BYRAM TOWNSHIP MUNICIPAL BUILDING ASSESSMENT

9/11/15

ES EXECUTIVE SUMMARY:

The Byram Township Municipal Building includes two separate structures that are connected by an enclosed link. The **Lower Building** was the original building on the site and was constructed in 1971, making this building approximately 44 years old. This structure is a one-story building with a masonry façade and is wood framed with a flat roof construction. The useful life expectancy for a building of traditional construction is approximately 50 years.

The **Upper Building** is constructed of twelve (12) modular temporary trailers that are connected together, and were assembled on site in approximately 1975. A false façade, and roof truss canopy system, was constructed around these units, in 1991, to disguise the appearance of the modular units.

The useful life expectancy of modular units is from eight (8) to ten (10) years. The Upper Building was assembled forty (40) years ago in approximately 1975. As such this assembly of modular units is well beyond its useful life expectancy.

Trying to upgrade outdated modular units is extremely problematic and typically an inefficient use of funds. Even replacing finishes within a modular unit is ill-advised because the ceiling framing system, interior partition framing, and subflooring/framing may be in poor condition and need replacing prior to upgrading the finishes.

RE RECOMMENDATION:

Based on the deficiencies identified in this assessment, reusing, modifying, upgrading, or adding, to the Upper Building (Modular Units) would be an inefficient use of funds, as all components of the systems and construction are well beyond their life expectancy.

The original Lower Building is also nearing the end of its life expectancy and all materials, finishes, electrical, mechanical, and plumbing systems need to be replaced. While portions of the structure of the lower building could potentially be reused, major modification would be necessary to properly house the required program as well as all ADA components, including toilets, circulation etc.

Trying to reuse the Lower Building would also limit the ability to layout the building in a fashion that would work properly, due to the limits of the existing footprint, and structure. In addition, based on a cursory review of the existing property wetlands, it appears that the 150 foot wetlands buffer extends through the middle of this building, which would make its reuse all that more difficult.

Due to the existing deficiencies, and age, of the existing building(s), as well as the need of a working program which is approximately twice the size of the existing building; our recommendation would be to explore the possibility of constructing a new Municipal Building.

The existing building could be used until the new building is constructed on site. The new building should be designed to fit on open portions of the site, and avoid all wetlands buffers.

The following summary identifies the necessary upgrades needed, within the existing municipal building, just for proper building occupancy and function.

LOWER BUILDING

Area: **ENTRY/LOBBY**

With a size of only 60 Square Feet, the existing entry is more of a vestibule than a lobby. Adequate space for people to wait or congregate prior to a meeting in the Council Chamber does not exist. The finishes of the space are original to the building and all need an upgrade, including the following:

- The old Quarry Tile floor needs to be replaced.
- The original wood paneling on the walls needs to be refinished or replaced.
- The existing drinking fountain obstructs much of the little space available.
- The existing aluminum and glass storefront is constructed of single pane glass and has minimal insulating capabilities. This storefront should be replaced with insulating glass units, and thermally broken aluminum frames.
- The existing suspended acoustical ceiling is beyond its useful life and should be replaced.
- The existing fluorescent lighting should be replaced with energy efficient lighting.

Area: **FINANCE/TAX**

The Finance/Tax Department is located to the left side of the entry. There is a makeshift transaction counter that was constructed to handle processing paperwork with the public and collecting Tax. This transaction window should be replaced with a new window, and counter, with ballistic glazing. The finishes, furniture, and partitions in this area should all be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be refinished or replaced.
- The transaction window and counter should be replaced.
- The existing suspended acoustical ceiling was installed to lower the existing ceiling height.
- The existing fluorescent lighting should be replaced with energy efficient lighting.
- The temporary/movable partition creating the break area should be replaced.
- The original windows were all single pane units. In a few area the top portion of the windows were replaced with vinyl replacement windows. New windows should be installed throughout to improve the insulating values.

Area: **TOILETS**

The existing toilets in the Lower Building are located next to the building entry. These are the only toilets in the Lower Building which must be used by both the public and the staff. In addition, neither the Men's or Women's toilet is ADA Accessible. Major renovation **and expansion** would be required to make these toilets accessible. All of the finishes and fixtures in the toilets should be replaced, including the following:

- The 2" x 2" tile floor and wall tile needs to be replaced.
- The existing suspended acoustical ceiling is beyond its useful life and should be replaced.
- The existing fluorescent lighting should be replaced with energy efficient lighting.
- All the existing plumbing fixtures and toilet accessories should be replaced.
- The existing metal toilet partitions should be replaced.

Area: **COUNCIL CHAMBERS**

The Council Chamber is located to the right side of the building entry. The Council Dais is approximately 6" above the rest of the floor, however, there is no accessible route to the Dais. The existing podium is dated, and should be replaced, and if the room is converted back to dual-use as a Court Room, a new podium with a ballistic shield for the Judge would be required. All of the finishes in the room appear original to the building and should be upgraded or replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be refinished or replaced.
- The existing suspended acoustical ceiling is beyond its useful life and should be replaced.
- The existing fluorescent lighting should be replaced with energy efficient lighting.
- The original windows were all single pane units. In a few area the top portion of the windows were replaced with vinyl replacement windows. New windows should be installed throughout to improve the insulating values.
- The existing wood doors into the Council Chamber are old and should be replaced with new doors along with ADA Compliant Hardware.
- The original display boards and cabinets should be replaced with new units.
- The accordion doors on the closet are in poor condition and should be replaced.
- The audio and visual systems in the Council Chamber should be replaced with the latest technology.

Area: **COURT OFFICE**

All of the finishes in the Court Office are dated and should be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be refinished or replaced.
- The existing suspended acoustical ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The original windows are single pane units. New windows should be installed throughout to improve the insulating values.
- The existing wood doors on both ends of the room are old Hollow Wood doors, and should be replaced with new doors along with ADA Compliant Hardware.
- A supplemental through-wall AC unit has been installed indicating that the existing HVAC system is not functioning as it should.
- The existing storefront, on the front building façade, is a single pane aluminum and glass system which should be replaced with new insulating glass units, and thermally broken aluminum frames.
- There is a single stall toilet, within the Court Office, which is in poor condition and should be completely renovated with all new finishes and fixtures. This toilet is not ADA Compliant.

Area: **MEETING ROOM**

There is a meeting room adjacent to the Council Chamber and the Court Office which is currently used for multiple functions. All of the finishes in this room are dated and should be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be refinished or replaced.
- The existing suspended acoustical ceiling is beyond its useful life and should be replaced.
- The existing fluorescent lighting should be replaced with energy efficient lighting.
- The original windows are single pane units. New windows should be installed throughout to improve the insulating values. The existing wood doors on both ends of the room should be replaced with new doors along with ADA Compliant Hardware.

Area: **STORAGE**

An old vault currently serves as a shared storage space. All finishes in the room should be replaced with new, and an organized shelving/file system installed to properly store all documents and records. Adequate storage/file spaces are needed throughout the entire Municipal Building. Some of these storage areas should be located within each department, and other shared storage spaces should be provided for long term storage.

Area: **CUSTODIAN**

The Custodian Closet backs up to the existing toilets in the Lower Building. The presence of a water leak has caused damage to the gypsum board, and the wood framing. It appears that there is mold on a portion of this gypsum board damage. The existing 9" x 9"floor tile is assumed to be ACT. All of these finishes should be properly removed and replaced.

