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ABERDEEN COMMUNITY SERVICES BUILDING
FABRIC STUDY/FACILITIES ASSESSMENT REPORT

34 North Philadelphia Blvd.
Aberdeen, Maryland 21001

Prepared For:
City of Aberdeen
Department of Planning and Community Development

Submitted:
October 21, 2015

Consultants:
Manns Woodward Studios, Architect
DEDC LLC, MEP Engineer
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BACKGROUND & PURPOSE

SECTION 1

BACKGROUND AND PURPOSE

1.A: PURPOSE

This existing conditions assessment report details key opportunities and faults in regard to the existing building's suitability of an economical renovation. The building was surveyed by architect Manns Woodward Studios, consulting MEP engineer DEDC, LLC, and consulting hazardous materials inspectors Jenkins Environmental, Inc.

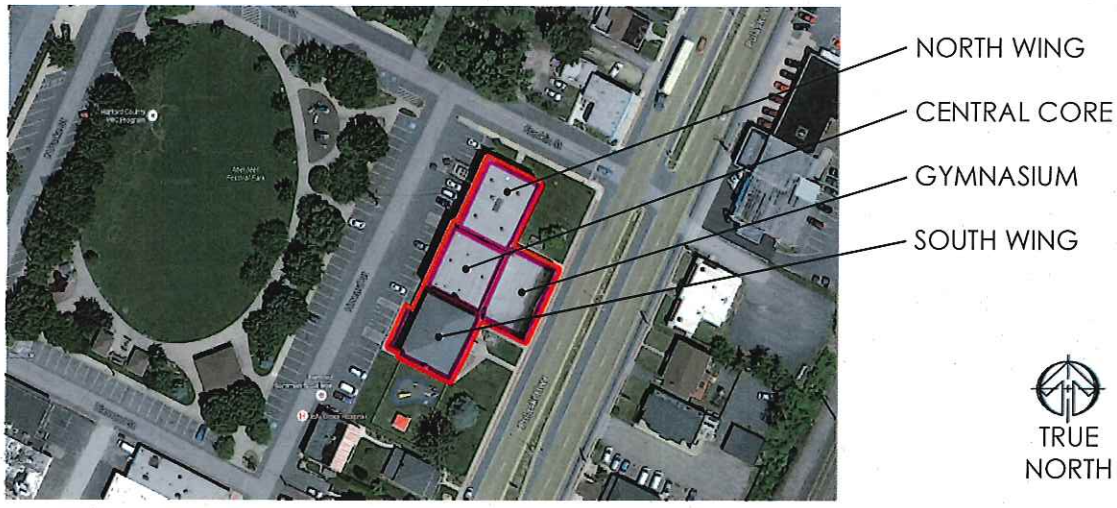
1.B: CONTRIBUTORS

This feasibility study is for the City of Aberdeen's Department of Planning and Community Development by Manns Woodward Studios. The work was performed under the direction of the Department of Planning and Community Development.

1.C: BUILDING HISTORY AND SUMMARY

The project is located at 34 North Philadelphia Blvd.; Aberdeen, Maryland. The facility is three stories with varying brick/stone veneer and the majority of the building has a sloped built-up roof and a small portion of sloped shingle roofing. The original building itself has had two major additions and a series of smaller renovations over its existence. We have no knowledge of the exact construction specifications but some research has yielded a brief history of the the building's expansions.

- The original building was the northern portion of the current structure, designed by Otto Simonson, built in 1908, referred to in this report as the "north wing".
- A 3 story addition was added to the south of the original building (currently the center of the structure) in 1924, adding classroom space. This is referred to in this report as the "central core".
- A second 3 story addition was added to the south again in 1935, which contained more classrooms and also included a single story gymnasium and stage to the east of the central core. The addition will be referred to as the "south wing" and the gym addition as the "gymnasium".
- There were then one or more major interior renovations that most likely occurred between the 1960's and 1990's. One such renovation was a large scale systemic upgrade in which the window heads were lowered to accommodate drop ceilings and the new HVAC systems installed above those ceilings. Shorter windows were installed and the space above was infilled with aluminum siding.
- More recently, an elevator was retrofitted into what we suspect was an existing stair shaft, providing an accessible entrance to the west in 1995.
- Roughly a year ago, the building was closed down and has remained vacant since. Please refer to the diagram below for further clarification.



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EXECUTIVE SUMMARY

SECTION 2

EXECUTIVE SUMMARY

2.A: SUMMARY

The following study explores the current state of the Aberdeen Community Services Building's existing conditions in order to give a holistic picture as to what the most cost effective solution is to bring the existing building up to contemporary code and systemic modernization.

Major fabric issues identified are:

- Outdated and inefficient HVAC systems in various states of abandonment and disrepair.
- Extensive cracking throughout interior plaster and minor cracking in exterior masonry - further examination by a licensed structural engineer is necessary to ascertain the severity of the cracking.
- Approximately 90% of the toilet rooms, including the multi-user toilet rooms, are not currently ADA compliant.
- Interior finishes in poor general condition, some hazardous materials discovered.
- Signs of significant water infiltration and damage in northeast corner of basement.
- Residential-grade windows with rotted seals and siding infills in original masonry openings, in poor operable condition

2.B: RENOVATION CHALLENGES

For a building that is over a century old, the original design has served its purpose well. Over the course of its life, the building has withstood many years of use and abuse, and from a retrospective standpoint the building is in acceptable condition. However, it is the building's age and size that presents significant and costly challenges in regards to bringing the existing structure up to contemporary code standards and systemic modernization.

Because the building exists as an original structure with multiple additions, there are several structural systems in place which primarily consist of bearing walls and wood joists. It is likely that some or all portions of the wood construction would need to be reinforced in order to comply with the design loading of current codes in respect to the proposed occupancies of the building. Some of the areas in which such reinforcement would be cost prohibitive may limit the type of use and program that can occupy that portion of the building.

Additionally, there is concern about the degree of reinforcing that will be required in order to achieve today's performance requirements for seismic, snow, and wind loads. In accordance with the International Existing Building Code, since more than 30% of the building area is anticipated to undergo alterations, a structural analysis will need to be performed in order to demonstrate that the final completed project will comply with current standards prescribed by IBC. Masonry bearing walls in particular are sensitive to seismic forces, and it is possible many of the cracks in the building are related to the seismic event of 2011. Lateral force stabilization efforts for this project could prove to be extremely costly but are difficult to estimate without having completed further analysis and design.

The thermal performance of the building will be required to be upgraded in accordance with the International Energy Conservation Code (IECC). Currently the building utilizes an unvented composite masonry wall which was a common construction type during the 20th century, however, it provides very little thermal performance when compared to today's standards for construction.

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EXECUTIVE SUMMARY (cont.)

2.B: RENOVATION CHALLENGES (cont.)

According to the IECC, thermal upgrades will only be required where areas of work are being performed. The code specifically requires that mass walls, meaning those constructed of masonry, must be continuously insulated and achieve a minimal R-Value of 9.5. Because the exterior bearing walls are composite masonry, we cannot insert a layer of continuous insulation in a vented cavity, as would be the most effective solution in a cavity wall structure. Continuous insulation can be achieved in a variety of ways but the most effective way is to line the interior face of the exterior masonry walls with rigid insulation or a closed-cell spray foam insulation. While the more costly option, the spray foam offers the additional protection as an indoor air film that prevents moisture from migrating through the wall. Additionally, because of the size of the building and the complexity of construction, the spray foam would be the more practical option because of its ability to expand, fill holes and cracks, and seal otherwise unseen gaps.

2.C: HAZARDOUS MATERIALS SUMMARY

A preliminary hazardous materials evaluation was conducted by inspectors who have received U.S. EPA accredited training to identify suspect asbestos-containing materials. Asbestos was detected in floor tile and associated mastic in the North Basement Stairwell, and it should be assumed that all similar materials in the building contain asbestos. This material should be abated by a licensed asbestos abatement contractor immediately. Additionally, lead based paint was detected on several exterior doors and door casings, various locations in the Gym and Hot Water Heater Room, as well as an exterior lintel. The full study is included in Appendix A of this report.

2.D: FINAL RECOMMENDATION

When considering renovation vs. new construction, the first priority is to identify what renovations will be required of the existing structure to make it applicable to modern standards. In order to make a renovation cost-effective the total sum of renovation expenditures should be less than or equal to the cost to build that portion of building new again.

The structural shell of the building, although aging, remains in sound condition and can be repaired and reinforced to allow a full interior and systemic renovation. Complete removal of all finishes as well as the windows and doors is necessary for the most effective and efficient adaptation of the existing building to its new program. The masonry exterior and original window openings require restoration and repair, and new commercial energy-efficient windows need to be installed. The modernization and partial replacement of the HVAC system and plumbing will work in tandem with a newly insulated building envelope to ensure a long, durable life cycle for the building.

The final recommendation of this report is that the building is a good candidate for complete renovation, modernization, and preservation. Assuming that the 34,000 S.F. of existing space is sufficient for future needs, the cost of renovation would be considerably less than new construction.

As detailed at the end of this report, a cost estimate has been provided to take a preliminary look as to what the initial cost would be to renovate the existing building. In order to give a holistic look at project cost, Hard Cost and Soft Cost have been added to the cost estimate model. Effectively, the numbers shown are the complete and total cost to move into a furnished and operable building.

Based upon recent bid prices for similar projects and the current economical market, it is anticipated that new construction would likely exceed $250.00/S.F. Renovation of this building would likely yield a savings of between 20-25% vs. new construction. In addition to preserving the historic character of the community, a complete renovation of this project would result in a less expensive building that has the same life expectancy. In addition, the location of the building and its proximity to other municipal amenities (Library, Senior Center, Town Hall) and public open space (Festival Park) add a value to this building that is not reflected in the building itself.

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EXISTING CONDITIONS ANALYSIS

SECTION 3.A: CODE COMPLIANCE

ADA ACCESSIBILITY (cont.)

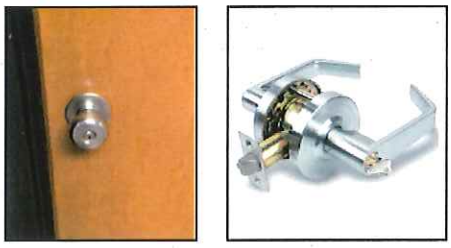
Accessible Restrooms
Very few single-user toilet rooms in the building meet current ADA accessibility requirements, and none of the multi-user toilet rooms meet current ADA requirements. Issues documented include, but are not limited to: inadequate toilet stall clearances, inadequate fixture clearances, non-compliant accessory placement, and unsatisfied turn-radius requirements. A renovation will require at least one accessible toilet fixture for each sex be provided on each floor.

Accessible Telephones
The provisional requirements for telephone usage are easily met throughout the building.

Accessible Drinking Fountains
ADA accessible drinking fountains are only provided on the third floor.

Accessible Parking
The provisional requirements for accessible parking are easily met throughout the site.

SUPPORTING FIGURES:



Non-Compliant Hardware vs. Required Hardware

Non-Compliant Toilet Clearance

Only Compliant Drinking Fountain

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EXISTING CONDITIONS ANALYSIS

SECTION 3.B: CIRCULATION

EXTERIOR CIRCULATION/ACCESS

3.B.1: FINDINGS:

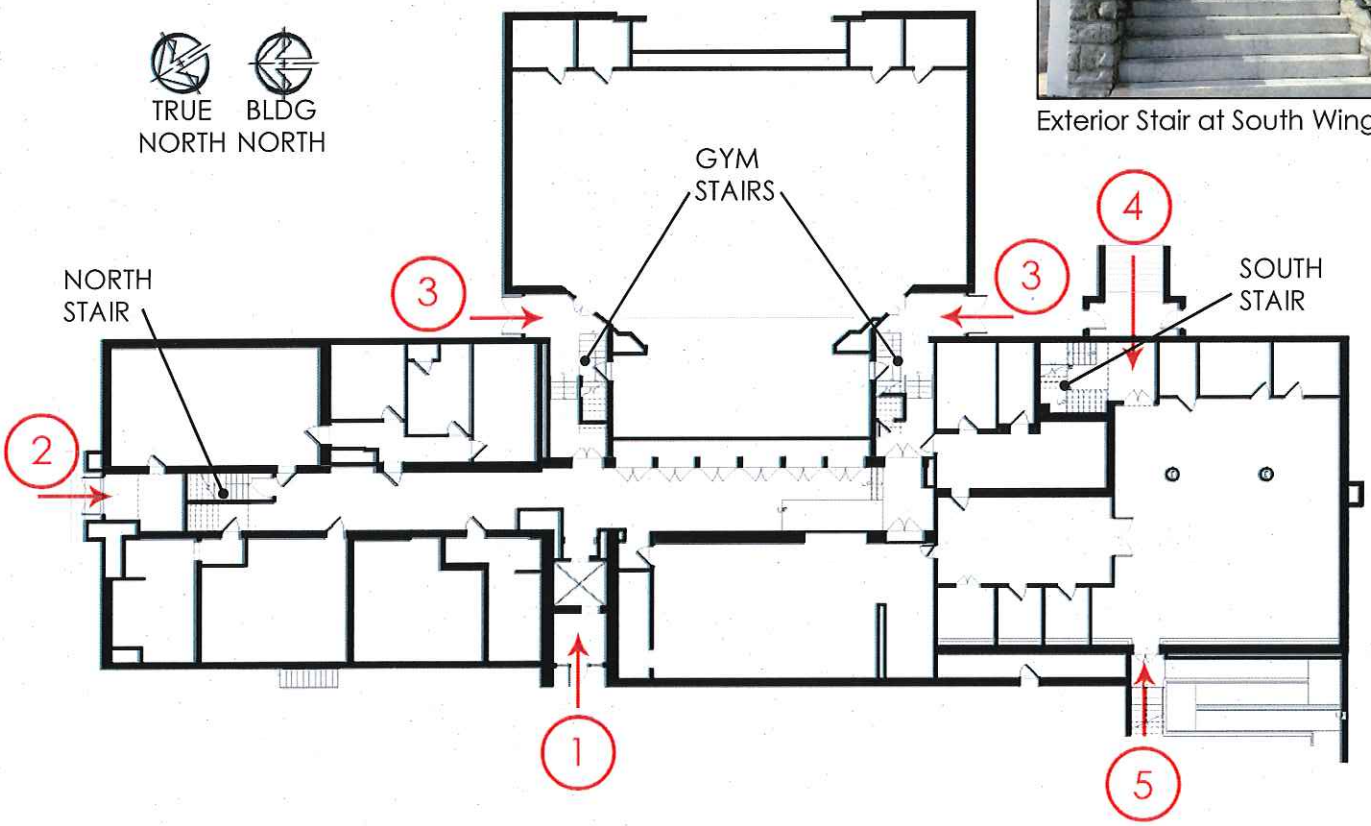
The accessible entrances were discussed under the ADA Accessilibility Section. Below is a clear outline of the buildings entrances:

1. The main public entrance at the west side of the central core which requires access to the facility via an elevator.
2. An entrance at the north wing which requires ascending stairs and leads directly into a stairway with access to all three floors.
3. Two entrances on either side of the gymnasium
4. There are multiple entrances to the south wing on the east side, which all enter into the south stair: one main entrance that ascends a stair and provides access to the second floor landing of the south stair, and two small stairs that descend under the main stair and provide access to the basement.
5. The last entrance is located at the South West side of the building. It contains an exterior stair and an exterior ramp under a pavilion structure that descends and provides access to the basement.

