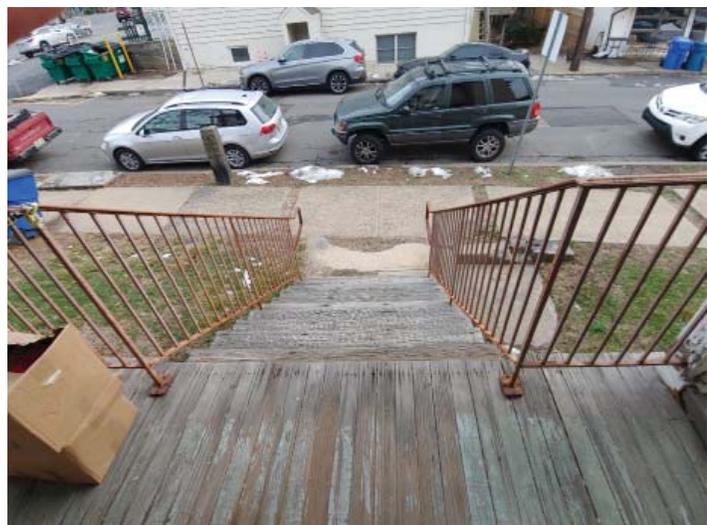




Photo 31
Replace concrete sidewalk.
Repoint brick. Replace
deteriorated stone cap
over low brick wall. See
comments to other photos of
the stairs to the back porch.



Photo 32
Photo towards the exterior entrance
to the basement residential
apartment and storage area. The
residential apartment was not
visited for the scope of this report.
Remove organic growth from the
building. Remove clutter from the
area under the building that leads
to the entrances to the residential
apartment and to the storage areas.
Replace the concrete sidewalk to the
basement. Install splash blocks under
the rail leaders. Replace windows.
Repaint brick.



Photo 33
Unfinished basement. Install
insulation in ceiling.

Photo 34
Unfinished basement.
Install insulation in ceiling.



Photo 35
Unfinished basement.
Patch opening and Install
insulation in ceiling. Replace
deteriorated conduits and
junction boxes.



Photo 36
Unfinished basement. Install
insulation in ceiling. Remove
debris and clean spaces.





Photo 37
Water closet at the first floor Toilet 110 is not handicapped compliant. It is missing the vertical grab bar at the side wall and horizontal grab bar at back wall. It is not dimensionally compliant for handicapped accessibility. Replace lights with LED light fixtures with sensor controls. Install toilet accessories to the handicapped accessible heights.



Photo 38
Water closet at the first floor Toilet 109 is not handicapped compliant. It is missing the vertical grab bar at the side wall and horizontal grab bar at back wall. Replace lights with LED light fixtures with sensor controls. Install toilet accessories to the handicapped accessible heights.

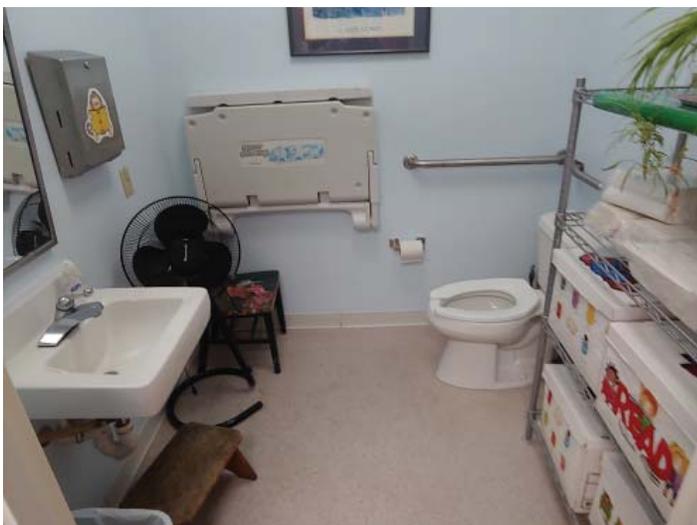


Photo 39
Water closet at the second floor Toilet 204 is not handicapped compliant with the vertical grab bar missing at the side wall and furniture within the 56" dimension required to the back wall of the water closet per IBC NJ 1109 and ICC A1171-2009: 604.3.2 and 604.5.

Photo 40
Repair the water leak and
water damaged ceiling.
Repaint at the second floor
Lobby 201.



Photo 41
Replace the lighting in
the elevator with LED
fixtures to be more energy
efficient and to have more
illumination.



Photo 42
The metal roof is in good
condition. If maintained and
if the drainage is kept clean,
the roof should serve the
building for a long time.





Photo 43
Clean roof and drainage paths of debris



Photo 44
Photo in the roof. The existing structure is probably not designed to support the load of file boxes of paper. Refer to the structural engineer's report. Replace damaged insulation. Replace light fixtures with LED light fixtures.



Photo 45
Photo in the roof. Replace damaged insulation. Replace light fixtures with LED light fixtures.

Photo 46
Photo in the cupula.
The wood is showing deterioration and will need to be repaired or replaced. Clean area from debris and bird waste. Replace glass with tempered insulated tempered glass.



Photo 47
Photo outside of the cupula. Repair or replace deteriorated wood and then paint. Glass is slipping away from its frame causing a major water infiltration problem. Replace glass with tempered insulated tempered glass.

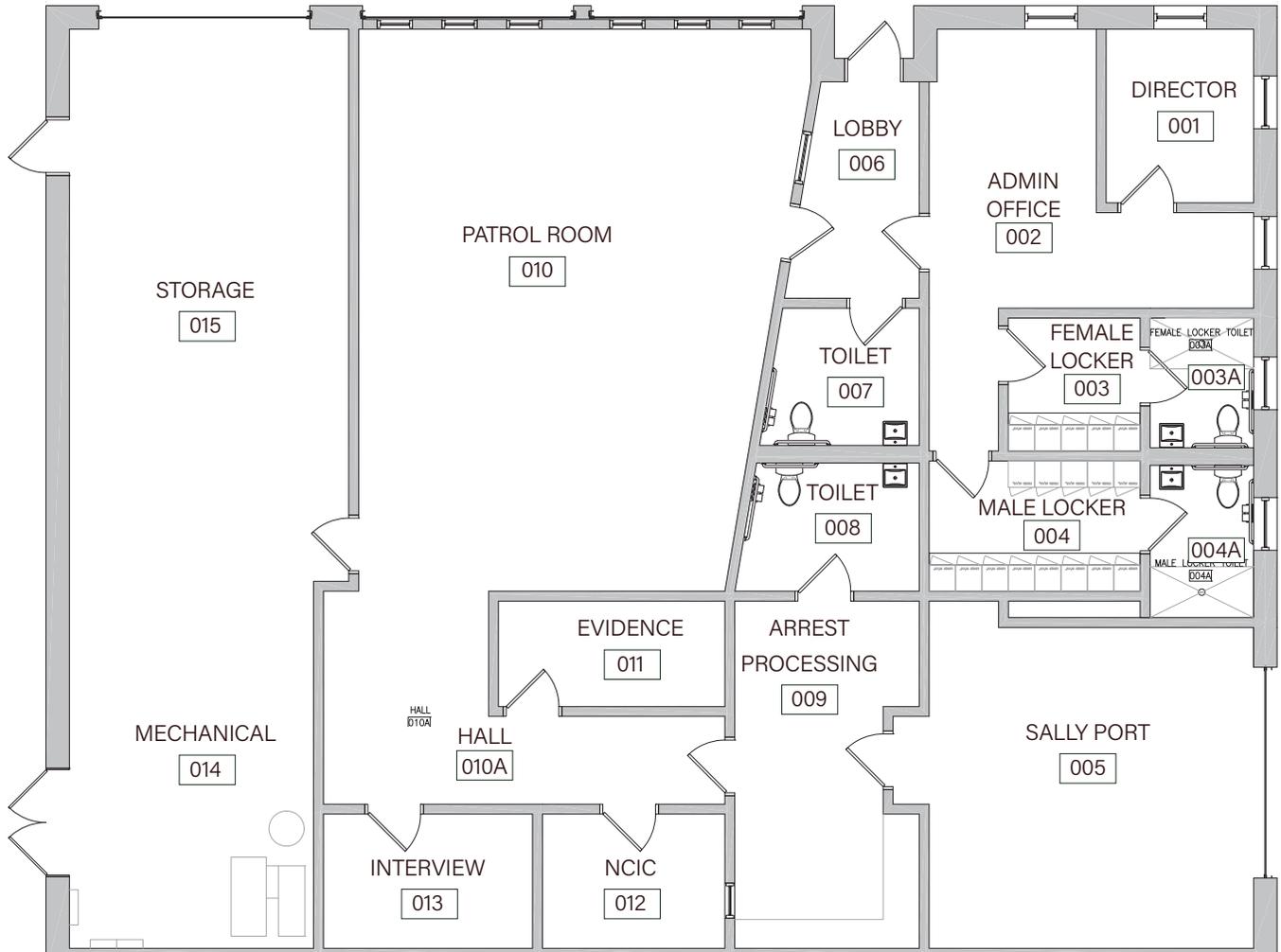


POLICE DEPARTMENT
349 North Main Street
Lambertville, NJ 08530



POLICE DEPARTMENT

349 North Main Street
Lambertville, NJ 08530



FLOOR PLAN



POLICE DEPARTMENT

Approximate Gross Area = 3,850 SF

Number of Floors = 1

Construction Type: Pre-engineered metal structure.

HISTORICAL BACKGROUND

The town purchased the property and existing building in 1999. The building was originally an auto body shop and was converted into a police station during the early 2000's.

RECOMMENDATIONS

General Comments:

Door Hardware: The police lieutenant (referred to as Director below), requested that all doors with locks to be controlled with keyless entry devices, such as key fobs. Some advantages of using keyless entry devices include ease of entry for those possessing the device, it has a built-in authentication mechanism, and it can record data that describes when, and where the device was used and by whom.

Finishes: The building has been painted recently. The carpet was installed approximately in 2017, approximately 5 years ago.

Lighting: The light fixtures are predominately fluorescent and should be replaced with LED light fixtures to be more energy efficient. The ceiling will need to be patched and refinished after the installation of the new light fixtures.

Room Signage: Not all of the rooms have room signs to designate the room name and room number. None of the existing room signs have the braille lettering or are mounted at the height/location per the barrier free subcode. It is recommended that all room signs be replaced and installed uniformly per the barrier free subcode.

Emergency Generator: The existing emergency generator served $\frac{3}{4}$ of the building. If replaced, the lieutenant prefers not have an emergency generator fueled by natural gas.

DIRECTOR 001

- The painted GWB walls are in good condition.
- The 4" high vinyl base is in good condition.
- 24" x 24" carpet tile is in good condition.
- The 8'-11" high painted GWB ceiling is in good condition.
- The 2 light fixtures are surface mounted and do not match each other. They should be replaced with LED light fixtures.
- The lighting is controlled with a toggle switch. It should be controlled by a motion sensor.
- The 2 windows have a fixed panel of tempered glass over another tempered glass awning with a screen.

- The windows appear to be in good condition.
- The 3'-0" wide x 6'-8" high wood door is stained with shoe scuffs on it. This door should be refinished. The painted hollow metal frame is in good condition. A kick plate on the administration office side of the door leading to the director's office should also be installed after that door is repaired.
- The director mentioned that the director's office gets cold and requires a supplemental space heater to raise the temperature in the room to a comfortable level.

ADMIN OFFICE 002

- The walls are predominately painted GWB. Another small area has painted CMU at the wall. The walls are in good condition.
- The 4" high vinyl base is in good condition.
- 24" x 24" carpet tile is in good condition.
- The 9'-7" high 24" x 24" ACT is in good condition.
- The existing light fixtures are five 24" x 24" recessed fluorescent fixtures that should be replaced with LED lighting fixtures. The lens' need to be cleaned from trapped insects.
- The light control is a toggle switch. It should be replaced with a sensor to be more energy efficient.
- A supply air grille at the ceiling has a slight bend to it that will not impede its service. If desired for aesthetic concerns, it can be repaired and repainted.
- The 2 windows have a fixed panel of tempered glass over another tempered glass awning with a screen. The windows appear to be in good condition.
- The fire extinguisher in this room was serviced April 2021.
- The exit light and emergency light is in good condition.
- The door latch is loose and needs to be repaired.

FEMALE LOCKER 003

- The walls are painted GWB. Patch and paint wall in approximately 4 SF under coat hook.
- The 4" high vinyl base is in good condition.
- 24" x 24" carpet tile is in good condition.
- The 9'-0" high painted GWB ceiling is in good condition.
- Air grille in the ceiling needs to be cleaned.
- The 2 lighting fixtures are globe fluorescent fixtures and do not illuminate the room sufficiently. The lighting should be replaced with LED lighting.
- The lighting is sufficiently controlled by a motion sensor.
- The speaker in the ceiling is in good condition.
- The 3'-0" wide x 6'-8" high wood door to the Administration Office area is stained with shoe scuffs on it. This door should be refinished. The painted hollow metal frame is in good condition. A kick plate on the Administration Office side of the door leading to the Female Locker should also be installed after that door is repaired.
- The 5 lockers are in good condition.
- The bench under the lockers has paint on it that needs to be removed.

FEMALE LOCKER TOILET 003A

- The walls are painted GWB and ceramic tile. The walls are in good condition.
- The floor has ceramic tile. The grout between the floor tile and along the tiled base is soiled and dark and should be cleaned and replaced or covered with clean new grout. Then, the floor grout should be sealed in order to protect it from be stained from soil.
- The 8'-11" high painted GWB ceiling is in good condition.
- The exhaust fan needs to be cleaned.
- The supply air grille needs to be cleaned.
- The existing light fixtures should be replaced with LED light fixtures.
- The toilet paper holder is a residential plastic model. A commercial metal toilet paper holder would be more durable.
- Missing 18" vertical grab bar near the water closet.
- A metal rack has been placed in front of the handicapped grab bar at the back wall. This will prevent the grab bar to function properly.
- There is no feminine napkin disposal.
- The GFI electric duplex outlet near the lavatory is in good condition.
- The window is approximately 18" high x 22" wide. It is an awning window with a screen and needs to be cleaned. There are bugs trapped in between the glass and the screen.
- The wooden window sill is approximately 6" x 33" and needs to be repainted.
- The ceramic tiled floor is cracked. It appears that the floor is sinking. There is an 8" crack in the ceramic tile at the wall too. This needs to be repaired.

MALE LOCKER 004

- The walls are painted GWB and CMU. The walls need to be repainted.
- The 4" high vinyl base is in good condition.
- 24" x 24" carpet tile is in good condition.
- The 9'-0" high painted GWB ceiling is in good condition.
- Speaker and air grille in the ceiling are in good condition.
- The 2 lighting fixtures are globe fluorescent fixtures and do not illuminate the room sufficiently. One of the existing light fixtures needs to be repaired. The lighting should be replaced with LED lighting.
- The lighting is controlled with a toggle switch. It should be controlled by a motion sensor.
- The 3'-0" wide x 6'-8" high wood door to the Administration Office area is stained with shoe scuffs on it. This door should be refinished. The painted hollow metal frame is in good condition. A kick plate on the Administration Office side of the door leading to the Male Locker should also be installed after that door is repaired.
- The lockers are in good condition.
- The bench under the lockers needs to be cleaned.

MALE LOCKER TOILET 004A

- Hot water lever is mounted backwards.
- The ceramic tiled floor is cracked. It appears that the floor is sinking. This needs to be repaired.
- The shower drain needs to be sealed all around.

- Missing 18" vertical grab bar near the water closet.
- The 1 lighting fixture is a globe fluorescent fixtures and does not illuminate the room sufficiently. The lighting should be replaced with LED lighting.
- The lighting is controlled with a toggle switch. It should be controlled by a motion sensor.
- The 3'-0" wide x 6'-8" high wood door to the toilet is stained with shoe scuffs on it. The edge of the door is scuffed. This door should be refinished. The painted hollow metal frame is in good condition. A kick plate on the locker side of the door leading to the toilet should also be installed after that door is repaired.
- The 8'-11" high painted GWB ceiling is in good condition.

SALLY PORT 005

- The garage door is in good condition.
- The garage door is not insulated. Their windows are plastic. Therefore, the thermal barrier between the cold and warm environment is virtually nonexistent.
- The garage door is opened by a remote door opening devices that are in the police vehicles.
- The interior door between the sally port of the processing room 009 is hollow metal. It has an 18" x 18" glass panel. The door is in good condition. The door needs to be repainted.
- The interior walls are painted concrete masonry units (CMU) in some areas and painted gypsum wallboard (GWB) in other areas. The joints between the CMU and GWB needs to be caulked.
- Approximately 70 SF of the gypsum board wall needs to be patched and painted.
- Approximately 4 SF of the insulation in the wall is missing and will need to be installed.
- There is no wall base in this room. And, it is not needed.
- The floor is painted concrete that will need to be repainted. There is approximately 350 SF of floor area in the sally port. There are approximately 5 LF cracks that need to be patched and painted.
- The 12'-10" high ceiling has exposed insulation panels. Approximately 10 SF of the insulation panels are damaged and will need to be replaced.
- The lighting fixtures are T8 fluorescent and should be replaced with LED light fixtures.
- The lighting is sufficiently controlled by a motion sensor.
- There is an exposed open junction box on the wall near the interior door to the processing room. This should be covered.
- The exit sign and emergency lights located above the interior door to the processing room appears to be sufficient.
- The panic alarm is connected to the alarm system and dispatch center.
- The firearms closet has doors that are not metal.
- There is no fire extinguisher in the sally port.

LOBBY 006

- The walls are painted GWB above a wooden wainscot. Both surfaces are in good condition.
- The wood base is in good condition.
- 24" x 24" carpet tile is in good condition.

- There are two 36" x 60" floor mats over the carpet. They are in good condition but will need to be replaced sooner than the carpet tile on the floor.
- The 9'-8" high 24" x 24" ACT is in good condition.
- The 3 air grilles in the ceiling need to be cleaned.
- The lighting fixtures are 4 globe fluorescent fixtures and do not illuminate the room sufficiently. The lighting should be replaced with LED lighting fixtures.
- The light control is a toggle switch. It should be replaced with a sensor to be more energy efficient. The light switch is installed at 48" above the finished floor. Therefore, the light switch are handicapped accessible.
- There is window with an open slot below tempered glass along the wall between the Lobby and the Administration Office. This window is in good condition.
- There are three interior wood doors with painted hollow metal frames. All of these doors have scuff marks on the bottom half of their panels. They need to be refinished. It is recommended that metal kick plates be installed upon both sides of the doors leading to the office areas after they are repaired. A kick plate on the toilet side of the door leading to the toilet should also be installed after that door is repaired.
- The fire extinguisher in this room was serviced April 2021.
- The exit light and emergency light is in good condition.

TOILET 007

- The walls are painted GWB and ceramic tile. The walls are in good condition.
- The floor has ceramic tile. The grout between the floor tile and along the tiled base is soiled and dark and should be cleaned and replaced or covered with clean new grout. Then, the floor grout should be sealed in order to protect it from being stained from soil.
- The 8'-11" high painted GWB ceiling is in good condition.
- The exhaust fan needs to be cleaned.
- The existing light fixtures should be replaced with LED light fixtures.
- The light fixtures are controlled by a sensor.
- Paper towel and waste receptacle are in good condition.
- Missing 18" vertical grab bar near the water closet.
- There is no feminine napkin disposal.
- The door latch is loose and needs to be repaired.
- The lavatory is mounted on the wall too high to be handicapped accessible. The top of lavatory is 36". It should be 34" maximum. The bottom of the lavatory is 32-1/2". It should be 27" maximum.

TOILET 008

- The painted CMU walls are in good condition.
- The 4" high vinyl base is in good condition.
- The painted concrete floor needs to be patched and painted in approximately 4 SF of area near the water closet.
- The 9'-0" high painted GWB ceiling is in good condition.
- Ceiling grilles are in good condition.
- The painted hollow metal is in good condition.

- Missing 18" vertical grab bar near the water closet.
- The toilet paper holder is a residential plastic model. A commercial metal toilet paper holder would be more durable.
- There is no feminine napkin disposal.
- The GFI electric duplex outlet near the lavatory is in good condition.
- Missing paper in the paper towel dispenser.
- The fluorescent globe lighting fixture should be replaced with LED lighting.
- The light control is a toggle switch. It should be replaced with a sensor to be more energy efficient.

ARREST PROCESSING 009

- The painted CMU walls are in good condition.
- The 4" high vinyl base is in good condition.
- The approximately 200 SF concrete floor needs to be repainted.
- An approximate 1/2" wide x 6'-0" construction joint needs to be closed/ sealed near the door to the toilet 008.
- The 8'-11" high 24" x 24" acoustic ceiling tile (ACT) panels and grid are in good condition. One tile needs to be secured into the grid.
- The speaker mounted in the ceiling is in good condition.
- An exhaust fan is mounted on the wall with a pull chain within reach of the bench for detained people. This should be out of reach from the detained people brought into this room.
- There is a potential risk of the detained person being able to remove the fan from the wall and escape through the wall opening to the outdoors.
- The exit sign and emergency lights located above the interior door to the Hall 10A appears to be sufficient.
- The panic alarm is connected to the alarm system and dispatch center.
- The cable to the computer is exposed and runs up to the ceiling. This could be a hazard to the detained people in this room.
- The fluorescent lighting fixture is a globe and does not illuminate the room sufficiently. The lighting should be replaced with LED lighting.
- The light control is a toggle switch. It should be replaced with a sensor to be more energy efficient.

PATROL ROOM 010

- Painted CMU and GWB walls need to be repainted. There are scuffs and liquid drip stains on the wall in some areas.
- The 4" high vinyl base is in good condition.
- 24" x 24" carpet tile is in good condition.
- The floor near the door to the Storage 015 has sunk resulting with a large gap between the finished floor and the bottom of the hollow metal door frame. See structural engineer's report about the sinking slab. The gap will need to be patched and painted with the hollow metal door frame after any structural repairs to the slab are completed.
- The 9'-9" high 24" x 24" ACT has one cracked tile that needs to be replaced.

- The eight ceiling grilles and the one smoke/CO2 detector at the ceiling are in good condition.
- The existing light fixtures are 24" x 24" recessed fluorescent fixtures that should be replaced with LED lighting fixtures.
- The light controls are 3 toggle switches. They should be replaced with sensors to be more energy efficient. These light switches are installed at 48" above the finished floor. Therefore, the light switches are handicapped accessible.
- There are 6 awning windows with screens that are in good condition. Each are 12" high x 20" wide. The glass in the windows are not insulated. They have painted wood casings on the interior that are in good condition.
- The 3'-0" wide x 6'-8" high wood door to the Lobby 006 is stained with shoe scuffs on it. This door should be refinished. The painted knock-down hollow metal frame is in good condition.
- The 3'-0" wide x 6'-8" high hollow metal door to the Storage 015 needs to be repainted. Its frame is in good condition.
- This room has a kitchenette:
 - o 7'-0" long plastic laminate countertop and cabinets that is in good condition.
 - o The base cabinet needs to pull handles.
 - o The plastic laminate inside the cabinet under the sink needs to be replaced at the front edge.
 - o The stainless steel sink is in good condition.
 - o The plastic laminate overhead cabinets are 30" high x 42" wide and are in good condition.
 - o The electric duplex is GFI.
- The ABC fire extinguisher is surface mounted on the wall and has been recharged in April 2021.
- There are two exit signs with emergency lighting that appear to be in good condition.

HALL 10A

- Painted CMU and GWB walls are in good condition.
- The 4" high vinyl base is in good condition.
- 24" x 24" carpet tile is in good condition.
- The 8'-9" high 24" x 24" ACT has one tile with a water stain. This tile needs to be replaced.
- The ceiling grid needs to be replaced in approximately 8 SF.
- Approximately 6 ceiling tiles need to be secured into the grid.
- Other devices in the ceiling are in good conditions that include: speaker, supply/return air grilles, and smoke/CO2 detector.
- The lighting fixture is a globe and does not illuminate the room sufficiently. The lighting should be replaced with LED lighting.
- The light control is a toggle switch. It should be replaced with a sensor to be more energy efficient.
- There should be an exit sign at the west end of the hall.
- The filing cabinet near the door to the arrest processing 009 room should be relocated. It is blocking the required clearance from the door strike to be handicapped accessible.

EVIDENCE 011

- Needs an exhaust fan.
- Ventilation has no outside air.
- The painted CMU walls, GWB ceiling, and concrete floor is in good condition.

- The hollow metal door and frame are in good condition.
- The 12" x 48" surface mounted fluorescent light fixture should be replaced with an LED light fixture.

NCIC 012

- The walls are painted CMU and GWB.
- The GWB wall near the door to Hall 10A has a crack that needs approximately 10 SF to be patched and repaired. This is probably the result of the floor settling in this area.
- The 4" high vinyl base is in good condition.
- 24" x 24" carpet tile is in good condition.
- The 8'-8" high painted GWB ceiling is in good condition.
- Air grille in the ceiling is in good condition.
- The lighting fixture is a globe and does not illuminate the room sufficiently. The lighting should be replaced with LED lighting.
- The lighting is sufficiently controlled by a motion sensor.
- The light fixture mounted to the underside of the overhead shelves is loose and should be replaced with an LED light fixture.

