PATTERSON CENTER CONDITION ASSESSMENT & TREATMENT PLAN

Maryland Historical Trust



FINAL
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ARCHITECTS

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EXECUTIVE SUMMARY



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EXECUTIVE SUMMARY

PURPOSE

This study report, entitled the *Patterson Center Condition Assessment and Treatment Plan*, has been prepared to help guide decision-making by the Department of General Services (DGS) regarding the 15 acre tract that is located within the Jefferson Patterson Park and Museum (JPPM).

The 15 acres comprise the Patterson Center, a site developed between 1932 and 1935 by Jefferson Patterson. Essentially unaltered, the buildings and landscape retain a very high degree of integrity as originally designed by the original architect Gertrude Sawyer. The intent of the Maryland Historical Trust (MHT) and JPPM is to retain the Patterson Center as historic house museum to interpret the lifestyle associated with the American Country House movement in the period. In order to assure this outcome, the site will be enhanced for increased public visitation, both as a museum and for income-producing events such as weddings. The Condition and Assessment and Treatment Plan provides a master plan to achieve this purpose while also complying with the language of the Trust agreement between Mrs. Patterson and the State.

The report consists of two primary sections: Part 1 - Conditions Assessment and Part 2 - Treatment and Use. Part 1 identifies character-defining features and discusses the condition and significance of the features for the landscape character areas and the seven buildings: Main Residence, Pump House/Garage, Pool House and Pool, Gardener's Cottage, Beach House, Greenhouse, and Cold Frame, (see Figure ii.1). Part 2 includes the code and accessibility evaluation, identifies a master plan for the development of the historic site and proposed use for each building, and provides a rehabilitation/restoration plan for each building.

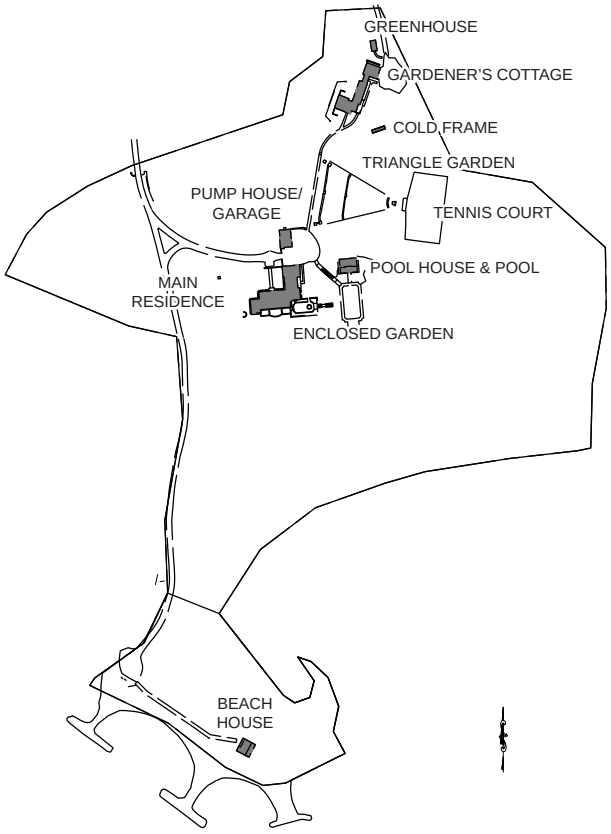


Figure ii.1. Patterson Center Site Plan NOT TO SCALE

INCREASED SITE UTILIZATION

The Patterson Center has had a rather low-impact utilization. The Main Residence has been open for public tours and has had modest utilization over the years. Some special events are held at the house and in the landscape. The assumption of this plan is that the buildings and site would be rehabilitated and then become the center of a much more active public visitation operation with greater utilization of the site features for special events. The Main Residence would continue to serve as a historic house museum. Visitation will be enabled for additional individual visitors, groups, bus tours, and school groups.

Regarding visitation, historic house tours typically have about 500-1000 individuals/year for house tours. Currently, the Patterson Center has less than this. However, with increased visitation to JPPM in conjunction with the Patterson Center buildings both by individuals and school groups, this will increase greatly. A tour to JPPM is currently on the local school curriculum but it does not include the buildings and landscape of the Patterson Center. Including the Patterson Center in the school curriculum will increase its exposure. Additionally, income-producing events, such as weddings, if scheduled for two or more per weekend from April through October, could bring in 6,000 to 12,000 additional visitors.

IMPLEMENTATION

It is an assumption of the planning at this point that State funding would be sought to accomplish the recommendations of this report as a single capital project. If necessary, the site plan development and rehabilitation could be broken down into sequential phases.

STUDY TEAM

This report is prepared by the architectural consulting firm, Quinn Evans Architects, with several additional engineering and technical consultants. This study effort has been directed (and guided) by the Patterson Center Study Team with the following members:

Mark Thompson (JPPM)
Elizabeth Hughes (MHT)
Marcia Miller (MHT)
Sam Stokes (JPPM Advisory Committee)

METHODOLOGY

All seven buildings were accessible to the Project Team for field survey. In addition, electronic scans of historic drawings (original and subsequent alterations) were made available. Two previous reports regarding the significance and a feasibility study were made available for use.

The Project Team conducted this study through the following efforts:

- Identified the character-defining features with the use of the available materials and field observations;
- Assessed existing conditions through several days of field observation;
- Created floor plan drawings using historic drawings and field observation. The topographic survey was created using GPS technology and conventional survey methods;
- Analyzed applicable building codes & accessibility codes to identify issues and determine compliance;
- Prepared treatment recommendations for the preferred use;
- Prepared a conceptual costs estimate to assess the rough order of magnitude cost for the recommended treatments; and
- Compiled a series of issues that require further exploration as part of any conceptual design effort (when the overall recommended treatment is implemented).

BRIEF HISTORY

Point Farm, the country residence of Jefferson Patterson and his wife, Mary Marvin Breckenridge Patterson, is located in Calvert County, Maryland on a bluff above the Patuxent River at the mouth of St. Leonard Creek. Mr. Patterson purchased the 512-acre property in 1932 for a country retreat from his residence in Washington D.C., and to create a working model farm where he could raise Aberdeen Angus cattle for show. Patterson hired Gertrude Sawyer, a Cambridge School of Architecture graduate, to develop an overall master plan and to design the buildings. In all, Gertrude Sawyer designed 26 new buildings and renovated several existing structures. She retained Rose Greely to design the landscapes for the site. Cary Millholland Parker joined the project later, altering some of the landscape plans to accommodate the Patterson's changing tastes and needs. When Mr. Patterson passed away in 1977, Mrs. Patterson continued to use the property as a weekend home and retreat. She eventually donated Point Farm to the State of Maryland to become what is now Jefferson Patterson Park & Museum.

STATEMENT OF SIGNIFICANCE

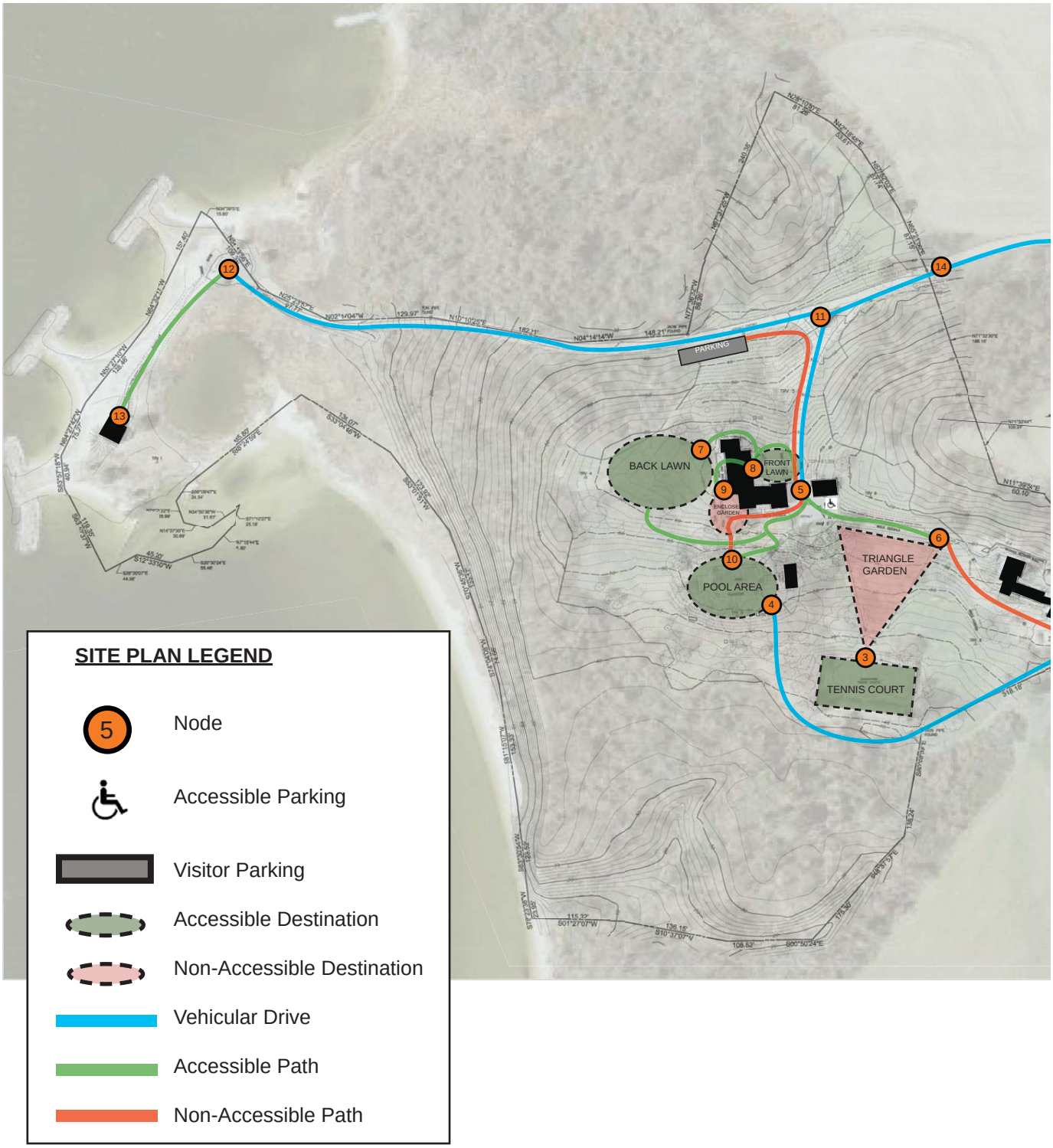
The general Statement of Significance for the Patterson Center was prepared by the MHT and is provided here in its entirety.

"The overall integrity of the domestic complex and designed landscape is excellent. The buildings and landscape have remained essentially unaltered, and the few changes that have occurred were occasioned by the evolving requirements of the Patterson Family. All alterations were designed by the original architect Gertrude Sawyer. The buildings have been maintained adequately; only the Gardener's Cottage has suffered substantial loss of integrity through deterioration. The entire complex offers an exceptional opportunity to interpret the lifestyle associated with the American Country House movement in the period. The main house is particularly valuable in this respect, in that it retains virtually all its architectural fabric and interior finishes intact, and also retains the full complement of furnishings, decorative treatments and household items selected and used by the Patterson's."

Per the *Phase I Significance Study*, the period of significance extended from the purchase of the property by Mr. Patterson in 1932 until the death of Mrs. Patterson in 2002. Within that span, significant dates include the initial building campaign in 1932-1935 and the dates of alterations documented by drawings in the JPPM collections: 1941, 1951-53, 1959, and 1966. For the purposes of interpretation at the Patterson Center, the Maryland Historical Trust will use the 1932-2002 period of significance. For the purposes of listing in the National Register of Historic Places, the period of significance of 1932 through 1966, the year of the last documented construction by Gertrude Sawyer, was be applied.

HISTORIC DESIGNATION STATUS

The Main Residence and associated outbuildings are not individually listed on the National Register of Historic Places. The Main Residence, Pump House/Garage, Pool House, Gardeners' Cottage, Greenhouse, and the Beach House are listed as contributing resources to the Patterson Archeological District, a designated district listed in the National Register of Historic Places.


PARKING
BACK LAWN
FRONT LAWN
ENCLOSED GARDEN
POOL AREA
TRIANGLE GARDEN
TENNIS COURT
SITE PLAN LEGEND
Node
Accessible Parking
Visitor Parking
Accessible Destination
Non-Accessible Destination
Vehicular Drive
Accessible Path
Non-Accessible Path

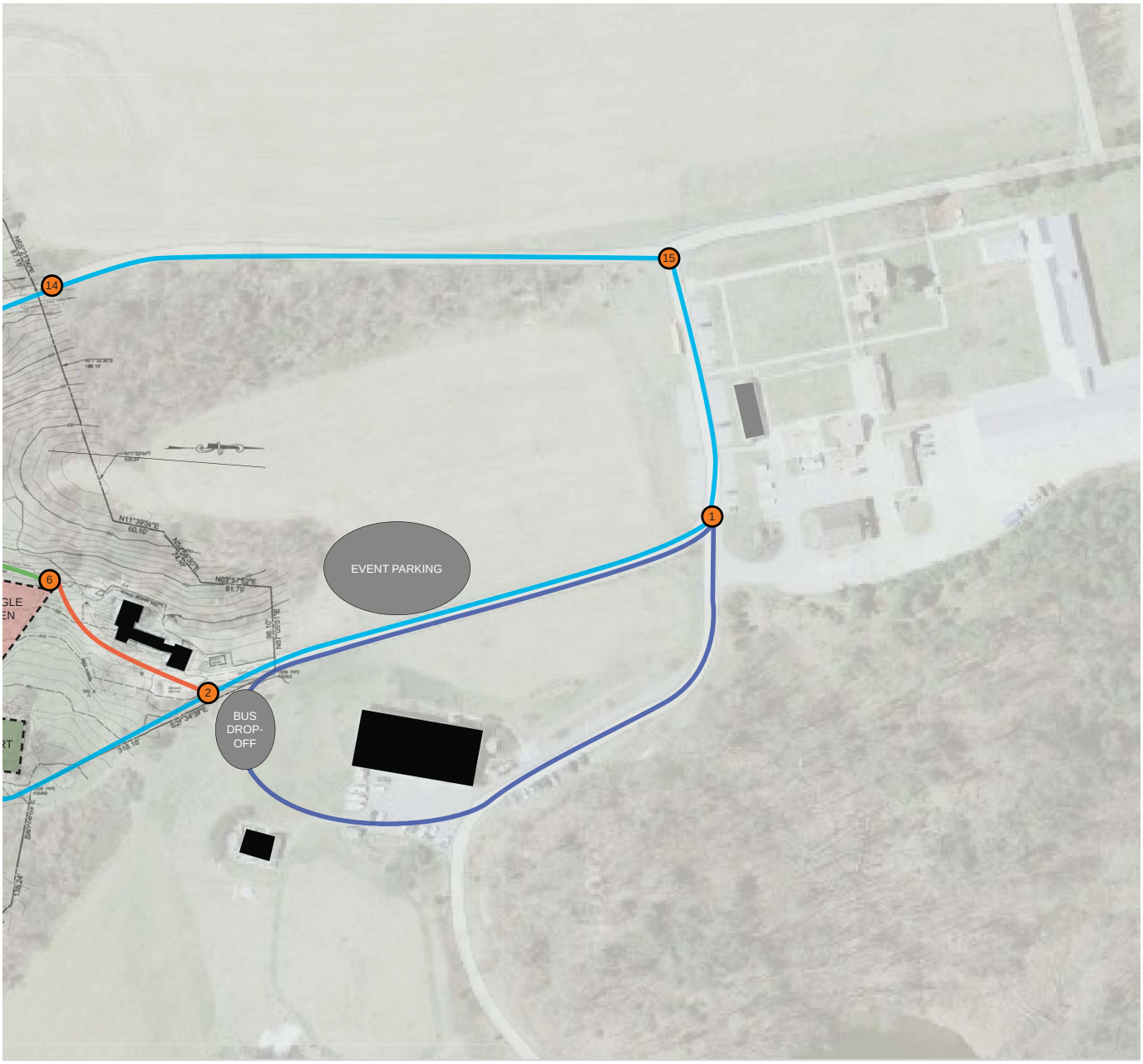


Figure ii.2. Patterson Center Proposed Plan for Site Development

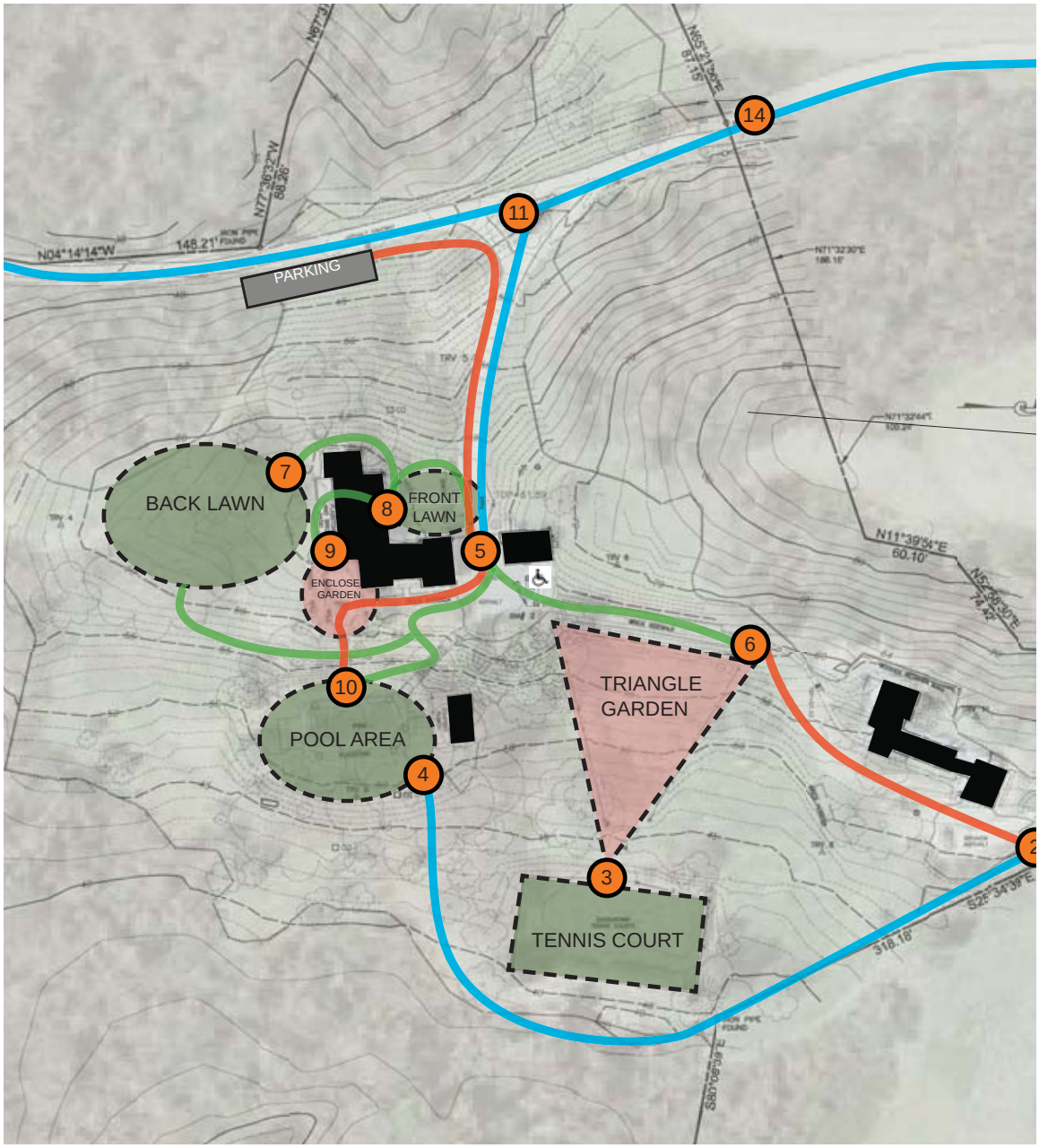


Figure ii.3. Enlarged Proposed Plan for Site Development

OVERALL RECOMMENDED SITE TREATMENT

A proposed plan for site plan development is provided in Figure ii.2. Most all of the visitors will arrive via automobile or bus. Most parking will utilize the existing lot at the Maryland Archaeological Conservation Laboratory (MAC Lab) building. From this point, it would be a 5 minute walk to the Main Residence. A small parking lot for 8 cars would be built just west of the Main Residence to handle daily visitors to the house museum. Large groups arriving by coaches or school buses would utilize a new bus drop-off behind the Morgan State building. Once discharged, the buses would park at the MAC Lab. Those visitors would approach the Patterson Center along the paths past the Gardener's Cottage.

For visitor with disabilities, accessible parking will be provided at designated parking at the Pump House/Garage and they can also be dropped off in front of the Main Residence.

Many important site elements would be repaired and rehabilitated to be enjoyed by pedestrians and for use during special events, (see Figure ii.3). The Enclosed Garden to the main house and the Pool House and pool can become an important set of features in this regard. An accessible path would be provided from the accessible parking at the Pump House/Garage down to the pool and Pool House. A continuation of this path would lead to the back lawn. Also, there will be continued landscape restoration in the Triangle Garden. A new path is proposed behind the tennis courts which then would connect to the swimming pool. This path would have a low-slope and could be managed by vehicles and, if necessary, wheelchair users.

The roadway to the Beach House would be repaired, but not widened. The goal is for most of the roads to maintain their current character and configuration.

The site master plan includes upgrades to the underground utilities. The site is not serviced by municipal sewers, so each of the existing septic fields will be replaced to serve the new functions. The current water source is from an underground well. A new well would be installed and distribution piping replaced to increase capacity and provide high-level filtration to address naturally occurring contaminants. All of the existing underground electrical will be upgraded and replaced.

The current policies that identify the Patuxent River beaches for restricted use will remain. No fishing or camping would be allowed, but the Beach House would become an "overnight accommodation" that could be reserved by kayakers.

BUILDINGS REHABILITATION

The physical condition of each of the seven buildings was assessed by the study team. The Main Residence and the Beach House are in fair to good condition with basic repairs and routine maintenance needed. On the other hand, the Gardener's Cottage, the Pool House, and the Greenhouse are in poor condition and more comprehensive repairs are needed as a result. With new or expanded uses established for each building, a basic building code and safety analysis was undertaken for each to identify upgrades needed to bring the proposed work into compliance.

The architectural and historic significance for each building was assessed and the work needed to rehabilitate or restore features was also identified.

The following is a summary of the proposed treatments for each building.

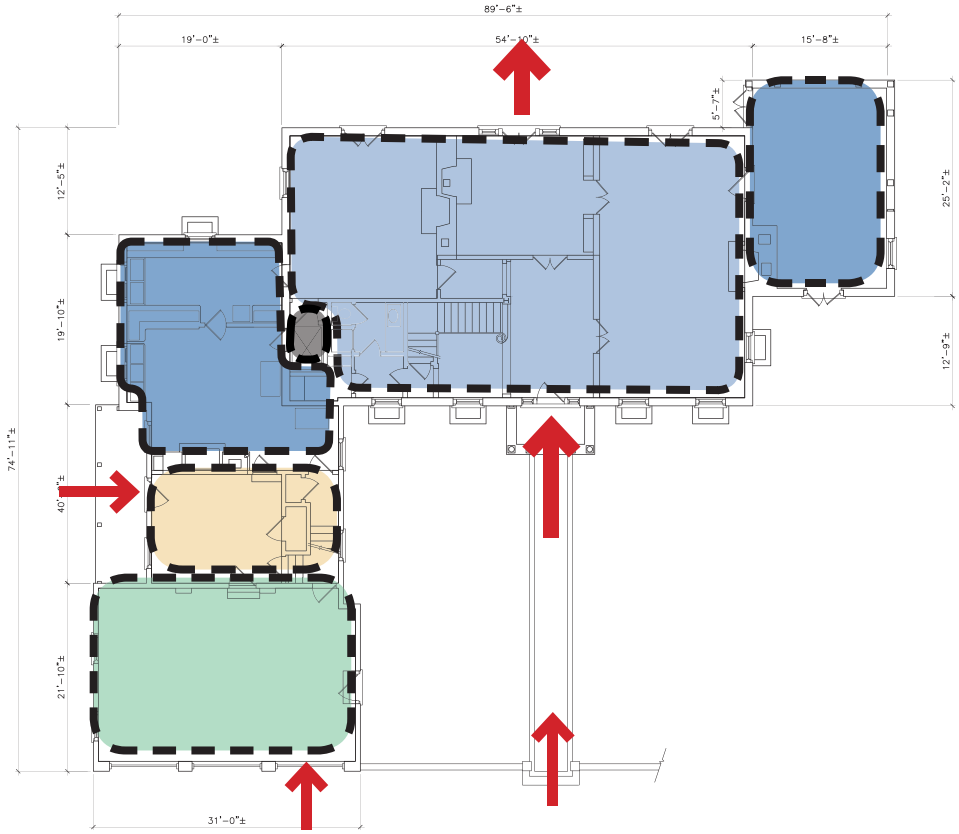
MAIN RESIDENCE
(7,640 SF)

The Main Residence will be substantially rehabilitated as a public house museum. The primary first floor rooms and the second floor bedrooms would be restored and furnished as they have been during the Patterson time. Some of the secondary spaces would also be rehabilitated, but flexibility is left so that they could serve as meeting rooms (i.e. bridal changing rooms) or offices in the future. The garage will be converted into a multi-purpose space for meetings, orientation, and other uses. See Figure ii.4 and Figure ii.5 for the building rehabilitation floor plans. In general, architectural finishes would be restored or conserved, while all building systems would be replaced including water, electrical, plumbing, heating, and cooling. A fire protection system would be added as well.

The back lawn and Enclosed Garden will be improved so that they can continue to function for wedding rentals and other special events.

Estimated Project Costs:

Direct Construction Costs	$2,087,300
Contingencies @ 20%	$417,500
A/E Fees & Reimb.	$471,700
Total	$2,976,500



Legend:

- Primary Museum Spaces
- Secondary Museum Spaces
- Multi-purpose Room
- Staff
- Existing Elevator
- Accessible Entrances

Figure ii.4. Space Utilization Plan of the Main Residence, First Floor



Legend:

Event Support Space

Mechanical

Secondary Museum Spaces

Existing Elevator

Figure ii.5. Space Utilization Plan of the Main Residence, Second Floor

PUMP HOUSE/GARAGE (710 SF)

This building is directly associated with the Main Residence, but it will have a new use in this plan. Part of the building will house new accessible toilet rooms for the public and a catering kitchen in the former garage, (see Figure ii.6). These are intended to support site and garden events as well as other public visitation. The remainder of the small building will house an electrical room and mechanical equipment.

Estimated Project Costs:

Direct Construction Costs	$179,800
Contingencies @ 20%	$36.000
A/E Fees & Reimb.	$40,300
Total	$256,300

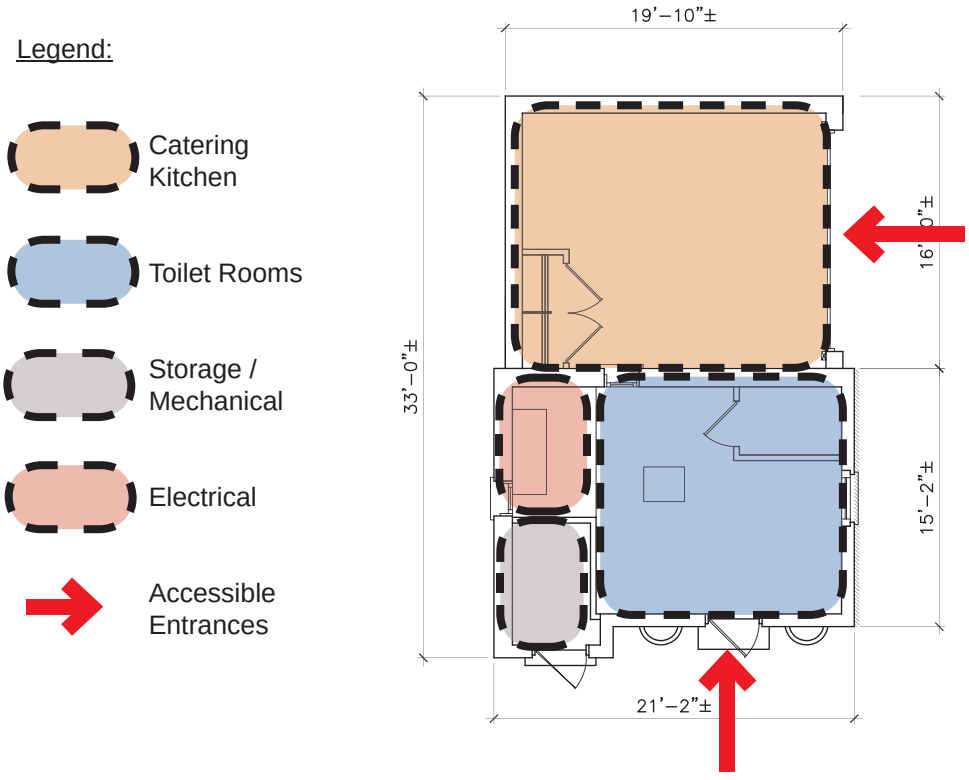


Figure ii.6. Space Utilization Plan of Pump House/Garage, First Floor

POOL HOUSE AND POOL
(355 SF)

The swimming pool is no longer needed and is both a maintenance and safety concern. Therefore, the proposal here is to fill in the pool with lightweight material covered with a concrete slab and paving stones. This would allow the area to be used as a central public area. It is hoped that this would become a second major rental area for events and weddings. The existing shower rooms of the Pool House would be converted into accessible toilets while the central pump room would become an event support space, (see Figure ii.7). This conversion would support the use of the area for special events.

Estimated Project Costs:

Direct Construction Costs	$109,300
Contingencies @ 20%	$22,000
A/E Fees & Reimb.	$24,700
Total	$156,000

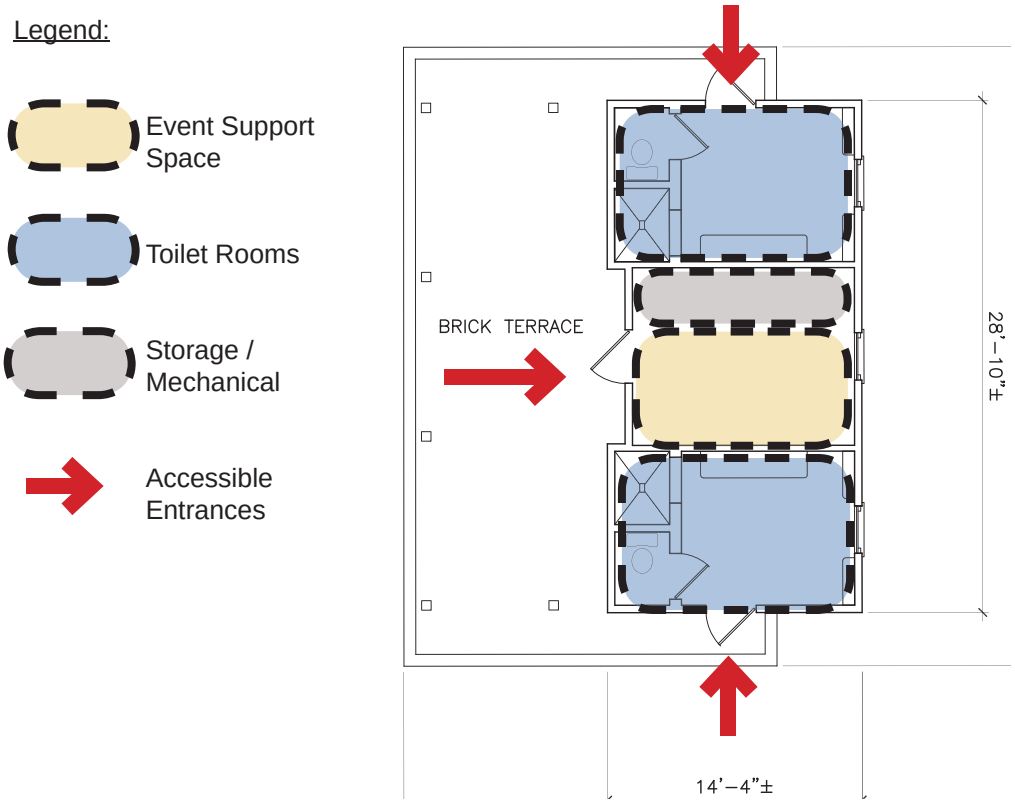


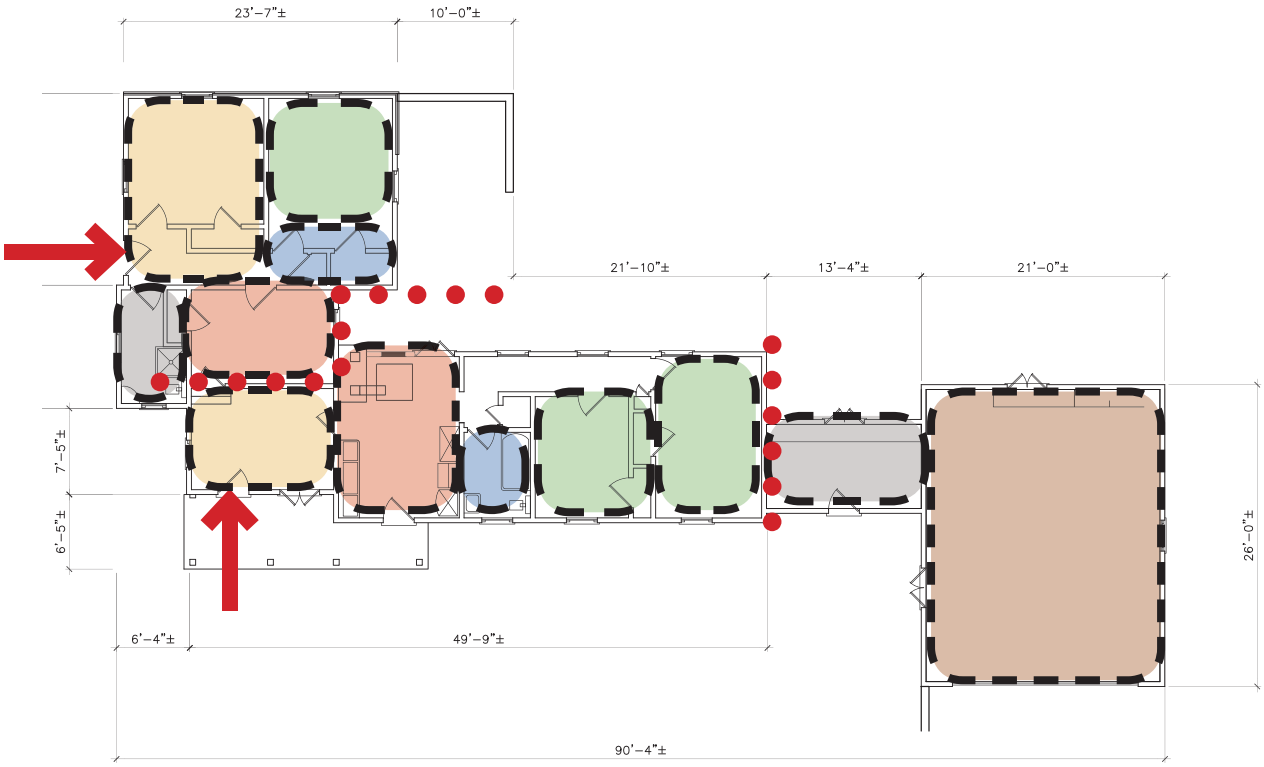
Figure ii.7. Space Utilization Plan of the Pool House and Pool, First Floor

GARDENER'S COTTAGE (1825 SF)

The Gardener's Cottage is in the poorest condition of any of the buildings, but the basic house structure can be re-utilized. The proposal is to convert this by sub-dividing it into two rental apartments, one with one bedroom and one with two bedrooms. The garage would be used as storage for the Patterson Center, (see Figure ii.8).

Estimated Project Costs:

Direct Construction Costs	$279,700
Contingencies @ 20%	$56,000
A/E Fees & Reimb.	$63,300
Total	$399,000



Legend:

- Kitchen
- Living Room
- Bedroom
- Bathroom
- Mechanical
- Storage for JPPM
- Accessible entrances
- Separation between two dwelling units

Figure ii.8. Space Utilization Plan of the Gardener's Cottage, First Floor

BEACH HOUSE
(355 SF)

The Beach House has the most idyllic of settings for any of the buildings on this site. This building would be repaired and rehabilitated so that it could be utilized as an overnight guest accommodation, (see Figure ii.9). The actual operational issues have not been worked out yet, but the repairs will enable this building to be used. There will be running water and toilets, but only the wood burning fireplace.

Planned work will include modifications to the boardwalk to ensure that visitors with disabilities can use the Beach House.

Estimated project costs:

Direct Construction Costs	$88,800
Contingencies @ 20%	$17,800
A/E Fees & Reimb.	$20,000
Total	$126,600

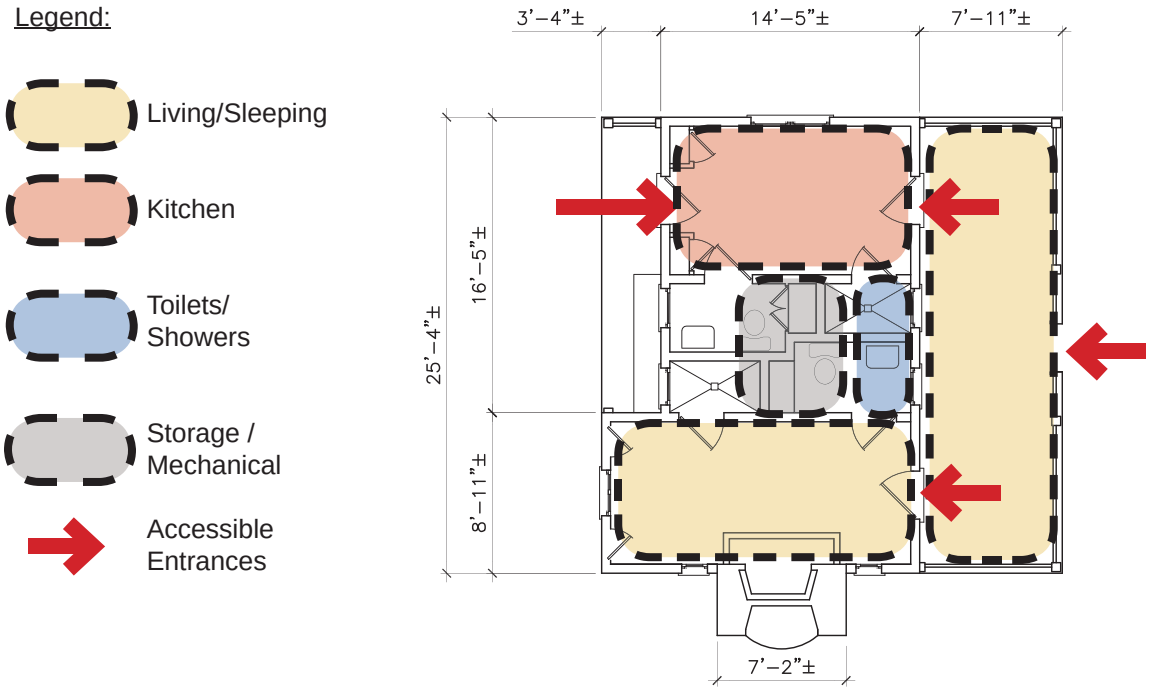


Figure ii.9. Space Utilization Plan of the Beach House, First Floor

SITE IMPROVEMENTS

Site improvements will focus on new vehicular access and parking, new and modified pedestrian pathways, and utility infrastructure to support the broader building rehabilitation work. Specific work elements include:

- New vehicular and bus loop from the MAC Lab to the Morgan State building parking lot to a drop-off location opposite the Gardener's Cottage.
- Two new accessible pathways across the site and a new ramp between the Main Residence and the Pool.
- A small parking area west of the Main Residence to accommodate daily visitors.
- Underground utilities including a new well, electric service and providing new utility service from the Main Residence out to each of the 4 buildings (Pump House/Garage, Pool House, Beach House, and Gardener's Cottage).
- Site-wide fire hydrants and overhead security lighting at selected points.

Estimated project costs:

Direct Construction Costs	$667,600
Contingencies @ 20%	$133,600
A/E Fees & Reimb.	$150,800
Total	$952,000

PROJECT EXECUTION SCHEDULE

The following implementation schedule has been provided by the Patterson Center Study Team:

February 2013	"Condition Assessment & Treatment Plan" completed.
	Begin preparation of design program for submittal to Department of Budget and Management (DBM) and Department of General Services (DGS).
April 2013	Submit design program to DBM and DGS.
September 2013	Design program approved by DBM and DGS.
July 2014	Design funds become available in the FY2015 State of Maryland Capital Improvement Campaign (CIG).
August 2014	Design program put to bid by DGS.
October 2014	Design consultant selected.
July 2015	Construction funds become available in the FY2016 State of Maryland CIP.
March 2016	Design plans and specifications completed. Construction procurement begins.

PROJECT BUDGET

The estimate of construction costs provided has utilized the cost estimate format provided by the Department of General Services (DGS). The following definitions or assumptions were utilized to prepare the estimate:

Direct Construction Costs: This could be taken to be the same as the bid award amount to the general contractor. Factors are included in the estimate to account for the complexity of this historic preservation work and the minor remoteness of the site.

Contingencies @ 20%: Two contingencies have been included in the estimate. A "design" contingency of 10% is included to account for the fact that the design or technical aspects of this project are only at the concept design level. This means many assumptions were made regarding the quantity and nature of the various work treatments. As the design becomes more firm through the design process, this contingency would be reduced and go to zero when the design documents were 100% complete. At that point exact quantities and content of each work element are known so no design contingency is needed.

The second contingency, also at 10%, is often called the owner's contingency. This is maintained through every estimate and is used during the construction phases to cover the costs of unforeseen conditions or to allow the owner to add additional work.

A/E Fees and Reimbursements: The percentages used here are provided by DGS for use in estimates such as this. This includes A/E basic services at 15%, A/E special services at 5% and A/E reimbursables at 2.6%.

The "project budget" is the total of these three values.

The total project budget by component can be summarized as follows:

COMPONENT	BUDGET TOTAL
Main Residence	$2,976,500
Pump House/Garage	$256,300
Pool & Pool House	$156,000
Gardener's Cottage – Two Rental Apts.	$399,000
Beach House & Boardwalk	$126,600
Site Improvements	$952,000
GRAND TOTAL	$ 4,866,400

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CHAPTER 1:
INTRODUCTION



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CHAPTER 1: INTRODUCTION

PURPOSE

The purpose of this condition assessment and treatment plan is to guide the decision-making for the rehabilitation treatments of the Patterson Center that will maintain and preserve the property's historic character and significant features. The Patterson Center consists of a 15-acre site developed between 1932 and 1935 by Jefferson Patterson. Essentially unaltered, the buildings and landscape retain a very high degree of integrity as originally designed by the original architect Gertrude Sawyer. The intent of the Maryland Historical Trust (MHT) and JPPM is to retain the Patterson Center as historic house museum to interpret the lifestyle associated with the American Country House movement in the period. In order to assure this outcome, the site will be enhanced for increased public visitation, both as a museum and for income-producing events such as weddings. The Condition and Assessment and Treatment Plan provides a master plan to achieve this purpose while also complying with the language of the Trust agreement between Mrs. Patterson and the State. More detailed development of the work and treatment recommendations--and ultimately specific design solutions--are left for future efforts.

SITE

The Patterson Center complex of domestic buildings and landscapes are part of the larger Point Farm, the country residence of Jefferson Patterson and his wife, Mary Marvin Breckenridge Patterson. The 512 acre Point Farm, now known as the Jefferson Patterson Park and Museum (JPPM), is located in Calvert County, Maryland on a bluff above the Patuxent River at the mouth of St. Leonard Creek. The Patterson Center complex of domestic buildings consists of seven (7) buildings, an in-ground swimming pool, tennis court, enclosed garden and triangle garden on 15 acres of land at the southern tip of the Park see Figure ii.1.

SCOPE

The condition of the Patterson Center Buildings and Landscapes are evaluated and character defining features identified, including the relative significance, in Part 1. The conditions and significance are summarized in a checklist found in Appendix A.

Code and accessibility are reviewed in the context of the proposed interpretive and use objectives. Life safety, fire protection, hazardous materials, energy conservation and accessibility are addressed in Part 2. Recommendations for hazardous materials abatement are also included in Part 2.