Exterior Stair at North Wing

Exterior Stair at South Wing

Entrance and Stair Diagram



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VERTICAL CIRCULATION

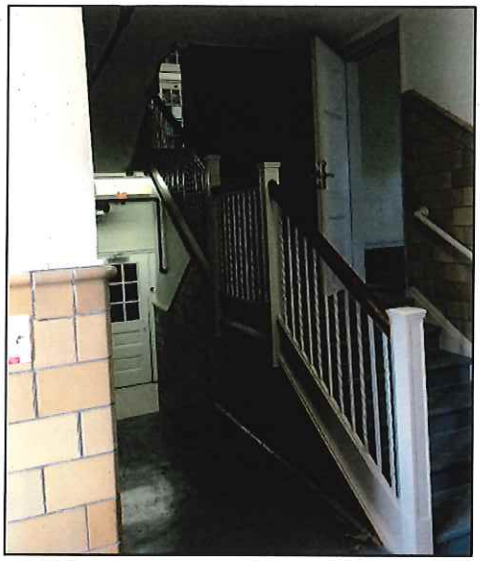
3.B.2: FINDINGS

Interior Stairs
Both main interior exit stairs are wood treads and risers on wood carriage supports and single wood railings. There are various code violations that include but are not limited to: handrail height, guard height and spacing, handrail extensions and clearances, and geometry. Because of the construction of the stairs and the existing non-code compliant guards and handrails, significant structural modifications to the stair may be necessary. The north stair exhibits a slight slope on the third floor landing and may need to be reinforced. The stairs flanking each side of the gymnasium are metal stringers, concrete-filled metal pans, and single metal guards. Again, the issues of height and spacing, and lack of handrails will require modifications to these stairs.

Exterior Stairs
The north exterior entrance stair is concrete with steel pipe handrails, and is in solid, but weathered condition. The nosings are worn and spalling in many places, but there are no major visible structural concerns. Tread and riser dimensions appear to be within the allowable code requirements. The steel pipe handrails are structurally sound, but are in violation of height and extension requirements.

The exterior stair on the eastern side of the south wing is comprised of stone treads and risers with stone wall guards and steel pipe handrails. The masonry appears to be structurally sound and the treads and riser dimensions appear to be within allowable code requirements. The steel pipe handrails are structurally sound, but are in violation of height and handrail extension requirements. The width of the stair may require the addition of an additional handrail down the centerline of the stair. The height of the masonry wall acting as a guard may need to be modified or supplemented to provide adequate fall protection. Under this stair, there are two flanking stairs that provide access to the lower level via a shared landing located directly below the landing of the entrance stair. These stairs are concrete and also appear to be dimensionally acceptable, but are in violation of handrail requirements.

The covered entrance located on the west side of the south wing contains a stair and ramp that descend to the basement level and serve as the former entrance to a daycare program. These stairs and ramp appear to be in sound condition and within dimensional requirements, but also require modification to the handrails.


Stair 4 at Gym Landing


Non-Code Compliant Landing Size


Non-Code Compliant Handrail, Landing, & Tread Material

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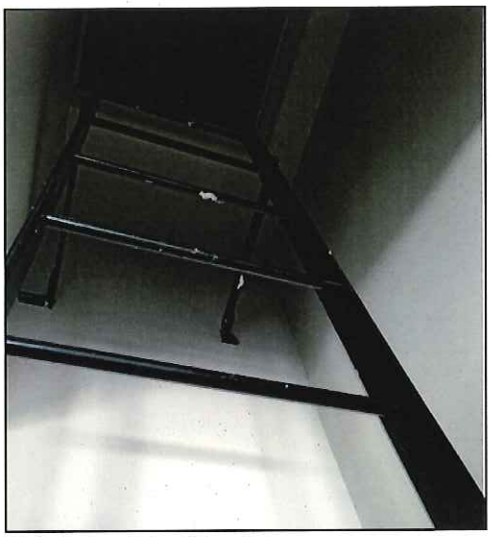
VERTICAL CIRCULATION (cont.)

3.B.2: FINDINGS (cont.)

Elevators
Dimensionally, the elevator meets ADA size requirements. It appears to be in good working condition and has a recent certification, but cab finishes need replacing and an inspection performed. The elevator machine room is on an upper floor and is not accessible from the elevator lobby, however, it is clean and the equipment appears to be in good condition.


Elevator

Roof Access
Roof access is gained through a hatch and ship's ladder that connects the third floor to the roof. Access to this hatch is only through the security office that lies adjacent to the north stair on the third floor. The ship's ladder and hatch are securely fastened to the structure and in general, appear to be in good condition – we were able to safely use it to access the roof – however, there are signs of water damage at the bottom of the ladder.


Ship's Ladder/Roof Access

3.B.3: KEY POINTS
The interior stairs appear to be in good condition, but will require modifications to comply with current code standards. The stair structure should be evaluated by a licensed structural engineer, and reinforced or modified as needed. The exterior stairs also appear to be in good condition, but will require replacement of handrails and possible modifications for fall protection. The elevator is in good working order, but should be inspected and serviced.


Exterior Stair

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EXISTING CONDITIONS ANALYSIS

SECTION 3.C: BUILDING CONSTRUCTION

BUILDING STRUCTURE

3.C.1: FINDINGS

Based on historical research and our observations of the existing building, we have determined that this building has undergone multiple additions and renovations.

The north wing is the original structure from 1908 and resides at the north end of the building and comprises about a third of the total building footprint. The structural system is exterior masonry and interior wood bearing walls with floor joists and roof joists. There is a basement level that is partially exposed above grade that consists of a combination of poured concrete foundation walls and masonry walls. The corridor walls are wood-framed and plaster-clad, and serve as the internal bearing walls. Wood joists span from east to west. There appears to be an original skylight framed into the third floor corridor roof.

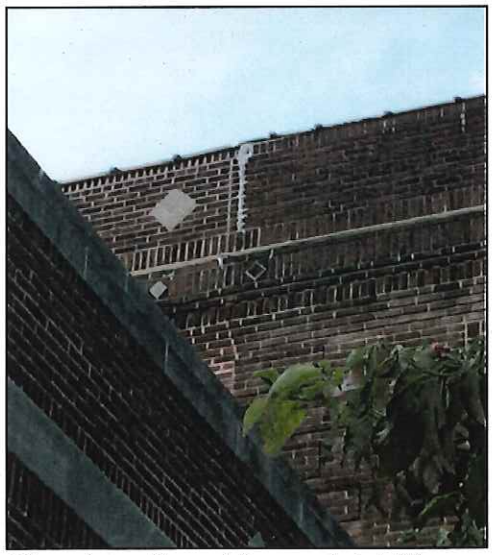
The second addition, built in 1924, was of roughly the same size as the original 1908 building, and was designed to match the original facade & proportions. The construction is exterior and interior masonry bearing walls, which have a similar height, thickness, and fenestration as the original building, with some minor differences in the brickwork. The interior bearing walls are masonry and plaster, and the framing spans east to west over corridor bearing walls, as with the original building. The main floor joists are wood between the corridor walls and the exterior bearing walls, but change to small steel bar joists over the corridor areas. This configuration is consistent vertically with the exception of the roof, which was observed to have wood joists in a number of locations. The second addition is now the "central core".

The south wing, built in 1935, is the most recent addition to the school. The addition roughly matches the footprint of the original 1908 building in size and height, but has a pitched roof in lieu of the parapet and flat roof design of the rest of the building. The main structure consists of masonry bearing walls, a central post and beam bearing line at the centerline of the structure, and wood framing running east to west. A large timber beam over columns serves as the central bearing member, and this is consistent through the first two floors. The roof framing is not immediately observable, but the roof form and structure below suggest a ridge beam and hip rafters bearing on the exterior walls.

The single story gymnasium, also constructed in 1935, lies to the east of the central core. The gym has no directly observable structure, but the existing walls, span distances, and building proportions suggest that there are steel joists spanning east to west, bearing on the exterior walls and the proscenium wall above the stage. The stage itself appears to be concrete over masonry bearing walls, with small storage spaces between. The understage is not accessible from the lower level of the main building.

SUPPORTING FIGURES:

Clear Location of the Third Addition at the Central Core and South Wing



Clear Location of Second Addition at Central Core and North Wing

Clear Location of Addition

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BUILDING STRUCTURE (cont.)

3.C.1: FINDINGS (cont.)

Most of the exterior bearing walls are coated in plaster, and in many of those locations the plaster is cracked. On the building exterior, the masonry cracks are sparse and limited to small areas, which suggests much of the plaster cracking is a non-structural issue. For the most part, the masonry veneer of the exterior bearing walls are in good condition, and only would require re-pointing and cleaning to restore them.

The interior bearing wall and joists need to be evaluated by a licensed structural engineer to determine what type of reinforcement, if any, is required. Most of the main floor framing is obscured by a plaster ceiling that is fastened to the underside of the joists. Where the framing was observable through some holes in the plaster ceiling, the wood joists appeared to be solid, intact and in good condition. Where steel joists were observable in the central core corridor, they appear to be in good condition as well.

3.C.2: KEY POINTS

The exterior masonry structure seems to be in good condition, and can be restored with minor work. The floor framing runs east to west and, where visible, seems to be in good condition. The roof framing also runs east to west, and, where visible, appears to be in good condition. The interior bearing walls and structural members appear to be in good condition. However, much of the internal structure remains obscured, and other complications may be revealed when the structure is exposed

SUPPORTING FIGURES:

Opening in Ceiling Showing the Exposed Wood Plank Flooring

Roof Framing - for Scoping

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EXTERIOR WALLS/VENEER

3.C.3: FINDINGS

Based upon field observation and measurements of the existing structure, the entire exterior envelope appears to be 4" brick veneer backed by 8" masonry bearing walls. There appears to be no air space between the brick and concrete block, rendering it prone to moisture infiltration, and in fact, there was efflorescence observed over swathes of brick. The exterior mortar joints on brick veneer are not crumbling, however, long exposure to weather has eroded them.

Some of the masonry near grade has been removed and patched with concrete or non-matching masonry, and should be replaced. Additionally, the lower level parging shows minor but extensive cracking and spalling around window and door openings. Some of the grade-level stone and cast stone show signs of significant erosion and vandalism, and should be repaired or replaced.

The design team was not able to ascertain if any insulating material was used to insulate within the core of the concrete block as it was a typical practice when portions of the building were originally constructed. It should be noted that even if the concrete units had originally been insulated, based upon the building's age, the minimal R-value provided would have been further degraded due to the insulation settling within the core. Selective demolition should be done to ascertain whether or not insulation was used as this could indicate that the bearing walls are not fully reinforced.

The maximum thermal performance of the wall (at 12" masonry) is R-2.8, well below today's code requirement of R-9.5 (with continuous rigid insulation) for mass walls. Since the anticipated work area for this project is greater than 50% of the building's square footage, building code will likely trigger costly structural and energy efficiency modifications. If insulation was used and the walls are not fully reinforced, then it will likely need to be remediated in order to satisfy the new seismic, snow, and wind load requirements. It is recommended that the interior face of the walls be furred out and insulated with 2" minimum rigid insulation or an equivalent thickness of closed-cell spray foam insulation.

3.C.4: KEY POINTS

The exterior masonry walls are in good structural condition and need minor repairs to restore the character of the building. All brick and cast stone joints should be re-pointed. Testing on existing mortar and brick should be done prior to selecting new mortar type as some types of older bricks can quickly deteriorate when paired with new type-N mortars.

SUPPORTING FIGURES:

Weathered Brick Joints and Obvious Efflorescence

Exterior Lower Wall Crack/Parging and Attempted Repair

Exterior Degrading Brick and Attempted Repair

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EXTERIOR WINDOWS

3.C.5: FINDINGS

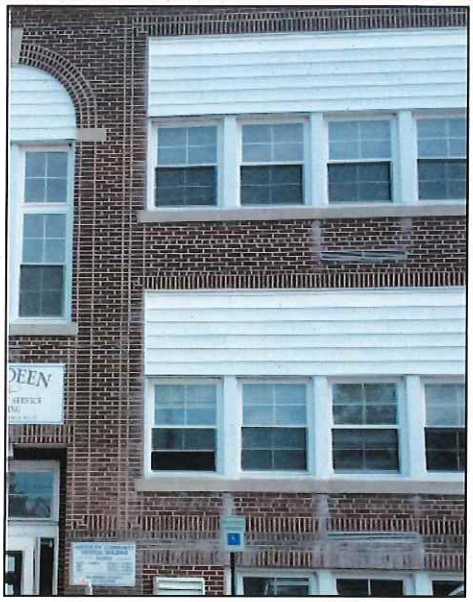
All of the windows in the building are roughly the same age and same level of quality and condition. From our field observations, the windows appear to be a residential quality vinyl-clad double-hung window. The glass does appear to be double-paned, but the design team was unable to determine the exact composition of the glass pane and any optical coatings present. The windows cannot be assessed for their thermal performance by visible inspection only, but we did experience certain rooms in the building which had a higher temperature and humidity than adjacent rooms, suggesting the performance is compromised.