INTERVIEW 013

- The painted GWB walls need to be repainted.
- The GWB wall near the door to Hall 10A has a crack that needs approximately 3 SF to be patched and repaired. This is probably the result of the floor settling in this area.
- The 4" high vinyl base is in good condition.
- 24" x 24" carpet tile is in good condition.
- The 8'-8" high painted GWB ceiling is in good condition.
- Air grille in the ceiling is in good condition.
- The lighting fixture is a globe fluorescent fixture and does not illuminate the room sufficiently. The lighting should be replaced with LED lighting.
- The lighting is sufficiently controlled by a motion sensor.
- Other devices in the ceiling are in good conditions that include: supply air grille, sensor, camera, and access panel.
- The door to this room is hollow metal. It has an 18" x 18" glass panel. The door is in good condition.
- An exhaust fan is mounted on the wall with a pull chain within reach of the table and chairs for visiting people. This should be out of reach from the visiting people brought into this room.
- There is a potential risk of the visiting person being able to remove the fan from the wall and escape through the wall opening to the outdoors.

MECHANICAL 014

- The painted CMU and GWB walls are in good condition.
- Exposed insulation in a wall area approximately 17'-0" wide x 5'-6" high should be replaced.
- The unpainted concrete floor has cracks throughout the area and should be repaired. This area is approximately 290 SF.

- The 12'-3" high ceiling has exposed insulation. Approximately 24 SF of the insulation has been patched with duct tape and should be replaced.
- The ducts and smoke/CO2 detector mounted at the ceiling appears to be in good condition. (Refer to mechanical engineer's report).
- There is 1 pendant 12' x 48" T8 fluorescent light fixture that should be replaced with an LED lighting fixture.
- The lighting control is a toggle switch. It should be replaced with a sensor to be more energy efficient.
- There is a double door to the outside with an emergency egress hardware on one leaf. Both leaves have a 10" x 10" wired glass panel. The existing threshold is damaged, is not water tight, and needs to be replaced. The doors should be repainted.

STORAGE 015

- The walls are a collection of GWB, CMU, peg board and exposed insulation. Most surfaces are not painted.
- There is no wall base in this room. And, it is not needed.
- The floor is unpainted concrete. There are cracks in approximately 35 SF of area that needs to be repaired.
- The 13'-9" high ceiling has exposed insulation. Seven insulation panels that are approximately 36" x 48" each in the ceiling has been patched with duct tape and should be replaced.
- There are shelves along the walls that are hung from the structure above.
- There are exposed ducts hung from the structure above.
- There are 2 pendant 12' x 48" T8 fluorescent light fixtures that should be replaced with LED lighting fixtures.
- The lighting control is a toggle switch. It should be replaced with a sensor to be more energy efficient.
- There is a garage door with 3 windows. This door is not insulated and is in good condition.
- The garage door is not connected to a remote door opener.
- There is one 3'-0" wide x 6'-8" high hollow metal door and frame used as an exit door to the outside. It appears to be in good condition.

EXTERIOR:

- The wood siding needs to be repainted.
- Painted steel column is rusting and needs to be repaired and repainted at the front entry.
- The concrete at the front entry is cracked and needs to be repaired.
- The insulation is exposed under the metal siding. This area needs to be closed and repainted.
- The rain leader near the garage door to Storage 015 is damaged. It needs to be replaced. Paint new leader to match.
- The asphalt is cracking from the building out to the parking lot. It will need to be repaired. See civil engineer's report.
- Replace missing seal in the garage door window that opens to the Storage 015.
- Remove insect nests that have been attached to the building.
- The area outside of the egress door from Storage 015 is blocked by outdoor trash cans and traffic signs.
- Lighting mounted on the building should be replaced with LED lighting fixtures.
- Remove vines growing and attaching to the building.
- One of the three roof drain leaders is missing a splash block.
- The splash block of one of the three roof drain leaders needs to be placed under the flow from the roof drain leader.

- The seal along the plan north jamb of the overhead door leading to the Sally Port is damaged and needs to be replaced.
- The leaders along the plan north side of the building are missing boots at the connection of the leaders and the underground drainage. It is not clear where the underground drainage is leading towards. It might be the source of the erosion found under the cracking asphalt parking lot.
- The metal siding on the plan east side of the building is soiled with bird nest that should be removed. The metal siding should be cleaned and repainted.
- The painted vertical metal flashing above a window at the plan east side of the building is too short to meet the painted horizontal metal flashing.
- There are two new LED lights at the parking lot. The other two parking lot lights are halogen that should be replaced with LED light fixtures.
- There is a sink hole in the asphalt parking lot. Refer to the civil engineer's report.

ROOF

This roof assembly is a 2-ply, smooth-surfaced, torch-applied, APP (Atactic Polypropylene). The roofing material consists of asphalt mixed with plastic. It is a modified bituminous membrane over and insulation board and on a structurally sloped deck. The membrane has an aluminum coating that is coming off in areas.

The roof was repaired around 2014.

If the roof is leaking (there is evidence of a roof leak in Hall 010A), consider an infrared scan to determine what is wet vs. dry. Metal wall panels appear to be in good condition.

ROOF DRAINAGE

A nearby tree has left leaves and other debris in the gutters. Currently, some of the gutters are clogged and will need to be cleaned.

EXISTING CONDITION PHOTOS POLICE DEPARTMENT



Photo 1
Northeast corner
facade of the police
building.)



Photo 2
Northwest corner
facade of the police
building.



Photo 4
West façade. Repaint the metal siding and doors all around the building. Replace exterior lighting with LED lighting fixtures.



Photo 5
East façade along N. Main Street. Repaint the metal siding and doors all around the building. Repair and repaint wood siding. Remove bird nest, clean bird debris, and repaint.

Photo 6
Store signs, garbage cans, and all other items at least 5'-0" away from egress doors and egress paths.



Photo 7
Replace threshold at double doors to be weather tight.



Photo 8
Southeast corner façade of the police building.





Photo 9
East façade. Repair and
repaint wood siding.



Photo 10
East façade. Repair and
repaint wood siding.



Photo 11
Remove bird nest, clean bird
debris, and repaint at east
facade.

Photo 12
Fill open joints in concrete drive
to sally port at the east side of
the building.



Photo 13
Painted metal trim missing
above window at east façade.



Photo 14
Photo at north façade near
main entrance. Repair and
repaint building's metal
column. Install boot around
joint between rain leader
and underground drain after
cleaning underground drain
from any debris.

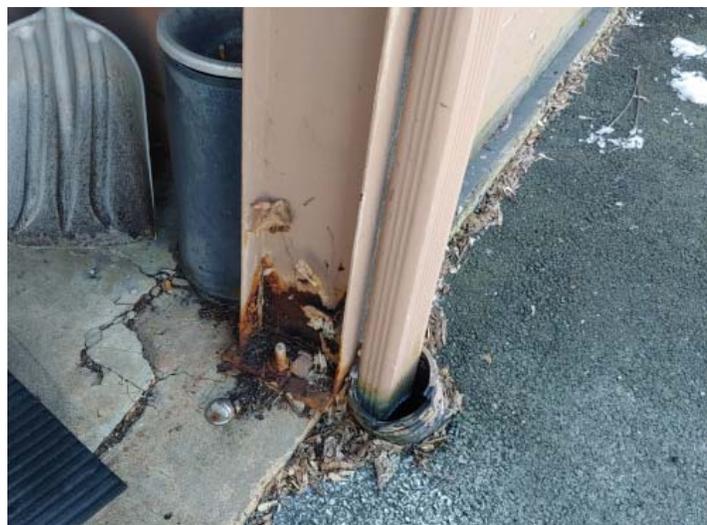




Photo 15
Install boot around joint between rain leader and underground drain after cleaning underground drain from any debris along north façade.



Photo 16
Photo is along the north façade. Exposed insulation behind metal siding should be covered with a metal trim.



Photo 17
Rain leader at the south façade is missing a splash block.

Photo 18
Splash block needs to be
relocated under the rain
leader at the south façade.



Photo 19
Repair sink hole, under traffic
cone, in paving in parking lot.



Photo 20
Replace exterior lights that are
not LED lights with LED lights.





Photo 21
The roof membrane has an aluminum coating that is coming off in areas and needs to be repaired.



Photo 22
Trim tree that sheds its debris upon the roof and into the gutters. Clean gutters.



Photo 23
Doors in the Lobby 006 are scuffed. They should be refinished and have kick plates installed.

Photo 24
Replace light fixtures
with LED fixtures. In the
meantime, clean existing
light fixtures.



Photo 25
Bench in Women's Locker
Room 003 should be cleaned
of paint.



Photo 26
Women's Locker Room Toilet
003A is missing a vertical grab
bar at the side wall of the water
closet. Shelving unit is blocking
the back grab bar. Replace
lighting with LED lights.





Photo 27
Toilet 007 is missing a vertical grab bar at the side wall of the water closet. Replace lighting with LED lights.



Photo 28
Tiled floor is cracked and separating in the Women's Locker Room Toilet 003A due to deflection in the floor slab. Refer to the structural engineer's report. Floor and tile to be repaired.



Photo 29
Men's Locker Room Toilet 004A is missing a vertical grab bar at the side wall of the water closet. Replace lighting with LED lights.

Photo 30
Tiled floor is cracked and separating in the Men's Locker Room Toilet 004A due to deflection in the floor slab. Refer to the structural engineer's report. Floor and tile to be repaired.



Photo 31
Seal around the shower floor drain in the Men's Locker Room Toilet 004A.



Photo 32
Door to Patrol Room 010 from Lobby 006 is scuffed. It should be refinished and have kick plates installed.

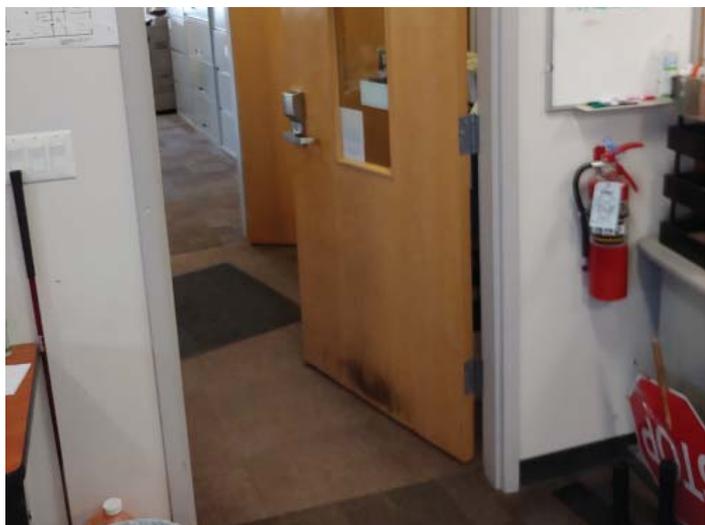




Photo 33
Kitchenette lower cabinet doors in Patrol Room 010 is missing pulls. The plastic laminate is showing wear and will need to be repaired.



Photo 34
The floor near the door between Patrol Room 010 and Storage 015 has settled. This has created a large gap between the hollow metal door frame and the finished floor. Repair the floor settling and fill gap. Refer to structural engineer's report.



Photo 35
Typical surface mounted dome compact fluorescent light fixture throughout the building that should be replaced with LED light fixtures. Note that some of the ceiling tile needs to be reinserted into the grid.

Photo 36
Replace damaged insulation
and door threshold in
Mechanical 014.



Photo 37
Ceiling tile in Hall 010A that
should be reinserted into
the grid.





Photo 38
Repair water leak and
replace water damaged
ceiling tile in Hall 010A.



Photo 39
Room sign in Hall
010A on the window
frame of the door to
the Arrest Processing
009 room. This sign is
typical in other areas of
the building and is not
handicapped compliant
with proper mounting
height and braille.

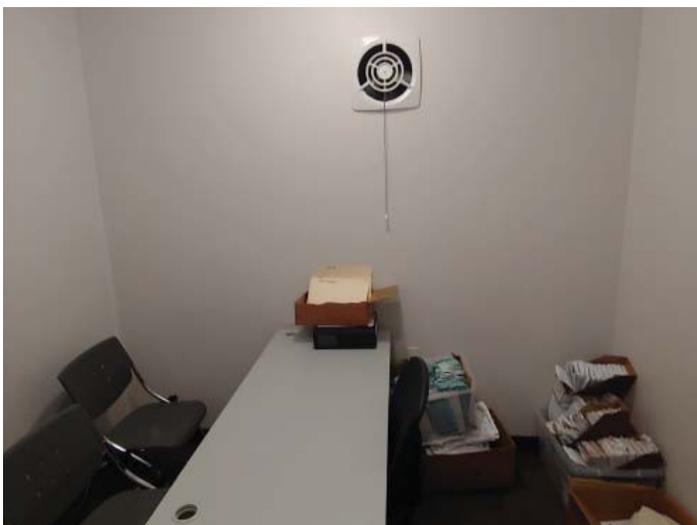


Photo 40
View of wall with exhaust
fan and pull chain near
visitor's seating in the
Interview 013 room. Exhaust
fan is mounted at the same
height above the finished
floor over the prisoner's
bench in the Arrest
Processing 009 room.

Photo 41
Opening in wall and exhaust fan at wall with pull chain within reach above the prisoner's bench in the Arrest Processing 009 room.



Photo 42
Crack in wall over door inside Interview 013 room due to the settling floor slab. Repair slab settling. See structural engineer's report. Repair and repaint wall at crack.



Photo 43
Repaint concrete floor or install durable floor finish in the Arrest Processing 009 room.





Photo 44
Repair slab settling in
the Arrest Processing
009 room. See structural
engineer's report. Repair
and fill joint in slab.



Photo 45
Toilet 008 is missing a vertical
grab bar at the side wall of
the water closet. Replace
lighting with LED lights.
Replace plastic residential
toilet paper holder with metal
commercial grade toilet paper
holder for more durability and
ease of maintenance.



Photo 46
Fill joint between CMU and
GWB walls in the Sally Port 005.

Photo 47
Repair concrete slab and fill
joint separation in the Sally
Port 005.



Photo 48
Install a metal cover plate
over the open junction box in
the wall in the Sally Port 005.

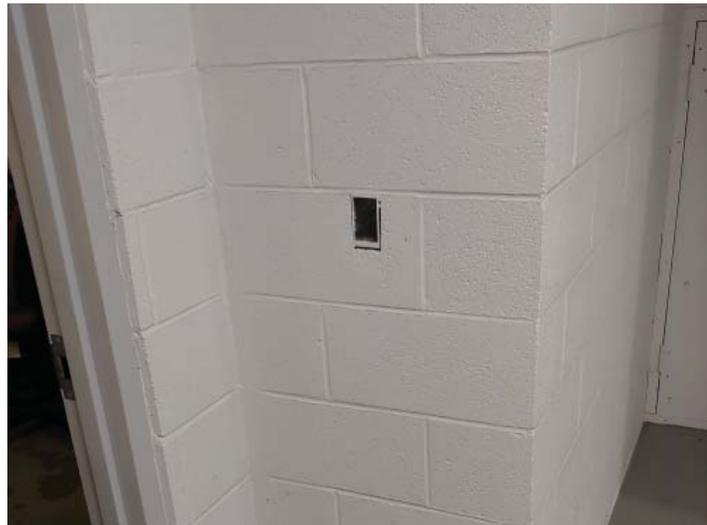


Photo 49
Replace missing fire extinguisher
in the Sally Port 005.

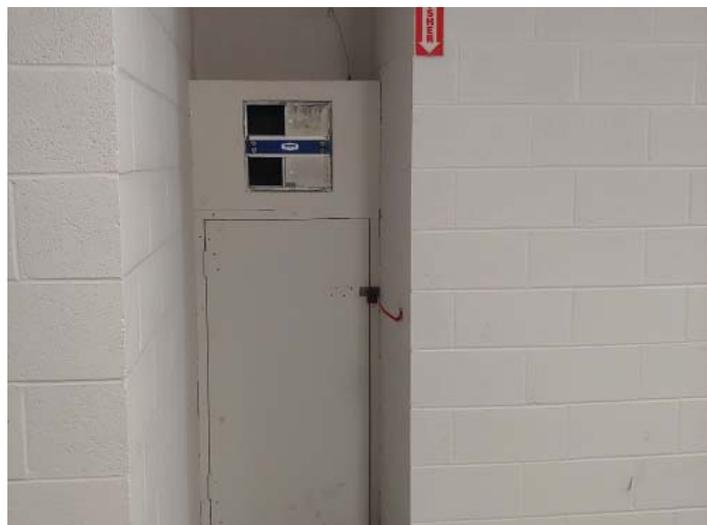




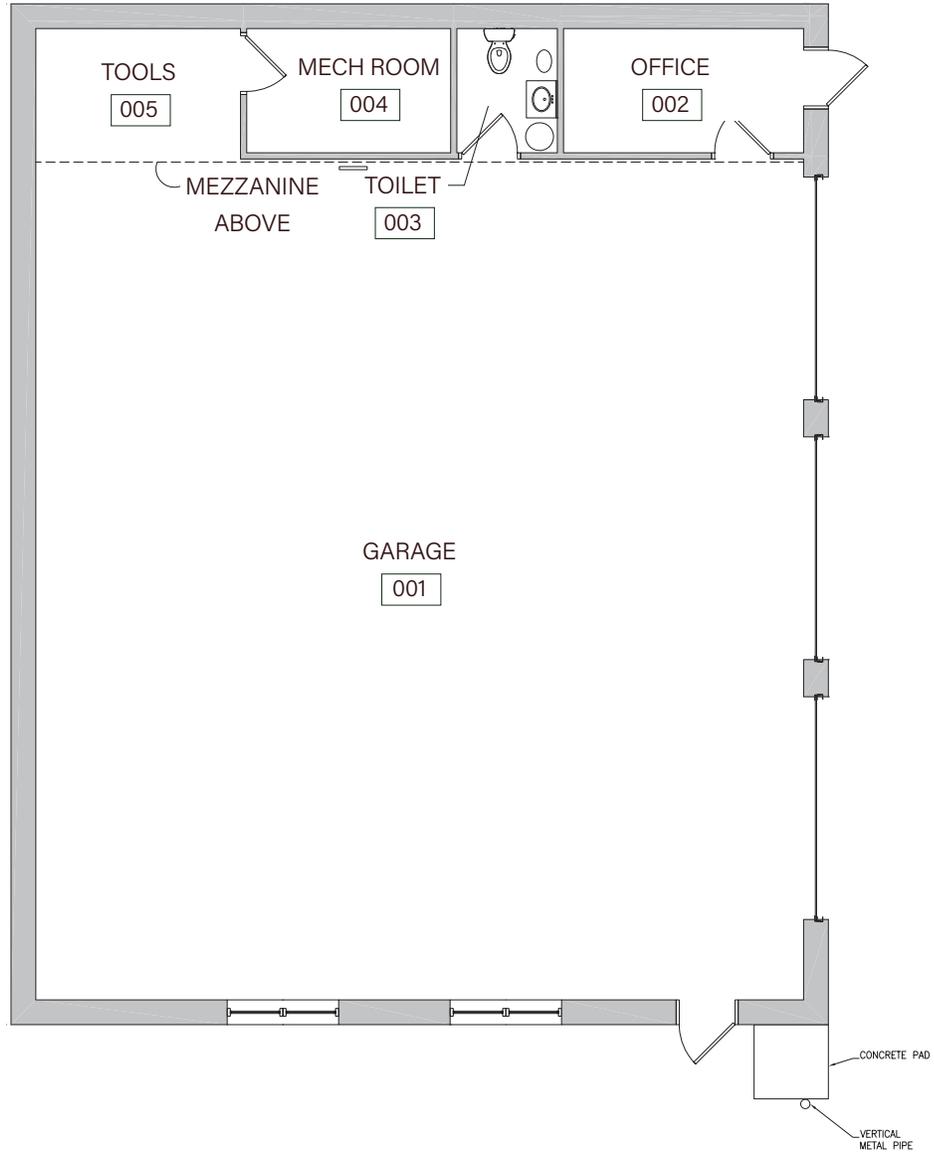
Photo 50
Repair wall with new insulation
and GWB near overhead door
in the Sally Port 005. Repaint
concrete floor.

PUBLIC WORKS
120 Quarry Street
Lambertville, NJ 08530



PUBLIC WORKS

120 Quarry Street
Lambertville, NJ 08530



FLOOR PLAN



PUBLIC WORKS

Approximate Gross Area = 3,600 SF

Number of Floors = 1

Construction Type: Masonry walls with wooden roof trusses.

HISTORICAL BACKGROUND

The building was built in 1969. It has fuel oil heat. The plumbing is connected to a septic tank. The doors and storm windows were installed approximately 20 to 25 years ago. They need to be replaced.

RECOMMENDATIONS

General Comments:

Future Expansion: The director would like to have an expansion built to the plan north of the building that would have a break room, locker room, showers, and toilets. This expansion could also have an additional bay to house a garbage truck that is 12'-2" high.

GARAGE 001

- The CMU wall is cracked at the plan south side and needs to be repointed, repaired, and repainted.
- The 3'-0" wide x 7'-0" high hollow metal door and frame to the outside needs is rusted and needs to be replaced.
- The 13'-2" high ceiling is exposed insulation between the bottom chords of the wooden roof trusses. Approximately 350 SF of the insulation has been damaged and needs to be replaced.
- The concrete floor is in good condition.
- The existing T8 fluorescent light fixtures should be replaced with LED light fixtures.
- The overhead doors have stains on the interior face upon them. They could be repainted or replaced.
- The windows are not insulated. They are double hung with storm windows and screens. Some of the glass panes are broken. The windows need to be replaced. Each of the four windows are approximately 3'-6" wide x 6'-0" high.
- The exit sign and emergency lighting are in good condition.
- The room is equipped with a fire extinguisher.

OFFICE 002

- The CMU wall along the plans east wall is in good condition.
- The hollow metal door and frame, its threshold to the outside are damaged. It is not weathertight. They need to be replaced.

- The wood door from the garage to the office needs to be replaced. The frame should be replaced or repainted.
- The walls and ceiling needs to be repainted.
- The fluorescent light fixtures should be replaced with an LED light fixture.
- The light is controlled by a sensor.
- The air diffuser in the ceiling is missing a grille.
- The concrete floor is in good condition. Installing vinyl composite tile or carpet would be an improvement.

TOILET 003

- The walls need to be cleaned and repainted.
- The concrete floor is in good condition. But, it has some stains that need to be cleaned. Installing a hard finished surface on the floor would be an improvement.
- The room is not handicapped accessible. It is missing the required dimensional clearances, grab bars, mounting heights of plumbing fixtures and toilet accessories, and door hardware.
- The painted wood door is deteriorating and needs to be replaced.
- The fluorescent light fixtures should be replaced with an LED light fixture.
- The toggle light control should be replaced with a motion sensor.

MECH ROOM 004

- The walls need to be cleaned and repainted. But, the exterior wall (plan north) is an unpainted CMU wall that can remain unpainted.
- The concrete floor is in good condition. But, it has some stains that need to be cleaned.
- The fluorescent light fixtures should be replaced with an LED light fixture.
- The toggle light control should be replaced with a motion sensor.
- The ceiling is missing taping and bedding. The joints of the ceiling panels are uneven and not finished. It should be painted.
- The door to the room is in satisfactory condition.
- The concrete floor is in good condition. But, it has some stains that need to be cleaned.

MEZZANINE LEVEL

- The area needs to be cleaned.
- The walls need to be repainted.
- The guardrails should be altered so there is not enough space between any openings in the guardrail to allow a 21" diameter sphere through them.

EXTERIOR:

SIDE FAÇADE (PLAN SOUTH)

- The CMU wall needs to be repaired and repointed at the cracks. The cracks might be the result of the foundation settling. There is a stream that passes along the southwest corner of the building that may contribute to the settling.
- The siding at the gable needs to be repaired in approximately 4 SF near the top.
- The wall needs to be sealed around the pipe penetrations under the windows.

FRONT FAÇADE (PLAN EAST)

- The CMU wall has a stain that is approximately 15 SF of area that needs to be cleaned.
- There are three overhead doors. The northern overhead door's trim is damaged and needs to be replaced. The CMU wall near this damage overhead door trim has been patch. But, there are still openings in the CMU that need to be patched.
- The soffit under the roof needs to be cleaned.
- The exterior lights on the soffit are LED and in good condition.
- The gutter needs to be cleaned.
- The wall opening that is penetrated by a wall mounted air conditioner needs to be sealed all around the gap between the CMU and the air conditioning unit.
- Remove the plants growing against the wall and soffit.
- Repair the roof leader by installing the missing section at the northeast corner of the building.

SIDE FAÇADE (PLAN NORTH)

- Remove the plant from the face of the building.
- Clean the mold off of the siding at the gable.

BACK FAÇADE (PLAN WEST)

- Remove the plant from the face of the building.
- The soffit under the roof needs to be cleaned.
- The gutter needs to be cleaned.

ROOF

- The asphalt shingled roof is in good condition. It was installed in 2014.
- The gutters and downspouts need to be cleaned from all debris. Repair the roof leader by installing the missing section at the northwest corner of the building.

EXISTING CONDITION PHOTOS PUBLIC WORKS



Photo 1
Southeast facade of
the building.



Photo 2
East facade of the
building

Photo 3
North façade of the
building



Photo 4
Northwest façade of
the building.





Photo 5
South façade of the building. Windows with storm windows should be replaced with windows with tempered insulated glass. CMU wall needs to be repointed. Replace insulation around air conditioning units. Seal around all wall penetrations.



Photo 6
Repair damaged siding at gable at the south façade.