Finally the study provides a prioritized list of work recommendations to meet the interpretive and use objectives in Part 3. The recommended treatments have been selected to meet the *Secretary of Interior's Standards for Rehabilitation.*

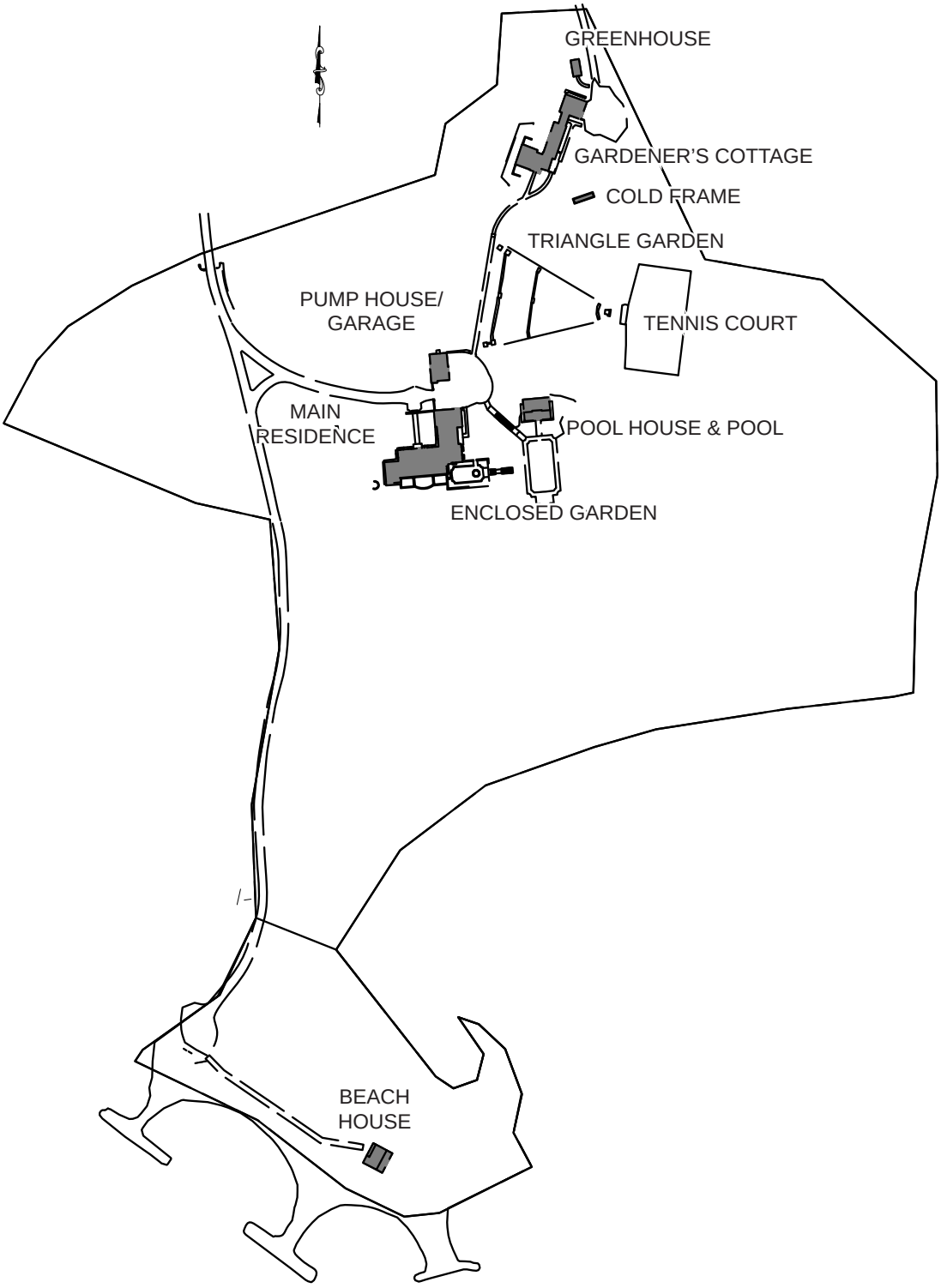


Figure ii.1. Patterson Center Site Plan NOT TO SCALE

FUNDING SOURCES

Estimated costs associated with the recommended treatments (and alternatives) are provided to assist with the definition of a capital improvement project and to prioritize maintenance concerns.

The report has been developed, in part, by a grant from the Department of the Interior, National Park Service. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Department of the Interior. The State of Maryland Capital Improvement Program currently includes capital funds for future design and construction projects at the Patterson Center. Funds will be used to renovate the property, making the site accessible to the public (ADA, fire code, electrical code, etc.) and rendering it easier to maintain.

STUDY TEAM

This study effort has been directed (and guided) by the Patterson Center Study Team with the following members:

Mark Thompson (JPPM)
Elizabeth Hughes (MHT)
Marcia Miller (MHT)
Sam Stokes (JPPM Advisory Committee)

PROJECT TEAM

Architectural research, architectural history, historic architecture, and building technology consulting:

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ORGANIZATION

The Condition Assessment and Treatment Plan consists of three primary sections: Part 1 – Condition Assessment, Part 2 – Code and Accessibility Evaluation, and Part 3 - Treatment and Work Recommendations.

Part 1 identifies the character-defining elements of the site and landscape, assesses the current condition of building materials, elements, and systems, and analyses the causes of deterioration for each of the Patterson Center buildings. An analysis of the condition of the designed landscape is also included in the Condition Assessment.

Part 2 includes a code, accessibility, and hazardous materials evaluation for the Patterson Center buildings and landscape. Part 2 also establishes the recommended historic preservation philosophy for each building and landscape area.

Part 3 identifies options necessary to meet proposed interpretive and use objectives while minimizing impacts on significant historic fabric. Part 3 discusses historic preservation and future use objectives with recommendations for an overall treatment approach and for specific work.

Included as Appendices are the Features Checklist, a reduced set of the architectural plans, a site plan, and the complete structural investigation prepared by Robert Silman Associates. The Features Checklist provides an accessible way to look up a space, as part of a building or landscape, and understand the significance and current condition of key features at the time of this report.

METHODOLOGY

All seven buildings were accessible to the Project Team for field survey. In addition, electronic scans of historic drawings (original and subsequent alterations) were made available. Two previous reports regarding the significance and a feasibility study were made available for use.

The Project Team conducted this study through the following efforts:

- Identified the character-defining features with the use of the available materials and field observations;
- Assessed existing conditions through several days of field observation;
- Created floor plan drawings using historic drawings and field observation. The topographic survey was created using GPS technology and conventional survey methods;
- Analyzed applicable building codes & accessibility codes to

identify issues and determine compliance;
- Prepared treatment recommendations for the preferred use;
- Prepared a conceptual costs estimate to assess the rough order of magnitude cost for the recommended treatments; and
- Compiled a series of issues that require further exploration as part of any conceptual design effort (when the overall recommended treatment is implemented).

BRIEF HISTORY

Point Farm, the country residence of Jefferson Patterson and his wife, Mary Marvin Breckenridge Patterson, is located in Calvert County, Maryland on a bluff above the Patuxent River at the mouth of St. Leonard Creek. Mr. Patterson purchased the 512-acre property in 1932 for a country retreat from his residence in Washington D.C., and to create a working model farm where he could raise Aberdeen Angus cattle for show. He hired Gertrude Sawyer, a Cambridge School of Architecture graduate, to develop an overall master plan and to design the buildings. In all Gertrude Sawyer designed 26 new buildings and renovated several existing structures. She retained Rose Greely to design the landscapes for the site; Cary Millholland Parker joined the project later, altering some of the landscape plans to accommodate the Patterson's changing tastes and needs. When Mr. Patterson passed away in 1977, Mrs. Patterson continued to use the property as a weekend home and retreat. She eventually donated Point Farm to the State of Maryland for what is now Jefferson Patterson Park & Museum.

The property can be broken down into five main zones: the Farm Manager's Group, the Barns (including the Show and Cattle Barns, now Visitor Center and Pavilion), the Tenant Farmer Area Group, the Fields, and the Patterson Center domestic complex. The farm manager's complex has undergone adaptive use of existing buildings and sensitive new construction to accommodate the Maryland State Archaeological Conservation Laboratory, its museum support functions, and park visitor related facilities.

The Patterson Center Condition Assessment and Treatment Plan focuses on the portion of the property now called the Patterson Center, comprising those domestic buildings and landscapes that were retained by Mrs. Marvin Patterson as part of a life tenancy agreement upon the donation of Point Farm to the State of Maryland, approximately 15 acres. The Patterson Center complex remains largely untouched, offering a personal glimpse into the past lives of the Patterson family. The outlines and basic structural forms of the 1930s designed landscape remain discernible, although the grounds have not had dedicated maintenance for some time.

BUILDING CHRONOLOGY

The following chronology is derived from the historic drawings and field observations.

1932: Beach[1] House constructed.

1933: Main Residence and Pump House constructed (designed 1932).

1934: Assumed construction date of Enclosed Garden (designed 1933). Pool constructed.

1934: Chicken/Dog/Pheasant structure constructed.[2]

1935: Assumed construction date of Triangle (Vegetable) Garden (designed 1933). Assumed construction of Tennis Court.

1936: Pool Pump House constructed (designed 1934).

1941: Lamp post installed at Pool. Alterations to Main Residence, second floor. Bedroom 2 altered and Bath 5 constructed for the new Mrs. Patterson.

1951: Gardener's Cottage, additions and alterations.

1953: Alterations to Main Residence, attic bedroom completed.

1954: Greenhouse constructed.

1959: Alteration to Enclosed Garden. Wood Gate installed at north brick site wall. Alteration to Pump House. Garage addition constructed with attic space above. Alterations to Main Residence, basement playroom and adjacent hall. Built-in cupboards installed.

1966: Alteration to Pool. Handrail for concrete steps inside swimming pool installed.

Unknown: Cold Frame construction date

1 Originally labeled the "Bath" House on plan and elevation drawings by Architect Gertrude Sawyer, today the structure is referred to as the Beach House.

2 Note the Chicken/Dog/Pheasant structure was converted into the Gardeners' Cottage in 1951.

STATEMENT OF SIGNIFICANCE

The general Statement of Significance for the Patterson Center is well written in a report entitled, *Historic Structures Report Phase I Significance Study: Patterson Center* prepared by the Maryland Historical Trust in September 2011. That narrative is included in this report by reference. An excellent summary statement of significance was also included in the Request for Proposals for the Patterson Center Condition Assessment issued by the Maryland Historical Trust, as "Attachment F." This is also included by reference. To quote from "Attachment F, " of the RFP,

"The overall integrity of the domestic complex and designed landscape is excellent. The buildings and landscape have remained essentially unaltered, and the few changes that have occurred were occasioned by the evolving requirements of the Patterson Family. All alterations were designed by the original architect Gertrude Sawyer. The buildings have been maintained adequately; only the Gardener's Cottage has suffered substantial loss of integrity through deterioration. The entire complex offers an exceptional opportunity to interpret the lifestyle associated with the American County House movement in the period. The main house is particularly valuable in this respect, in that it retains virtually all its architectural fabric and interior finishes intact, and also retains the full compliment of furnishings, decorative treatments and household items selected and used by the Pattersons."

Per the *Phase I Significance Study*, the period of significance extended from the purchase of the property by Mr. Patterson in 1932 until the death of Mrs. Patterson in 2002. Within that span, significant dates include the initial building campaign in 1932-1935 and the dates of alterations documented by drawings in the JPPM collections: 1941, 1951-53, 1959, and 1966. For the purposes of interpretation at the Patterson Center, the Maryland Historical Trust will use the 1932-2002 period of significance. For the purposes of listing in the National Register of Historic Places, the period of significance of 1932 through 1966, the year of the last documented construction by Gertrude Sawyer, was be applied.

HISTORIC DESIGNATION STATUS

The Main Residence and associated outbuildings are not individually listed on the National Register of Historic Places. The Main Residence, Pump House/Garage, Pool House, Gardener's Cottage, Greenhouse and the Beach House are listed as contributing resources to the Patterson Archeological District,[3] a designated district on the National Register of Historic Places.

3 National Register of Historic Places, Patterson Archeological District as amended, Calvert County, MD National Register # CT-755.

AREAS OF FUTURE STUDY

The following items are suggested for future study:

1) Survey and mapping of the existing underground utilities in the project area.

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2) Additional research on the historic landscapes would be beneficial to better inform the landscape treatments.

3) Detailed investigation of the wallpaper in Dining Room, 106,[4] by an architectural conservator to prepare more specific conservation treatment recommendations.

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4 Room numbers are shown on architectural floor plans drawings, see Appendix D.

PART 1

CONDITION ASSESSMENT



FINAL
FEBRUARY 2013

QUINN EVANS
ARCHITECTS

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CHAPTER 2:

CONDITION ASSESSMENT - MAIN RESIDENCE



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CHAPTER 2: CONDITION ASSESSMENT - MAIN RESIDENCE

OVERVIEW

This chapter discusses the Main Residence's current conditions and significant building features. Preservation treatments and guidelines for these significant features will be discussed in the following chapters.

EVALUATION OF SIGNIFICANCE

Each feature of the Main Residence was evaluated and determined to be either 1) Contributing (Very Significant), 2) Contributing (Significant), or 3) Non-Contributing. Due to the extensive Period of Significance that extends to the very recent past, overall, very few Non-Contributing features were noted. The Feature Checklist in Appendix A identifies the significance of every feature for each resource in the complex.

Contributing (Very Significant) – Character-defining features that are related to the period of significance and have an exemplary degree of craftsmanship, originality, and/or connection to important historical figures, i.e. the Pattersons.

Contributing (Significant) - Character-defining features that are related to the period of significance and have a good degree of craftsmanship, originality, and/or connection to important historical figures, i.e. the Pattersons.

Non-Contributing – Features outside the period of significance, or features within the period of significance (including original construction) that are without special craftsmanship, artistry, or connection to important historical figures, i.e. the Pattersons.

CONDITION ASSESSMENT

The following condition assessment criteria were used for the architectural elements: excellent, good, fair, and poor.

Excellent is defined as elements that perform their original function and require no renewal or repair.

Good is defined as elements that perform their original function and require only limited repair or renewal.

Fair is defined as elements with only minor or limited areas of failure. Elements would require some repair or corrective action.

Poor is defined as elements that only marginally function as originally intended. Deterioration or loss is more significant and significant repair work, partial replacement, or full replacement is required.

Quinn Evans and its consultants conducted field survey to assess condition and significance on the following days:

- June 20, 2012
- June 26, 2012
- June 28, 2012
- August 29, 2012

The investigations included visual observations, review of historic documentation, and interviews with facilities staff.

MAIN RESIDENCE EXTERIOR

The Main Residence consists of a main block and east wing. The main block includes three stories above grade and is five bays wide, running east to west and measures approximately 54 feet wide and 30 feet deep. The main block includes a 1 1/2 story screen porch at the southwest corner. The east wing, runs north south, includes two stories above grade and measures 30 feet wide by 60 feet deep. The east wing terminates to the north with a 1 1/2 story three-car garage.

OVERALL MASSING

The north facade has a central entrance defined by a gabled portico supported on slender columns with acanthus leaf capitals (see Figure 2.1). The paneled entrance door is framed by sidelights and an elliptical fanlight, all holding delicate leaded tracery (see Figure 2.2). The flanking bays hold 2/2 sash; on the upper story, 3/3 sash are aligned above the first-floor openings. The majority of window openings are detailed with splayed jack arches and fitted with shutters. At the main block, first floor windows at the north elevation and first and second floor windows at the east elevation have splayed jack arch details, At the east wing, the first floor window at east and south elevations and two of the five windows at the second floor east elevation also have splayed jack arch details. Three gabled dormers are arrayed across the front slope of the slate-clad gable roof. At the east end of the main block, a lower 1-1/2 story gabled wing projects forward, housing service areas and terminating in a three-car garage (see Figure 2.3). An exterior chimney rises from the west gable end, and a one-story screened porch projects from the southwest corner of the main block. The south elevation, facing the river, has a broad pedimented central doorway flanked on either side by French doors opening onto a flagstone terrace (see Figure 2.4 and Figure 2.5). A tripartite sash window is centered on the upper story, with two 6/6 sash on either side. There are three gabled dormers and an interior chimney on the south slope of the roof.

EXTERIOR CONDITIONS

Summary:

Overall the conditions of the contributing exterior features are good. There is isolated deterioration of the brick masonry at window heads caused by lintel corrosion (see Figure 2.6). Some roof flashing is in poor condition, and many of the copper gutters are in poor condition (severely bent).

Walls (Brick and Wood Siding):

The Flemish bond brick exterior walls are contributing (very significant). The walls are highly visible, character-defining features that date to the original construction. The overall condition of the brick masonry is good. At the west elevation of the garage there is

no separation between the grade and brick. Minor step cracking and cracking through masonry units is visible at isolated locations (see Figure 2.7). There is noticeable loose mortar at window heads with some isolated spalling. Most of the mortar appears to be original, and only a few instances of inappropriate/incompatible pointing mortar are visible. Several instances of chipped brick units were noted. Where present, wood siding is in good condition.

Foundations:

The foundations are original but not readily visible and therefore not character-defining other than creating the footprint of the main residence. They are a non-contributing feature. The foundations are in good condition. There is no sign of active differential settlement.

Chimneys:

The brick chimneys are highly visible and character-defining. They are contributing (very significant). The chimneys are in good condition with just a couple of isolated open joints. At the apex of the roof, all three brick chimneys displayed open/loose mortar joints and minor spalling of brick.

Dormers:

The wood dormers are highly visible and character-defining. They are contributing (very significant). The dormers are in good/ fair condition--with isolated instances of paint failure and wood deterioration.

Roof:

The original slate roof, approximately 80 years old, is very visible and character-defining. It is contributing (very significant). The slate roof is in good condition, however, some of the flashing is in fair/poor condition. The slate roof is in good condition with a few localized tiles exhibiting displacement indicating breakage. Some of the snow guards are bent, presumably from a heavy snow storm. The lightning protection system has a few bent conductors.

Trim:

The wood trim is highly visible and character-defining. It is contributing (very significant). The trim is in generally good condition. Minor wood deterioration was observed at the top of the screen panels on the Living Porch, most likely the result of animal burrowing at these locations.

Gutters and Downspouts:

The half-round copper gutters and rectangular downspouts are contributing (significant) features as they are visible but they do not define the exterior character of the building. The gutters and downspouts are in fair condition. Many are bent and misaligned from storm damage, and some gutter supports appear to be damaged. The gutter at the northeast corner leading from the juncture of the Main Block and East Wing is very bent does not allow drainage to the downspout. It has likely been the cause of the water damage on the interior. The built-in gutter in the entrance portico is in fair condition.

Windows:

The Main Residence has nearly all of the original operable double-hung and fixed wood windows. A few windows in the basement have been replaced with aluminum window assemblies. The original windows are very significant. Overall, the windows are in good condition. There is some minor peeling paint at window heads. Trim and sills are generally in good condition.

Shutters and Hardware:

The operable shutters and shutter hardware are contributing (very significant) features. The shutter hardware appears to be original. They are in good condition. Some painted hardware is missing paint.

Doors (Entrance, Screen, Garage):

The wood doors are contributing (very significant) features. Overall, the entrance doors are in good condition. There is some missing paint/ glazing putty. The screen doors are in fair condition. Some wood deterioration is present at the bases of some of the screen doors. The three garage doors with operable overhead doors are in good condition.

Transom and Sidelights:

The transom and sidelights adjacent to the front door of the residence are contributing (very significant) features. They are generally in good condition. There is no cracked glass, but several pieces of ornament are missing. The lead cames are in fair condition and show some signs of oxidation.

Entrance Portico:

The entrance portico, a gabled pediment supported by slender columns with acanthus leaf capitals, is contributing (very significant). Overall, it is in good condition The wood columns are in good condition, with isolated paint deterioration and biological growth at the bases (see Figure 2.8). The entrance portico has an interior gutter. The slate roof of the pediment is in fair condition.

Exterior Lighting:

There are a variety of presumably original exterior light fixtures. A large copper four sided lantern fixture is mounted to the north west corner of the east wing, see Figure 2.9. At the south elevation, two flush mounted copper fixtures are mounted to either side of the central door, see Figure 2.10. It appears that the glazing of one of the globes has been replaced with Plexiglas. Ceiling mounted fixtures are found at the north elevation entrance portico and the east elevation service entrance. The fixture at the service entrance is a nautical, cabin light, style fixture. The exterior lighting is contributing (very significant). The fixtures are generally in fair/good condition and finishes appear to be intact. In addition to the historic lighting fixtures, modern flood lights have been installed at the southeast corner of the main block.

EXTERIOR PHOTOGRAPHS



Figure 2.1. Main Residence, north elevation, three story main block at right, east wing at left with three- car garage (QEA, 2012).



Figure 2.2. Main Residence, main block north elevation, gabled entrance portico, (QEA, 2012).



Figure 2.3. Main Residence, east facade, service entrance (QEA, 2012).



Figure 2.4. Main Residence, south facade overlooks the Pautuxent River and St. Leonard Creek (QEA, 2012).



Figure 2.5. Main Residence, door from Library 110 to south terrace (QEA, 2012).



Figure 2.6. Main Residence, north elevation, window lintel and brickwork, lintel corrosion causing masonry deterioration (QEA, 2012).



Figure 2.7. Main Residence, vertical crack at brick masonry, to the right of entrance door (QEA, 2012).



Figure 2.8. Main Residence, biological growth and isolated paint failure at gabled portico wood column base, (QEA, 2012).



Figure 2.9. Main Residence, four sided lantern fixture mounted to the north west corner of the east wing (QEA, 2012)



Figure 2.10. Main Residence, flush mounted copper fixture mounted at south elevation (QEA, 2012)

MAIN RESIDENCE BASEMENT INTERIOR

The basement level occupies space in both the main block and the east wing. The basement includes several rooms including a laundry, furnace room, two bathrooms, and a “treasure room” where the Pattersons stored their collections from their travels, as well as a children’s playroom. Most of these spaces retain their integrity from the 1930s period. The Playroom resulted from a 1959 remodeling of the original Recreation Room.

SPATIAL LAYOUT

The basement can be accessed via two entry points on the first floor. From the main block the entrance is just off Entry Hallway 109[1]. From the east wing access is provided from the original Servants Hall 102. From the Entry Hallway 109 access is straightforward to the Hall, 011 and Playroom 013. Access to the remainder of the rooms within the main block are from a central corridor. At the basement level, the east wing houses Storage 001 and Mechanical 002 in addition to a Lavatory 003 and Wine Storage 005. Presently the basement level is dedicated to storage and mechanical equipment. Historically, the basement was used largely for storage with the exception of the Laundry Room 108 and Playroom 013.

BASEMENT INTERIOR CONDITIONS

Summary:

Most of the rooms in the basement contain contributing features. The Playroom is the only one with significant and very significant features. Overall, the conditions of the playroom features are fair. The following is a feature by feature compilation of significance and condition throughout the basement.

Ceilings:

Overall, the ceilings of the basement are non-contributing and in good/fair condition. Some spaces have no ceilings and other spaces have fiber board ceilings that are in fair condition. In Playroom 013, the ceiling assembly is the original fiberglass ACT from the 1950s, and this ceiling exhibits some water damage and tearing of the outermost vinyl layer in some locations.

1 Note: For reference, room names and room numbers noted on floor plans in Appendix D, are referred to within the text.

Walls:

The walls consist of multiple types: painted and unpainted brick, painted and unpainted structural clay tile walls as well as painted plaster walls and gypsum board (see Figure 2.11). They are non-contributing features, in good/fair condition. There is a good deal of damage to the finish of the walls in Bathroom 012 and Halls 011 (see Figure 2.12 and Figure 2.13). The Playroom 013 walls have some water damage and water staining. The Luggage Room 006 has some damaged plaster in one corner. A large crack runs through the brick flue in Mechanical Room 004 (see Figure 2.14).

The north and west walls of Hall 011 and Playroom 013 suffer from past and present water infiltration. In Bathroom 006 there is also evidence of water infiltration at the north elevation. This damage is constant with water damage noted at the first and second floors, caused by flashing failures at the reentrant corner.

Windows:

The windows in the basement are a mix of painted wood and aluminum windows. In general, the windows are non-contributing features. Windows in Hall 011 and Playroom 013 are contributing (significant) features. All of the basement windows are in good/ fair condition overall. The window sill at Hall 011 has significant sill damage from past and present water infiltration (see Figure 2.15).

Doors:

Doors are typically painted wood and contributing (significant) features. The wood doors of Hall 011 and Playroom 013 are significant features. In general, the doors are in fair condition with the exception of a few that are in good condition. Many of the doors retain their original hardware that is in good/fair condition.

Flooring:

Most of the flooring in the basement is painted concrete. There is vinyl asbestos tile flooring in the Laundry 008, linoleum in the Hall 011 and Playroom 013, and ceramic tile in Bathroom 012. The painted concrete is typically in fair condition where the paint is very worn. The flooring in the basement is a non-contributing feature.

Lighting:

Typically, the light fixtures in the basement are non-contributing features. Several rooms have modern strip fluorescent light fixtures. There are some original ceiling- or wall-mounted fixtures. The lighting in the Playroom 013 is original. Most of the fixtures are in good condition.

Built-in Cabinets:

There are built-in cabinets in the Hall 011 and Playroom 013. These custom built-ins are contributing (significant) and in good condition.

Stairs:

The stair components in Storage 001 and Hall 011 are non-contributing features. In Storage 001, the components have a good amount of wear and tear on the treads and are in fair/poor condition (see Figure 2.16). Those in Hall 011 are in good condition.

Plumbing Fixtures and Accessories:

Lavatory 003 and Bathroom 012 both have plumbing fixtures and accessories that are non- contributing features. Both are in fair condition.

Fireplace:

The fireplace with its ceramic tile surround in Playroom 013 is a contributing (very significant) feature. It is in good condition.

BASEMENT PHOTOGRAPHS



Figure 2.11. Main Residence, Storage 001, view looking southeast, note unpainted brick walls with parging (QEA, 2012).



Figure 2.12. Main Residence, Hall 011, north elevation, note water staining from past and present water infiltration (QEA, 2012).



Figure 2.13. Main Residence, Bathroom 012, water damage at north elevation, left (QEA, 2012).



Figure 2.14. Main Residence, Mechanical 004, step cracking at brick wall (QEA, 2012).



Figure 2.15. Main Residence, Hall 011, wood window sill, damage from past and present water infiltration (QEA, 2012).



Figure 2.16. Main Residence, Storage 001, worn treads at stair to Servants Hall 102 (QEA, 2012).

FIRST FLOOR - MAIN BLOCK INTERIOR

The main block of the first floor consists of the primary rooms: Living Room, Library and Dining Room and the adjacent Living Porch on the southwest. The east wing consists of the Pantry, Kitchen, Servants Hall and Garage.

SPATIAL LAYOUT-MAIN BLOCK

The primary rooms face south towards the open lawn and the Patuxent River. The spacious Entrance Hall is the central room around which the Living Room, Library, Dining Room are organized (see Figure 2.17). The Living Porch extends off of the Living Room (see Figure 2.16). To the east of the Entrance Hall 109 is the entrance to the basement and then a small Dressing Room 107. Just off the northeast corner of the Dining Room 106 is access to an elevator, installed in 1966 (see Figure 2.19, Figure 2.20 and Figure 2.21).

The Entrance Hall 109 features a dogleg stair with slender turned balusters and scrolled step-ends. The area below the stair, and its soffit, are paneled. The ceiling is defined by a complex molded cornice. Paneled double doors are framed with reeded architraves. Baseboard and chair rail moldings are present. The Entrance Hall is a very significant feature of the house as are the elements within the Entrance Hall.

The Living Room, Library, and Dining Room all have French doors opening onto the south terrace. These rooms retain nearly all of their original architectural fabric and decorative detailing and include high quality Colonial-style millwork. The Library is fully paneled, with built-in bookshelves on the west wall. The Library is a very significant feature of the house as are the elements within the Library. The Dining Room has cornice, architrave, chair rail, and baseboard moldings, as well as a reeded fireplace mantel, and retains its original Chinese wall covering depicting birds and flowers.

The Living Room extends the full depth of the house at the west end. The room features a paneled west wall, with a reeded mantel framing the fireplace. The rooms molded cornice incorporates a dentil course. The Living Room is a very significant feature of the house as are the architectural features within it.

The Living Porch 112 is accessed from the main block through the Living Room 111. The room features a high gabled ceiling with a large pedant light fixture and stone floor. Exposed brick walls at the north and east elevations with wood screen doors are at the south and west elevations (see Figure 2.18). The room is furnished with outdoor furniture. The Living Porch and its architectural components are a very significant feature of the house.

FIRST FLOOR - MAIN BLOCK CONDITIONS

Summary:

Nearly all of the rooms on the first floor are contributing (very significant) and contain features that are very significant. Most are in good condition as well as a few that are good/fair and fair. The associated closets to various spaces are non-contributing features. The elements within the closets are also non-contributing features.

Ceiling (plaster, painted):

The flat plaster ceilings throughout the first floor are non-contributing features. They are generally in good condition. In the Dining Room, the paint is delaminating and peeling away at the juncture with the crown molding. This area is where there has been significant water infiltration as shown by the water stains below the crown molding (see Walls).

Walls (plaster, painted):

The plaster walls throughout the first floor are contributing (significant) features. They are in good condition. The Dining Room walls are covered in nineteen Chinese panels of birds and flowers by H. Leo Gould. The wallpaper is contributing (very significant). Unfortunately it is in poor condition, showing signs of water damage and deterioration from exposure to UV light (see Figure 2.21 and Figure 2.22). Some of the water damage dates back to 1933 when the Chesapeake-Potomac Hurricane[2] terrorized the property. The plaster behind the wallpaper is most likely in fair condition. At one location, the paper and plaster is crumbling near the chair rail. There also appears to be black spots, possibly mold. The plaster wall of the Coat Closet is cracking and deteriorating (see Figure 2.23). The moisture infiltration here extends to the other side of this wall that is in the Kitchen. This condition extends to the ceiling and the back wall of the Coat Closet.

Decorative Trim (painted typical, clear finish stain - Library 107 and Dressing Room 110):

The decorative trim elements throughout the first floor include crown moldings, mantles, paneling, baseboards, door and window casings, chair rails, cabinetry, and other millwork. In most rooms the trim is painted except for the millwork in the Library and Dressing Room (see Figure 2.24 and Figure 2.25). The Library paneling was reclaimed from a previous structure. The decorative trim throughout

2 The United States did not begin naming storms until 1951. National Hurricane Service. www.weather.gov.

the first floor main block rooms are contributing (very significant) features. Overall, the decorative trim is in good condition.

Windows (wood, painted):

The windows throughout the first floor are contributing (very significant) features. Overall, they are in good condition.

Doors (wood, painted/stained):

The wood doors throughout the first floor are contributing (very significant) features. Overall, they are in good condition. The doors to the South Terrace in the Library are in fair condition. Water stains and soiling are found on the raised paneling on the lower half of the doors (see Figure 2.26). Most of the doors retain their original hardware, which is generally in good/fair condition.

Flooring (Wood, Carpet Runner on Stair Treads):

The wood floors throughout the main block rooms are contributing (very significant) features. Overall, they are in good condition. The wood floor in the Dining Room is in fair condition. It is worn and water damaged near the pair of doors leading out to the South Terrace. The solid color carpet on the stair treads in the Entrance Hall is a contributing (significant) feature. It is good condition.

Lighting:

The various types of light fixtures throughout the first floor are generally contributing (very significant) features in the primary rooms and contributing (significant) in the secondary rooms. Lighting fixtures are in good condition. The first-floor rooms retain original electrical fixtures, including a hanging light fixtures in the Entrance Hall and Living Porch and wall sconces in the Living Room and Library.

Stairs:

The Entrance Hall stair components are contributing (very significant) features that are in good condition. The components of the Basement Stair and Servants Stair are contributing features that are in good condition.

MAIN BLOCK ROOMS PHOTOGRAPHS



Figure 2.17. Main Residence, Entrance Hall, 109 view looking east (QEA, 2012). The arched opening on the right leads to the Dining Room 106. The doorway on the left leads to the Basement Stair 108 and Dressing Room 107. The main entrance is on the left.



Figure 2.18. Main Residence, Living Porch 112, view looking south (QEA, 2012). Entry to the porch is from the Living Room 111 on the left.



Figure 2.19. Main Residence, Living Room 111, view looking southwest (QEA, 2012).



Figure 2.20. Main Residence, Library 110, view looking southeast (QEA, 2012).



Figure 2.21. Main Residence, Dining Room 106, west elevation (QEA, 2012). The light colored area is an example of subsequent painting on top of the wallpaper.



Figure 2.22. Main Residence, Dining Room 106, east elevation (QEA, 2012). Note water staining.



Figure 2.23. Main Residence, Coat Closet 107C, water damage to northeast corner (QEA, 2012).



Figure 2.24. Main Residence, Dressing Room 107, view looking southwest (QEA, 2012).



Figure 2.25. Main Residence, Dressing Room 107, detail of door to Toilet 107A (QEA, 2012).



Figure 2.26. Main Residence, Library 110, doors to South Terrace (QEA, 2012). Note water staining at the wood paneling.

FIRST FLOOR - EAST WING INTERIOR

The east wing rooms of the first floor include the Pantry, Kitchen, Servants Hall, Servants Stair, Garage, and associated closets. At the south end are the Kitchen and Pantry (see Figure 2.27, Figure 2.28, and Figure 2.29). North of the Kitchen is a Servants' Hall (i.e., living room), with access to the garage (see Figure 2.30). The Servants' Stair rises along the west side of the wing. The pantry and kitchen areas retain the full complement of original cabinetry, counters, sink, and other furnishings, including the servants' call-bell system.

SPATIAL LAYOUT

The east wing of the first floor is accessed via two entry points, the Garage 101 and the Servants Hall 102. The Servants Hall 102 provides access into the Kitchen 104 and basement level. The Kitchen 104 provides access to the second floor of the east wing as well as access to the Panty 105. There are no corridors, the layout of the spaces is utilitarian and functional.

FIRST FLOOR - EAST WING CONDITIONS

Summary:

The overall condition of the first floor, east wing rooms is good. Damage to interior plaster and paint finishes is present in the kitchen where the east wing meets the main block. This damage is most likely from water infiltration caused by deteriorated roofing/flashing on the roof above this area.

Ceiling (plaster, painted):

The flat plaster ceilings throughout the east wing are non-contributing features. They are in good condition. The ceiling in the Kitchen has some hairline cracks and some chipping paint around the stove area. The ceiling in the Kitchen and Pantry has separated slightly from the walls and the built-in cabinetry. This may be caused by localized deflection in the floor framing due to the possibility of the loads being transferred from above.

Walls (Plaster, Painted and Exposed Brick and Structural Clay Tile):

The plaster walls throughout the east wing are contributing (significant) features. Generally, they are in good condition. The exterior wall of the Servant Stair has a significant amount of blistering and peeling paint, indicating a moisture issue. Along the same wall in the Kitchen 104, there are similar issues of cracking and peeling paint and plaster damage. The condition is also found in the wall behind the cabinets (see Figure 2.31). The east exterior wall of the Pantry has a large crack near the window. The storage closet next

to the bathroom in the main block shows a large amount of water infiltration.

Decorative trim (painted):

The decorative trim throughout the east wing primarily consists of baseboards and a cornice on top of the built-in cabinetry in the kitchen and pantry, and they are contributing (very significant) features. They are in good condition.

Windows (Wood, Painted):

The windows throughout the east wing are contributing (very significant) features. Overall, they are in good/fair condition. The window sash and its casing at the Pantry has cracking and peeling paint. Paint has peeled away exposing bare wood at the apron. The adjacent plaster also has some cracks.

Doors (wood, painted):

The wood doors throughout the east wing are contributing (very significant) features. Overall, they are in good condition. Most of the doors retain their original hardware, which is generally in good/fair condition.

Flooring (Wood, Carpet, Linoleum):

There are various types of flooring throughout the east wing, including wood strip flooring, carpet and linoleum. All are contributing (significant) features. Overall, they are in good condition. The linoleum flooring in the kitchen and pantry is in fair condition. Large stains have lightened areas of the floor. The linoleum in the Pantry has many cracks and a large area that is severely deteriorated (see Figure 2.32).

Lighting:

The various types of light fixtures throughout the east wing are contributing (significant) features in the secondary rooms.

Stairs:

The stair components of the Servants Stair are non-contributing features. They are in fair condition. The treads show wear and are missing some of the protective resilient tread coverings.

EAST WING ROOMS PHOTOGRAPHS



Figure 2.27. Main Residence, Pantry 105, view of Pantry looking east (QEA, 2012).



Figure 2.28. Main Residence, Kitchen 104, southern portion of east elevation (QEA, 2012).



Figure 2.29. Main Residence, Kitchen 104, northeast corner (QEA, 2012).



Figure 2.30. Main Residence, Servants' Hall 102, northeast corner (QEA, 2012).



Figure 2.31. Main Residence, Kitchen 104, significant plaster damage caused by water infiltration at reentrant corner, southwest corner near servants stair (QEA, 2012).



Figure 2.32. Main Residence, Pantry 105, signs of deterioration at linoleum floor (QEA, 2012).

SECOND FLOOR INTERIOR

The second floor consists of the master bedrooms (one each for Mr. and Mrs. Patterson), dressing rooms, and bathrooms in the main block, and a large bedroom and adjoining bath (provided for Mr. Patterson's mother) in the south end of the east wing. The four primary bedrooms (Bedrooms No. 1-4, rooms 211, 214, 216, and 220 respectively) are all very significant spaces with significant features. The decorative trim in Mr. Patterson's Bedroom No. 1 220 is a very significant feature (see Figure 2.33). The remainder of the east wing, and the space above the garage, are the children's bedrooms (Patricia and Mark), the children's nanny's bedroom, closets, two bathrooms, the Luggage Room 209, the Pressing Room 207, and Service Stair 206. All rooms in the east wing are significant features except for the closets, which are contributing features.

SPATIAL LAYOUT

Rooms on the second floor of both the main block and east wing are accessed via a central corridor. Primary bedrooms are located within the main block. Bedrooms for the children, nanny and storage (originally servants bedrooms) are located to the north of the east wing.

SECOND FLOOR INTERIOR CONDITIONS

Summary:

The overall condition of the second floor interior spaces is good. Plaster damage and paint deterioration is present in locations where roofing and/or flashing has failed. In some locations, where roof repairs have been made, the water infiltration is no longer active. This applies to the walls around the chimney in Bedroom #1 - 220. Damage in the Luggage Closet - 209 may still be due to an area with active water infiltration. Damage to the wallpaper in Servant Room #1 suggests water infiltration.

Ceiling (Plaster, painted):

The flat plaster ceilings of the rooms on the second floor are all non-contributing features in good condition. The ceiling in Luggage Room 209 is in poor condition (Figure 2.34). There is efflorescence and the plaster is deteriorated and failing, due to failed flashing at the roof line. The ceiling in Bathroom 4, 210 has some minor peeling paint and plaster damage near the bathtub. Bathroom 2, 213, and Dressing Room 222 also have peeling paint on the ceiling. The ceiling of Hallway 215 has some paint crazing. Bedroom No. 2, 216, minor paint blistering. The ceiling of the main stair Hallway 217, has cracks and paint blistering. The ceiling of Bedroom No. 1, 220, has some water damage, due a previous issue with water infiltration in the attic.

Walls (Plaster, painted, wallpaper):

In general, the painted plaster walls are contributing (significant) features. The wallpapered walls in the Children's and Nanny's bedrooms 201, 202, and 203 are contributing (significant) features. The ceramic tile in Bathrooms 1 2, 3, 4, and 5 are also contributing (significant) features (see Figure 2.35 and Figure 2.36). Overall, the condition of the walls on the second floor is good/fair.

In the Children's and Nanny's bedrooms 201, 202, and 203, the wallpaper and the plaster behind it is stained and damaged by water infiltration at each of the windows except for at the one window in the gable end of Mark's Bedroom 203 (see Figure 2.37. Wallpaper has delaminated from the canted plaster walls in Patricia's Bedroom 201(see Figure 2.38). Water infiltration is coming not only at the window sills but in other locations as well. Peeling paint and plaster damage is also found on the west wall of Hallway 208 and at the dormer window in Service Stair 206. Luggage Room 209 has the worst damage (see Figure 2.34). Here the plaster damage is severe due to failed flashing at the roof line. The plaster has cracked and broken off. There is also significant mold growth which extends to the door as well in Luggage Room 209. Under the east window in Mr. Patterson's Mother's Bedroom No. 4 211, there is wood paneling that has a good deal of peeling and cracking paint that is exposing bare wood. The wallpaper is also peeling in Bedroom No. 4.

The rooms in the main block of the residence also have various conditions. In Guest Bedroom No. 3 214, the wallpaper was originally painted to provide a subtle texture to the walls (see Figure 2.39). It is now in fair/poor condition due to its delamination from the plaster wall. There is some minor plaster cracking along the south wall of Bathroom 5 219. The walls in Bedroom No. 1 220, are in poor condition (see Figure 2.33). There is a good deal of brown staining on the wall above the door to Dressing Room 222 (see Figure 2.40). On the opposite of the wall, inside Dressing Room 222, the paint is peeling above the doorway. The west wall, above the fireplace, has similar brown stains running down the wall as well as peeling painted wallpaper.

The ceramic tiles in Bath 4 210, has extensive crazing and are missing some grout. The ceramic tiles in Bathroom 1, 221 also have crazing and some chipped wall tiles.

Decorative trim (Painted, Stained):

The decorative trim on the second floor includes crown moldings,

chair rails, and baseboards in the master bedrooms within the main block. The large bedroom in the south end of the east wing has a narrower cornice, baseboard, but no chair rail. The servants' hallway and quarters have the least elaborate detailing. The profiles of the second floor are less complex than those on the first floor. An arched opening with pilasters and a keystone leads from the main stair to the other bedrooms. Over the bathtubs, there is a carved wood valance. Over the shelves in Hallway 215, there is another more decorative wood valance. The valance over the bathtub in Bathroom 5, 219, is actually a series of doors for overhead storage. Built-in cabinetry is found in Dressing Room 222 and Pressing Room 207. Painted wood built-in shelves are found in various closets and in Servants' Hall 204. Stained wood built-in cabinets are found in Pressing Room 207. Decorative trim throughout the second floor are contributing (very significant) features. Overall, the decorative trim is in good condition.

There is some minor peeling paint on the decorative trim in Bathroom No. 2, 213 (see Figure 2.41). In Bedroom No. 1, 220, the decorative trim is in fair condition. It has brown stains and peeling and cracking paint that is exposing bare wood. The painted wood fireplace mantel also exhibits the same conditions. This is most likely due to the water infiltration in the attic from failed chimney flashing or from the air conditioning unit in the attic.

Windows (Wood, Painted):

The painted wood windows on the second floor are typically contributing (very significant) features and in good condition. The casing, sill, and apron/panel of the east window (which was altered for the window air conditioning unit) in Bedroom No. 4, 211, is in fair condition (see Figure 2.42). It has a good deal of peeling and cracking paint that is exposing bare wood. The south window of the same bedroom does not have these conditions. The stools for the windows in Guest Bedroom No. 3, 214, have some minor peeling paint.

Doors (Wood, Painted):

Doors at the second floor are contributing (significant) features. Painted six-paneled doors lead into the bedrooms. The corridors include several louvered doors that allow for air circulation. Overall, the condition of the doors is good. The door in Luggage Room 209 is in fair condition due to the mold growth. The door between Bedroom No. 1, 220 and Dressing Room, 222, has water staining, peeling and cracking paint that is exposing bare wood. This is most

likely due to the water infiltration in the attic from failed chimney flashing or from the air conditioning unit in the attic. Most of the doors retain their original hardware, which is generally in good/fair condition.

Flooring (Wood, Tile):

Wood flooring is found in nearly all bedrooms, hallways, and closets. Ceramic tile is found in all bathrooms. The flooring is a contributing (significant) feature. A number of area rugs have been placed over the wood flooring obscuring the conditions. Rectangular cork flooring in a herringbone pattern is found in Mark's Bedroom 203. Overall, the flooring on the second floor is in good/fair condition. A portion of the ceramic tile floor in Bathroom 4, 210 has a area of loose/chipped tiles. The wood and cork flooring in Bedrooms 201-203 have a good deal of debris near the windows. There is also evidence of insect infiltration. Presumably the debris and insects are the result of gaps around the window AC units installed in these rooms. The wood flooring in Bedroom No. 1 220, is water stained near the entrance to Dressing Room 222 (see Figure 2.43). This is due a previous issue with water infiltration in the attic.

Lighting:

Generally, the light fixtures in the bedrooms, bathrooms, and hallways are significant features whereas the light fixtures in closets are contributing (significant) features. There are a variety of ceiling-mounted fixtures and wall sconces. Overall they are in good condition.

SECOND FLOOR PHOTOGRAPHS



Figure 2.33. Main Residence, Mr. Patterson's Bedroom 220. Note decorative trim, including crown molding, chair rail, baseboard (not shown) and fireplace mantel and surround. (QEA, 2012).



Figure 2.34. Main Residence, Luggage Room, 209, significant plaster damage at south elevation caused by water infiltration at reentrant corner (QEA, 2012).



Figure 2.35. Main Residence, Bathroom 5, 219, east elevation (QEA, 2012)



Figure 2.36. Main Residence, Bath No. 3, 205, look east (QEA, 2012).



Figure 2.37. Main Residence, Nanny's Bedroom No. 2, 202, note water damage at wall below modern AC window unit (QEA, 2012).



Figure 2.38. Main Residence, Mark's Bedroom, 203, cork flooring and peeling wallpaper (QEA, 2012).



Figure 2.39. Main Residence, Bedroom No. 3 214, southeast corner, note painted wallpaper, original finish (QEA, 2012)



Figure 2.40. Main Residence, Bedroom No. 1, 220, existing water staining above door to Dressing Room 222 (QEA, 2012).



Figure 2.41. Main Residence, Bath No. 2 213 (QEA, 2012).



Figure 2.42. Main Residence, Bedroom No. 4 211, deteriorated wood paneling and paint failure below modern window AC unit (QEA, 2012).



Figure 2.43. Main Residence, Bedroom No. 1, 220, existing waster staining are floor in front of Dressing Room 222 (QEA, 2012).