The windows are of consistent look and manufacture, but they are of poor quality and many of the windows suffer from hardware failure making them difficult or impossible to operate. There are multiple units with missing or cracked glazing, damaged sashes/frames, and rotted and leaking seals. Additionally, the existing windows are much smaller than the original masonry rough openings, and share the rough opening with un-insulated infill walls of aluminum siding. There are numerous windows that have been removed or modified for various HVAC and utility components, and in several cases, those penetrations are allowing water infiltration. Additionally, many of the interior sills and jambs show signs of seal failure and water infiltration. Selective demolition will reveal more information about how the windows were installed and what precautions were taken to mitigate moisture penetration during window replacement.

The masonry lintels above the windows are primarily steel and, where visible, appear to be in good condition. The south wing features granite sills and heads, which also appear to be in good condition.

3.C.6: KEY POINTS

We would recommend that all of the existing windows and infills be removed, and new commercial-grade energy-efficient windows that fill the complete rough opening be installed wherever possible. There is approximately 6,000 S.F. of windows in the project which would constitute a significant cost. Additionally, there may be cost and labor intensive remediation of the steel lintels required if any are found to be structurally compromised due to weathering.



Lowered Original Window Openings

Lowered Original Window Openings from Inside

Inoperable Window Condition

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EXTERIOR DOORS

3.C.7: FINDINGS

The existing exterior doors are a mix of wood doors and frames and hollow metal doors and frames. The glazed double entry/exit doors tend to be wood, and the unglazed single man doors tend to be hollow metal. The wood doors appear to be operable and in fair condition, and have been outfitted with wired glass. The wood door frames appear to be the original design, and while they appear weathered, they could be restored and modified to function appropriately. The hollow metal doors and frames show damage and signs of rust and corrosion. Weather seal failure and threshold failure is common amongst door openings, as well as locations where the door leaf no longer fits the frame correctly, and daylight is visible around the door leaf edges.

Door hardware is in poor condition and inconsistent across the exterior doors, and should be removed entirely. The door swing directions are consistent with the direction of egress, but some of the clear widths and minimum door leaf sizes need to be evaluated in a detailed code study to ensure they allow adequate egress width.

Per the attached hazardous materials report, most of the paint on the exterior surfaces, including doors and frames, contains lead, and would require remediation or encapsulation.

3.C.8: KEY POINTS

We recommend all exterior wood doors be evaluated for restoration, and all hollow metal doors and frames be removed. All door hardware including but not limited to: levers, knobs, latches, pulls, plates, closers, panic hardware, and hinges should be removed and replaced with code-compliant hardware.

SUPPORTING FIGURES:

Damaged and Rusted Frame

Damaged, Old and Rusted Hardware

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ROOFING

3.C.9: FINDINGS

Field observation reports that the primary roofing system over the north wing and the central core is a built-up flat roof that slopes to roof drains. A pitched, shingled, hip roof that drains into gutters and downspouts covers the south wing. The single story gymnasium also has a built-up flat roof. There is a small infill addition on the southwest that adjoins the roof over the ramp and stair, and this is built-up roofing as well, but with a gutter and downspout at the eave. There is also a built-up shed roof covering the stair and ramp at the west side of the south wing.

With the exception of minor patches, the roof and coping appear to be in fair condition. There is evidence of repair at several locations, but the repairs appear to be sound and recent. As evidenced by the observation of the roof structure over the north wing, there are portions of the high roof that are sagging and show obvious signs of ponding. There is evidence of structural sagging and ponding on the gymnasium roof near the east edge of the building. In the roof of the north wing, there is a large pitched skylight that appears to be structurally stable, but there is evidence of water infiltration at one corner. The skylight itself is in poor condition, with cracking or missing putty on the glazing and stained and weathered flashing.

There are portions of ceiling throughout the building that show water damage; however, considering the condition of the roof this damage may be attributable to a mechanical or plumbing system failure or may pre-date the roof replacement.

3.C.10: KEY POINTS

Much of the existing flat and shingle roofs are in good condition and can be salvaged. Areas that are retaining water will need to be re-sloped to allow water to drain. Any small leaks and irregularities in the roofing and coping will need to be repaired. The roof has approximately 10-15 years of remaining lifespan and future replacement will be of moderate cost. The skylight should be removed, but should be replaced as an important historic detail.

SUPPORTING FIGURES:

Stained Location from Ponding Water

Repaired Flashing and Jointing

Patched Coping

Roof View

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INTERIOR CONSTRUCTION

3.C.11: FINDINGS

Masonry Partitions

The observable masonry and plaster partitions serve as the corridor bearing walls in the north wing and the central core and the interior walls of the gymnasium. The corridor walls appear to be structurally sound and exhibit minimal cracking in the plaster. Where the cracking is most severe, there is evidence of water damage. Per the attached hazardous materials report, much of the paint on these walls contains lead and must be removed or encapsulated.

The openings in these walls appear to be part of the original design and have appropriate lintels where observable. At many of these openings, the original wood trim is in good condition and could be salvaged and reused. There are several openings in the second addition that have original glass transoms that appear to be in good condition and could be salvaged and reused. Again, much of the trim is coated in lead paint and would need to be removed or encapsulated.

Wood Stud Partitions

The corridor walls in the north wing of the building are wood-framed bearing partitions, and are clad in wood lathe and plaster. These walls also appear to be in good structural condition, but it is less obvious where the original openings lie in reference to the current openings. Several wider original openings appear to have been partially infilled to contain a single man door, but do not appear to have compromised the original structural header.

The non-bearing wood walls that reside in the north wing of the building are of similar construction, but several have been furred out with metal studs on the room interiors. The interior walls in the central core also appear to be wood framed, but they are more often clad in drywall and they appear to be in good structural condition. Many of the finishes and drywall have damage and degradation, but the walls are still rigid and appear plumb to the floor.

The openings in the non-bearing wood walls are also a mixture of old and new doors, frames, and trim. Some of the frame and doors are damaged and worn past the point of reuse, but some of the openings with original trim could be salvaged and reused.

Metal Stud Partitions

Upon field observation, the design team found numerous instances of metal-framed drywall partitions in various, seemingly random spots throughout the building. The only common characteristic seems to be that these walls appear to be the newest renovation to the interior. The metal framed walls occur most commonly as a furring to the original masonry and plaster walls.

SUPPORTING FIGURES:

Water Damage and Falling Hard Ceiling

Water Cracking

Gymnasium

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INTERIOR CONSTRUCTION (cont.)

3.C.11: FINDINGS (cont.)

In the south end of the south wing, the walls on the second floor are almost new, and include some hollow metal glazed openings and a pass-thru cashier's window that are all in good condition.

Interior Doors

In general, most interior doors are wood veneer set in a hollow metal frame. There are some hollow metal doors, but they are largely limited to the first floor mechanical areas and kitchen area. Across the entire building, door sizes and types vary widely. Most of the wood doors have several layers of paint, and it is likely (because of the findings of the attached hazardous materials report) that this paint contains lead. Many of the doors exhibit wear and damage beyond what would be considered fair condition. Some of the wired glazing in the doors is cracked and the putty is falling apart.

Door hardware is similarly a mix of components throughout the building. Some of the door hardware sets are matched in certain areas, like the Catholic Charities Offices. Other areas, like the first floor day care area, which require several keys to open all of the inclusive doors. Some of the hardware is very old, and no longer functions correctly. Some of the newer hardware has been corroded or damaged to the point where the operation is affected.

3.C.12: KEY POINTS

In general, the interior corridor walls that were part of the original building design appear to be structurally sound, but most are covered in lead paint. It is our recommendation that these walls be stripped to the wood or masonry framing to allow for a full structural inspection and new finishes. The interior non-bearing walls are in various states of age and damage, and should likewise be stripped down to the rough framing. If it is not economically feasible to selectively demolish these walls, then we recommend the full removal of all non-structural interior partitions. The interior doors are also in various states of age and disrepair, and our recommendation is to remove all interior doors, frames, and hardware.

SUPPORTING FIGURES:

Framed Interior Window

Interior Doors

Damaged Door

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TOILET ROOMS

3.C.13: FINDINGS

Many of the toilet rooms in the building are of the single-user type. There are multi-user toilet rooms, but they are limited to 2 or 3 fixtures per sex. As discussed in the ADA-compliance section, very few fixtures and features of these toilet rooms meets current ADA standards. Some of the toilet rooms are tight even when ADA is not taken into consideration. The water closet and lavatory fixtures are inconsistent across the building. The fixtures themselves also vary in degrees of age and wear. Some of the toilet rooms have toilet partitions, but these partitions are in poor condition and some are missing entirely. Toilet room accessories are similarly inconsistent throughout the building, with some missing from the rooms entirely. There also appears to be an inconsistency in finishes.

3.C.14: KEY POINTS

Most of the toilet rooms are undersized and their dimensions, clearances, and accessories are not ADA-compliant. The fixture and accessories are in poor condition, and inconsistent throughout the building. We recommend the full removal of all fixtures, finishes, and accessories in the existing toilet rooms, and code compliant toilet rooms be integrated into the new building program.

SUPPORTING FIGURES:

Children's Toilet Room

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FINISHES

3.C.15: FINDINGS

In general, the building finishes are showing a significant degree of use and wear. Like many building components, they are widely varied throughout the building. In general, interior walls are clad in painted plaster and painted gypsum wallboard (gwb). The plaster cracking is extensive throughout the building, but it appears to be concentrated on the exterior walls and areas that have sustained water damage. The drywall, depending on its age and location, varies from damaged and moldy to almost brand-new. Cracking and peeling wall finishes were observed in numerous locations, and some walls have been modified and the finishes have awkward and unsightly material joints. In the gymnasium addition and central core, there is a ubiquitous tile wainscot that lines almost all of the public corridors and stairs and the gymnasium itself.

Most ceilings in the building are acoustic-tile drop ceilings that were installed in a renovation. They are in a poor state of repair, with many missing or stained tiles and damaged and corroded grids. Above the grids, there is evidence of two other ceiling finishes. Affixed to the underside of the floor joists above is a metal lathe and plaster ceiling that appears to be part of the original design, as the height exceeds the head height of the original window openings. Over the plaster ceiling, an older renovation had installed surface-adhered fibrous ceiling tiles directly to the plaster surface. Many of these tiles have fallen down and exposed the dried-out glue dots and aging plaster ceiling. In almost every room, the plaster ceiling has been penetrated for various HVAC equipment or their hangers. In some locations where water damage has collapsed the plaster ceiling, the lathe is rusty and the wood joists above show water stains.

The building flooring varies per building addition and floor level. On the basement level, the majority of the flooring is 12x12 vinyl composite tile and linoleum. Some of the floor tile is 9x9 and contains asbestos and should be abated. There are also small patches of broadloom carpet and terra cotta tile that are in poor condition. On the second and third floor, the corridor floors are wood in the original building and the south wing addition, and 12x12 VCT in the gymnasium addition.

3.C.16: KEY POINTS

In general, the finishes are widely varied throughout the building, in appearance, as well as condition. Because of the diverse nature of the finishes, their varying degrees of wear, and the presence of hazardous materials, we recommend the full removal of all finishes down to the rough framing. This will allow a clean, consistent, responsible renovation of the interior that will ultimately yield more value in the restored building than a piecemeal treatment of the interiors.

SUPPORTING FIGURES:

Common Corridor (2nd floor)

Children's Toilet Room

Worn Casework (2nd floor)

Worn Wood Floor (3rd floor)

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EXISTING CONDITIONS ANALYSIS

SECTION 3.D: MECHANICAL

MEP - MECHANICAL SYSTEM

3.D.1: FINDINGS

The majority of the building, except for the gymnasium, is conditioned by a two-pipe fan coil system with pneumatic valve controls and manual fan speed dials. A two-pipe fan coil system consists of fan coil units with single coils, which are connected to two pipes (one supply pipe and one return pipe) that either provide hot water or chilled water throughout the building. A building with a two-pipe system is either entirely in a heating mode or entirely in a cooling mode.

The fan coil units themselves are comprised of a finned-tube coil, an insulated drain pan under the coil to collect condensate, a fan to move air through the coil, filters, and a cabinet to house these components. There are two types of fan coil installations in the building: units located above ceilings ducted to ceiling diffusers and console units under windows and in hallways. Both types of installations are ducted through the wall for ventilation air. The fan coils have been disconnected from the piping system, presumably to prevent water from freezing and bursting coils. The exact age of these units is unknown, but they are most likely older than ASHRAE's estimated equipment lifespan of 20 years.

SUPPORTING FIGURES:

Two-Pipe Fan Coil System

Heating Unit

Manual Speed Fan Dial

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MEP - MECHANICAL SYSTEM (cont.)

3.D.1: FINDINGS (cont.)