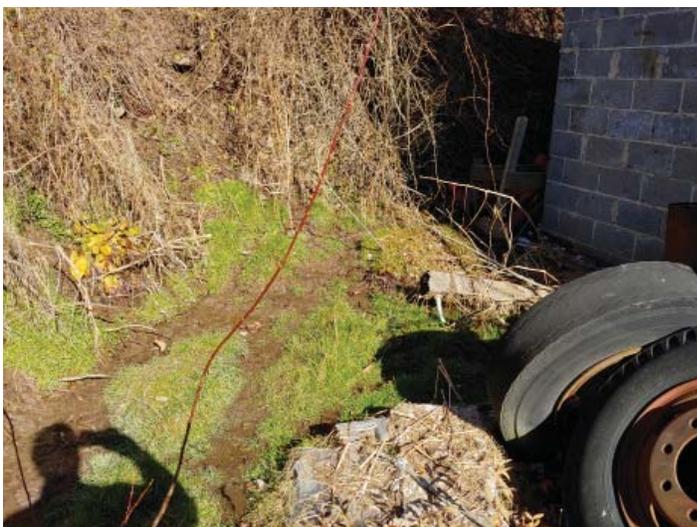


Photo 7
Stream passing the southwest corner of the building maybe contributing to the cracking of the CMU wall at the south façade.

Photo 8
Replace damaged door trim
and repair damaged CMU wall.
At the east façade.



Photo 9
Install new insulation around
the air conditioning unit at the
east façade.



Photo 10
Remove vegetation that can
attach to the building or shed
its debris into the gutters.
Clean all gutters. Clean mold
from the siding at the gable of
the north façade.





Photo 11
Garage Room 001 looking
towards the southeast.



Photo 12
Garage Room 001 looking
towards the southeast.
Replace hollow metal
door and frame. Replace
all windows tempered
insulated glass. Repair
CMU wall.

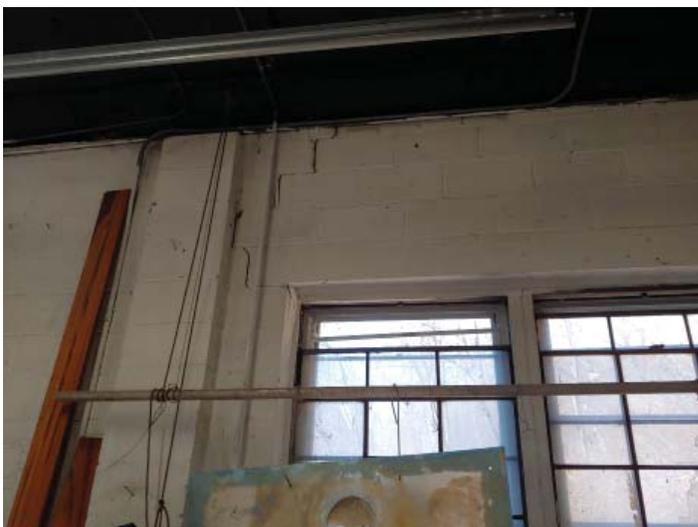


Photo 13
Garage Room 001 towards
crack in CMU wall over the
windows on the south wall
that needs to be repaired.
Repaint inside walls.
Replace windows with
tempered insulated glass.

Photo 14
Garage Room 001 towards
broken glass in windows at
the south wall that needs to
be replaced with tempered
insulated glass.



Photo 15
Replace damaged insulation in the
ceiling of the Garage Room 001.



Photo 16
Staff break area inside the
Garage Room 001. The director
mentioned during the site visit
that inspectors have requested
that the break room not be in
the Garage Room 001. Future
plans were to expand the
building to the north with a
break room, locker room, and
toilets.





Photo 17
Ladder in Garage Room 001 that leads up to the mezzanine at the north side of the Garage Room 001.



Photo 18
Mezzanine in the Garage Room 001. Provide guardrails that will not allow a 21 inch sphere to pass through the spindles per IBC NJ 1015.4.

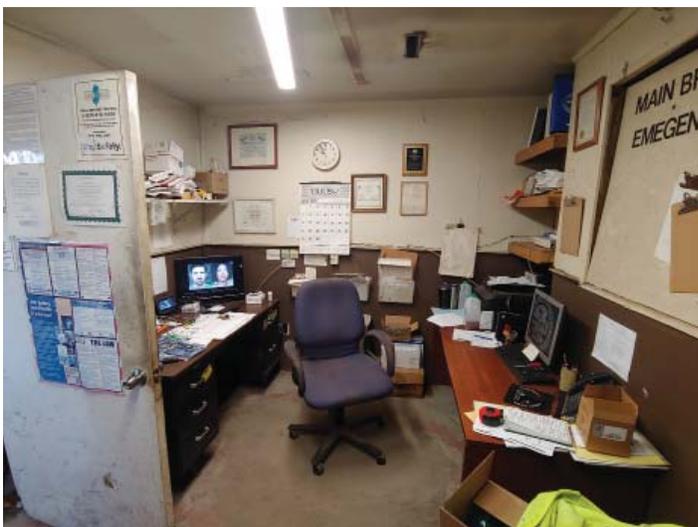


Photo 19
Photo is in Office 002 looking west. Room needs new wall, ceiling, and floor finishes. Replace door to office from Garage Room 001. Install light fixture tight to ceiling. Install sensor lighting control where missing.

Photo 20
Photo is in Office 002 looking east. Room needs new wall, ceiling, and floor finishes. Replace door outside with new weather tight threshold. Replace toggle light switch with sensor lighting control.



Photo 21
Toilet 003 is not handicapped accessible. Replace light with an LED light fixture with a sensor lighting control. Replace door. Replace plumbing fixtures and plumbing accessories.

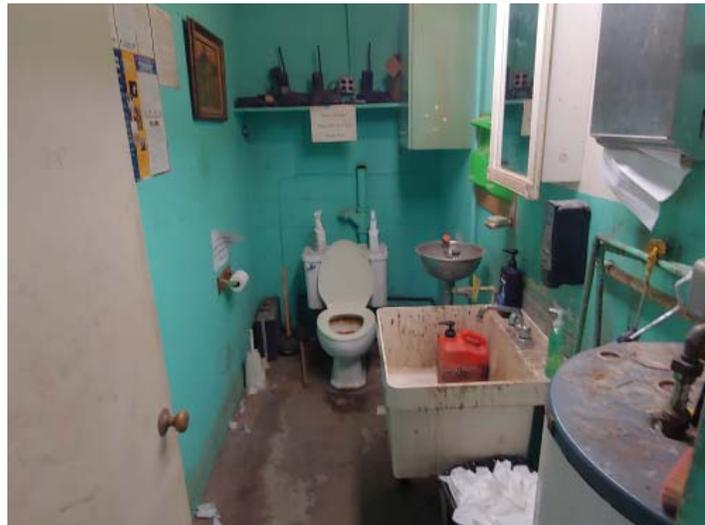


Photo 22
Replace plumbing fixtures and plumbing accessories in Toilet 003.





Photo 23
Photo is in Mech Room 004. Replace
light with an LED light fixture with a
sensor lighting control.

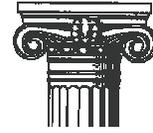


Photo 24
Photo is in Tools 005.

3

STRUCTURAL ASSESSMENT CONSULTING ENGINEERS COLLABORTIVE ,INC.





Building Condition Assessment Survey based on walkthrough visual site observation tour of the various structures on Scattered Sites in Lambertville NJ

June 23, 2022

At the request of The Musial Group, PA, this office was asked to visually observe various structures at scattered sites in Lambertville, NJ. The purpose of this report is to document the building condition assessment by visual observation only of the various structures. A list of deficiencies observed during the visual observation is provided along with recommendations to address said deficiencies. These deficiencies to address are listed as a) highest priority (immediately to one year) b) moderate priority (one to three years) and c) low priority (three to five years or no deficiency to address. An opinion of probable cost is furnished. This value must be confirmed by a professional cost estimator.

Several of these structures are historic and documented on NJ LUCY (the NJ Cultural Resources Geographic Information System) and NJSHPO (NJ State Historic Preservation Office). The site assessment is limited to the building structures at these sites. Site features like pavement, lighting, sidewalks drainage etc. were not observed and should be reviewed by others.

All physical condition visual observation surveys consisted of a walk-through visual observation tour of the buildings readily accessible areas to note the general condition of major structural components and systems. Accessible areas were observed. Soil, walls, sheathing, floor finishes, stored materials, suspended ceilings insulation and other items which obstructed the view of the observer were not moved. The non-invasive, non-destructive observation of structural items is of a visual nature only. No probing and testing were performed. The structural adequacy of visible members and connections cannot be verified by visual observation alone. The determination or verification of member capacity is beyond the scope of this observation.

Exclusions:

This report covers a work product that was prepared in a manner consistent with the level of care and skill ordinarily exercised by members of the engineering profession currently practicing under similar conditions. No other warranty, expressed or implied, is made. The work product does not address any environmental or geotechnical considerations and any observations, conclusions and recommendations in the work product are not intended to supersede any conditions or requirements that should be reflected in professions or trades other than structural engineering. The presence of asbestos, lead, mold, radon, rodent, or insect infestation etc. was not checked. No representation as to the presence or absence of the same is addressed. If such testing is required, a testing agency should be contacted to provide these services.

Further, it should be noted that documentation on the permitting of the structures is limited or

absent. In the absence of documentation and as permitted by the New Jersey Uniform Construction Code and its sub code the Rehabilitation Sub Code of New Jersey CEC has evaluated the structures per the Standard Building Code of New Jersey (SBCNJ). We used the SBCNJ prepared pursuant to the Laws of 1946 Chapter 120 with reprint of 1960 as published by the NJ Bureau of Commerce for the Division of Planning and Development in the Department of Conservation and Economic Development. It is not clear how the permitting and review of plans were made for changes in use and occupancy.

For buildings built prior to 1946, it could not be determined what building code was used in the City of Lambertville. For buildings built from 1946 through December 31, 1976, based on the information available from the Division of Codes and Standards of the NJ Department of Community Affairs the Standard Building Code of New Jersey (SBCNJ) was used. For buildings built after January 1, 1977, the respective model codes Building Officials and Code Administrators (BOCA) and International Building Code (IBC) adopted by New Jersey was used. See model code adoption history in the references section.

Additionally, we were unable to reach the local flood plain administrator for the City of Lambertville. Hence, we were unable to establish with certainty the flood risk maps, the flood zones and the base flood elevations. We have made a good faith estimate based on information we could get from public resources.

General comments about the change in use and occupancy

Except for the DPW building, all of the buildings observed have undergone a change in use and a change in occupancy. For all buildings built prior to January 1, 1977, it is assumed that in conformance with SBCNJ section B-118.3 all existing buildings had a valid certificate of occupancy and that there were no violations of law or orders of the building official or other governmental agency pending. It has not been established by CEC after a visual observation that the alleged use of the building has here fore to existed and is safe. Further, it has been assumed that after a change in occupancy and use a certificate of occupancy was issued by the construction official.

For existing buildings built between January 1, 1977, and January 5, 1998, for changes in use or occupancy, the 25/50 rule and /or the requirements of the then prevalent New Jersey Uniform Construction Code NJAC 5:23-2.4 Alterations, Replacement and Damages apply. It is assumed that all buildings have a valid certificate of occupancy after the change in use or occupancy. Post visual observation CEC could not establish that the alleged use of the building has here fore to existed and is safe.

For existing buildings built after January 5, 1998, to date for changes in use or occupancy, the rehab subcode NJSA 52:27D-123.8 and NJAC 5:23-6 Rehab Sub code apply along with the prevalent BOCA or IBC codes. It was not possible for CEC to establish that the alleged use of the building has here fore to existed and is safe by visual observation alone.

See the list of New Jersey Model code adoptions on page 135.

Floor live loads change with occupancy and use. A visual observation is not sufficient to establish if the required reinforcement of the floor members, beams, columns, bearing walls and foundations if required was completed for the additional loads from the change in use and / or occupancy.

New Jersey Model Code Adoptions

Building Subcode	IBC	Electrical Subcode	NEC	Energy Subcode			Fire Protection Subcode		Mechanical Subcode		IFGC	Plumbing Subcode	1 & 2 Family Dwelling		Barrier Free (Ch.11/IBC)	Rehab (Sub 6)	Effective Date <small>(start date of six month grace period)</small>
				BOCA	CABO	IECC	ASHRAE	Std. 90.1	BOCA	IBC			BOCA	IMC			
1975			1975									1975				01-01-77	
1976/S			1976/S													12-01-77	
1978			1977													01-01-78	
1981												1978				10-01-78	
1983/AS												1980				05-07-81	
1984												1981/82/S				02-22-83	
1985/S												1983				08-06-84	
																04-01-85	
																07-01-85	
1986/AS												1984/85/S				02-03-86	
1987																09-22-86	
																04-01-87	
1988/S												1987				09-21-87	
																10-05-87	
																06-20-88	
																08-15-88	
																09-06-88	
1989/AS																02-06-89	
																11-01-89	
1990																05-21-90	
1991/S																07-01-90	
																03-04-91	
1993																05-20-91	
																05-01-93	
																07-01-95	
1996																01-05-98	
																07-06-98	
																02-07-00	
																06-18-01	
																09-17-01	
																01-16-02	
																11-04-02	
2000																05-05-03	
																01-18-05	
2006																05-01-06	
																02-20-07	
																05-07-07	
																04-06-09	
2009																09-07-10	
																05-07-12	
2015																09-21-15	
																01-04-16	
2018																09-03-19	

(Revised 09/03/19)

S = Supplement AS = Accumulative Supplement A = Amendments

Certain changes in use and occupancy will trigger mandatory changes to structural requirements based on the prevalent rehab code. At times, it may require an upgrade to bring the structure or parts thereof into compliance with current codes.

For several of the structures observed, there is a limitation to the extent the building can be reinforced or strengthened to comply with the flood, wind, and seismic requirements of the present-day codes.

Recommendations:

High Priority (do now within 12 months)

- 1) As will be discussed later for each structure, it is imperative that the construction official examine all the documentation and confirm that the changes in occupancy and/or use do not violate any codes, laws, or statutes.
- 2) Construction official shall identify all structures with change of use and occupancy that will require a structural load category evaluation per Table K of the New Jersey Uniform Construction Code NJAC 5:23-6.31. when the use or character of use of a building is changed to a higher load category as shown in Table K the structure must be made capable of supporting the new load requirement as required by Table 1607.1 of IBC 2018 Nj edition.
- 3) Construction official shall identify if hand rails, and guard rails complied with NJAC 5:23-6.33 (b) (10) Special Provisions: Historic Buildings at the time of the change.

General Comments about Flood Risk

These comments apply to all of the buildings except the DPW building. It should be noted that except for the Police Station and the DPW, all other structures are in a historic district per NJ LUCY (a Cultural Resources Geographic Information System -CRGIS).

A recent audit of New Jersey's model ordinances by FEMA for conformance with the National Flood Insurance Program (NFIP) regulations, 44 CFR Parts 59 and 60, resulted in a review of existing local flood damage prevention ordinances. Based upon FEMA's review, specific language related to NFIP regulations was not consistent. Additionally, during Compliance Assistance Contacts with local floodplain administrators, it was determined that better coordination was needed between the three sets of regulations that regulate development and construction in the floodplain. These regulations are the NFIP implemented by local floodplain administrators, the New Jersey Flood Hazard Area Control Act (FHACA) implemented at the State level by the NJDEP, and the Uniform Construction Code (UCC) implemented by the local Construction Official.

CEC made several attempts to contact the local flood plain administrator through the Township Clerk's office and the Building Department. Lambertville does not have any individual this position. Our assessment of the flood risk is based on the guidance provided by the NJ

Department of Consumer Affairs, the NJ Department of Environmental Protection, and the NJ Bureau of Flood Engineering.

When historic structures in special flood hazard areas are damaged by flood, fire, or other hazard, they must be mitigated by elevating, retrofitting, buyouts, or relocations just like other structures in a floodplain. When severe damage or future risk make elevation or retrofitting structurally impossible, historic structures should be saved for future generations by pursuing a combination of a buyout and relocations to higher ground. Demolition of historic structures should be reserved only for those structures too damaged to be saved or relocated.

When full mitigation is not an option, only structures that qualify for listing on Federal and State registries can be given a variance according to National Flood Insurance Program and Uniform Construction Code rules. Unfortunately, partial mitigation activities will not significantly lower insurance premiums for any structure that receives a variance because the flood risk has not been fully mitigated.

With the increased frequency, intensity, and duration of precipitation events and a 50% probability of 1.4 feet of sea level rise by 2050, many of New Jersey's historic structures are even more vulnerable to flood risk than when they were constructed. Many of these properties are publicly owned. Municipalities should consider developing an adaptation plan for their historic structures as part of a comprehensive Historic Preservation Master Plan Element and to avoid future flood damage and to reduce insurance premiums. Municipalities should also consider allocating or setting aside mitigation funding annually to implement their historic structure adaptation plans.

The last Flood Insurance Rate Map for the Town of Lambertville available through the FEMA map service center is FEMA flood map panel 34019C0420G revised on May 2, 2012. Every year, FEMA requires that NJDEP put together a workplan as part of a federal grant. Over the past few years, efforts have been made to formalize some foundational National Flood Insurance Program (NFIP) work products that will better align New Jersey with other FEMA efforts and initiatives nationwide. It is the responsibility of the local flood plain administrator to co-ordinate and oversee the following:

- 1) The Bureau of Flood Engineering is working on a New Jersey-specific version of FEMA's Version 3 Code Coordinated Model Ordinance. This will align the flood resistant design requirements of the American Society of Civil Engineers (ASCE) 24-14 Flood Resistant Design publication referenced in the New Jersey Uniform Construction Code with NFIP requirements with the Flood Hazard Area Control Act requirements. Current ordinances have gaps that do not meet the NFIP minimum requirements, and the newer version will better coordinate with the Uniform Construction Code and clarify the NFIP requirements for flood resistant design for residents who do not have access to ASCE 24-14.
- 2) FEMA requires that participating communities have a floodplain development permit. Recent FEMA compliance assistance visits have indicated that many permits are not actually permits but are notations, tracked on the UCC sleeve. This has raised concerns that key items required in technical bulletins are not being addressed uniformly throughout the State and that key technical information is not being provided as required by applicants during permit application. This model permit is intended to walk floodplain

administrators through the permit application, issuance, variance, enforcement stages, ensuring that all required recordkeeping will be maintained.

In the absence of the local flood plain administrator, it was difficult to ascertain what the latest FIRM map revisions are. There were no letters of map change (LOMC); letters of map amendment (LOMA) or effective maps available for review. CEC has performed all the flood studies based on the flood map panels 34019C0339G and 34019C0420G revised on May 2, 2012. See Figure 1 on page 139, Figures 2 and 3 on page 140. The flood maps on the NJDEP website are from 1978 and are old. See figure 4 and Figure 5 on page 141. These are shown for an illustrative purpose only and have been ignored. Our recommendations are based on the FEMA maps. It is possible that even these maps and the flood information contained therein is incorrect.

Recommendations:

High Priority (do now within 12 months)

City of Lambertville must enact a New Jersey Model Code Co-ordinated Ordinance for the City of Lambertville. **This model code coordinated ordinance should not be adopted by the City of Lambertville without obtaining the appropriate review and concurrence by the NFIP State Coordinator and the FEMA Regional Office.** Careful attention should be paid to changes and renumbering that affect cross references. The Model Ordinance alerts the reader when Construction Official's authority is established in the building codes. The administrative sections of the Model Ordinance are organized to be consistent with the administrative provisions of the building codes. It is important to note that some administrative provisions, even if they appear in the building codes, must be retained in the Model Ordinance to appropriately regulate development regulated under the National Flood Insurance Program or the New Jersey Flood Hazard Area Control Act that is not within the scopes of the building codes. Refer to the Documents section of this report for the language of the NJ model code coordinated ordinance for Riverine flooding.

City of Lambertville must appoint a local Flood Plain Administrator. The Model Ordinance now requires the Floodplain Administrator to make certain inspections, enforce the ordinance, and alerts the reader that building codes authorize the Construction Official to inspect work for which building permits have been issued and to enforce the building codes.

New Jersey has adopted most flood provisions in the International Code Coordinating Council (ICC) i-Codes and because FEMA has worked with the ICC to develop a Model Code Coordinated Ordinance that can be adapted for local use, FEMA's Version 3 Model Code Coordinated Ordinance was used as a starting point. Then, because NFIP regulations encourage and specify that higher State-level standards take precedence in 44 CFR 60.1(d), higher standards such as those for floodway rise and mandatory freeboard have been incorporated in these new model ordinances so that local floodplain management regulations and decisions do not conflict with Statewide minimum requirements. Also, in an effort to better specify enforcement authority and processes for achieving compliance, N.J.S.A. 40:49 is referenced, and language is proposed for development that does not meet NFIP and ordinance regulations.

As a result of this process, New Jersey Model Flood Damage Prevention Ordinances have been simplified to a Riverine model applicable to the City of Lambertville. This simplification was necessary because both the FHACA and the UCC are expansively written to achieve site-specific compliance for construction and development in all types of floodplains. Additionally, the Flood

Hazard Area Control Act's (NJAC 7:13) requirement that the best available mapping be considered in determining the floodplain and the design flood elevation for structures necessitated that the municipality's regulation of the floodplain and the local design flood elevation would be no less stringent than that required by State regulation.

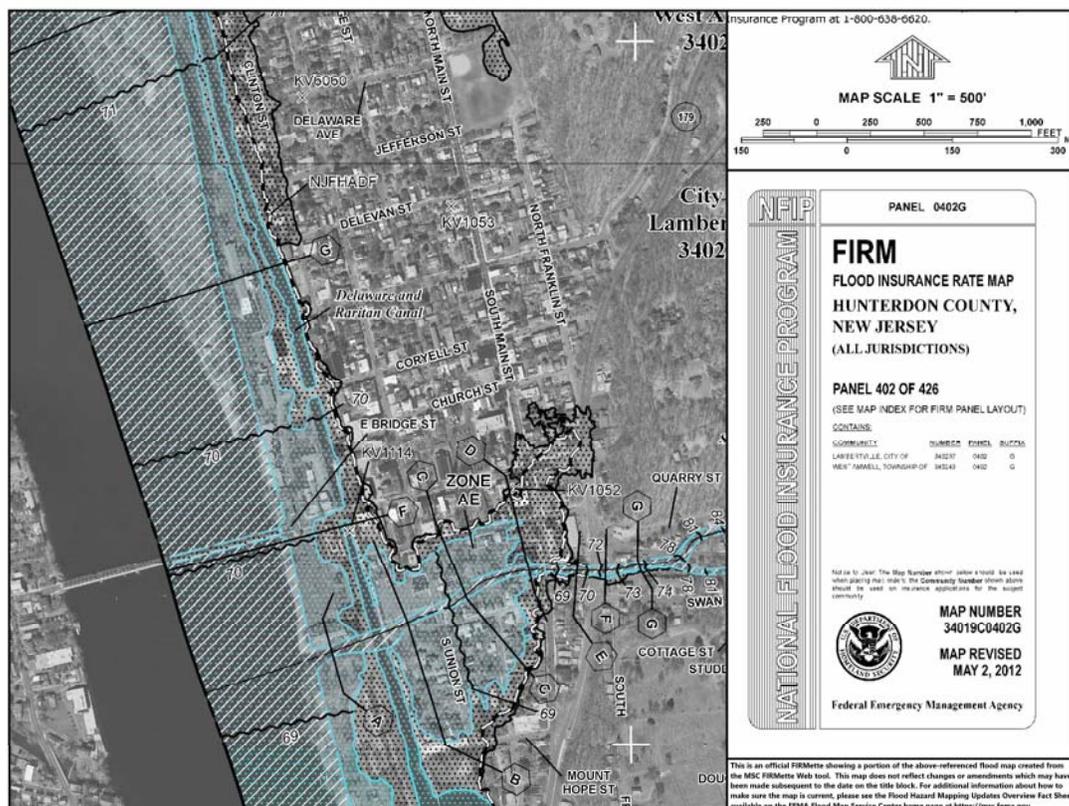


Figure 1 FEMA Flood Firmette for 18 York Street (flooding from Delaware River and D&R Canal)

In particular, Lambertville faces dual threats from floods—localized flash floods caused by heavy rains, and the rising of the Delaware River due to higher water volumes generated upriver. High water velocities, clogging of storm drains, stream bank erosion, and even stream bank failure have all been by-products of flooding. Flooding also can occur when heavy rainfalls collect on the hills and rush into our neighborhoods, as was most recently evidenced during Tropical Storm Irene in 2011.

Lambertville is vulnerable to direct flooding from the rising on the Delaware River and back-flooding local tributaries. Major floods on the Delaware River impacting Lambertville occurred historically in October 1903, March 1936, and August 1955 (record flood), and then most recently in September 2004, April 2005, and June 2006. Heavy rains feeding into the Alexauken, Ely, and Swan creeks can create immediate, localized flash floods.