THIRD FLOOR INTERIOR

The third floor was finished in 1953 to provide a guest suite and additional storage space. The Attic Stair 302, Bathroom 301, Bedroom 303 and Storage Room 304 have a number of contributing features. An abandoned modern AC unit, used to cool the Attic and Second Floors, occupies nearly half of the Storage Room 304. A previous issue with chimney flashing has left a significant amount of water staining at the room's west elevation. The following is a feature by feature compilation of significance and condition. Where there are exceptions, they have been noted.

SPATIAL LAYOUT

The third floor attic is accessed by a flight of stairs from the second floor Hallway 217. The attic consists of three rooms, a Bedroom 303, Bath 301 and Storage Room 304. Access to the Bath and Storage Room is from the Bedroom. Several closets are located off of the Bedroom, providing additional storage space in unfinished attic spaces.

THIRD FLOOR INTERIOR CONDITIONS

Summary:

The overall conditions of the third floor spaces are good. Some water damaged finishes were observed in Closet 303C, in the adjacent dormer walls, and in the west wall of Storage Room 304.

Ceiling (Plaster, Painted, fiberboard):

All ceilings on the third floor are non-contributing features. Most all were in good condition except for the ceiling in Storage Room 304. In this room, the fiberboard ceiling has water damage from failed chimney flashing along the west elevation.

Walls (plaster, painted):

All walls on the third floor are non-contributing features with the exception of the walls with ceramic tile in Bath 301 which are contributing (significant) features. Most are in good condition except for the walls in Storage Room 304 which are in fair condition due to the water damage from failed chimney flashing along the west elevation (see Figure 2.44). The walls (and ceiling) of the north dormer window in Bedroom 303 has a good amount efflorescence due to water intrusion (see Figure 2.45). In addition, the ceramic tiled walls in Bath 301 are in fair condition. There is at least one crack of note in the southeast corner. There are several cracked tiles in the tub and minor grout cracking in the ceramic tile in this space. Minor peeling paint was also observed in Bath 301 (see Figure 2.46).

Decorative trim (Painted,Stained):

Nearly all the decorative trim in each room is a contributing (significant) feature and in good condition. The decorative trim in the Attic Stair is also contributing (significant) feature and in good condition.

Windows (Wood, Painted):

Typically, the windows in the third floor rooms are contributing (significant) features and are in good condition. The windows Bath 301 and Attic Stair 302 are significant features in good condition. These windows retain their original hardware.

Doors (Wood, Painted):

Typically, the doors in the third floor rooms are contributing (significant) features and are in good condition. The doors in Bath 301 and Attic 302 are significant features in good condition. Most of the doors retain their original hardware, which is generally in good/ fair condition.

Flooring (Wood, Carpet, Linoleum, Tile):

Typically, the flooring on the third floor is a contributing (significant) feature and in good condition. The ceramic tile floor in Bath 301 is a significant feature in fair condition. Bedroom 303 has carpet over the wood strip floor. Storage Room 304 has 8” wood boards (the underlayment) set at an angle.

Lighting:

Most light fixtures are contributing (significant) and in good condition. Attic fixtures include chrome and brass surface-mounted fixtures with incandescent lamps.

Stairs:

The stair treads, risers, balusters, and newel posts in Attic Stair 302 are contributing (significant) features and in good condition.

THIRD FLOOR PHOTOGRAPHS



Figure 2.44. Main Residence, Storage Room 304, water staining at west elevation (QEA, 2012).



Figure 2.45. Main Residence, Bedroom 303, north elevation dormer, paint failure at walls and ceiling (QEA, 2012).

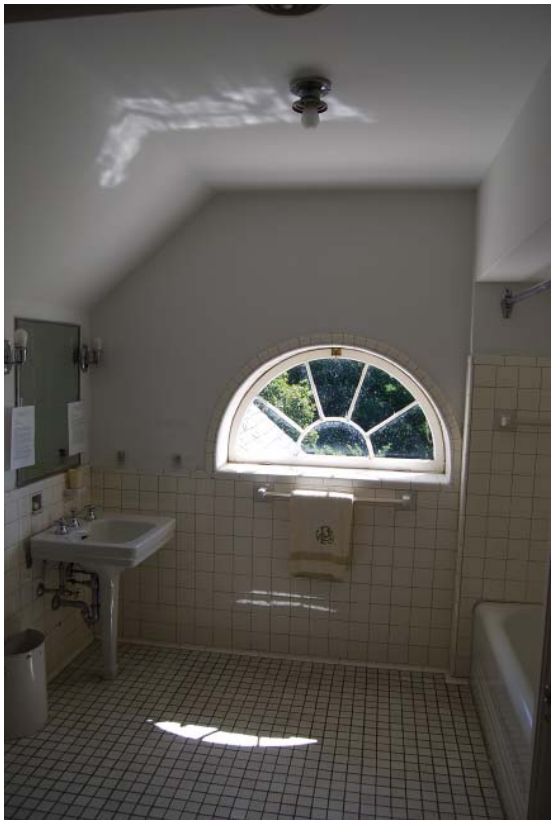


Figure 2.46. Main Residence, Bathroom 301, view looking east, (QEA, 2012).

STRUCTURAL CONDITIONS

Summary:
In general, the floor and wall systems of the Patterson Home appear in sound structural condition with localized areas of deterioration due to moisture intrusion. With the results of the wood species identification, analysis of the existing structure revealed that the in situ framing members appeared adequate to support live loads associated with a typical family dwelling. This analysis will be discussed in further detail in the technical sections of the report.

Walls and Floor Framing:

Constructed in 1932, the Patterson residence is a three story wood and steel-framed historic home. Exterior load-bearing masonry walls extend below grade to rest upon cast-in-place concrete spread wall footings. Interior wood-framed load-bearing partitions are supported by steel beams and columns to carry the floor loads. Terra cotta and brick masonry infill walls are located in the basement beneath the steel beams and framing partitions. Typical floor framing is comprised of 2x10 or 2x12 wood joists spaced at 16” on center. The original slate roof is supported on 2x10 wood roof rafters. Three wood samples were removed for identification at the roof, attic, and 1st floor joists. Per the results of the wood species identification performed by Quirk Consulting (Wood Scientists), all wood samples were identified as Southern Yellow Pine. This species matches the wood noted on the original construction drawings. Three masonry chimneys penetrate the gabled roofline at separate locations. The following subsections summarize the conditions and findings of the Patterson Home noted by the structural engineer during their survey of the structure.

The structural engineer interviewed site personnel to understand ongoing and past maintenance activities. Although the structure appeared in generally good condition, some conditions warranting structural repair and maintenance were noted.

Exterior:

The exterior brick façade largely appears sound with brick and mortar joints free of deterioration. Localized portions of the brick façade exhibit cracked and open mortar joints possibly due to settlement. Most likely this settlement occurred shortly after construction. There is a large vertical crack beneath the second story window of bedroom number four extending down from the sill to the top of the jack arch of the window below. This crack appears to have been previously repaired, and possibly was the result of settlement or corrosion of embedded steel lintels.

Embedded steel angle lintels over all exterior wall openings were observed to exhibit corrosion. This corrosion is volumetrically expanding and exerting additional levels of stress on the brick masonry façade, causing localized brick and mortar to crack and displace. Significant water presence, as indicated by algae growth on the exterior surface of the building, was noted in the northwest reentrant corner where the servant wing meets the main block of the house. This appears to correlate to a change of roof direction where poor roof and ground drainage away from the building occurs. As a result, the surrounding brick pavers were reset three years ago by the owner, and pitched away from the home in hopes of reducing water infiltration into the basement.

The retaining wall surrounding the enclosed garden on the southeast corner of the building has a number of through-wall cracks in several locations including where the wall adjoins to the main residence. This appears to be a result of the freeze thaw cycle and water infiltration through open mortar joints in the brick cap at the top of the wall. Additionally, through wall cracks may be the result of a differential lateral soil pressure due to unequal depths of retained soil on either side of the wall.

Basement:

All exposed window lintels show signs of rust and corrosion as a result of exposure to moisture. All exterior areaways show accumulation of debris from the surrounding plantings, and the majority of the area drains appeared to be clogged. At the stair leading to the servant rooms and garage, stair stringers and handrail posts show signs of crushing where in contact with the concrete slab due to the sustained presence of moisture.

MECHANICAL CONDITIONS

Plumbing:

The Main Residence is served by a 2,000 gallon septic tank located east of the swimming pool. Water service is from the main well at the Pump House.

Heating and Air Conditioning:

In the east portion of the basement there are two oil-fired, forced air system furnaces (both circa 1998) that serve the original ductwork for heating supply. An air conditioning system that serves the dining room, living room and library on the first floor was added to the building in the late 1950s with a separate ductwork system. The AC unit, located in the Treasure Room, is a Chrysler model from the late 1950s that runs well water through a condenser. This unit is well maintained but beyond its service life. This AC unit uses R-22 refrigerant. A second, abandoned AC unit is located in the Storage Room on the attic. This system, which served the attic, and second floor bedrooms, failed and was taken offline in 2008. Window units now provide air conditioning on the second and third floors.

The hot-water heater for the Main Residence is oil-fired and acts as an “instant hot water” system. The water heater dates to the 1980s. It is in good condition but nearing the end of its service life.

Climate Control:

A functional circa 1958 dehumidifier serves the Playroom. This system, while well maintained, is beyond its service life.

ELECTRICAL CONDITIONS

Electrical Service:

The electrical service for the Main Residence comes into the house from the Pump Room. The house contains many electrical panels, not all of which are active. One panel is located at the top of the stair to the attic. The panels are a combination of fuse panels and circuit breaker panels. Wiring in the residence is from various time periods dating back to the original construction, and much of the wiring does not meet code.

Communications and Security:

The Main Residence has an active ADT security system with window and door contacts that is in good condition. The telephone system not currently functional. The original push button call system is a significant feature that remains intact.

Fire Protection:

There is currently no central fire suppression or fire alarm system in the Main Residence. The only fire protection provided in the Main Residence is from fire extinguishers and from a fire hose on the east porch, the condition of which is unknown.

CHAPTER 3:

CONDITION ASSESSMENT - OUTBUILDINGS



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CHAPTER 3: CONDITION ASSESSMENT - OUTBUILDINGS

OVERVIEW

This chapter discusses the current conditions and contributing building features for the Pump House/Garage, Gardener's Cottage, Greenhouse, Cold Frame, Pool House/Pool, and Beach House. Preservation treatments and guidelines for these significant features will be discussed in the following chapters.

EVALUATION OF SIGNIFICANCE

Each outbuilding feature was evaluated and determined to be either 1) Contributing (Very Significant), 2) Contributing (Significant), or 3) Non-Contributing. Due to the extensive Period of Significance that extends to the very recent past, overall, very few Non-Contributing features were noted. The Feature Checklist in Appendix A identifies the significance of every feature for each resource in the complex.

Contributing (Very Significant) – Character defining features that are related to the period of significance and have an exemplary degree of craftsmanship, originality, and/or connection to important historical figures, i.e. the Pattersons.

Contributing (Significant)- Character defining features that are related to the period of significance and have a good degree of craftsmanship, originality, and/or connection to important historical figures, i.e. the Pattersons.

Non-Contributing – Features outside the period of significance, or features within the period of significance (including original construction) that are without special craftsmanship, artistry, or connection to important historical figures, i.e. the Pattersons.

CONDITION ASSESSMENT

The following condition assessment criteria were used for the architectural elements: excellent, good, fair, and poor.

Excellent is defined as elements that perform their original function and require no renewal or repair.

Good is defined as elements that perform their original function and require only limited repair or renewal.

Fair is defined as elements with only minor or limited areas of failure. Elements would require some repair or corrective action.

Poor is defined as elements that only marginally function as originally intended. Deterioration or loss is more significant and significant repair work, partial replacement, or full replacement is required.

Quinn Evans and its consultants conducted field survey to assess condition and significance on the following days:

- June 20, 2012
- June 26, 2012
- June 28, 2012
- August 29, 2012

The investigations included visual observations, review of historic documentation, and interviews with facilities staff.

PUMP HOUSE/GARAGE

The Pump House/Garage was constructed in two phases. The one-story, gable roofed Pump House was built in 1933 to accommodate equipment for the water well that served the main residence, and a generator to provide electrical power during outages (see Figure 3.1). In 1959, a 1-1/2 story Garage was added on the north side of the Pump House, providing additional garage space as well as chauffeur's quarters on the upper floor. The Pump House and Garage, standing opposite the attached three-car garage, define the north side of a parking court.

OVERALL MASSING

The Pump House/Garage measures approximately 33 feet wide by 19 feet deep. The original Pump House has a gabled roof running east to west. The Garage addition has a gable roof that runs from north to south. Like the Main Residence the walls are constructed of brick, Flemish bond. Access to the Pump House is from the south, through a nine light wood door (see Figure 3.2). The Garage can be accessed via either the garage door or a wood pedestrian door at the second floor via the north elevation. There are two gabled dormers at the east and west roof slopes of the Garage addition, with 6/6 wood double-hung windows. Another 6/6 wood double hung window is located on the east elevation. Finally, a small Tool Shed room is located at the southwest corner of the Pump House, accessed only from the exterior via a batten wood door.

EXTERIOR CONDITIONS

Summary:

Overall conditions of the Pump House/Garage's significant exterior features are generally fair. Some masonry and concrete deterioration was observed, and the gutters are bent in some locations.

Walls (brick):

The original pump house features an exterior brick masonry façade with brick and terra-cotta masonry substrate whereas the garage addition features a brick façade with a brick and concrete masonry substrate. The walls of the Pump House/Garage are contributing (significant) features. They are in fair condition with some open and deteriorated mortar joints. Step cracking on the west wall above the gable window is present (see Figure 3.3). The cause could be from the rusting of the lintels which are exposed. At the garage door, there are a few bricks that have cracked and spalled (see Figure 3.4).

Foundations (concrete):

The foundations are non-contributing features. They are in fair/poor condition. There is some visible horizontal cracking at the garage addition.

Dormers (wood, painted):

The dormers with their 6/6 windows are contributing (significant) features. They are in fair condition with minor instances of wood deterioration and paint failure.

Roof (slate):

Slate roof tiles match the Main Residence slate roof. The original slate roof is a contributing (very significant) feature. Throughout the years the original slate has been patched as required, the roof is currently in fair/poor condition. There are some chipped pieces of slate and bent snow guards.

Trim (wood, painted):

The wood trim is a contributing (very significant) feature. It is in good condition. It appears that the trim has been painted recently.

Gutters and downspouts (copper):

The gutters and downspouts are contributing (significant) features. They are in fair condition. The gutters are bent and filled with vegetation.

Windows (wood, double-hung):

The windows are contributing (very significant) features. They are in fair condition. There is some rotten wood and flaking paint.

Doors, entrances and garage (wood, painted):

The doors are contributing (very significant) features. They are in good/fair condition. There is some wood rotting at the bottom of the pedestrian doors on the north elevation. The garage door is in good condition. The hardware is original and functioning. The entrance to the pump house has a non-original lock. The steps to the attic are unstable.

Exterior lighting:

The one exterior light fixture is a non-contributing feature. It is in good condition.

Plantings:

There are two small half round planting beds at the north elevation and a brick border adjacent to the driveway. These are contributing (significant) features. They are in fair/poor condition.

Site Walls (brick):

The brick site walls between the Garage and Main Residence are a significant feature. They are in good condition. There is some minor biological growth and a chipped brick a the north wall.

EXTERIOR PHOTOGRAPHS



Figure 3.1. Pump House/Garage, view looking northwest (QEA, 2012). Original Pump House in foreground, Garage addition at right.



Figure 3.2. Pump House/Garage, entrance door to Pump House, south elevation (QEA, 2012).



Figure 3.3. Pump House/Garage, step cracking at gable window, west elevation (QEA, 2012).



Figure 3.4. Pump House/Garage, damaged brick wall to north of garage door (QEA, 2012).

PUMP HOUSE/GARAGE INTERIOR

The interior of the Pump House/Garage consists of the Pump Room, Tool Room, and Transformer and the adjacent Garage on the first floor. An Attic level houses the chauffeur's quarters.

SPATIAL LAYOUT

The Pump House consists of three rooms. The main space, Pump House 103 from which the Transformer 102 room is accessed. A portion of the Pump House floor is sunken, the pumping equipment is located here. The Tool Room 104 does not relate spatially to the Pump House 104 as it is accessed only from the exterior.

INTERIOR CONDITIONS

Ceiling (concrete, gypsum wallboard):

Most rooms in the Pump House/Garage have exposed wood framing with no ceiling. The concrete ceiling in Transformer Room 102 is a contributing feature in good condition. In the Attic 201, there is a gypsum board ceiling (see Figure 3.5). The ceiling slopes practically to the floor. It is a non-contributing feature in good condition.

Walls (exposed brick, structural clay tile):

Typically, the walls are exposed structural clay tile with bands of brick or concrete masonry units with bands of brick (see Figure 3.6). They are contributing features in good condition. There is a very short painted plaster knee wall in Attic 201. It is a non-contributing feature and appears to be in good condition (the short wall was difficult to survey due to obstructions).

Windows (wood, painted):

The 6/6 double-hung wood windows are contributing (significant) features. They are in good condition.

Doors (wood, painted):

Pedestrian doors at the north and south elevations, as well as the garage door at the east elevation are contributing (significant) features. A thick metal door to the Transformer Room 102 is a contributing feature. All doors are in fair condition.

Flooring (concrete):

The concrete floor(s) are non-contributing features. The wood floor in Attic 201 is a contributing (significant) feature. All are in good condition except for the floor in Garage 101 which is in fair condition.

Lighting:

The interior light fixtures are contributing (significant) features. They are in good condition.

STRUCTURAL CONDITIONS

Exterior:

Localized cracked and displaced mortar and brick is present above all windows due to corrosion of embedded steel lintels. This condition is identical to that observed on the exterior of the main residence. Cracking was also observed in the exterior parging course at the base on the west façade of the building. This type of cracking could be the result of moisture infiltration and the freeze/thaw cycle. Brick spalling was noticed at the north jamb of the garage door. The pattern and location of the spalled areas appears to correlate with the corrosion of the garage door anchorage and/or vehicular impact.

Interior:

Limited deterioration was noted on the interior of the Pump House; however a ½" open vertical crack was discovered where the tool room was toothed into the remainder of the pump house. This type of structural distress suggests that this toothed portion of the tool room is rotating away from the rest of the structure, potentially due to localized ground settlement.

MECHANICAL CONDITIONS

Plumbing:

The Pump House includes the original well pump for the water service to the Main House and Pool House.

Heating and Air Conditioning:

The Pump House/Garage does not have a mechanical system for HVAC.

Climate control issues:

Lacking a heating and cooling system, the Pump House/Garage relies solely on passive methods of cooling and ventilation to temper heat build up during the summer.

ELECTRICAL CONDITIONS

Electrical service:

A 240 volt service is located at the Pump House/Garage serves the Pump House/Garage and Main House. Two meters are located on the north side of the Garage, one of which is active. The active meter is connected to the feeder that goes through the garage and into the Pump House. This feeder continues to the Main House. The Pump House/Garage has multiple panel boards, some with fuses and others with circuit breakers. Most of the wiring appears to be original Bx, which is two-wire that does not meet current code.

Communications and Security:

There are no communication nor alarm systems at the Pump House/ Garage.

Fire Protection:

There is currently no central fire suppression or fire alarm system in the Pump House/Garage

INTERIOR PHOTOGRAPHS



Figure 3.5. Pump House/Garage, Attic 201, view looking south (QEA, 2012).



Figure 3.6. Pump House/Garage, Transformer Room 102 (QEA, 2012).

GARDENER'S COTTAGE EXTERIOR

The Gardeners' Cottage has not always functioned as such. The structure was originally constructed in 1934 to house Chickens, Dogs, and Pheasants with a small apartment for the animal caretaker attached. In 1951, the original structure was converted into the Gardeners' Cottage. Two additional bedrooms, a kitchen and bath were added to the original building. The garage was added at a later, unknown, date (see Figure 3.7).

OVERALL MASSING

The Gardener's Cottage measures approximately 80 feet wide by 40 feet deep. Added onto over time, the various roofs are gabled. With the exception of the 1 1/2 story Garage, the Cottage is one-story. There are two chimneys, the larger of the two is located in the kitchen. The second relates to the Tool Room. Primary access to the cottage is via the east elevation. The south entry is inhibited by overgrown vegetation. The Cottage and the Garage are separated by the Tool Room. A small covered porch is located at the southeast corner of the cottage.

EXTERIOR CONDITIONS

Summary:
The overall conditions of the contributing (significant) exterior features at the Gardener's Cottage are poor. The exterior siding is in poor condition with extensive paint failure. Roofing appears to be in poor condition.

Walls (brick, wood siding):

The walls of the Gardener's Cottage are contributing (significant) features. The one brick wall appears to be in good condition with some biological growth near grade. The majority of the walls have wood-lapped siding that is in poor condition. The paint is failing on every elevation such that bare wood is exposed. Biological growth also covers a good portion of two walls adjacent to the retaining wall and along the lower portion of the west elevation (see Figure 3.8).

Foundations (concrete):

The concrete foundations are non-contributing features. They are in fair condition. Small cracks were observed where the foundation wall steps up along its length.

Roof (asphalt shingles):

The roof is a non-contributing feature. The asphalt shingles are in poor condition. Debris on the roof contributes to the roof deterioration.

Chimneys (brick, metal sheathing):

The chimneys are contributing (significant) features. They are in fair condition. The brick chimney has spalling and deteriorated bricks however the mortar joints seem to be in good condition. The metal wrapped chimney has a rusted chimney cap.

Trim (wood):

The wood trim around the eaves, windows, and other openings are contributing (significant) features. As with the wood siding, the trim is also in poor condition and rotting due to paint failure. Additionally, there is missing trim at both sides of the garage door that has exposed the wood framing and sheathing.

Gutters and downspouts (aluminum):

The aluminum k-style gutters and downspouts are non-contributing features. They are in poor condition. They are non-functioning due to the vegetation that has accumulated and grown in the gutters.

Windows, double-hung and casement (wood, aluminum):

The variety of double-hung and casement windows are contributing (significant) features. Some have triple-track aluminum storm windows. The windows are in poor condition, exhibiting missing paint and wood rot in some locations.

Shutters (wood) and hardware (metal):

Many of the windows have exterior wood shutters, held open by shutterdogs. The shutters and associated hardware are contributing (significant) features. Like the wood siding, the shutters are also in poor condition due to paint failure and some rotted wood. There is also some missing hardware.

Doors, entrance, screen, and garage (wood, painted):

There are five wood entrance doors plus a garage door. Three of the doors have aluminum screen doors. The doors are contributing (significant) features. The doors are in fair condition. The garage door has a good deal of paint failure similar to the wood siding and trim.

Porch (wood):

The wood porch is a contributing (significant) feature. It is in poor condition due to visible wood rot at the columns and peeling paint.

Exterior lighting:

The spot lights are non-contributing features. They are in fair condition.

Walkway (brick) and porch paving (brick):

The brick walkway and brick paving at the porch are contributing (significant) features. They are in fair condition.

Lightning protection:

The lightning protection is a non-contributing feature. It is in fair condition. There are numerous bent conductors.

EXTERIOR PHOTOGRAPHS



Figure 3.7. Gardener's Cottage, east elevation (QEA, 2012).



Figure 3.8. Gardener's Cottage, north elevation (QEA, 2012). Note the brick retaining wall at right as well as biological growth at wood siding.

GARDENER'S COTTAGE INTERIOR

The Gardener's Cottage comprises a living room, dining room, kitchen, five bedrooms, their adjacent closets, two bathrooms, a tool room, and a garage. In general, the interior elements are contributing features. Nearly all are in poor condition due to mold growth and deteriorated surface finishes. The following paragraphs will summarize the character-defining elements and their conditions found throughout the Gardener's Cottage. Refer to the Feature Checklist for an expanded list of features with their significance and condition on a room by room basis.

SPATIAL LAYOUT

The interior spatial organization of the Gardener's Cottage, like the building's exterior, has evolved over time. As a result, the spatial layout is complicated. From the main entrance at the east elevation one immediately enters the Kitchen 107. Hallway 109 extends north providing access to Bath 2 108, Bedroom 4 110, and Bedroom 5 111. Access to Bath 1 104, Bedroom 1 101, Bedroom 2 102, is through Bedroom 3 105 and Living Room 106. There is a second entrance at the south elevation of the Cottage, however, it is currently inhibited by overgrown vegetation. From this entrance Bath 1 and Bedrooms 1-3 are accessed from a central corridor, however, access to the Kitchen is still via the Living Room. The Tool Room 112 and Garage 113 can only be accessed from the exterior.

INTERIOR CONDITIONS

Summary:

The overall conditions of the significant interior features in the Gardener's Cottage are poor. With no active HVAC system, the interior is deteriorating.

Ceilings (plaster, painted):

The plaster ceilings throughout the Cottage are non-contributing features. All are in poor condition except for the ceilings in Bedroom No. 1 and Bedroom No. 2 due to peeling paint, water damage, and mold growth (see Figure 3.9). The ceiling in the kitchen is in particularly poor condition along the edge of the chimney where it appears that the roof flashing has failed, hence water has infiltrated (see Figure 3.10). The garage does not have a finished ceiling.

Walls (plaster, painted):

The plaster walls throughout the Cottage are non-contributing features. All are in poor condition due to peeling paint and a significant amount of mold growth. These areas of mold growth correspond with locations of inadequate ventilation or locations where the interior wall is set below the exterior soil grade. This

creates a cool moist surface in which the mold is able to thrive. Bath No. 1 has ceramic tile and is in poor condition. The garage does not have finished walls.

Decorative trim (painted, stained):

The decorative trim (typically baseboards, window and door casings) throughout are non-contributing features. It is also in poor condition. There are sections of very deteriorated rotten baseboards with mold growth.

Windows (wood, painted):

The wood windows are contributing (significant) features. They are in poor condition with deteriorated wood and paint observed.

Doors (wood, painted):

The wood doors are contributing (significant) features. Generally, they are in poor condition.

Flooring (VAT, VCT, carpet):

All flooring types are non-contributing features. All are in poor condition due to mold growth, deterioration, soiling, water damage, and debris. The garage has a concrete floor that is in fair condition.

Lighting:

The light fixtures are typically ceiling fans with a light fixture and wall-mounted sconces in the bathrooms. They are non-contributing features in fair condition.

STRUCTURAL CONDITIONS

The cottage is wood-framed with 2x4 studs spaced at 16” on center. The building is clad with 1” horizontal sheathing boards on top of 1” diagonal tongue and groove sheathing boards. The asphalt shingled roof is supported by 2x6 wood roof rafters spaced at 24” on center.

Exterior:

There is heavy vegetation growth in all gutters due to improper drainage, and peeling paint on all exterior sheathing. Debris accumulation on the roof surface from the surrounding trees may have built up within the gutters, preventing them from draining properly. A disconnected gutter downspout was noted at the northeast corner of the garage; however the inlet location from the

roof gutter appeared to be blocked by debris. Several locations along the roof display picked up shingles and penetrations with inadequate flashing. These areas may serve as a source of water infiltration to the interior of the cottage. Improper flashing (wood lumber) was located on the south face of the kitchen's chimney, leading to water infiltration on the interior of the structure. The east facing porch was generally in sound condition with a few members exhibiting earlier signs of rot and deterioration. Two brick masonry retaining walls located on the east side of the cottage displayed horizontal deflection accompanied by diagonal cracking potentially due to an unbalanced lateral soil pressure.
Interior:

Small cracks were observed on the interior face of the low foundation wall. These cracks occurred at the location of vertical steps in the wall height, ideal locations for stress concentrations.

MECHANICAL CONDITIONS

Plumbing:

Water for the Gardener's Cottage is provided from the Pump Room in the Garage, but the water line is broken, so the building does not have active water service. A 1,500 gallon septic tank serves the Gardener's Cottage.

Heating and Air Conditioning:

A single, oil-fired boiler provided heating in the Gardener's Cottage. The heating system is 2-pipe hydronic with terminal units through the building. The boiler was replaced sometime in the 1990s. This heating system is no longer active.

Climate Control:

Lack of heating and any ventilation has caused significant climate control issues in the Gardener's Cottage, as evidenced by the mold growth throughout the interior.

ELECTRICAL CONDITIONS

Electrical service:

Electrical service to the Gardener's Cottage is from an underground electrical line (UGE) connected to the main feeder in the Main Residence. The electrical system is 120/240 volt with 100-150 amp service at a single panel.

Communications and Security:

There are no communication nor alarm systems at the Gardener's Cottage.

Fire Protection:

There is currently no central fire suppression or fire alarm system in the Gardener's Cottage.

INTERIOR PHOTOGRAPHS



Figure 3.9. Gardener's Cottage, Bedroom No. 1 101, while the ceiling is in fair condition the floor tiles are vinyl containing asbestos and the east elevation shows signs of water damage (QEA, 2012).



Figure 3.10. Gardener's Cottage, Kitchen 107, failed flashing at the chimney has caused significant water damage to the ceiling below (QEA, 2012).

GREENHOUSE

To the north of the Gardener's Cottage is the Greenhouse, which was added in 1952. The structure features a prefabricated aluminum frame produced by the Lord and Burnham company, which sits atop an 8" nominal concrete masonry unit (CMU) wall and contains a cast-in-place concrete slab on grade (see Figure 3.11).

EXTERIOR & INTERIOR CONDITIONS

The foundation, concrete masonry unit walls, aluminum frame enclosure (including doors), and concrete slab floor are all contributing (significant) features. In general, they are in fair/poor condition. The walls have some biological growth. There are a few cracks through the mortar joints that extend through the parging on the top of the wall. The parging has broken off in a couple places. The frame is missing a significant amount of glazing (see Figure 3.12). The glazing that is still intact is probably at risk of falling out. The earth beds are no longer existing. They have been replaced by wood tables that are severely rotten. There is a large amount of overgrown vegetation inside the Greenhouse.

STRUCTURAL CONDITIONS

Structure:

Overall, the Greenhouse frame appears in sound structural condition. The CMU base displays minor cracks and open mortar joints, as well as slight spalling on the face of the units.

MECHANICAL CONDITIONS

Plumbing:

The Green House does not have a plumbing system.

Heating and Air Conditioning:

A small boiler originally provided heat in the Green House, but the boiler was removed at an unknown date.

ELECTRICAL CONDITIONS

Electrical service:

The Green House was originally served by an underground electrical line (UGE) that is no longer functioning. The UGE is most likely connected to the main service feeder in the Garage.

Lighting:
N/A

Communications and Security:
N/A

EXTERIOR PHOTOGRAPHS



Figure 3.11. Greenhouse, view looking south, Gardener's Cottage in background (QEA, 2012). Note the overgrown vegetation inside the structure.

INTERIOR PHOTOGRAPHS



Figure 3.12. Greenhouse, door, north elevation (QEA, 2012). Note the significant amount of missing glazing.

COLD FRAME

The brick base for what used to be a Cold Frame is located to the southeast of the Gardener's Cottage (see Figure 3.13).

EXTERIOR AND INTERIOR CONDITIONS

The brick walls and their foundations are contributing (significant) features. The original superstructure no longer remains. The brick wall is in poor condition. There are vertical cracks extending through brick and mortar joints, mismatched mortar replacement, loose bricks, and open mortar joints (see Figure 3.14). There is some existing parging on top of the brick wall that is broken and deteriorated. The condition of the foundation is unknown as it is located below grade and not visible. It is assumed that the condition is also poor.

STRUCTURAL CONDITIONS

The Cold Frame contains several locations of loose brick and mortar loss between the individual wythes. Several through wall cracks have developed at various locations along the cold frame's base measuring ¼" to ¾" wide. These cracks and areas of loose mortar are most likely caused by a number of factors stemming from continued water infiltration permitted by the open mortar joints at the top of the wall. After water is able to penetrate into the substrate, further deterioration is afforded by freeze/thaw and corrosion and voluminous expansion of the embedded steel anchorages left in place from the original frame.

MECHANICAL CONDITIONS

Plumbing:
N/A

Heating and Air Conditioning:
N/A

ELECTRICAL CONDITIONS

Electrical Service:
N/A

Lighting:
N/A

Communications and Security:
N/A

PHOTOGRAPHS



Figure 3.13. Cold Frame, view looking south, Triangle Garden in the distance (QEA, 2012).



Figure 3.14. Cold Frame, vertical crack at north wall (QEA, 2012).

POOL HOUSE EXTERIOR & POOL

The Pool House and Pool are located to the east of the Main Residence. The Pool House is made up of three distinct spaces, the Pump Room, used to house various pool equipment, and the Men's and Women's changing rooms and restrooms. A wood pergola faces the Pool and acts as a shelter from the sun.

OVERALL MASSING

The Pool House is a one-story frame building with horizontal board siding. The south slope of its gable roof extends to create a deep overhang facing the pool. A wooden pergola spans this area, shading a brick patio; a brick walkway extends to the pool (see Figure 3.15). At the north elevation there is a single centered entrance to the Pump Room 104. The south elevation consists of three 6/6 wood, double-hung windows. Entrances to the Men's and Women's changing rooms are accessed via the east and west elevations by a single pedestrian entrance. Small awning windows are located high at the gabled ends of the east and west elevations, for ventilation.

EXTERIOR CONDITIONS

Summary:

The overall conditions of the Pool House features are fair. Roofing and siding are in fair and poor condition respectively. The overall conditions of the significant Pool features are good.

Walls (wood siding):

The wood siding is a contributing (significant) feature. It is fair/poor condition (see Figure 3.16). The siding on the west elevation is severely warped (see Figure 3.17). At some locations, the wood has rotted away from the nails and has pulled loose from the diagonal sheathing. There was evidence of deteriorated tar paper under wood siding.

Foundations (concrete):

The concrete foundation is a non-contributing feature. It is in good condition with limited biological growth present.

Roofing (asbestos cement):

The roof is a non-contributing feature. It is in poor condition (see Figure 3.18). The asbestos shingles are deteriorating and moss is growing on many portions of the roof. Roof flashing is also in poor condition.

Trim (wood):

The wood trim is a contributing (significant) feature. It is in fair condition. The trim is void of paint, it may have been painted. Along the north elevation, there is a large split and insect damage at the rake boards.

Windows, double-hung (wood):

The 6/6 double-hung wood windows along the north elevation are contributing (significant) features. They are in poor condition with paint loss/failure and wood rot visible.

Shutters (wood) and hardware (metal):

The shutters and their associated hardware are contributing (significant) features. They are in poor condition due to paint deterioration and shutters that are missing. Some of the slats are broken and missing.

Doors (wood, entrance, screen):

The wood plank door to the pump room and the two wood doors with screens and 12-lite casement sashes into the Men's and Women's rooms are contributing (significant) features. They are in fair condition. The screen doors no longer have any paint. There is some biological growth on the east door to the Men's room. The hardware is rusting.

Pergola (wood):

The wooden pergola is a contributing (very significant) feature. Its condition is poor. The wood trellis and the posts are deteriorating. Many of the trellis rafters show water staining and deterioration as well as biological growth (lichen, algae, and mold).

Exterior Lighting:

The two copper wall sconces are contributing (significant) features. They are in good condition. They have heavy oxidation.

Paving (brick, stone):

The brick paving under the pergola is a very contributing (significant) feature. It is in poor condition. It is not level and the stone edging pavers are out of their original alignment.

EXTERIOR PHOTOGRAPHS



Figure 3.15. Pool House, south elevation, wooden pergola provide shade to the brick patio below (QEA, 2012).



Figure 3.16. Pool House, north elevation (QEA, 2012). Note deteriorated condition of roof, missing shutters, and poor window conditions.



Figure 3.17. Pool House, west elevation siding (QEA, 2012). Note wood siding has rotted away from nails and pulled loose.



Figure 3.18. Pool House, north elevation, roof (QEA, 2012). Note deteriorating asbestos shingles, covered in moss.

POOL HOUSE
INTERIOR

SPATIAL LAYOUT

The Pool House consists of three primary rooms: a central mechanical room that houses pool equipment, Ladies' and Gentlemen's changing rooms on either side. Each changing room includes a small water closet and a shower.

INTERIOR CONDITIONS

Summary:

Overall the conditions of the Pool House's features are fair. Exposure to the weather have contributed to the deterioration of the siding, roofing, and windows.

Ceilings:

There are no finished ceilings in the Pool House. The roof rafters are exposed. This is a contributing (significant) feature. They are in good condition.

Walls (wood):

The walls in the Pool House consist of a variety of wood boards/ planks and the exposed sheathing (see Figure 3.19). In the changing rooms there are vertical boards that extend one story in height (see Figure 3.20). Above, the wall surface is horizontal siding. The walls are in good condition and a contributing (significant) feature.

Windows (wood);

The 6/6 double-hung windows and 4-paned hopper window in the gable are contributing (significant) features. They are in poor condition. The 6/6 window in the Men's Changing Room has a rotten wood sill and casing where it meets the sill.

Decorative trim (wood):

At the top of the partition wall between the changing rooms and lavatories is a carved wood cornice with a wave design. There are small built-in shelves with mirrors above on the opposite wall in the changing rooms. Along the wall shared with the Pump Room there are towel hooks and wood shelves hung on the wall. The decorative trim is a contributing (significant) feature. They are in good condition. The built-in shelves have debris on them.

Doors (wood, painted):
The interior doors consist of the doors to the lavatories which are made of the same vertical wood paneling as the wall so as to disappear into the wall. They are contributing (significant) features. They are in good condition. There is no visible rot and they are operable. The hardware looks original (except for a newer lock) but it is rusted.

Flooring (brick):

The brick flooring in a herringbone pattern is a contributing (significant) feature. Around the perimeter of the shower rooms, there is a raised brick sill. It is in good condition. There is debris and some soiling but the mortar joints look good.

Lighting:

The lighting in the Pool House is a contributing (significant) feature. There is a metal wall sconce in each changing room. If there was a shade for the bulb, it is now missing. The metal is rusting. The sconce in the Women's Changing Room has a candle cover but no bulb. They are in fair condition.

STRUCTURAL CONDITIONS

The Pool House is wood-framed with 2x4 studs at 16" on center. Extending from the south façade of the building is a wooden pergola constructed of 2x6 joists at 16"± on center which are supported by 5x5 timber posts. The Pool House is clad with 1x8 horizontal sheathing boards on top of 1" tongue and groove diagonal sheathing boards with a layer of tar paper set between the two layers of sheathing. These shingles are set on roofing boards which are supported by 2x6 rafters spaced at 16" on center.

Exterior:

Leaves and branches from the surrounding trees, as well as moss and small vegetation have accumulated atop the roof of the Pool House. The existence of moss on the roof surface signifies the presence of moisture within the structure. Beneath the vegetation, the asbestos roof shingles were in poor condition showing signs of deterioration from years of weathering. A number of exterior horizontal sheathing boards appear to be warped due to prolonged exposure to moisture. The distortion of the members' original cross sections has caused them to pry away from the face of the structure

exposing the underlying tar paper and diagonal tongue and groove sheathing boards. Where exposed, the tar paper between the two layers of sheathing has deteriorated. Framing members of the pergola, which tie back into the stud framing of the pool house, exhibit a large amount of rot, deterioration, and insect borings. The 2x6 pergola rafters also display loss of section and signs of water infiltration under the main roof projection, providing a poor bearing area for the curvilinear roof rafter outriggers. In addition, the supporting timber posts displayed vertical splits along the grain at their base. The onset of rot and splits forming along the grain of wood members is associated with the presence of moisture as expected in a shaded, damp environment. The swimming pool, while covered, is currently hold water with no known leaks. The perimeter walkways were observed to have localized open mortar joints.

Interior:

The interior sill plates and stud and timber framing of the mechanical room of the pool house were sounded for their structural integrity. Sounding revealed that the built up sill plate surrounding the base of the pump room has completely deteriorated due to rot and moisture infiltration. Although the exterior faces of the timbers and stud framing inside the Pool House were sound, rot may have developed within the interior portion of the members as a result of frequent flooding and saturation. An open crack in the slab was noticed at the entrance to the pump room. This crack appears to be 1/8” in depth and extends approximately 4’. Being that this crack originates near recently installed piping that penetrates the slab, it is most likely the result of the pipe installation or refinishing of the concrete surface.

MECHANICAL CONDITIONS

Plumbing:

The Pool House has toilets and showers. They are contributing features. Water service at the Pool House was originally from a dedicated well, but this was abandoned at an unknown date and replaced with service from the well that serves the Main House. The Pool House is connected to the same septic system used by the Main House.

Heating and air conditioning:

The Pool House does not have a mechanical system for HVAC. A filter system for the pool dates to the 1970s.

Climate control issues:

It is unknown if there are any climate control issues. At the time of the inspection, all the windows were open leading one to believe there may be a ventilation issue.

ELECTRICAL CONDITIONS

Electrical service:

Electrical service to the Pool House is via an underground electric line (UGE) from the Garage. The service is estimated to be an 80 amp service. The electrical service failed in 2011 and has not been repaired.

Communications and Security:

The Pool House and Pool do not have any communications or security systems.

Fire Protection:

There is currently no central fire suppression or fire alarm system in the Pool House.

INTERIOR PHOTOGRAPHS



Figure 3.19. Pool House, Pump Room 104, view looking north (QEA, 2012).



Figure 3.20. Pool House, Men's Changing Room 101, southwest corner (QEA, 2012). Note decorative "wave" detail at the southern wall.

POOL

The concrete in-ground swimming pool was constructed in 1934 and is reportedly the first private swimming pool in Calvert County, MD.[1]

Located to the south of the Pool House and to the east of the Main Residence, the pool measures 60'-0" in length by 30'-0" in width. At the pool edge there is a 3'-0" flagstone border, flagstone extends to almost 15'-0" at the south end providing a paved area around the pools diving board. The reinforced concrete pool varies in depth from 4'-0" to 9'-6". Built-in ladders at the north and south ends provided access in and out of the pool. Light fixtures illuminated the pool after dark. In 1966 concrete steps and a handrail were installed at the northeast corner of the pool.

EXTERIOR CONDITIONS

The pool is overall in good condition. The railing at the pool stairs is no longer extant. There are some chipped and cracked stones at the flagstone border. JPPM staff noted that a major rehabilitation to the swimming pool was completed prior to the creation of the Park, between the years of 1972-1983.

STRUCTURAL CONDITIONS

A visual inspection of the pool was conducted by both the architects and structural engineers. The swimming pool was found to be in good condition and a further structural investigation was deemed unnecessary.

MECHANICAL CONDITIONS

All equipment for the pool is located in the Pool House, Pump Room 104. The existing pool equipment dates to 1974.

ELECTRICAL CONDITIONS

The pool was well maintained until 2011 when the underground electrical service to the Pool Pump House was damaged. Park staff noted that the underground utilities are in all probability not well protected, causing the original electric line to fail. With the electrical service disconnected the pool has been covered for over two years.

1 Historic Structures Report Phase 1, Jefferson Patterson Park and Museum, September 2011, page 14.

POOL PHOTOGRAPHS



Figure 3.21. Pool, view looking west towards the Main Residence (QEA, 2012).



Figure 3.22. Pool, view looking north towards the Pool House (QEA, 2012).

BEACH HOUSE EXTERIOR

The Beach House, located on the shore of the Patuxent River below the main house and gardens, was constructed in 1932. The building can be accessed by land via an extension of the drive past the main house. Originally, water access was provided by means of a pier (washed out in 2003).

OVERALL MASSING

The Beach House is a one-story gable roofed wood frame building with a chimney at the east elevation. The building measures approximately 22 feet wide by 25 feet deep. A small covered porch is located at the west elevation; an entrance into the Women's Dressing Room is provided here. At the east elevation, a screened-in porch faces the water (see Figure 3.22 and Figure 3.23). The entrance to the Men's dressing room is provided via the screened-in porch, a second entrance to the Women's dressing room through the screened-in porch is also provided (see Figure 3.24).

EXTERIOR CONDITIONS

Summary:

Overall the conditions of the Beach House's features are poor. Exposure to the weather and periodic flooding have contributed to the deterioration of the siding, roofing, windows, and structure.

Walls (wood siding):

The wood siding on all sides of the Beach House is a contributing (significant) feature. The siding's condition is poor. In many locations the siding is warped and has pulled away from the sheathing. To the right of the chimney, there is a plywood cover over what may be an opening. To the right of the plywood patch is some new siding which replaces siding that had a large hole in it in February 2012.

Foundations (concrete):

The concrete foundation is a non-contributing feature. It is in fair condition. Visible surfaces exhibit minor cracking.

Chimney (brick):

The brick chimney is a contributing (very significant) feature. It is in fair condition. The brick has weathered and in some areas is significantly eroded or has suffered spalling (see Figure 3.25). Minor step cracking was also observed at the first diagonal surface from the ground. Overall the mortar joints appear to be in good condition. In several locations repointing has been undertaken with mortar that does not match the original mortar in composition or tooling. In a few locations, individual bricks have been replaced.

Roof (asphalt shingles):

The asphalt shingled roof is a non-contributing feature. It is in fair condition. Near the chimney there is an area where incompatible shingles have been used to patch a small area.

Trim (wood):

The wood trim is a contributing (significant) feature. The flat board along the rake is cut at the end to match the profile of the eave trim. It is in fair condition. Similar to the siding, the wood trim has lost its paint coating.

Windows, double-hung (wood):

The windows are a contributing (significant) feature. They are in fair/poor condition depending on the window. Several are covered with plywood due to missing glazing, and some windows have broken stiles and muntins.