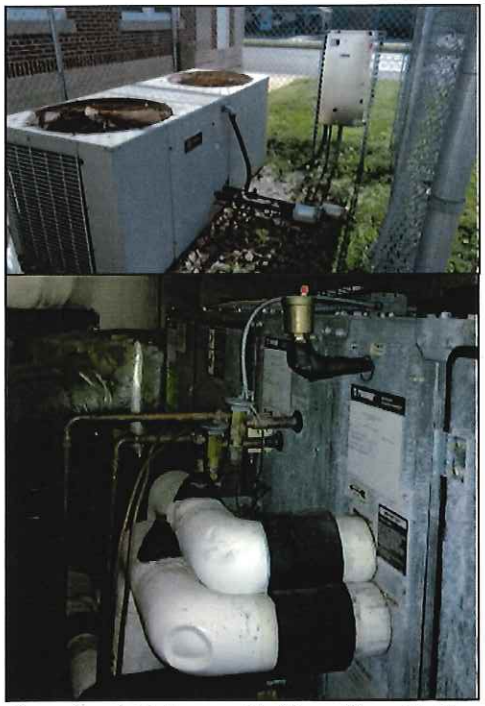
The gymnasium HVAC system, which is approximately 24 years old, is comprised of two constant volume air handling units ducted to two wall diffusers and return grilles in the gym and two on the stage.

These units have water coils connected to the building piping loop for heating and refrigerant DX coils, with associated 12.5 ton outdoor condensing units, for cooling. The refrigerant in these units is R-22, which contributes to ozone depletion and is being phased out of use.

The daycare kitchen exhaust hood is a residential type that is ducted to the front of the building. The remaining exhaust systems throughout the building consist of inline fans that are ducted directly outside through wall vents.

SUPPORTING FIGURES:

Wall Diffusers & Return Grilles (Gym)



Constant Volume Air Handling Units

Daycare Kitchen

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MEP - MECHANICAL SYSTEM (cont.)

3.D.1: FINDINGS (cont.)

A York air-cooled chiller installed on the northwest side of the building is used to produce chilled water for air conditioning. The 90-ton chiller is approximately six years old and is in good condition.

Hot water for the two-pipe system is provided by two gas-fired, forced draft, cast iron boilers manufactured by H. B. Smith. Each of these boilers can supply 1,000 mbh of heat and are approximately 25 years old. Despite their age, the boilers are in good condition. Boiler products of combustion are exhausted to the roof via a chimney. Combustion air for the boilers is brought in by two local intake fans located in the boiler room. Boilers of this type are only 70% efficient.

The pumps used in the two-pipe system and the piping system itself appear to be in good condition with all insulation in place.

3.D.2: KEY POINTS

Two-pipe Fan Coil Units

The two-pipe fan coil units, as previously discussed, have reached the end of their equipment lifespan and therefore should be replaced.

A two-pipe system is usually operated in the heating mode during the Winter and the cooling mode during the Summer. In the Spring and Fall it is not uncommon to have alternating hot and cold spells, or cold mornings with warm afternoons. This would require that the Owner either tolerate some temperature swings or switch the mode of the system. Automatic switchover is not recommended as it can lead to unnecessary cycling. Two-pipe systems cannot handle simultaneous heating and cooling, and are not acceptable where there are internal rooms with high internal gains, such as computer rooms. Two-pipe systems are less complicated in the sense that there are fewer pipes, coils, valves and controls. With that said, since the infrastructure for the two-pipe fan coil systems is currently in place there is merit to consider using this type of HVAC system for the renovation.

Depending on the building renovation size, the system could be upgraded to four-pipe (a pair of chilled water pipes and another pair of hot water pipes). This system allows for simultaneous heating and cooling, but the cost to add the second set of pipes and pumps would need to be evaluated.

SUPPORTING FIGURES:

York Air-Cooled Chiller

Boilers and Intake Fan

Boiler Exhaust Chimney

Two-Pipe System - Pumps

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MEP - MECHANICAL SYSTEM CONT.

3.D.2: KEY POINTS (cont.)

Gym Air Handling Units
The gym air handling and outdoor condensing units have reached the end of their equipment lifespans and should be replaced. As part of the replacement, the distribution ductwork for the space should be augmented for better comfort. Also, the amount of outside air required by code should be re-evaluated for compliance.

Air Cooled Chiller
The existing air cooled chiller is in good condition and should be reused to provide cooling for the building. As it has not been used for some time, it should be examined by service personnel to make sure that it is in peak operating condition.

Boilers
The gas-fired, forced draft boilers have reached the end of their equipment lifespan and should be replaced. Higher efficiency boilers should be specified but the type of equipment selected may be hampered by the size of the existing chimney. If condensing boilers are to be used, the chimney should have a liner installed.

Pumps
The pumps are base-mounted, end-suction configuration. In general, the pumps are of high quality, however, they are approximately 20 years old and are near the end of their lifespan. Given that refurbishing the pumps will be only slightly less expensive than replacing them, new pumps should be installed and sized for the building's new function.

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EXISTING CONDITIONS ANALYSIS

SECTION 3.E: PLUMBING

MEP - PLUMBING

3.E.1: FINDINGS

The water meter is located in a meter pit off of Pulaski Highway. Domestic cold, hot, and hot water return piping is generally copper.

The water service enters the facility in Office 105 on the first floor and is accessed through a 12"x12" door.

The building has a single, gas fired domestic water heater located near the kitchen on the first floor. The water heater is an A.O. Smith Model FS-75-202 with a 75 gallon storage capacity and heating input of 75,100 BTUs. The water heater appears to be in good condition, but is very old as it was manufactured in 1991. The system includes a circulating pump. Products of combustion from the water heater are exhausted out the Pulaski Highway side of the building via a duct to the roof.

Sanitary waste and vent piping is generally cast iron, although some recent renovations have used PVC for drains. The domestic water piping is generally copper. With good water quality, copper and cast iron piping life expectancy should exceed 50 years.

Plumbing fixtures are in good condition.

SUPPORTING FIGURES:

Water Meter

Water Service Entrance - Office 105

Water Heater, Circulating Pump and Exhaust Duct

Plumbing Fixtures

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MEP - PLUMBING (cont.)

3.E.1: FINDINGS (cont.)

The sanitary sewer exits the facility, towards Pulaski Highway, adjacent to the water service. It too is accessed through a 12"x12" door. The daycare kitchen does not have a visible grease trap.

Storm water is collected through both downspouts surrounding the building and interior rainwater conductors. In some locations, the rainwater conductors appear to be connected directly into the existing underground storm drainage system. It is unknown if the storm water drainage and sanitary sewer systems are interconnected. A few downspouts on the southwest corner of the building discharge directly to the parking lot.

The 1" high pressure natural gas service is brought into the facility from Howard Street. From there, distribution piping runs to the mechanical room boilers and building domestic water heater. The gas regulator, meter and piping are all in good condition.

3.E.2: KEY POINTS

The plumbing fixtures are in good condition and could be reused if desired. Plumbing piping and sanitary mains can be reused, but should be closely inspected during any renovation due to their age. Piping sizes should be re-evaluated based on the final architectural design.

SUPPORTING FIGURES:

Sanitary Sewer Pipe


Downspout at Southwest Corner


Natural Gas Regulator, Meter, and Piping

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EXISTING CONDITIONS ANALYSIS

SECTION 3.F: SPRINKLER SYSTEMS

MEP - SPRINKLER SYSTEMS

3.F.1: FINDINGS

The building's 4" fire main enters the building from Pulaski Highway into a first floor Office Closet. The building is fully-sprinklered with multiple fire zones with zone valves.

The sprinkler system was installed sometime after the building was constructed. The sprinkler piping is concealed by false ceilings that are installed beneath the building's original ones.

3.F.2 KEY POINTS

The sprinkler system is in good condition. The system, however, should be re-evaluated and modified based on the final architectural design and use of the building. Also, a hydrant flow test should be completed to confirm flows and pressures available to the system.

SUPPORTING FIGURES:

Fire Main - Entrance Point

Sprinkler System Beyond Drop Ceiling

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EXISTING CONDITIONS ANALYSIS

SECTION 3.G: ELECTRICAL

MEP - ELECTRICAL

3.G.1: FINDINGS

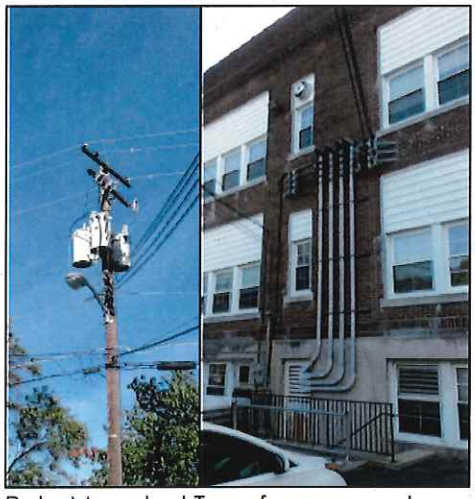
At the back of the building, on Howard Street, there are three pole-mounted transformers configured in a 208 Volt, 3 phase, WYE service that is run overhead to four weatherheads and conduits running down the building. The service then penetrates the exterior wall into an existing wiring trough located in the existing mechanical room in the basement. The electrical conduits and weatherheads appear to be in good condition.

The service is distributed from the wiring trough through five service entrance rated enclosed circuit breakers to different panel boards throughout the building and one 200 Amp main circuit breaker, 208 Volt, 3 phase panel that feeds mechanical room equipment:

- One 800 Amp, 208 Volt, 3 pole service entrance rated enclosed circuit breaker feeds a 1200 Amp main lug only panel, Panel "G" located in mechanical room.
- One 100 Amp, 208 Volt, 3 pole service entrance rated enclosed circuit breaker feeds a 225 Amp main lug only panel board located in basement level weight room.
- One 100 Amp, 208 Volt, 3 pole service entrance rated enclosed circuit breaker feeds a 225 Amp main lug only, 120/208 Volt, 3 phase panel board located in the first floor gym.
- One 100 Amp, 208 Volt, 3 pole service entrance rated enclosed circuit breaker feeds panel board located in second floor corridor.
- One 150 Amp, 208 Volt, 3 pole service entrance rated enclosed circuit breaker feeds a 225 Amp main lug only panel board located in third floor corridor.

A majority of the panel boards are dated 1989 as installation date. The electric service is provided by Baltimore Gas & Electric Company. The existing service entrance rated enclosed circuit breaker enclosures have accumulated rust.

SUPPORTING FIGURES:



Pole Mounted Transformers and Conduit Running into Building

Panel Boards and Circuit Breakers

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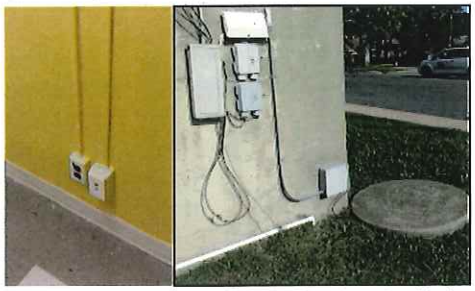
MEP - ELECTRICAL (cont.)

3.G.1: FINDINGS (cont.)

Existing receptacles and tele/data outlets are located throughout the building in walls and utilize Wiremold in areas. The existing receptacles and tele/data outlets located throughout the building are old and worn. The existing tele/data utility service enters the north side of the building, fed overhead from an existing utility pole and then terminates on demarcation board located in basement mechanical room. Existing telephone service is marked Bell Atlantic.

A majority of the existing lighting throughout the building consists of 2'x4' fluorescent troffers, 4' wraparounds and downlights utilizing fluorescent T8 lamps and compact fluorescent lamps respectively. In the existing gym, metal halide high-bay fixtures are utilized. All lighting has manual light switches for control. The lighting should be replaced.

SUPPORTING FIGURES:



Receptacles and Tele/Data Outlets

Demarcation Board

Interior Lighting Fixtures

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MEP - ELECTRICAL (cont.)

3.G.1: FINDINGS (cont.)

Existing exit signs are ceiling and wall mounted throughout the building. Exit signs typically are LED with white thermoplastic housings, red lettering and battery backup for emergency operation. There are a few locations where the exit sign is a combination exit/emergency light fixture with green lettering. In other locations, the exit sign has an aluminum housing with red letters and an incandescent lamp source. The exit signs are old and should be replaced.

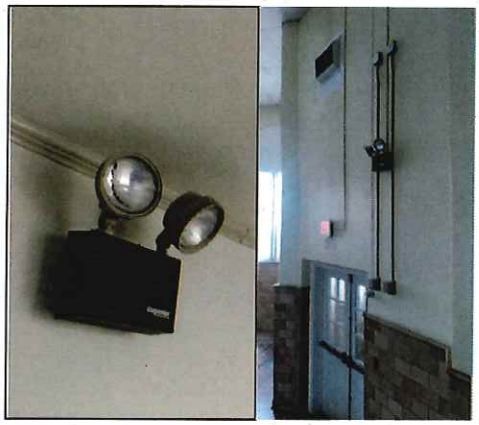
Existing exterior fixtures consist of ceiling and wall mounted metal halide fixtures. Existing exterior fixtures located overtop of exit doors are worn and their lenses are yellowed. Existing ceiling mounted fixtures at daycare canopy are different fixtures which do not match. These fixtures should be replaced.

Emergency lighting fixtures with battery back-up are scattered throughout the building for emergency egress lighting. Existing emergency fixtures are old and using incandescent lamp sources. The emergency lights should be replaced.

SUPPORTING FIGURES:

Ceiling and Wall-Mounted Exit Signs

Exterior Lighting Fixtures



Emergency Lighting Fixtures

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MEP - ELECTRICAL (cont.)

3.G.1: FINDINGS (cont.)

The existing disconnecting means to the HVAC equipment looks to be in excellent condition.

The elevator is a 30 HP hydraulic type elevator and has a 200 amp, 3 pole disconnect feeding it. The elevator controller was installed in 1995 based on nameplate data. The elevator machine room is fed from its own panelboard located in closet 3 #304 adjacent to the elevator machine room and is in good condition. The elevator machine room meets code, as it has devices required by the elevator code including the elevator disconnect with shunt trip breaker, heat detector, smoke detector, sprinkler head and a fan coil unit for conditioning of the space.

3.G.2: KEY POINTS

The existing electrical service appears to be of adequate size for the use of the building. Existing panel boards and service entrance rated enclosed circuit breakers are recommended to be replaced due to age. All electrical wiring devices throughout the building should be replaced due to wear and tear.