Figure 2 FEMA Flood Firmette for 25 South Union St and 6 Lilly St (flooding from Delaware River and Swan Creek)

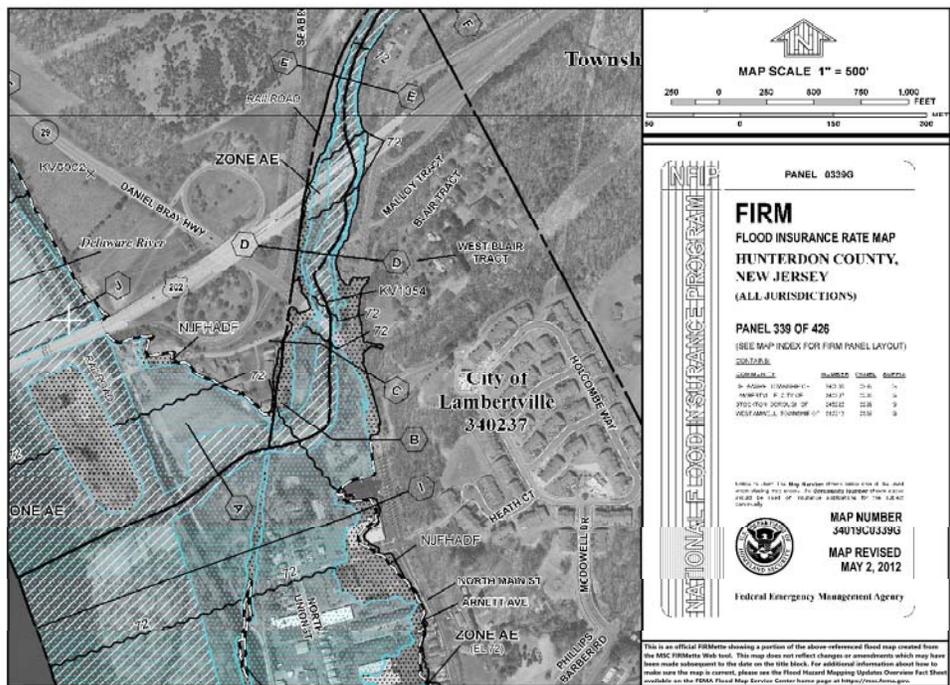


Figure 3 FEMA Flood Firmette for 349 North Main Street (flooding from Delaware River and Alexauken Creek)

The City of Lambertville keeps Elevation Certificates on file for some buildings within the floodplain. Not all of these are in the North American Vertical Datum of 1988 (NAVD88). FEMA, NJDCA and NJDEP mandate that all elevation certificates be maintained in NAVD88.

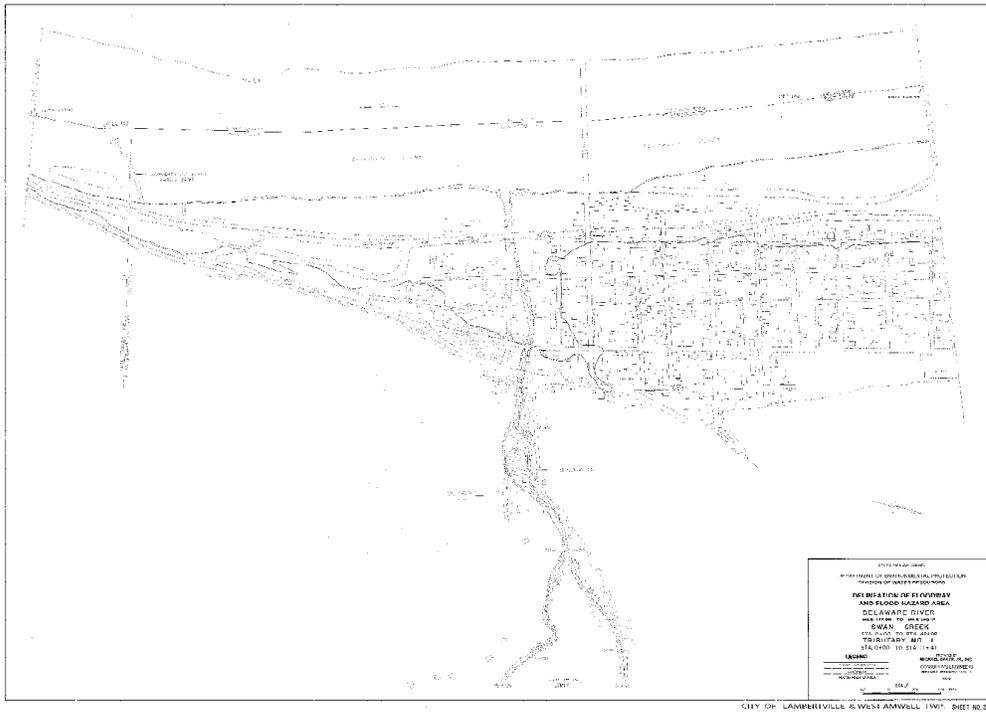


Figure 4 NJDEP Flood Hazard Area for Delaware River and Swan Creek circa 1978
<https://www.nj.gov/dep>



Figure 5 NJDEP Flood Hazard Area for Delaware River and Alexauken Creek circa 1978
<https://www.nj.gov/dep>

City Hall Building (18 York Street):

City Hall is a five-story building structure including a basement and a cupola structure. The exterior walls are stone masonry walls. This cannot be confirmed without a probe. Based on the visual site observation, where visible the floors, interior walls, roof, mansard roof and cupola were of wood construction. The building is a historic structure

The structure was completed in 1868 according to the Musial Group PA as a residence. In the 1920's, the structure was converted to a social club. In the 1950's, the City of Lambertville took possession and has used it as a City Hall. The building is historic structure documented on NJ LUCY and NJSHPO.

Over the years, there have been several changes to the use and occupancy of the structure. It has housed municipal services, the court, the library, and the police department. At present, the structure is being used only for the town hall and municipal services. The basement, third floor and the cupola are being used for storage.

An elevator addition has been added to allow for ADA access. The elevator is hydraulic. The building frame of the elevator addition is structural steel. The floors are concrete slabs on metal deck.

The last Flood Insurance Rate Map for this structure available through the FEMA map service center was FEMA flood map panel 34019C0420G revised on May 2, 2012. The building is located is close to but just outside the of FEMA flood zone AE with a flood elevation between 70 and 71 ft NAVD88. It is also close to but just outside of New Jersey Flood Hazard Area Design Flood line (NJFHADF).

The building predates both the seismic codes and the current code wind load requirements.

Observation:

Exterior:

The stone masonry on the exterior walls is in fair condition. Several cracks were observed in the mortar joints and also at the water table and at doors and windows. Cracks were observed around the cast stone water table and concrete base at the elevator addition.



Photo CH1 Cracking in exterior wall



Photo CH2 Separation of window frames from masonry



Photo CH3 Deterioration in exterior stone masonry cladding



Photo CH4 Deterioration in exterior stone masonry cladding

The front stair (on the south façade) is damaged and needs to be replaced. See photograph CH5 and 6 on this page. The stairs on the West façade to the basement are in fair condition. The railing on this stair needs to be replaced. The wood stairs on the north façade going to the basement have deteriorated and need to be replaced.



Photo CH5 Front stoop deterioration



Photo CH6 Front Stair and railing deteriorated.

The areaway leading down to the basement has masonry walls which have failed. The water pressure on these walls have caused a shear failure and the cmu in each course has shifted horizontally from the cmu course below. See photograph CH7 and CH8 on this page.



Photo CH7 Failure of masonry wall at areaway



Photo CH8 Cracking in masonry wall at areaway

Please refer to City Hall drawing A-101 for additional photographs 1 through 10 and the locations.

Basement:

The basement remains unoccupied and is used for storage of documents, mep equipment, the elevator machine room, telecom, and computer network gear. The clear height in the basement does not meet current code requirement of 7 ft 6 in. The condition of the walls and floors is fair. The newer elevator addition is in good condition.

The materials used for construction in the basement do not meet the requirements of ASCE 24-14 Flood resistant design and construction Chapter 5.

The construction of the basement does not comply with requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14.

All attendant utilities and equipment in the basement do not comply minimum elevation requirements specified in Chapter 7 of ASCE 24-14.

CEC could not ascertain if there exist any underground tanks in or below the basement.

First Floor:

Where it could be observed, the condition of the floors and walls in the basement is fair to good. This floor houses a meeting room, clerk and registrar's office and several closets, corridors, and toilets. The floor is level. There are several minor cracks in the wall and ceiling finishes at various locations. Approximate area to be patched is 140 square feet. These do not appear to be structural in nature. A 7 ft long crack was observed in the concrete slab at the elevator addition. This crack is a shrinkage crack and should be routed and patched.

Please refer to City Hall drawing A-101 for additional photographs 1 through 10 and the locations. Please note that the numbers on the photographs on A101 reference that individual drawing only and not the report.

Second Floor:

Where it could be observed, the condition of the floors and walls at the second floor is good. This floor houses several offices and several closets, corridors, and toilets. The floor is level. There are several minor cracks in the wall and ceiling finishes at various locations. Approximate area to be patched is 130 square feet. These do not appear to be structural in nature. The newer elevator addition is in decent shape.

See photo CH 9 and 10 on page 145 for cracking in plaster at second floor.



Photo CH9 Cracking in plaster second floor ceiling



Photo CH10 Cracking in plaster second floor ceiling

Please refer to City Hall drawing A-102 for additional photographs 1 through 10 and the locations. Please note that the numbers on the photographs on A101 reference that individual drawing only and not the report.

Third Floor:

Where it could be observed, the condition of the floors and walls at the third floor is fair. This floor is unoccupied and is used for storage. The floor is level. There are several minor cracks in the wall and ceiling finishes at various locations. See photographs 15 to 18 on drawing A-103. Several walls have water damage from leaks at the roof. See photo CH11 and CH12 on this page. Approximate area to be patched is 150 square feet. These do not appear to be structural in nature. They have most likely been caused by water leaks. The newer elevator addition is in a good condition.



Photo CH11 Water damage failure of ceiling lath and plaster

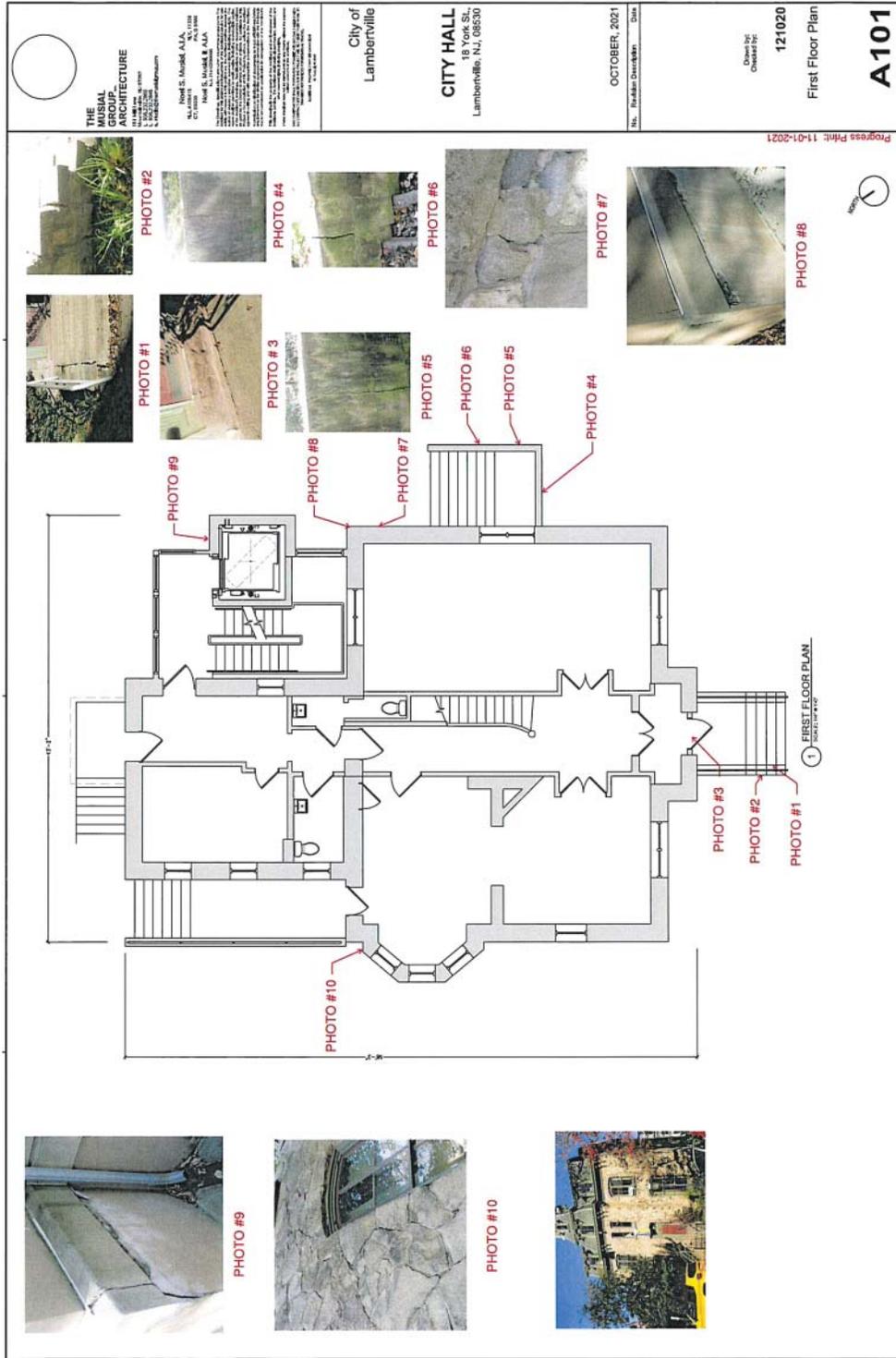


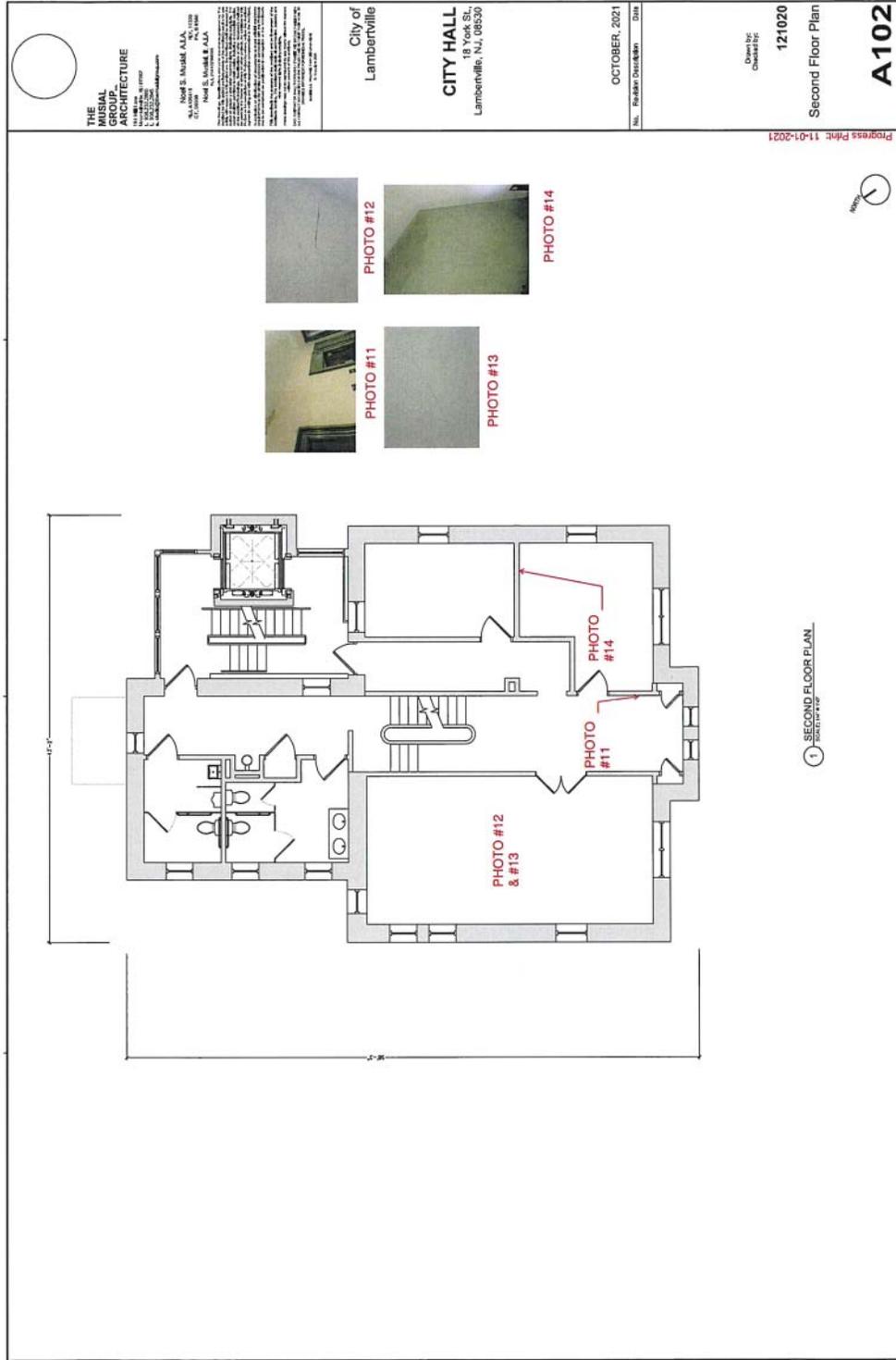
Photo CH12 Water damage failure of ceiling lath and plaster

Please refer to City Hall drawing A-103 for additional photographs 1 through 10 and the locations. Please note that the numbers on the photographs on A101 reference that individual drawing only and not the report.

Roof:

The roof drainage and slope are incorrect. For example, the roof slopes towards the cupola instead of towards the perimeter edges of the roof where it can be routed off through roof leaders.





THE MISAL GROUP ARCHITECTURE
1000 S. Market A.J.A.
Lambertville, NJ 08530
Tel: 609.398.1234
Fax: 609.398.1235
www.misalgroup.com

1000 S. Market A.J.A.
1000 S. Market A.J.A.
Lambertville, NJ 08530
Tel: 609.398.1234
Fax: 609.398.1235
www.misalgroup.com

City of Lambertville

CITY HALL
18 York St.,
Lambertville, NJ, 08530

OCTOBER, 2021

No. Revision Description Date

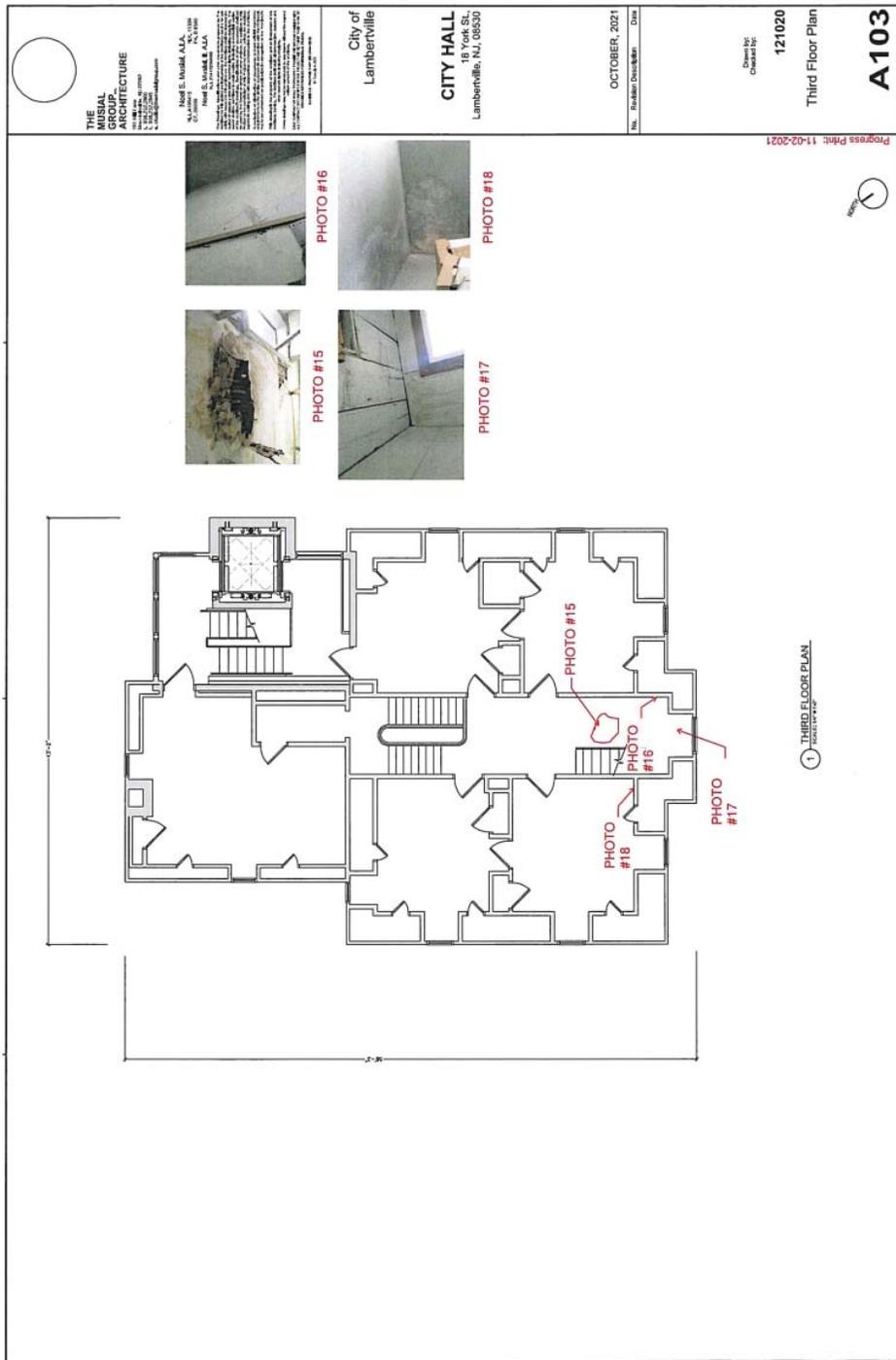
Drawn by:
Checked by:

121020

Second Floor Plan

A102

ORIGINAL



ORIGINAL

Recommendations:

High Priority (do now within 12 months)

- 1) The Construction Official must examine all the documentation and confirm that the changes in occupancy and/or use do not violate any codes, laws, or statutes.

- 2) If required analyses of reinforcement of the floor members, beams, columns, bearing walls and foundations must be completed for the additional loads from the change in use and / or occupancy and from fixed loads. In particular several areas require a live load of 100 psf. Light storage areas require a live load of 125 psf. A residential building would have been designed for 30-40 psf live load, there are no visible signs of reinforcement having been undertaken in the past. This should be investigated.
- 3) City of Lambertville must adopt a model code coordinated Flood Ordinance. Based on this ordinance an impact assessment has to be made.
- 4) A meeting with the township engineer, construction official and local flood plain administrator must be arranged to ascertain the base flood elevation. All finished floor elevations must be surveyed in NAVD88. A design flood elevation shall then be established.
- 5) Use of existing basement must be re-evaluated to conform FEMA; NJDEP; ASCE and IBC 2018 flood requirements for the base flood elevation in item 1 above and flood ordinance in item 2 above. Occupied areas below the design flood elevations shall be used only for storage.
- 6) Based on items 1 and 2 above a determination has to be made for the construction materials used in the basement. Additionally, requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14 need to be investigated.
- 7) All electrical systems below the Design Flood Elevations must be mitigated

Medium Priority (initiate soon 1-3 years)

- 1) When the work described in the high priority and subsequent discussions are completed, initiate and medium initiate whether requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14 can be met. If they cannot be met the city may have to consider building a new structure. If they can be met, then consider the items 2-4 below:
- 2) The area wall in photo CH7 and CH8 on page 143 must be rebuilt.
- 3) All materials below the design flood elevation shall be changed to flood resistant material to meet the requirements of ASCE 24-14 Flood resistant design and construction Chapter 5.
- 4) All attendant utilities and equipment below the design flood elevation must be changed to comply with minimum elevation requirements specified in Chapter 7 of ASCE 24-14 and the requirements of the NEC.
- 5) Compliance with various FEMA, NJDEP and NJUCC documents must be checked.
- 6) Roof drainage and slope must be checked.
- 7) Lath and plaster ceiling and walls at third floor framing need to be patched where noted. See photo CH 11-12 on page 145.
- 8) Lath and plaster ceiling and walls at second floor to be patched as noted. See photo CH 9 and 10 on page 145.
- 9) All cracks in exterior masonry walls shall be pointed or filled. See photos CH 1 on page 142 and CH3-4 on page 143. Since the building structure is historic, manual removal of existing mortar and replacement and patching or repointing per NJSHPO and federal standards is required.
- 10) The front stoop and stair must be rebuilt. See photo CH5 and 6 on page 143.

Low priority (3-5 years)

- 1) Shrinkage crack at first floor slab in elevator addition to be addressed.

Justice Center (25 South Union St.) :

This building is one story with a concrete slab at grade. It has a metal roof deck on a structural steel frame with load bearing masonry walls on the exterior. The building used to house an ACME grocery store. The structure is located in an AE flood zone based on the FEMA Flood Map panel for the Delaware River and Swan Creek that has been referenced earlier. The building structure has experienced flooding several times in its history. CEC believes that the building's first floor slab elevation is well below the design and base flood elevation for this area.

The building has recently undergone an interior retrofit and renovation.