Area: **CONNECTING HALLWAY**

A hallway was constructed to connect the original Lower Building and the later added Upper Building. The only way to access this hallway is through the Council Chambers, or the Finance/Tax Department, which makes circulation impossible for the public. For the public to move from Lower Building to Upper Building, they have to exit each building and travel outside to the other section. The hallway has a ramp in order to connect the elevation change between the Lower and Upper Buildings. This ramp has a slope of greater than 1 on 12, and therefore is not an accessible means of travel. The finishes in this hallway are in poor condition and should be replaced, including the following;

- The old carpet flooring needs to be replaced.
- The original stucco/plaster on the walls needs to be refinished or replaced.
- The existing suspended acoustical ceiling is water dam aged, and beyond its useful life and should be replaced.
- The roof shows signs of leaking causing this water damage.
- The existing fluorescent lighting should be replaced with energy efficient lighting.
- There are two glass doors an either end of this hallway which should be replaced with new doors and ADA compliant hardware.

UPPER BUILDING – MUNICIPAL OFFICES

The Upper Building is constructed of twelve (12) modular temporary trailers that are connected together, and were assembled on site in approximately 1975. A false façade, and roof truss canopy system, was constructed around these units, in 1991, to disguise the appearance of the modular units.

The useful life expectancy of modular units is from eight (8) to ten (10) years. The Upper Building was assembled forty (40) years ago in approximately 1975. As such this assembly of modular units is well beyond its useful life expectancy.

The original ceiling system through-out the Upper Building is a panelized ceiling system with surface mounted lights. In several areas a new suspended acoustical tile ceiling was installed below the panelized system in order to cover the existing ceiling and to install 2' x 4' prismatic light fixtures.

The majority of interior partitions consist of 2" x 3" framing with thin wood wall panels on each side. These partitions do not appear to include sound batts to limit noise transmission from space to space. The exterior wall and ceiling systems have questionable insulating values. All exterior windows are inexpensive vinyl replacement type windows. The majority of the interior doors are low grade hollow wood doors and frames with non ADA compliant hardware.

Trying to upgrade outdated modular units is extremely problematic and typically an inefficient use of funds. Even replacing finishes within a modular unit is ill-advised because the ceiling framing system, interior partition framing, and subflooring/framing may be in poor condition and need replacing prior to upgrading the finishes. The following Upper Building summary, however, identifies the necessary upgrades needed just for proper building occupancy and function.

Area: **ENTRY/LOBBY**

The Upper Building has a separate entry/lobby area which functions primarily as a vestibule. There is a set of double doors on each side. One set of doors is from the exterior and are aluminum and glass doors. The other set are old wood doors which lead into the General Office Reception area. All of the finishes in the entry are dated and should be replaced including the following:

- The old Quarry Tile floor needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.

Area: **RECEPTION/COUNTER**

Inside of the building entry/lobby is the general office area which contains a waiting area and a transaction counter. This area is the public's first impression of the Municipal Building and should be made of quality materials, finishes, and furniture. All of the finishes in this are need replacement, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The wood framed, plastic laminate, reception counter is in poor condition and should be replaced.
- The Tax Map Area for use by the public is undersized and in poor condition.
- All of the furniture in this area should be replaced with new furniture.

Area: TOWNSHIP MANAGER

The Township Managers area includes the Manager's Office and the adjacent assistant's office. Consistent with the quality of modular construction, all of the finishes within this area need to be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The vinyl windows should be replaced.
- The hollow wood doors and frames should be replaced along with ADA compliant hardware.

Area: GENERAL OFFICE AREA

The General Office area is divided into six (6) sections. Within these sections are five (5) office cubicles, and a dedicated area for septic files. Supplemental through-wall AC units have been installed indicating that the existing HVAC system is not functioning as it should. The following finishes and systems should be replaced:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The vinyl windows should be replaced.
- The existing cubicle partitions systems, and all furniture should be replaced.

Area: STORAGE/SERVER ROOM

The existing Municipal Building does not have a dedicated IT Closet. The existing server rack is located within a storage closet. A dedicated IT Closet, with a separate mini-split HVAC system, should be provided to properly protect the server. The typical finishes requiring replacement within this room are as follows:

- The old VCT flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.

Area: BREAK ROOM

The existing Break Room is in better condition than most of the other spaces within the Upper Buildings, and likely was renovated not long ago. A suspended acoustic ceiling tile system has been installed along with newer 2' x 4' prismatic lighting. There is newer sheet vinyl flooring, and counters and cabinets in fair condition.
A few items remain which should be replace:

- Sound batts should be installed within the interior partitions.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.
- The vinyl windows should be replaced.

Area: **TOWN CLERK**

A Supplemental through-wall AC unit has been installed indicating that the existing HVAC system is not functioning as it should. Consistent with the quality of modular construction, all of the finishes within this area need to be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The vinyl windows should be replaced.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.

Area: **HALLWAYS**

The hallways lead from the general office area to the toilets, and from the reception area towards the Police Department. The typical finishes requiring replacement within these areas are as follows:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.

Area: **TOILETS**

The only available toilets in the Upper Building – Office Area must be used by both the public and the staff. In addition, neither the Men's or Women's toilet is ADA Accessible. Major renovation **and expansion** would be required to make these toilets accessible. All of the finishes and fixtures in the toilets should be replaced, including the following:

- The VCT flooring needs to be replaced.
- The rigid plastic wall panels need to be replaced.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- All the existing plumbing fixtures and toilet accessories should be replaced.
- The existing metal toilet partitions should be replaced.
- The hollow wood doors and frames should be replaced along with ADA compliant hardware.

Area: **RECREATION OFFICE**

Consistent with the quality of modular construction, all of the finishes within the Recreation Office need to be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The hollow wood doors and frames should be replaced along with ADA compliant hardware.

Area: MECHANICAL ROOM

The mechanical room appears to be in fair condition for its utilitarian use. The floor is concrete, and the walls are half concrete and half gypsum board. The ceiling is gypsum board with surface mounted bulbs. There is a hollow metal fire rated door and frame entering the mechanical room.

Area: CONSTRUCTION OFFICE

The Construction office consists of the construction assistant's area, as well as the larger area for the construction official and all the files. A dedicated storage space is needed for all of the long term files. Consistent with the quality of modular construction, all of the finishes within the Construction Office need to be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The vinyl windows should be replaced.
- The hollow wood doors and frames should be replaced along with ADA compliant hardware.

Area: UTILITY ROOM

Consistent with the quality of modular construction, all of the finishes within the utility room need to be replaced, including the following:

- The flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.

UPPER BUILDING – POLICE DEPARTMENT

The right hand side of the Upper Building contains the various areas of the Police Department. The issues and deficiencies present in the Municipal Office portion of this Upper Building are consistent with the Police Department.

Area: ENTRY/LOBBY

In addition to the hallway connection to the Municipal Offices, the Police Department also has its own outside entry. This entry is only four (4) feet wide, and is more of a hallway than an entry. Within this space is the transaction window for the public to use with the Police Receptionist. The typical finishes requiring replacement within this areas are as follows:

- The old rubber tile flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The suspended acoustical ceiling and lighting are in better condition than many other areas.
- The transaction window should be replaced with a more protective ballistic window.

Area: **WAITING AREA**

The police department waiting area is really the hallway connecting the police department with the municipal offices. A suspended acoustical tile ceiling with prismatic lights has been installed in this area. Rubber floor tile has been installed in the waiting room area. The wall finishes are painted gypsum board. A larger more defined waiting area is needed. The finishes requiring replacement within this areas are as follows:

- Sound batts should be installed within the interior partitions.
- The suspended ceiling lighting should be replaced with energy efficient fixtures.
- The hollow wood doors and frames around this area should be replaced along with ADA compliant hardware.