Shutters (wood) and hardware (metal):

The paint is peeling and faded (see Figure 3.26). Bare wood is exposed and somewhat deteriorated. Hardware is rusted. One of the shutters has been removed from one of the windows and is inside. The shutters and associated hardware are contributing (significant) features.

Doors, entrance and screen (wood):

There are three wood plank doors. The entrance door from the north has a set of painted shutters (see Figure 3.27). The other two exit onto the screened porch. The screen door for the porch is missing (see Figure 3.23). The hardware is rusted. The doors are in poor condition. The doors are contributing (significant) features.

Porches, entry and screened-in (wood):

There are two (2) porches at the Beach House, a small covered entry porch to the west and a screened porch to the south. Both are contributing (significant) features. A built-in wood plank bench is in the open porch. They are in fair/poor condition (see Figure 3.27). The open porch floor boards have collapsed near the bench and tree roots have unsettled the floor boards near the entrance. The screened porch is missing its screen. The paint on the wood stud framing is failing.

Exterior lighting:

A wall-mounted lantern is located in the open porch and between the hopper windows in the screened porch. The two fixtures are contributing (significant) features and are in fair condition.

EXTERIOR PHOTOGRAPHS



Figure 3.23. Beach House, northwest elevation (QEA, 2012).



Figure 3.24. Beach House, southwest elevation (QEA, 2012).



Figure 3.25. Beach House, screened-in porch, southeast elevation (QEA, 2012).

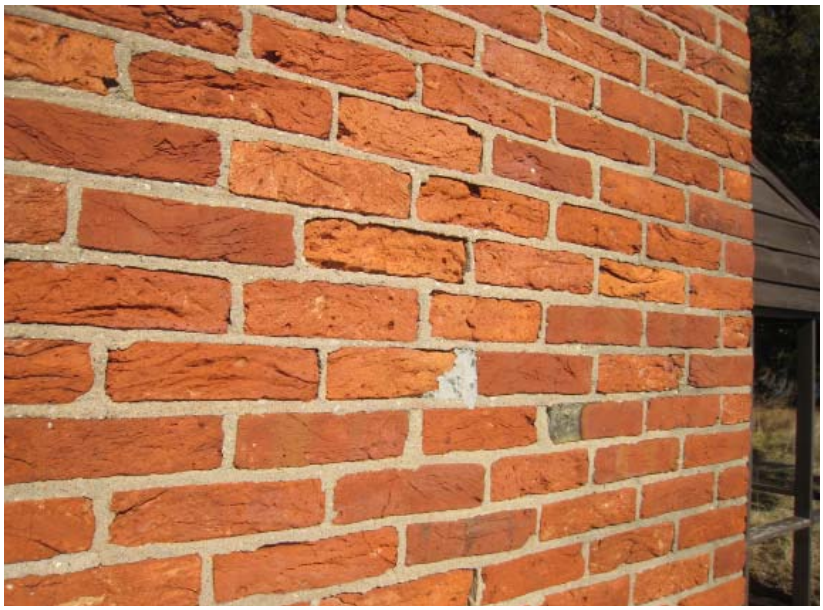


Figure 3.26. Beach House, detail photo of chimney, southwest elevation (QEA, 2012).



Figure 3.27. Beach House, detail of shutter, southwest elevation (QEA, 2012).



Figure 3.28. Beach House, covered porch, northwest elevation (QEA, 2012).

BEACH HOUSE
INTERIOR

SPATIAL LAYOUT

The interior of the Beach House consists of two guest/changing rooms, each with a lavatory (containing a water closet and sink) and shower. The exposed roof rafters allow the space above the lavatory and shower areas to be used as a loft for storage. A small covered porch is located on the west elevation and provides access to the women's changing room. On the east elevation is a substantial roof overhang that incorporates the screened-in porch. Access to both the Men's and Women's changing rooms are provided via the screened-in porch. Situated on the south elevation, the chimney is unique in that it has two hearths. With two flues, a fire can be enjoyed from either the Men's Changing Room, the beach, or both.

INTERIOR CONDITIONS

Summary:

Despite occasional flooding the interior features in the Beach House are in fair condition overall. Most of the interior wood features are in the poorest condition near the floor level due to water damage. The windows are in poor condition overall.

Ceilings (wood):

There are few finished ceilings in the Beach House. The roof rafters are exposed in the dressing rooms (see Figure 3.28). This is a contributing (significant) feature. They are in good condition. In the showers and lavatories there is a wood board ceiling (same material as the walls). This is a significant feature. They are in fair condition.

Walls (wood):

The walls in the Beach House consist of vertical wood boards that extend to one story in height. At the gable ends, horizontal wood boards extend from the top of the vertical boards to the peak of the roof. The walls are contributing (significant) features. They are in fair condition due to the water staining they have received (see Figure 3.29). There is a distinct water line at about 24" above the floor level. At the base of the wood boards there is more water damage.

Windows, casements and hopper (wood):

The casement windows in the dressing rooms and hopper windows in the lavatories and showers are contributing (significant) features. They are in poor condition. Nearly all the glass is missing from the windows. The hardware is rusted.

Decorative trim (wood):

At the top of the partition wall between the dressing rooms and the lavatories and showers is a carved wood cornice with a wave design. There are small built-in shelves in Dressing Room No. 1 and in the small closets. In the showers there are wood pegs on the doors to hang towels and a wood shelf under the hopper window. In the lavatories, there are wood towel rods, shelves, and toilet paper holders. The decorative trim is a contributing (significant) feature. They are in good condition. The built-in shelves have debris on them.

Doors (wood, painted):

The interior doors consist of the doors to the lavatories and closets which are made of the same vertical wood boards as the wall so as to disappear into the wall. They are contributing (significant) features. They are in fair/poor condition. As with the walls, there is water staining and water damage. The hardware is rusted.

Flooring (brick):

The brick flooring in a stacked pattern is a contributing (significant) feature. Around the perimeter of the shower rooms (but not at the door opening), there is a raised brick sill under the walls. It is in fair condition. There is a good deal of debris and soiling (see Figure 3.30).

Lighting:

The lighting in the Beach House is a contributing (significant) feature. There is a metal wall sconce with a candle cover and candelabra bulb in each dressing room along the interior partition. There is also a copper wall sconce with a more utilitarian white glass shade over the mirrors in the lavatories. These two types of fixtures are significant features. In the showers, there is a square surface ceiling mounted light fixture. It is a contributing feature. The metal for all the fixtures is rusting. They are in good condition.

STRUCTURAL CONDITIONS

The Beach House is wood-framed with 2x4 studs spaced at 16” on center. An asphalt shingled roof is supported by 2x6 wood roof rafters spaced at 16” on center. 2x4 ceiling joists spaced at 16” on center support the ceiling over the lavatory and shower areas.

Exterior:

When approaching the Beach House, it is apparent that the structure is sunken beneath the surrounding grade possibly due to building settlement or most likely the buildup of sand and sediment from repeated flooding events. Missing asphalt shingles were noticed near the chimney on the south edge of the roof, providing an entrance point for moisture. Brick on all faces of the chimney show signs of localized spalling from typical weathering events. An uprooted tree adjacent to the west porch has seemingly caused the wood porch deck to heave up along its west edge creating an uneven surface. Framing members of the screened-in porch were sounded with an awl to assess their structural integrity. The east porch's perimeter sill plate as well as the 6x6 timber posts exhibited localized areas of rot and deterioration as evident by the presence of splits and material softness. Beneath the screened-in porch, lays a brick paver patio. Brick pavers located along the patio's perimeter, in close proximity to an adjacent tree, have been pried upward due to root expansion from the tree.

Interior:

Generally, the interior of the structure appears in good condition. Open mortar joints were visible at the base of the chimney, and may have been the result of previous water infiltration. The most notable areas of deterioration were the sill plates located in the west closets of Dressing Room Number 2. Sills contained longitudinal splits at anchorage locations, and exhibited signs of soft wood material. In addition to their deteriorated condition, these sill plates were not properly supported at their base.

MECHANICAL CONDITIONS

Plumbing:

The building has two showers, two toilets with adjacent sinks, a monel sink, and a small water heater (see Figure 3.31). They are contributing features and are in fair condition. Water lines from the Pump Room in the Garage serve the Beach House, but the water service is not functioning. A dedicated septic tank serves the Beach House.

Heating and Air Conditioning:

The Beach House is not heated or cooled by an HVAC system.

Climate Control:

ELECTRICAL CONDITIONS

The Beach House is naturally ventilated to control its interior climate. Electrical service:

The electrical system at the Beach House is not functioning and has been out of service since at least 2000. Electrical service to the Beach House is a UGE system that is 220 volt, 70 amp service. A single panel is located in a small closet in the corner of Dressing Room Number 2. Wiring is assumed to be original and does not meet code.

Communications and Security:

There are no communication nor alarm systems at the Beach House.

Fire Protection:

There is currently no fire suppression or fire alarm system in the Beach House.

INTERIOR PHOTOGRAPHS



Figure 3.29. Beach House, exposed wood roof rafters in Dressing Room No. 1 101 (QEA, 2012).



Figure 3.30. Beach House, water staining at vertical wood board wall of Dressing Room No. 2 106 (QEA, 2012).



Figure 3.31. Beach House, debris and soiling at brick floor in Shower No. 2 105 (QEA, 2012).



Figure 3.32. Beach House, Lavatory No. 2 104 (QEA, 2012).

CHAPTER 4: CONDITION ASSESSMENT - LANDSCAPE



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CHAPTER 4: CONDITION ASSESSMENT - LANDSCAPE

OVERVIEW

This chapter discusses the current conditions and significance of the landscape character areas at the project site. Landscape character areas are defined by the physical qualities of a landscape combined with the type and concentration of cultural resources present. Preservation treatments and guidelines for these significant features will be discussed in the following chapters.

EVALUATION OF SIGNIFICANCE

The character defining features associated with each landscape character area were evaluated and determined to be either 1.) Contributing (very significant), 2.) Contributing (significant), or 3.) Non-Contributing. The Feature Checklist in Appendix A identifies the character defining features associated with each landscape character area.

Contributing features are character-defining features that are associated with the period of significance. Contributing landscape features that are indicated in the original designer's drawings and have a high level of integrity associated with those designs are indicated as "very significant." Other character defining features that were implemented prior to 1977 are annotated as contributing, significant.

CONDITION ASSESSMENT

The following condition assessment criteria were used for the landscape features: excellent, good, fair, and poor.

Excellent is defined as elements that perform their original function and require no renewal or repair.

Good is defined as elements that perform their original function and require only limited repair or renewal.

Fair is defined as elements with only minor or limited areas of failure. Elements would require some repair or corrective action.

Poor is defined as elements that only marginally function as originally intended. Deterioration or loss is more significant and significant repair work, partial replacement, or full replacement is required.

Quinn Evans and its consultants conducted field survey to assess conditions and significance on the following days:

- June 20, 2012
- June 26, 2012
- June 28, 2012

The investigations included visual observations, review of historic documentation, and interviews with facilities staff.

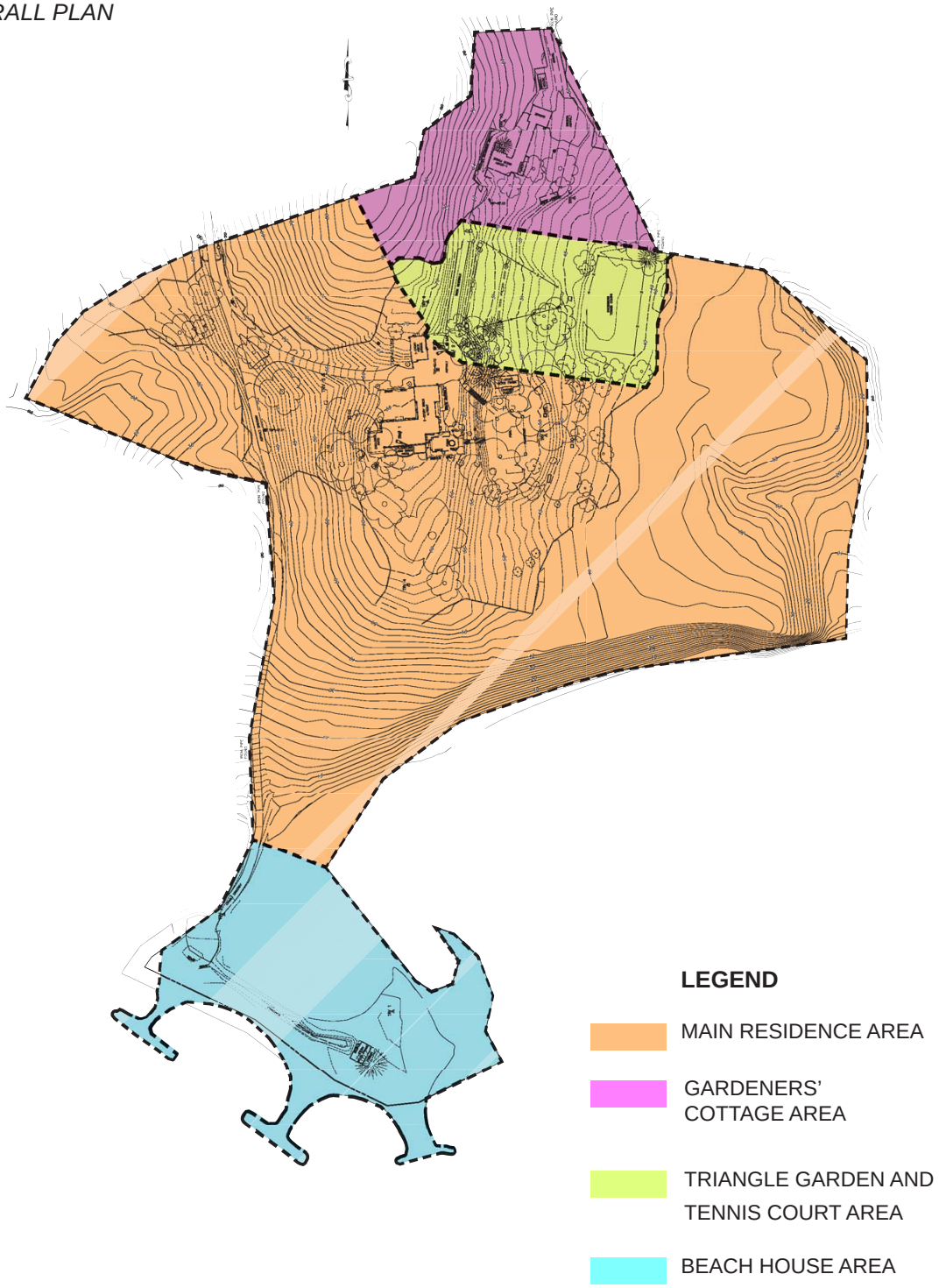
ASSOCIATED LANDSCAPES & ELEMENTS

The overall design of the landscapes within the Patterson Center demonstrate the influence of the English-style park landscape which was a hallmark of the American Country House. The residential complex is located at a distance from the working areas of the farm, and is approached by a drive that passes through a pastoral landscape and affords views of the Patuxent River.

CHARACTER AREAS

The Patterson Center's associated landscape and elements have been grouped into the following four (4) landscape character areas: the Main Residence area, Gardener's Cottage area, Triangle Garden and Tennis Court area, and the Beach House area. The character-defining features within these areas have been organized according to landscape characteristics. Landscape characteristics are the tangible and intangible aspects of a landscape that individually and collectively give the landscape its historic character and aid in the understand of its cultural importance. The landscape characteristics that are relevant to the Patterson Center's historic landscape include: natural systems and features, spatial organization, land use, cluster arrangement, circulation routes, topography, vegetation, structures (if not covered in the previous chapter), views and vistas, constructed water features, and small scale features.

OVERALL PLAN



MAIN RESIDENCE AREA

The Main Residence area consists of the lawns, plants, patios, views and other features around the Main Residence. Features also include the Enclosed Garden, driveway and entrance into the Patterson Center, landscape around the pool and Pool House, and the landscape around the Pump House / Garage, for example.

The house was sited to take maximum advantage of the sweeping river view, and various means, i.e. French doors opening onto the south terrace, and the west porch, were provided to connect the interior spaces with the outside. In addition, the Enclosed Garden at the southeast corner of the house functioned as an "outdoor room" and featured an octagonal fish pond.

NATURAL SYSTEMS, FEATURES, AND TOPOGRAPHY

The topography of the site and relation to rivers influenced the choice of this location for the development. The natural systems, features, and topography are contributing (very significant) features in good condition.

SPATIAL ORGANIZATION

The spatial organization of the Main Residence Area is a carefully designed arrangement of buildings, gardens, site walls, and other features. The spatial organization is a contributing (very significant) feature and in good condition.

LAND USE

Lack of historic residential use and related activities on the property reduce integrity slightly but continued maintenance of the landscape and gardens can help the landscape to represent its condition when historic land use occurred. The former open lawns and views that have been replaced by dense wooded areas do not reflect their historic land use. Land use for this area is non-contributing.

CLUSTER ARRANGEMENT

The buildings and outdoor spaces are carefully laid out to enhance relationships with and/or screen the various uses. Topography is used extensively for this purpose. Cluster arrangement is a contributing (very significant) feature and in good condition.

CIRCULATION ROUTES

There are several circulation routes around the Main Residence: the asphalt driveway, the flagstone path edged in brick at the north entrance, the flagstone south terrace (see Figure 4.1 and Figure 4.2) and Enclosed Garden.

Brick stairs at the NW corner of the Pool lead to the Main Residence parking area, these stairs are not shown as part of the original design. A second, original set of stairs leads from the Enclosed Garden down to Pool (see Figure 4.3). Additional brick walkways connect the Pool and Pool House and lead from the parking area to the east entrance of the Main Residence.

With a few exceptions, circulation routes are contributing (very significant) features and in good/fair condition. There are some bricks that are damaged, missing and loose mortar in some of the flagstone paving, and uneven surfaces of the brick paving at the Pool House.

TOPOGRAPHY

The Main Residence is sited at a high point to take advantage of views of the surrounding landscape and water. Also, the topography was skillfully utilized by the designer to assist in screening views of the more functional activities on the property. The topography is a contributing (very significant) feature and is in good/excellent condition.

VEGETATION

There are various areas of vegetation in the Main Residence area. These include the plantings around the Main Residence, the Pump House/Garage, the Pool House, the Enclosed Garden, and the masses of vegetation enclosing the lawns. Overall the vegetation is in fair/poor condition. See Appendix A for detailed information regarding the significance and condition of vegetation.

The plantings around the Main Residence are overgrown and in need of pruning and weeding. There is a dead tree on the south side of the residence (see Figure 4.4).The magnolia and the apple tree near the Pump House/Garage need to be pruned. The vine on the retaining wall near the Pump House/Garage may be impacting the wall.

Several significant mature trees are located around the Pool House. The magnolias were a wedding gift to the Pattersons. The willow oaks also date to the period of significance. Some mature trees around this building have large dead branches that need to be removed. Shrubs on east side of patio need maintenance. The three wood planters to the north and south of the Pool were added by caretakers/gardeners in the 1990s and do not reflect the character of the original landscape design.

The planting beds of the enclosed garden are in good condition. Some of the plants are in poor condition or are not appropriate for the garden (too large) and should be removed. Although some of the plants have changed, the overall original design of the planting beds is intact. The grass area of the enclosed garden is in fair condition.

The masses of vegetation between the house and the pool are much larger than originally designed. Vegetation masses include some invasive species that threaten native species including grape vines. Pruning is needed to restore historic views.

BUILDINGS AND STRUCTURES

There is a small shed to the east of the pool (see Figure 4.5). It has water pipes and a spigot. This shed is a contributing (significant) feature as it most likely dates to the period of significance. Its condition is poor.

VIEWS AND VISTAS

There are several contributing (very significant) views around the Main Residence looking out onto the surrounding landscape. From the entrance driveway, there is a view out to the Patuxent River. From the Living Porch (112), the river is seen again. Towards the south from the residence, only a small portion of what was once a much larger view out to the river is seen (see Figure 4.6). Additional views occur between the south terrace of the residence and the enclosed garden and from the pool and Pool House towards the south. These views are all contributing features. Most are in fair/poor condition due to the overgrowth of vegetation that reduces views of the river. The view between the terrace and Enclosed Garden is in good condition.

CONSTRUCTED WATER FEATURES

There are two constructed water features in the Main Residence Area, the in-ground swimming pool and the octagonal fish pond in the Enclosed Garden (see Figure 4.7). Both are contributing (very significant) features. The pool is in good condition. The fish pond is in good condition, as it was repaired as recently as July 2012.

SMALL SCALE FEATURES

There are several small scale features throughout the Main Residence Area. Nearly all of the small scale features are contributing (very significant) features. Exceptions are noted in the following text. See Appendix A for detailed information regarding the significance and condition of each feature. Most are in good/fair condition.

Features include several brick walls. The entrance into the Patterson Center is designated by brick entrance gates and a brick wall on the south side of the gates and east side of the driveway. In front of the residence, a low brick retaining wall creates a terraced lawn. Brick and stone walls extend from the Pump House/Garage to screen the parking court beyond. Brick stairs and landings are incorporated into the brick walls around the Pump House/Garage. The Enclosed Garden is surrounded by brick walls.

Additional small scale features include the wrought iron gate (1934) and the wood garden gate (1959) in the Enclosed Garden, three wood planters to the north and south of the pool, gravel between the Pool and Pool House, ladies and gentleman signs at the east and west of the Pool House (see Figure 4.8), and a well house to the west of the Main Residence.

The brick walls have vegetation growing on them. In particular, the ivy needs to be removed from the weep holes. There are some chipped and cracked masonry units. The brick retaining wall at the Linden tree (west side of the residence) is in poor condition. It is falling apart. The wrought iron gate is crooked. It has some cracking at the coping stone and peeling paint. The hardware of the wooden gate is operational but it is covered in layers of paint and does not close properly. The gravel next to the pool is a non-contributing feature. It is uneven and very loose. The signs by the Pool House have some rust. Installed in the 1990s by the caretakers/ gardeners, the wood planters are non-contributing features. The well house to the west of the Main Residence is a contributing (very significant) feature, see Figure 4.2. JPPM staff noted that the well, and well house pre-date the construction of the Main Residence. The well house is believed to have been rebuilt. It is noted to be approximately 60 feet deep and lined with brick. The opening is locked.

PHOTOGRAPHS



Figure 4.1. Brick entrance gates to the Patterson Center (QEA, 2012).



Figure 4.2. Entrance driveway to the Main Residence (QEA, 2012). Note well house at center left.



Figure 4.3. Brick stairs up to the Enclosed Garden (QEA, 2012).



Figure 4.4. Lawn at south side of Main Residence (QEA, 2012).



Figure 4.5. Small shed to the east of the Pool (QEA, 2012).



Figure 4.6. Lawn at south side of Main Residence (QEA, 2012).



Figure 4.7. Enclosed Garden, looking east (QEA, 2012).



Figure 4.8. Wood planters next to the Pool, north (QEA, 2012).

GARDENER'S COTTAGE AREA

The Gardener's Cottage Area is located at the north side of the project area. It extends from the Triangle Garden to the northern property line of the Patterson Center.

NATURAL SYSTEMS, FEATURES, AND TOPOGRAPHY

The design utilized topography (and possibly vegetation) and spatial organization to screen views of the cottage from the main residence and residential outdoor areas. The cottage is fairly large, but is nestled into the side of the hill. It is very well screened from view from the residential areas of the property. It is not clear how much woody vegetation was present historically, but today this adds to the screen between the two types of use. The topography is a contributing (very significant) feature and in good condition.

SPATIAL ORGANIZATION

The design of the property utilized patterns of circulation, topography, and vegetation to provide borders between various types of use areas. The cottage is situated lower and screened from the residence by a change in grade and vegetation. Also, the cottage is situated between the residential areas and the agricultural operations. The dedicated gardeners' entrance road minimizes circulation conflicts between service activities and residents/guests. The proximity of the triangular garden between the residence and the Gardener's Cottage is convenient for maintenance and pleasure. The spatial organization is contributing (very significant) and in good condition.

LAND USE

The land use of the Gardener's Cottage Area changed several times during the period of significance. An small apartment and attached structure originally housed chickens, dogs, and pheasants. In the 1950s the building was converted into a residence, the Gardener's Cottage. The current land use is still residential but the building is abandoned. The land use (lack thereof) is a non-contributing feature. The lack of residential use and related activities on the property reduce the integrity slightly but continued maintenance of the landscape and gardens can help the landscape to represent its condition when the historic land use occurred.

CLUSTER ARRANGEMENT

The relationship between the residence, driveway/workyard, and greenhouse is tight and functional. Work related features were not located in the front yard of the residence, as this was clearly viewed from the triangle garden. It appears that a domestic space for the caretaker may have been provided at the back of the house where the brick wall is located. The cluster arrangement is a contributing (significant) feature and in good condition.

CIRCULATION ROUTES

There are several circulation routes in the Gardener's Cottage Area. An asphalt/gravel driveway and parking area leads from the northern property line to the garage (see Figure 4.9). Brick paths lead from the driveway to the cottage and from the cottage to the Main Residence (see Figure 4.10). The circulation routes are contributing (significant) features in fair/poor condition. Vegetation is growing in the driveway and parking area. The broken asphalt of the driveway and parking area is filled with weeds. Some of the brick paths are barely discernible and covered with earth.

VEGETATION

There is minimal ornamental vegetation in the Gardener's Cottage Area. Two overgrown honeysuckles are at the south door, one mature cedar is to the west between the house and the retaining wall, and a few mature canopy trees are in the east "yard." The mature plants are contributing (significant). They are in fair condition. The shrubs against house should be pruned or removed. Vegetation in the coldframe bed is non-contributing.

VIEWS AND VISTAS

There are four primary views in the Gardener's Cottage Area: the view from the Triangle Garden to the Gardener's Cottage, the view from the cottage back to the Triangle Garden, the view to the east, and the view to the north. All of the views are contributing (significant) features and in fair/poor condition. The changes to the vegetation in the Triangle Garden and to the north of the garden have changed those views. The view to the east is much less expansive than it was originally, and the maintenance/boat storage facilities are now part of the view. The cultivated fields to the north reflect the original conditions and have not changed much since the period of significance.

SMALL SCALE FEATURES

There are a few small scale features in the Gardener's Cottage Area. Two brick walls extend from the west side of the cottage to create two small partially enclosed areas. The walls are contributing (significant) features and in fair condition. Vegetation is impacting one wall and some repairs are needed (see Figure 4.11). A wood retaining wall is set a few feet from the west side of the cottage. This is a non-contributing feature (see Figure 4.12). It is fairly new. It is probable that there was a retaining wall in this location prior to the construction of the current structure. An iron railing and a wood post with a light and exterior outlet are located at the start of the brick path leading past the Triangle Garden. While the iron railing is a contributing (significant) feature, the wood post is non-contributing, good condition. The railing is in fair condition and needs to be painted.

PHOTOGRAPHS



Figure 4.9. Gardeners Cottage, asphalt driveway and parking area (QEA, 2012).



Figure 4.10. Brick path to Gardener's Cottage (QEA, 2012).



Figure 4.11. Brick retaining wall at south end of the Gardener's Cottage (QEA, 2012).



Figure 4.12. Wood retaining wall behind the Gardener's Cottage (QEA, 2012).

TRIANGLE GARDEN AND TENNIS COURT AREA

The Triangle Garden and Tennis Court Area is located to the northeast of the Main Residence between the Pump House /Garage and the Gardener's Cottage. The Triangle Garden has a formal layout, with grapevines forming the outer diagonals converging at a stone well at the base of the triangle (see Figure 4.13). Inside the triangle, a series of terraces and steps define planting beds. A single, fenced clay-surfaced Tennis Court is located to the east of the Triangle Garden (see Figure 4.14).

NATURAL SYSTEMS, FEATURES, AND TOPOGRAPHY

The east facing slope provides a good framework for the terraced garden concept. The topography was manipulated and refined with sloped walks, retaining walls, and stepped terraces. The topography is a contributing (very significant) feature in good condition.

SPATIAL ORGANIZATION

The Triangle Garden has a careful layout using walls, shrubs, arbors, vegetables, and flowers that purposefully enforce the geometry of the design. It is a contributing (very significant) feature in poor condition. The organization of the garden has degraded due to the deterioration of the walls and steps, loss of contributing plants, addition of inappropriate plants, and lack of pruning to keep plants in their intended locations and forms.

LAND USE

During the period of significance, the garden was initially used as an ornamental vegetable garden. Later the pattern was maintained with flowers in place of vegetables. It is now an unmaintained garden. The land use is a contributing (very significant) feature in poor condition. It needs maintenance.

CIRCULATION ROUTES

There are four circulation routes in the Triangle Garden and Tennis Court Area: the brick path at the top of the garden which runs between the Gardener's Cottage and Main Residence, the unpaved turf paths along the southern and northern angled sides of the garden, and the unpaved turf path through the middle of the garden (see Figure 4.15 and Figure 4.16)). All four paths are contributing (very significant) features but in fair/poor condition. The brick path is in a dry-laid tapestry pattern but the ground has heaved and the path needs repair, especially at the north end (see Figure 4.17). The unpaved turf paths have overgrown shrubs extending into the circulation route, the path is not identifiable or passable in some locations. Additionally, the ground is uneven and the turf circulation routes are not clearly apparent.

VEGETATION

The planting beds in the Triangle Garden were originally vegetable and then re-purposed as a flower garden. Although no annuals are present, the woody plants and hardscape continue to provide a framework for the garden. The vegetation is a contributing (very significant) feature in poor condition.

BUILDINGS AND STRUCTURES

A tennis court is situated at the apex of the Triangle Garden. It lies at a lower grade to the northeast of the Main Residence. The tennis court is a contributing (significant) feature, however, it is in poor condition.

VIEWS AND VISTAS

The view of the garden from the east (base of triangle) to the west was originally of the geometrically laid-out garden beds. The overgrown shrubs and lack of garden beds have degraded this view. The view from the top (west) of the garden to the east originally provided an overview of the manicured garden, maintained tennis court, and the landscape beyond. The degraded condition of the garden and tennis court have impacted this view. Both views are contributing (very significant) but in poor condition.

SMALL SCALE FEATURES

There are a variety of small scale features in the Triangle Garden including contributing (very significant), contributing (significant), and non-contributing features. Features consist of a stone planting bed edge, stone steps along the south side of the garden, a fence/arbor at the south side for grapes, a dry-laid stone retaining wall along the top of the terrace, stone steps at the middle of the stone retaining walls, stone steps on the north side, a water spigot in a vertically placed drain tile, another water spigot, a dry-laid stone retaining wall, and a stone well (see Figure 4.18). The fence/arbor and spigots are in good condition but all the stone items are in fair/poor condition. The stone planting bed edge is irregular and loose. The stone steps have had some ground heaving and some stones have shifted (see Figure 4.19). The other stone retaining walls and stone steps have been impacted by vegetation and erosion. The stone of the well needs some repair and the top of the well is in poor condition.

PHOTOGRAPHS



Figure 4.13. Triangle Garden, east towards tennis court (QEA, 2012).



Figure 4.14. Tennis court (QEA, 2012).



Figure 4.15. Brick path towards Pump House / Garage (QEA, 2012).



Figure 4.16. Brick path towards Triangle Garden (QEA, 2012).



Figure 4.17. Brick path towards Gardener's Cottage (QEA, 2012).



Figure 4.18. Triangle Garden and well (QEA, 2012).



Figure 4.19. Triangle Garden, west towards main entrance driveway (QEA, 2012).

BEACH HOUSE AREA

The Beach House Area is located at the southern end of the Patterson Center.

NATURAL SYSTEMS, FEATURES, AND TOPOGRAPHY

The beach house and associated landscape features are part of the historic designed landscape at the property. The site was selected because of its access to the water and beach. As a result the area is a contributing (very significant) feature in good condition. The natural systems and features in the Beach House Area include the Patuxent River, the beach and the wetland areas. These features are in good condition and are contributing (significant).

LAND USE

During the period of significance, the land use of the Beach House Area was private recreation. Currently, it is part of historic and environmental interpretation. This is a non-contributing, compatible feature.

CIRCULATION ROUTES

There are two circulation routes in the Beach House Area, the road from the Main Residence to the Beach House Area and the wood boardwalk from the road to the Beach House (see Figure 4.20). The road/path to the beach from the Main Residence is a contributing (very significant) feature. The boardwalk, replaced as recently as 2007 is a contributing (significant) feature in good condition.

TOPOGRAPHY

The relationship between the residence on the high point and the beach house at the water level is enhanced by the grade change between the two areas. This topography is a contributing (very significant) feature and is in good condition.

VEGETATION

The vegetation around the Beach House includes beach grasses, wetland vegetation, trees and shrubs around the Beach House, and trees and shrubs on the west and south sides of the parking lot. The beach grasses and wetland vegetation are contributing (significant) features that are in good condition. The trees and shrubs around the Beach House are non-contributing features in good condition. In the original design, there were no trees or shrubs immediately surrounding the beach house. The structure was surrounded by water and beach grasses.

BUILDINGS AND STRUCTURES

No buildings or structures, other than the Beach House, are located in the Beach House Area.

VIEWS AND VISTAS

There are three (3) primary views and vistas within the Beach House Area, all are in fair condition. The view between beach area and residence area is a contributing (very significant) feature. Vegetation is blocking most of the historic view. Views of the water surrounding the Beach House are also contributing (very significant) features. The view to the west and south from the parking area is a contributing (significant) feature. The views are in good condition.

CONSTRUCTED WATER FEATURES

The Beach House Area has two constructed water features. The man-made beach cells and stone groins are non-contributing features in good condition (see Figure 4.21). The boat dock, pier, and float are contributing (very significant) features in poor condition (see Figure 4.22). Although the groins are aligned differently now than they were during the period of significance they continue to protect the land and direct sand migration to the beaches. The boat dock, pier, and float is now in ruins.

SMALL SCALE FEATURES

The only small scale features in the Beach House Area are the interpretive signs in the parking lot. They are non-contributing features in good condition. They were added as part of current site interpretation.

PHOTOGRAPHS



Figure 4.20. Boardwalk to the Beach House (QEA, 2012).



Figure 4.21. Beach cell and stone groin to south of Beach House (QEA, 2012).



Figure 4.22. Ruins of the boat pier, east of Beach House (QEA, 2012).

PART 2

TREATMENT AND USE



FINAL
FEBRUARY 2013

QUINN EVANS
ARCHITECTS

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CHAPTER 5:

PREFERRED USE AND TREATMENT - MAIN RESIDENCE



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CHAPTER 5: PREFERRED USE AND TREATMENT - MAIN RESIDENCE

PREFERRED USE

The preferred use for the Main Residence is one that will allow the Jefferson Patterson Park and Museum's programmatic plans and objectives to be implemented. The residence will be used as a historic house museum with the possibility of a few rooms on the second floor being used for administrative purposes.

BASEMENT

The basement will continue in its primary use as storage. It is possible that the Play Room would be used for programmatic purposes, depending on accessibility.

FIRST FLOOR

The preferred use of the first floor will be for interpretive purposes with public access. The primary rooms, Entry Hall, Living Room, Library, and Dining Room, will be part of the main house tour. The Servant Hall may be used for administrative or storage purposes. The Garage will be converted into a conditioned space with audio visual capabilities that will allow for large groups to gather and meet.

SECOND FLOOR

The preferred use of the second floor will be for interpretive purposes with limited public access to these rooms. Another possibility would be to use some of the rooms on the second floor for administrative purposes, i.e. offices or small meeting rooms. Bedroom No.4 211 and its adjoining bathroom may be used as a bridal changing room. Creating an accessible route for persons with disabilities to the second floor presents challenges. This will be discussed in subsequent chapters.

ATTIC

The attic level is accessed via a narrow stair. There is no elevator access to this floor. The use of the attic would remain as storage.

TREATMENT PHILOSOPHY AND GUIDELINES

In the previous chapters, this report identified the historically and architecturally significant features of the Main Residence and their conditions. This section outlines the over-arching preservation guidelines for the Main Residence. Code requirements will be discussed in subsequent chapters. Treatment recommendations will be provided in Part 3.

The National Park Service (NPS) has developed standards and guidelines for approaches to various treatments of historic properties. These are published in *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings.* These standards are widely utilized and understood by historic preservation professionals, architects, engineers, contractors and craftsmen around the country.

Three principal treatment options typically apply to historic buildings: preservation, rehabilitation, and restoration. A fourth treatment, reconstruction, is not applicable to this project. Choosing the appropriate treatment is the most fundamental decision involving the future of a historic building. The NPS indicates the following issues be addressed in making this choice:

- Relative importance in history
- Physical condition
- Proposed use
- Mandated code requirements.

Each of these issues is addressed in a comprehensive fashion in this Condition Assessment and Treatment Plan Report, and the recommended treatment choice is described below. The three principal treatments which could be applied to the Main Residence are defined by the NPS as follows:

Preservation *is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-related work to make the properties functional is appropriate within a preservation project. The treatment emphasizes repair and conservation of significant building features and strives to retain existing materials and features while employing as little new materials as possible.*

Preservation as a Treatment. *When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular point of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, Preservation may be considered as a treatment. Prior to undertaking work, a documentation plan for Preservation should be developed.*

The guidelines state that the Preservation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Stabilize deteriorated historic materials and features as a preliminary measure;*
- *Protect and maintain historic materials and features;*
- *Repair (stabilize, consolidate, and conserve) historic materials and feature; and provide*
- *Limited replacement in kind of extensively deteriorated portions of historic features;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*

Rehabilitation *is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.*

Rehabilitation as a Treatment. *When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.*

The guidelines state that the Rehabilitation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Protect and maintain historic materials and features;*
- *Repair historic materials and features;*
- *Replace deteriorated historic materials and features; and provide*
- *Design for the replacement of missing historic features;*
- *Alterations/additions for the new use;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*

***Restoration** is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.*

***Restoration as a treatment.** When the property's design, architectural, or historical significance during a particular period of time outweighs the potential loss of extant materials, features, spaces, and finishes that characterize other historical periods; when there is substantial physical and documentary evidence for the work; and when contemporary alterations and additions are not planned, Restoration may be considered as a treatment. Prior to undertaking work, a particular period of time, i.e., the restoration period, should be selected and justified, and a documentation plan for Restoration developed.*

The guidelines state that the Restoration treatment approach aims to:

- *Identify, retain, and preserve materials and features from the restoration period;*
- *Protect and maintain materials and features from the restoration period;*
- *Repair (stabilize, consolidate, and conserve) materials and features from the restoration period;*
- *Replace extensively deteriorated features from the restoration period;*
- *Remove existing features from other historic periods;*
- *Re-create missing features from the restoration period; and provide*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*

PREFERRED TREATMENT

In selecting the most appropriate overall treatment for the Main Residence based on the NPS guidelines, there are a number of important considerations:

- The exterior's character-defining materials and features are intact and thus convey the historic significance without extensive repair or replacement.
- Depiction at a particular period of time would be appropriate. Almost all of the character-defining interior finishes represent a particular period of time.
- A continuing or new use does not require additions or extensive alterations.
- Minor alterations are planned for a new use as a historic house museum.

Hence, the preferred overall treatment for the Main Residence is rehabilitation. The rehabilitation treatment will identify, retain, and preserve historic materials and features as well as allow sensitive upgrading of mechanical, electrical, and plumbing systems and other code-related work to make the house functional for its preferred use.

TREATMENT ZONES

Within an overall treatment of rehabilitation, various spaces within the Main Residence may have a different treatment due to the relative significance of the spaces and features within spaces. Typically, the exterior will consistently be within a preservation zone. Another zone, a free zone, will also be applied to certain spaces. In this zone, virtually any alterations would be permissible as long as they do not have an adverse effect on the overall structure or the historic fabric.

BASEMENT

The spaces in the basement are primarily designated as a free zone. The Play Room 013 and Treasure Room 009 are designated as a rehabilitation zone.



Figure 5.1. Basement - Historic Preservation Treatment Zones

FIRST FLOOR

The primary spaces on the first floor, the Entrance Hall 109, Living Room 111, and Library 110 are designated as a preservation zone. The Dining room 106, Pantry 105, Kitchen 104, Servants Hall 102, and Living Porch 112 have been designated a rehabilitation zone. The remaining utilitarian and storage spaces are designated as a free zone.



Figure 5.2. First Floor - Historic Preservation Treatment Zones

SECOND FLOOR

Nearly all the spaces on the second floor are designated as a rehabilitation zone. The remaining utilitarian and storage spaces are designated as a free zone.



Figure 5.3. Second Floor - Historic Preservation Treatment Zones

ATTIC

Most of the spaces in the attic are designated as a rehabilitation zone. The Storage Room 304 and its adjacent closet are assigned as a free zone.

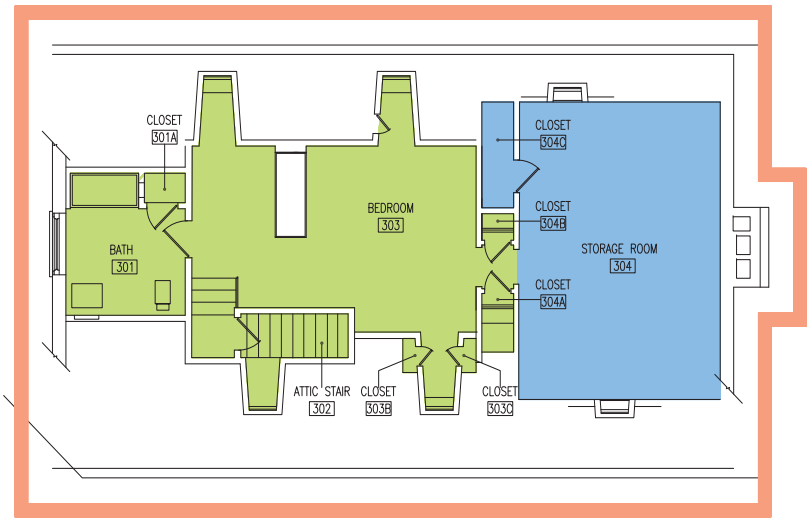


Figure 5.4. Attic - Historic Preservation Treatment Zones

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CHAPTER 6:

PREFERRED USE AND TREATMENT - OUTBUILDINGS



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CHAPTER 6: PREFERRED USE AND TREATMENT - OUTBUILDINGS

PREFERRED USE

The preferred use for the outbuildings is one that will allow the Jefferson Patterson Park and Museum's programmatic plans and objectives to be implemented.

PUMP HOUSE/GARAGE

The preferred use for the Pump House/Garage is one that will provide support spaces for the historic house museum. The Pump House portion of the structure can accommodate an accessible toilet facility. This facility can be used for both the visitors to the historic house museum as well as for event attendees. The Garage portion of the structure can accommodate a catering kitchen for events.

GARDENER'S COTTAGE

The preferred use for the Gardener's Cottage is as a rentable residential facility. The Gardener's Cottage can be made into two apartments, one with two bedrooms and one with one bedroom within the existing footprint.

GREENHOUSE

The preferred use for the Greenhouse is one that will support the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Greenhouse will be used as a gardening facility to support the restored gardens of the property.

COLD FRAME

The preferred use for the Cold Frame is one that will continue contributing to the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Cold Frame will be used as a gardening facility to support the restored gardens of the property. It is a non-occupiable structure.

POOL HOUSE & POOL

The preferred use for the Pool House & Pool is one that will provide support spaces for the historic house museum and its income-producing events. The two changing rooms can be made into auxiliary accessible toilet rooms to provide additional toilet rooms during large events. The pump room can become an event support space. This event support space would be a conditioned space with a counter and sink.

BEACH HOUSE

The preferred use for the Beach House is one that will support the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Beach House will be used as overnight accommodations for kayakers and canoers with a designated put-in location. The two sets of waterclosets and showers can house an accessible toilet, sink, and shower. If reconnecting to the septic system is cost-prohibitive, then a composting toilet nearby would be necessary.

TREATMENT PHILOSOPHY AND GUIDELINES

In the previous chapters, this report identified the historically and architecturally significant features of the outbuildings and their conditions. This section outlines the over-arching preservation guidelines for the outbuildings. Code requirements will be discussed in subsequent chapters. Treatment recommendations will be provided in Part 3.

The National Park Service (NPS) has developed standards and guidelines for approaches to various treatments of historic properties. These are published in *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. These standards are widely utilized and understood by historic preservation professionals, architects, engineers, contractors and craftsmen around the country.

Three principal treatment options typically apply to historic buildings: preservation, rehabilitation, and restoration. A fourth treatment, reconstruction, is not applicable to this project. Choosing the appropriate treatment is the most fundamental decision involving the future of a historic building. The NPS indicates the following issues be addressed in making this choice:

- Relative importance in history
- Physical condition
- Proposed use
- Mandated code requirements.