Photo JC 1 Front (East) View of the Justice Center



Photo JC 2 Rear (West) View of the Justice Center



Photo JC 3 Side (North) View of the Justice Center



Photo JC 4 Side (South) View of the Justice Center

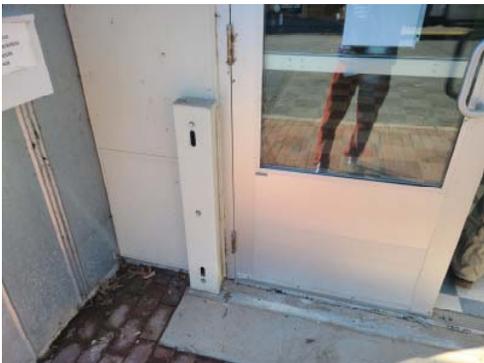


Photo JC 5 Flood Barrier channels at front entrance



Photo JC 6 View of knee wall at the front.

Observation:

The exterior walls are in fair to good condition. A portion of the south façade requires repointing / regrouting. The exterior insulation finish system on the south façade and the west façade need repair. The retaining wall on the west is missing a cap.

The metal deck at the roof and the foundations could not be observed. The interior faces of the perimeter exterior masonry walls were covered by finishes and could not be observed.

In general, none of the visible structural elements showed any conspicuous signs of distress or failure.

Sidewalks and pavements should be evaluated by others.

The materials used for construction at the first floor do not meet the requirements of ASCE 24-14 Flood resistant design and construction Chapter 5. See photo JC 6 on page 150.

The construction of the first floor does not comply with requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14. See photo JC6 on page 150.

All attendant utilities and equipment at the first floor do not comply minimum elevation requirements specified in Chapter 7 of ASCE 24-14. See photo JC 4 on page 150.

CEC could not ascertain if there exist any underground tanks in or below the basement.

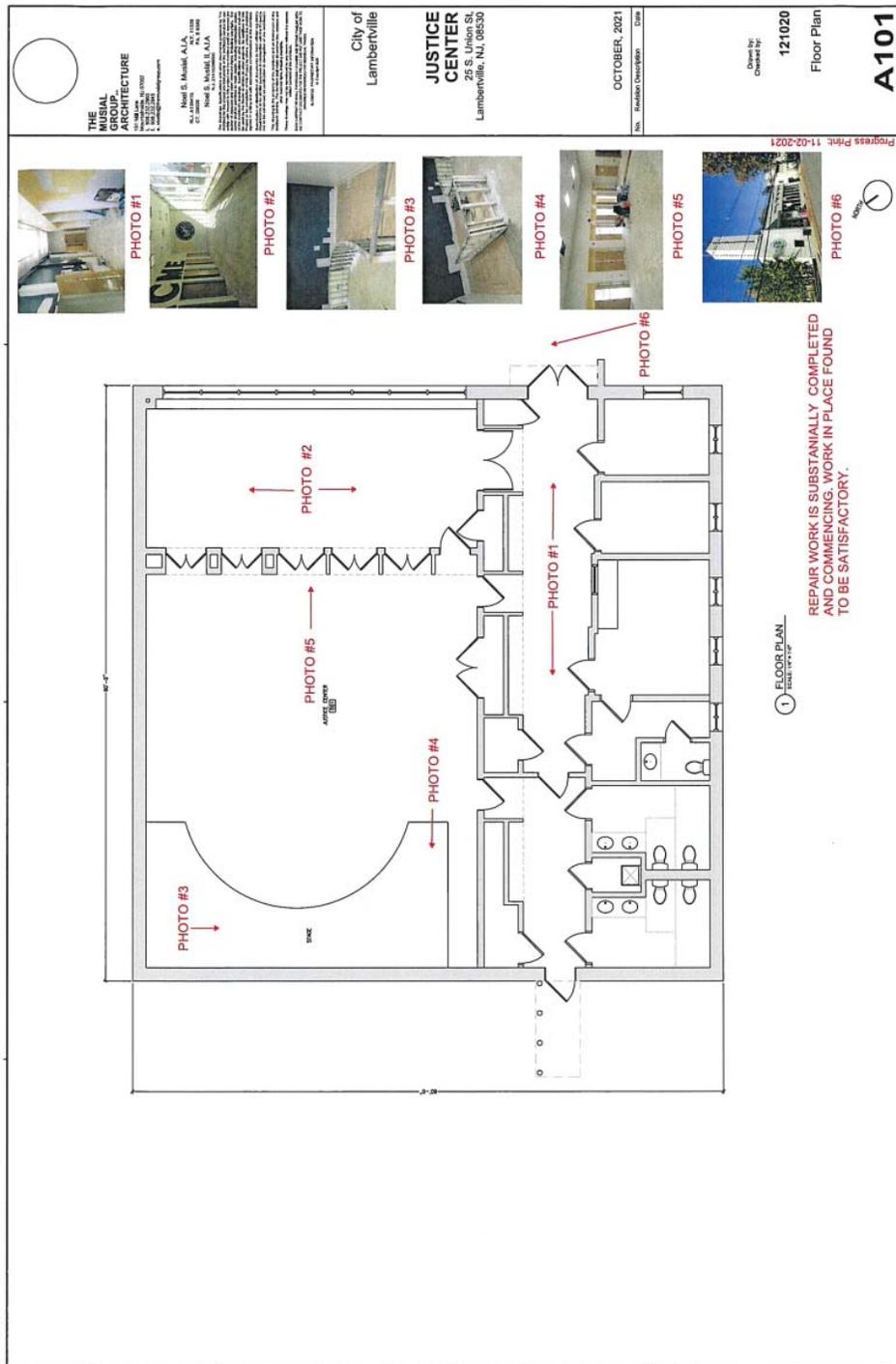
Recommendations:

High Priority (do now within 12 months)

- 1) Construction official shall identify if change in use or occupancy complies with code.
- 2) City of Lambertville must adopt a model code coordinated Flood Ordinance. Based on this ordinance an impact assessment has to be made.
- 3) A meeting with the township engineer, construction official and local flood plain administrator must be arranged to ascertain the base flood elevation. All finished floor elevations must be surveyed in NAVD88. A design flood elevation shall then be established.
- 4) Existing Flood Barriers must be re-evaluated to conform with FEMA; NJDEP; ASCE and IBC 2018 flood requirements for the base flood elevation in item 1 above and flood ordinance in item 2 above. See photo JC 5 on page 150.
- 5) Based on items 1 and 2 above a determination has to be made for the construction of the first floor
- 6) Requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14.

Medium Priority (initiate soon 1-3 years)

- 1) When the work described in the high priority and subsequent discussions are completed, evaluate whether requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14 can be met. If they cannot be met the City may have to consider building a new structure. If they can be met, then consider the items 2-4 below:



- 1) The knee wall at the front elevation on Union St and the glazing must be re-evaluated for water pressure from the design flood elevation based on item 1 above and flood ordinance in item 2 above. See photo JC1 and JC6 on page 150.

- 2) All materials below the design flood elevation shall be changed to flood resistant material to meet the requirements of ASCE 24-14 Flood resistant design and construction Chapter 5 on page 18.
- 3) All attendant utilities and equipment below the design flood elevation must be changed to comply with minimum elevation requirements specified in Chapter 7 of ASCE 24-14 and the requirements of the NEC.

Low priority (3-5 years)

- 1) None.

Public Library (6 Lily Street)

The Public Library is a two-story building structure with a basement, attic, and a cupola structure. Gross area approx. 6000 sf. The exterior walls are masonry walls. This cannot be confirmed without a probe. Based on the visual site observation, where visible the floors, interior walls, roof, mansard roof and cupola were of wood construction. The building is a historic structure.

The structure was completed in 1812-30, according to the Musial Group PA, as a residence for Dr. John Lilly. The structure was converted to a Moose Lodge, then apartments, and then offices for the Hunterdon County Nutrition project for the elderly. The City of Lambertville took possession in 1980 and installed the library in 1988. The building is a historic structure documented on NJ LUCY and NJSHPO.

At present, the structure is being used only for the public library services. The basement, attic and the cupola are being used for storage and for mechanical units.

In 1993, an elevator and ramp has been added to allow for ADA access. The elevator is hydraulic. It is stated on the library website that a structural steel framework to support the library was added. CEC did not observe this reinforcement. The framework if it exists is completely concealed.

The structure is located in an AE flood zone based on the FEMA Flood Map panel for the Delaware River and Swan Creek that has been referenced earlier. The building structure has experienced flooding several times in its history. CEC believes that the building basement and the first-floor slab elevation is well below the design and base flood elevation for this area.

The last Flood Insurance Rate Map for this structure available through the FEMA map service center was FEMA flood map panel 34019C0420G revised on May 2, 2012. See page 140. The building is located within the FEMA flood zone AE. It is within the New Jersey Flood Hazard Area Design Flood line (NJFHADF). It is also within the flood zone shown on the historical flood maps by NJDEP circa 1978 see page 141.

The building predates both the seismic codes and the current code wind load requirements.

Observation:

The exterior walls were observed to be of brick masonry construction. The basement walls are of stone masonry construction. The parge coat on the stone masonry has deteriorated. See photo PL 1 and PL 2 on page 155. Settlement cracks were observed throughout the exterior masonry envelope.

The brick is absorbing a lot of water. This is typical of older brick from the 1800's. The mortar joints are soft and appear to be constructed with lime mortar. There exists deterioration of the brick masonry from the contributory mechanisms of moisture saturation and leaching of the lime mortar. Leaching has resulted in the physical loss of strength and adhesion. Where leaching is severe, the mortar is weak and friable and is lost from the joints by either washing-out or by compressive extrusion in areas of high stress. This has resulted in local stress concentrations and loosening of masonry walls. See photographs PL 3 and PL 4 on the next page.

Some attempts at repointing and regrouting have been made in the past. Unfortunately, the mortar used appears to be a cement mortar and not a historic lime mortar. This repair is compounding the cracking and deterioration of the brick masonry. The use of cement mortar is developing stronger knife edge supports over which the brick masonry has to arch. The brick was never designed to function in this way. As explained earlier, this is causing stress concentrations within the mortar causing mortar to become weak and loose. See photo PL 5 on this page.



Photo PL 1 Deteriorated parge coat reception area (North)



Photo PL-2 Deteriorated stone masonry mortar and parge coat



Photo PL 3 Washed out mortar in brick masonry



Photo PL 4 Washed out mortar in brick masonry

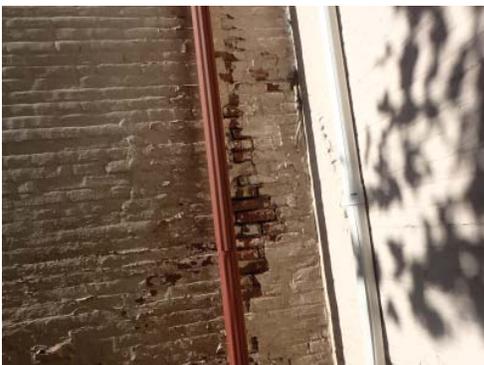


Photo PL5 Deterioration at locations of repointed mortar



Photo PL6 Break Room Window 2nd Floor note settlement cracks

Window lintels are of heavy timber construction and are exposed to the weather. There has been repeated swelling and shrinkage in these wood members and has caused cracking in the brick masonry. Differential settlement has aggravated the situation. See photo PL 6 on this page.

All exposed wood is showing signs of deterioration. Window lintels have split. See photo PL 6 on this page. The porch to the south (Lilly St.) has severe deterioration in the exposed wood.

This has occurred both at the floor, columns and the roof eaves and soffit. There is a conspicuous lack of connections or nailing between various wood members. See photo PL 7 through 10 on this page. The exposed wood at roof eaves and soffits show signs of deterioration. See photo PL 11 to 12 on this page and photo PL 13 on the next page.



Photo PL7 South Porch on Lily St



Photo PL8 deteriorated wood framing at eave of South Porch



Photo PL 9 Deteriorated wood framing at eave of South Porch



Photo PL10 Deteriorated wood framing at floor of South Porch

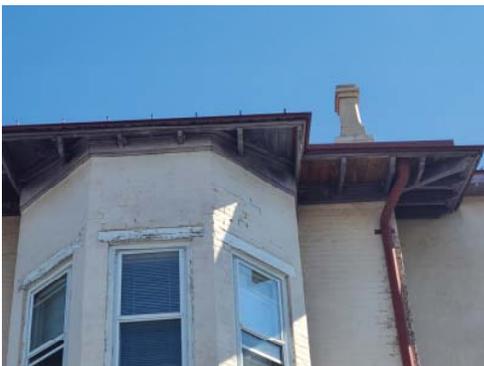


Photo PL 11 Exposed wood at roof eave on west



Photo PL 12 Deteriorated soffit at eave

There exists settlement of the ramp slab on the east side of the library (towards NJ Highway 29). It is not clear by visual observation alone if this has been caused by improper compaction of the soil under the ramp slab or by washout during a flood event. As a result of this settlement the height of both the handrail and the guide rail is now non-compliant with the code. The settlement has also caused the handrails to come loose at the landing. See photos PL 14, 15 and 16 on the next page.



Photo PL 13 Deteriorated soffit at eave



Photo PL 14 Settlement at handicapped ramp (East)



Photo PL 15 Settlement at handicapped ramp (East)



Photo PL 16 Loose handrail at handicapped ramp

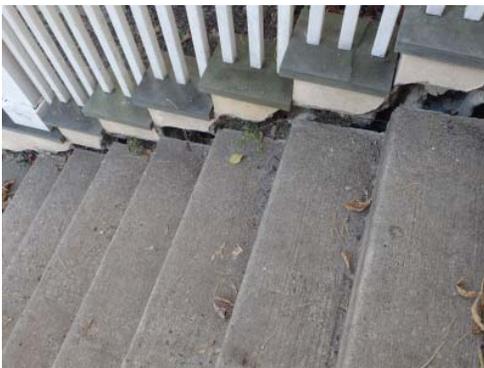


Photo PL 17 Settlement stair to reception area 101 (North)



Photo PL 18 Closeup of settlement at stair

On the north side of the library building at the entrance stairs to the main reception area the stair slab has separated from the cheek wall to the North (towards the Exxon Gas Station). It could not be established by visual observation only if this is as a result of improper compaction of the soil or from flood damage. The condition is hazardous and could injure a person. See photo PL 17 and 18 on this page.

There are several openings in the walls around the building that are below the flood elevation and do not appear to be protected. Similarly, there are several utilities and mechanical units at grade scattered around the building that are below the flood elevation. See photos PL 17- 18 on this page and photos PL 19-20 on the next page.

The first and the second floor of the library house storage and stack rooms. The library website indicates that floors were reinforced to accommodate this use. We could not verify this by visual

observation alone. The framing if it exists is concealed by finishes. Further the new foundations if any are concealed and cannot be viewed.



Photo PL19 Electric Utilities below flood elevation



Photo PL 20 HVAC and wall opening below flood elevation

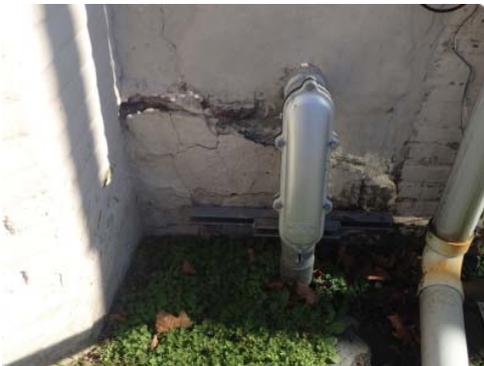


Photo PL21 Electric Utilities below flood elevation



Photo PL 22 Wall opening below flood elevation

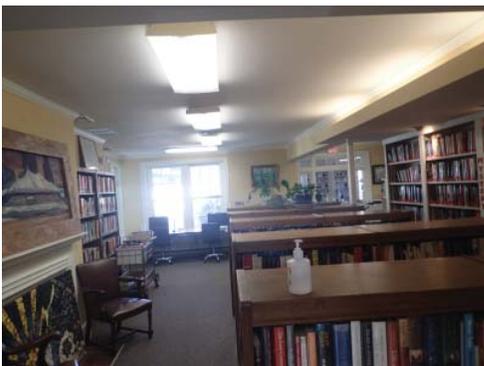


Photo PL 23 Stack room



Photo PL24 Ceiling showing leaks.

Several ceilings show signs of water leaks. See photo PL 24 on this page and PL 25 on the next page. The finish and the sheathing has deteriorated. It is not immediately clear if these are coming from the roof or the wall envelope. It is also possible that at some locations it could be from the attic. The attic is being used for storage and for support of the mechanical units. It does not appear that any reinforcing of the attic floor joists and girders was attempted. See photo PL 26 and 27 on page 159.

The cupola is not insulated. The windows of the cupola are not watertight, do not shut properly and are kept open for fresh air intake. This is allowing the rain and snow to infiltrate. See photo PL 28 on page 159.

Please refer to Public Library drawings A-101 and A-102 for additional photographs. Please note that the numbers on the photographs on A101 and 102 reference that individual drawing only and not the report.



Photo PL 25 Water leak at ceiling



Photo PL 26 Mechanical units in attic.



Photo PL 27 Attic being used for storage

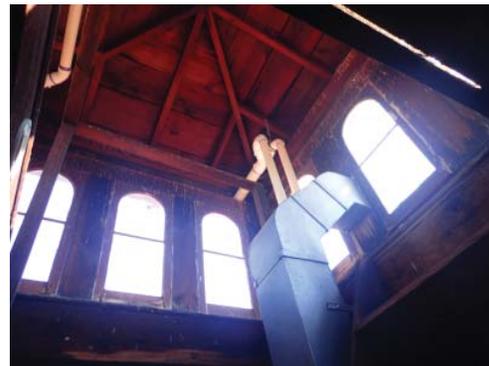


Photo PL 28 Cupola interior

Recommendations:

High Priority (do now within 12 months)

- 1) The Construction Official must examine all the documentation and confirm that the changes in occupancy and/or use do not violate any codes, laws, or statutes.
- 2) If required, analyses of reinforcement of the floor members, beams, columns, bearing walls and foundations must be completed for the additional loads from the change in use and / or occupancy and from fixed loads must be made. Then appropriate remedial measures must be undertaken. In particular, several areas require a live load of 100 psf and stack rooms require a live load of 150 psf. A residential building would have been designed for 30-40 psf live load. Current occupancy has significantly higher loads. There are no visible signs of reinforcement having been undertaken. This should be investigated.
- 3) City of Lambertville must adopt a model code coordinated Flood Ordinance. Based on this ordinance an impact assessment has to be made.
- 4) A meeting with the township engineer, construction official and local flood plain administrator must be arranged to ascertain the base flood elevation. All finished floor elevations must be surveyed in NAVD88. A design flood elevation shall then be established.
- 5) Use of existing basement must be re-evaluated to conform to FEMA; NJDEP; ASCE and IBC 2018 flood requirements for the base flood elevation in item 1 above and flood ordinance in item 2 above. Occupied areas below the design flood elevations shall be used only for storage.
- 6) Based on items 1 and 2, above a determination has to be made for the construction materials used in the basement. Additionally, requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14 need to be investigated.
- 7) Consider elevating the building. Follow FEMA guidelines.
- 8) All electrical and mechanical systems below the Design Flood Elevations must be mitigated.
- 9) A historic structures consultant should be retained to work with the architect, civil, structural and mep engineer to determine the feasibility of making changes to a historic structure.
- 10) Fix the handrail at handicapped ramp.
- 11) Fix the stairs on Lilly Street.
- 12) Fix the stairs to the north leading to the reception area
- 13) Remove all items stored in attic
- 14) Probe and evaluate existing reinforcement of steel framework.

Medium Priority (initiate soon 1-3 years)

- 1) When the work described in the high priority and subsequent discussions are completed, evaluate whether requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14 can be met. If they cannot be met, the City may have to consider building a new structure. If they can be met, then consider the items 2-4 below:
- 2) All materials below the design flood elevation shall be changed to flood resistant material to meet the requirements of ASCE 24-14 Flood resistant design and construction Chapter 5.

- 3) All attendant utilities and equipment below the design flood elevation must be changed to comply with minimum elevation requirements specified in Chapter 7 of ASCE 24-14 and the requirements of the NEC.
- 4) Compliance with various FEMA, NJDEP and NJUCC documents must be checked.
- 5) In conjunction with the historic building restoration consultant, the brick masonry must be repaired. We suggest that scaffolding be installed, and the wall be inspected in its entirety including all side walls, roofs eaves, coping, buttresses etc.
- 6) Follow the following guidelines:
 - a. Secretary of the Interior's Standards for Rehabilitation of Historic buildings 36CFR67.
 - b. NJDEP and NJ Historic Preservation Office Guidelines for Preservation of Historic Properties.
- 7) Further we suggest:
 - a. All cracks shall be repaired with new brick work with a stitching patterns for zigzag, vertical and horizontal cracks.
 - b. All new replacement facing brick shall have a water absorption rate between 6% and 9% and conform to ASTM C216 Grade S.
 - c. All deteriorated (weak, crumbling, cracked or missing) brick and mortar joints shall be replaced and tuck pointed. Old mortar shall be removed to a depth of $\frac{3}{4}$ inch or deeper if it badly deteriorated. For all joints use a mason's chisel or a special raking tool. Clean out all joint surfaces with compressed air, brush, them wet with a stream of water and then replace with new mortar.
 - d. All new mortar shall match existing in strength and appearance. Mortar for repointing shall conform to ASTM C270 Type O. Mortar should be prehydrated in conformance with the brick institute of America Technical Note 46. Mortar shall be placed in thin $\frac{1}{4}$ inch layers and rammed into each joint, each layer shall be allowed to stiffen "thumbprint" hard before mortar shall be tooled, compacted, and pushed into contact with brick. No voids shall be permitted.
 - e. All excess mortar shall be scraped and removed immediately. The joint shall be tooled according to the architects' specifications.
 - f. Color match all new mortar by soaking a portion of the wall and checking the color of the wet mortar with new.
 - g. Follow all procedures in the masonry code and Brick Institute of America Technical Manual for hot and cold weather masonry construction.
- 8) Ceiling lath and plaster ceiling and walls to be patched where noted. See photo PL24 on page 158 and photo PL 25 on page 159.
- 9) Reconstruct the porch, the soffits and the eaves. See photos PL 8 – 13 on pages 156 thru 157.

Low priority (initiate in 3-5 years)

- 1) Replace cupola windows.
- 2) Insulate cupola

Police Station (349 North Main Street)

The Lambertville Police Station is located in a former auto body shop building that the City of Lambertville had purchased along with the property in 1999. Approximate gross floor area is 3850 sf. The structure is a one story pre-engineered prefabricated steel building. The exterior cladding is a combination of concrete masonry with metal panels above.



Photo PS 1 North Elevation



Photo PS2 view from Northeast corner



Photo PS 3 West Elevation



Photo PS4 South Elevation



Photo PS 5 Damaged concrete masonry at southwest corner

Observation:

The property (approx. 1.5 acres) is subject to flooding from both the Delaware River and Alexauken Creek. From the FEMA maps the flood zone is AE. According to the Lieutenant / Director, during the recent floods the water in the Creek had risen to the level of the parking lot,

Being a police station (a critical facility) the design flood elevation would have to be constructed at least 2 feet above the parking lot elevation. This is obviously not the case.

From the FEMA maps, the property is an island during a flood event. The only access in and out of the property is from Main St. This road gets flooded out both North and South of the property. There is flooding to the north, south and west of the property. Please see the FEMA map section on page 140. The property has only one access on the east to Main Street. Main Street gets flooded to the north and to the south. There is no access either on to or off from Main Street to the east at the police station. For a critical facility like a police station this is a condition that merits immediate investigation.

The exterior walls are in fair to good condition. All the metal panels on all the faces need painting and caulking. The masonry walls require repointing / regrouting. There was loose masonry observed at southwest corner photo PS 5 on page 164. Please note that the numbers on the photographs on A101 reference that individual drawing only and not the report.

The metal deck at the roof and the foundations could not be observed. There is evidence of leaks in the ceiling tile in the Hall (room 10A) on drawing A101 on page 166.

Several slabs showed signs of cracking. See drawing A101 on page 166 for cracks in the storage room 015, mechanical room 014, arrest processing room 009 and the sallyport room 005. The masonry walls around the evidence room 011 have caused the slab to settle and crack.

An evaluation must be made by a security professional for the security of all doors, window, fan, and roof openings. Most do not appear to meet standards for police stations, holding cells and jails.

In general, none of the visible structural elements showed any conspicuous signs of distress or failure. See photo 8 on drawing A101 for damage and corrosion to a perimeter column.

Sidewalks, pavements, retaining walls and guard rails should be evaluated by others.

The materials used for construction at the first floor do not meet the requirements of ASCE 24-14 Flood resistant design and construction Chapter 5.

The construction of the first floor does not comply with requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14.

All attendant utilities and equipment at the first floor do not comply minimum elevation requirements specified in Chapter 7 of ASCE 24-14.

CEC could not ascertain if there exist any underground tanks.

- 1) Construction official shall identify if change in use or occupancy complies with code.
- 2) City of Lambertville must adopt a model code coordinated Flood Ordinance. Based on this ordinance an impact assessment has to be made.
- 3) A meeting with the township engineer, construction official and local flood plain administrator must be arranged to ascertain the base flood elevation. All finished floor elevations must be surveyed in NAVD88. A design flood elevation shall then be established.
- 4) Based on items 1 and 2 above a determination has to be made for the construction of the first floor. This building cannot be raised to the design flood elevation.
- 5) Requirements and feasibility for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14.
- 6) Flood Barriers conforming to FEMA; NJDEP; ASCE and IBC 2018 flood requirements for the base flood elevation in item 1 above and flood ordinance in item 2 above, do not appear to be feasible.
- 7) Based on the lack of access during a flood event, this police station is a prime candidate for relocation to a better site.
- 8) Security analysis of doors, windows, and fans for an escape threat.