We recommend replacing all inefficient interior and exterior fluorescent and incandescent lighting fixtures with new LED type fixtures and new lighting controls. The controls should include occupancy sensors, photocells, time clocks and dimming controls to meet Code requirements. All battery backup emergency fixtures should be replaced with emergency backup integral to fixtures. All exit signage should be replaced with new LED type exit signs with battery back-up.

Existing disconnect switches feeding mechanical HVAC equipment look to be in excellent condition and we recommend keeping switches for reuse.

There are no recommendations for the existing elevator installation as it meets code requirements and is in good working order.

SUPPORTING FIGURES:

HVAC Equipment Disconnects

Elevator Controller, Panelboard and Disconnect

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EXISTING CONDITIONS ANALYSIS

SECTION 3.H: FIRE ALARM SYSTEM

MEP - FIRE ALARM SYSTEM

3.H.1: FINDINGS

The building currently has a fire alarm system with smoke detectors, horns, horn/strobes, strobes and manual pull stations installed throughout.

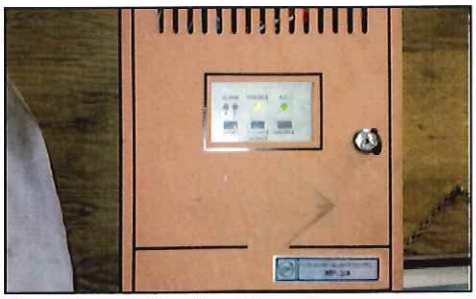
The existing fire alarm control panel is a Fire Lite Alarms Inc. panel which is old and dated. The existing panel had a trouble message during the survey. The fire alarm control panel should be replaced.

3.H.2: KEY POINTS

Existing fire alarm system is old and dated and we recommend updating entire fire alarm system with new fully addressable building fire alarm system.

SUPPORTING FIGURES:

Fire Alarm System



Fire Alarm Control Panel

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COST ESTIMATE

SECTION 4

NO	DESCRIPTION	UNIT	QUANTITY	UNIT COST	AMOUNT	COMMENT	TRADE SUBTOTAL	SF COST
01.00	**GENERAL CONDITIONS & EXISTING CONDITIONS**							
	General Conditions	MO	12	$25,000.00	$300,000.00			
	Utility Connection Fees	ALLOW	1	$20,000.00	$20,000.00			
	Inspection Fees	ALLOW	1	$25,000.00	$25,000.00			
	Grading Permit	ALLOW	1	$0.00	$0.00			
	Building Permit	ALLOW	1	$0.00	$0.00			
	Builders Risk Insurance	ALLOW	1	$50,000.00	$50,000.00			
	Other (Permits & Connections)	EA	1	$15,000.00	$15,000.00			
	Interior Demolition	SF	34000	$4.00	$136,000.00			
	HazMat Abatement	ALLOW	1	$100,000.00	$100,000.00			
	Sitework	ALLOW	1	$650,000.00	$650,000.00			
	DIVISION SUBTOTAL						***$1,296,000.00***	***$19.94***
03.00	**CONCRETE**							
	Wall Footings	CY	0	$325.00	$0.00			
	Column Footings	CY	0	$365.00	$0.00			
	4" Slab On Grade	SF	0	$7.00	$0.00			
	Misc. Concrete	CY	100	$325.00	$32,500.00			
	Concrete Testing	Ea	1	$8,000.00	$8,000.00			
	Equipment Pads	SF	200	$12.00	$2,400.00			
	DIVISION SUBTOTAL						***$42,900.00***	***$0.66***
04.00	**MASONRY**							
	Waterproof Foundation	SF	8000	$15.00	$120,000.00			
	Repair Cast Stone	ALLOW	1	$40,000.00	$40,000.00			
	Repoint Masonry	SF	18000	$16.00	$288,000.00			
	Repair Lintels & Cracks	ALLOW	1	$40,000.00	$40,000.00			
	DIVISION SUBTOTAL						***$488,000.00***	***$7.51***
05.00	**METALS**							
	Ramp Repair/Modification	ALLOW	3	$6,000.00	$18,000.00			
	Stair Repair/Modifcation	ALLOW	3	$12,000.00	$36,000.00			
	Misc Reinforcing & Repair	ALLOW	1	$15,000.00	$15,000.00			
	DIVISION SUBTOTAL						***$69,000.00***	***$1.06***
06.00	**WOODS & PLASTICS**							
	Rough Carpentry	HR	120	$60.00	$7,200.00			
	Misc. Rough Lumber	ALLOW	1	$10,000.00	$10,000.00			
	Lift Rental	MO	12	$1,000.00	$12,000.00			
	Install Division 10 Items	HR	60	$60.00	$3,600.00			
	Install Doors & Windows	HR	120	$60.00	$7,200.00			
	Install Casework & Trim	HR	120	$60.00	$7,200.00			
	Lav Tops w/ Integral Sink	LF	80	$275.00	$22,000.00			
	Misc. Casework & Trim	AILLOW	1	$350,000.00	$350,000.00			
	DIVISION SUBTOTAL						***$419,200.00***	***$6.45***

MANNS WOODWARD STUDIOS
ARCHITECTURE + INTERIORS + MASTER PLANNING

10839 PHILADELPHIA ROAD
WHITE MARSH, MARYLAND 21162

410-344-1460
WWW.MWSARCH.COM

NO	DESCRIPTION	UNIT	QUANTITY	UNIT COST	AMOUNT	COMMENT	TRADE SUBTOTAL	SF COST
07.00 THERMAL & MOISTURE PROTECTION								
	Fire Stopping	EA	1	$8,000.00	$8,000.00			
	Rigid Insulation	SF	20000	$6.00	$120,000.00			
	Roof Repairs and Modifications	ALLOW	1	$100,000.00	$100,000.00			
	Roof Specialties	ALLOW	1	$15,000.00	$15,000.00			
	Caulking	EA	1	$35,000.00	$35,000.00			
	DIVISION SUBTOTAL						***$278,000.00***	***$4.28***
08.00 OPENINGS								
	Interior Doors and Hardware	EA	112	$1,000.00	$112,000.00			
	Exterior Doors and Hardware	EA	10	$1,000.00	$10,000.00			
	Window Replacements	SF	4700	$65.00	$305,500.00			
	Storefront / Curtain Walls	SF	600	$70.00	$42,000.00			
	Operable Partitions	EA	2	$65,000.00	$130,000.00			
	SF Entry System	SF	200	$75.00	$15,000.00			
	SF Entry Doors	EA	4	$1,600.00	$6,400.00			
	Louvers	EA	10	$2,000.00	$20,000.00			
	DIVISION SUBTOTAL						***$640,900.00***	***$9.86***
09.00 FINISHES								
	Light Gauge 3.625" Partitions	LF	3500	$30.00	$105,000.00			
	Light Gauge 6.000" Partitions	LF	2000	$38.00	$76,000.00			
	Drywall and Furring @ Perimeter	LF	2400	$25.00	$60,000.00			
	2x2 Ceiling Tile	SF	5000	$3.50	$17,500.00			
	2x2 Ceiling Grid Exposed	SF	5000	$2.75	$13,750.00			
	Drywall Ceiling	SF	3000	$4.00	$12,000.00			
	Entry Soffit Framing	SF	200	$40.00	$8,000.00			
	Ceramic Tile Floor	SF	1800	$12.00	$21,600.00			
	Ceramic Tile Base	LF	400	$12.00	$4,800.00			
	Ceramic Wall Tile	SF	1200	$12.00	$14,400.00			
	Carpet Tiles	SY	1500	$30.00	$45,000.00			
	VCT	SF	16000	$5.00	$80,000.00			
	Vinyl Base	LF	3500	$1.75	$6,125.00			
	Acoustical Ceiling Panels	EA	25	$1,500.00	$37,500.00			
	Paint Drywall	SF	34000	$1.50	$51,000.00			
	Paint Existing Structure	SF	34000	$2.00	$68,000.00			
	Paint / Stain Doors / Frames	EA	131	$65.00	$8,515.00			
	Paint Drywall Ceilings	SF	3000	$2.50	$7,500.00			
	Misc. Accent Paint	ALLOW	1	$8,000.00	$8,000.00			
	Grind, Acid Finish, Seal	SF	11000	$4.00	$44,000.00			
	DIVISION SUBTOTAL						***$688,690.00***	***$10.60***
10.00 SPECIALTIES								
	Toilet Partitions	EA	25	$1,200.00	$30,000.00			
	Urinal Partition	EA	12	$500.00	$6,000.00			
	Room Signage	EA	90	$50.00	$4,500.00			
	Lobby & Wayfinding	ALLOW	1	$12,000.00	$12,000.00			
	Exterior Building Letters	EA	50	$135.00	$6,750.00			
	Marker / Tack Boards	ALLOW	25	$2,500.00	$62,500.00			
	TV Mounts	EA	30	$250.00	$7,500.00			
	Toilet Room Accessories	RM	8	$1,200.00	$9,600.00			
	Fire Extinguisher & Cabinets	EA	18	$225.00	$4,050.00			
	Misc. Specialties	ALLOW	1	$20,000.00	$20,000.00			
	DIVISION SUBTOTAL						***$162,900.00***	***$2.51***

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10839 PHILADELPHIA ROAD
WHITE MARSH, MARYLAND 21162

410-344-1460
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NO	DESCRIPTION	UNIT	QUANTITY	UNIT COST	AMOUNT	COMMENT	TRADE SUBTOTAL	SF COST
12.00	**FURNISHINGS**							
	Furniture, Fixtures, Eqipment	ALLOW	1	$750,000.00	$750,000.00			
	DIVISION SUBTOTAL						***$750,000.00***	***$11.54***
14.00	**CONVEYING SYSTEM**							
	Repair Elevator & Cab Finishes	ALLOW	1	$10,000.00	$10,000.00			
	DIVISION SUBTOTAL						***$10,000.00***	***$0.15***
21.00	**FIRE SUPRESSION**							
21.01	Modify Wet Pipe Sprinkler System	SF	34000	$1.25	$42,500.00			
21.02	Entry Valve Assembly	EA	0	$4,500.00	$0.00			
21.02	Back Flow Preventer	EA	0	$3,500.00	$0.00			
	DIVISION SUBTOTAL						***$42,500.00***	***$0.65***
22.00	**PLUMBING**							
	Demo Cut & Cap	EA	120	$85.00	$10,200.00			
	Domestic Water Heater & Pumps	EA	1	$20,000.00	$20,000.00			
	Water Closets	EA	30	$2,500.00	$75,000.00			
	Urinals	EA	16	$2,500.00	$40,000.00			
	Lavs	EA	24	$2,500.00	$60,000.00			
	Sinks	EA	14	$2,500.00	$35,000.00			
	Roof Drains	EA	6	$8,000.00	$48,000.00			
	Drinking Fountains	EA	3	$3,500.00	$10,500.00			
	Gas Piping	ALLOW	1	$35,000.00	$35,000.00			
	Misc. Plumbing	ALLOW	1	$8,000.00	$8,000.00			
	Hose Bibs	EA	4	$1,500.00	$6,000.00			
	DIVISION SUBTOTAL						***$347,700.00***	***$5.35***
23.00	**HVAC**							
	Mechanical Demo	HR	400	$85.00	$34,000.00			
	Tools and Equipment	LS	1	$3,000.00	$3,000.00			
	Haulaway	LOADS	3	$500.00	$1,500.00			
	Chiller	EA	1	$375,000.00	$375,000.00			
	Cooling Tower	EA	1	$65,000.00	$65,000.00			
	Water Pumps	EA	2	$19,000.00	$38,000.00			
	Heating Pumps	EA	2	$14,000.00	$28,000.00			
	Energy Recovery	EA	1	$65,000.00	$65,000.00			
	Hydronic Piping	SF	34000	$8.00	$272,000.00			
	Unit Ventilators	EA	35	$6,500.00	$227,500.00			
	Exhaust	ALLOW	1	$4,500.00	$4,500.00			
	Terminal Units	LS	1	$10,000.00	$10,000.00			
	Ductwork and Diffusters	SF	34,000	$8.50	$289,000.00			
	Insulation	SF	30	$2.75	$82.50			
	Controls	EA	1	$200,000.00	$200,000.00			
	Test and Balance	EA	1	$52,000.00	$52,000.00			
	Commission	ALLOW	1	$20,000.00	$20,000.00			
	DIVISION SUBTOTAL						***$1,684,582.50***	***$25.92***