Each of these issues is addressed in a comprehensive fashion in this Condition Assessment and Treatment Plan Report, and the recommended treatment choice is described below. The three principal treatments which could be applied to the Main Residence are defined by the NPS as follows:

Preservation *is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-related work to make the properties functional is appropriate within a preservation project. The treatment emphasizes repair and conservation of significant building features and strives to retain existing materials and features while employing as little new materials as possible.*

Preservation as a Treatment. *When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular point of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, Preservation may be considered as a treatment. Prior to undertaking work, a documentation plan for Preservation should be developed.*

The guidelines state that the Preservation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Stabilize deteriorated historic materials and features as a preliminary measure;*
- *Protect and maintain historic materials and features;*
- *Repair (stabilize, consolidate, and conserve) historic materials and feature; and provide*
- *Limited replacement in kind of extensively deteriorated portions of historic features;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*

Rehabilitation *is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.*

Rehabilitation as a Treatment. *When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.*

The guidelines state that the Rehabilitation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Protect and maintain historic materials and features;*
- *Repair historic materials and features;*
- *Replace deteriorated historic materials and features; and provide*
- *Design for the replacement of missing historic features;*
- *Alterations/additions for the new use;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*

Restoration *is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.*

Restoration as a treatment. *When the property's design, architectural, or historical significance during a particular period of time outweighs the potential loss of extant materials, features, spaces, and finishes that characterize other historical periods; when there is substantial physical and documentary evidence for the work; and when contemporary alterations and additions are not planned, Restoration may be considered as a treatment. Prior to undertaking work, a particular period of time, i.e., the restoration period, should be selected and justified, and a documentation plan for Restoration developed.*

The guidelines state that the Restoration treatment approach aims to:

- *Identify, retain, and preserve materials and features from the restoration period;*
- *Protect and maintain materials and features from the restoration period;*
- *Repair (stabilize, consolidate, and conserve) materials and features from the restoration period;*
- *Replace extensively deteriorated features from the restoration period;*
- *Remove existing features from other historic periods;*

- *Re-create missing features from the restoration period; and provide*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*

PREFERRED TREATMENT

In selecting the most appropriate overall treatment for the outbuildings based on the NPS guidelines, there are a number of important considerations:

- The exterior of the outbuildings have character-defining materials and features that are largely intact and thus convey the historic significance without extensive repair or replacement.
- Depiction at a particular period of time would be appropriate. The character-defining interior finishes represent a particular period of time.
- A continuing or new use does not require additions or extensive alterations.
- Minor alterations are planned for a new use as a historic house museum, or other support uses

Hence, the preferred overall treatment for the outbuildings collectively is rehabilitation. As with the preservation treatment, rehabilitation will identify, retain, and preserve historic materials and features. Rehabilitation will also allow for alterations for a new use where necessary or desired.

PUMP HOUSE/GARAGE	The preferred overall treatment for the Pump House/Garage is rehabilitation.
GARDENER'S COTTAGE	The preferred overall treatment for the Gardener's Cottage is rehabilitation.
GREENHOUSE	The preferred overall treatment for the Greenhouse is rehabilitation.
COLD FRAME	The preferred overall treatment for the Cold Frame is rehabilitation. Should the Cold Frame be rehabilitated, the new design for the missing portions should be based on the historic design.
POOL HOUSE & POOL	The preferred overall treatment for the Pool House and Pool is rehabilitation.
BEACH HOUSE	The preferred overall treatment for the Beach House is rehabilitation.
TREATMENT ZONES	Within an overall treatment zone of rehabilitation, various spaces within each outbuilding may have a different treatment due to the features within space. The exteriors have been designated as preservation zones. Another zone, a free zone, will also be applied to certain spaces. In this zone, virtually any alterations would be permissible as long as they do not have an adverse effect on the overall structure or the historic fabric.

PUMP HOUSE/GARAGE The exterior of the Pump House/Garage is within a preservation zone while the interior is within a free zone

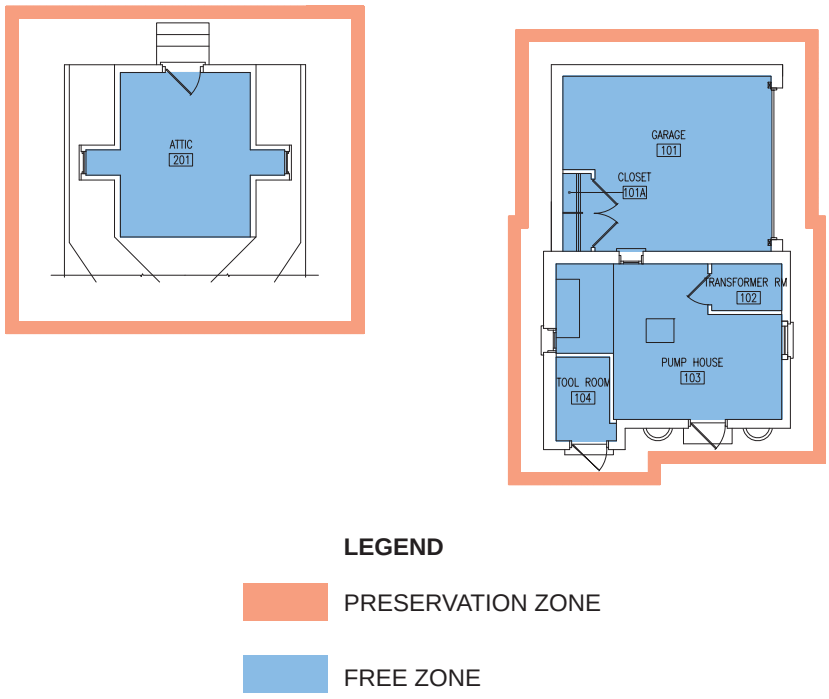


Figure 6.1. Pump House/Garage - Historic Preservation Treatment Zones

GARDENER'S COTTAGE The exterior of the Gardener's Cottage is within a preservation zone while the interior is within a free zone.

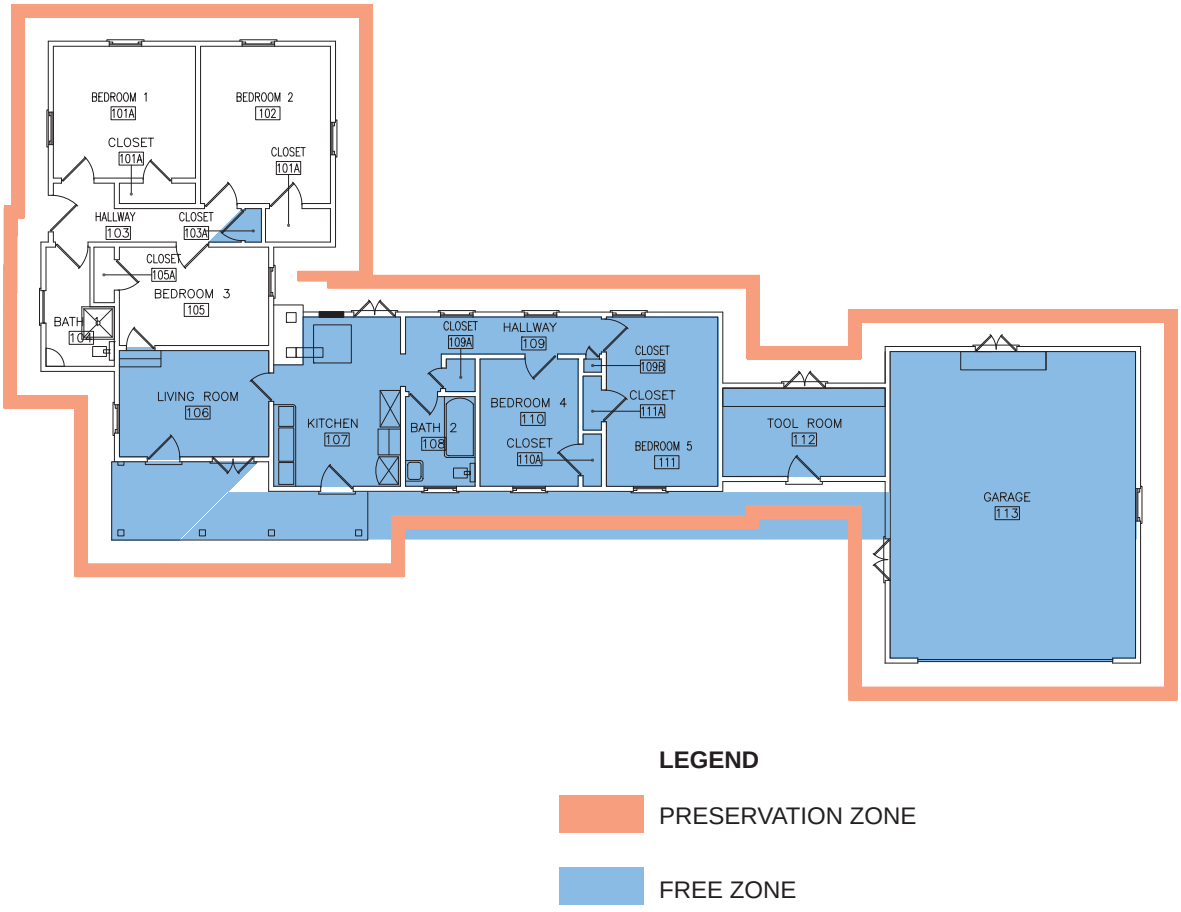


Figure 6.2. Gardener's Cottage - Historic Preservation Treatment Zones

GREENHOUSE

The exterior of the Greenhouse is within a preservation zone while the interior is within a rehabilitation zone.

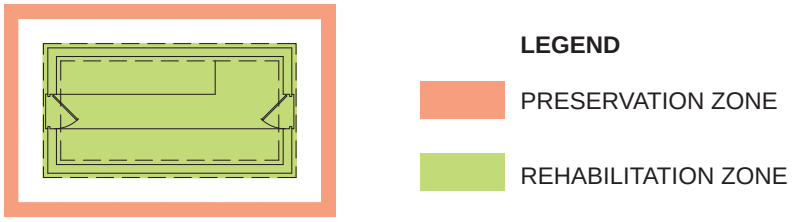


Figure 6.3. Greenhouse - Historic Preservation Treatment Zones

COLD FRAME

The exterior of the Cold Frame is within a preservation zone while the interior is within a free zone.

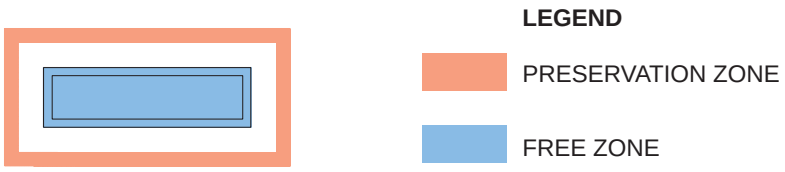


Figure 6.4. Cold Frame - Historic Preservation Treatment Zones

POOL HOUSE

The exterior of the Pool House is within a preservation zone while the most of the rooms on the interior are within a rehabilitation zone. The Pump Room is within a free zone.

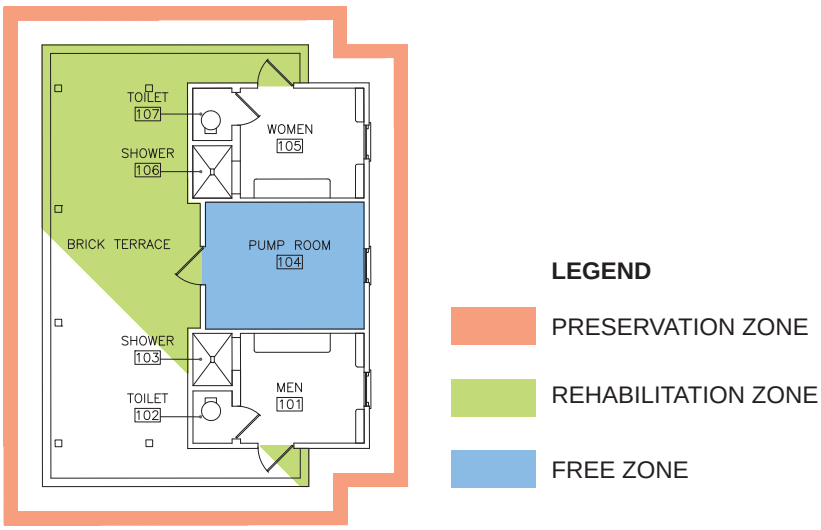


Figure 6.5. Pool House & Pool - Historic Preservation Treatment Zones

BEACH HOUSE

The exterior of the Beach House is within a preservation zone while the interior is within a rehabilitation zone.

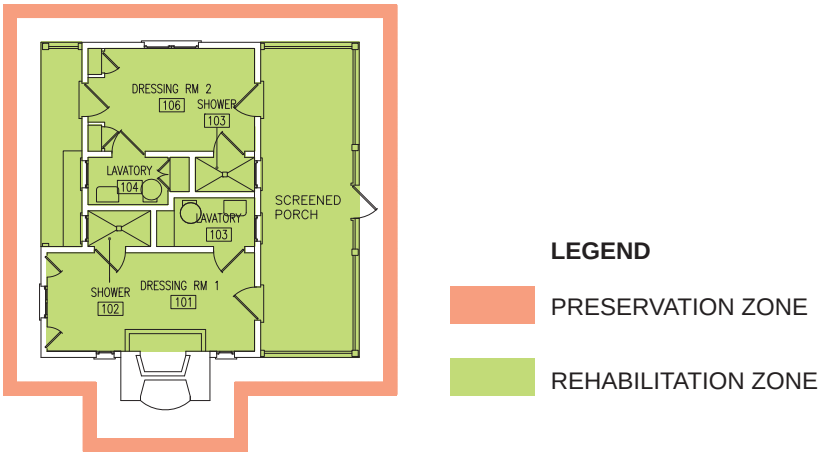


Figure 6.6. Beach House Treatment Zones

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CHAPTER 7:

PREFERRED USE AND TREATMENT - LANDSCAPE



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CHAPTER 7: PREFERRED USE AND TREATMENT - LANDSCAPE

PREFERRED USE

The preferred use for the landscape is one that will allow the Jefferson Patterson Park and Museum's programmatic plans and objectives to be implemented. This chapter will discuss the preferred use and treatments for each of the landscape character areas.

MAIN RESIDENCE AREA

The preferred use for the Main Residence Landscape Character Area is one that supports the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Main Residence Area will be used as an "interpreted landscape" for the Main Residence. Main components of the interpreted landscape will be the Enclosed Garden, back lawn, terrace, and the area around the pool. The back lawn and pool areas may also be used to provide assembly space for planned events (for instance, the annual "Tea in the Garden").

GARDENER'S COTTAGE AREA

The preferred use for the Gardener's Cottage Landscape Character Area will primarily be residential. However, the Greenhouse and Cold Frame will be support spaces for interpretation of the historic landscape. Vehicular access from the gravel access road to the Pool House will also be provided through this area.

TRIANGLE GARDEN AND TENNIS COURT AREA

The preferred use for the Triangle Garden and Tennis Court Landscape Character Area is one that supports the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Triangle Garden Area will be used as an interpretive landscape. The Tennis Court may be used to provide assembly space for various events.

BEACH HOUSE AREA

The preferred use for the Beach House Landscape Character Area is one that supports the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Beach House Area will be used as a put-in (launch) for kayakers and canoers who wish to use the area as a stopover in their travels. This area would support the overnight accommodations provided at the Beach House.

TREATMENT PHILOSOPHY AND GUIDELINES

In the previous chapters, this report identified the character-defining features of the landscape character areas and their conditions. This section outlines comprehensive treatment guidelines for the landscape. Code and accessibility requirements will be discussed in subsequent chapters. Treatment recommendations will be provided in Part 3.

The National Park Service (NPS) has developed standards and guidelines for approaches to various treatments of historic properties. These are published in *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings.* These standards are widely utilized and understood by historic preservation professionals, architects, engineers, contractors and craftsmen around the country.

Three principal treatment options are applicable to the Patterson property historic landscape: preservation, rehabilitation, and restoration. A fourth treatment, reconstruction, is not appropriate for this project. Choosing the appropriate treatment is the most fundamental decision involving the future of a historic landscape. The NPS indicates the following issues be addressed in making this choice:

- Relative importance in history
- Physical condition
- Proposed use
- Mandated code requirements.

Each of these issues is addressed in a comprehensive fashion in this Condition Assessment and Treatment Plan Report and the recommended treatment choice is described below. The three principal treatments which could be applied to the landscape character areas are defined by the NPS as follows:

Preservation *is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-related work to make the properties functional is appropriate within a preservation project. The treatment emphasizes repair and conservation of significant building features and strives to retain existing materials and features while employing as little new materials as possible.*

Preservation as a Treatment. *When the property's distinctive materials, features, and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular point of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations, Preservation may be considered as a treatment. Prior to undertaking work, a documentation plan for Preservation should be developed.*

The guidelines state that the Preservation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Stabilize deteriorated historic materials and features as a preliminary measure;*
- *Protect and maintain historic materials and features;*
- *Repair (stabilize, consolidate, and conserve) historic materials and feature; and provide*
- *Limited replacement in kind of extensively deteriorated portions of historic features;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*

Rehabilitation *is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.*

Rehabilitation as a Treatment. *When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.*

The guidelines state that the Rehabilitation treatment approach aims to:

- *Identify, retain, and preserve historic materials and features;*
- *Protect and maintain historic materials and features;*
- *Repair historic materials and features;*
- *Replace deteriorated historic materials and features; and provide*
- *Design for the replacement of missing historic features;*
- *Alterations/additions for the new use;*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*

Restoration *is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.*

Restoration as a treatment. *When the property's design, architectural, or historical significance during a particular period of time outweighs the potential loss of extant materials, features, spaces, and finishes that characterize other historical periods; when there is substantial physical and documentary evidence for the work; and when contemporary alterations and additions are not planned, Restoration may be considered as a treatment. Prior to undertaking work, a particular period of time, i.e., the restoration period, should be selected and justified, and a documentation plan for Restoration developed.*

The guidelines state that the Restoration treatment approach aims to:

- *Identify, retain, and preserve materials and features from the restoration period;*
- *Protect and maintain materials and features from the restoration period;*
- *Repair (stabilize, consolidate, and conserve) materials and features from the restoration period;*
- *Replace extensively deteriorated features from the restoration period;*
- *Remove existing features from other historic periods;*

- *Re-create missing features from the restoration period; and provide*
- *Energy efficiency/accessibility considerations/health and safety code considerations.*

PREFERRED TREATMENT

In selecting the most appropriate overall treatment for the landscape character areas based on the NPS guidelines, there are a number of important considerations:

- A good portion of the landscape character areas' character- defining features are essentially intact and thus convey the historic significance without extensive repair or replacement.
- Depiction at a particular period of time is appropriate. However, a number of the landscape character areas are in state that do not reflect the period of significance.
- A continuing or new use does not require extensive alterations.
- Minor alterations are planned for a new or continued use, i.e. providing an accessible route through the landscape and possibly adding new parking.

Hence, the preferred overall treatment for the various landscape character areas is rehabilitation. As with the preservation treatment, rehabilitation will identify, retain, and preserve historic materials and features.

MAIN RESIDENCE AREA	The preferred overall treatment for the Main Residence Area is rehabilitation. The rehabilitation treatment will identify, retain, and preserve historic materials and features but will allow for a compatible use through alterations, i.e. accessible routes, while preserving those portions or features which convey its historical, cultural, or architectural values. The treatment for the Enclosed Garden is restoration. This will be discussed in the following section.
GARDENER'S COTTAGE AREA	The preferred overall treatment for the Gardener's Cottage Area is rehabilitation.
TRIANGLE GARDEN AND TENNIS COURT AREA	The preferred overall treatment for the Triangle Garden and Tennis Court Area is rehabilitation. The treatment for the immediate area of the Triangle Garden is restoration. This will be discussed in the following section.
BEACH HOUSE AREA	The preferred overall treatment for the Beach House Area is rehabilitation.
TREATMENT ZONES	With an overall treatment approach of rehabilitation, specific locations within the property may be preserved, restored or rehabilitated, as necessary to address the resources and planned use of the landscape. Some landscape character areas include more than one treatment zone as described in the following section.

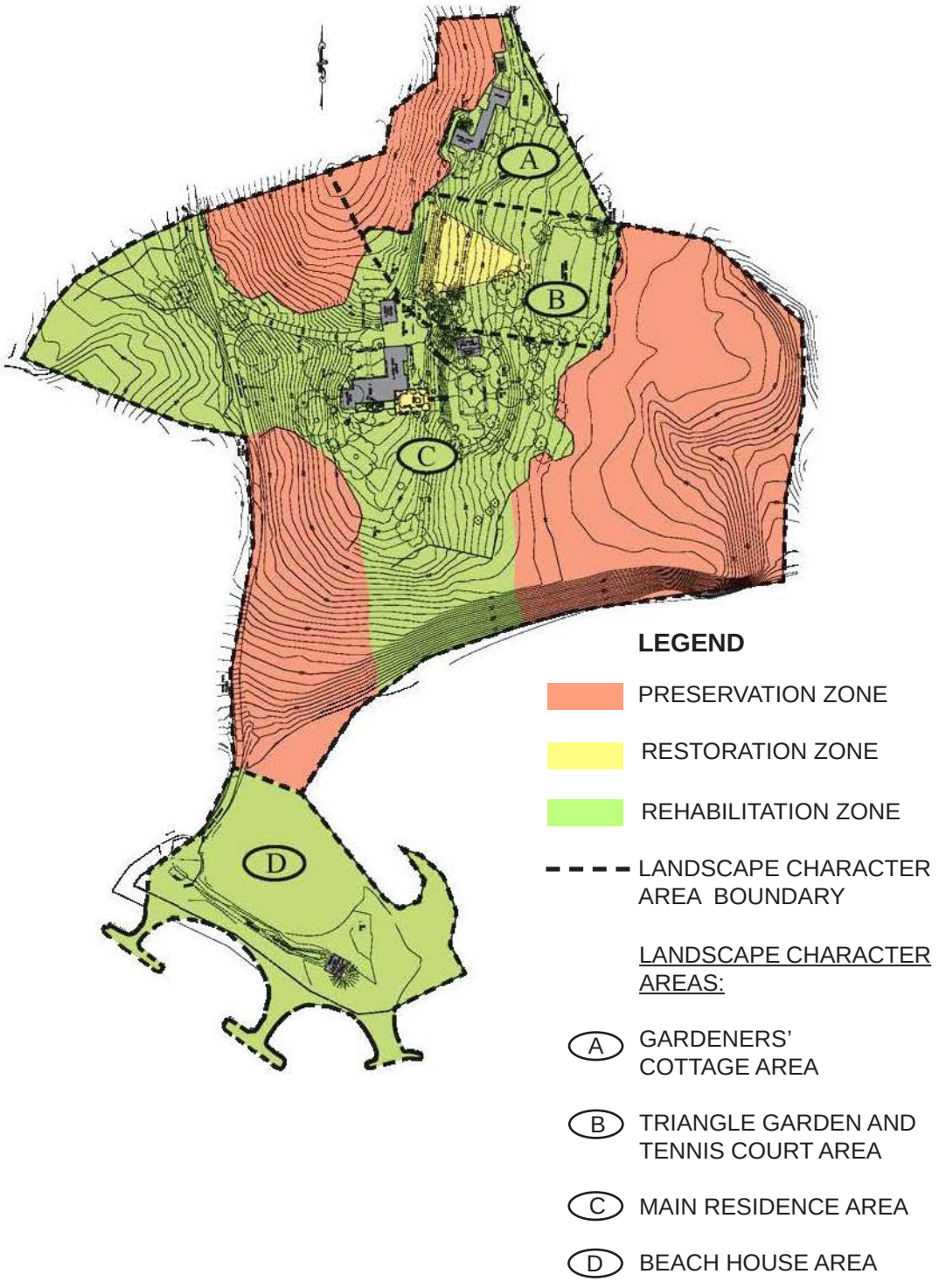


Figure 7.1. Landscape Historic Preservation Treatment Zones

MAIN RESIDENCE AREA

The majority of the Main Residence Area is zoned for rehabilitation to allow for alterations necessary to provide accessible routes for interpretation and vegetation management needed to re-establish selected lawns and views. The enclosed garden area has historical value that will be enhanced by restoration of the historic plants. Large portions of the Main Residence Area contain woodlands that have developed during the last few decades. Although these areas do not contribute to the historical significance of the property, they provide wildlife habitat, a protective buffer from erosion and extreme weather and are more economical to maintain than the historic mown lawns. Therefore, selected parts of the woodland are preserved.

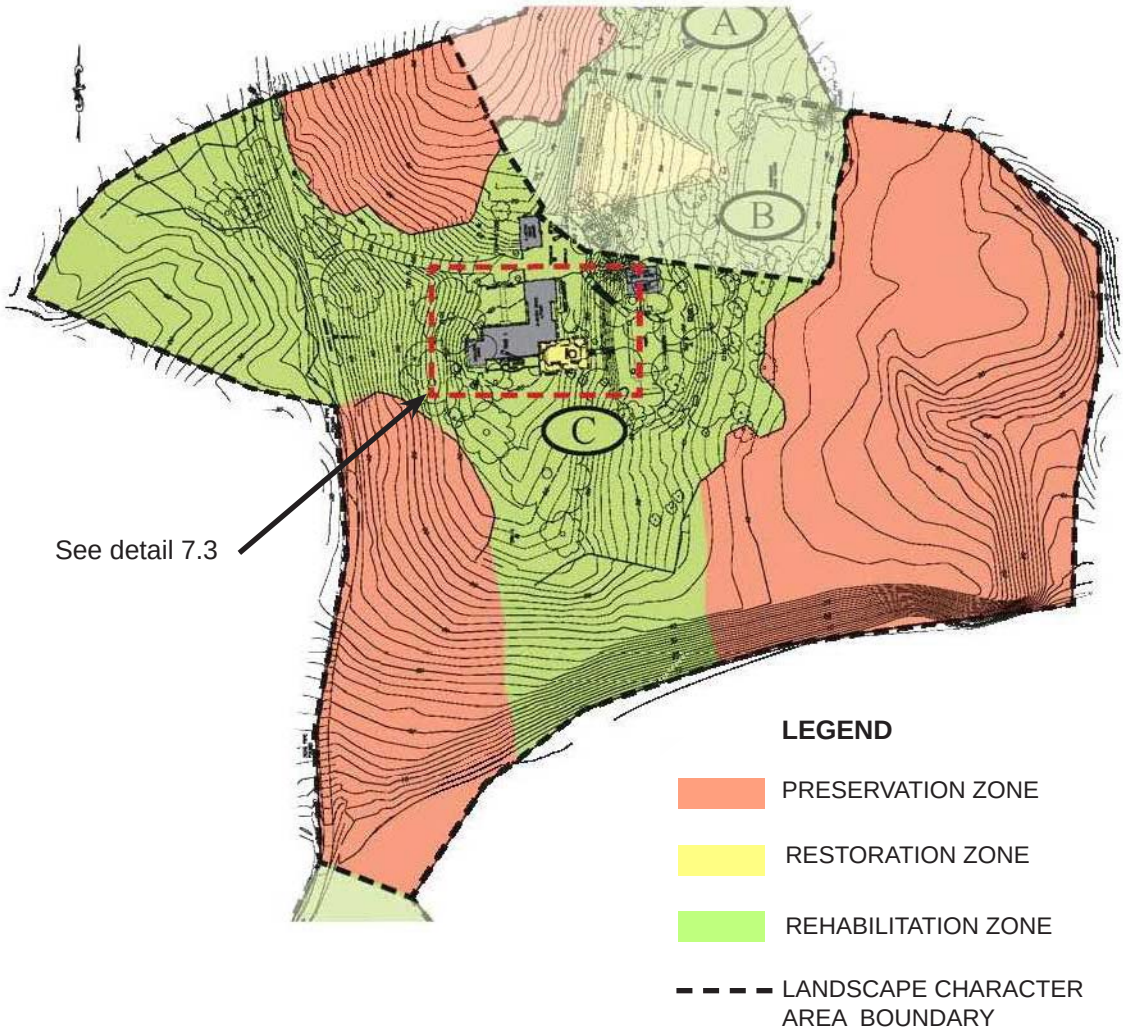


Figure 7.2. Main Residence Area Historic Preservation Treatment Zones

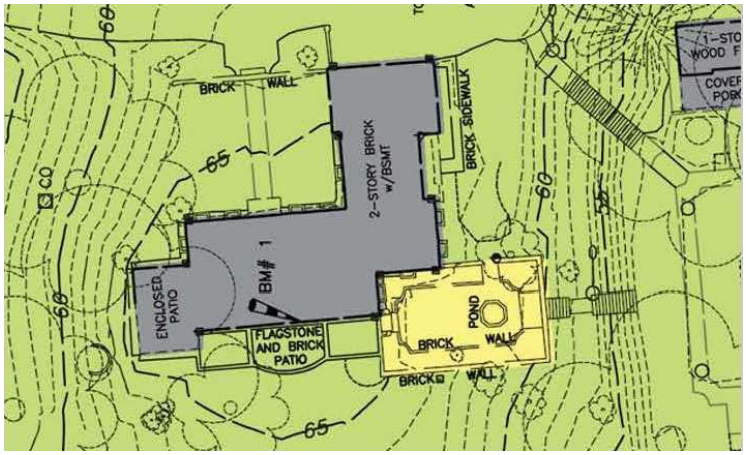


Figure 7.3. Detail of Main Residence Area Historic Preservation Zones

GARDENER'S COTTAGE AREA

The Gardener's Cottage Area landscape includes a rehabilitation area and a preservation area. The area surrounding the residence and greenhouse, as well as the lawn to the east, is rehabilitated to accommodate residential use. The woodlands on the slope west and south of the residence has developed during the last few decades. Although the vegetation does not contribute to the historical significance of the property, it provides wildlife habitat, a protective buffer from erosion and extreme weather and is more economical to maintain than the historic mown lawns. Therefore this area is preserved.

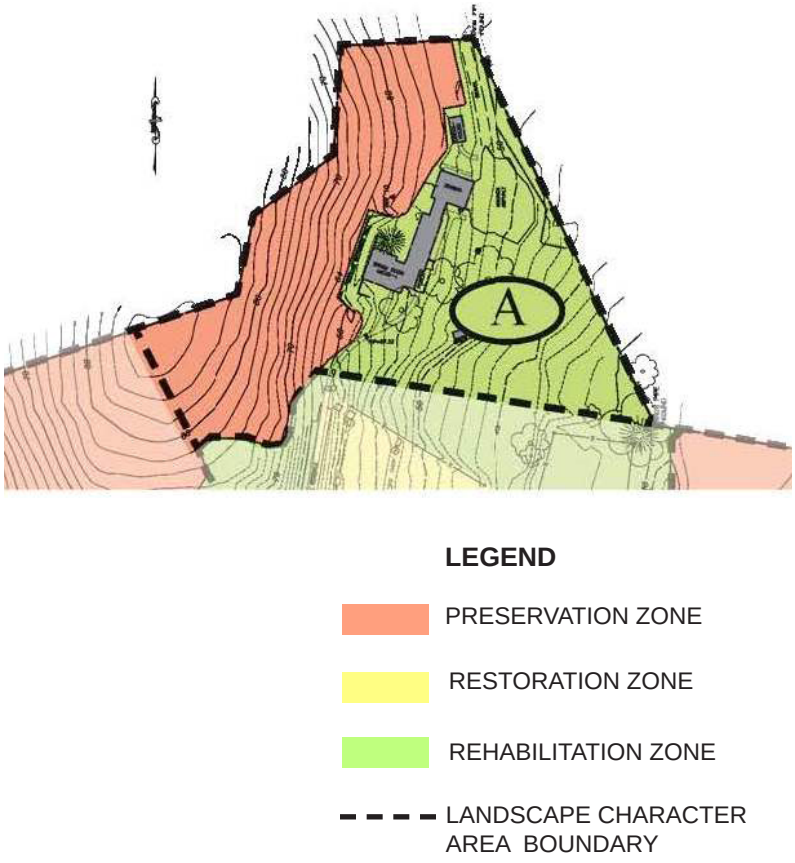


Figure 7.4. Gardener's Cottage Area Historic Preservation Treatment Zone

TRIANGLE GARDEN AND TENNIS COURT AREA

The Triangle Garden and Tennis Court Area includes rehabilitation and restoration zones. The majority of the area is rehabilitated to provide universal access for visitors and possible events at the tennis court. The Triangle Garden has historical value but a degraded level of integrity. This area is restored to improve integrity related to the overall design, including plant beds, paths, walls, and steps.

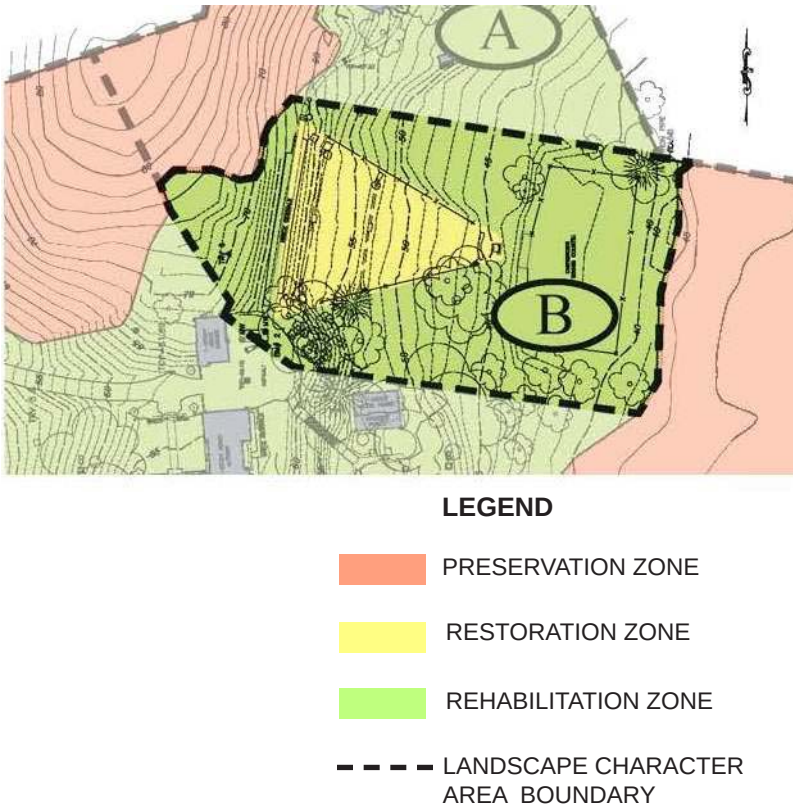


Figure 7.5. Triangle Garden and Tennis Court Area Historic Preservation Treatment Zones

BEACH HOUSE AREA

The Beach House Area is rehabilitated to provide universal access for visitors for interpretation of the historic property.

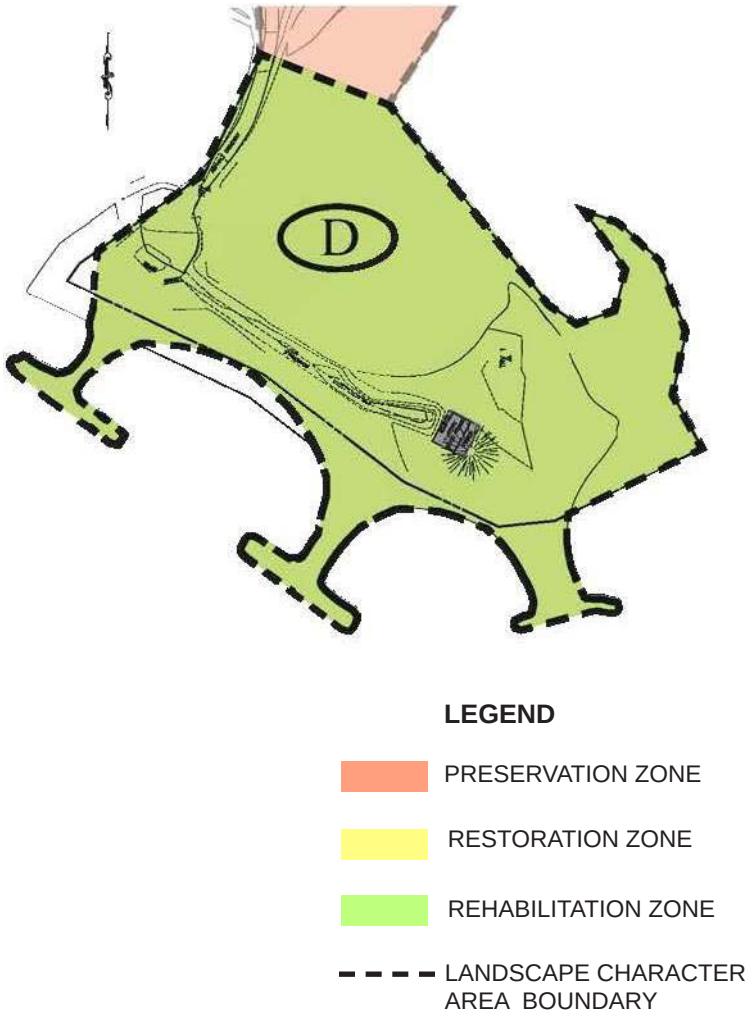


Figure 7.6. Beach House Area Historic Preservation Treatment Zones

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CHAPTER 8:

CODE EVALUATION - MAIN RESIDENCE



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CHAPTER 8: CODE EVALUATION - MAIN RESIDENCE

INTRODUCTION

The code and accessibility evaluation below is preliminary in nature. More detailed code analysis is required in a future design phase based on specific program requirements. The purpose of the analysis in this report is to identify likely requirements with significant cost implications as well as areas where variances or alternate compliance means may need to be considered.

APPLICABLE CODES

The following codes and standards apply to the Main Residence. The requirements herein would likely apply for many years in the future.

BUILDING CODES

2012 lBC -International Building Code (IBC) 2012 w/ the MD Department of Housing and Community Development (DHCD) modifications (Ref: COMAR 05.02.07)

2012 IECC -International Energy Conservation Code (IECC) (Ref: COMAR 05.02.07)

2009 IEBC -Maryland Building Rehabilitation Code (MBRC) incorporating the International Existing Building Code (IEBC) 2009 (Ref: COMAR 05 .16)

2009 NFPA 101 Life Safety Code - The State Fire Prevention Code incorporating the (National Fire Protection Association- NFPA 101 Life Safety Code 2009 (Ref: CO MAR 29.06.01) including State Fire Marshal-modifications

2012 IBC- Safety glazing requirements set forth in the IBC 2012, and in the Public Safety Article, Title 12, Subtitle 4, Annotated Code of Maryland (Ref: COMAR 05.02.07) in addition to the Department of Labor Licensing and Regulations (DLLR) requirements

2011 NEC- National Electrical Code (NEC) 2011 (Ref: COMAR 05.02.07.; Public Safety Article Title
12, Subtitle 6, Annotated Code of Maryland)

2009 IMC- International Mechanical Code (IMC) 2006 with modifications (Ref: COMAR 05.02.07; Business Regulation Article, section 9A-205, Annotated Code of Maryland)

2006 NSPC and 2007 supplement to 2006 NSPC; and NFGC-National Standard Plumbing Code (NSPC) 2006 illustrated with modifications, 2007 supplement to 2006 National Standard Plumbing Code, National Fuel Gas Code (NFGC), ANSI Z223.1, NFPA 54,2006, and Liquefied Petroleum Gas Code (LPGC), NFPA 58,2004 (Ref: COMAR 05.02.07; Business Occupations and Professions Article 12, Annotated Code of Maryland)

2012 IBC- Elevators and conveying systems requirements set forth in the IBC 2012, and in the Public Safety Article, Title 12, Subtitle 8, Annotated Code ofMaryland (Ref: COMAR 05.02.07) in addition to the Maryland DLLR requirements

IPSDC - International Private Sewage Disposal Code

2012 IPC - International Plumbing Code
Chapter 29 of the IBC and the IPC shall be followed for any alteration, repairs, relocation, replacement, and addition to the use or maintenance of the plumbing equipment and systems.

ACCESSIBILITY CODES

The accessibility evaluation of the Main Residence will follow in a subsequent chapter. The following codes and standards are applicable to the Main Residence.

Chapter 11 “Accessibility,” 2012 lBC

Section 806 “Accessibility,” Chapter 8 “Alterations - Level 3” and Section 906 “Accessibility,” Chapter 9 “Change of Occupancy” 2009 IEBC

2010 ADA Standards for Accessible Design

MAC - Maryland Accessibility Code (Ref: COMAR 05.02.02)

EXISTING STRUCTURES	Chapter 34 “Existing Structures” within the 2012 IBC includes provisions that deal with alternative methods or reduced compliance requirements when dealing with existing building constraints. The chapter allows for a controlled departure from full compliance with technical codes, without compromising the minimum standards for fire prevention and life safety features of the rehabilitated building. The chapter also includes further allowances for registered historic buildings. This chapter is repeated in the IEBC.
ALTERATION LEVEL	In accordance with 2009 IEBC, most work that will be necessary to bring the Main Residence in compliance with current code and to make them functional for the preferred use will likely be classified as a Level 3 alteration. Level 3 alterations apply where the work area exceeds 50 percent of the aggregate area of the building.
HISTORIC BUILDINGS	Chapter 11 “Historic Buildings” within the 2009 IEBC states that there are exceptions from code requirements when the building has historic value. The most important criterion is that the building must be accredited as being of historic significance by a state or local authority. As the Patterson Center is a designated historic property, certain exemptions may apply. According to Section 3409 in the 2012 IBC, repair, alteration, restoration, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute a distinct life safety hazard.

LIFE SAFETY REQUIREMENTS

USE AND OCCUPANCY CLASSIFICATION (IBC, SECTION 303.4)	The preferred use for the Main Residence is as a historic house museum. The appropriate IBC classification is Group A-3 Assembly.
BUILDING CONSTRUCTION CLASSIFICATION (IBC, SECTION 602.3, TABLE 601)	The Main Residence is Type IIIA construction class. The exterior walls are of noncombustible materials (brick and terra cotta block) while the roof and floor assemblies have fire resistance protection afforded by the plaster ceilings. The Main Residence is not protected by an automatic sprinkler system.

ALLOWABLE BUILDING HEIGHT AND AREA (IBC, TABLE 503)	For an A-3 use group classification with Type IIIA construction classification, the allowable building height it 65 feet. The allowable number of stories is 3 with 14,000 square feet of allowable area per story. The Main Residence is 3 stories, 32'-6" tall, and 2,405 SF per story. This is well within the allowable requirements.

FIRE PROTECTION REQUIREMENTS

AUTOMATIC SPRINKLER SYSTEMS (IBC, SECTION 903.2.1.3)	An automatic sprinkler system shall be provided for Group A-3 occupancies where the fire area is located on a floor other than a level of exit discharge serving such occupancies. Hence, an automatic sprinkler system is required for the Main Residence.
FIRE EXTINGUISHERS (IBC, SECTION 906 AND IFC, SECTION 906)	Portable fire extinguishers are required for an Assembly occupancy. The Main Residence does not currently comply but this is easily remedied.

MEANS OF EGRESS REQUIREMENTS

MEANS OF EGRESS - OCCUPANT LOAD (IBC, TABLE 1004.1.2)

The rooms in the Main Residence will have a new use as a historic house museum, with primarily an Assembly (Museum) function. The following chart outlines the various functions and the occupant load factor. Based on this, the occupant load of the Main Residence is 131 occupants. However, it is highly unlikely that all floors would be occupied to capacity at the same time.

Function	Area	Occ Load Factor	# Occupants
Basement			
Storage Areas, Mechanical	2,405 gross sf	300 gross sf	8
First Floor			
Living Room, Dining Room, Library (as Assembly, Museum)	1105 net sf	30 net sf	37
Pantry, Kitchen (as Storage Areas)	505 gross sf	300 gross sf	2
Servants Hall (as Business use, i.e. docent office)	195 gross sf	100 gross sf	2
Garage (as Assembly, i.e. meeting room with tables and chairs)	600 net sf	15 net sf	40
Second Floor			
Bedrooms 1, 2, 3 (as Assembly, Museum)	835 net sf	30 net sf	28
Bedroom 4 (as Business, i.e. bridal changing room)	255 gross sf	100 gross sf	3
Luggage & Pressing Rooms (as Storage Areas)	180 gross sf	300 gross sf	1
Bedrooms over the Garage (as Business, i.e. office space)	560 gsf	100 gross sf	6
Attic			
Storage Areas, Mechanical	1,000 gross sf	300 gross sf	4
Total			**131**

MEANS OF EGRESS SIZING STAIRWAYS (IBC, SECTION 1005.3.1	The means of egress stairways shall be equal to the occupant load served by the stair multiplied by a means of egress capacity factor of 0.3 inch per occupant. The main stair complies with this requirement. The servants stair does not comply. See egress stairway width (IBC, 1009.4).
ACCESSIBLE MEANS OF EGRESS (IBC, SECTION 1007.1)	Accessible spaces shall be provided with not less than one accessible means of egress, however an accessible means of egress is not required in alterations to existing buildings (Exception 1). If the Patterson Center desires to provide an accessible means of egress, then this would require either a platform lift or an elevator as an area of refuge at the stair cannot be easily accommodated (Section 1007.2).
MEANS OF EGRESS - DOOR WIDTHS (IBC, 1008.1.1, IFC 1008.1, NFPA 101, 7.2.1.2.4)	The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of 32 inches. According to NFPA condition (4), in existing buildings, existing door leaf width shall not be less than 28 inches. The main entrance door of the Main Residence provides a clear width of 37 inches and complies with this requirement. However, the double (French) doors from the Living Room, Library, and Dining Room to the exterior and the interior double doors do not meet the requirement of having one leaf providing a clear opening width of 32 inches. Other interior egress doors are not in compliance.
EGRESS DOOR SWING (IBC, 1008.1.2)	Typically, egress doors are to swing in the direction of egress travel. This requirement is for occupant loads of 50 or more persons. The Main Residence egress doors do not swing in the direction of egress travel.
INTERIOR EXIT STAIRWAYS (IBC, 1009.2.1, 1022.2)	Interior exit stairways are to lead directly to the exterior of the building or with an exit passageway. They are to be enclosed in accordance with Seciton 1022, i.e. as a fire barrier with a fire resistance rating of not less than one hour. Neither the main stair nor the servants stair complies with this requirement.