Area: **POLICE CHIEF'S OFFICE**

The police chief's office is separated from the rest of the police department because of the configuration of the police department entry, and the hallway leading to the municipal offices. The chief's office should be contained within the overall police department. Newer carpet has been installed in this office as well as a suspended acoustical ceiling system with 2' x 4' prismatic lighting. The walls of the office consist of painted gypsum board. The finishes requiring replacement within this office are as follows:

- Sound batts should be installed within the interior partitions.
- The suspended ceiling lighting should be replaced with energy efficient fixtures.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.
- The vinyl windows should be replaced.

Area: **TOILET**

There is a single stall toilet adjacent to the police chief and the waiting area. A plastic shower enclosure has been added to this already tight space to accommodate the potential for a female officer. This toilet however is not located within the police department, and therefore could never function properly as designed. Major renovation **and expansion** would be required to make this toilet accessible. All of the finishes and fixtures in the toilet should be replaced, including the following:

- The sheet vinyl flooring needs to be replaced.
- The gypsum board walls should be covered with ceramic tile.
- All the existing plumbing fixtures and toilet accessories should be replaced.
- The existing toilet partition should be replaced.
- The plastic shower stall should be replace with a permanent unit.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.

Area: **RECEPTION OFFICE**

There is a single step leading into the reception office, which makes for a tripping hazard, and prevents possible accessibility. The wall finishes are painted gypsum board. The finishes requiring replacement are as follows:

- The old carpet flooring needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The vinyl windows should be replaced.
- The public transaction window should be replaced.

Area: **HOLDING/PROCESSING AREA**

Consistent with the quality of modular construction, all of the finishes within the holding/processing area need to be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling, and the painted plywood sheathing on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.
- The vinyl windows should be replaced.

Area: **HALLWAY**

The general hallway connects all areas within the Police Department. The typical finishes requiring replacement within these areas are as follows:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- All hollow wood doors and frames should be replaced along with ADA compliant hardware.

Area: **TOILET**

There is a single stall toilet within the police department for use by a detainee. Major renovation **and expansion** would be required to make this toilet accessible. All of the finishes and fixtures in the toilet should be replaced, including the following:

- The sheet vinyl flooring needs to be replaced.
- The ridged plastic wall panels should be replace with a more durable material.
- All the existing plumbing fixtures and toilet accessories should be replaced.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.

Area: **RECORDS/BREAK/SECRETARY**

This multi-function room serves as a records storage room, break room, and secretarial workstation. Separate rooms should be provided for each function. There is a painted gypsum board surface on one of the walls and wood paneling on the other three walls. A Supplemental through-wall AC unit has been installed indicating that the existing HVAC system is not functioning as it should. The typical finishes requiring replacement are as follows:

- The old carpet flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The vinyl windows should be replaced.

Area: **POLICE ENTRY**

There is a separate entry for police department use, which is also the way detainees are brought into the police station. This entry is only four (4) feet wide which makes transporting detainees very difficult. The finishes requiring replacement are as follows:

- The old sheet vinyl flooring needs to be replaced.
- The original wood paneling on the walls needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.

Area: **PATROL ROOM**

Several finishes have been updated in the patrol room over time. These include a suspended acoustical ceiling with 2' x 4' prismatic lights, vinyl/wood plank flooring, and gypsum wall board with wood wainscoting. The finishes requiring replacement are as follows:

- Sound batts should be installed within the interior partitions.
- The suspended ceiling lighting should be replaced with energy efficient fixtures.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.
- The vinyl windows should be replaced.

Area: **SARGEANTS ROOM**

A Supplemental through-wall AC unit has been installed indicating that the existing HVAC system is not functioning as it should. Consistent with the quality of modular construction, all of the finishes within this room need to be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.
- The vinyl windows should be replaced.

Area: **LIEUTENANT/DETECTIVE ROOM**

A Supplemental through-wall AC unit has been installed indicating that the existing HVAC system is not functioning as it should. Consistent with the quality of modular construction, all of the finishes within this room need to be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.
- The vinyl windows should be replaced.

Area: **EVIDENCE ROOM**

All of the finishes within this room need to be replaced, including the following:

- The flooring needs to be replaced.
- The wall finishes need to be replaced.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.

Area: **CRIME LAB**

The crime lab is really just an alcove with a counter. All of the finishes within this room need to be replaced, including the following:

- The carpet needs to be replaced with a surface easy to clean.
- The wall finishes need to be replaced.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.

Area: **POLICE LOCKER ROOM**

Consistent with the quality of modular construction, all of the finishes within this room need to be replaced, including the following:

- The old carpet flooring needs to be replaced.
- The original wood paneling needs to be replaced.
- Sound batts should be installed within the interior partitions.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The hollow wood doors and frames should be replaced along with ADA compliant hardware.
- All new lockers, benches, and furniture should be installed.

Area: **MEN'S TOILET/SHOWER**

The men's toilet and shower is grossly undersized for its use. The fixtures include one sink, one urinal, one toilet, and one plastic shower enclosure. This room is not ADA compliant. Major renovation **and expansion** would be required to make this toilet accessible. All of the finishes and fixtures in the toilet should be replaced, including the following:

- The VCT flooring needs to be replaced.
- The ridged plastic wall panels should be replaced with a more durable finish.
- All the existing plumbing fixtures and toilet accessories should be replaced.
- The existing toilet partition should be replaced.
- The plastic shower stall should be replace with a permanent unit.
- The existing panelized ceiling is beyond its useful life and should be replaced.
- The existing surface mounted fluorescent lighting should be replaced with energy efficient lighting.
- The hollow wood door and frame should be replaced along with ADA compliant hardware.

BUILDING ENVELOPE

Construction was completed on the original **Lower Building** in **1971** [Age 44 Years].
The Modular Units of the **Upper Building** were assembled in approximately **1975** [Age 40 Years], and the roof and façade were installed around the Upper Building, modular units, in **1991** [Age 24 Years].

Item: **ROOFING**

The roof on the **Lower Building** was replaced in approximately 1996 making the current roof **19 years old**. This is a flat roof, with rigid insulation, and a membrane roof. There are signs of water ponding on various areas of the roof giving the indication that proper tapered insulation was not installed to ensure complete drainage. The roof drains and internal leaders are also beyond their life expectancy. There are ongoing leaks associated with this roof, and the average life expectancy for roofs of this era is approximately 20 years. Therefore this roof is due for immediate replacement.

The roof on the **Upper Building** is original to the project completed in 1991, making the current roof **24 years old**. This roof is comprised of asphalt shingles over plywood. There is much discoloration and staining on the asphalt shingles. Gutters are provided in very limited areas on this roof. They only exist near the main entry and a small portion on the back of the building. The remainder of the building sheds water to the ground without the use of gutters and leaders. The average life expectancy for roofs of this era is approximately 20 years. Therefore this roof is due for immediate replacement.

Item: **BUILDING FACADE**

LOWER BUILDING

Brick Veneer & Weep Holes: The brick veneer is in fair condition however, there is no evidence of weep holes in the brick veneer to allow trapped water to exit the façade. Some re-pointing is needed at the base of the building, and there are some cracked bricks at the corner.

Stucco Finish: The stucco finish at the back of the building is in poor condition and has sever cracks at the base. This entire surface needs to be patch and refinished.