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NO	DESCRIPTION	UNIT	QUANTITY	UNIT COST	AMOUNT	COMMENT	TRADE SUBTOTAL	SF COST
26.00	**ELECTRIC**							
	Demo / Make Safe	EA	200	$85.00	$17,000.00			
	Transofmer Pad & Duct Bank	EA	1	$40,000.00	$40,000.00			
	Telecom Ductbank	EA	1	$30,000.00	$30,000.00			
	2000A Switchboard	EA	1	$135,000.00	$135,000.00			
	Emergency Generator	EA	1	$200,000.00	$200,000.00			
	Branch Circuit Panels and Feeders	SF	34,000	$4.00	$136,000.00			
	HVAC Connections	SF	34,000	$3.00	$102,000.00			
	Lighting	SF	34,000	$4.00	$136,000.00			
	Branch Devices	SF	34,000	$2.00	$68,000.00			
	Branch Circuit Conduit and Wiring	SF	34,000	$2.75	$93,500.00			
	PA System	SF	16	$3.00	$48.00			
	DIVISION SUBTOTAL						***$957,548.00***	***$14.73***
27.00	**COMMUNICATIONS**							
27.01	Voice / Data / Telephone	SF	34,000	$4.00	$136,000.00			
	DIVISION SUBTOTAL						***$136,000.00***	***$2.09***
28.00	**ELECTRONIC SAFETY & SECURITY**							
28.01	Fire Slarm System	SF	34,000	$1.50	$51,000.00			
28.02	Access Control System	ALLOW	1	$225,000.00	$225,000.00			
	DIVISION SUBTOTAL						***$276,000.00***	***$4.25***
31.00	**EARTHWORK**							
	SEE DIVISION 1							
	DIVISION SUBTOTAL						***$0.00***	***$0.00***
32.00	**SITE IMPROVEMENTS**							
	SEE DIVISION 1							
	DIVISION SUBTOTAL						***$0.00***	***$0.00***
33.00	**UTILITIES**							
	Utiliites	ALLOW	1	$150,000.00	$150,000.00			
	DIVISION SUBTOTAL						***$150,000.00***	***$2.31***
	Total Divisions						$8,439,920.50	
	Contingency			10.00% Div			$843,992.05	
	Overhead & Profit			10.00% Div + Contingency			$928,391.26	
	Insurance			1.00% Div + Contingency + O&P			$102,123.04	
	Payment and Performance Bond			5.00% Div + Contingency + O&P +			$515,721.34	
	TOTAL ESTIMATED CONSTRUCTION						**$10,830,148.19**	**$166.62**
	TOTAL ESTIMATED DESIGN COSTS			**10.00%**			**$1,083,014.82**	
	TOTAL ESTIMATED FURNITURE						**$1,200,000.00**	
	ESTIMATED BIDDING COSTS & ADVERTISTING						**$35,000.00**	
	TOTAL ESTIMATED CAPITAL COSTS						**$13,148,163.00**	**$202.28**

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Aberdeen
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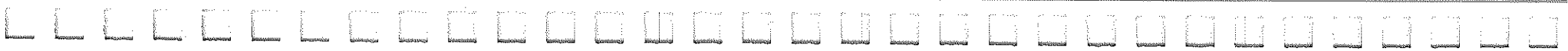
APPENDIX A - HAZARDOUS MATERIALS REPORT

SECTION 5 - APPENDICES



HAZARDOUS MATERIALS EVALUATION
(ASBESTOS and LEAD BASED PAINT)

Aberdeen Community Center
34 N. Philadelphia Blvd.
Aberdeen, MD 21001

JEI Job No.: 2015-226

September, 2015

Prepared by:

Jenkins Environmental, Inc.
8600 La Salle Road
York Building, Suite 509
Towson, MD 21286
410-828-9888

Prepared for:

Manns Woodward Studios
10839 Philadelphia Rd.
White Marsh, MD 21162

Larry D. Jenkins, Project Manager

TABLE OF CONTENTS

1.0 INTRODUCTION

Jenkins Environmental, Inc. was engaged by Manns Woodward Studios to provide an asbestos and lead paint investigation of the Aberdeen Community Center at 34 N. Philadelphia Rd. in Aberdeen, MD which was slated to be renovated. The site visit by Jenkins Environmental was conducted on September 24, 2015 by Larry D. Jenkins, a licensed AHERA Asbestos Inspector and Management Planner and certified Lead Paint Risk Assessor. He was assisted by Naomi Blaylock an asbestos and lead paint inspector.

This assessment is only designed for identification of hazardous material conditions at the time of this investigation. JEI does not assume responsibility for the discovery and elimination of potential hazards that could cause accidents, injuries, or damage. This assessment includes conditions, operations, and practices as observed during the time of the site survey. Changes, procedural modifications or facility renovations made after the site assessment are not included.

2.0 SAMPLING METHODS

Asbestos

As part of the survey completed by Jenkins Environmental, bulk samples were collected of suspect materials for asbestos with each given a unique number, placed in single whirlpak bags, sealed and sent to an accredited laboratory for analysis using Polarized Light Microscopy with dispersion staining techniques.

The facility was visually inspected to identify the locations of suspected asbestos-containing building materials (ACBM). The suspected ACBM was touched by the accredited inspector in order to determine whether the material was friable. Friable by definition means any material that can be crumbled, pulverized or reduced to powder by hand pressure.

Homogeneous areas, those areas of material that are uniform in color and texture, were identified for both friable and non-friable ACBM. Each homogeneous area was classified as one of the following three types of material as defined by EPA.

a. Surfacing Material (SM): Material that is sprayed-on, trowelled on or otherwise applied to surfaces, such as acoustical plaster or other materials on surfaces for acoustical, fireproofing, or other purposes.
b. Thermal System Insulation (TSI): Material that is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.
c. Miscellaneous Material (MISC): Interior building material that is on structural components, structural members or fixtures, such as floor and ceiling tiles and does not include surfacing material or thermal system insulation.

Lead Based Paint (LBP)

Lead paint was tested using an X-Ray Fluorescence Analyzer (LPA-1) manufactured by RMD, Inc. of Waltham, Massachusetts. The use of a portable, non-destructive testing device was selected due to its quick analysis and efficiency when compared to laboratory analysis. This report includes all readings, both positive and negative. Actual readings appearing on an LCD display are recorded on site while a data logger can generate a final report once downloaded to a computer.

XRF results are identified as positive or negative by the following rules:

"POSITIVE" refers to a sample that has a lead concentration of greater than 0.7 mg/cm^2
"NEGATIVE" refers to a sample that has lead concentration less than or equal to 0.7 mg/cm^2

3.0 SURVEY RESULTS

Asbestos Survey Reports

Twenty-eight (28) bulk samples of various materials were collected on September 24, 2015 and analyzed for the presence of asbestos fibers.

Lead Based Paint

A total of sixty-six (66) XRF readings including 6 calibration checks were taken on September 8, 2015.

The following tables summarize the results of analysis:

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

Customer: Jenkins Environmental Inc
8600 La Salle Rd
Towson MD 21286

Attn: Larry Jenkins

Project: Aberden

Lab Order ID: 1518560
Analysis ID: 1518560_PLM
Date Received: 9/25/2015
Date Reported: 9/25/2015

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
AB-1	Rm 101 mastic beneath ft	None Detected		100% Other	Black Non Fibrous Homogeneous
1518560PLM_1					Dissolved
AB-2	Rm 101 blue 12" ft (#2)	None Detected		100% Other	Blue Non Fibrous Homogeneous
1518560PLM_2	*tile only*				Dissolved, Crushed
AB-3 - A	Rm 101 white 12" ft	None Detected		100% Other	White Non Fibrous Homogeneous
1518560PLM_3	*tile*				Dissolved, Crushed
AB-3 - B	Rm 101 white 12" ft	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1518560PLM_29	*mastic*				Dissolved
AB-4	Rm 101 12" splice ct rm 101	None Detected	95% Cellulose	5% Other	Tan Fibrous Homogeneous
1518560PLM_4					Ashed
AB-5	Rm 101 drywall mud	None Detected		100% Other	White Non Fibrous Homogeneous
1518560PLM_5	*joint compound*				Crushed
AB-6	Rm 101 drywall	None Detected	5% Cellulose	95% Other	Gray Non Fibrous Homogeneous
1518560PLM_6	*drywall*				Crushed
AB-7	Women's RR 12" ft gray fl	None Detected		100% Other	Gray Non Fibrous Homogeneous
1518560PLM_7	*tile only*				Dissolved, Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.25%.

Megan Javonovich (40)
Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

Customer: Jenkins Environmental Inc
8600 La Salle Rd
Towson MD 21286

Attn: Larry Jenkins

Lab Order ID: 1518560
Analysis ID: 1518560_PLM
Date Received: 9/25/2015
Date Reported: 9/25/2015

Project: Aberden

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
AB-8 - A	Women's RR 12" ft white fl	None Detected		100% Other	White Non Fibrous Homogeneous
[illegible]	*tile*				Dissolved, Crushed
AB-8 - B	Women's RR 12" fl white fl	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1518560PLM_30	*mastic*				Dissolved
AB-9	H... 12" ... ft	None Detected		100% Other	Gray Non Fibrous Homogeneous
[illegible]	*tile only*				Dissolved, Crushed
AB-11	Rm 102C/blue 12" ft	None Detected		100% Other	Blue Non Fibrous Homogeneous
[illegible]	*tile only bag labeled 10*				Dissolved, Crushed
AB-11	Rm 102 glue dot	None Detected		100% Other	Brown Non Fibrous Homogeneous
[illegible]					Dissolved, Crushed
AB-12	Rm 103 12" white w/ gray ft	None Detected		100% Other	Gray Non Fibrous Homogeneous
[illegible]	*tile only*				Dissolved, Crushed
AB-13	Mastic for #12	None Detected		100% Other	Black Non Fibrous Homogeneous
[illegible]					Dissolved
AB-14	Boy's RR 12" white fl	None Detected		100% Other	White Non Fibrous Homogeneous
[illegible]	*tile only*				Dissolved, Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Megan Javonovich (40)
Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

Customer: Jenkins Environmental Inc
8600 La Salle Rd
Towson MD 21286

Attn: Larry Jenkins

Lab Order ID: 1518560
Analysis ID: 1518560_PLM
Date Received: 9/25/2015
Date Reported: 9/25/2015

Project: Aberden

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
AB-15	Boy's RR 12" gr ft	None Detected		100% Other	Gray Non Fibrous Homogeneous
1518560PLM_15	*tile only*				Dissolved, Crushed
AB-16 - A	Wgt rm 9" lt grey ft	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1518560PLM_16	*mastic 1*				Dissolved
AB-16 - B	Wgt rm 9" lt grey ft	3% Chrysotile		97% Other	Beige Non Fibrous Homogeneous
1518560PLM_31	*tile*				Dissolved, Crushed
AB-16 - C	Wgt rm 9" lt grey ft	None Detected		100% Other	Black Non Fibrous Homogeneous
1518560PLM_32	*mastic 2*				Dissolved
AB-17	Mastic for #10	None Detected		100% Other	Black Non Fibrous Homogeneous
1518560PLM_17					Dissolved
AB-18	Wgt rm glue dot	None Detected	15% Other	85% Other	Brown Non Fibrous Homogeneous
1518560PLM_18					Dissolved, Crushed
AB-19 - A	12" white ft (w/ brown)	None Detected		100% Other	White Non Fibrous Homogeneous
1518560PLM_19	*tile*				Dissolved, Crushed
AB-19 - B	12" white ft (w/ brown)	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1518560PLM_33	*mastic*				Dissolved

Megan Javonovich (40)
Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

NVLAP Lab Code 200604-0

Customer: Jenkins Environmental Inc
8600 La Salle Rd
Towson MD 21286

Attn: Larry Jenkins

Lab Order ID: 1518560
Analysis ID: 1518560_PLM
Date Received: 9/25/2015
Date Reported: 9/25/2015

Project: Aberden

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
AB-20 - A	12" flr tl	None Detected		100% Other	Gray Non Fibrous Homogeneous
1518560PLM_20	*tile*				Dissolved, Crushed
AB-20 - B	12" flr tl	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1518560PLM_34	*mastic*				Dissolved
AB-21 - A	White 12" w/ blk speck in hall	None Detected		100% Other	Gray Non Fibrous Homogeneous
1518560PLM_21	*tile*				Dissolved, Crushed
AB-21 - B	White 12" w/ blk speck in hall	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1518560PLM_33	*mastic*				Dissolved
AB-22 - A	Hall w/ #21 - covebase gray	None Detected		100% Other	Gray Non Fibrous Homogeneous
1518560PLM_22	*covebase*				Ashed
AB-22 - B	Hall w/ #21 - covebase gray	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1518560PLM_36	*mastic*				Dissolved
AB-23	Diff. perf'd splice in halls (2) & wgt rm	None Detected	70% Mineral Wool 25% Cellulose	5% Other	Gray Fibrous Homogeneous
1518560PLM_23					Teased
AB-24 - A	2nd flr 9" at #201	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1518560PLM_24	*mastic I*				Dissolved

Megan Javonovich (40)
Analyst

Approved Signatory

Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020

Customer: Jenkins Environmental Inc
8600 La Salle Rd
Towson MD 21286

Attn: Larry Jenkins

Project: Aberden

Lab Order ID: 1518560
Analysis ID: 1518560_PLM
Date Received: 9/25/2015
Date Reported: 9/25/2015

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes / Treatment
AB-24 - B	2nd flr 9" at #201	None Detected		100% Other	Tan Non Fibrous Homogeneous
1518560PLM_37	*tile*				Dissolved, Crushed
AB-24 - C	2nd flr 9" at #201	3% Chrysotile		97% Other	Black Non Fibrous Homogeneous
1518560PLM_38	*mastic 2*				Dissolved
AB-25	2nd flr 9" at #201 mastic	5% Chrysotile	40% Cellulose	55% Other	Black Fibrous Homogeneous
1518560PLM_23					Dissolved
AB-26 - A	12" lt insl/ft by elevator	None Detected		100% Other	White Non Fibrous Homogeneous
1518560PLM_26	*tile*				Dissolved, Crushed
AB-26 - B	12" lt insl/ft by elevator	3% Chrysotile		97% Other	Black Non Fibrous Homogeneous
1518560PLM_39	*mastic*				Dissolved
AB-27 - A	12" multi colored ft	None Detected		100% Other	Pink Non Fibrous Homogeneous
1518560PLM_27	*tile*				Dissolved, Crushed
AB-27 - B	12" multi colored ft	None Detected		100% Other	Yellow Non Fibrous Homogeneous
1518560PLM_40	*mastic*				Dissolved
AB-28	Rm 209 glue dot	None Detected		100% Other	Brown Non Fibrous Homogeneous
1518560PLM_28					Dissolved, Crushed

Megan Javonovich (40)
Analyst

Approved Signatory

LIFE SAFETY

3.A.1: FINDINGS

The existing building is two stories with a basement, Type IIIB construction, and comprises approximately 34,000 S.F. of finished space. There are two main exit stairs, each discharging to a public way, connected by a common corridor on all three levels. Per the International Existing Building Code, because the renovations to the building would exceed 50% of the gross building area, both stairs would need to comply with Chapter 10 of the International Building Code. The existing stair geometry does not meet current codes for egress or ADA accessibility, but it is feasible that either the existing stairs could be modified or code-compliant stairs could be built in the existing stair enclosures.