EGRESS STAIRWAY WIDTH (IBC, 1009.4)	The width of stairways shall be determined by the occupant load (.3 inches/occupant) but shall not be less than 44 inches. However, per Exception 1, those stairways serving an occupant load of less than 50 shall have a width of not less than 36 inches. The main stair in the Main Residence serves less than 50 occupants coming from the second floor and attic. It has a clear width of 41 inches from the first floor to the second floor and complies with the requirement. The runs to the attic and to the basement have a clear width of 34.5 inches and do not comply. The servant stair has a clear width of 30.5 inches and does not comply.
TRAVEL DISTANCE (IBC, TABLE 1016.2)	The exit access travel distance for an Assembly occupancy without a sprinkler system is 200 feet. The Main Residence exit access travel distance is well within this requirement.
COMMON PATH OF TRAVEL (IBC, TABLE 1014.3)	The common path of travel for an Assembly occupancy with more than 30 occupants is 75 feet. The Main Residence common path of travel is well within this requirement.
EXITS (IBC, SECTION 1015.1, TABLE 1015.1)	Two exits from any space shall be provided when either the occupant load exceeds the values in Table 1015.1 or the common path of egress travel exceeds that in Section 1014.3. As an Assembly occupancy, the proposed meeting room in the Garage comes close to meeting the maximum occupant load of 49 for only one exit. However, a second exit from this space can be accommodated.
NUMBER OF EXITS (IBC, SECTION 1021.2)	Two exits from any story shall be provided when either the occupant load, number of dwelling units, or the exit access travel distance exceeds the values in Tables 1021.2(1) or 1021.2(2). The proposed first floor uses exceed the maximum occupant load of 49 and would require two exits. The proposed second floor, basement and attic uses fall under the maximum occupant load of 49 and only require the one exit per story.
MEANS OF EGRESS - CORRIDOR WIDTH (IBC, TABLE 1018.2)	The minimum corridor width shall be 44 inches for most spaces and 24 inches when accessing mechanical, plumbing, or electrical systems or equipment. In general, the corridors (primarily on the second floor) within the Main Residence are less than 44 inches and do not comply with this requirement.

MEANS OF EGRESS - CORRIDOR DEAD ENDS (IBC, SECTION 1018.4)

Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet in length. The dead end corridor to the servant rooms over the garage is 16 feet in length to the servant stair. This does comply with the requirement. The other couple of dead end corridors are shorter than 20 feet.

ACCESSIBILITY REQUIREMENTS

SCOPING (IBC, SECTION 1103.2.2) & CHANGE OF OCCUPANCY (IBC, SECTION 3411.4)

Existing buildings shall comply with Section 3411 which states that for alterations and change of occupancies to existing buildings, including historic buildings, the building should have the following accessible features:

1. At least one accessible building entrance.
2. At least one accessible route from an accessible building entrance to primary function areas.
3. Signage complying with Section 1110.
4. Accessible parking, where parking is being provided.
5. At least one accessible passenger loading zone, when loading zones are provided.
6. At least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

The primary function areas (defined by IBC as the major activity for which the facility is intended) of the Main Residence are those rooms on the primary tour of the historic house museum: Entrance Hall, Living Room, Library, and Dining Room. If the second floor rooms are also considered to be part of the primary function areas, then an elevator would be required.

Where it is technically infeasible to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible.

EMPLOYEE WORK AREAS (IBC, SECTION 1103.2.3

Spaces and elements within employee work areas (defined as spaces used only for work, not including corridors, toilet rooms, and break rooms) shall only be required to comply with Sections 907.9.1.2, 1007 (accessible means of egress) and 1104.3.1 and shall be designed and constructed so that individuals with disabilities can approach, enter and exit the work area.

Per 1104.3.1, common use circulation paths within employee work areas shall be accessible routes except when the work area is less than 1,000 sf. Any offices within the Main Residence would likely be less than 1,000 sf and would not be required to have an accessible route that would necessitate installing an elevator.

STRUCTURAL REQUIREMENTS

ROOF FRAMING CAPACITY

The roof framing of the Main Residence has a capacity over the minimum roof live loads required by IBC 2012.

ATTIC FRAMING CAPACITY

The attic space was noted to have sufficient strength capacity for the current residential loadings of inhabitable and uninhabitable attic spaces; however, the existing framing below the tiled bathroom was calculated with a reduced capacity of 24 psf due to deflection requirements for brittle finishes (L/480 for Live Load only and L/360 for Total Load). Since the ceiling below does not exhibit cracks and or excessive deflection, it would appear that the blocking or bridging set between the floor joists contributes by distributing applied forces throughout the floor diaphragm.

SECOND FLOOR FRAMING CAPACITY

Overall, second floor rooms appear to have a capacity suitable for residential occupancies (40 psf). This is principally governed by joist deflection and the flexural capacity of the supporting steel beams. The interior corridors were calculated to have an available capacity greater than 75 psf and largely suitable for corridors above the first floor level. If second floor rooms are to be converted to office use, Bedrooms No. 3 and 4 and the Pressing Room would be acceptable as their capacity exceeds 50 psf and do not require reinforcement of the existing framing. The majority of the second floor areas exhibit a capacity of less than 50 psf as previously identified as the recommended capacity for house museums. However, since the majority of the historic furniture and collections are scheduled to remain in situ, this will effectively reduce the floor area which visitors can physically occupy and thereby restricts overloading the existing structure.

FIRST FLOOR FRAMING CAPACITY

The first floor framing largely has an available capacity suitable for residential occupancies and for the anticipated use as a house museum for both the public areas and corridors, except for the Kitchen and Pantry area. Here, the floor framing spans an increased distance than other wood-framed areas on this floor. Though the framing has a calculated capacity of 64 psf based on strength, its capacity is governed to 37 psf by deflection. This analysis appears to correlate with the existing conditions where separation was observed between the first floor ceiling and the pantry casework below and the existing plaster ceiling in the basement space below which was noted to exhibit localized sagging and unevenness.

Refer to Appendix B for additional information on the capacity of the existing Main Residence structure.

MECHANICAL SYSTEMS REQUIREMENTS

HEATING AND AIR CONDITIONING

Most of the heating and air conditioning equipment is either well beyond its service life, nearing the end of its service life, or is no longer functioning. All replacement equipment will comply with current code requirements.

PLUMBING SYSTEMS REQUIREMENTS

REQUIRED PLUMBING FIXTURES (IBC, TABLE 2902.1)

For an A3 occupancy classification with a museum function, at least 1 designated water closet per 125 males and 1 designated water closet per 65 females with 1 lavatory per 200 males or females is required. There should also be 1 drinking fountain per 500 occupants. If the existing toilet rooms and bathrooms of the Main Residence were used for the public, then it would comply with the requirements. The Main Residence does not comply with the requirements for the drinking fountain. If new toilet rooms were provided in the Pump House/Garage, then the required plumbing fixtures would be 1 water closet for men, 2 water closets for women, 1 lavatory, and 1 drinking fountain.

DRINKING FOUNTAINS (SECTION 2902.5)	Drinking fountains should be located within a travel distance of 500 feet from the most remote location in the space and along an accessible path. If a drinking fountain were to be added to the Pump House/Garage, then it would be approximately 150 feet from the most remote location within the Main Residence.
PLUMBING	Water service is provided by the main well at the Pump House/ Garage. It is assumed that all underground piping (water, sanitary, and storm sewer) is original and may not comply with current code requirements.
PRIVATE SEWAGE DISPOSAL (IPSD, CHAPTER 8)	The Main Residence is served by a 2,000 gallon septic tank. It is assumed to be original and will need to be made to comply with current code requirements.

ELECTRICAL REQUIREMENTS

The wiring in the Main Residence is original and the electrical panels include fuse panels. Much, if not all of the electrical system does not comply with current code requirements.

The existing active ADT security system with window and door contacts would remain in place. The telephone system may need additional line(s) for future use. The original call system wires are original and do not comply with current code requirements. The call system can be abandoned in place.

FIRE PREVENTION REQUIREMENTS

FIRE DEPARTMENT ACCESS FOR APPARATUS (CALVERT COUNTY CODE, CHAPTER 44)

Applicable requirements include:
1. Means of Access: Hard, all weather surface
2. Dead Ends: Limited to 300 feet. The Main Residence driveway includes a dead-end condition that exceeds 300 and may not have a turn-around condition that is acceptable.
3. Roadways must be a minimum of 20 feet wide. The roads leading to the Main Residence do not comply with this width requirement.
4. Setback: Structures exceeding 30 feet in height are limited to 50 foot setbacks from street/fire lanes. The Main Residence is very close to the 30 foot height and appears to comply with this requirement.
5. Standpipes: Standpipes are required for structures that are more than 3 stories or over 50 feet in height. The Main Residence is not required to have a standpipe system.

6. Water supply: Water supply systems that are not publicly owned and installed must meet NFPA 24.
7. Fire flow requirements vary depending on zoning and permitted uses. Flow requirements will need to be confirmed for this project in a future design phase.

ENERGY CONSERVATION REQUIREMENTS

Any alterations, renovations, or repairs to the Main Residence or its building systems shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with the IEC code requirements (Section C101.4.3).

EXISTING OR HISTORIC COMPLIANCE (IECC, C101.4.1 AND C101.4.2)

For existing buildings, the IEC shall not be used to require the alteration nor prevent the continued use and maintenance of existing buildings. As the Main Residence is listed on the State or National Register, then it is be exempt from the requirements within the IEC.

CHANGE IN USE (IEC, C101.4.4)C

As the Main Residence will have a change of use from residential to assembly, any increase in demand for fossil fuel or electrical energy shall comply with the IEC code requirements (Section C101.4.4), unless its exemption as a historic building is applied.

CHANGE IN SPACE CONDITIONING (IECC, C101.4.5)

If any nonconditioned space within the Main Residence is altered to become conditioned, then it must comply with the IEC (Section C101.4.5), unless its exemption as a historic building is applied.

CHAPTER 9:

CODE EVALUATION - OUTBUILDINGS



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CHAPTER 9: CODE EVALUATION - OUTBUILDINGS

INTRODUCTION

The code and accessibility evaluation below is preliminary in nature. More detailed code analysis is required in a future design phase based on specific program requirements. The purpose of the analysis in this report is to identify likely requirements with significant cost implications as well as areas where variances or alternate compliance means may need to be considered.

APPLICABLE CODES

The following codes and standards apply to the Outbuildings. The requirements herein would likely apply for many years in the future.

BUILDING CODES

2012 lBC -International Building Code (IBC) 2012 with the MD Department of Housing and Community Development (DHCD) modifications (Ref: COMAR 05.02.07)

2012 IRC- International Residential Code (IRC) 2012 with the MD DHCD modifications (Ref: COMAR 05.02.07)

2012 IECC -International Energy Conservation Code (IECC) (Ref: COMAR 05.02.07)

2009 IEBC -Maryland Building Rehabilitation Code (MBRC) incorporating the International Existing Building Code (IEBC) 2009 (Ref: COMAR 05 .16)

2009 NFPA 101 Life Safety Code- The State Fire Prevention Code incorporating the (National Fire Protection Association- NFPA 101 Life Safety Code 2009 (Ref: CO MAR 29.06.01) including State Fire Marshal-modifications

2012 IBC- Safety glazing requirements set forth in the IBC 2012, and in the Public Safety Article, Title 12, Subtitle 4, Annotated Code of Maryland (Ref: COMAR 05.02.07) in addition to the Department of Labor Licensing and Regulations (DLLR) requirements

2011 NEC- National Electrical Code (NEC) 2011 (Ref: COMAR 05.02.07.; Public Safety Article Title
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2009 IMC- International Mechanical Code (IMC) 2006 with modifications (Ref: COMAR 05.02.07; Business Regulation Article, section 9A-205, Annotated Code of Maryland)

2006 NSPC and 2007 supplement to 2006 NSPC; and NFGC-National Standard Plumbing Code (NSPC) 2006 illustrated with modifications, 2007 supplement to 2006 National Standard Plumbing Code, National Fuel Gas Code (NFGC), ANSI Z223.1, NFPA 54,2006, and Liquefied Petroleum Gas Code (LPGC), NFPA 58,2004 (Ref: COMAR 05.02.07; Business Occupations and Professions Article 12, Annotated Code of Maryland)

2012 IBC- Elevators and conveying systems requirements set forth in the IBC 2012, and in the Public Safety Article, Title 12, Subtitle 8, Annotated Code ofMaryland (Ref: COMAR 05.02.07) in addition to the DLLR requirements

IPSDC - International Private Sewage Disposal Code

2012 IPC - International Plumbing Code
Chapter 29 of the IBC and the IPC shall be followed for any alteration, repairs, relocation, replacement, and addition to the use or maintenance of the plumbing equipment and systems.

ACCESSIBILITY CODES

The accessibility evaluation of the Main Residence will follow in a subsequent chapter. The following codes and standards are applicable to the Main Residence.

Chapter 11 “Accessibility,” 2012 IBC

Section 806 “Accessibility,” Chapter 8 “Alterations - Level 3” and Section 906 “Accessibility,” Chapter 9 “Change of Occupancy” 2009 IEBC

2010 ADA Standards for Accessible Design

MAC - Maryland Accessibility Code (Ref: COMAR 05.02.02)

EXISTING STRUCTURES	Chapter 34 “Existing Structures” within the 2012 IBC includes provisions that deal with alternative methods or reduced compliance requirements when dealing with existing building constraints. The chapter allows for a controlled departure from full compliance with technical codes, without compromising the minimum standards for fire prevention and life safety features of the rehabilitated building. The chapter also includes further allowances for registered historic buildings. This chapter is repeated in the IEBC.
ALTERATION LEVEL	In accordance with 2009 IEBC, most work that will be necessary to bring the outbuildings in compliance with current code and to make them functional for the preferred use will likely be classified as a Level 3 alteration. Level 3 alterations apply where the work area exceeds 50 percent of the aggregate area of the building.
HISTORIC BUILDINGS	Chapter 11 “Historic Buildings” within the 2009 IEBC states that there are exceptions from code requirements when the building has historic value. The most important criterion is that the building must be accredited as being of historic significance by a state or local authority. As the Patterson Center is a designated historic property, certain exemptions may apply. According to Section 3409 in the 2012 IBC, repair, alteration, restoration, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute a distinct life safety hazard.
COLD FRAME	The Cold Frame is a non-occupied structure and will not be studied in this analysis.

PUMP HOUSE/GARAGE

LIFE SAFETY REQUIREMENTS - PUMP HOUSE/GARAGE

	The following requirements and classification for this building are based on the International Building Code (IBC), 2012 edition. These are general requirements that would likely apply for many years in the future.
USE AND OCCUPANCY CLASSIFICATION (IBC, SECTION 303.4)	The preferred use for the Pump House/Garage is as a facility supporting the Main Residence with accessible toilet rooms and a catering kitchen. This will entail a change of use and occupancy from its current use as a garage with storage spaces that is classified as Group U Utility occupancy. The new occupancy classification would be Group B Business which is for small buildings used for assembly purposes with an occupant load of less than 50 persons.
BUILDING CONSTRUCTION CLASSIFICATION (IBC, SECTION 602.3, TABLE 601)	The Pump House/Garage most closely fits the Type IIIB construction classification. The exterior walls are of noncombustible materials (brick and terra cotta block) while the exposed wood roof assembly is unprotected. The Pump House/ Garage is not protected by an automatic sprinkler system.
ALLOWABLE BUILDING HEIGHT AND AREA (IBC, TABLE 503)	For a Group B occupancy classification with Type IIIB construction classification, the allowable building height it 55 feet. The allowable number of stories is 3 with 19,000 square feet of allowable area per story. The Pump House/Garage is 1 story plus an occupiable attic, approximately 21’-0” tall, and 540 SF. This is well within the allowable requirements.

FIRE PROTECTION REQUIREMENTS - PUMP HOUSE/GARAGE

AUTOMATIC SPRINKLER SYSTEMS (IBC, SECTION 903.2.11)	An automatic sprinkler system is not required for the Pump House/ Garage as a Group B occupancy classification does not have this requirement. However, if a commercial kitchen exhaust hood and duct system is installed with a Type 1 hood, then an automatic sprinkler system will be required (IBC, 904.2.1 and 903.211.5).

FIRE EXTINGUISHERS (IBC, SECTION 906 AND IFC, SECTION 906)

Portable fire extinguishers are required for an Business occupancy. If there is commercial cooking equipment, they must be located within 30 feet of the equipment. The Pump House/Garage does not currenlty comply but this is easily remedied.

MEANS OF EGRESS REQUIREMENTS - PUMP HOUSE/GARAGE

MEANS OF EGRESS - OCCUPANT LOAD (IBC, TABLE 1004.1.2)

The rooms in the Pump House/Garage will have the new use as an accessory structure to the historic house museum. The following chart outlines the various functions and the occupant load factor. Based on this, the occupant load of the Pump House/Garage is 4 occupants.

Function	Area	Occ Load Factor	# Occupants
First Floor			
Catering Kitchen (former Garage)	270 gross sf	200 gross sf	2
Storage (former Tool Room)	40 gross sf	300 gross sf	1
Toilet Rooms (former Transformer Room, Pump Room)	230 gross sf	n/a	n/a
Attic			
Storage Areas, Mechanical	170 gross sf	300 gross sf	1
Total	**710**		**4**

ACCESSIBLE MEANS OF EGRESS (IBC, SECTION 1007)

Accessible spaces shall be provided with not less than one accessible means of egress. However, according to exception 1 in Section 1007, accessible means of egress are not required in alterations to existing buildings. If the treatments proposed suggest making an accessible means of egress, then various other requirements within this section will need to be followed.

MEANS OF EGRESS - DOOR WIDTHS (IBC, 1008.1.1, IFC 1008.1, NFPA 101, 7.2.1.2.4)

The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of 32 inches. According to NFPA condition (4), in existing buildings, existing door leaf width shall not be less than 28 inches. The entrance doors to the Pump House/Garage provide a clear width of approximately 34 inches and comply with this requirement.

EGRESS DOOR SWING (IBC, 1008.1.2)	Egress doors are to be of the pivoted or side-hinged type. Exception 1 states that private garages and storage areas with an occupant load of 10 or less do not need to comply. Typically, egress doors are to swing in the direction of egress travel. This is required for occupant loads of 50 or more persons. The Pump House/Garage doors on the first floor are side-hinged (except for the garage door) and swing in the direction of travel. The door to the attic swings in.
EGRESS STAIRWAY WIDTH (IBC, 1009.4)	There is no stair in the Pump House/Garage.
COMMON PATH OF TRAVEL (IBC, TABLE 1014.3)	The common path of travel for a B occupancy with less than 30 occupants is 100 feet. The Pump House/Garage common path of travel is well within this requirement.
EXITS (IBC, SECTION 1015.1, TABLE 1015.1)	Two exits from any space shall be provided when either the occupant load exceeds the values in Table 1015.1 (49 occupants) or the common path of egress travel exceeds that in Section 1014.3 (100 feet with less than 30 occupants). For a Group B occupancy with a maximum of 49 occupants, only one exit is required from each space. With an occupant load of three, the Pump House/Garage is allowed to have one exit and complies with this requirement.
TRAVEL DISTANCE (IBC, TABLE 1016.2)	The exit access travel distance for a B occupancy without a sprinkler system is 200 feet. The Pump House/Garage exit access travel distance is well within this requirement.
MEANS OF EGRESS - CORRIDOR WIDTH (IBC, TABLE 1018.2)	The minimum corridor width shall be 36 inches for spaces with a required occupancy capacity of less than 50 and 24 inches when accessing mechanical, plumbing, or electrical systems or equipment. There are no existing corridors in the Pump House/ Garage.
MEANS OF EGRESS - CORRIDOR DEAD ENDS (IBC, SECTION 1018.4)	Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet in length. There are no existing dead end corridors in the Pump House/Garage.

NUMBER OF EXITS (IBC, SECTION 1021.2)	Two exits from any story shall be provided when either the occupant load exceeds the values or the exit access travel distance exceeds the values in Tables 1021.2(1) or 1021.2(2). For a Group B occupancy with a maximum of 49 occupants and maximum exit access travel distance of 75 feet, only one exit is required from each space. With an occupant load of three and an exit access travel distance well under the maximum, the Pump House/Garage is allowed to have one exit and complies with this requirement.

PLUMBING SYSTEMS REQUIREMENTS - PUMP HOUSE/GARAGE

REQUIRED PLUMBING FIXTURES (IBC, TABLE 2902.1)	Currently, plumbing fixtures are not required for a Utility classification and use. With the change of use to B occupancy to become a support facility for the Main Residence which will become an A3 occupancy, the Pump House/Garage does not comply with the number of required plumbing fixtures. For an A3 occupancy classification with a museum function, there should be at least 1 designated water closet per 125 males and 1 designated water closet per 65 females with 1 lavatory per 200 males or females. There should also be 1 drinking fountain per 500 occupants. If Pump House portion of the Pump House/Garage were converted to house accessible toilet rooms, then they would be required to comply with these requirements.
DRINKING FOUNTAINS (SECTION 2902.5)	Drinking fountains should be located within a travel distance of 500 feet from the most remote location in the space and along an accessible path. The Pump House/Garage does not currently comply.

STRUCTURAL REQUIREMENTS - PUMP HOUSE/GARAGE

ROOF FRAMING CAPACITY	The roof framing of the pump house was calculated to have an estimated allowable capacity of 64 psf which is significantly greater than the minimum roof loads required by code.

The size of the attic framing was unobserved since the existing framing was concealed by the existing ceiling and floor finishes and hence the capacity could not be verified. However, the joist spacing was noted at 12” on-center due to the presence of nailed fasteners in the ceiling below. Since the attic was used for living quarters and its relatively steep roof profile restricts useable space to the center of the room, it would appear that the framing has an available capacity which could easily exceed 40 psf. A localized probe within the ceiling below could easily reveal the size and spacing of framing members to allow calculation of the allowable capacity.

Refer to Appendix B for additional information on the capacity of the existing Pump House/Garage structure.

MECHANICAL SYSTEMS REQUIREMENTS - PUMP HOUSE/GARAGE

PLUMBING

There is no plumbing system in the Pump House/Garage other than the original well pump for the water service to the Main House and Pool House. The piping requires a future investigation to determine if it meets code. For a preferred use as a support facility with toilet rooms and a catering kitchen, all new plumbing would be required to comply with current codes.

HEATING AND AIR CONDITIONING

There are no heating and air conditioning systems in the Pump House/Garage. For a preferred use as a support facility with toilet rooms and a catering kitchen, all new heating and air conditioning would be required to comply with current codes.

ELECTRICAL REQUIREMENTS - PUMP HOUSE/GARAGE

ELECTRICAL SYSTEMS

The majority of the wiring and the fuse boxes in the Pump House/Garage are not compliant with current code requirements. For a preferred use as a support facility with toilet rooms and a catering kitchen, all new electrical systems would be required to comply with current codes.

FIRE PREVENTION REQUIREMENTS - PUMP HOUSE/GARAGE

FIRE DEPARTMENT ACCESS FOR APPARATUS (CALVERT COUNTY CODE, CHAPTER 44)	Applicable requirements include: 1. Means of Access: Hard, all weather surface 2. Dead Ends: Limited to 300 feet. The Main Residence driveway includes a dead-end condition that exceeds 300 and may not have a turn-around condition that is acceptable. 3. Roadways must be a minimum of 20 feet wide. The roads leading to the Main Residence do not comply with this width requirement. 4. Setback: Structures exceeding 30 feet in height are limited to 50 foot setbacks from street/fire lanes. The Pump House/Garage complies with this requirement. 5. Standpipes: Standpipes are required for structures that are more than 3 stories or over 50 feet in height. The Pump House/ Garage is not required to have a standpipe system. 6. Water supply: Water supply systems that are not publicly owned and installed must meet NFPA 24. 7. Fire flow requirements vary depending on zoning and permitted uses. Flow requirements will need to be confirmed for this project in a future design phase

ENERGY CONSERVATION REQUIREMENTS - PUMP HOUSE/GARAGE

	Any alterations, renovations, or repairs to the Pump House/Garage and its building systems shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with the IEC code requirements (Section C101.4.3).
EXISTING OR HISTORIC COMPLIANCE (IECC, C101.4.1 AND C101.4.2)	For existing buildings, the IEC shall not be used to require the alteration nor prevent the continued use and maintenance of existing buildings. As the Pump House/Garage is listed on the State and National Registers, then it is exempt from the requirements within the IEC.
CHANGE IN USE (IECC, C101.4.4)	For a change in use to a support facility with toilet rooms and a catering kitchen, then any increase in demand for fossil fuel or electrical energy shall comply with the IEC code requirements (Section C101.4.4), unless its exemption as a historic building is applied.

CHANGE IN SPACE CONDITIONING (IECC, C101.4.5)	If any non-conditioned space within the Pump House/Garage is altered to become conditioned, then it must comply with the IEC (Section C101.4.5), unless its exemption as a historic building is applied.

GARDENER'S COTTAGE

LIFE SAFETY REQUIREMENTS - GARDENER'S COTTAGE

USE AND OCCUPANCY CLASSIFICATION (IBC, SECTION 303.4)	The preferred use for the Gardener's Cottage is as a residence. It would likely become two dwelling units: one two-bedroom apartment and one one-bedroom apartment. The closest IBC classification is Group R-3. This use is intended for residential occupancies where the occupants are primarily permanent in nature in buildings that do not contain more than two dwelling units. The Gardener's Cottage currently has one kitchen, one living room, and five bedrooms.
BUILDING CONSTRUCTION CLASSIFICATION (IBC, SECTION 602.3, TABLE 601)	The Gardener's Cottage most closely fits the Type VA construction classification. This classification is for a protected wood frame construction. The roof system is protected by a plaster ceiling. The Gardener's Cottage is not protected by an automatic sprinkler system.
ALLOWABLE BUILDING HEIGHT AND AREA (IBC, TABLE 503)	For a Group R-3 use classification with Type VA construction classification, the allowable building height it 50 feet. The allowable number of stories is 3 with an unlimited allowable area per story. The Gardener's Cottage is 1 story, approximately 15'-00" tall, and 1825 SF per story. This is well within the allowable requirements.

FIRE PROTECTION REQUIREMENTS - GARDENER'S COTTAGE

AUTOMATIC SPRINKLER SYSTEMS (IBC, SECTION 903.2.8,)	Group R-3 residences are required to have an automatic sprinkler system in accordance with Section 903.3.1.3 which specifies an NFPA 13D automatic sprinkler system. The Gardener's Cottage does not comply with this requirement. It is likely that new underground water service would be needed to support such a system. The system would include smoke detection and fire alarm devices.
FIRE EXTINGUISHERS (IBC, SECTION 906 AND IFC, SECTION 906)	Portable fire extinguishers are required for an R-3 occupancy.

MEANS OF EGRESS REQUIREMENTS - GARDENER'S COTTAGE

MEANS OF EGRESS - OCCUPANT LOAD (IBC, TABLE 1004.1.2)

The rooms in the Gardener's Cottage will remain residential in use. The following chart outlines the various functions and the occupant load factor. Based on this, the occupant load of the Gardener's Cottage is 9 occupants.

Function	Area	Occ Load Factor	# Occupants
First Floor			
Residential (most rooms)	1155 gross sf	200 gross sf	6
Laundry/Mech (former Tool Room)	100 gross sf	300 gross sf	1
Garage - Storage	570 gross sf	300 gross sf	2
Total	**1825**		**9**

ACCESSIBLE MEANS OF EGRESS (IBC, SECTION 1007)

Accessible spaces shall be provided with not less than one accessible means of egress. However, according to exception 1 in Section 1007, accessible means of egress are not required in alterations to existing buildings. If the treatments proposed suggest making an accessible means of egress, then various other requirements within this section will need to be followed.

MEANS OF EGRESS - DOOR WIDTHS (IBC, 1008.1.1, IFC 1008.1, NFPA 101, 7.2.1.2.4)

The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of 32 inches. According to NFPA condition (4), in existing buildings, existing door leaf width shall not be less than 28 inches. Most of the doors into the Gardener's Cottage provide a clear width of less than 32 inches and do not comply with this requirement.

EGRESS DOOR SWING (IBC, 1008.1.2)

Egress doors are to be of the pivoted or side-hinged type except egress doors within or serving a single dwelling unit in Group R-3 (Exception 4). Typically, egress doors are to swing in the direction of egress travel (this is required for occupant loads of 50 or more persons). The Gardener's Cottage exterior egress doors are side-hinged and do not swing in the direction of travel.

EGRESS STAIRWAY WIDTH (IBC, 1009.4)	The width of stairways shall be determined by the occupant load (.3 inches/occupant) but shall not be less than 44 inches. However, per Exception 1, those stairways serving an occupant load of less than 50 shall have a width of not less than 36 inches. Currently, there is a short stair (three steps) in the Gardener's Cottage that could be interpreted as along an egress path. The stair 41 inches wide without any handrails. It is not in compliance. With a preferred use of two dwelling units, this short stair may be eliminated.
COMMON PATH OF TRAVEL (IBC, TABLE 1014.3)	The common path of travel for the R-3 occupancy with less than 30 occupants is 75 feet. With an automatic sprinkler system this increases to 125 feet. The common paths of travel in the Gardener's Cottage are well within this requirement.
EXITS (IBC, SECTION 1015.1, TABLE 1015.1)	Two exits from any space shall be provided when either the occupant load exceeds the values in Table 1015.1 or the common path of egress travel exceeds that in Section 1014.3. Exception 1 states that in Group R-3 occupancies, one means of egress is permitted within and from individual dwelling units with a maximum occupant load of 20 where the dwelling unit is equipped throughout with an automatic sprinkler system. For a Group R-3 occupancy with a maximum of 10 occupants, only one exit is required from each space. With an occupant load of 9, the Gardener's Cottage is allowed to have one exit and complies with this requirement. If the occupants increase to over 10 and the Gardener's Cottage has an automatic sprinkler system, then the exception can be used and one exit will still be allowed.
TRAVEL DISTANCE (IBC, TABLE 1016.2)	The exit access travel distance for the R-3 occupancy without a sprinkler system is 200 feet. With an automatic sprinkler system, this increases to 250 feet. The Gardener's Cottage exit access travel distance of 50 feet is well within this requirement.
MEANS OF EGRESS - CORRIDOR WIDTH (IBC, TABLE 1018.2)	The minimum corridor width shall be 36 inches within a dwelling unit. Access mechanical, plumbing, or electrical systems or equipment requires a corridor width of 24 inches. One of the corridors is 36 inches whereas the other is 33 inches wide.

MEANS OF EGRESS - CORRIDOR DEAD ENDS (IBC, SECTION 1018.4)	Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet in length. The dead end corridor from the Bedroom 111 door to the Kitchen 107 door is 20 feet in length. The other dead end corridor from Hallway 103 to Bedroom 102 is 12 feet in length.
NUMBER OF EXITS (IBC, SECTION 1021.2)	Two exits from any story shall be provided when either the occupant load, number of dwelling units, or the exit access travel distance exceeds the values in Tables 1021.2(1) or 1021.2(2). Group R-3 occupancies are not listed in the Tables. Exception 2 allows Group R-3 occupancy buildings to have one exit. As a Group R-3 occupancy, the Gardener's Cottage is allowed to have one exit.

ACCESSIBILITY REQUIREMENTS - GARDENER'S COTTAGE

SCOPING (IBC, SECTION 1103.2.2) & CHANGE OF OCCUPANCY (IBC, SECTION 3411.4)	Existing buildings shall comply with Section 3411 which states that for alterations and change of occupancies to existing buildings, including historic buildings, the building should have various accessible features listed in Section 3411.4.
DETACHED DWELLINGS (IBC, SECTION 1103.2.4	However, as a two-family dwelling, the Gardener's Cottage and its associated sites and facilities are not required to be accessible.

STRUCTURAL REQUIREMENTS - GARDENER'S COTTAGE

The various roof framing was evaluated at the Gardener's Cottage and per the analysis it appears that the roof framing has an available capacity exceeding the minimum roof live load requirements per code. The attic area above the garage has a capacity of 30 psf which is suitable for residential structures with uninhabitable attic space used for storage.

Refer to Appendix B for additional information on the capacity of the existing Gardener's Cottage structure.

MECHANICAL SYSTEMS REQUIREMENTS - GARDENER'S COTTAGE

HEATING AND AIR CONDITIONING (IMC,CHAPTER 12)

The current heating system is no longer active. The Gardener's Cottage is heated by a 2-pipe hydronic system with terminal units though the building. The boiler dates to the 1990s. In another 10 to 30 years the boiler will need replacing and would be required to comply with the current code. When the 2-pipe hydronic system is replaced, the new system would be required to comply with the current code.

PLUMBING REQUIREMENTS - GARDENER'S COTTAGE

REQUIRED PLUMBING FIXTURES (IBC, TABLE 2902.1)

For a Residential classification with an R-3 occupancy, there should be at least 1 designated water closet per dwelling unit with 1 lavatory per 10 occupants. There should also be 1 bathtub or shower, 1 kitchen sink, automatic clothes washer connection per dwelling unit.

The Gardener's Cottage has two bathrooms with a shower in one and a bathtub in the other plus one kitchen. As a single dwelling unit, the building complies with all the requirements except for the automatic clothes washer. However, as a preferred use as facility with two dwelling units, the Gardener's Cottage will need to comply with an additional kitchen sink and clothes washer connection.

If it is decided that the Gardener's Cottage is to become a congregate living facilities with 16 or fewer persons, then the plumbing fixtures requirements will change. This includes a change to the quantity of water closets, lavatories, and showers as well as a requirement for a drinking fountain and a service sink.

As an R-3 occupany for one and two-family dwellings, there is no drinking fountain requirement. However, if the Gardener's Cottage becomes a congregate living facility (still an R-3 occupancy), then a drinking fountain will be required.

PLUMBING (IPC, CHAPTER 6)

The current water lines from the Pump House/Garage to the Gardener's Cottage is broken and hence, there is no active water service. It is likely that the current underground water piping will need to be replaced and at that time will be made to comply with current code requirements.

DRINKING FOUNTAINS (SECTION 2902.5)	Drinking fountains should be located within a travel distance of 500 feet from the most remote location in the space and along an accessible path. Drinking fountains are not required at the Gardener's Cottage.
PRIVATE SEWAGE DISPOSAL (IPSD, CHAPTER 8)	The Gardener's Cottage is connected to two septic tanks that will need to be made to comply with current code requirements.

ELECTRICAL REQUIREMENTS - GARDENER'S COTTAGE

ELECTRICAL SERVICE	The current electrical system at the Gardener's Cottage comes from an underground electrical line (UGE). Considering that the other UGE's to the Pool House and Beach House are not functioning, it is likely that it will need to be replaced and be made to comply with current code requirements. The wiring is original and does not comply with current code requirements.

FIRE PREVENTION REQUIREMENTS - GARDENER'S COTTAGE

FIRE DEPARTMENT ACCESS FOR APPARATUS (CALVERT COUNTY CODE, CHAPTER 44)	Applicable requirements include: 1. Means of Access: Hard, all weather surface 2. Dead Ends: Limited to 300 feet. The Gardener's Cottage driveway includes a dead-end condition that exceeds 300 and may not have a turn-around condition that is acceptable. 3. Roadways must be a minimum of 20 feet wide. The roads leading to the Main Residence do not comply with this width requirement. 4. Setback: Structures exceeding 30 feet in height are limited to 50 foot setbacks from street/fire lanes. The Gardener's Cottage complies with this requirement. 5. Standpipes: Standpipes are required for structures that are more than 3 stories or over 50 feet in height. The Gardener's Cottage is not required to have a standpipe system. 6. Water supply: Water supply systems that are not publicly owned and installed must meet NFPA 24. 7. Fire flow requirements vary depending on zoning and permitted uses. Flow requirements will need to be confirmed for this project in a future design phase

ENERGY CONSERVATION REQUIREMENTS - GARDENER'S COTTAGE

	Any alterations, renovations, or repairs to the Gardener's Cottage or its building systems shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with the IEC code requirements (Section C101.4.3).
EXISTING OR HISTORIC COMPLIANCE (IECC, C101.4.1 AND C101.4.2)	For existing buildings, the IEC shall not be used to require the alteration nor prevent the continued use and maintenance of existing buildings. As the Gardener's Cottage is listed on the State and National Registers, then it is exempt from the requirements within the IEC.
CHANGE IN USE (IECC, C101.4.4)	If in the future, the Gardener's Cottage undergoes a change of use from residential to assembly or business, then any increase in demand for fossil fuel or electrical energy shall comply with the IEC code requirements (Section C101.4.4), unless its exemption as a historic building is applied.
CHANGE IN SPACE CONDITIONING (IECC, C101.4.5)	If any non-conditioned space within the Gardener's Cottage is altered to become conditioned, then it must comply with the IEC (Section C101.4.5), unless its exemption as a historic building is applied.

GREENHOUSE

LIFE SAFETY REQUIREMENTS - GREENHOUSE

USE AND OCCUPANCY CLASSIFICATION (IBC, SECTION 303.4)

The preferred use for the Greenhouse is as a greenhouse. The IBC classification for greenhouses is Utility and Miscellaneous Group U. This use is intended for buildings of an accessory character such as garages, sheds, and greenhouses.

BUILDING CONSTRUCTION CLASSIFICATION (IBC, SECTION 602.3, TABLE 601)

The Greenhouse most closely fits the Type IIIB construction classification. The exterior walls are of noncombustible materials (concrete masonry units) while the exposed aluminum frame roof assemblies is unprotected. The Greenhouse is not protected by an automatic sprinkler system.

ALLOWABLE BUILDING HEIGHT AND AREA (IBC, TABLE 503)

For a Group U use classification with Type IIIB construction classification, the allowable building height it 55 feet. The allowable number of stories is 2 with 8,500 square feet of allowable area per story. The Greenhouse is 1 story and approximately 10'-0" tall, and 200 SF. This is well within the allowable requirements.

FIRE PROTECTION REQUIREMENTS - GREENHOUSE

AUTOMATIC SPRINKLER SYSTEMS (IBC, SECTION 903.2.11)

An automatic sprinkler system is not required for the Greenhouse as a Group U use classification does not have this requirement.

FIRE EXTINGUISHERS (IBC, SECTION 906 AND IFC, SECTION 906)

Portable fire extinguishers are not required for an Utility occupancy.

MEANS OF EGRESS REQUIREMENTS - GREENHOUSE

MEANS OF EGRESS - OCCUPANT LOAD (IBC, TABLE 1004.1.2)

The room in the Greenhouse will remain storage in use. The following chart outlines the various functions and the occupant load factor. Based on this, the occupant load of the Greenhouse is 1 occupant.

Function	Area	Occ Load Factor	# Occupants
First Floor			
Storage	200 gross sf	300 gross sf	1
Total	**200 gross sf**		**1**

ACCESSIBLE MEANS OF EGRESS (IBC, SECTION 1007)	Accessible spaces shall be provided with not less than one accessible means of egress. However, according to exception 1 in Section 1007, accessible means of egress are not required in alterations to existing buildings. If the treatments proposed suggest making an accessible means of egress, then various other requirements within this section will need to be followed.
MEANS OF EGRESS - DOOR WIDTHS (IBC, 1008.1.1, IFC 1008.1, NFPA 101, 7.2.1.2.4)	The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of 32 inches. According to NFPA condition (4), in existing buildings, existing door leaf width shall not be less than 28 inches. The entrance doors to the Greenhouse provide a clear width of approximately 26 inches and do not comply with either requirement.
EGRESS DOOR SWING (IBC, 1008.1.2)	Egress doors are to be of the pivoted or side-hinged type. Exception 1 states that private garages and storage areas with an occupant load of 10 or less do not need to comply. Typically, egress doors are to swing in the direction of egress travel. This is required for occupant loads of 50 or more persons. The Greenhouse doors are side-hinged and do not swing in the direction of travel.
EGRESS STAIRWAY WIDTH (IBC, 1009.4)	There is no stair in the Greenhouse.
COMMON PATH OF TRAVEL (IBC, TABLE 1014.3)	The common path of travel for a Utility occupancy with less than 30 occupants is 100 feet. The Greenhouse common path of travel is well within this requirement.
EXITS (IBC, SECTION 1015.1, TABLE 1015.1)	Two exits from any space shall be provided when either the occupant load exceeds the values in Table 1015.1 or the common path of egress travel exceeds that in Section 1014.3. For a Group U occupancy with a maximum of 49 occupants, only one exit is required from each space. With an occupant load of one, the Greenhouse is allowed to have one exit and complies with this requirement.
TRAVEL DISTANCE (IBC, TABLE 1016.2)	The exit access travel distance for a Utility occupancy without a sprinkler system is 300 feet. The Greenhouse exit access travel distance is well within this requirement.

MEANS OF EGRESS - CORRIDOR WIDTH (IBC, TABLE 1018.2)	The minimum corridor width shall be 44 inches for most spaces and 24 inches when accessing mechanical, plumbing, or electrical systems or equipment. There are no corridors in the Greenhouse.
MEANS OF EGRESS - CORRIDOR DEAD ENDS (IBC, SECTION 1018.4)	Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet in length. There are no dead end corridors in the Greenhouse.
NUMBER OF EXITS (IBC, SECTION 1021.2)	Two exits from any story shall be provided when either the occupant load exceeds the values or the exit access travel distance exceeds the values in Tables 1021.2(1) or 1021.2(2). For a Group U occupancy with a maximum of 49 occupants and maximum exit access travel distance of 75 feet, only one exit is required from each space. With an occupant load of one and an exit access travel distance well under the maximum, the Greenhouse is allowed to have one exit and complies with this requirement.

ACCESSIBILITY REQUIREMENTS - GREENHOUSE

SCOPING (IBC, SECTION 1103.2.2) & CHANGE OF OCCUPANCY (IBC, SECTION 3411.4)	Existing buildings shall comply with Section 3411 which states that for alterations and change of occupancies to existing buildings, including historic buildings, the building should have various accessible features listed in Section 3411.4.
UTILITY BUILDINGS (IBC, SECTION 1103.2.5	As the Greenhouse is an agricultural building in Occupancy Group U, access is required to paved work areas and areas open to the general public.

STRUCTURAL REQUIREMENTS - GREENHOUSE

If the Greenhouse were to be rehabilitated, this work would most likely be undertaken by the original supplier and would be required to meet the structural requirements for pre-engineered structures.

MECHANICAL SYSTEMS REQUIREMENTS - GREENHOUSE

PLUMBING	There is no plumbing system in the Greenhouse.
HEATING AND AIR CONDITIONING	There are no heating and air conditioning systems in the Greenhouse.

PLUMBING SYSTEMS REQUIREMENTS - GREENHOUSE

REQUIRED PLUMBING FIXTURES (IBC, TABLE 2902.1)	Plumbing fixtures are not required for a Utility classification and use.
DRINKING FOUNTAINS (SECTION 2902.5)	Drinking fountains should be located within a travel distance of 500 feet from the most remote location in the space and along an accessible path. There are no drinking fountains in the Greenhouse nor are any to be proposed.

ELECTRICAL REQUIREMENTS - GREENHOUSE

ELECTRICAL SERVICE	The non-functioning underground electrical line (UGE) that originally served the Greenhouse is not compliant with current code requirements.

FIRE PREVENTION REQUIREMENTS - GREENHOUSE

FIRE DEPARTMENT ACCESS FOR APPARATUS (CALVERT COUNTY CODE, CHAPTER 44)	Applicable requirements include: 1. Means of Access: Hard, all weather surface 2. Dead Ends: Limited to 300 feet. The Gardener's Cottage driveway includes a dead-end condition that exceeds 300 and may not have a turn-around condition that is acceptable. 3. Roadways must be a minimum of 20 feet wide. The roads leading to the Main Residence do not comply with this width requirement. 4. Setback: Structures exceeding 30 feet in height are limited to 50 foot setbacks from street/fire lanes. The Greenhouse complies with this requirement. 5. Standpipes: Standpipes are required for structures that are more than 3 stories or over 50 feet in height. The Greenhouse is not required to have a standpipe system. 6. Water supply: Water supply systems that are not publicly owned and installed must meet NFPA 24. 7. Fire flow requirements vary depending on zoning and permitted uses. Flow requirements will need to be confirmed for this project in a future design phase

ENERGY CONSERVATION REQUIREMENTS - GREENHOUSE

	Any alterations, renovations, or repairs to the Greenhouse and its building systems shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with the IEC code requirements (Section C101.4.3).
EXISTING OR HISTORIC COMPLIANCE (IECC, C101.4.1 AND C101.4.2)	For existing buildings, the IEC shall not be used to require the alteration nor prevent the continued use and maintenance of existing buildings. As the Greenhouse is listed on the State and National Registers, then it is exempt from the requirements within the IEC.
CHANGE IN USE (IECC, C101.4.4)	It is not likely that the Greenhouse were to have a change of use. If it were to change in use, then any increase in demand for fossil fuel or electrical energy shall comply with the IEC code requirements (Section C101.4.4), unless its exemption as a historic building is applied.
CHANGE IN SPACE CONDITIONING (IECC, C101.4.5)	If any non-conditioned space within the Greenhouse is altered to become conditioned, then it must comply with the IEC (Section C101.4.5), unless its exemption as a historic building is applied.