Window – Lintels & Sealant: The window lintels are covered, however seem to be in fair condition. All sealant around the windows should be tested for asbestos and replaced with new sealant.

Metal Roof Soffit & Fascia: The soffit and fascia are beyond their life expectancy and showing signs of discoloration, fading, and pitting.

Exterior Doors & Frames: All exterior doors and frames are in poor condition and should be replaced along with new ADA hardware. All single pane aluminum and glass systems should be replace with insulated glass and aluminum frames.

UPPER BUILDING

Brick Veneer & Weep Holes: The brick veneer is in fair condition however, there is no evidence of weep holes in the brick veneer to allow trapped water to exit the façade.

Window – Lintels & Sealant: The window lintels are rusted and corroded and should be cleaned and repainted. All sealant around the windows should be tested for asbestos and replaced with new sealant.

Stucco Infill Panels: There are numerous cracks in the stucco veneer above the windows which should be repaired. All stucco should be patched and refinished.

Metal/Wood Siding: The metal siding on the side elevation, by the police entry, is severely discolored and pitted. There is also a fair amount of rusting around all of the through wall A/C units. The lower wood siding on the back of the building is in poor condition, with signs of water damage, discoloration and boards popping loose.

Metal Soffit & Fascia: The metal soffits and fascia are in poor condition and portions have been replaced over the years.

Exterior Doors & Frames: All exterior doors and frames are in poor condition and should be replaced along with new ADA hardware.

BUILDING SYSTEMS & UTILITIES

Item: PLUMBING SYSTEMS

Water Source: A connection to a public water service is not currently available near the site. The water source for the municipal building is an existing well. There have been numerous problems with this well that has led to the need for regular testing. The well pump has recently failed and was replaced with a new pump along with new plastic plumbing lines. A new water well is needed for the site, and should include new water storage tanks, and a new water purification system.

Sewer System: The existing sewer system and sewer pump, installed in 1996, are currently functioning well, and require only routine maintenance. Based on the size and layout of a new addition, or new facility, the system will have to be reviewed for compatibility.

Underground Storage Tanks: A connection to a public Natural Gas service is not currently available near the site. The existing municipal building is serviced by an existing 25,000 gallon underground oil tank, installed in approximately 2002. Proposed service for an addition, or new facility, would have to be coordinated with the capacities of the existing tank.

Item: ELECTRICAL SYSTEMS

Currently the electrical distribution throughout the site is by way of overhead power lines. Moving forward, any modifications to the electrical service, and the phone lines, should be underground to clean up the site utilities. (Refer to the attached Site Plan **SP-1**).

The existing electric service to the municipal building is at the end of its useful life. The main electrical branches for the Upper Modular Building actually run along the outside of the modular units, exposed to the weather. The electrical service for the upper and lower buildings were originally two separate systems which over time were cobbled together into one system.

The existing electrical panels are full and any upgrades to the electrical or HVAC systems could not be accommodated by the existing service. Power to various areas within the Finance/Tax office are provided by extension cords taped to the carpet. Future plans should consider improved wireless connectivity throughout the site.

Emergency Generators: There are two (2) emergency generators on site, installed in approximately 2003. One is utilized by the DPW building and site utilities, and has a capacity of 100 KW. The second is dedicated for the municipal building. The generator serving the municipal building has a capacity of 130 KW.

Item: **MECHANICAL SYSTEMS**

A detailed report evaluating the condition of the building's mechanical systems was prepared on October 10, 2014; by **Strunk-Albert Engineering**. This report is the best source of information regarding the mechanical systems. We have included a brief summary below to identify the major deficiencies.

As described in the report; The Lower Building (Building #1) and the Upper Building (Building #2) each have their own HVAC system. All of the existing systems in the lower building are beyond their expected service life and near failure. The report recommends that this system be replaced in its entirety. The Hot Water Boilers in the upper building are relatively new, however much of the remaining system is in poor condition. Ongoing problems include increased maintenance, lack of adequate temperature control, and poor indoor air quality. The following is a summary of the findings for each Building:

LOWER BUILDING (Building #1)

The **central hot water boiler** (oil fired) was replaced in 1987 and is approximately **28 years old**. The report indicated that it is operating at 78% to 80% efficiency. The existing combustion air component is not code compliant, and the boiler should be replaced in the near future to avoid failure.

There are two (2) **blower coil units,** above the ceiling, which are original to the building, which distribute the air throughout the building. These units are **44 years old** and extremely difficult to service because of the limited access space above the ceiling. The report also recommends replacing these units before potential failure.

The existing outdoor condensing units are approximately **14 years old** and have a limited remaining service life of no more than 5 years. It is also noted that the existing "fresh air intake" is not code compliant leading to poor indoor air quality.

UPPER BUILDING (Building #2)

The upper building consists of 12 modular units connected together with its own set of issues. There are two (2) **central hot water boilers** (oil fired) operating at approximately 81% efficiency. While these units are 6 and 10 years old, there are signs of pipe rusting and deterioration.

Heat is provided through a **hot water baseboard system**. The control valves for this system are in poor condition and the baseboard also exhibits signs of rusting and deterioration.

There are two (2) **A/C blower coil units** in the attic, replaced in 2007 & 2010, which distribute the air throughout the building, connected to outdoor condensing units. No mechanical ventilation is provided with these units, and the design causes excessive pressure loss to the system. Any maintenance for the attic units requires a 12 foot step ladder.

The insulation in the attic is missing in areas causing additional temperature control issues. Some signs that the system is not properly functioning has been the increased implementation of supplemental through-wall A/C units. Addition code concerns are the toilet exhaust which discharges into the attic and not to the exterior, as well as the interior spaces which receive no natural ventilation. The existing plumbing lines are outdated and deteriorating, and lack adequate shut-off valves to assist in routine maintenance.

END BUILDING ASSESSMENT

Refer to the attached "Building Assessment Matrix" and "Existing Condition" photos.

BUILDING ASSESSMENT MATRIX 1

Site Improvements	Comments:	Condition
landscaping		2
Sidewalks		2
Steps		2
Curbs		2
Paving		2
Striping		1
ADA Accessability		1
	AVERAGE RATING:	**1.71**

Exterior Enclosure	Comments:	Condition
Roofing		2
Windows/Louvers		1
Foundations		2
Building Framing/Structure	Modular Unit Rating	1
Exterior Finish/Façade		2
Doors/Frames/Hardware	Non-ADA	1
	AVERAGE RATING:	**1.50**

Interior	Comments:	Condition
Elevators	NA	
Stairs	NA	
Built-in Furnishings		2
Exterior Walls	Modular Unit Rating	1
Interior Partitions		2
Ceilings		1
Flooring		2
Doors/Frames/Hardware	Non-ADA	1
ADA Accessability	Non Existent	1
	AVERAGE RATING:	**1.42**

Toilet Rooms	Comments:	Condition
Wall Finishes		2
Toilet Partitions		1
Ceilings		1
Floor Finishes		2
Doors/Frames/Hardware	Non-ADA	1
Built-in Counters		2
Mirrors		2
Accessories		2
ADA Accessability		1
	AVERAGE RATING:	**1.56**

Existing Conditions Matrix

4 **Excellent:** System or component is functioning well. Many years of service reamin. Routine maintenance will maintain this component.

3 **Good:** System or component is functioning reliably. Routine maintnenance & servicing is required to maintain this component.

2 **Fair:** System or component is minimally functioning and typically has exceeded its useful life. Near term replacement or rehabilitation is needed.