Depending on the proposed uses and distribution of uses throughout the building, additional modifications to the existing stair enclosures may be needed to comply with fire separation requirements. Likewise, there may be horizontal separation requirements that would affect the structural loading of the existing floors, and therefore may incur further structural reinforcement. The full extent of required separation assemblies cannot be determined until the Schematic Design phase of the building renovation contract. The separation requirements include openings, and so it is likely that all corridor, stair, exit doors, and door hardware will require replacement.

The existing fire suppression system is amongst the newer building renovations, and most of the existing components can be reused in the new design. The sprinkler system exists throughout the entirety of the building and appears to be code compliant, but a building re-design will require minor (though extensive) modifications to the sprinkler system. The existing alerting system, exit signs, and notification devices are not compliant with current life safety codes, and it is recommended that a modern code-complaint alarm and notification system is installed, as well as emergency lighting and exit signs.

3.A.2: KEY POINTS

From a holistic view, the building's general organization and number of available exits seems to support the proposed use as a community services building. However, the construction type of the existing floors, corridors, and exit stairs may require modifications to the structure to maintain code-required fire separation.

SUPPORTING FIGURES:

Common Corridor (1st floor)

South Exit Stair

Sprinkler System

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ADA ACCESSIBILITY

3.A.3: FINDINGS

The following issues were observed at the building that specifically concern handicap accessibility. According to Title III of the law, 20% of the owner's budget must be dedicated to making the building conform with the requirements of ADA. Areas of monetary contribution must be addressed in the following priority:

Accessible Entrances; Accessible Routes to Altered Areas; Accessible Restroom for Each Sex on Each Floor; Accessible Telephones; Accessible Drinking Fountains; Accessible Parking.

Entrances

According to the ADA, if a renovation encompasses more than 50% of the building area, then all entrances shall be accessible. There are seven entrances, however, only two of them provide full accessibility to the building. The main public entrance at the west side of the central core is the primary accessible entrance, as its grade-level entry opens to a dedicated elevator lobby which allows immediate access to all floors. Another accessible entrance is located at the west side of the south wing under a shed roof pavilion structure. It contains under its cover an exterior stair and an exterior ramp, whose geometry and construction appear to be ADA compliant. This accessible entrance connects to the basement. Occupants would then have access to the elevator for the remaining floors. The gymnasium contains two grade-level accessible entrances, but these access only the gym, not the remainder of the building.

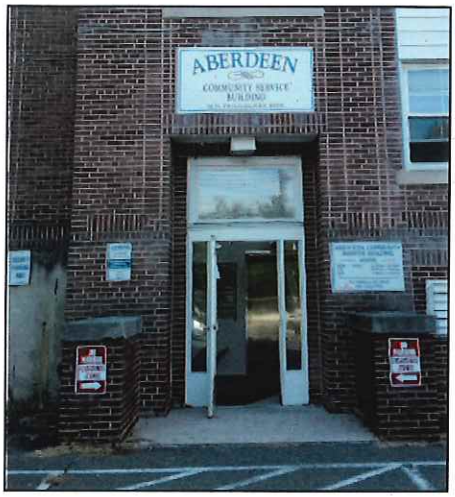
Accessible Routes

Most of the building meets the accessible route requirements of the ADA in regards to the minimum widths, clearances, and maneuvering spaces. Once in the building, a person can gain access to all three floors via an elevator. The elevator opens onto a hallway of acceptable width that runs the entire length of each floor terminating in exit stairwells. Because of the multiple building additions, some of the floor levels vary slightly, and have been constructed with short, non-compliant ramps. These would need to be modified to comply with current ADA standards.

The door hardware on most of the doors conforms to the ADA required lever type, however, there are a few doors of the "round knob" style or with unreachable pull handles which would need to be replaced. Additionally, it should be noted that some of the existing door widths would need to be modified to allow for the ADA-required 32" clear width.

While the gymnasium is accessible from the exterior, there is no internal access to either the gymnasium or the stage areas from the central core. Installing a ramp would take a significant amount of space and would be technically infeasible to contain within the existing structure without compromising the configuration of the gymnasium and stage. An hydraulic lift or a limited-use, limited-application elevator would need to be installed to grant access to the gymnasium and stair from the main building.

SUPPORTING FIGURES:



Entrance with Elevator at West Side of Central Core

Exterior Ramp at West Side of the South Wing

Interior Ramp at 3rd Floor into South Wing

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LEAD BASED PAINT -- XRF INSPECTION DATA

Client: Manns Woodward **Project:** Aberdeen High School 2015-26

Date: 9/24/15 **Inspector:** L. Jenkins **XRF:** RMD/LPA-1# 01554

Confirmed Lead Paint: >0.7 mg/cm^2 **BL** = Below Federal Lead Level (≤0.7 mg/cm^2)

No.	Wall	Room/Location	Substrate	Condition Satis/unsatis	Color	Lead (mg/cm^2)
1		Calibration Check				.8
2		Calibration Check				.8
3		Calibration Check				.8
4		Ext. Lintel by Toddler	M	U	WH	.8
5		Ext. Front Door - S End	W	U	WH	1.1
6		Ext. Double Side Doors – E side	W	S	WH	.8
7		Ext. N End Door casing	W	U	WH	6.4
8		Int. 1st Floor Door casing	W	S	Y	-.1
9		Int. MER door	M	S	Y	-0.0
10		Int. Door to bathroom	W	S	Y	.1
11		Int. Baseboard in girl's restroom	W	S	Y	.8
12	A	MER Wall	C	S	WH	.2
13		MER floor	C	S	GR	-.3
14		MER baseboard 4"	C	S	WH	-.2
15	C	Hall Wall	PL	S	Y	8.1
16	C	Hall Chair Rail	W	S	Y	-.1
17		Rm. 102 Door casing	W	U	Y	1.2
18		Int. Hall Door	W	S	Y	-.1
19		Int. Hall Door casing	M	S	Y	.0
20		Stonewall glaze block wall	GL BLK	S	BR	-.3
21		Weight Room Door casing	W	S	WH	.1
22	D	Weight Room Door	C	S	WH	-.1
23	C	Weight Room window sill	W	S	WH	-.1
24	C	Weight Room window trim	W	S	WH	.2
25		Double doors by steps – E wall	W	S	T	.1
26		Post	W	S	T	.1
27		Stair stinger	W	S	T	.1
28		Stair riser	W	S	GR	.0
29		Kitchen glaze block	GL BLK	S	BR	3.4

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Confirmed Lead Paint: >0.7 mg/cm^2 **BL** = Below Federal Lead Level (≤0.7 mg/cm^2)

No.	Wall	Room/Location	Substrate	Condition Satis/unsatis	Color	Lead (mg/cm^2)
30		Kitchen shelving	W	S	GR	.0
31	B	Hot Water Heater Room	PL	U	Y	.0
32		Double Doors by Janitor's Closet	W	S	WH	.1
33		Door E of Gym	M	S	GR	.1
34		Door E of Gym – Trim	M	S	GR	.8
35		Front Wall off Small Room in Gym	C	U	BL	-.2
36		Front Wall – High Door Trim	M	S	T	-.1
37	A	Front Wall - Gym	PL	U	LT GR	-.2
38		Calibration Check		S		.8
39		Calibration Check		S		.8
40		Calibration Check		S		.8
41		2nd Floor Window Sill by Elevator	W	S	T	-.0
42		2nd Floor Window Frame	W	S	T	-.0
43	A	Baseboard – Hall	W	S	T	-.1
44		Stairwell Trim – N	W	S	T	0.0
45	A	Concrete Wall – N End	C	S	T	7.1
46	C	Concrete Wall – Off Stairs	C	S	T	6.3
47		N Door Casing	W	S	T	-.1
48		Stairwell Stringer - N	W	S	T	-.1
49	C	Wall by 202 – Hall	C	S	T	7.1
50		Room 201 – Window Ledge	W	S	T	-.2
51		Room 201 – Window Frame	W	S	T	-.2
52		Middle Doors	W	S	T	.0
53	C	Wall – S Hall	PL	S	T	2.1
54		S Wall – End of Addition Hall	DW	S	T	-.2
55		S Wall – by E Double Doors	PL	S	T	-.1
56		E Wall – by Double Doors	PL	S	T	5.9
57		E Wall – Wood Door Casing	W	S	T	-.1
58		Post at Top Step	W	S	T	-.1

LEAD BASED PAINT -- XRF INSPECTION DATA

Client: Manns Woodward **Project:** Aberdeen High School 2015-26

Date: 9/24/15 **Inspector:** L. Jenkins **XRF:** RMD/LPA-1# 01554

Confirmed Lead Paint: >0.7 mg/cm^2 **BL** = Below Federal Lead Level (≤0.7 mg/cm^2)

No.	Wall	Room/Location	Substrate	Condition Satis/unsatis	Color	Lead (mg/cm^2)
59		3rd Floor – N End	W	S	T	-.1
60	A	3rd Floor – E Wall at N End	PL	S	T	-.1
61	A	Wall	PL	S	T	6.1
62		3rd Floor Center glazed block	GL BLK	S	BR	-.4
63	C	Wall by S Stairwell	PL	S	WH	.0
64		Calibration Check				1.1
65		Calibration Check				1.1
66		Calibration Check				1.1

Key

Substrate

DW = dry wall
W = wood
M = metal
C = concrete
G = glass

P = plaster
B = brick
S = steel
CM = ceramic

CLG = Ceiling
FLR = Floor

Color

WH = white
GR = gray
BR = brown
B = black
BL = blue
Y = yellow

R = red
OR = orange
GN = green
T = tan
P = pink

4.0 CONCLUSIONS

ASBESTOS

Bulk samples were collected of floor tiles and mastics, ceiling tiles and associated glue dots, drywall and drywall seam tape and miscellaneous suspect materials. This large 3 story brick school dated from the early 20th century. It is scheduled for some mechanical and structural renovation activity in the near future. Jenkins Environmental was provided drawings by the architect, Manns Woodward Studios.

On September 24, Jenkins Environmental was requested to conduct an asbestos survey and to conduct testing for the presence of lead based paint. We also were asked to confirm whether the building contained PCBs in light ballasts or mercury in light tubes.

RESULTS

There were 28 separate bulk samples collected which due to separate analyses resulted in 40 separate material analyses. All 9" vinyl floor tiles and all mastic associated should be considered positive for asbestos content throughout the building. This was the only positive asbestos containing material identified.

LEAD PAINT EVALUATION

A survey for lead paint was conducted by virtue of the direct read XRFLPA-1 instrument on any surfaces with paint. Surfaces tested included all painted wood, brick, block, metal surfaces. These included doors, door jambs, walls, door casings, windows, stairwells etc.

RESULTS

Lead paint was identified on nearly all exterior surfaces including doors, casings and lintels. On the interior lead paint was found on walls, baseboards, and on door and window components.

The presence of lead paint was not consistent on all walls, however. Based upon the testing completed, the walls and all interior wood trim should be considered positive.

PCBs/ MERCURY

There were no PCB ballasts, but there is 2400 linear feet of light tubes with mercury.

Cost Estimate

19,488 square feet of VAT/Mastic @ $3.50 psf = $68,208 for abatement, plus $10,231 for IH & monitoring, for a total of $78,439.

Recycle 2400 linear feet of light tubes containing mercury = $5,000.

Photo 5 12" floor tile – negative. All 12" floor tiles were negative except those by the elevator lobby.

Photo 6 Lead paint on door trim, casings etc.

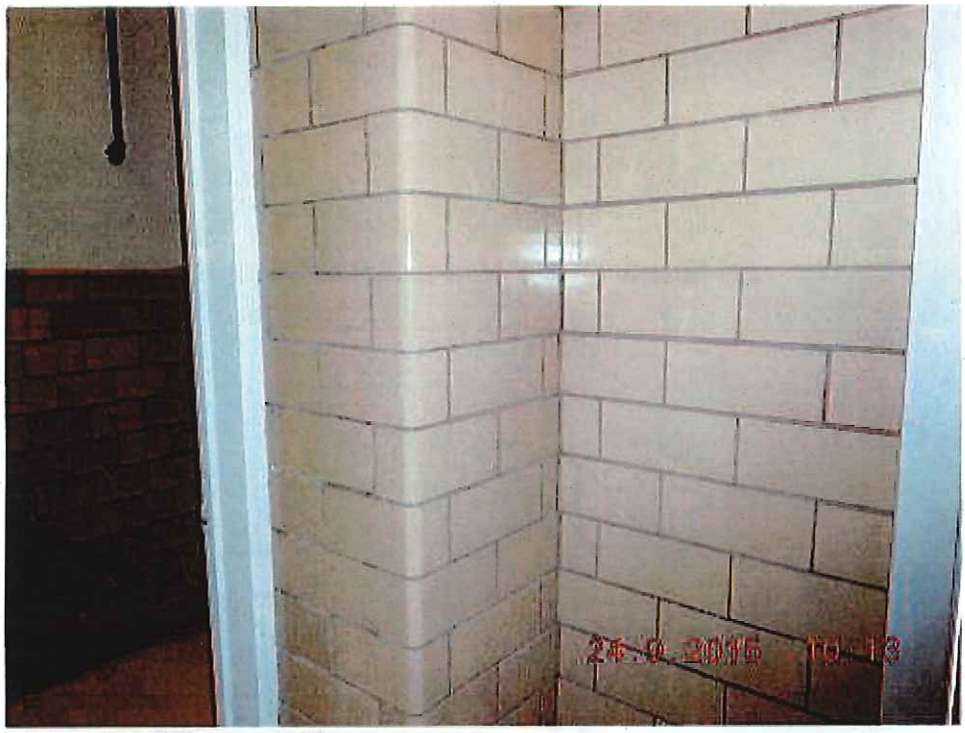


Photo 7 Kitchen glazed block wall has a lead paint component. NO other glazed block tested positive in the building.