POOL HOUSE

LIFE SAFETY REQUIREMENTS - POOL HOUSE

USE AND OCCUPANCY CLASSIFICATION (IBC, SECTION 303.4)	The preferred use for the Pool House is as a facility supporting the Main Residence with accessible toilet rooms and an event support space. This will entail a change of use and occupancy from its current use as a residential support building. The new occupancy classification would be Group B Business which is for small buildings used for assembly purposes with an occupant load of less than 50 persons.
BUILDING CONSTRUCTION CLASSIFICATION (IBC, SECTION 602.3, TABLE 601)	The Pool House most closely fits the Type VB construction classification. This classification is for unprotected wood frame construction. The Pool House is not protected by an automatic sprinkler system.
ALLOWABLE BUILDING HEIGHT AND AREA (IBC, TABLE 503)	For a Group B occupancy classification with Type VB construction classification, the allowable building height it 40 feet. The allowable number of stories is 2 with 9,000 square feet of allowable area per story. The Pool House is 1 story approximately 15’-0” tall, and 355 SF. This is well within the allowable requirements.

FIRE PROTECTION REQUIREMENTS - POOL HOUSE

AUTOMATIC SPRINKLER SYSTEMS (IBC, SECTION 903.2.1.3)	An automatic sprinkler system is not required for the Pool House as a Group B occupancy classification does not have this requirement.
FIRE EXTINGUISHERS (IBC, SECTION 906 AND IFC, SECTION 906)	Portable fire extinguishers are required for an Business occupancy. The Pool House does not currently comply but this is easily remedied.

MEANS OF EGRESS REQUIREMENTS - POOL HOUSE

MEANS OF EGRESS - OCCUPANT LOAD (IBC, TABLE 1004.1.2)

The rooms in the Pool House will have the new use as an accessory structure to the historic house museum. The following chart outlines the various functions and the occupant load factor. Based on this, the occupant load of the Pool House is 5 occupants.

Function	Area	Occ Load Factor	# Occupants
First Floor			
Event Support Space (former Pump Room)	125 net sf	30 net sf	5
Toilet Rooms	230 gross sf	n/a	n/a
Total	**355**		**5**

ACCESSIBLE MEANS OF EGRESS (IBC, SECTION 1007)

Accessible spaces shall be provided with not less than one accessible means of egress. However, according to exception 1 in Section 1007, accessible means of egress are not required in alterations to existing buildings. If the treatments proposed suggest making an accessible means of egress, then various other requirements within this section will need to be followed.

MEANS OF EGRESS - DOOR WIDTHS (IBC, 1008.1.1, IFC 1008.1, NFPA 101, 7.2.1.2.4)

The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of 32 inches. According to NFPA condition (4), in existing buildings, existing door leaf width shall not be less than 28 inches. The entrance doors of the Pool House provide a clear width of 32 inches and complies with this requirement.

EGRESS DOOR SWING (IBC, 1008.1.2)

Egress doors are to be of the pivoted or side-hinged type. Typically, egress doors are to swing in the direction of egress travel (this is required for occupant loads of 50 or more persons). The Pool House doors are side-hinged and swing in the direction of travel.

EGRESS STAIRWAY WIDTH (IBC, 1009.4)

There is no stair in the Pool House.

COMMON PATH OF TRAVEL (IBC, TABLE 1014.3)

The common path of travel for a Business occupancy with more than 30 occupants is 100 feet. There is no common path of travel in the Pool House.

EXITS (IBC, SECTION 1015.1, TABLE 1015.1)	Two exits from any space shall be provided when either the occupant load exceeds the values in Table 1015.1 or the common path of egress travel exceeds that in Section 1014.3. For a Group B occupancy with a maximum of 49 occupants, only one exit is required from each space. With an occupant load of 1, the Pool House is allowed to have one exit and complies with this requirement.
TRAVEL DISTANCE (IBC, TABLE 1016.2)	The exit access travel distance for a Business occupancy without a sprinkler system is 200 feet. The Pool House exit access travel distance is well within this requirement.
MEANS OF EGRESS - CORRIDOR WIDTH (IBC, TABLE 1018.2)	The minimum corridor width shall be 36 inches for spaces with a required occupancy capacity of less than 50 and 24 inches when accessing mechanical, plumbing, or electrical systems or equipment. There are no existing corridors in the Pool House.
MEANS OF EGRESS - CORRIDOR DEAD ENDS (IBC, SECTION 1018.4)	Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet in length. There are no dead end corridors in the Pool House.
NUMBER OF EXITS (IBC, SECTION 1021.2)	Two exits from any story shall be provided when either the occupant load exceeds the values or the exit access travel distance exceeds the values in Tables 1021.2(1) or 1021.2(2). For a Group B occupancy with a maximum of 49 occupants and maximum exit access travel distance of 75 feet, only one exit is required from each space. With an occupant load of one and an exit access travel distance well under the maximum, the Pool House is allowed to have one exit and complies with this requirement.

ACCESSIBILITY REQUIREMENTS - POOL HOUSE

SCOPING (IBC, SECTION 1103.2.2) & CHANGE OF OCCUPANCY (IBC, SECTION 3411.4)	Existing buildings shall comply with Section 3411 which states that for alterations and change of occupancies to existing buildings, including historic buildings, the building should have various accessible features listed in Section 3411.4.

STRUCTURAL REQUIREMENTS - POOL HOUSE

ROOF FRAMING CAPACITY	The roof and pergola framing of the pool house was calculated to have sufficient available capacity, 38 psf and 33 psf respectively, exceeding the loading requirements per code. Refer to Appendix B for additional information on the capacity of the existing Pool House structure.

MECHANICAL SYSTEMS REQUIREMENTS - POOL HOUSE

HEATING AND AIR CONDITIONING	The Pool House does not have a mechanical system for heating and air conditioning.

PLUMBING SYSTEMS REQUIREMENTS - POOL HOUSE

	Chapter 29 of the IBC and the IPC shall be followed for any alteration, repairs, relocation, replacement, and addition to the use or maintenance of the plumbing equipment and systems in the Pool House.
REQUIRED PLUMBING FIXTURES (IBC, TABLE 2902.1)	With the change of use to B occupancy to become a support facility for the Main Residence which will become an A3 occupancy, the Pool House does not currently comply with the number of required plumbing fixtures. For an A3 occupancy classification with a museum function, there should be at least 1 designated water closet per 125 males and 1 designated water closet per 65 females with 1 lavatory per 200 males or females. There should also be 1 drinking fountain per 500 occupants. If the Pump House/Garage and the Pool House were converted to house accessible toilet rooms, then they would be required to comply with these requirements.
DRINKING FOUNTAINS (SECTION 2902.5)	Drinking fountains should be located within a travel distance of 500 feet from the most remote location in the space and along an accessible path. The Pool House does not currently comply.
PLUMBING	The plumbing system is original and does not currently comply with code requirements.
PRIVATE SEWAGE DISPOSAL (IPSD, CHAPTER 8)	The Pool House is served by the same 2,000 septic tank that serves the Main Residence. It is assumed to be original and will need to be made to comply with current code requirements.

ELECTRICAL REQUIREMENTS - POOL HOUSE

ELECTRICAL SERVICE	The current electrical service comes from an underground electric line which has failed and is non-functioning. The wires are all assumed to be original. The electrical service and wiring do not comply with current code requirements.

FIRE PREVENTION REQUIREMENTS - POOL HOUSE

FIRE DEPARTMENT ACCESS FOR APPARATUS (CALVERT COUNTY CODE, CHAPTER 44)	Applicable requirements include: 1. Means of Access: Hard, all weather surface 2. Dead Ends: Limited to 300 feet. The Pool House does not have a driveway. 3. Roadways must be a minimum of 20 feet wide. There are no roads leading to the Pool House. 4. Setback: Structures exceeding 30 feet in height are limited to 50 foot setbacks from street/fire lanes. The Pool House complies with this requirement. 5. Standpipes: Standpipes are required for structures that are more than 3 stories or over 50 feet in height. The Pool House is not required to have a standpipe system. 6. Water supply: Water supply systems that are not publicly owned and installed must meet NFPA 24. 7. Fire flow requirements vary depending on zoning and permitted uses. Flow requirements will need to be confirmed for this project in a future design phase

ENERGY CONSERVATION REQUIREMENTS - POOL HOUSE

	Any alterations, renovations, or repairs to the Pool House or its building systems shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with the IEC code requirements (Section C101.4.3).
EXISTING OR HISTORIC COMPLIANCE (IECC, C101.4.1 AND C101.4.2)	For existing buildings, the IEC shall not be used to require the alteration nor prevent the continued use and maintenance of existing buildings. As the Pool House is listed on the State and National Registers, then it is exempt from the requirements within the IEC.

CHANGE IN USE (IECC, C101.4.4)	As the Pool House will have a change of use from residential to assembly, any increase in demand for fossil fuel or electrical energy shall comply with the IEC code requirements (Section C101.4.4), unless its exemption as a historic building is applied.
CHANGE IN SPACE CONDITIONING (IECC, C101.4.5)	If any non-conditioned space within the Pool House is altered to become conditioned, then it must comply with the IEC (Section C101.4.5), unless its exemption as a historic building is applied.

BEACH HOUSE

LIFE SAFETY REQUIREMENTS - BEACH HOUSE

USE AND OCCUPANCY CLASSIFICATION (IBC, SECTION 303.4)	The preferred use for the Beach House is as overnight accommodations for kayakers and canoers with a designated put-in location. At least one of the two changing rooms can house an accessible toilet, sink, and shower. This will entail a change of use and occupancy from its current use as a residential support building. The new occupancy classification would be Group R-3 which is for transient boarding houses with 10 or fewer occupants.
BUILDING CONSTRUCTION CLASSIFICATION (IBC, SECTION 602.3, TABLE 601)	The Beach House most closely fits the Type VB construction classification. This classification is for unprotected wood frame construction. The Beach House is not protected by an automatic sprinkler system.
ALLOWABLE BUILDING HEIGHT AND AREA (IBC, TABLE 503)	For an R-3 use group classification with Type VB construction classification, the allowable building height is 40 feet. The allowable number of stories is 3 with unlimited square feet of allowable area per story. The Beach House is 1 story, 14’-11” tall, and 355 SF per story. This is well within the allowable requirements.

FIRE PROTECTION REQUIREMENTS - BEACH HOUSE

AUTOMATIC SPRINKLER SYSTEMS (IBC, SECTION 903.2.1.3)	Group R-3 residences are required to have an automatic sprinkler system in accordance with Section 903.3.1.3 which specifies an NFPA 13D automatic sprinkler system. The Beach House does not comply with this requirement. It is likely that new underground water service would be needed to support such a system. The system would include smoke detection and fire alarm devices.
FIRE EXTINGUISHERS (IBC, SECTION 906 AND IFC, SECTION 906)	Portable fire extinguishers are required for an R-3 occupancy. The Pool House does not currently comply but this is easily remedied.

Portable fire extinguishers are required for an Business occupancy. The Pool House does not currently comply but this is easily remedied.

MEANS OF EGRESS REQUIREMENTS - BEACH HOUSE

MEANS OF EGRESS - OCCUPANT LOAD (IBC, TABLE 1004.1.2)

The rooms in the Beach House will have the new use as an overnight camping facility. The following chart outlines the various functions and the occupant load factor. Based on this, the occupant load of the Beach House is 2 occupants.

Function	Area	Occ Load Factor	# Occupants
First Floor			
Kitchen/Living/Sleeping rooms (as Residential)	255 gross sf	200 gross sf	2
Toilet Room	100 gross sf	n/a	n/a
Total	**355**		**2**

ACCESSIBLE MEANS OF EGRESS (IBC, SECTION 1007)

Accessible spaces shall be provided with not less than one accessible means of egress. However, according to exception 1 in Section 1007, accessible means of egress are not required in alterations to existing buildings. If the treatments proposed suggest making an accessible means of egress, then various other requirements within this section will need to be followed.

MEANS OF EGRESS - DOOR WIDTHS (IBC, 1008.1.1, IFC 1008.1, NFPA 101, 7.2.1.2.4)

The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of 32 inches. According to NFPA condition (4), in existing buildings, existing door leaf width shall not be less than 28 inches. The entrance doors of the Beach House provide a clear width of less than 32 inches and do not comply with the IBC requirement.

EGRESS DOOR SWING (IBC, 1008.1.2)

Egress doors are to be of the pivoted or side-hinged type. Typically, egress doors are to swing in the direction of egress travel (this is required for occupant loads of 50 or more persons). The Beach House doors are side-hinged and do not swing in the direction of travel.

EGRESS STAIRWAY WIDTH (IBC, 1009.4)

There is no stair in the Beach House.

COMMON PATH OF TRAVEL (IBC, TABLE 1014.3)	The common path of travel for an R-3 occupancy with less than 30 occupants is 75 feet without a sprinkler system. With a sprinkler system, this is increased to 125 feet. The current common paths of travel in the Beach House are well within this requirement.
EXITS (IBC, SECTION 1015.1, TABLE 1015.1)	Two exits from any space shall be provided when either the occupant load exceeds the values in Table 1015.1 or the common path of egress travel exceeds that in Section 1014.3. For a Group R-3 occupancy with a maximum of 10 occupants, only one exit is required from each space. With a proposed occupant load of 2, the Beach House is allowed to have one exit. The Beach House currently has one exit from Dressing Room 1 101 and two exits from Dressing Room 2 106. It currently complies with these requirements.
TRAVEL DISTANCE (IBC, TABLE 1016.2)	The exit access travel distance for an R-3 occupancy without a sprinkler system is 200 feet. With a sprinkler system, this is increased to 250 feet. The current Beach House exit access travel distance is well within this requirement.
MEANS OF EGRESS - CORRIDOR WIDTH (IBC, TABLE 1018.2)	The minimum corridor width shall be 36 inches for most spaces and 24 inches when accessing mechanical, plumbing, or electrical systems or equipment. There are currently no corridors in the Beach House.
MEANS OF EGRESS - CORRIDOR DEAD ENDS (IBC, SECTION 1018.4)	Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet in length. If the Beach House is a B occupancy and an automatic sprinkler system is provided, then this is increased to 50 fee. However, there are currently no dead end corridors in the Beach House.
NUMBER OF EXITS (IBC, SECTION 1021.2)	Two exits from any story shall be provided when either the occupant load, number of dwelling units, or the exit access travel distance exceeds the values in Tables 1021.2(1) or 1021.2(2). There is no such requirement for an R-3 occupancy.

ACCESSIBILITY REQUIREMENTS - BEACH HOUSE

SCOPING (IBC, SECTION 1103.2.2) & CHANGE OF OCCUPANCY (IBC, SECTION 3411.4)	Existing buildings shall comply with Section 3411 which states that for alterations and change of occupancies to existing buildings, including historic buildings, the building should have various accessible features listed in Section 3411.4.

STRUCTURAL REQUIREMENTS - BEACH HOUSE

The main roof over the Beach House was calculated to be 35 psf which exceeds the required roof live load by code. Additionally the porch roof framing has a capacity of 47 psf which exceeds the roof minimum live load. The existing framing is suitable for the preferred use.

MECHANICAL SYSTEMS REQUIREMENTS - BEACH HOUSE

HEATING AND AIR CONDITIONING	The Beach House is not heated or cooled by an HVAC system. If a mechanical system were to be introduced, it would be required to comply with the current code.

PLUMBING REQUIREMENTS - BEACH HOUSE

PLUMBING (IPC, CHAPTER 6)	The current water lines from the Pump House/Garage to the Beach House are not functioning. It is likely that the current underground water piping will need to either be replaced or made to comply with current code requirements.
PRIVATE SEWAGE DISPOSAL (IPSD, CHAPTER 8)	The Beach House has an original septic tank that will need to be made to comply with current code requirements.
REQUIRED PLUMBING FIXTURES (IBC, TABLE 2902.1)	For an R-3 occupancy, there should be at least 1 designated water closet per dwelling unit with 1 lavatory per 10 occupants. There should also be 1 bathtub or shower, 1 kitchen sink, automatic clothes washer connection per dwelling unit. There is no drinking fountain requirement. The Beach House currently has two water closets and adjacent sinks, two showers, and an additional sink. The building complies with all the requirements except for the automatic clothes washer.

DRINKING FOUNTAINS (SECTION 2902.5)	Drinking fountains should be located within a travel distance of 500 feet from the most remote location in the space and along an accessible path. There are no drinking fountains within the Beach House nor within 500 feet.

ELECTRICAL REQUIREMENTS - BEACH HOUSE

ELECTRICAL SERVICE	The current electrical system at the Beach House is not functioning and has not been functional for over 10 years. Wiring is original and does not comply with current code requirements.

FIRE PREVENTION REQUIREMENTS - BEACH HOUSE

FIRE DEPARTMENT ACCESS FOR APPARATUS (CALVERT COUNTY CODE, CHAPTER 44)	Applicable requirements include: 1. Means of Access: Hard, all weather surface 2. Dead Ends: Limited to 300 feet. The Beach House driveway includes a dead-end condition that exceeds 300 and may not have a turn-around condition that is acceptable. 3. Roadways must be a minimum of 20 feet wide. The roads leading to the Beach House do not comply with this width requirement. 4. Setback: Structures exceeding 30 feet in height are limited to 50 foot setbacks from street/fire lanes. The Beach House complies with this requirement. 5. Standpipes: Standpipes are required for structures that are more than 3 stories or over 50 feet in height. The Beach House is not required to have a standpipe system. 6. Water supply: Water supply systems that are not publicly owned and installed must meet NFPA 24. 7. Fire flow requirements vary depending on zoning and permitted uses. Flow requirements will need to be confirmed for this project in a future design phase

ENERGY CONSERVATION REQUIREMENTS - BEACH HOUSE

Any alterations, renovations, or repairs to the Beach House or its building systems shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with the IEC code requirements (Section C101.4.3).

EXISTING OR HISTORIC COMPLIANCE (IECC, C101.4.1 AND C101.4.2)	For existing buildings, the IEC shall not be used to require the alteration nor prevent the continued use and maintenance of existing buildings. As the Beach House is listed on the State and National Registers, then it is exempt from the requirements within the IEC.
CHANGE IN USE (IECC, C101.4.4)	As the Beach House will have a change of use from residential to assembly, any increase in demand for fossil fuel or electrical energy shall comply with the IEC code requirements (Section C101.4.4), unless its exemption as a historic building is applied.
CHANGE IN SPACE CONDITIONING (IECC, C101.4.5)	If any non-conditioned space within the Beach House is altered to become conditioned, then it must comply with the IEC (Section C101.4.5), unless its exemption as a historic building is applied.

CHAPTER 10:

ACCESSIBILITY EVALUATION



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CHAPTER 10: ACCESSIBILITY EVALUATION

APPLICABLE CODES, STANDARDS, & GUIDELINES

The following codes and standards apply to the Main Residence:

Chapter 11 “Accessibility,” 2012 lBC -International Building Code (IBC) 2012 w/ the MD Department of Housing and Community Development (DHCD) modifications (Ref: COMAR 05.02.07) See previous code analysis chapters for these requirements.

Section 806 “Accessibility,” Chapter 8 “Alterations - Level 3” and Section 906 “Accessibility,” Chapter 9 “Change of Occupancy” 2009 IEBC -Maryland Building Rehabilitation Code (MBRC) incorporating the International Existing Building Code (IEBC) 2009 (Ref: COMAR 05 .16)

The Maryland Accessibility Code (MAC) and the MAC Guidelines for Buildings and Facilities (Ref: COMAR 05.02.02) - Effective January 1, 2012.

2010 ADA Standards
Americans with Disabilities Act of Accessibility Guidelines for Buildings and Facilities (“ADAAG”) developed by the United States Architectural and Transportation Barriers Compliance Board, and adopted by the United States Department of Justice in the 20120 Standards, including both the Title II regulations at 28 CFR part 36, subpart D; and the 2004 ADAAG at 36 CFR part 1191, appendices B and D 2010 “ADA Standards for Accessible Design. US Department of Justice.”

MARYLAND ACCESSIBILITY CODE REQUIREMENTS

MAC .03.A.1 The MAC does not cover residential buildings consisting of less than four dwelling units. The Gardener’s Cottage would be exempt from following this code.

MAC .03.A.6 The MAC does not cover existing buildings or facilities not undergoing any addition, alteration, or change in use as defined in Regulation .05 of this chapter. If the buildings and facilities within the Patterson Center do not undergo any proposed treatment, then the MAC will not apply.

MAC .03.A.7	The MAC does not cover existing buildings undergoing alteration for the sole purpose of complying with the ADA, which requires removal of architectural barriers in existing buildings where removal is easily achievable.
MAC .03.A.B.2	The MAC applies to all additions, alterations, and changes of use of certain buildings in Maryland such as state government buildings and facilities. As the Patterson Center is owned by the State of Maryland, all the structures within the Patterson Center must comply. As discussed in the previous chapters, the Main Residence, Pool House, and Beach House will have a change in use from Residential to Assembly and Business.
PARKING, TOILETS (MAC .07.B.1-3)	The buildings and facilities in the Patterson Center do not comply with the accessible parking spaces nor the accessible toilet stalls requirements. Accessible parking and toilet stalls would need to be provided as part of a building rehabilitation.
PARKING SIGNAGE (MAC .07.D.1-6)	Currently there are no marked parking spaces in the driveway for the Main Residence or in the cul de sac at the Beach House. If parking spaces are provided, then an accessible parking space with the appropriate signage must be provided.
WAIVERS (MAC .09.A.1)	If strict compliance with the additional Maryland requirements set forth in Regulation .07A(3), B(3), and C(2) of this chapter will cause undue hardship because of the nature of use, occupancy, or other factors, a waiver from these requirements may be requested. A request for a waiver from the Maryland Accessibility Code cannot be processed unless it concerns a Maryland Accessibility Code requirement that is more restrictive than federal law. The Waiver Request Form includes only one more restrictive item that could be applied for the Main Residence: Minimum dimensions of 48” in width required for a toilet stall in alteration work.
2010 STANDARDS FOR STATE AND LOCAL GOVERNMENT FACILITIES: TITLE II REQUIREMENTS	State government facilities must follow the requirements of the 2010 Standards, including both the Title II regulations (28 CFR 35.151); and the 2004 ADAAG (36 CFR part 1191, appendices B and D). In the few places where requirements between the two differ, the regulatory requirements of Title II prevail. The Title II requirements cover accessible entrances, routes, toilet rooms, telephones, drinking fountains, and other topics.

The following accessible elements will be evaluated in Part 3 of this report in the order provided by Section 35.151.b.4.iv.B of 28 CFR Part 35:

(1) An accessible entrance;
(2) An accessible route to the altered area;
(3) At least one accessible restroom for each sex or a single unisex restroom;
(4) Accessible telephones;
(5) Accessible drinking fountains; and
(6) When possible, additional accessible elements such as parking, storage, and alarms.

2010 STANDARDS FOR TITLES II AND III FACILITIES: 2004 ADAAG REQUIREMENTS

State government facilities must follow the requirements of the 2010 Standards, including both the Title II regulations at 28 CFR 35.151; and the 2004 ADAAG at 36 CFR part 1191, appendices B and D. In the few places where requirements between the two differ, the requirements of 28 CFR 35.151 prevail.

ADAAG CHAPTER 2: SCOPING REQUIREMENTS

ALTERATIONS TO QUALIFIED HISTORIC BUILDINGS AND FACILITIES (202.5)

If the Patterson Center buildings and facilities were to become "qualified" historic buildings and facilities, then many of the ADA requirements could be waived, but this waiver is rarely necessary.

ACCESSIBLE ROUTES (206.2)

The Patterson Center buildings do not currently have accessible routes from accessible parking, through the site, and to accessible entrances.

On occasion, the Patterson Center will use an electric shuttle bus to transport persons with and without disabilities from the accessible parking spaces at the Maryland Archeological Center Lab to a site arrival point in the driveway between the Main Residence and the Pump House/Garage. The bus route to the site arrival point at the boardwalk leading to the Beach House may also be in compliance. An accessible route from accessible parking spaces to the Pool House does not exist and is not in compliance.

The Patterson Center buildings do not currently have accessible routes from the site arrival point to the accessible building or facility entrance.

	Several routes throughout the landscape can be made accessible with the addition of ramps and minor regrading. Creating accessible routes to some parts of the property, such as the Pool and Pool House, will be more difficult to achieve. Various facilities (all or any portion of buildings, structures, site improvements, elements, and pedestrian routes or vehicular ways located on a site) are visually accessed but not physically accessible. For instance, the enclosed garden in the Main Residence Area, can be visually accessed from the patio but is not physically accessible. If the pier is reconstructed in the Beach House Area it will need to be on an accessible route.
ACCESSIBLE ROUTES - ENTRANCES (206.4 AND 206.4.6)	As qualified historic buildings, the Main Residence, Pump House/ Garage, Pool House, and Beach House, and Gardener's Cottage, they would qualify for the exception to only have one public entrance be on an accessible route or have a separate entrance not used by the public be located on an accessible route. Currently none of these buildings have accessible entrances that need to be provided. The Gardener's Cottage is currently not in compliance. The primary entrance will need to be made accessible.
ACCESSIBLE ROUTES - DOORS (206.5)	Currently, the buildings in the Patterson Center do not have accessible doors. Examples are provided in the subsequent section ADAAG Chapter 4: Accessible Routes.
ACCESSIBLE ROUTES - ELEVATORS (206.6)	The Main Residence is the only building in the Patterson Center that has an elevator for passenger use. This elevator is not accessible and should be viewed as a historic feature to be preserved but not used in active service.
PARKING (208.2)	Currently there are no marked parking spaces in the driveway for the Main Residence or in the cul de sac at the Beach House. If parking spaces are provided, then an accessible parking space must be provided.

PASSENGER LOADING ZONES (209.2.1)	Currently, there is no delineated passenger loading zones in front of the Main Residence for when the electric bus is used. Further code analysis will be required to determine if a loading zone could be required based on the program.
DRINKING FOUNTAINS (211.1)	Drinking fountains are required by the building code for the Main Residence, Pool House, and Beach House. There are currently no drinking fountains. When drinking fountains are provided, they will need to comply with the ADA requirements.
TOILET ROOMS (213.2)	Currently, the toilet rooms and bathing rooms in the Main Residence, Gardener's Cottage, Pool House, and Beach House do not comply with the ADA requirements. New accessible toilet rooms would be provided as part of a rehabilitation project.
FIRE ALARM SYSTEMS (215.1)	If a new fire alarm system is installed in any of the Patterson Center buildings, it would need to comply with the ADA requirements.
SIGNAGE (216.3, 216.4.2, 216.8)	Currently, the waysides (interpretive panels) in the Beach House Area do not comply with ADA requirements. Currently, none of the doors at exit passageways and exit discharge at any of the Patterson Center buildings are identified by signage and no directional signage in any of the Patterson Center buildings indicating the accessible toilet rooms is provided. The proposed accessible toilet rooms in the Pump House/Garage will need to comply with this requirement.
RESIDENTIAL DWELLING UNITS (233.1)	The residential dwelling units in the Gardener's Cottage would need to comply with section 233. [See additional requirements at 28 CFR 35.151(e) and (f), p. 11, and 28 CFR 36.406(d) and (e), pp. 28 and 29.]
PIERS (237.1)	If the pier is reconstructed in the Beach House Area it will need to be accessible. An accessible route would also need to be provided to access the pier.

ADAAG CHAPTER 3: BUILDING BLOCKS

SURFACES (302.1)	The existing paths in the Triangle Garden and Tennis Court Area are not stable and firm. The platform step at the Attic entrance of the Pump House/Garage is not stable and firm.
TURNING SPACES (304.3)	In general, turning space required dimensions are not met along potential accessible paths throughout the buildings and facilities of the Patterson Center. The corridors in the Main Residence and Gardener's Cottage are too narrow to accommodate turning space except at the entrance halls or far end of the corridor.

ADAAG CHAPTER 4: ACCESSIBLE ROUTES

COMPONENTS (402.2)	Various existing paths through the landscape areas do not comply with the requirements for an accessible path. The wood ramp along the path to the primary entrance of the Main Residence is damaged and missing the portion that extends to the ground surface. Additionally, the second wood ramp leading to the entrance portico of the Main Residence does not extend to change in level at the threshold at the front door. The brick path along the top of the Triangle Garden consists of steps at the north and uneven surfaces and levels at the south. The boardwalk to the Beach House is nearly in compliance but it does not meet the paved surface. There is no accessible route to the rear patio of the Main Residence, to the enclosed garden, or the pool. Various facilities (all or any portion of buildings, structures, site improvements, elements, and pedestrian routes or vehicular ways located on a site) are visually accessed but not physically accessible. For instance, the enclosed garden in the Main Residence Area, can be visually accessed from the patio but is not physically accessible. The same could be true for the Triangle Garden if the brick path along the west was made accessible.
DOORS (404.2.2, 404.2.3)	The door opening to the Dining Room 106 in the Main Residence comply with the ADA requirements. However, the double doors to the Living Room 111 and Library 110 do not. The doors to the Pantry 105, Kitchen 104, and Servants Hall 102 are all under 32 inches. Most of the door openings on the second floor of the Main Residence are narrower than 32 inches.

MANEUVERING CLEARANCES (404.2.4)	In general, maneuvering clearances are not met along potential accessible paths throughout the buildings and facilities of the Patterson Center.

ADAAG CHAPTER 5: GENERAL SITE AND BUILDING ELEMENTS

PARKING (502.1)	Currently, there are no marked parking spaces. If marked parking spaces are added to the Patterson Center, they will need to comply with the ADA requirements.
STAIRS (504.2)	In general, the stairs in the landscape do not comply with the ADA requirements. The stone steps within the Triangle Garden and at the end of the brick path at the top of the Triangle Garden are in disrepair and do not have uniform riser heights and tread depths.
HANDRAILS (505.2, 505.4)	Various existing stairs in the Main Residence and the landscape areas do not comply with the ADA requirements. For instance, all the stairs in the Main Residence have only a handrail on one side. Additionally, the top of the gripping surface of the main stair is at 31 inches.

ADAAG CHAPTER 6: PLUMBING ELEMENTS AND FACILITIES

TOILET ROOMS	In general, the toilet and bathing rooms in the buildings of the Patterson Center do not comply with the ADA requirements.

ADAAG CHAPTER 7: COMMUNICATION ELEMENTS AND FEATURES

COMMUNICATION SYSTEMS	In general, the fire alarm systems, signs, and telephones do not comply with the ADA requirements.

ADAAG CHAPTER 8: SPECIAL ROOMS, SPACES, AND ELEMENTS

809.1 General. Residential dwelling units shall comply with 809. Residential dwelling units required to provide mobility features shall comply with 809.2 through 809.4. Residential dwelling units required to provide communication features shall comply with 809.5.

RESIDENTIAL DWELLINGS (809.1)	The Gardener's Cottage does not comply with the requirements for accessible routes, kitchens, toilet and bathing facilities, communication features (fire alarm, smoke detection), and primary entrances.

ADAAG CHAPTER 9: BUILT-IN ELEMENTS

BENCHES	If benches are added to the buildings and facilities in the Patterson Center, then they will need to comply with the ADA requirements.

ADAAG CHAPTER 10: RECREATION FACILITIES

RECREATIONAL FACILITIES	If the Patterson Center decides to provide recreational facilities such as boating facilities, reconstructing the pier, or opening the swimming pool for use, then those elements will need to comply with the ADA requirements.

CONCLUSION

The goals for the comprehensive rehabilitation of the Patterson Center buildings would be to eliminate all of the architectural barriers required by the MAC and ADA. Where removing a barrier would impact historically significant features or spaces, application of the historic preservation provisions of the accessibility codes may be appropriate on a case-by-case basis. This is particularly true for the Main Residence. Potential areas to be considered for variance requests are noted in Chapters 13 and 14.

CHAPTER 11:

HAZARDOUS MATERIALS EVALUATION - MAIN RESIDENCE



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CHAPTER 11: HAZARDOUS MATERIALS EVALUATION - MAIN RESIDENCE

APPLICABLE REGULATIONS

The following regulations apply to the Main Residence:

ASBESTOS

OSHA 29 CFR 1926.1101 "Asbestos in Construction Standard."

These regulations impose restrictions on the disturbance of asbestos during demolition, remodeling, and renovation activities.

Maryland Department of the Environment (MDE) COMAR 26.11.21 Control of Asbestos

COMAR 26.1121 governs companies that remove, repair, or encapsulate asbestos-containing materials (ACMs). Companies must be licensed to do this work and must be licensed before they do this work. The contractor must submit an application and pay a fee. The license is valid for one year and must be renewed annually.

Asbestos Management Plan

State-owned buildings are required to prepare and follow the "MD State Asbestos Management Plan." All asbestos-containing materials must receive periodic surveillance at least twice a year to verify its condition. Results of the bi-annual surveillance must be recorded in the management plan.

LEAD BASED PAINT

OSHA 29 CFR 1926.62 "Lead Exposure in Construction"

The confirmed presence of lead-based paints triggers EPA and OSHA regulatory standards contained in 29 CFR 1926.62.

EPA 40 CFR 745 "Lead: Renovation, Repair, and Painting Program" Renovator Certification

Effective 22 April, 2010, all renovation and maintenance workers are required to take a one-day EPA-approved renovator class when working on residential, child-care facilities, and schools constructed prior to 1978. This new EPA rule requires contractors to follow specific work practices to prevent lead contamination.

Maryland Department of the Environment - (MDE) COMAR 26.02.07, "Procedures for Abating Lead Containing Substances from Buildings."

These regulations govern lead-based paint abatement by trained and qualified personnel. Performance of maintenance, repair, or renovation work that results in disturbances of a lead-containing substance is excluded from the MDE regulations above if:

- The disturbance of a lead-containing substance is associated with plumbing or electrical work that involves 3 square feet or less of surface area in a room; or
- Other disturbances of a lead-containing substance involving 3 square feet of surface area in a room, except for window removal or replacement.

BIOHAZARD:

For biohazards that are not intact and not treated in place, proper disposal at a bio-hazard facility in Maryland is required.

ASBESTOS-CONTAINING MATERIALS (ACM) FINDINGS

Page Technologies conducted inspections of the Main Residence on 16 July 2012. The purpose of the inspection was to identify asbestos-containing materials (ACM) that may be impacted by a future rehabilitation project.

Materials identified by the Environmental Protection Agency (EPA) as being suspect of containing asbestos were visually identified. Each material that was visually unique was determined to be a homogeneous material. The number of samples collected based on the EPA AHERA methodology. Samples in the Main Residence were taken from materials and ranging from floor tile, floor tile mastic, plaster ceiling, linoleum, and ceiling tile. Samples were analyzed by EMSL Analytical, Inc. Refer to Appendix F "Hazardous Materials Survey Report "for more detailed information on the test results.

Of the eighteen samples taken in the Main Residence, ten of the samples returned results that were positive. Materials in the Main Residence that contained asbestos were ceiling plaster, floor tile, and floor tile mastic. Refer to Appendix E "Floor Plan Drawings Annotated with Condition Assessment" for locations of ACMs.

BASEMENT Floor tile in Hall 001, Play Room 013, and Laundry Room 008 were confirmed as ACMs. Floor tile mastic in the Laundry Room 008 was confirmed to be an ACM. Plaster ceilings in Laundry Room 008 and Mechanical 004 tested positive and are an ACM.

FIRST FLOOR No ACMs were identified on the first floor of the Main Residence.

SECOND FLOOR No ACMs were identified on the second floor of the Main Residence.

ATTIC No ACMs were identified on the third floor of the Main Residence.

ACM QUANTITIES The approximate quantities of ACMs in the Main Residence, as measured by Page Technologies, are summarized below:

QUANTITIES FOR POSITIVE ASBESTOS-CONTAINING MATERIALS (ACMs) - MAIN RESIDENCE		
MATERIAL TYPE	QUANTITY	UNIT OF MEASURE
Floor Tile	980	Sq Ft
Floor Tile Mastic	980	Sq Ft
Plaster Ceiling	657	Sq Ft

LEAD-BASED PAINT (LBP) FINDINGS

Page Technologies conducted a limited-scope lead-based paint inspection on 16 July 2012. The purpose of the inspection was to confirm the presence of lead-based paint, which in Maryland includes concentrations of lead greater than 0.7 milligrams per square centimeter.

The inspection included readings from representative painted or ceramic surfaces. Each painted surface was classified as being intact (I) or poor (P) condition.

Of the 181 samples taken at the Main Residence, 125 were positive for lead-based paint. This is not surprising given the date the structure. On the exterior, building elements that tested positive were columns, window shutters, window sash/mullions/casings/sills, wood fascia, doors, and door headers/casings/jambs. On the interior, many painted wood surfaces and painted plaster surfaces tested positive. Additionally, a ceramic sink tested positive.

	It should be assumed that similar like-components throughout the Main Residence are also positive for lead-based paint (LBP) unless further testing refutes the readings from the XRF testing conducted by Page Technologies.
BASEMENT	Elements in the Laundry Room 008 and Storage Room 001 contain lead-based paint. Refer to Appendix F “Hazardous Materials Survey Report “for more detailed information on the test results.
FIRST FLOOR	Elements in the Family Room 111, Entrance 109, Servant’s Hall 102, Dining Room 106, Kitchen 104, Garage 101, and Dressing Room 107 contain lead-based paint. Refer to Appendix F “Hazardous Materials Survey Report “for more detailed information on the test results.
SECOND FLOOR	Elements in Bedroom 1 220, Bedroom 3 214, Bedroom 4 211, and Bathroom 4 210 contain lead-based paint.
ATTIC	No elements in the attic tested positive for lead-based paint. However, it should be assumed that similar like-components throughout the Main Residence are also positive for lead-based paint (LBP) unless further testing refutes the readings from the XRF testing conducted by Page Technologies.
BIOLOGICAL HAZARDS FINDINGS	Page Technologies conducted a visual inspection of the Main Residence for the presence of potential bio-hazards. The purpose of the inspection was to verify the extent of mold damage.
BASEMENT	Mold infestation was identified and confirmed in Bathroom 012 on the walls.
FIRST FLOOR	No mold was identified on the first floor of the Main Residence.
SECOND FLOOR	On the second floor, mold was identified and confirmed on the ceiling of Luggage Room 209 and on the door into the Luggage Room.
ATTIC	No mold was identified on the attic floor of the Main Residence.

MOLD DAMAGE QUANTITIES

The approximate quantities of mold damage in the Main Residence, as measured by Page Technologies, are summarized below:

QUANTITIES OF MOLD DAMAGE - MAIN RESIDENCE			
DESCRIPTION/ CONDITION	ROOM	FLOOR	QUANTITY (SF)
Drywall/Intact	Bathroom 012	Basement	42
Plaster Ceiling/Poor	Luggage Room 209	Second Floor	85
Door/Intact	Luggage Room 209	Second Floor	20

Recommendations for the treatment of hazardous materials will be addressed in Chapter 13.

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CHAPTER 12:

HAZARDOUS MATERIALS EVALUATION - OUTBUILDINGS



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CHAPTER 12: HAZARDOUS MATERIALS EVALUATION - OUTBUILDINGS

APPLICABLE REGULATIONS

The following codes and standards apply to the Outbuildings.

ASBESTOS

OSHA 29 CFR 1926.1101 "Asbestos in Construction Standard."

These regulations impose restrictions on the disturbance of asbestos during demolition, remodeling, and renovation activities.

Maryland Department of the Environment - (MDE) COMAR 26.11.21 - Control of Asbestos

COMAR 26.1121 governs companies that remove, repair, or encapsulate asbestos-containing materials (ACMs). Companies must be licensed to do this work and must be licensed before they do this work. The contractor must submit an application and pay a fee. The license is valid for one year and must be renewed annually.

Asbestos Management Plan

State-owned buildings are required to prepare and follow the "MD State Asbestos Management Plan." All asbestos-containing materials must receive periodic surveillance at least twice a year to verify its condition. Results of the bi-annual surveillance must be recorded in the management plan.

LEAD BASED PAINT

OSHA 29 CFR 1926.62 - "Lead Exposure in Construction"

The confirmed presence of lead-based paints triggers EPA and OSHA regulatory standards contained in 29 CFR 1926.62.

EPA 40 CFR 745 - "Lead: Renovation, Repair, and Painting Program" - Renovator Certification

Effective 22 April, 2010, all renovation and maintenance workers are required to take a one-day EPA-approved renovator class when working on residential, child-care facilities, and schools constructed prior to 1978. This new EPA rule requires contractors to follow specific work practices to prevent lead contamination.

Maryland Department of the Environment - (MDE) COMAR 26.02.07, "Procedures for Abating Lead Containing Substances from Buildings."

These regulations govern lead-based paint abatement by trained and qualified personnel. Performance of maintenance, repair, or renovation work that results in disturbances of a lead-containing substance is excluded from the MDE regulations above if:

- The disturbance of a lead-containing substance is associated with plumbing or electrical work that involves 3 square feet or less of surface area in a room; or
- Other disturbances of a lead-containing substance involving 3 square feet of surface area in a room, except for window removal or replacement.

BIOHAZARD

For biohazards that are not intact and not treated in place, proper disposal at a bio-hazard facility in Maryland is required.

ASBESTOS-CONTAINING MATERIALS (ACM) FINDINGS

Page Technologies conducted inspections of the Main Residence on 16 July 2012. The purpose of the inspection was to identify asbestos-containing materials (ACM) that may be impacted by a future rehabilitation project.

Materials identified by the Environmental Protection Agency (EPA) as being suspect of containing asbestos were visually identified. Each material that was visually unique was determined to be a homogeneous material. The number of samples collected based on the EPA AHERA methodology. Samples in the Main Residence were taken from materials and ranging from floor tile, floor tile mastic, plaster ceiling, linoleum, and ceiling tile. Samples were analyzed by EMSL Analytical, Inc. Refer to Appendix F "Hazardous Materials Survey Report "for more detailed information on the test results.

Of the 41 samples taken in the Outbuildings, 32 of the samples returned results that were positive. Materials in the outbuildings that contained asbestos were pipe insulation, mudded elbows/ fittings, transite ceiling, floor tile, and floor tile mastic, roofing Refer to Appendix E "Floor Plan Drawings Annotated with Condition Assessment" for locations of ACMs and detailed test results.

PUMP HOUSE/GARAGE

The Transite ceiling in the Garage 101 of the Pump House/Garge was determined to be an ACM.

GARDENER'S COTTAGE Floor tile and floor tile mastic in the Living Room 106, Hallway 109, Bedroom 1 101 , Bedroom 2 102, Bedroom 3 105 , Bedroom 4 110 , Bedroom 5 111 , Hallway 103, Bedroom 2 Closet 102A, and Bathroom 1 104 was confirmed to be an ACM. Additionally, the attic contains pipe insulation and mudded elbows/fitting that are ACMs.

GREENHOUSE No testing for ACMs was undertaken at the Greenhouse.

COLD FRAME No testing for ACMs was undertaken at the Cold Frame.

POOL HOUSE & POOL The roofing on the Pool House was confirmed to be an ACM.

BEACH HOUSE No asbestos-containing materials (ACMs) were confirmed at the Beach House.

ACM QUANTITIES The approximate quantities of ACMs in the Pump House/Garage, Pool House, and Gardener's Cottage, as measured by Page Technologies, are summarized below:

QUANTITIES FOR POSITIVE ASBESTOS-CONTAINING MATERIALS (ACMs) - PUMP HOUSE/GARAGE		
MATERIAL TYPE	QUANTITY	UNIT OF MEASURE
Transite Ceiling	280	Sq Ft

QUANTITIES FOR POSITIVE ASBESTOS-CONTAINING MATERIALS (ACMs) - POOL HOUSE		
MATERIAL TYPE	QUANTITY	UNIT OF MEASURE
Roofing Material	1,050	Sq Ft

QUANTITIES FOR POSITIVE ASBESTOS-CONTAINING MATERIALS (ACMs) - GARDENER'S COTTAGE		
MATERIAL TYPE	QUANTITY	UNIT OF MEASURE
Floor Tile	905	Sq Ft
Floor Tile Mastic	905	SqFt
Pipe Insultation	190	Lf
Pipe Fittings/Elbows	48	Each

LEAD-BASED PAINT (LBP) FINDINGS

Page Technologies conducted a limited-scope lead-based paint inspection on 16 July 2012. The purpose of the inspection was to confirm the presence of lead-based paint, which in Maryland includes concentrations of lead greater than 0.7 milligrams per square centimeter.

The inspection included readings from representative painted or ceramic surfaces. Each painted surface was classified as being intact (I) or poor (P) condition.

Of the 143 samples taken at the Outbuildings, 40 were positive for lead-based paint. This is not surprising given the date the structures. On the exterior, building elements that tested positive included: window shutters, window sash/mullions/casings/sills, wood fascia, doors, and door headers/casings/jambs. On the interior, many painted wood surfaces, including doors, door casings, window aprons, tested positive. A ceramic tub in the Gardener's Cottage also tested positive.

It should be assumed that similar like-components throughout the Outbuildings are also positive for lead-based paint (LBP) unless further testing refutes the readings from the XRF testing conducted by Page Technologies.

PUMP HOUSE/GARAGE

Window mullions/casing/sash and closet doors and jambs in Pump House 103 were confirmed to have lead-based paint. Window mullions/casing/sash in Tool Room 104 were confirmed to have lead-based paint. On the exterior, window mullions/casing/sash, fascia, doors, and door jambs were confirmed to contain lead-based paint.

GARDENER'S COTTAGE

On the exterior of the Gardener's Cottage, lead-based paint was confirmed at the porch ceiling, fascia, soffit, and columns. It was also confirmed at some exterior siding, on window mullions and sash, window shutters, window casings, window sills, and doors and door jambs. On the interior, the Living Room -106 doors, door casings, and widow sash/muntins/casings/aprons tested positive for lead-based paint. The tub in Bathroom 1 104 also tested positive.

GREENHOUSE

No lead-based paint testing was undertaken at the Greenhouse.