1 **Poor:** System or component is not functioning as designed or has ceased to function. Conditions require ongoing excessive repair and labor costs. Immediate replacement or rehabilitation is needed.

BUILDING ASSESSMENT MATRIX 2

Plumbing Systems	Comments:	Condition
Storm Drainage System	Sheet Drainage Only	1
Sanitary Drainage System		3
Domestic Water System		1
Plumbing Fixtures		2
Fire Sprinklers/Standpipe	NA	
Siamese Connection	NA	
Water Source/Well		1
	AVERAGE RATING:	**1.60**

Mechanical Systems	Comments:	Condition
Boiler/Heat Exchanger		2
HVAC Distribution		1
HVAC Controls		1
Pumps/Motors/Compressors		1
AHU/RTU		1
AC Condensers		1
Chiller	NA	
	AVERAGE RATING:	**1.67**

Electrical Systems	Comments:	Condition
Electrical Service/Power		2
Electrical Distribution		1
Power Wiring		1
Lighting Fixtures/Systems		2
Lighting Controls		1
Fire Alarm System		1
Exit Devices		2
Telephone/ Data Systems		3
IT/MDF Closets		1
Emergency Generators		3
Lightning Protection	NA	
	AVERAGE RATING:	**1.70**

Total All Groups:	11.16
OVERALL BUILDING SCORE:	**1.59**

Existing Conditions Matrix

4 **Excellent:** System or component is functioning well. Many years of service reamin. Routine maintenance will maintain this component.

3 **Good:** System or component is functioning reliably. Routine maintnenance & servicing is required to maintain this component.

2 **Fair:** System or component is minimally functioning and typically has exceeded its useful life. Near term replacement or rehabilitation is needed.

1 **Poor:** System or component is not functioning as designed or has ceased to function. Conditions require ongoing excessive repair and labor costs. Immediate replacement or rehabilitation is needed.