Photo 8 Spline ceiling tile was negative along with glue dots.

5.0 PHOTOGRAPHIC DOCUMENTATION

Photo 1 Exterior lintel on south side of rear by addition with lead paint in poor condition.

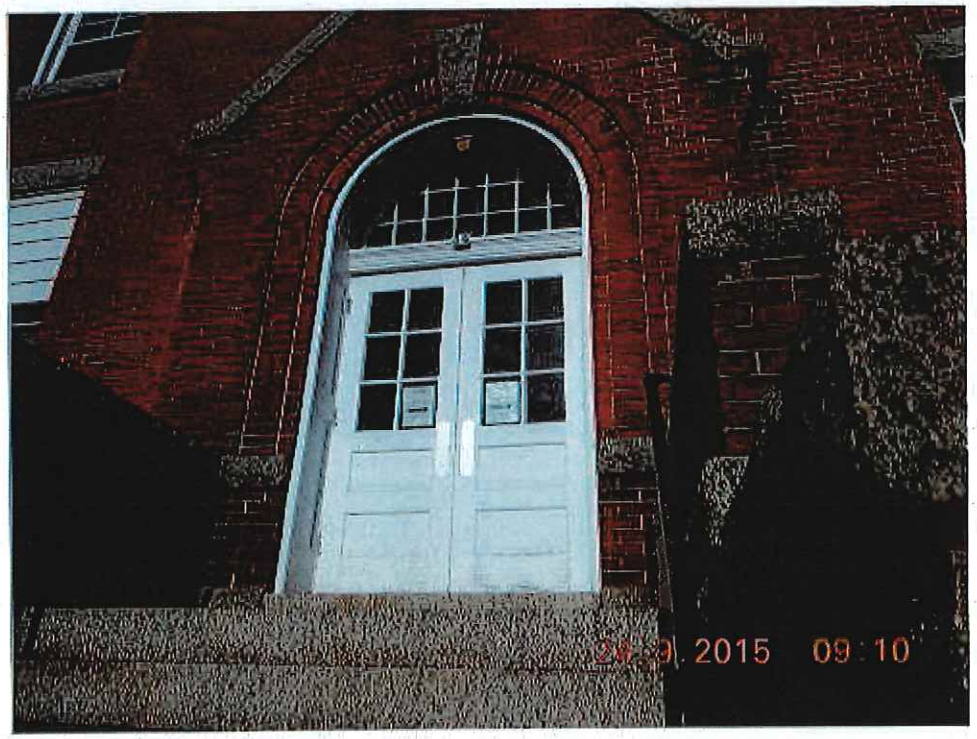


Photo 2 Door entrance with lead paint throughout on all surfaces.

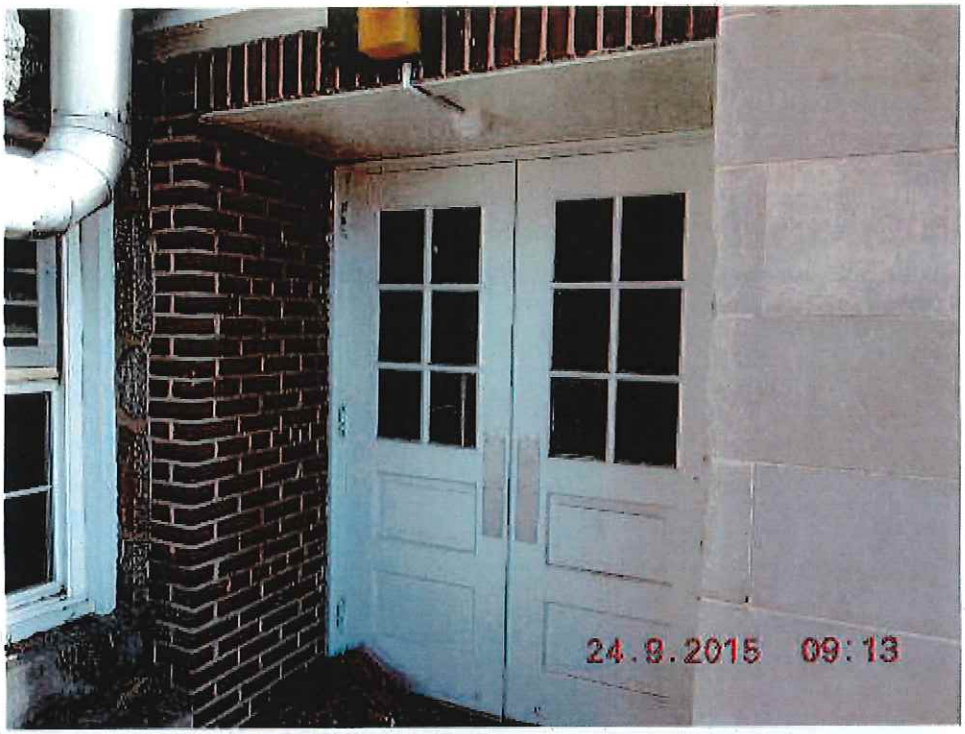


Photo 3 Lower level entrance with lead paint on wood and metal.

Photo 4 NO asbestos pipe insulation was identifed.

Photo 9 Non-asbestos 12" floor tile.

Photo 10 Nine (9") floor tile is present beneath most carpeting or beneath other 12" floor tile.

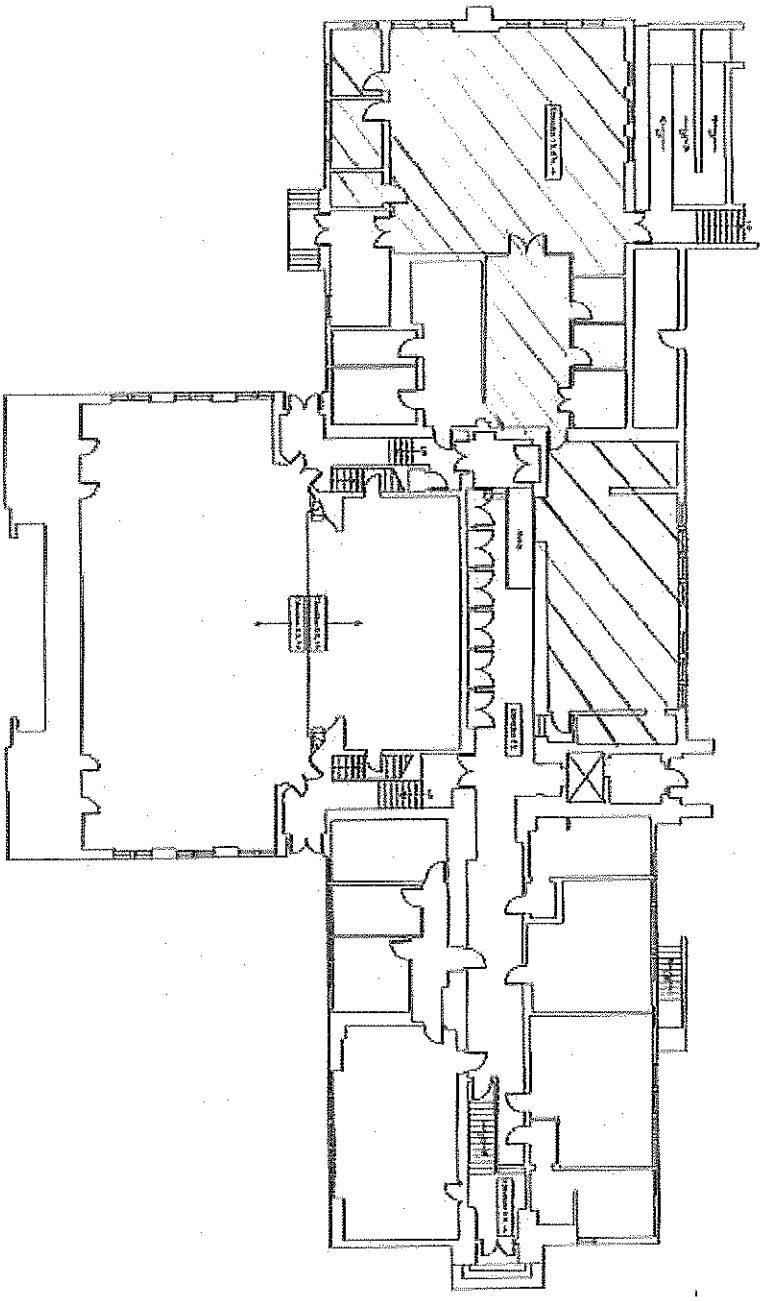
Photo 11 Glue dots were negative.

Photo 12 Much of this newer 12" floor tile is covering older 9" Vat/Mastic

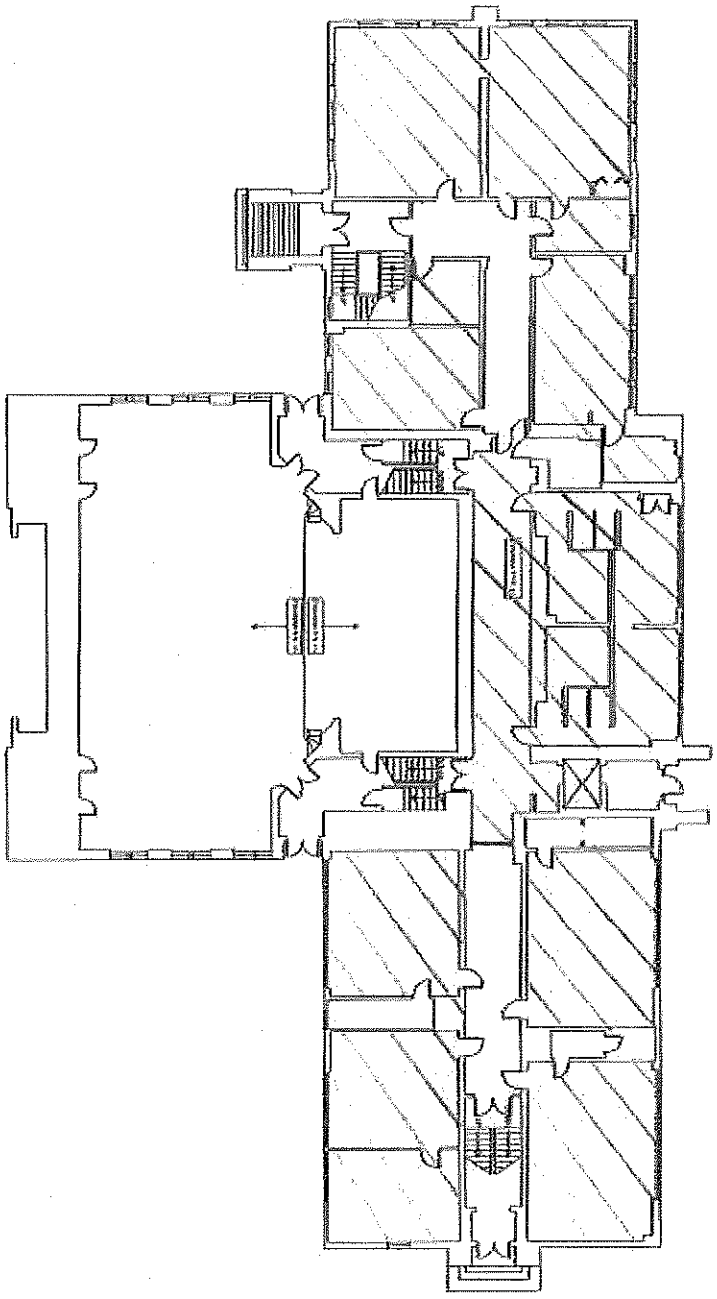
Photo 13 Stairwell with lead paint found.

Photo 14 Typical with 12" VCT covering 9" VAT

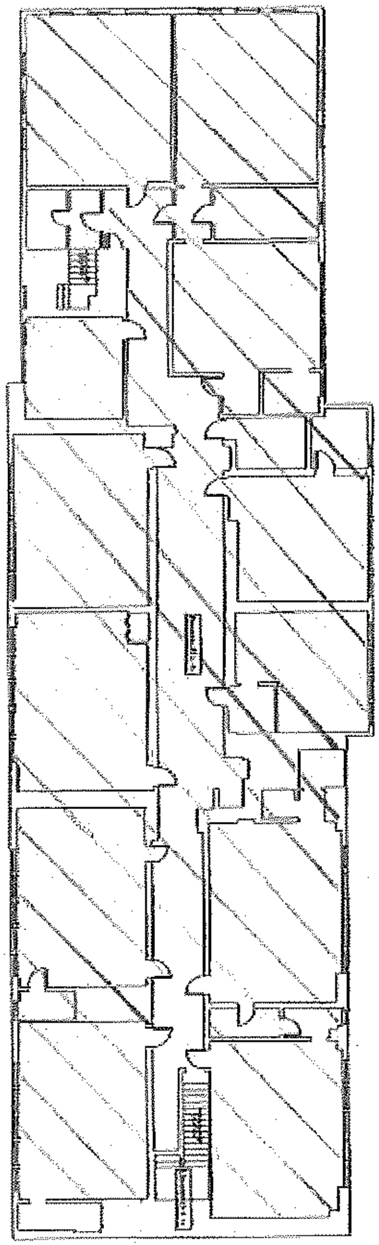
Photo 15 Typical with carpet covering 9" VAT



FIRST FLOOR PLAN HARFORD COUNTY GOVERNMENT	Scale: 1/16"=1'-0"	June 29, 2006	Drawing No. A1



SECOND FLOOR PLAN HARFORD COUNTY GOVERNMENT	Scale: 1/16"=1'-0"	June 29, 2006	Drawing No. A2



VAT/MASTIC lies beneath carpet or VCT throughout

THIRD FLOOR PLAN HARFORD COUNTY GOVERNMENT [illegible]	Scale: 1/16"=1'-0"	June 29, 2006	Drawing No. A3