Medium Priority (initiate soon 1-3 years)

- 1) When the work described in the high priority and subsequent discussions are completed, initiate and evaluate whether requirements for wet or dry flood proofing as established in Chapter 6 of ASCE 24-14 can be met. If they cannot be met the City may have to consider building a new structure. If they can be met then consider the items 2-4 below:
- 2) All materials below the design flood elevation shall be changed to flood resistant material to meet the requirements of ASCE 24-14 Flood resistant design and construction Chapter 5.
- 3) All attendant utilities and equipment below the design flood elevation must be changed to comply with minimum elevation requirements specified in Chapter 7 of ASCE 24-14 and the requirements of the NEC.
- 4) A scan of the roof for leaks.
- 5) Repair cmu at southwest corner photo PS 5 on page 164.
- 6) Repair perimeter column photo 8 on A101.
- 7) Remove and rebuild the cmu around the evidence room after installing a new footing or haunch in the slab to support the masonry.

Low priority (3-5 years)

- 1) Painting of metal panels.
- 2) Repointing / regrouting of masonry.
- 3) Repair of cracking in slabs.

Department of Public Works (120 Quarry St.):

This structure is a typical public works facility, one story concrete masonry units with wood trusses. It houses a garage, an office, a mezzanine, rest room and a mechanical room. The construction is from the 1960s. The building is outside of a flood zone based on the FEMA FIRM flood panels referenced earlier.



Photo PW1 Front (South) Elevation



Photo PW 2 West Elevation



Photo PW3 East Elevation



Photo PW4 Interior Elevation looking West

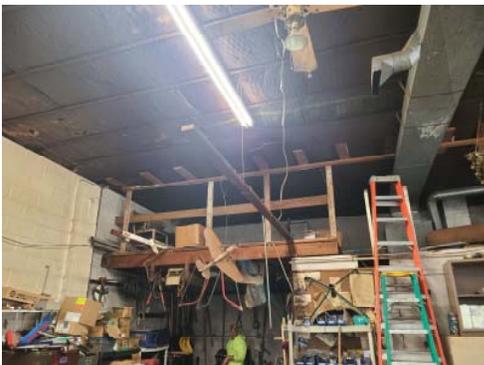


Photo PW5 Interior Elevation looking east

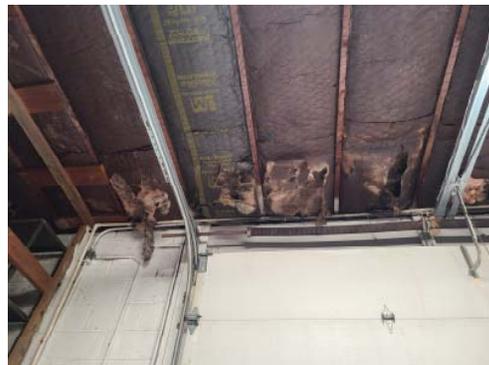


Photo PW6 Overhead door ceiling at Front Elevation

The concrete slab on grade is in fair condition. It does show wear and tear and some hairline cracks. The exterior concrete masonry walls appear to be unreinforced. This must be confirmed probing / testing. Several of the cmu walls have cracks suggesting that there has been settlement in the foundations. Control joints were also not observed. The cracking could have resulted from the lack of joints. There is some damage to the masonry above the garage doors. Some of the masonry at the door jambs is suspect. The rear wall could not be observed because of a lack of

access. Portions of other walls have metal panels that obscured our view of the wall construction. A wall mounted AC unit has been punched through the masonry wall. There is no evidence of a lintel above the opening. When observed from the ground, the roof was in good condition. The roof sheathing was not visible. Roof gutters are clogged, and several leaders are missing. These conditions should be evaluated by others.

The mezzanine appears to have been added after the main building was constructed. We suggest that the construction official check the clearance between the mezzanine floor and the roof trusses above as well as the mezzanine framing and the floor slab below for fire resistance requirements. The guard rails on the mezzanine do not comply with OSHA and with IBC 2018 NJ edition. These guard rails should be replaced.

The fence and the entrance gate on the property should be evaluated by site / civil engineer.

Recommendations:

High Priority (do now to 1year)

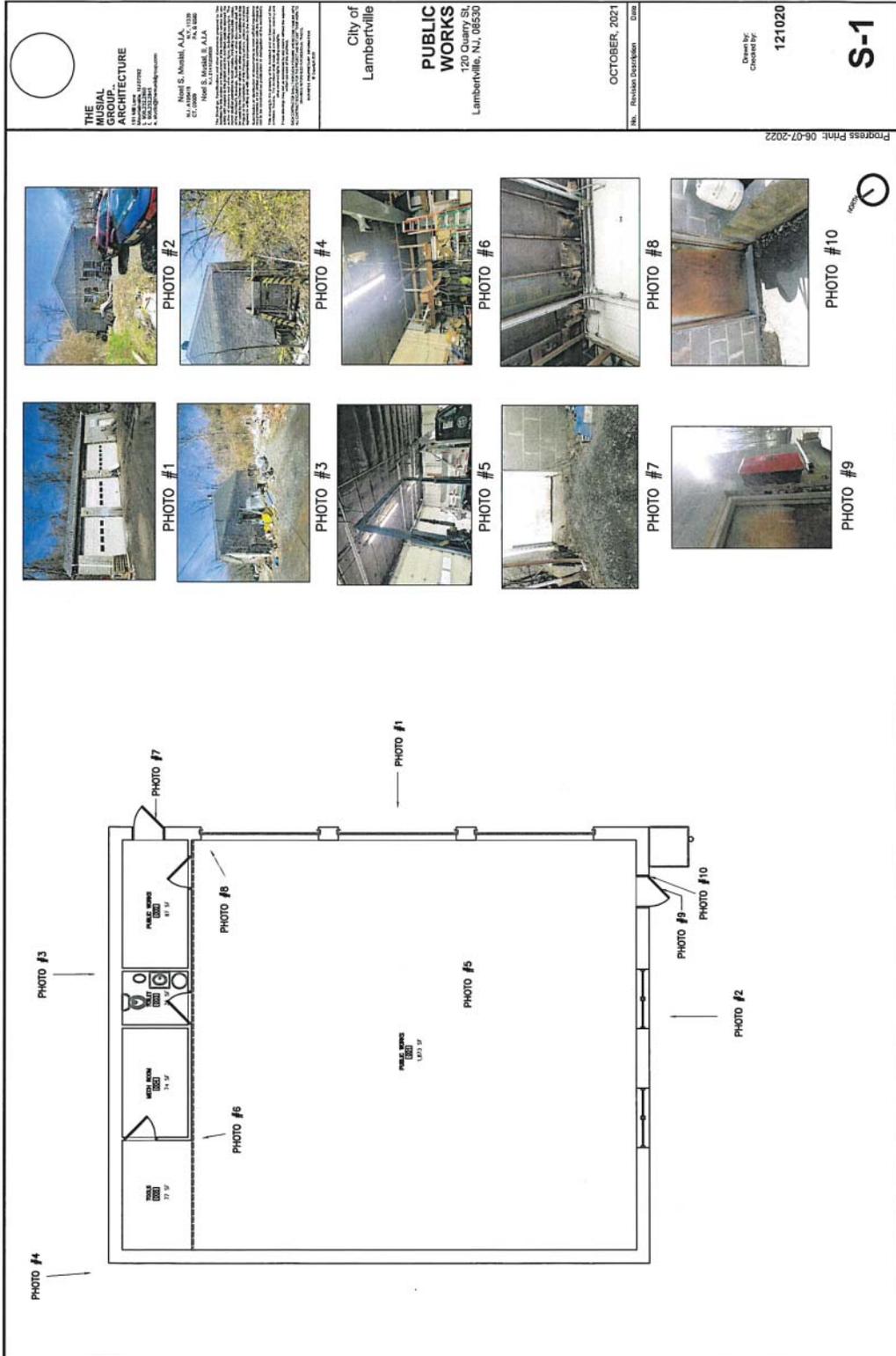
- 1) If mezzanine is to be designed for light storage 125 psf live load the existing framing should be re-evaluated.
- 2) Install new guard rails at mezzanine.
- 3) Depending on the findings of the construction official,, install a fire rated membrane assembly to protect the wood in the roof trusses above.
- 4) Depending on the findings of the construction official,, install a fire rated membrane assembly to protect the wood of the mezzanine framing.

Medium priority 1 to 3 years

- 1) Install lintels where missing.
- 2) Deterioration at ceiling above overhead door should be repaired.
Masonry should be repointed / regouted.

Low priority (3 to 5 years)

- 1) None



THE MUSIAL GROUP ARCHITECTURE
 1000 N. W. 10th St.
 Ft. Lauderdale, FL 33304
 Phone: (954) 575-1100
 Fax: (954) 575-1101
 Email: info@musialgroup.com

Neal S. Musial, A.I.A.
 Principal
 01/2009
 Neal S. Musial, A.I.A.
 Principal
 01/2009

City of
 Lamberville
PUBLIC WORKS
 120 Cherry St.
 Lamberville, NJ, 08530

OCTOBER, 2021
 No. Revision Description Date

Drawn by:
 Created by:
 121020

S-1

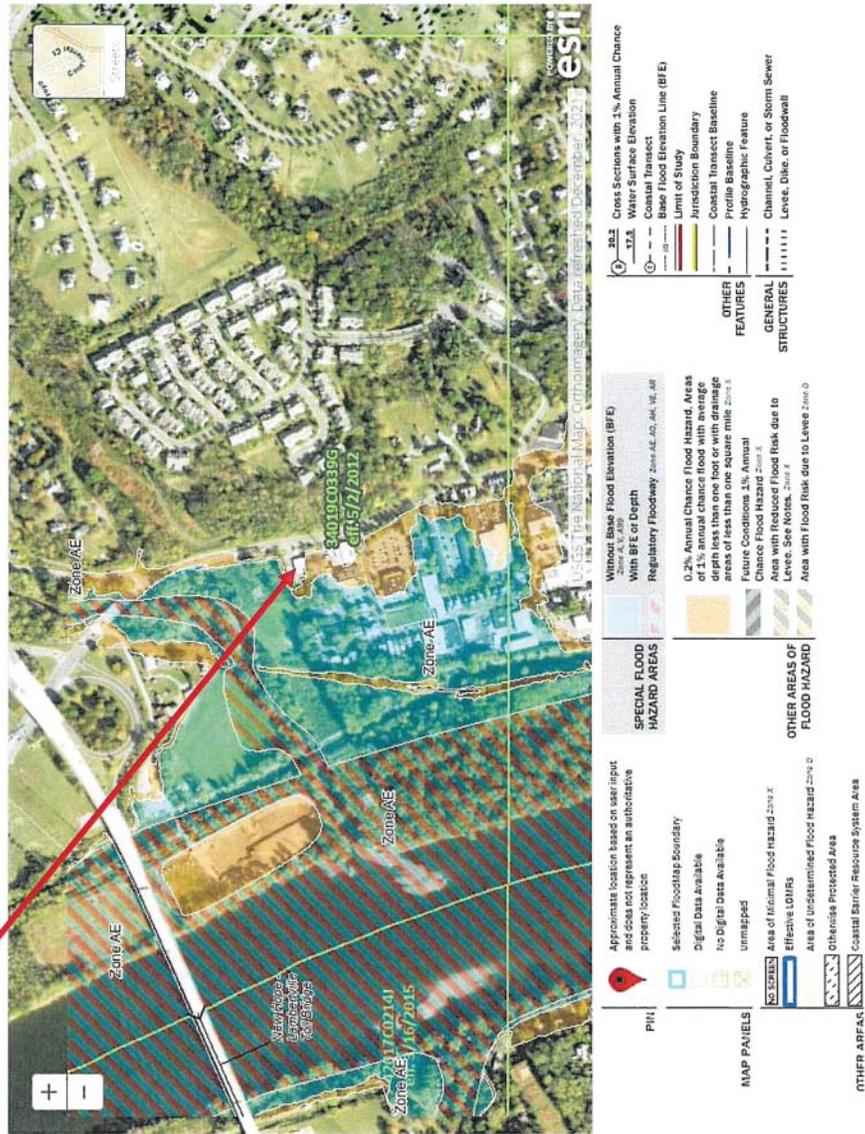
Progress Print: 06-07-2022

FEMA Flood Maps

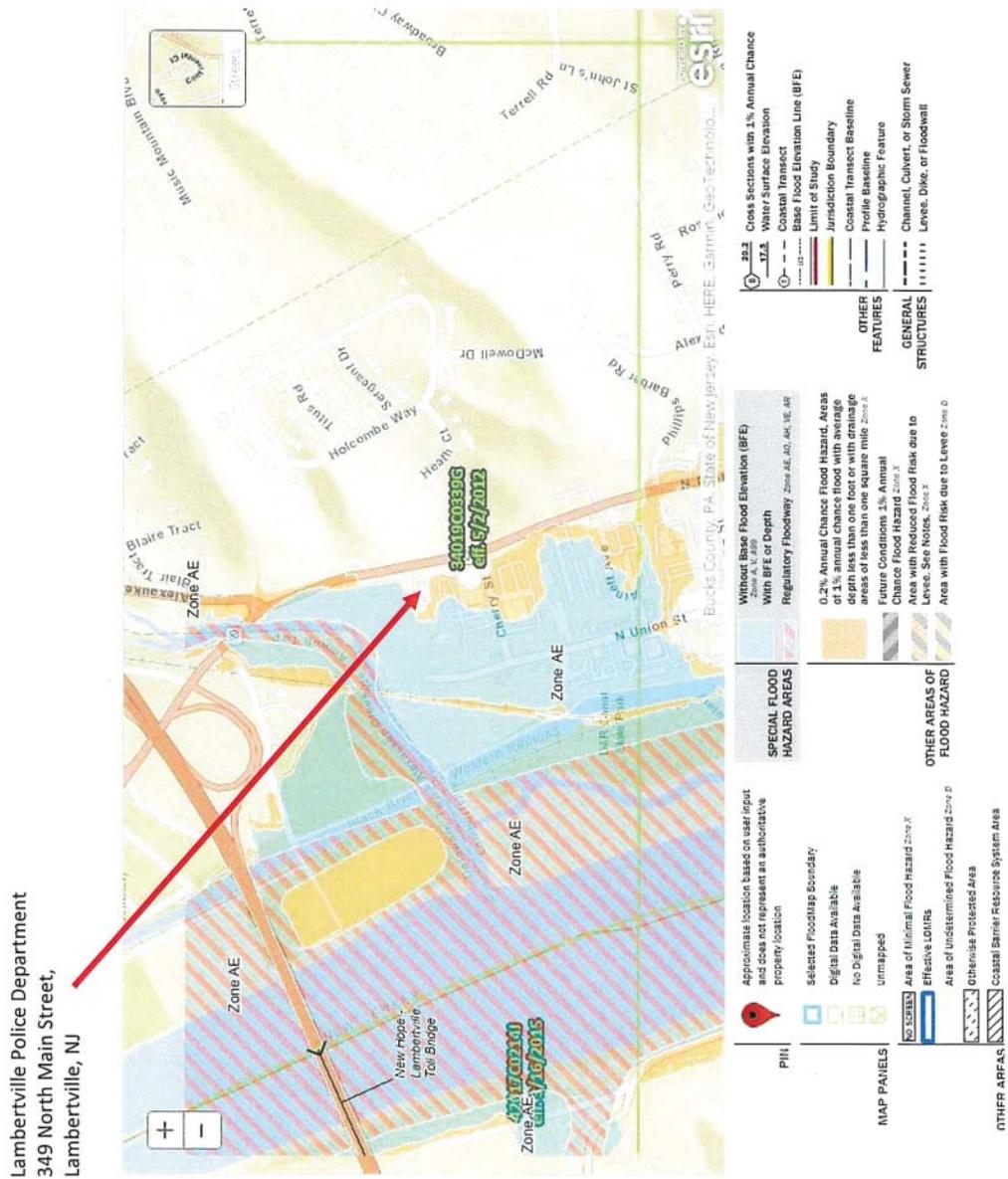


Blow up of FEMA map showing the Police Station and Flood Lines

Lambertville Police Department
 349 North Main Street,
 Lambertville, NJ



Blow up of Environmental Systems Research Institute (ESRI) map showing Flood Risk at Police Station



Another Blow up of Environmental Systems Research Institute (ESRI) map showing Flood Risk at Police Station

4

MECHANICAL ASSESSMENT WHITMAN ENGINEERS, INC.



WHITMAN
Creating Solutions. Exceeding Expectations.



FEASIBILITY ASSESSMENT REPORT OF EXISTING CONDITIONS

FOR

MUSIAL GROUP

PERFORMED BY

WHITMAN

FEBRUARY 2022

100 Franklin Square Drive, Suite 200, Somerset, NJ 08873
www.whitmanco.com

Table of Contents

1.0	INTRODUCTION	1
1.1	Purpose and Project Understanding	1
1.2	Executive Summary	1
1.2.1	Building and Site – General Description	1
1.2.2	Methodology	1
2.0	EXISTING CONDITIONS ASSESSMENT	1
2.1	Lambertville Police Station	1
2.1.1	Mechanical Systems	1
2.1.2	Electrical Systems	2
2.1.3	Plumbing Systems	3
2.2	City Hall	3
2.2.1	Mechanical Systems	3
2.2.2	Electrical Systems	4
2.2.3	Plumbing Systems	4
2.2.4	Fire Protection System	5
2.3	Public Works	5
2.3.1	Mechanical Systems	5
2.3.2	Electrical Systems	6
2.3.3	Electrical Distribution	6
2.3.4	Lighting	6
2.3.5	Plumbing Systems	6
2.4	Justice Center	6
2.4.1	Mechanical Systems	6
2.4.2	Electrical Systems	7
2.4.3	Plumbing Systems	8
2.5	Free Public Library	8
2.5.1	Mechanical Systems	8
2.5.2	Electrical Systems	9
2.5.3	Plumbing Systems	9
2.5.4	Fire Protection System	10
3.0	CONCLUSION	10

Feasibility Assessment Report of Existing Conditions

1.0 INTRODUCTION

1.1 Purpose and Project Understanding

The Whitman team was retained by The Musial Group, Architects to provide building assessments for town buildings located in Lambertville, New Jersey. The objective of this study is to investigate and assess the existing conditions of the facilities and prepare a description of the recommended repairs and renovations required to improve the condition of the building and its systems for future operation. To complete the study Whitman visually surveyed the existing conditions at each building and site and toured the facility with buildings and grounds personnel to gain insight to ongoing conditions. Based upon our field surveys and investigations, this report provides an assessment of the current conditions and recommendations for corrective actions.

1.2 Executive Summary

1.2.1 Building and Site – General Description

The subject properties are all located in the town of Lambertville, NJ. The Lambertville police station was constructed in the early 1900s. The Justice Center originally served as an ACME store built in 1951. In 2004, the space was renovated and became the Justice Center. The Public Library dates to the mid-1800s. Lastly, the Public Works building was built in 1969.

1.2.2 Methodology

Whitman conducted visual inspections of building elements and systems on-site, walked the building with buildings and grounds personnel, and reviewed existing floor plans. The following items were assessed as part of this study:

- a. General review of the condition of the interior including lighting and toilets.
- b. Review of the building systems, including mechanical, electrical, plumbing systems.

2.0 EXISTING CONDITIONS ASSESSMENT

2.1 Lambertville Police Station

2.1.1 Mechanical Systems

Whitman was able to survey the heating system, the duct work, the cooling system, and the exhaust systems. The following statements and recommendations are based on visual observations.

2.1.1.1 Heating and Cooling Systems

A Lennox gas-fired furnace, cooling coil, and accompanying ductwork supplies heating and cooling to all interior spaces. The unit was manufactured in August of 2000 and has a life expectancy of around 20 years which has been exceeded. In addition, no outside air provisions were observed. The recommendation would be to replace all existing units with more energy efficient models and to verify minimum ventilation rates comply with mechanical code requirements.

2.1.1.2 Ductwork

The existing duct work can be cleaned and reused depending on the future use of the facility. Before new equipment is installed, Whitman recommends verifying ducts are capable of handling proposed design requirements.

2.1.1.3 Exhaust Systems

The building consists of ceiling mounted exhaust fans located in bathroom spaces and sidewall mounted exhaust fans serving interrogation spaces. All units appear to be original. Exhaust fans typically have a life expectancy of 10 years, which has been exceeded. Whitman recommends replacing all exhaust fans.

2.1.2 Electrical Systems

Whitman was able to survey the electrical distribution and lighting. The statements and recommendations are based on visual observations.

2.1.2.1 Electrical Distribution

Electrical distribution for the building is served by multiple panels that all look to be in good condition and can be used for future usage in the building. The existing meter socket and CT is 120/240V and is in working condition. Next to the building there is also a 15 KW generator installed in 2003; Whitman recommends replacing with new 15 KW generator and fencing the unit in.

2.1.2.2 Lighting

The existing lighting mostly consisted of dome lighting fixtures and 2'x2' ceiling lights. Whitman recommends replacing all dome lighting with 2'x2' lights and the entire building be replaced with LED fixtures. In addition, it is recommended to provide at least the minimum light levels. Recent technological improvements have driven down the initial costs making LED a viable option for installation. Furthermore, LED fixtures have a long life (10+ years) without the need for lamp replacement. Whitman also recommends installing more outdoor, LED lighting. Lighting controls

should be replaced to include light sensors for exterior lights and motion sensors for interior lights.

2.1.3 Plumbing Systems

Whitman was able to survey the visible domestic water piping, sanitary drainage, and fixtures. The statements and recommendations are based on visual observations.

2.1.3.1 Domestic Water

The existing water heater is 75 gallon and Whitman recommends replacing with a high efficiency model.

2.1.3.2 Fixtures

Fixtures shall be cleaned free of dirt and debris and inspected of their condition and determined at that time if fixtures are in good working condition. Per our inspection, the fixtures appear to be in good condition.

2.2 City Hall

2.2.1 Mechanical Systems

Whitman was able to survey the heating and exhaust systems. The building currently has no central cooling and relies on PTAC (Packaged Terminal Air Conditioning) units. The following statements and recommendations are based on visual observations.

2.2.1.1 Heating Systems

A Lochinvar gas-fired condensing boiler was installed in 2011 provides hot water for general heating purposes. The unit is sized for 285,000 btu/ hr natural gas input and appears to be in good condition. No replacement is recommended at this time. Hot water from the boiler is fed to radiators via piping distributed throughout the building. Electric convector units were also identified in corridor spaces. Whitman recommends replacing the existing hot water radiator thermostatic valves and tamperproof actuators for new units. Many radiators show signs of exterior rusting and should be replaced.

2.2.1.2 Exhaust Systems and Ductwork

The existing exhaust ductwork and grilles can be cleaned and reused depending on the future use of the facility. Before new equipment is installed, Whitman recommends verifying ducts are capable of handling new design requirements. Exhaust systems should be verified to comply with local mechanical code requirements.

2.2.1.3 Cooling Systems

Cooling is generally handled utilizing PTAC units located throughout the building office spaces. The General Electric PTAC units appear to have been installed in 1980. These units appear to be in poor condition and are past their life expectancy of 10 years. They should be replaced with new units. PTAC units provided by LG were also identified. It is unclear if the units were installed in 2010 or 2000, but in general it is recommended to replace the units as general life expectancy for PTACs is around 10 years. A better cooling solution may be to provide multi-zoned split system units similar to VRF or a central cooling system.

2.2.2 Electrical Systems

Whitman was able to survey the electrical distribution and lighting. The statements and recommendations are based on visual observations.

2.2.2.1 Electrical Distribution

The electrical distribution consists of a main 400 A 120/240 3 phase panel and a 120/208 V subpanel. The interior of both panels and the panels' housing are in good condition and can be re-used for the building's potential usage. Outlet locations should be verified to be in safe locations, Whitman observed an outlet located too close to the stairway. The generator, installed around 2012, has an issue that once the generator is energized, it continues and does not shut down. This should be repaired.

2.2.2.2 Lighting

Lighting throughout the building varies throughout the building and includes dome lighting, incandescent lamps, pendent linear strip fluorescents, 2'x4' fluorescents, and 1'x4' lamp fluorescents. Replacement of all fixtures with LED fixtures and providing—or exceeding minimum light levels—is recommended. Recent technological improvements have driven down the initial costs making LED a viable option for installation. Furthermore, LED fixtures have a long life (10+ years) without the need for lamp replacement. Lighting controls should be replaced to include light sensors for exterior lights and motion sensors for interior lights.

2.2.3 Plumbing Systems

Whitman was able to survey the visible domestic water piping, sanitary drainage, and fixtures. The statements and recommendations are based on visual observations.

2.2.3.1 Domestic Water

Whitman recommends replacing existing water heater with high efficiency model.

2.2.3.2 Fixtures & Sanitary Drainage

The existing toilets and lavatories are in working condition, but Whitman recommends replacing with newer fixtures. Newer second floor fixtures already replaced in 2010 do not need to be replaced. Rough-ins, stops, and escutcheons connected to the toilets and lavatories should be replaced. The floor-drain strainers in the bathrooms show exterior rust and should be replaced. Sanitary piping ADA insulation should be inspected and replaced as necessary. Some fixtures were covered in dirt and debris and should be cleaned for future use.