LOWER BUILDING – EXISTING CONDITIONS

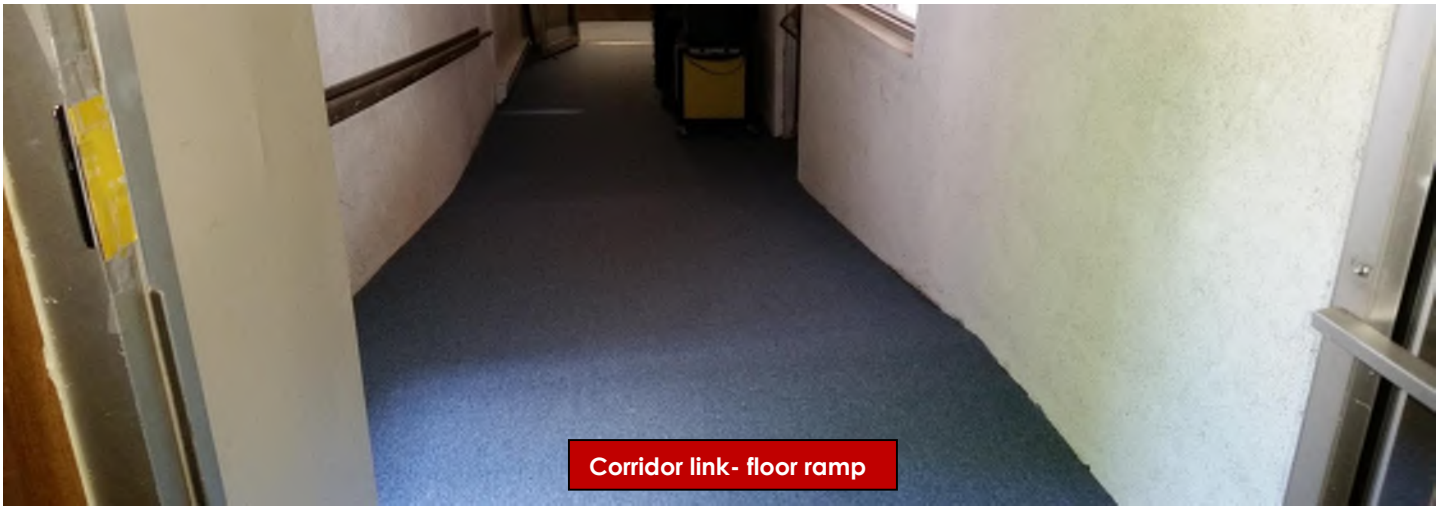

Custodian room water damage


Possible gypsum board mold


Half vinyl window in original window


Corridor link-ceiling water damage

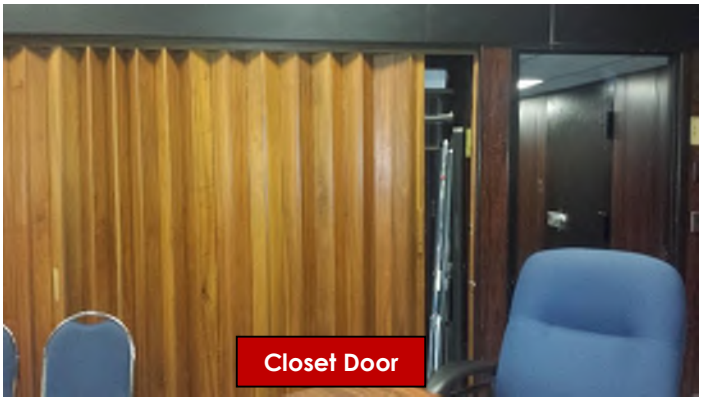
Corridor link-ceiling water damage


Corridor link- floor ramp

LOWER BUILDING – EXISTING CONDITIONS


Shared File Room with Plumbing lines


Dated Podium & Electrical

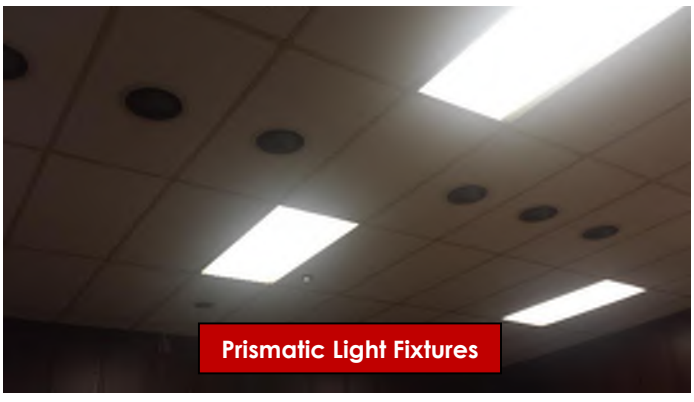

Closet Door


Non-Accessible Dais


Tax Transaction Window


Temporary Dividing Wall

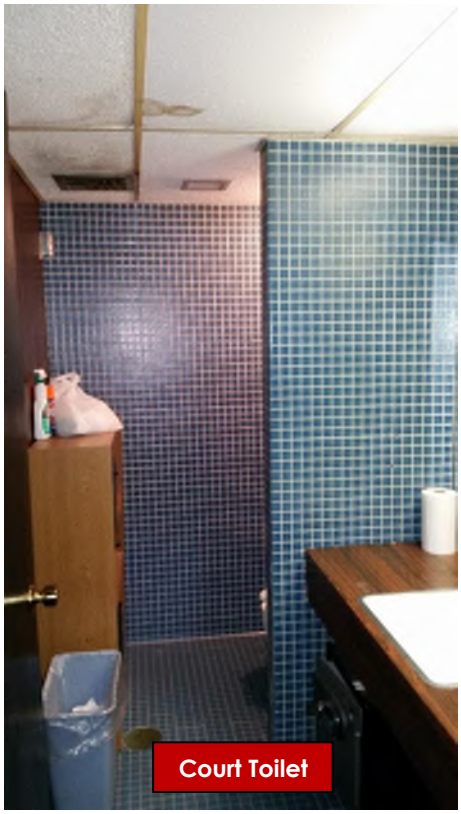

Above Ceiling HVAC


Prismatic Light Fixtures

LOWER BUILDING – EXISTING CONDITIONS


Entry Lobby


Court Transaction Window


Court Toilet


Public & Staff Toilets

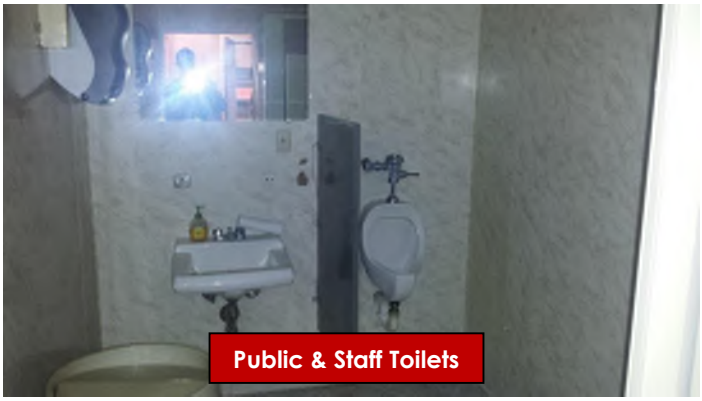

Files & Extension Cords


Window Ventilation

UPPER BUILDING – EXISTING CONDITIONS

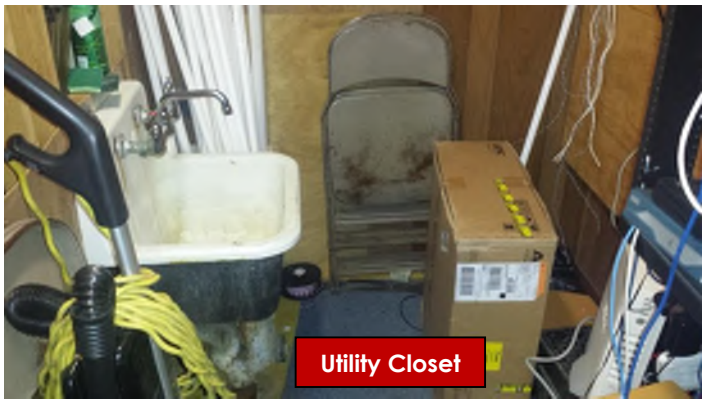

Reception & Waiting

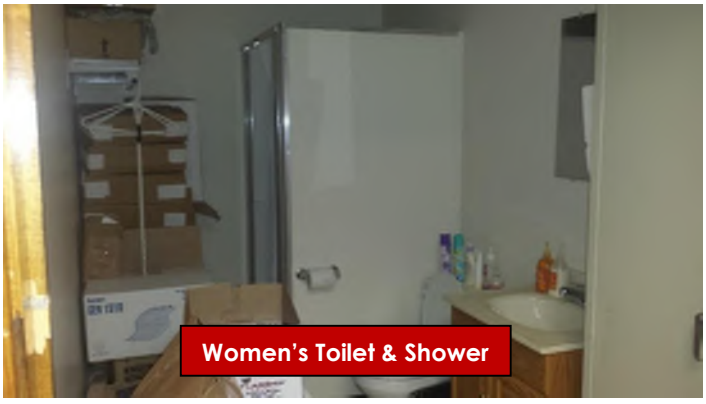

Supplemental A/C

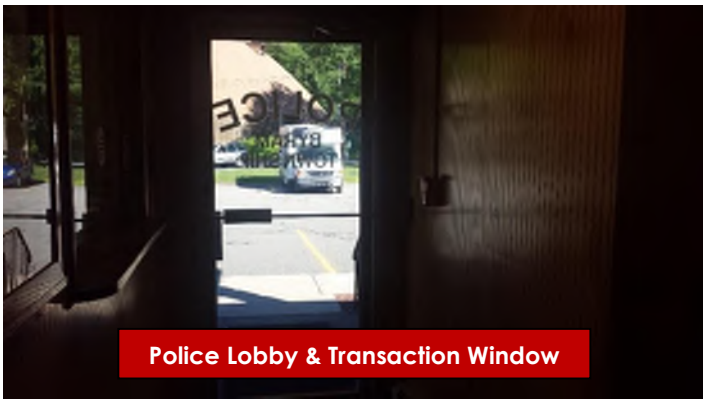

Public & Staff Toilets


Modular Crawl Space

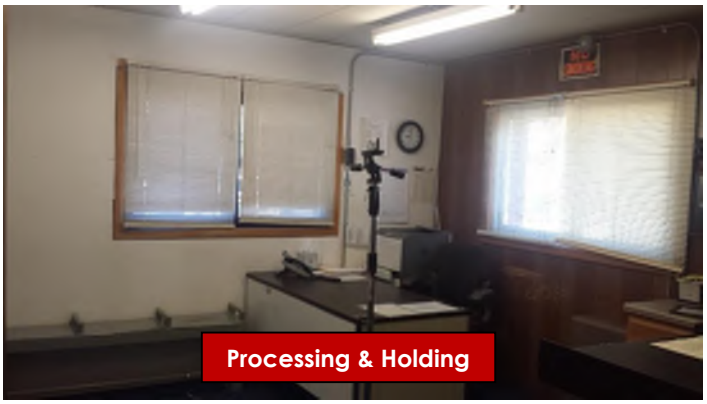

Construction Files & Office


Utility Closet

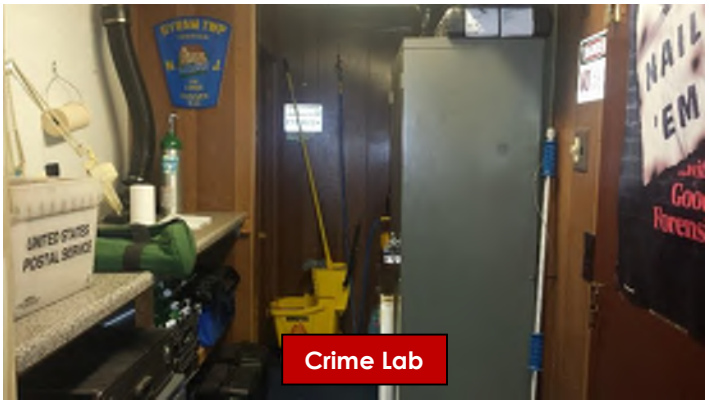

Women's Toilet & Shower


Police Lobby & Transaction Window

UPPER BUILDING – EXISTING CONDITIONS


Processing & Holding


Holding & Corridor


Crime Lab


Men's Locker Room