2.2.4 Fire Protection System

Whitman was able to survey the fire alarm system. The statements and recommendations are based on visual observations.

2.2.4.1 Fire Alarm Systems

Whitman observed fire alarm equipment located throughout the building. Equipment included a horn strobe, a pull station, an edge lit exit sign, and a combo exit/emergency light. All pieces are survivable and can be used as part of a future fire alarm system.

2.3 Public Works

2.3.1 Mechanical Systems

Whitman was able to survey the heating system, duct work, and cooling systems. The statements and recommendations are based on visual observations.

2.3.1.1 Heating Systems

The existing furnace is in poor condition and past the useful life expectancy of 15 years. Whitman recommends replacing with a more efficient model. Whitman did not observe provisions for outside air. Whitman recommends verifying minimum ventilation rates comply with local mechanical code requirements.

2.3.1.2 Ductwork and Exhaust Systems

The existing duct work can be cleaned and reused depending on the future use of the facility. Before new equipment is installed, Whitman recommends verifying ducts are capable of handling new design requirements. Exhaust systems were not identified during the survey and should be incorporated per local mechanical code requirements.

2.3.1.3 Cooling Systems

Cooling is generally handled by various PTAC units located throughout the building spaces. These units appeared to be in poor condition. Whitman recommends replacing the units as general life expectancy for PTACs is around 10 years. A central cooling system may be a better cooling solution.

2.3.2 Electrical Systems

Whitman was able to survey the electrical distribution and lighting. The statements and recommendations are based on visual observations.

2.3.3 Electrical Distribution

The electrical distribution consists of a 200 A 120/240 V panel that is 50 years old. The panel is outdated, and Whitman recommends replacing it with an equivalent panel.

2.3.4 Lighting

The existing lighting system consists of 1'x4' wrap around fixtures and 2 lamp fluorescents. Replacement of all fixtures with LED fixtures and providing—or exceeding minimum light levels—is recommended. Recent technological improvements have driven down the initial costs making LED a viable option for installation. Furthermore, LED fixtures have a long life (10+ years) without the need for lamp replacement. Lighting controls should be replaced to include light sensors for exterior lights and motion sensors for interior lights.

2.3.5 Plumbing Systems

Whitman was able to survey the visible domestic water piping, sanitary drainage, and fixtures. The statements and recommendations are based on visual observations.

2.3.5.1 Domestic Water

The existing water heater is a 40-gallon Rheem model number 81V40D. The unit shows signs of exterior damage and rusting. It was installed in 1995 and has passed the recommend lifespan. Whitman recommends replacing the existing domestic water heater.

2.3.5.2 Fixtures & Sanitary Drainage

Whitman observed numerous plumbing violations and recommends replacing entire plumbing system. The existing toilet is not properly vented, existing vent pipe is capped and exposed at the slab. System will need a new water closet and rough-ins. The slope sink is covered in dirt and debris and shows signs of damage; sink should be replaced. Existing eye wash shows signs of rust and should be removed or replaced if required. The existing hose bibs located inside the building should be replaced with new fixtures.

2.4 Justice Center

2.4.1 Mechanical Systems

Whitman was not able to access the rooftop equipment during the survey. All information pertaining to rooftop equipment was provided through the township of Lambertville and photos by building personnel. In addition, ductwork was mostly inaccessible but is assumed to be in good condition according to information provided by onsite personnel. The following statements and recommendations are based on limited visual observations.

2.4.1.1 Rooftop Units

Two five-ton gas-fired Lennox roof top units provide ventilation, heating and cooling to the building spaces. Both units were installed in March of 2011 and appear to be in good working condition. No replacement is recommended at this time, only general maintenance and upkeep. Whitman recommends verifying minimum ventilation rates meet proposed space needs according to local mechanical code requirements.

2.4.1.2 Ductwork and Exhaust Systems

Limited access to ductwork was available during the survey. Onsite personnel provided Whitman with a general history of the ductwork system. Whitman recommends all existing duct work to be cleaned and reused depending on the future use of the facility. Before new equipment is installed, Whitman recommends verifying ducts are capable of handling new design requirements. The bathroom exhaust systems are currently being renovated. Whitman recommends cleaning the exhaust ductwork and grilles.

2.4.2 Electrical Systems

Whitman was able to survey the electrical distribution and lighting. The statements and recommendations are based on visual observations.

2.4.2.1 Electrical Distribution

The electrical distribution consists of a 200 A 120/240 V panel; the interior and panel enclosure look to be in good condition and can be reused. The incoming service is located on the side of the building and should be clean of all vegetation. Outlets, switched, and electrical work seems to be unfinished, new cover plates should be installed after electrical work is complete.

2.4.2.2 Lighting

The existing lighting system consists of 2'x4' fluorescents, 2'x2' fluorescents, and down lights. These fixtures should be replaced by flat panel LED fixtures. The outdoor lighting consists of incandescent par lamps. Replacement of all fixtures with LED fixtures and providing—or exceeding minimum light levels—is recommended. Recent technological improvements have driven down the initial costs making LED a viable option for installation. Furthermore, LED fixtures have a long life (10+ years) without the need for lamp replacement. Lighting controls

should be replaced to include light sensors for exterior lights and motion sensors for interior lights.

2.4.3 Plumbing Systems

Whitman was able to survey the visible domestic water piping, sanitary drainage, and fixtures. The statements and recommendations are based on visual observations.

2.4.3.1 Domestic Water

There is an existing 17-gallon domestic water heater that Whitman recommends replacing with a high-efficiency model. Whitman recommends installing a backflow preventer on the incoming water service.

2.4.3.2 Fixtures & Sanitary Drainage

During the walkthrough, fixtures were not installed. If fixtures are already purchased and are installed, they do not need to be replaced.

Existing rough-ins appear to be in good shape and Whitman recommends connecting new fixtures to these locations; piping shall have new ADA insulation. Whitman also recommends new trap primers and a chrome plated wall mounted cleanout cover in the bathroom. In any uncapped piping, Whitman recommends using a scope to verify the line is clean of dirt and debris before being utilized for future use.

Whitman recommends reinstalling insulation on piping throughout the building. At a minimum, insulation should be installed from protection against freezing & condensation.

2.5 Free Public Library

2.5.1 Mechanical Systems

Whitman was able to survey the mechanical split systems, the duct work, and exhaust systems. The following statements and recommendations are based on visual observations.

2.5.1.1 Heating and Cooling Systems

Heating was originally provided via baseboard heaters located throughout the building. Onsite personnel confirmed the units are no longer in service and need to be removed or replaced and used for supplemental heating purposes. Currently, heating and cooling is provided by three Carrier split system units installed around 2011. The units are nearing the end of their useful life but do not need replacement at this time. Condensing units are located next to the building and appear to be in good condition. Whitman recommends inspecting and repairing the concrete pads they are installed on as necessary.

2.5.1.2 Ductwork and Exhaust Systems

The existing ductwork and grilles can be cleaned, repaired, and reused depending on the future use of the facility. Any ductwork located in a nonconditioned space should be insulated. Before new equipment is installed, Whitman recommends verifying ducts are capable of handling new design requirements. Exhaust systems should be verified to comply with local mechanical code requirements.

2.5.2 Electrical Systems

Whitman was able to survey the electrical distribution and lighting. The statements and recommendations are based on visual observations.

2.5.2.1 Electrical Distribution

The electrical distribution consists of a 225 A 120/208 V panel located in the basement. The interior and housing of the panel seems to be in good condition and can be re-used for the building's potential usage but does not show much capacity for future expansion.

2.5.2.2 Lighting

The existing lighting system consists of mostly 4 lamp fluorescents. Whitman recommends replacing with a streamline LED linear surface lighting. There are also spotlights that use a lot of energy. It is recommended to replace the lights with an LED strip fixture or LED down lights. New lighting should provide at least minimum light levels. Recent technological improvements have driven down the initial costs making LED a viable option for installation. Furthermore, LED fixtures have a long life (10+ years) without the need for lamp replacement. Lighting controls should be replaced to include light sensors for exterior lights and motion sensors for interior lights.

2.5.3 Plumbing Systems

Whitman was able to survey the visible domestic water piping, sanitary drainage, and fixtures. The statements and recommendations are based on visual observations.

2.5.3.1 Domestic Water

The existing water heater is a RUUD model number PE40-2 C from 1996. Whitman recommends the water heater to be removed and replaced with a new, high-efficient unit.

The existing 1" water service needs a backflow preventer per the National Standard Plumbing Code.

2.5.3.2 Fixtures & Sanitary Drainage

All toilets, lavatories, and sinks appear to be in good working condition. In the bathroom, the ADA insulation on the lavatory piping, the trap, and the tail piece should be replaced. Any piping throughout the building that is not insulated should be insulated. The vent piping in the basement should be replaced as well.

2.5.4 Fire Protection System

Whitman was able to survey the fire alarm and fire suppression systems. The statements and recommendations are based on visual observations.

2.5.4.1 Fire Alarm Systems

The existing fire alarm system consists of serviceable exit signs. Some of the emergency lighted are outdated and should be replaced when building is refurbished. There was a CO detector plugged into a low located outlet that should be replaced and integrated into new fire alarm system.

3.0 CONCLUSION

The report provides Whitman's observations and recommendations for the five town buildings located in Lambertville, NJ. The Lambertville police station facility needs almost all mechanical, electrical, and plumbing equipment to be replaced. The existing mechanical equipment is past its recommended life-expectancy and should be replaced, but the duct work can be cleaned and reused. In addition, provisions for outside air should be included to meet local code requirements. The electrical panels inside the building, the existing meter socket and CT are in working condition. The existing generator next to the building should be replaced. All existing lighting should be replaced and should install additional outdoor lighting. All plumbing fixtures should be cleaned free of dirt/debris and inspected to determine if fixtures should be replaced with new. The water heater has also exceeded its recommended life expectancy and should be replaced with new. Construction work shall not interfere with the continuing occupation of the adjacent operations within the building.

The City Hall building mechanical heating system appears to be a good working order. All mechanical room equipment operates under 10 horsepower and the condensing boiler inputs are less than 400,000 btu/hr. A sprinkler system or fire rated wall should not be required under incidental use of the International Building Code. The radiator thermostatic valves should be replaced with new. All cooling PTAC units are past their useful life and should be replaced with new or a new central air system should be added. Exhaust system ductwork can be cleaned and reused. The electrical panels inside the building are in working condition and can be used for the building's potential usage. Outlet locations should be verified to be in safe locations. The existing generator and all existing lighting should be replaced. Visible piping and accessories for

sanitary, water, gas, piping are worn or damaged and should be replaced before use. All plumbing rough-ins and fixtures should be replaced with new. The existing water heater has also exceeded its recommended life-expectancy and should be replaced with new. The fire alarm equipment can be used as part of a future fire alarm system. Construction work shall not interfere with the continuing occupation of the adjacent operations within the building.

All mechanical equipment contained within The Public Works building should be replaced as all components are past their useful life. In addition, outside air provisions were not observed and should be implemented to meet local code requirements. The electrical panel inside the building is outdated and should be replaced. All existing lighting should be replaced. All plumbing equipment, fixtures and associated plumbing piping in its entirety should be replaced with new in accordance with all applicable codes. Construction work shall not interfere with the continuing occupation of the adjacent operations within the building.

The Justice Center mechanical equipment appears to be in good working order. The two rooftop units are nearing life expectancy, but should provide several years of heating, cooling, and ventilation. The electrical panel inside the building is in working condition. The incoming service is located on the side of the building and should be clean of all vegetation. Outlets, switched, and electrical work seems to be unfinished, new cover plates should be installed after electrical work is complete. All existing lighting should be replaced. Domestic water service should have a code required backflow device installed downstream of the water meter. All plumbing fixtures are in good working condition. Recommend replacing existing trap primers with new. All domestic cold and hot water piping within the building envelope should be fully insulated to prevent freezing/condensation. The existing water heater has also exceeded its recommended life-expectancy and should be replaced. We recommend that existing sanitary piping below slab be scoped prior to commencement of any construction to avoid obstructions that may be present. Construction work shall not interfere with the continuing occupation of the adjacent operations within the building.

Lastly, the Free Public Library mechanical units were installed around 2011 and do not need to be replaced at this time. Several baseboard heating units are located throughout the building and are no longer in service. Whitman recommends removing the units or replacing to use for supplemental heating. The electrical panel inside the building is in working condition for the building's potential usage but does not show much capacity for future expansion. All existing lighting should be replaced. Domestic water service should have a code required backflow device installed downstream of the water meter. The existing water heater has also exceeded its recommended life-expectancy and should be replaced. All domestic cold and hot water piping within the building envelope should be fully insulated to prevent freezing/condensation. Existing trim on lavatory in bathroom is in poor working condition and should be replaced with new in like kind. Vent piping in basement is in poor working condition and should be replaced with new. The existing fire alarm emergency lights are outdated and should be replaced. The CO detector should be replaced. Construction work shall not interfere with the continuing occupation of the adjacent operations within the building.

5

CIVIL ASSESSMENT
HARBOR CONSULTANTS, INC.



FACILITIES ASSESSMENT
FOR
18 YORK STREET – CITY HALL
6 LILLY STREET – LIBRARY
25 SOUTH UNION STREET – JUSTICE CENTER
349 NORTH MAIN STREET – POLICE DEPARTMENT
120 QUARRY STREET – DPW YARD
CITY OF LAMBERTVILLE
HUNTERDON COUNTY, NJ

PREPARED BY:



Harbor Consultants Inc
320 North Avenue East
Cranford NJ 07016
908-276-2715



PREPARED FOR:

City of Lambertville
18 York Street
Lambertville, NJ

December 13, 2021

A handwritten signature in blue ink that reads "Anthony G. Gallerano".

Anthony G. Gallerano, PE, PP
NJ Professional Engineer License No. 03343500

Introduction

The purpose of this report is to present the findings and recommendations of the assessment of existing site improvements at various municipal facilities in the City of Lambertville. On November 9, 2021, the following facilities were field inspected:

- 18 York Street – City Hall.
- 6 Lilly Street – Library.
- 25 South Union Street – Justice Center.
- 349 North Main Street – Police Station.
- 120 Quarry Street – Department of Public Works.

The site assessment included, but not limited, to pavement, curbing, sidewalks, walls, steps, lighting, and drainage. Areas of the City are located with the flood area of the Delaware River as show on FEMA Map. Presented below are evaluations of existing conditions and recommended improvements with estimated costs. Site photographs can be found in Appendix A. Engineers Estimates can be found in Appendix B.

18 York Street – City Hall

This property has an area of 0.30 acres and is located at the corner of North Union Street, from which the parking lot is accessed. Observations include a gravel parking lot with a paved portion for handicap accessible parling spaces, cracked sidewalk near accessible entrance, discharge point of roof leader and trench drain at rear corner of building and in rear of building near wood steps not known, sidewalk along rear of building near wood steps in poor condition, handrail along rear sidewalk disconnected, some uneven settlement of wood stairs, disconnected roof leaders along North Unuion Street side of building, street sidewalks in good condition, however brick paver inserts are potential tripping hazard, one pole mounted light in parking lot, parking stops along fence not in correct locations, and portions of fence in disrepair.

Recommended improvements include the following:

1. Paving of parking lot will create a safer surface for pedestrians and will provide for more efficient snow removal.
2. Replace cracked sidewalk near accessible entrance.
3. Replace sections of rear sidewalk that are in disrepair and reset valve box flush with sidewalk to avoid tripping hazard.
4. Repair handrail along rear sidewalk.
5. Reset brick pavers in street sidewalk or replace with concrete.
6. Observe wood stairs for further settlement. May need future repair or replacement.
7. Reset parking stops.
8. Repair portions of fence that are in disrepair.
9. Secure all roof leaders.

The estimated cost of repairs is \$17,080.00.

6 Lilly Street – Library

This property has an area of 0.33 acres and is located at the corner of South Main Street, from which the parking lot is accessed. Observations include a paved parking in poor condition, damaged sidewalk in front of Lilly Street stairs, sidewalk along Lilly Street in poor condition, brick paver inserts in sidewalk are settling and are a tripping hazard, parking stops not in correct locations, building mounted lights, concrete stairs separating from wall, stonework at Lilly Street stairs need repair, detectable pads at handicap curb ramps in complete disrepair, and areas of parking lot appear to have ponding water.

Recommended improvements include the following:

1. Resurface parking lot and pitch towards street to avoid ponding water.
2. Repair sections of sidewalk that are in disrepair, including area in front of stairs and street sidewalks.
3. Reset brick pavers in street sidewalk or replace with concrete.
4. Replace damaged detectable pads at handicap curb ramps.
5. Repair damaged stonework near Lilly Street stairs.
6. Fill space between concrete stairs and wall to prevent freezing causing further damage. Observe stairs for continuing settlement. Stairs may need to be replaced in future.
7. Reset parking stops and replace as required.

The estimated cost of repairs is \$15,869.00.

25 South Union Street – Justice Center

This property is 1.0 acres in size and fronts on the canal to the west and a tributary to the south and is located within the AE Zone of the Delaware River as shown on FEMA map. Observations include a paved parking in good condition with some spider cracking, parking stops not in correct locations, wood bench along edge of parking lot near stream, gabion retaining wall along stream in good condition, sidewalk in front of building in good conditions, building mounted lights, no detectable pads on handicap curb ramps at driveway, timber guard rail in good condition, spider cracks in parking lot, curbs in good condition, washout near parapet wall at stream culvert, paint on retaining wall in poor condition, and there appears to be areas of ponding water.

Recommended improvements include the following:

1. Reset parking stops to correct locations.
2. Install detectable pads on handicap curb ramps at driveway.
3. Fill spider cracks and seal coat parking lot to extend life of pavement.
4. Repair washout near parapet wall at stream culvert.
5. Repaint retaining wall.
6. Install additional lighting in parking lot.

The estimated cost of repairs is \$49,000.00.

349 North Main Street – Police Station

This property is 1.59 acres in size and is adjacent to the flood zone identified as Zone AE on the FEMA map. Observations include a paved parking in good condition with some spider cracking, curbs are in good condition, timber guard rail is in good condition, pole mounted lights, and slope along north side appears to be subject to erosion and contains a small retaining wall.

Recommended improvements include the following:

1. Fill spider cracks and seal coat parking lot to extend life of pavement.
2. Install proper retaining wall to stabilize slope.

The estimated cost of repairs is \$19,858.00.

120 Quarry Street – Department of Public Works

This property is 0.42 acres in size and contains facilities customary to a DPW yard, such as equipment storage, material storage and a maintenance building. The property road frontage contains a solid wood fence with sections that are in disrepair. Lighting is by building mounted lights.

Recommended improvements include the following:

1. Repairs sections of fence in disrepair.
2. Repair damaged gate.

The estimated cost of repairs is \$3,500.00.

APPENDIX A
SITE PHOTOGRAPHS

PHOTO EXHIBIT - 18 YORK STREET (CITY HALL)



CRACKED SIDEWALK NEAR ADA ENTRANCE



WOOD FENCE ALONG EDGE OF PARKING LOT



OVERALL GRAVEL PARKING LOT



REAR SIDEWALK AND WOOD HANDRAIL



WOOD STEPS TO REAR ENTRANCE



PAVER INSERTS IN SIDEWALK

PHOTO EXHIBIT – 6 LILLY STREET (LIBRARY)



PAVER INSERTS & SIDEWALK NEAR LILLY STREET STEPS



DAMAGED SIDEWALK ALONG LILLY STREET



DAMAGED STONEWORK NEAR STEPS



DAMAGED DETECTABLE PADS



PAVEMENT IN POOR CONDITION



STAIRS SEPARATING FROM WALL

PHOTO EXHIBIT – 25 SOUTH UNION STREET (JUSTICE CENTER)



WASHOUT NEAR PARAPET WALL



EDGE OF PARKING LOT WITH PARKING STOPS



SIDEWALK ALONG SOUTH UNION STREET



SPIDER CRACKS IN PARKING LOT



RETAINING WALL



AREA OF APPARENT PONDING

PHOTO EXHIBIT - 349 NORTH MAIN STREET (POLICE STATION)



SPIDER CRACKS IN PAVEMENT



TIMBER GUARD RAIL



OVERALL PARKING LOT



SLOPE EROSION

120 QUARRY STREET (DPW YARD)



DAMAGED FENCE ALONG QUARRY STREET



DAMAGED FENCE ALONG QUARRY STREET

APPENDIX B

ENGINEERS ESTIMATES



HARBOR CONSULTANTS INC.
 Engineers, Planners & Surveyors
 320 North Avenue East
 Cranford, NJ 07016

ENGINEERS ESTIMATE

PROJECT: Lambertville Facilities Assessment
 18 York Street
 City Hall

DATE: 12/13/21

PAGE: 1 OF 1

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
1	Pave Parking Lot	TN	118	\$95.00	\$11,210.00
2	Pavement Subbase	TN	72	\$25.00	\$1,800.00
3	Replace Concrete Sidewalk	SF	105	\$14.00	\$1,470.00
4	Repair Fence	LF	24	\$25.00	\$600.00
5	Reset Pavers	LS	1	\$1,000.00	\$1,000.00
6	Repair Handrail	LS	1	\$500.00	\$500.00
7	Secure Roof Leaders	LS	1	\$500.00	\$500.00
	TOTAL				\$17,080.00



HARBOR CONSULTANTS INC.
 Engineers, Planners & Surveyors
 320 North Avenue East
 Cranford, NJ 07016

ENGINEERS ESTIMATE

PROJECT: Lambertville Facilities Assessment
 6 Lilly Street
 Library

DATE: 12/13/21

PAGE: 1 OF 1

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
1	Resurface Parking Lot	SF	5,270	\$1.50	\$7,905.00
2	Replace Concrete Sidewalk	SF	176	\$14.00	\$2,464.00
3	Repair Stonework	LS	1	\$1,500.00	\$1,500.00
4	Replace Detectable Pads	EA	2	\$500.00	\$1,000.00
5	Repair Concrete Stairs	LS	1	\$2,000.00	\$2,000.00
6	Reset Parking Stops	LS	1	\$1,000.00	\$1,000.00
	TOTAL				\$15,869.00



HARBOR CONSULTANTS INC.
 Engineers, Planners & Surveyors
 320 North Avenue East
 Cranford, NJ 07016

ENGINEERS ESTIMATE

PROJECT: Lambertville Facilities Assessment
 25 South Union Street
 Justice Center

DATE: 12/13/21

PAGE: 1 OF 1

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
1	Fill Spider Cracks in Pavement	LS	1	\$4,000.00	\$4,000.00
2	Seal Coat Parking Lot	SY	2,750	\$2.00	\$5,500.00
3	Repair Washout Near Parapet Wall	LS	1	\$7,500.00	\$7,500.00
4	Install Detachable Pads at Driveway	LF	2	\$500.00	\$1,000.00
5	Reset Parking Stops	LS	1	\$1,000.00	\$1,000.00
6	Install Pole Mounted Lights	EA	6	\$5,000.00	\$30,000.00
	TOTAL				\$49,000.00



HARBOR CONSULTANTS INC.
 Engineers, Planners & Surveyors
 320 North Avenue East
 Cranford, NJ 07016

ENGINEERS ESTIMATE

PROJECT: Lambertville Facilities Assessment
 349 North Main Street
 Police Department

DATE: 12/13/21

PAGE: 1 OF 1

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
1	Fill Spider Cracks in Pavement	LS	1	\$2,000.00	\$2,000.00
2	Seal Coat Parking Lot	SY	1,429	\$2.00	\$2,858.00
3	Install Retaining Wall	SF	600	\$25.00	\$15,000.00
	TOTAL				\$19,858.00



HARBOR CONSULTANTS INC.
 Engineers, Planners & Surveyors
 320 North Avenue East
 Cranford, NJ 07016

ENGINEERS ESTIMATE

PROJECT: Lambertville Facilities Assessment
 120 Quarry Street
 DPW Department

DATE: 12/13/21

PAGE: 1 OF 1

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
1	Repair Fence	LF	100	\$25.00	\$2,500.00
2	Repar Gate	LS	1	\$1,000.00	\$1,000.00
	TOTAL				\$3,500.00

6

CONSTRUCTION COST ESTIMATES

CONSTRUCTION COST ESTIMATES AND PRIORITIES

The estimated costs for the various tasks mentioned in the following pages are anticipated project costs based upon industry standards. They are provided to aid in the budgeting process for the next ten years.

The current economy is very volatile. The cost of products and services has been fluctuating at a much more rapid rate than recent years. In addition, the availability of construction materials has affected the amount of time construction projects can be completed.

There are some tasks in this report that refer to the testing for hazardous materials. These tests could include, but are not limited to, the testing of materials suspected to contain asbestos, lead, or mercury. The testing must be performed by qualified and licensed testing agencies. The result of any hazardous test will affect the estimated costs to complete certain tasks. The remediation or abatement costs that would follow any discovery of hazardous materials cannot be included in this construction cost estimate report.

Estimated costs are also found in some of the engineer's reports prior to this section. These estimated costs are also included in the following comprehensive list of estimated costs and priorities.

The following cost estimates are listed for each of the five facilities. Each facility has three sets of cost estimates and is referred to as "priorities."

Priority 1 denotes tasks that should be completed immediately to maintain the health and safety of the occupants.