Police Toilet


Police Shower


Detainee Toilet

EXTERIOR – EXISTING CONDITIONS

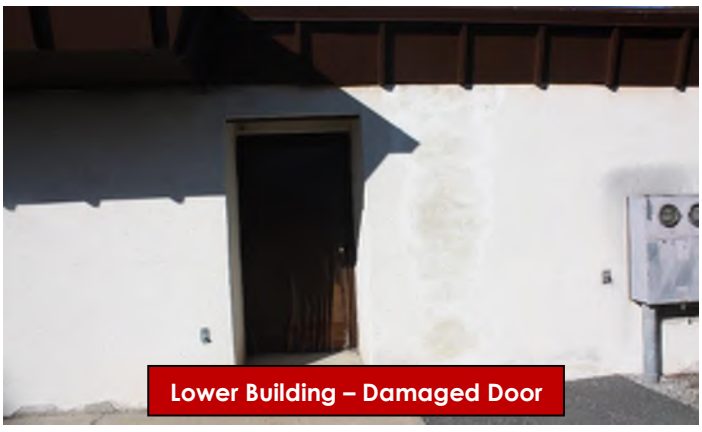

Upper & Lower Buildings

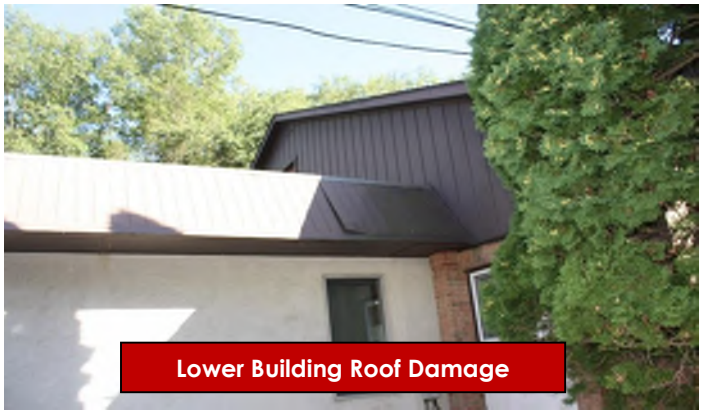

Police Entry & Storage Containers


Siding with A/C Units


Siding with Windows


Lower Building – Masonry Damage

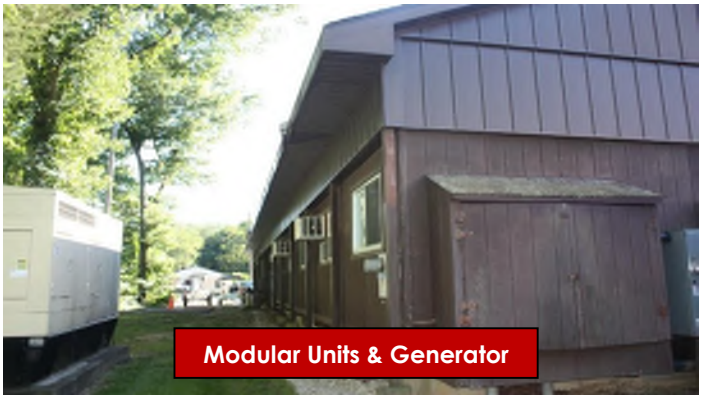

Lower Building – Damaged Door


Lower Building Roof Damage

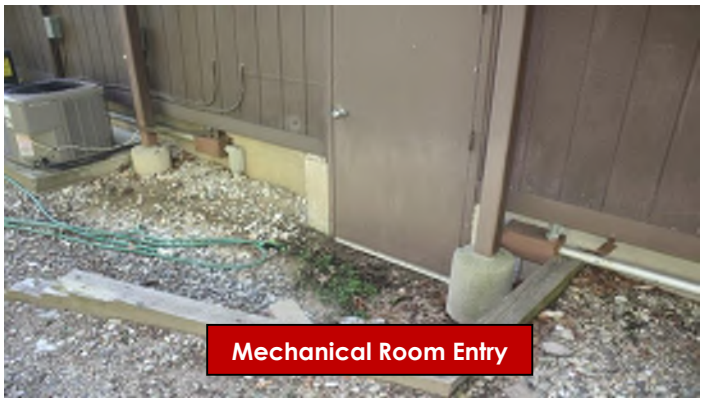

Single Pane Glazing

EXTERIOR – EXISTING CONDITIONS

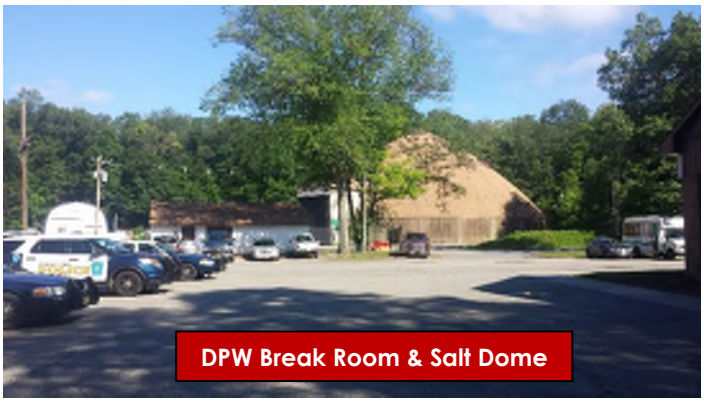

Storage Trailers

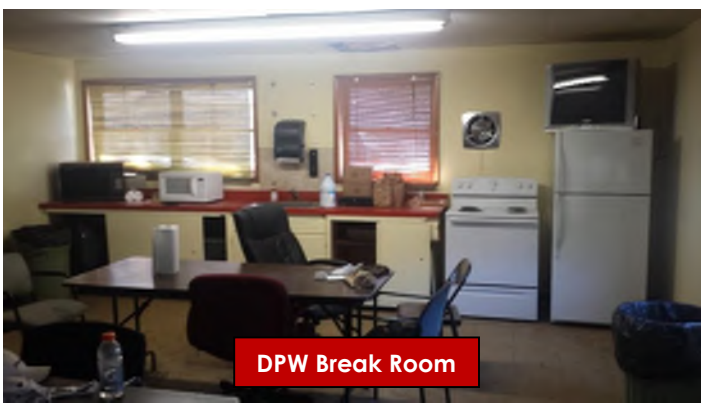

Modular Units & Generator


Modular Units – Exterior Structure


Mechanical Room Entry


Parking Lot & Leaf Storage Building

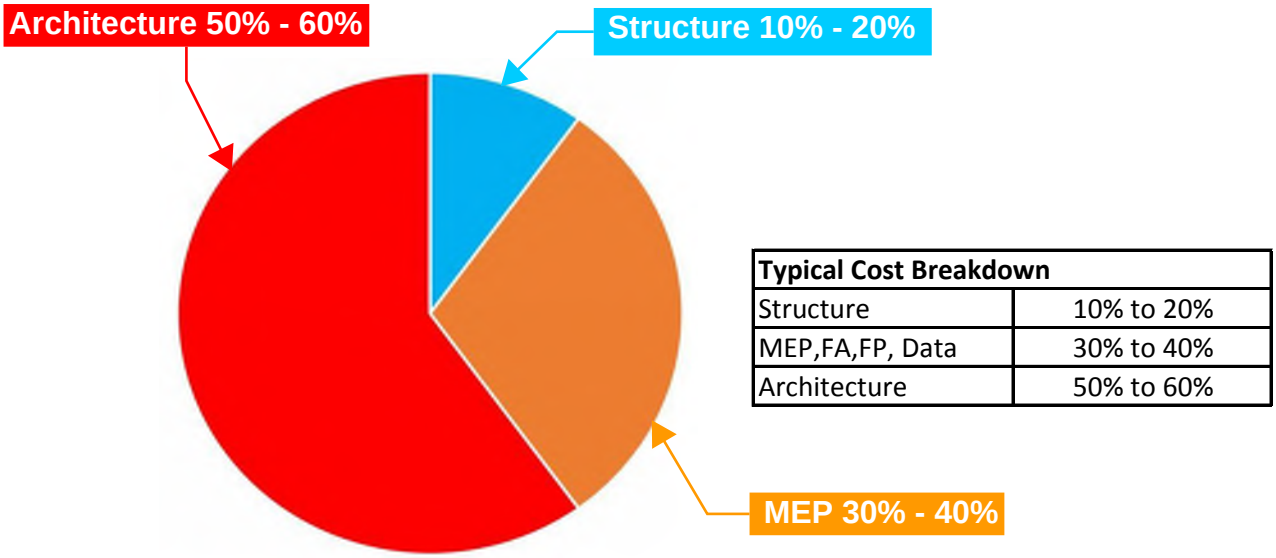

DPW Break Room & Salt Dome


DPW Break Room


DPW Break Locker Room

CONSTRUCTION COST COMPARISON

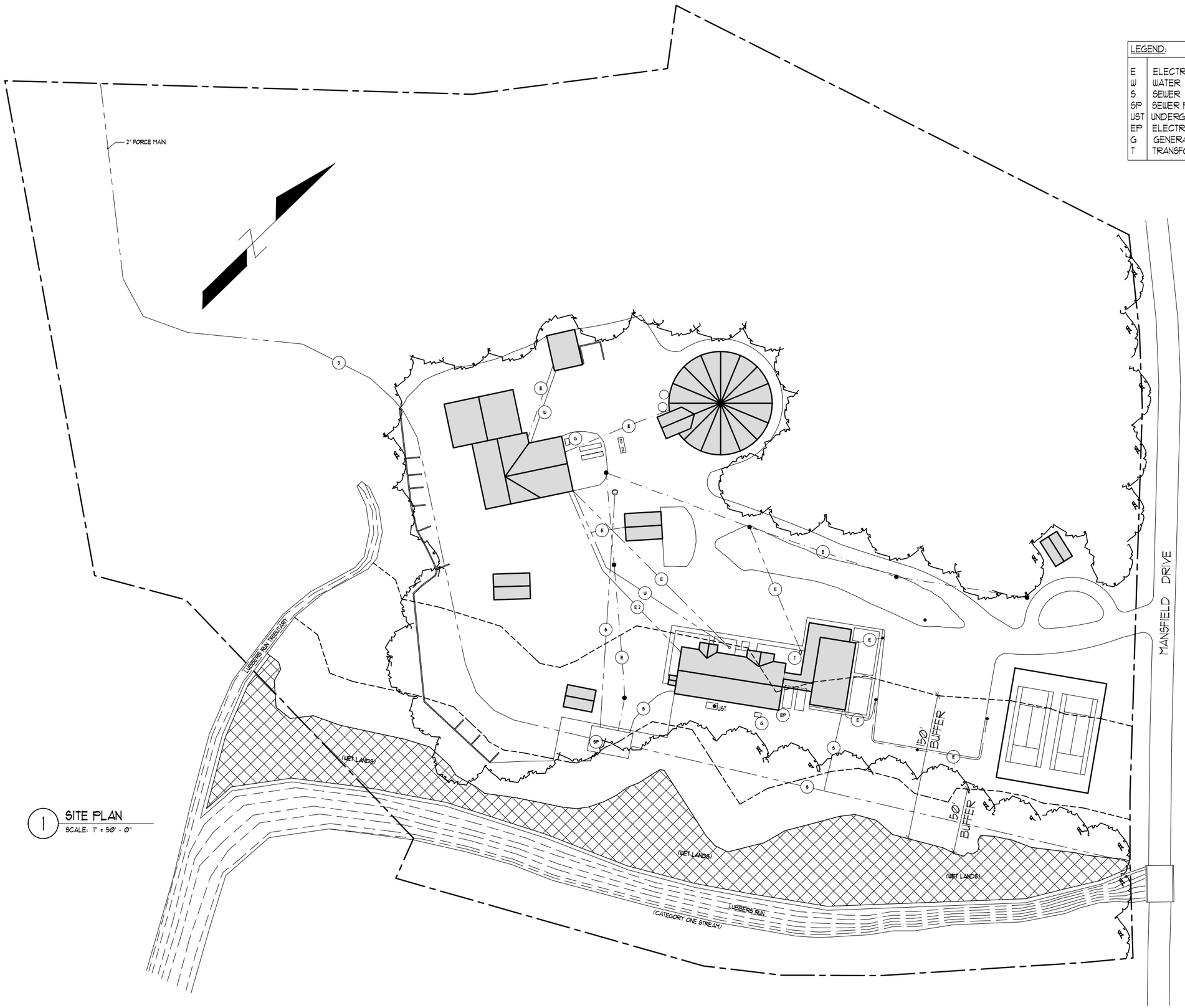
COST UNIT		LOW INTENSITY RENOVATION	MEDIUM INTENSITY RENOVATION	HIGH INTENSITY RENOVATION	NEW CONSTRUCTION
		Rate $/SF	Rate $/SF	Rate $/SF	Rate $/SF
Hard Construction Cost		**$ 100**	**$ 150**	**$ 200**	**$ 250**
Gen. Conditions (+Bonds & Insurance)	8%	**$ 8**	**$ 12**	**$ 16**	**$ 20**
Subtotal		$ 108	$ 162	$ 216	$ 270
Design & Estimating Contingency	10%	**$ 11**	**$ 16**	**$ 22**	**$ 27**
Subtotal		$ 119	$ 178	$ 238	$ 297
Construction Contingency	10%	**$ 12**	**$ 18**	**$ 24**	**$ 30**
Subtotal		$ 131	$ 196	$ 261	$ 327
Contractor Overhead & Profit	7%	**$ 9**	**$ 14**	**$ 18**	**$ 23**
Total Construction Cost		**$ 140**	**$ 210**	**$ 280**	**$ 350**
Escalation per Annum	3.5%	$ 4.89	$ 7.34	$ 9.79	$ 12.23
Construction Cost w/ Escalation		**$ 145**	**$ 217**	**$ 289**	**$ 362**



Typical Cost Breakdown	
Structure	10% to 20%
MEP,FA,FP, Data	30% to 40%
Architecture	50% to 60%

Potential Cost Savings:	Savings; Renovation Over New:
Replace only Architectural Finishes/Envelope	50% to 40%
Replace only MEP Systems	70% to 60%
Fix everything within existing structure	20% to 10%
Fix everything & modify structure	10% to 0%
Fix everything & modify structure + ADA	0%

LEGEND:	
E	ELECTRIC
W	WATER
S	SEWER
SP	SEWER PUMP
UST	UNDERGROUND STORAGE TANK
EP	ELECTRIC PANEL
G	GENERATOR
T	TRANSFORMER



1 SITE PLAN
SCALE: 1" = 50' - 0"

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306 Ramapo Valley Road
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201.644.0505 Fax: 201.644.0501
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signature:

Thomas J. Kosten, A.I.A. AI11394

Michael R. Bieri, A.I.A. AI01507700

key plan:

MUNICIPAL BUILDING ASSESSMENT
AT
BYRAM TOWNSHIP MUNICIPAL BUILDING
10 MANSFIELD DRIVE
BYRAM TOWNSHIP, NJ 07874

drawing title:

SITE PLAN

rev.	date	description

NM	TJK	AS NOTED
drawn	check	scale
8-25-15		1519
issue date		project no.

drawing number:

SP-1