Priority 2 denotes tasks that should be completed five years from the writing of this report.

Priority 3 denotes tasks that should be completed ten years from the writing of this report.

Some of the municipalities that The Musial Group served have determined it to be more beneficial to move their functions into a newly built municipal complex instead of mending their scattered outdated buildings. This is particularly true for existing buildings located in flood zones.

If this becomes a consideration for the City of Lambertville, it is recommended that a thorough program be developed. This program would determine the spatial requirements of each department. It would also describe the adjacency requirements of all municipal functions. With this program, a well-studied construction cost estimate could be developed along with phasing options to help with the new building's procurement.

CITY HALL

18 York Street
Lambertville, NJ 08530

Priority	Task	Cost
1	Interior Room Signage	\$5,400.00
1	Repair stair loose handrails	\$2,920.00
1	Repair crack on front door	\$2,820.00
1	Install emergency lights in rooms 103 and 110	\$800.00
1	Install exit sign in corridor 202	\$300.00
1	Reinstall missing piping insulation in room 210	\$100.00
1	Yearly maintenance to roof	\$1,500.00
1	Repair roof over elevator area	\$3,000.00
1	Clean out roof drain systems at roof	\$1,000.00
1	Service and maintain fire shutters annually	\$1,500.00
1	Reinforce existing structure for increased live loads	\$300,000.00
1	Mitigate electrical systems above flood elevations	\$200,000.00
1	350 ft. cont. inflatable flood barrier around building	\$65,450.00
		\$584,790.00

Priority	Task	Cost
2	Replace Windows	\$65,250.00
2	Upgrade Lights to LED	\$75,072.00
2	Replace light switches with sensors	\$8,250.00
2	Replace glass in vestibule door	\$2,664.00
2	Clean adhesive from wood floor at 1st floor	\$500.00
2	Replace and repaint window sill in room 104 and all of 3rd floor	\$2,920.00
2	Repair ceiling crack or water damage in rooms 107, 203, 204, 205 and all of 3rd floor and cupola	\$9,568.00
2	Replace toilet accessories in toilets 107 and 108 with commercial grade items	\$1,400.00
2	Replace or install new window blinds in toilet 108, 206	\$600.00
2	Repair cracks or water damage in walls in rooms 110, 111, 203, 204, 205, all of third floor	\$44,130.00
2	Repair and reinstall floor tile in room 210	\$5,300.00
2	Install waterproof wall covering around janitor sink room 209	\$500.00
2	Replace damaged wood flooring in kind and repaint at rooms 302, 304, 305, 306, 310, 311, 314, 315, 316, 317, 320, 321, 322	\$3,270.00
2	Repair doors to two closets of room 205	\$2,000.00
2	Install elec/comm outlets in all of 3rd floor	\$17,820.00
2	Add electric sub-panel for additional 3rd floor duplexes	\$7,500.00
2	Replace doors in 3rd floor to be handicapped accessible (Including adjacent walls)	\$36,320.00
2	Replace stairs from 3rd floor to cupola	\$5,000.00
2	Rebuild window sill at 3rd floor stair landing	\$2,500.00
2	Install wire management system in cupola	\$500.00

2	Repoint exterior masonry walls	\$1,500.00
2	Repaint exterior of building	\$4,422.00
2	Rebuild front entrance stairs	\$15,000.00
2	Rebuild back entrance stairs	\$10,000.00
2	Repair foundation wall at elevator	\$10,000.00
2	Repair foundation wall at east outdoor stair	\$10,000.00
2	Replace drain at east outdoor stair	\$2,000.00
2	Clean underground roof drain system and install boots at leaders	\$5,000.00
2	Install vertical grab bars at water closets	\$200.00
2	Replace vinyl wainscot in toilet 108	\$500.00
2	Install or replace radiators	\$10,000.00
2	Replace cooling system	\$100,000.00
2	Replace generator	\$75,000.00
2	Replace water heater	\$7,500.00
2	Pave Parking Lot	\$11,210.00
2	Pavement Subbase	\$1,800.00
2	Replace Concrete Sidewalk	\$1,470.00
2	Repair Fence	\$600.00
2	Reset Pavers	\$1,000.00
2	Repair Handrail	\$500.00
2	Secure Roof Leaders	\$500.00
		\$559,266.00

Priority	Task	Cost
3	Refinish wood flooring (Part of 1st floor)	\$3,660.00
3	Repaint interior doors/frames, window casings/sills, walls, ceilings, radiators, millwork, stair stringers/balusters	\$25,000.00
3	Repair mosaic tile in vestibule	\$3,000.00
3	Repair carpet in Stair Landing 102	\$1,000.00
3	Repair and repaint crown molding in rooms 103 and 105	\$15,000.00
3	Replace carpet in rooms 104 and 105 (without pad)	\$18,000.00
3	Repair pocket doors with new hardware in room 104	\$7,500.00
3	Install wall base in room 205	\$2,500.00
3	Mount electric outlets 15" above the finished floor in room 206	\$1,500.00
3	Replace 1st floor plumbing fixtures	\$10,000.00
3	Repair shutter pockets	\$20,000.00
3	Repoint chimney	\$2,500.00
	Repair 1st floor slab in elevator addition	\$3,000.00
		\$112,660.00

PHILLIP L. PITTORE
JUSTICE CENTER
 25 S. Union Street
 Lambertville, NJ 08530

Priority	Task	Cost
1	Clean air filters	\$500.00
1	Repaint exterior soffit at front entrance	\$200.00
1	Repoint exterior brick	\$300.00
1	Exterminate insect hive	\$100.00
1	Paint bollards near exterior meter	\$300.00
1	Install splash block under rain leader	\$100.00
1	Repair rust and repaint top of west canopy	\$450.00
1	Repair flashing of west canopy to exterior wall	\$700.00
1	Patch masonry openings at north wall	\$1,000.00
1	Clean roof	\$500.00
1	Repair roof leak at southeast area	\$1,500.00
1	Install backflow preventer	\$1,000.00
1	New insulation on exposed piping	\$5,000.00
1	Install detectable pads at driveway	\$1,000.00
1	305 ft. cont. inflatable flood barrier around building	\$57,035.00
		\$11,650.00

Priority	Task	Cost
2	Replaced soiled or stained ceiling tiles	\$500.00
2	Replace toggle light switches with sensors	\$3,000.00
2	Repaint walls and gypsum board ceilings	\$13,572.00
2	Clean acrylic ceiling panels in Hall 001	\$300.00
2	Build wing walls each side of drinking fountain to be handicapped accessible	\$1,000.00
2	Install handicapped grab bars in Toilet 007	\$700.00
2	Install vertical grab bars at water closets	\$300.00
2	Upgrade Lights to LED	\$1,520.00
2	Repaint rod supporting the front canopy	\$300.00
2	Repair EIFS at southwest corner of building	\$1,000.00
2	Repaint back (west) wall and columns of canopy	\$3,600.00
2	Repoint and repaint retaining wall west of building	\$3,210.00
2	Fill spider cracks in pavement	\$4,000.00
2	Seal coat parking lot	\$5,500.00
2	Repaint washout near parapet wall	\$7,500.00
2	Reset parking stops	\$1,000.00
2	Install pole mounted lights	\$30,000.00
2	Mitigate electrical systems above flood elevations	\$125,000.00
		\$202,002.00

Priority	Column1	Column2
3	Task	Cost
3	Refinish bench at west side of building	\$2,500.00
3	Replace water heater	\$5,000.00
	Replace HVAC units	\$60,000.00
		\$67,500.00

PUBLIC LIBRARY

6 Lilly Street
Lambertville, NJ 08530

Priority	Task	Cost
1	Install handrail at stairs	\$845.00
1	Repair window at cupola	\$750.00
1	Test inside and outside surfaces and ground for hazardous materials	\$8,000.00
1	Repaint all of exterior surfaces	\$382,655.00
1	Repoint brick	\$150,000.00
1	Replace guardrail at upper stair landing at north side	\$1,500.00
1	Remove vegetation growing onto the building	\$1,500.00
1	Repair exterior columns at west, north and northeast sides	\$15,000.00
1	Replace surrounding concrete sidewalks	\$2,464.00
1	Repair exterior soffit at north and northeast side	\$10,000.00
1	Clean roof drains	\$1,500.00
1	Install splash blocks under rain leaders	\$100.00
1	Repair rain leaders	\$1,000.00
1	Fill open joints in concrete sidewalk	\$750.00
1	Repair back porch floor support and guardrails	\$50,000.00
1	Repair erosion under northwest corner of building	\$3,000.00
1	Repair crack in exterior west wall	\$3,000.00
1	Replace plywood hatch cover with prefab metal cover under the back (south) porch	\$1,500.00
1	Repair Concrete Stairs	\$2,000.00
1	Reinforce existing structure for increased live loads	\$125,000.00
1	Mitigate elec/mech systems above flood elevations	\$150,000.00
1	350 ft. cont. inflatable flood barrier around building	\$65,450.00
1	Probe and evaluate existing reinf of steel framework	\$5,000.00
		\$981,014.00

Priority	Task	Cost
2	Replace door hardware to be handicapped accessible	\$15,000.00
2	Repaint interior walls and ceilings	\$18,383.00
2	Repair crack in arch between rooms 111 and 112	\$1,500.00
2	Upgrade Lights to LED	\$15,200.00
2	Replace light switches with sensors	\$4,800.00
2	Install vertical grab bars at water closets	\$300.00
2	Replace damaged insulation in attic	\$2,400.00
2	Replace all windows	\$63,945.00
2	Replace front entry stairs at north side	\$5,000.00
2	Clean underground drainage system and connect to rain leaders with boots.	\$5,000.00
2	Repair plaster walls at exterior handicapped ramp	\$3,000.00
2	Replace water heater	\$7,500.00
2	New insulation on all exposed piping	\$7,500.00
2	New vent piping in the basement	\$10,000.00
2	Build fenced bin for garbage cans	\$3,000.00

2	Resurface Parking Lot	\$7,905.00
2	Repair Stonework	\$1,500.00
2	Replace Detectable Pads	\$1,000.00
2	Reset Parking Stops	\$1,000.00
		\$173,933.00

Priority	Task	Cost
3	Rebuild cupola	\$50,000.00
3	Replace HVAC	\$82,000.00
3	Insulate cupola	\$250.00
		\$132,250.00

POLICE DEPARTMENT

349 North Main Street
Lambertville, NJ 08530

Priority	Task	Cost
1	Repair cracks in concrete floor	\$5,000.00
1	Install fire extinguisher in sally port	\$200.00
1	Repair roof leaks	\$1,500.00
1	Install exit sign at west end of hall 10A	\$300.00
1	Install cabinet pulls on kitchenette	\$100.00
1	Install exhaust fan at room 011	\$1,500.00
1	Replace double doors, frame, and hardware to room 014 from outside.	\$7,825.00
1	Replace floor/wall tile in toilets after repairing cracks	\$1,626.00
1	Repair door hardware in room 002	\$100.00
1	Seal around shower drain in room 004A	\$100.00
1	Repaint exterior wood siding	\$300.00
1	Repair and repaint steel column at exterior entry	\$500.00
1	Install trim under exterior metal siding	\$750.00
1	Replace rain leader	\$100.00
1	Exterminate insects and their nests	\$500.00
1	Remove organic growth on exterior of building	\$500.00
1	Clean roof gutters	\$1,000.00
1	Install splash block at rain leader	\$100.00
1	Install boots at bottom of rain leaders at north side of the building	\$500.00
1	Remove bird nests	\$500.00
1	Trim tree away from roof	\$1,500.00
1	Relocate new exhaust fan in rooms 009 and 012	\$50,000.00
1	Replace toilet exhaust fans	\$50,000.00
1	330 ft. cont. inflatable flood barrier around building	\$61,710.00
		\$186,211.00

Priority	Task	Cost
2	Upgrade door locks with keyless locks	\$4,000.00
2	Upgrade Lights to LED	\$17,860.00
2	Replace light switches with sensors	\$3,150.00
2	Install room signage	\$1,800.00
2	Replace generator	\$20,000.00
2	Replace sally port overhead door	\$3,000.00
2	Repaint door frames, walls, ceilings	\$13,286.00
2	Replace damaged or add insulation at walls and ceiling	\$1,800.00
2	Patch walls	\$500.00
2	Relocate exhaust fan in rooms 009 and 013	\$7,220.00
2	Install wire maintenance system	\$300.00
2	Install vertical grab bars at water closets	\$600.00
2	Replace damaged ceiling tile	\$100.00
2	Repair exterior concrete slab at outside entry	\$1,000.00
2	Clean metal siding	\$1,000.00
2	Install LED light fixtures at parking lot	\$5,650.00
2	Replace generator	\$50,000.00

2	Fill spider cracks in pavement	\$2,000.00
2	Seal coat parking lot	\$2,858.00
2	Install retaining wall	\$15,000.00
2	Repair cmu at southwest corner	\$1,500.00
2	Mitigate elec/mech systems above flood elevations	\$100,000.00
2	Remove and rebuilt cmu walls	\$6,000.00
2	install new footing or haunch in slab to support cmu	\$14,140.00
		\$272,764.00

Priority	Task	Cost
3	Refinish scuffed doors	\$2,000.00
3	Install kick plates on doors	\$1,084.00
3	Repair kitchenette	\$5,000.00
3	Replace floor mats in room 006	\$200.00
3	Install commercial grade toilet accessories	\$2,800.00
3	Clean paint from bench in room 003	\$500.00
3	Repaint metal panels	\$3,000.00
3	Repointing / grouting masonry	\$2,000.00
		\$16,584.00

PUBLIC WORKS

120 Quarry Street
 Lambertville, NJ 08530

Priority	Task	Cost
1	Repair cracked masonry wall	\$2,000.00
1	Replace hollow metal doors and frames	\$5,200.00
1	Replace wood doors and hollow metal frames	\$4,000.00
1	Replace windows	\$3,128.00
1	Install grille on air diffuser	\$100.00
1	Install guardrail at mezzanine	\$523.00
1	Insulate around exterior wall penetrations	\$100.00
1	Clean out gutters	\$1,000.00
1	Replace missing rain leader	\$144.00
1	Remove organic growth from building's exterior	\$500.00
1	Install toilet exhaust	\$10,000.00
1	Repair fence	\$2,500.00
1	Repair gate	\$1,000.00
1	Install new guard rail at mezzanine	\$2,500.00
1	Install new fire rated membrane above/below mezz	\$5,000.00
		\$37,695.00

Priority	Task	Cost
2	Replace damaged insulation in ceiling	\$840.00
2	Install handicapped grab bars at water closet	\$700.00
2	Replace plumbing fixtures	\$8,000.00
2	Clean stains from concrete floor	\$500.00
2	Repair damaged CMU wall at overhead door	\$1,697.00
2	Clean stains from exterior soffits	\$1,000.00
2	Repaint interior	\$9,123.00
2	Clean mold from exterior gable	\$500.00
2	Upgrade Lights to LED	\$6,080.00
2	Replace light switches with sensors	\$750.00
2	Replace HVAC with central system and gas heat	\$60,000.00
2	Replace electric panel	\$10,000.00
2	Replace water heater	\$7,500.00
2	Install new lintels	\$1,500.00
2	Repoint masonry	\$8,000.00
		\$116,190.00

Priority	Task	Cost
3	Replace overhead doors	\$16,500.00
3	Install finished floor in office and toilet room (VCT)	\$435.00
3	Repair exterior siding	\$1,000.00
3	Clean stains from CMU walls	\$500.00
		\$18,435.00

7

REFERENCED DOCUMENTS

STANDARD BUILDING CODE OF NEW JERSEY

STATE OF NEW JERSEY
Robert B. Meyner, Governor

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT
Salvatore A. Bontempo, Commissioner

DIVISION OF PLANNING AND DEVELOPMENT
Kenneth H. Creveling, Director

- Part A - General Provisions and Definitions.
 - B - Structural, Fire, and General Safety Requirements.
 - C - Elevators, Motor Stairways, and Conveyor Equipment.
 - D - Air Conditioning, Mechanical Ventilation and Refrigeration.
 - E - Plumbing (published separately).
 - F - Electrical Equipment and Wiring.
- Rules for the Construction of One and Two Family Dwellings (published separately).

Previous editions of Parts A and B, like Parts C, D and F, of the Standard Building Code of New Jersey, were printed in separate volumes. These five parts now have been combined in this single volume.

No changes or revisions have been made to any of the parts as adopted. Several corrections in spelling, not affecting the meaning or requirements, have been made where found necessary.

Prepared pursuant to
Laws of 1946, Chapter 120

BUREAU OF COMMERCE
A. R. Post, Chief

A. J. Michaels, Staff Assistant

520 East State Street
Trenton 25, New Jersey

George E. Strehan, Code Consultant

REPRINT 1960

#609-292-6137

The BOCA Basic Building Code | 1978

Model building regulations for the protection
of public health, safety and welfare.

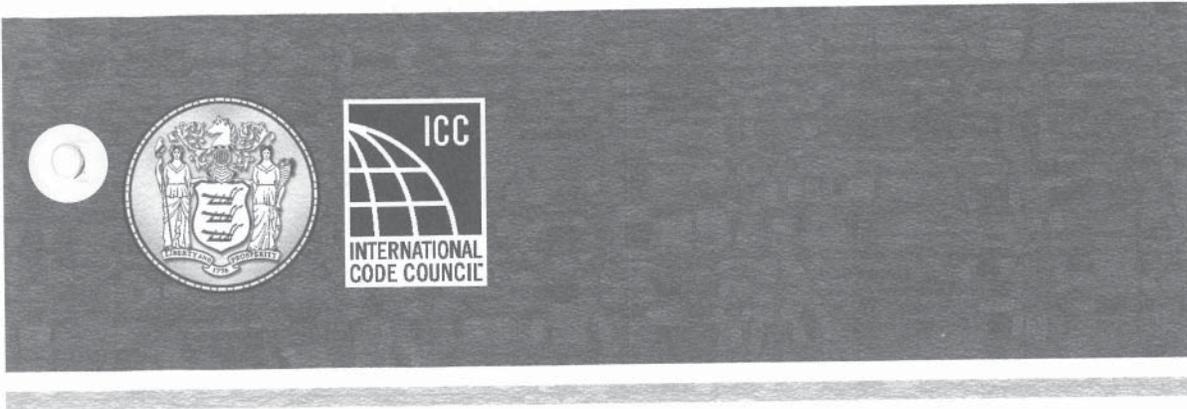
SEVENTH EDITION

As recommended and maintained
by the active membership of



**BUILDING OFFICIALS & CODE ADMINISTRATORS
INTERNATIONAL, INC.**

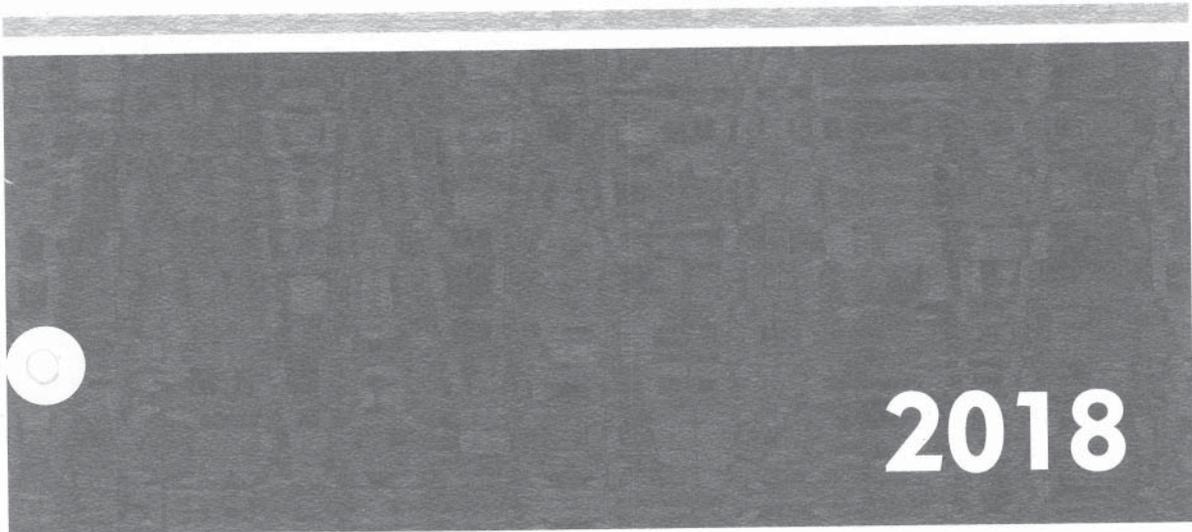
1313 East 60th St. • Chicago, Illinois 60637
Founded in 1915 312/947-2580



INTERNATIONAL BUILDING CODE®

NEW JERSEY EDITION

RECEIVED
SEP 16 2019
C.E.C., INC.



ASCE STANDARD

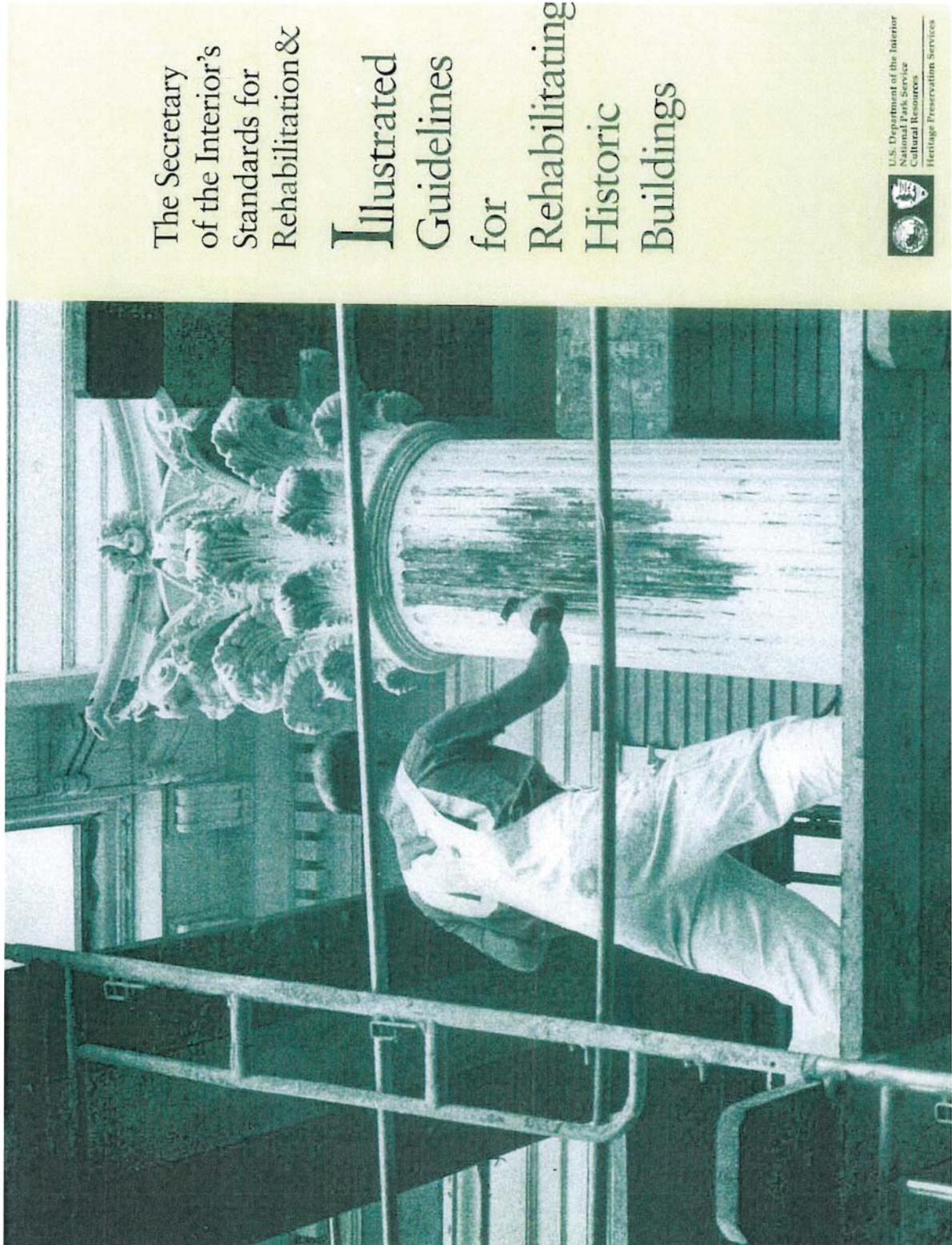
ASCE/SEI 24-14

American Society of Civil Engineers
Flood Resistant Design
and Construction

This document uses both the International System of Units (SI) and customary units.



Published by the American Society of Civil Engineers





Wet Floodproofing Requirements and Limitations

For Buildings and Structures Located in Special Flood Hazard
Areas in Accordance with the National Flood Insurance Program

NFIP Technical Bulletin 7 / May 2022



FEMA



Requirements for Flood Openings in Foundation Walls and Walls of Enclosures

Below Elevated Buildings in Special Flood Hazard Areas
In Accordance with the National Flood Insurance Program

NFIP Technical Bulletin 1 / March 2020



FEMA

**THE
MUSIAL
GROUP** p.a.

191 Mill Lane
Mountainside, NJ 07092
t. 908.232.2860
f. 908.232.2845
e. studio@themusialgroup.com
w. themusialgroup.com