COLD FRAME	No lead-based paint testing was undertaken at the Greenhouse.
POOL HOUSE & POOL	No elements in interior of the Pool House & Pool tested positive for lead-based paint.
BEACH HOUSE	No elements in interior of the Beach House tested positive for lead-based paint. Window casings on the exterior were confirmed to have LBP.
BIOLOGICAL HAZARDS FINDINGS	Page Technologies conducted a visual inspection of the Pump House/Garage, Gardener's Cottage, Pool House & Pool, and Beach House for the presence of potential bio-hazards. The purpose of the inspection was to verify the extent of mold damage.
PUMP HOUSE/GARAGE	No bio-hazards were identified or confirmed in the Pump House/ Garage.
GARDENER'S COTTAGE	Significant mold infestation was identified and confirmed within the Gardener's Cottage. Rooms where mold infestation is present include the Kitchen 107, Living Room 106, Hallway 109, Bathroom 1 104, Bedroom 2 102, Bedroom 1 101, and Hallway 103.
GREENHOUSE	No inspection or testing for bio-hazards was undertaken at the Greenhouse.
COLD FRAME	No inspection or testing for bio-hazards was undertaken at the Cold Frame.
POOL HOUSE & POOL	No bio-hazards were identified or confirmed in the Pool House & Pool.
BEACH HOUSE	No bio-hazards were identified or confirmed in the Beach House.

MOLD DAMAGE QUANTITIES

The approximate quantities of mold damage in the Gardener's Cottage, as measured by Page Technologies, are summarized below:

QUANTITIES OF MOLD DAMAGE GARDENER'S COTTAGE			
DESCRIPTION/CONDITION	ROOM	FLOOR	QUANTITY (SF)
Drywall/Intact	Kitchen 107	First Floor	48
Drywall Ceiling/Poor	Kitchen 107	First Floor	25
Drywall/Intact	Living Room 106	First Floor	60
Drywall/Intact	Hallway 109	First Floor	76
Drywall Ceiling/Intact	Bathroom 1 104	First Floor	55
Drywall/Intact	Bathroom 1 104	First Floor	110
Drywall/Intact	Bedroom 2 102	First Floor	113
2 Doors	Bedroom 2 102	First Floor	40
Drywall/Intact	Bedroom 1 101	First Floor	182
Drywall Ceiling/Poor	Hallway 103	First Floor	85
Drywall/Intact	Hallway 103	First Floor	340

Recommendations for the treatment of hazardous materials will be addressed in Chapter 14.

CHAPTER 13:

TREATMENT & WORK RECOMMENDATIONS - MAIN RESIDENCE



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CHAPTER 13: TREATMENT & WORK RECOMMENDATIONS - MAIN RESIDENCE

INTRODUCTION

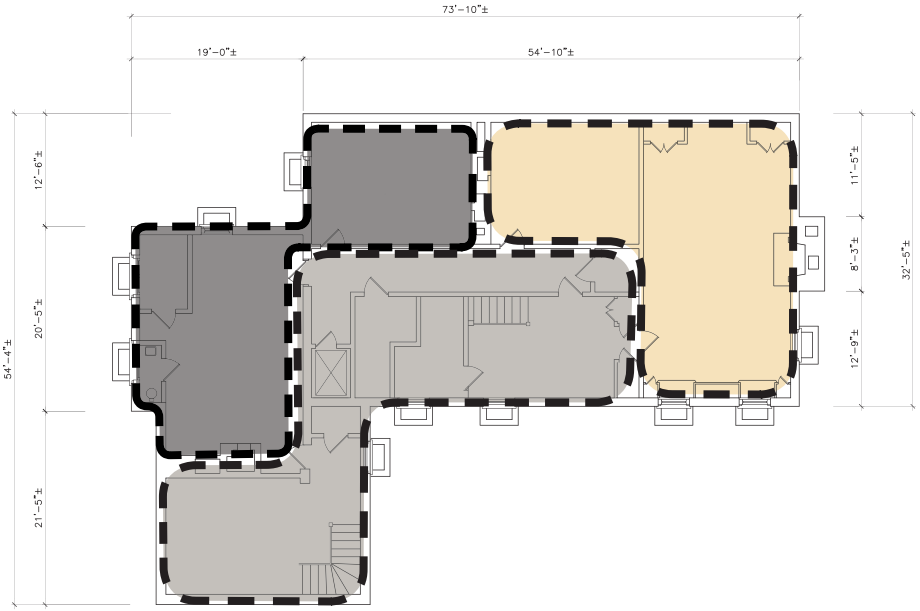
In order to prepare the Main Residence for a continued use as a historic house museum and potentially other functions, a number of treatment and work items are recommended. This will allow for the continued use of the facility into the future while fulfilling the programmatic needs of the Jefferson Patterson Park and Museum. A continued use of any historic structure is crucial to its preservation. Observation on a regular basis, and concurrent correction and maintenance, are effective deterrents of catastrophic failures. With the numerous hurricanes in various years, water infiltration has been the greatest issue that must be addressed. Recommendations offered herein for the rehabilitation of the Main Residence abide by the period of significance and with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. The greatest impact to the Main Residence will be the conversion of the garage space into an activity room. This will be discussed in the following paragraphs.

Treatments and work recommendations fall into the following categories: preservation, architecture, accessibility, structural, and systems. In order to comply with code and accommodate accessibility, most work recommendations can be characterized as serious. No minor work recommendations have been noted. Critical recommendations include those that stop water infiltration and stop the increase in biological hazards, i.e. mold growth.

OVERVIEW

The Main Residence will be substantially rehabilitated as a public house museum. The primary first floor rooms and the second floor bedrooms would be restored and furnished as they have been during the Patterson's occupancy. Some of the secondary spaces would also be rehabilitated, but flexibility is left so that they could serve as meeting rooms (i.e. bridal changing rooms) or offices in the future. The garage will be converted into a multi-purpose space for meetings, orientation, and other uses. See Figure 13.1, Figure 13.2, Figure 13.3, and Figure 13.4 for the building rehabilitation floor plans. In general, architectural finishes would be restored or conserved, while all building systems would be replaced including water, electrical, plumbing, heating, and cooling. A fire protection system would be added as well.

The back lawn and Enclosed Garden will be improved so that they can continue to function for wedding rentals and other special events.



Legend:

Staff

Mechanical

Storage

Figure 13.1. Space Utilization Plan of the Main Residence, Basement Floor

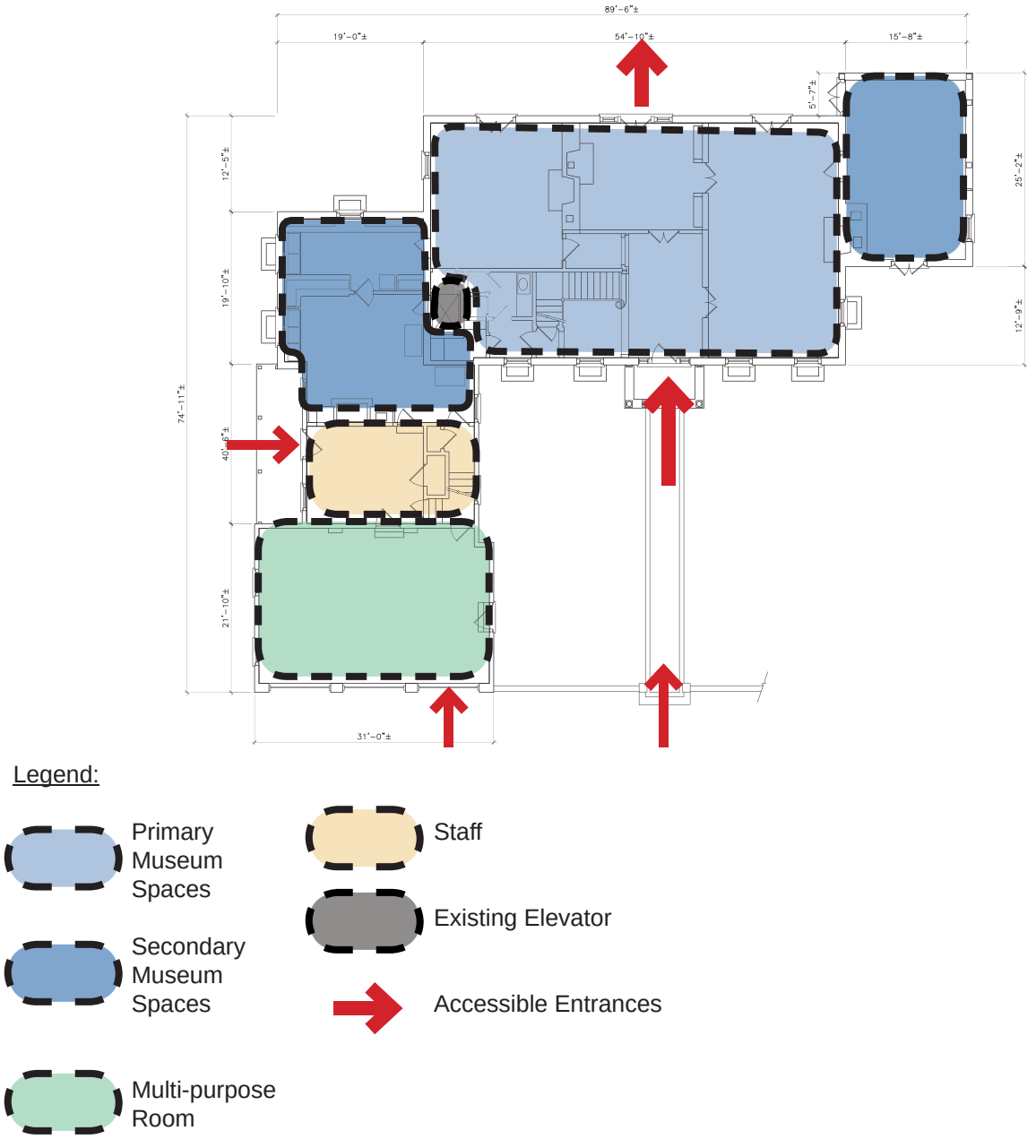
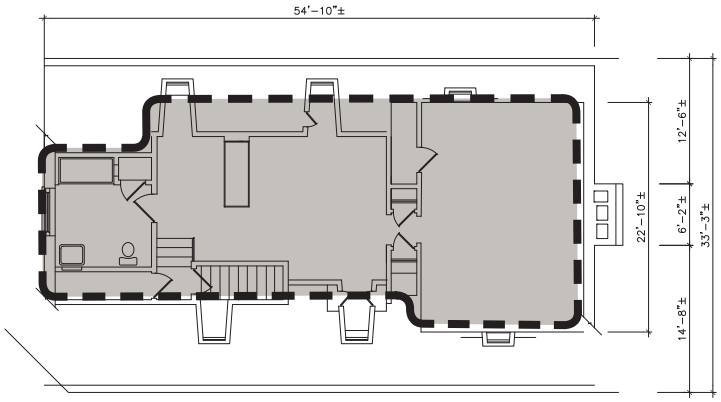


Figure 13.2. Space Utilization Plan of the Main Residence, First Floor



Figure 13.3. Space Utilization Plan of the Main Residence, Second Floor



Legend:

Storage

Figure 13.4. Space Utilization Plan of the Main Residence, Attic Floor

PRESERVATION TREATMENT RECOMMENDATIONS

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties. The following provides a narrative regarding treatments to the major site and building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more specific for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing will be recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

Materials removed in the course of this rehabilitation should be evaluated for salvage and later use for replacement or repair at the Patterson Center. Warehousing these materials in a controlled environment will minimize subsequent deterioration.

SITE FEATURES

The overall preservation treatments for the area around the Main Residence will be addressed in a subsequent chapter. However, it can be reiterated that the overall treatment is for rehabilitation which will allow for alterations necessary to provide accessible routes for interpretation and vegetation management needed to reestablish selected lawns and views.

A. Site:
   1. Regrade to provide positive slope around perimeter of the Main Residence to address overspill from gutters. This will require archeological monitoring.

EXTERIOR FEATURES

As discussed in Chapter 5, the exterior features would be in the preservation zone. The significant exterior features should be repaired and restored where possible. Any exterior features that cannot be preserved due to excessive deterioration should be replaced in kind.

A. Walls (Brick and Wood Siding):
1. Repair step cracking.
2. Repoint open joints and joints with loose mortar.
3. Replace bricks with through cracks.
4. Continue routine maintenance of repainting wood siding.

B. Foundations:
1. Retain and preserve foundations.
2. Inspect for water infiltration at grade.

C. Chimneys:
1. Repoint open joints and joints with loose mortar at brick chimneys.

D. Dormers:
1. Repair wood deterioration at wood dormers.
2. Repaint dormers.

E. Roof:
1. Replace deteriorated flashing.
2. Replace damaged snow guards.
3. Replace bent conductors in lighting protection system.
4. Replace missing/damaged slates.

F. Trim:
1. Replace/repair deteriorated wood trim.
2. Repaint trim.

G. Gutters and Downspouts:
1. Replace damaged gutters.

H. Windows:
1. Rehabilitate and repaint windows.

I. Shutters and Hardware:
1. Confirm operability of all shutters and repair as necessary.

J. Doors, entrance and screen:
1. Rehabilitate doors.
2. Repair areas of wood deterioration and repaint doors.
3. Repair screens at the Living Porch.

K. Transom and Sidelights:
1. Recreate missing ornament in lead caming.

L. Entrance Portico:
1. Repaint portico.
2. Remove biological growth at column bases.

M. Exterior Lighting:
1. Clean existing lighting and rewire.
2. Replace inappropriate globe material with appropriate material at rear elevation sconce on terrace.

INTERIOR FEATURES

As discussed in Chapter 5, the interior features would have an overall treatment of rehabilitation. However, the two-thirds of the basement spaces are in a free zone which will allow more extensive alterations. On the first floor, the Entrance Hall, Living Room, and Library are in a preservation treatment zone. Most of the second floor is in a rehabilitation zone. Half of the attic is a free zone.

The contributing (significant) and contributing (very significant) interior features should be repaired and preserved where possible. Any interior features deteriorated beyond repair should be replaced-in-kind. Documentation has been presented in the previous chapters to establish that the interior spaces have not been substantially altered over time. There is a great amount of building elements and finishes from the original construction period.

A. Spatial Layout:
1. Retain and protect the spatial layout on the first and second floors to the greatest extent possible.
2. Allow for necessary alterations on the basement and attic levels.

B. Ceilings:
1. Repair locations of water damage in the basement, in the Dining Room, and at various locations on the second floor.
2. Replace fiberboard ceiling in Storage Room 304.

C. Walls:
1. Repair damaged plaster walls at various locations throughout the Main Residence. Repaint.
2. Repaint painted brick and structural clay tile in basement.
3. Inspect locations of water infiltration. Repair.
4. Conserve the Chinese panel wallpaper in the Dining Room. This work will include, but is not limited to, removing overpainting, staining, and mold and may include complete restoration.
5. Reattach peeling wallpaper in the Children's and Nanny's Bedrooms 201, 202, and 203 and in Guest Bedroom No. 3 214.
6. Remove mold in Luggage Room 209.
7. Repair ceramic tile.
8. Replace damaged fiberboard walls in Storage Room 304.
9. Repair damaged plaster walls around dormer window of Bedroom 303.
10. Repair loose ceramic tile in Bath 301.

D. Decorative Trim:
1. Repair and repaint wood trim in Bedroom No. 1 220.

E. Windows:
1. Replace-in-kind window sill in Hall 011.
2. Repair water damage (from window AC units) at wood window sills, Bedrooms 201-203.
3. Repaint window sash, casing, and apron in Pantry.
4. Restore and repaint window trim in Bedroom No. 4 211 that was altered for the window air conditioning units.

F. Doors:
1. Repair water damage at French doors to South Terrace at Dining Room 106 and Library 110.
2. Repair door in Luggage Room 209.
3. Repair door to Dressing Room 222.

G. Flooring:
1. Repaint concrete floor in basement.
2. Remove vinyl asbestos tile in Laundry 008 and Playroom 013.
3. Restore wood floor in the Dining Room at the location of the French doors to the South Terrace.
4. Repair damaged linoleum floor in the Kitchen 104 and Pantry 105.
5. Repair loose ceramic tile in Bathroom 4 210.
6. Clean flooring in Bedrooms 201-203.
7. Restore wood floor in Bedroom No. 1 220 near entrance to Dressing Room 222.

H. Lighting:
1. Rewire historic fixtures on first and second floors.

I. Built-in Cabinetry:
None at this time.

J. Stairs:
1. Repair deteriorated stair treads in Storage 001.
2. Replace deteriorated and missing protective resilient tread coverings at the Servants Stair.

K. Plumbing Fixtures and Accessories:
1. Confirm type of piping used throughout building.

L. Fireplaces:
None at this time.

ARCHITECTURAL RECOMMENDATIONS

Beyond the repair and preservation of the historic building and site elements noted above, the following elements would become part of the architectural scope of work:

A. Activity Room:
   1. Convert Garage into a multi-purpose room for meetings, orientation, other programmatic uses, and bridal changing room, etc.
   2. Replace wood garage doors and infill openings to create building envelope. Infill should mimic historic garage door design. Create a door in one half of one of the garage doors to create an accessible entrance into the Activity Room.
   3. Provide a weathertight enclosure inside the Garage.
   4. Provide heating and air conditioning to the Activity Room.
   5. Provide a finished interior space (including, but not limited to, an acoustically absorptive ceiling, walls, carpet, overhead lighting).
   6. Provide infrastructure for audio visual equipment (i.e. projector, projection screen, and speakers.

B. Accessible toilet rooms:
   1. Accessible toilet rooms and drinking fountains will be provided in the Pump House/Garage. See the following chapter.

STRUCTURAL RECOMMENDATIONS

A. Structural:
   1. Replace steel angle lintels above windows.
   2. Reinforce joists below the Kitchen at the area of the existing wall of the pantry to allow for tour groups.
   3. Reconstuct lower section of servants stair in the run from the basement to the first floor.

ACCESSIBILITY RECOMMENDATIONS

A. Site:
   1. Provide an accessible pathway and entrance into the building on the north side to the entrance portico and into the Main Residence. There is a current elevation change of about 22 inches from the driveway to the brick walkway. There is another 5 inches from the walkway up to the entrance stoop and 3 inches a the front door into the Entrance Hall. This will require a ramp up to the entrance portico and modifications to the entrance stoop. This will affect the columns of the portico. See Chapter 15 for concept designs.
   2. Provide an accessible pathway from the south door threshold to the terrace and to the back lawn.

B. Interior:
   1. Provide at least one accessible building entrance.
   2. Provide at least one accessible route from an accessible building entrance to primary function areas (including out to the terrace).
   3. Request an exemption for non-compliant clearances for turning space, doors, and handrails.
   4. Based on the projected space use program for the second and third floors, a new elevator is not required. The primary function areas are those rooms on the primary tour of the historic house museum on the first floor. Any potential offices on the second floor would likely be less than 1,000 sf and would not be required to have an accessible route. Additionally, the existing elevator cannot be updated to meet current code requirements. Alternative facilitation (i.e. exhibit panels or videos on the first floor) may be provided for tours to illustrate second floor spaces.

MECHANICAL RECOMMENDATIONS

A. Heating and Air Conditioning:
   1. Remove window air conditioning units.
   2. Remove abandoned air conditioning unit in the attic.
   3. Replace oil-fired, forced air system furnaces at end of lifespan.
   4. Replace air conditioning system.
   5. Reuse existing ductwork if possible.
   6. Remove dehumidifier in the Playroom.
   7. Provide de/humidification through new heating and air conditioning system.

B. Plumbing:
   1. Replace all piping.
   2. Remedy current potable water issue.
   3. Provide new well for all of the Patterson Center.
   4. Replace 2,000 gallon septic tank. Confirm capacity for increased visitorship, events, and code compliance.

ELECTRICAL RECOMMENDATIONS

A. Electrical Service:
   1. Replace electrical system (panels, wiring, etc.) throughout the Main Residence. This will include, but is not limited to, distribution from panelboards and patching plaster walls as required.

B. Communications and Security:
   1. Retain ADT security system.
   2. Provide telephone service.
   3. Provide a fire alarm system with heat/smoke detectors and strobes.

FIRE PROTECTION RECOMMENDATIONS

A. Fire Protection:
   1. Disconnect and cap fire hose on east porch.
   2. Install an automatic sprinkler system.
   3. Provide portable fire extinguishers where required by the code official.

LIFE SAFETY RECOMMENDATIONS

A. Life Safety:

1. Though not required in alterations of existing buildings, if the Patterson Center desires to provide an accessible means of egress, this would require either a platform lift or an elevator.
2. Based on the preliminary code analysis provided in this report, the following variances may likely be needed: door widths along egress paths, egress door swings, egress corridor widths, egress stairway widths, egress stairway enclosures.

HAZMAT RECOMMENDATIONS

A. Hazardous Materials

1. Where repairs are necessary, remove lead-based paint on exterior as required.
2. Where alterations are necessary, remove lead-based paint from interior elements as required.
3. Remove mold in Bathroom 012 and Luggage Room 209.

GENERAL MAINTENANCE RECOMMENDATIONS

1. Confirm proper sizing and functionality of all gutters and downspouts.

CHAPTER 14:

TREATMENTS & WORK RECOMMENDATIONS - OUTBUILDINGS



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CHAPTER 14: TREATMENT & WORK RECOMMENDATIONS - OUTBUILDINGS

INTRODUCTION

In order to prepare the outbuildings for a continued use as support facilities for the historic house museum, a number of treatment and work items are recommended. This will allow for the continued use of the facility well into the future while fulfilling the programmatic needs of the Jefferson Patterson Park and Museum. A continued use of any historic structure is crucial to its preservation. Observation on a regular basis, and concurrent correction and maintenance, are effective deterrents of catastrophic failures. With the numerous hurricanes in various years, water infiltration has been the greatest issue that must be addressed. Recommendations offered herein for the rehabilitation of the outbuildings abide by the period of significance and with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. The greatest impact to the outbuildings will be converting them to accommodate their new uses. This will be discussed in the following paragraphs.

Treatments and work recommendations fall into the following categories: preservation, architectural, accessibility, structural, and systems. Most work recommendations can be characterized as serious in order to comply with code and accessibility. Critical recommendations include those that stop water infiltration and stop the increase in biological hazards, i.e. mold growth.

PUMP HOUSE/GARAGE

OVERVIEW - PUMP HOUSE/GARAGE

The preferred use for the Pump House/Garage is one that will provide support spaces for the historic house museum. It is directly associated with the Main Residence, but it will have a new use in this plan. The Pump House portion of the structure can accommodate an accessible toilet facility. This facility can be used for both the visitors to the historic house museum as well as for event attendees. The Garage portion of the structure can accommodate a catering (warming) kitchen for events. Both are intended to support site and garden events as well as other public visitation. The remainder of the small building will house an electrical room and mechanical equipment. See Figure 14.1 and Figure 14.2 for the building rehabilitation floor plans.

PRESERVATION TREATMENT RECOMMENDATIONS - PUMP HOUSE/GARAGE

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing will be recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

Materials removed in the course of this rehabilitation should be evaluated for salvage and later use for replacement or repair at the Patterson Center. Warehousing these materials in a controlled environment will minimize subsequent deterioration.

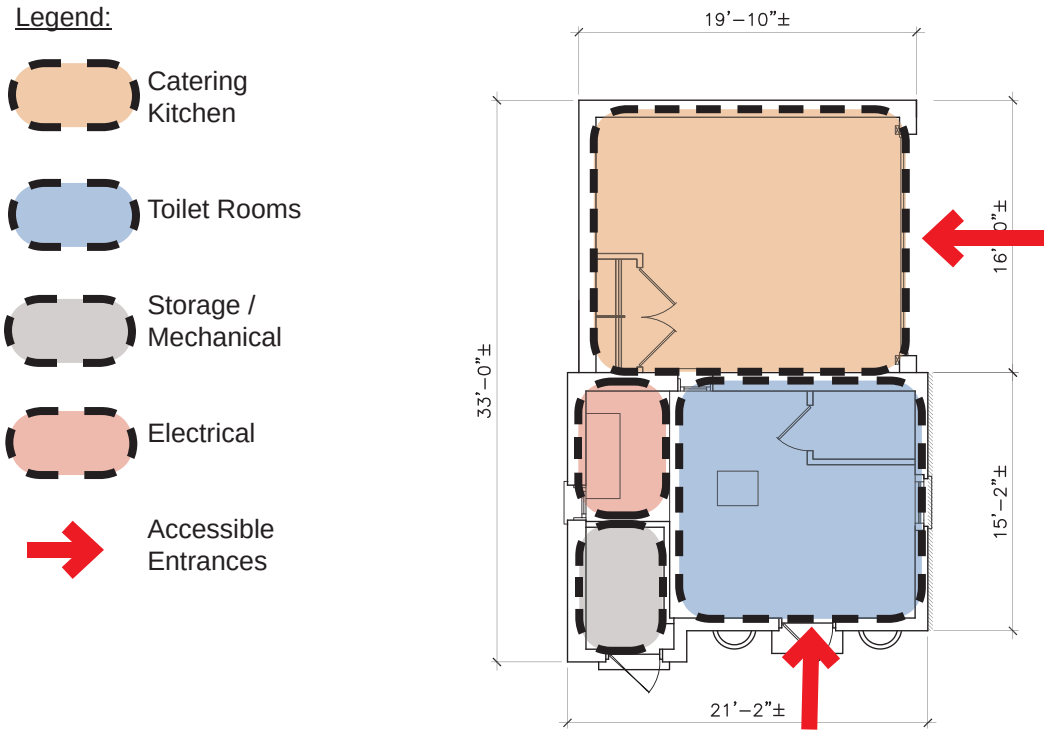


Figure 14.1. Space Utilization Plan of the Pump House/Garage, First Floor.

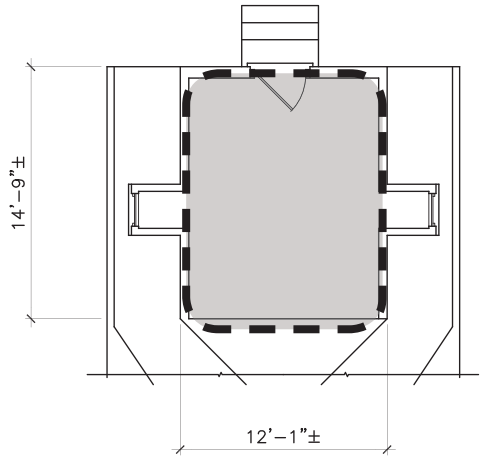


Figure 14.2. Space Utilization Plan of the Pump House/Garage, Attic Floor.

SITE FEATURES

The overall preservation treatments for the area around the Main Residence and Pump House/Garage will be addressed in a subsequent chapter. However, it can be reiterated that the overall treatment is for rehabilitation, which will allow alterations necessary to provide accessible routes and vegetation management needed to reestablish selected lawns and views.

EXTERIOR FEATURES

As discussed in Chapter 6, the exterior features are in the preservation zone. The significant exterior features should be repaired and restored where possible. Any exterior features that cannot be preserved due to excessive deterioration should be replaced in kind.

A. Walls (brick):
   1. Repair step cracking.
   2. Repoint open joints and joints with loose mortar.
   3. Replace-in-kind cracked and spalled bricks.

B. Foundations (concrete):
   1. Repair cracks near garage.
   2. Repair cracks in parging at base of walls.

C. Dormers (wood, painted):
   1. Repair areas of wood deterioration.
   2. Repaint dormers.

D. Roof (slate):
   1. Replace-in-kind deteriorated flashing.
   2. Replace-in-kind damaged snow guards.
   3. Replace-in-kind chipped slate.

E. Trim (wood, painted):
   1. Repaint trim as required.

F. Gutters and downspouts (copper):
   1. Replace-in-kind damaged gutters.

G. Windows (wood, double-hung):
   1. Rehabilitate wood windows.
   2. Repair areas of wood deterioration.
   3. Repaint windows.
   4. Replace hardware.
   5. Replace weather stripping in-kind.

H. Doors, entrances and garage (wood, painted):
1. Repair areas of wood deterioration.
2. Repaint doors.
3. Replace wood steps to attic entrance.

J. Exterior Lighting:
1. Maintain lighting.

K. Planting beds:
1. Repair brick planting beds.

L. Site walls (brick):
1. Remove biological growth.

INTERIOR FEATURES

As discussed in Chapter 6, the interior features are within a free zone.

The contributing (significant) and contributing (very significant) interior features should be repaired and preserved where possible. Any interior features deteriorated beyond repair should be replaced-in-kind. Documentation has been presented in the previous chapters to establish that the interior spaces have not been substantially altered over time.

A. Ceilings (concrete, gypsum wallboard):
1. No preservation work.

B. Walls (exposed brick and structural clay tile):
1. No preservation work.

C. Windows (wood, painted):
1. Repaint window sashes, casings, and aprons.

D. Doors (wood, painted):
1. Repaint all doors.

E. Flooring:
1. No preservation work.

F. Lighting:
1. No preservation work.

ARCHITECTURAL RECOMMENDATIONS - PUMP HOUSE/GARAGE

Beyond the repair and preservation of the historic building and site elements noted above, the following elements would become part of an architectural scope of work:

A. Accessible Toilet Rooms:
   1. Provide furred out gypsum wallboard partitions in the Pump House portion of the building to create a mens' and womens' toilet rooms. This will include but is not limited to porcelain tile flooring, wall base, doors, door hardware, and gypsum wallboard ceilings.
   2. Provide ADA compliant plumbing fixtures (toilets, sinks, drinking fountains).
   3. Provide ADA compliant stainless steel toilet accessories (toilet paper holders, grab bars, toilet seat covers, automatic hand dryers, recessed waste bins, baby changing stations).
   4. Provide mechanical system for heating, cooling, ventilation, and exhaust.

B. Catering (Warming) Kitchen:
   1. Provide furred out walls around perimeter of the Garage portion of the building. This will include but is not limited to rubber flooring, wall base, and a gypsum wallboard ceiling.
   2. Provide stainless steel base and wall cabinets with stainless steel counters and sink.
   3. Provide stainless steel tables.
   4. Provide plumbing fixtures (stainless steel sink, disposal).
   5. Provide mechanical system for heating, cooling, ventilation, and exhaust.
   6. Provide an electrical system for a kitchen that will include outlets for warming carts.
   7. Replace existing garage doors with new exterior wall with doors, that mimic the historic garage door appearance.

STRUCTURAL RECOMMENDATIONS - PUMP HOUSE/GARAGE

A. Structural:
   1. Similar to the Main Residence, existing steel angles are corroding and causing deterioration to adjoining masonry. New stainless steel lintels are recommended to promote increase durability and preservation to the historic structure.
   2. At garage roll-up door, localized masonry repairs at wall pier are required where displaced and deteriorated. Removal of existing deteriorated steel anchor bolts will be required and replacement with new stainless steel dowels set in an epoxy adhesive anchor.
   3. Repair repair vertical crack inside the Tool Room, east wall following monitoring with crack gauge.
   4. Remove half-enclosed fuel tank and underpin exterior walls.

ACCESSIBILITY RECOMMENDATIONS - PUMP HOUSE/GARAGE

A. Site:
   1. Provide an accessible pathway and entrance into the building on the south side to the toilet rooms and on the east side to the catering kitchen.
   2. Provide accessible signage complying with IBC.
   3. Provide at least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

B. Interior:
   1. Provide at least one accessible building entrance on the south side where the toilet rooms will be located. There is a current elevation change of about 4”- 6” inches to address. This will require regrading at the entrance.
   2. Provide an accessible entrance to the Garage portion where the catering kitchen will be located.
   3. Provide ADA-compliant signage at toilet rooms.
   4. Provide accessible toilet rooms.
   5. Provide an accessible drinking fountain.
   6. Provide an accessible kitchen.

MECHANICAL RECOMMENDATIONS - PUMP HOUSE GARAGE

A. Heating and Air Conditioning:
   1. Provide a mechanical system.

B. Plumbing:
   1. Remedy current potable water issue - to be confirmed.
   2. Provide new well (see Landscape - Site Utilities).
   3. Replace plumbing system.
   4. Provide new septic tank (shared with the Main Residence) to accommodate increased visitorship.

ELECTRICAL RECOMMENDATIONS - PUMP HOUSE/GARAGE

A. Electrical Service:
   1. Replace electrical system (meters, feeder to Main Residence, panels, wiring, etc.) throughout the Pump House/Garage.

B. Communications and Security:
   1. Provide security system.
   2. Provide telephone service, data, and telephone connection conduits.
   3. Provide a fire alarm system, heat/smoke detectors and strobes.

FIRE PROTECTION IMPROVEMENTS - PUMP HOUSE/GARAGE

A. Fire Protection:
   1. Provide portable fire extinguishers where required by the code official.

LIFE SAFETY RECOMMENDATIONS - PUMP HOUSE/GARAGE

None at this time.

HAZARDOUS MATERIALS RECOMMENDATIONS - PUMP HOUSE/GARAGE

A. Hazardous Materials:
   1. Remove asbestos-containing Transite ceiling in Garage 101.
   2. Remove lead-based paint at windows and doors.

GENERAL MAINTENANCE RECOMMENDATIONS - PUMP HOUSE/GARAGE

A. General Maintenance:
   1. Inspect all pipes for corrosion, holes, and breaks, including all underground supply piping from well.

FURTHER INSPECTION - PUMP HOUSE/GARAGE

None at this time.

ADDITIONAL RECOMMENDATIONS - PUMP HOUSE/GARAGE

These additional recommendations are not included in the attached cost estimate.

A. Catering (Warming) Kitchen:
   1. Provide residential appliances (range, hood, refrigerator, freezer, microwave). (Commercial appliances will trigger additional code requirements. If the catering kitchen has commercial equipment including a Type 1 exhaust hood, then this will require an automatic sprinkler system.)

GARDENER'S COTTAGE

OVERVIEW - GARDENER'S COTTAGE

The preferred use for the Gardener's Cottage residential. It would likely become two dwelling units (one two-bedroom apartment and one one-bedroom apartment). The Gardener's Cottage is in the poorest condition of any of the buildings, but the basic house structure can be re-utilized. The proposal is to convert this by sub-dividing it into two rental apartments, one with one bedroom and one with two bedrooms. The garage would be used as storage for the Patterson Center. See Figure 14.3 for the building rehabilitation floor plan.

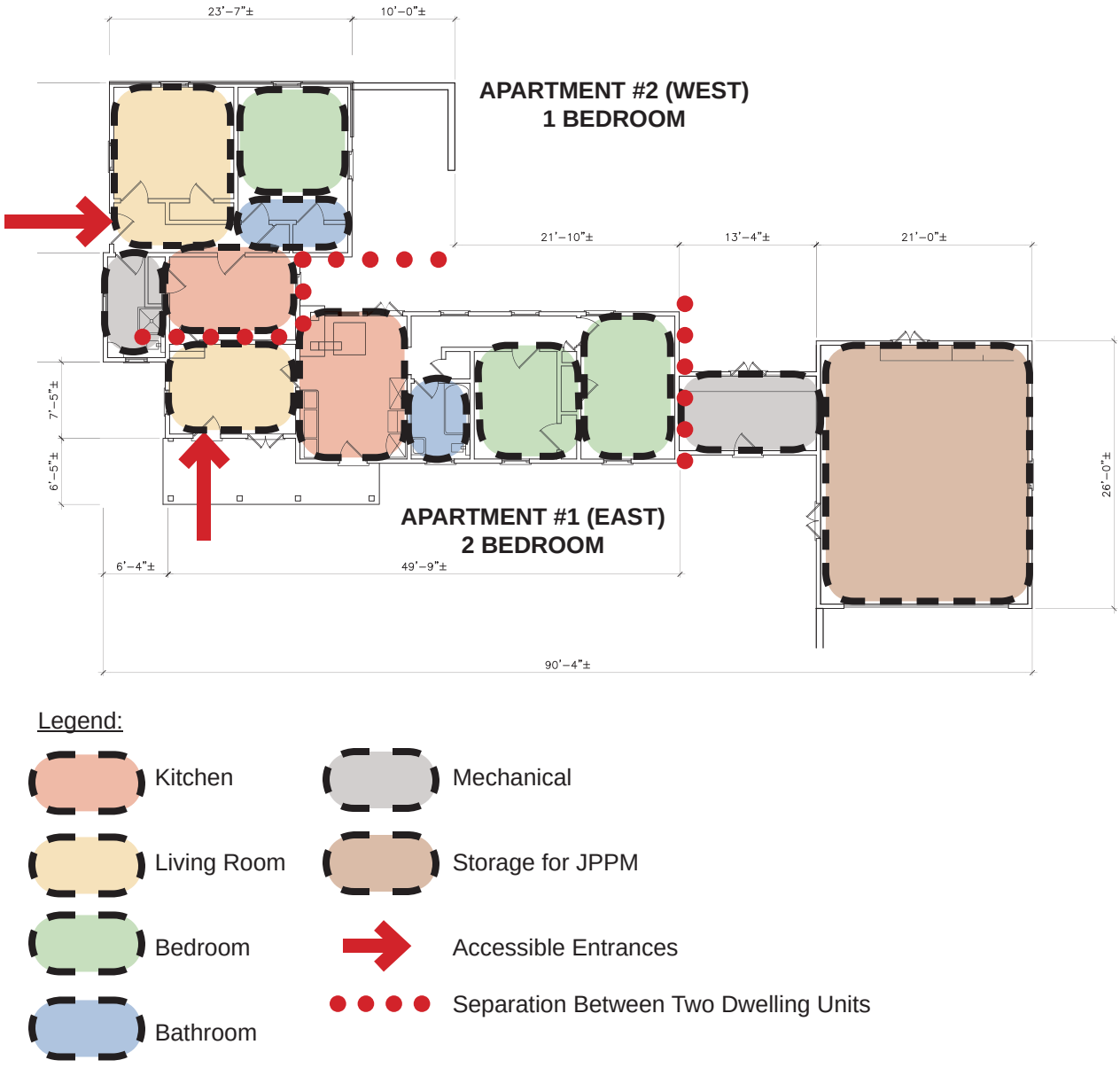


Figure 14.3. Space Utilization Plan of the Gardener's Cottage, First Floor

PRESERVATION TREATMENT RECOMMENDATIONS - GARDENER'S COTTAGE

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing will be recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

Materials removed in the course of this rehabilitation should be evaluated for salvage and later use for replacement or repair at the Patterson Center. Warehousing these materials in a controlled environment will minimize subsequent deterioration.

SITE FEATURES

The overall preservation treatments for the area around the Gardener's Cottage will be addressed in a subsequent chapter. However, it can be reiterated that the overall treatment is for rehabilitation, which will allow for alterations necessary to provide accessible routes and vegetation management needed to reestablish selected lawns and views.

EXTERIOR FEATURES

As discussed in Chapter 6, the exterior features are in the preservation zone. The significant exterior features should be repaired and restored where possible. Any exterior features that are deteriorated beyond repair should be replaced in kind.

A. Walls (brick, wood siding):
   1. Replace-in-kind all lapped wood siding.
   2. Paint siding.
   3. Replace and paint wood trim.
   4. Remove biological growth on brick and wood walls.
   5. Insulate wall cavities with foam.

B. Foundation (concrete):
   1. Remove vegetation close to the foundation.
   2. Repair small cracks.
   3. Paint foundation.

C. Roofing (asphalt shingles):
   1. Replace flashing.
   2. Replace asphalt shingles.

D. Chimneys (brick, metal sheathing):
   1. Repoint open joints and joints with loose mortar.
   2. Replace non-matching mortar.
   3. Replace-in-kind cracked and spalled bricks.

E. Trim (wood):
   1. Replace-in-kind all wood trim.
   2. Paint trim.

F. Gutters and downspouts (aluminum):
   1. Replace-in-kind gutters and downspouts.

G. Windows, double-hung and casement (wood, aluminum):
   1. Replace windows with aluminum clad windows with simulated divided lites/spacers, to match existing configuration.

H. Shutters (wood, painted) and hardware (metal):
   1. Replace shutters in-kind.
   2. Replace hardware in-kind.

I. Doors, entrance, screen, and garage (wood, painted):
   1. Replace doors with new wood doors to match existing.
   2. Paint doors.

J. Porch (wood, painted):
   1. Replace-in-kind columns.
   2. Paint columns.

K. Exterior lighting:
   1. Replace fixtures at each entrance.

L. Walkway (brick) and porch paving (brick):
   1. Re-lay brick paving to make a level surface.

M. Lighting protection:
   1. Replace lighting protection system.

INTERIOR FEATURES

As discussed in Chapter 6, the interior features are within a free zone.

The contributing (significant) and contributing (very significant) interior features should be repaired and preserved where possible. Any interior features deteriorated beyond repair should be replaced-in-kind. Documentation has been presented in the previous chapters to establish that the interior spaces have not been substantially altered over time. There is a considerable amount of building elements and finishes from the original construction period.

A. Ceilings (plaster, painted):
   1. Remove existing plaster finish and replace with gypsum wall board.

B. Walls (plaster, painted):
   1. Remove existing plaster finish and replace with gypsum wall board.
   2. Remove ceramic tile finish and replace.

C. Decorative trim (painted):
   1. Remove decorative trim (baseboards, window and door caisings) and replace.

D. Windows (wood, painted):
   1. Provide new window casing/aprons/stools.

E. Doors (wood, painted):
   1. Remove doors and replace.

F. Flooring (VAT, VCT, carpet):
   1. Remove floor finish and replace.

G. Lighting:
   1. Remove lighting and replace.

ARCHITECTURAL RECOMMENDATIONS - GARDENER'S COTTAGE

Beyond the repair and preservation of the historic building and site elements noted above, the following elements would become part of an architectural scope of work:

A. General:
   1. Replace all wall finishes with new gypsum wallboard.
   2. Replace all floor finishes (carpet in bedrooms and living rooms, rubber in kitchens, ceramic tile in bathrooms).
   3. Replace all ceiling finishes with new gypsum wallboard.
   4. Replace all wood trim.
   5. Replace all door and window hardware.
   6. Provide ventilation in attic.
   7. Replace all light fixtures.

B. Bathrooms in both apartments:
   1. Reconfigure existing toilet rooms to accommodate accessible toilets, showers, and sinks.
   2. Provide residential plumbing fixtures (toilets, sinks, bathtubs).
   3. Provide residential toilet accessories (toilet paper holders, grab bars, towel bars).
   4. Provide mechanical system for heating, cooling, ventilation, and exhaust.
   5. Provide new light fixtures.
   6. Provide a stacked washer and dryer for each apartment.

C. Apartment #1 (east):
   1. Replace kitchen appliances.
   2. Replace kitchen cabinets.
   3. Remove steps in living room.

D. Apartment #2 (west):
   1. Provide new kitchen (cabinets and appliances).
   2. Provide new living room.

STRUCTURAL RECOMMENDATIONS - GARDENER'S COTTAGE

A. Structural:
1. Repair brick retaining walls at localized areas.

ACCESSIBILITY RECOMMENDATIONS - GARDENER'S COTTAGE

As a two-family dwelling, the Gardener's Cottage and its associated sites and facilities are not required to be accessible.

MECHANICAL RECOMMENDATIONS - GARDENER'S COTTAGE

A. Heating and Air Conditioning:
1. Replace heating system.
2. Provide air conditioning system (in conjunction with heating system).

B. Plumbing
1. Replace plumbing system.
2. Replace underground water line from the Pump House/ Garage.
3. Replace existing septic tank for the intended occupancy.
4. Provide a new well.

ELECTRICAL RECOMMENDATIONS - GARDENER'S COTTAGE

A. Electrical Service:
1. Replace electrical system (panels, wiring, etc.).
2. Replace underground electrical line from Main Residence.

B. Communications and Security:
1. Provide telephone service.
2. Provide a fire alarm system with heat/smoke detectors, and strobes.

FIRE PROTECTION IMPROVEMENTS - GARDENER'S COTTAGE

A. Fire Protection:
1. Provide portable fire extinguishers at each floor and where required by the code official.
2. Provide an automatic sprinkler system.

LIFE SAFETY RECOMMENDATIONS - GARDENER'S COTTAGE

A. Life Safety Recommendations:
1. Request a variance for door width non-compliance.

HAZARDOUS MATERIALS RECOMMENDATIONS - GARDENER'S COTTAGE

A. Hazardous Materials:
1. Remove asbestos-containing floor tile and floor tile mastic in the Living Room 106, Hallway 109, Bedroom 1 101 , Bedroom 2 102, Bedroom 3 105 , Bedroom 4 110 , Bedroom 5 111 , Hallway 103, Bedroom 2 Closet 102A, and Bathroom 1 104.
2. Remove asbestos-containing pipe insulation and mudded elbows/fitting in the attic.
3. Remove exterior materials with lead-based paint: porch ceiling, fascia, soffit, and columns, some exterior siding, window mullions and sash, window shutters, window casings, window sills, and doors and door jambs.
4. Remove interior materials with lead-based paint: Living Room -106 doors, door casings, and widow sash/muntins/ casings/aprons tested positive for lead-based paint, bathtub in Bathroom 1-104.
5. Remove materials with mold in Kitchen 107, Living Room 106, Hallway 109, Bathroom 1 104, Bedroom 2 102, Bedroom 1 101, and Hallway 103.

GENERAL MAINTENANCE RECOMMENDATIONS - GARDENER'S COTTAGE

None at this time.

FURTHER INSPECTION - GARDENER'S COTTAGE

None at this time.

GREENHOUSE

OVERVIEW - GREENHOUSE

The preferred use for the Greenhouse is one that will support the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Greenhouse will be used as a gardening facility to support the restored gardens at the property.

PRESERVATION TREATMENT RECOMMENDATIONS - GREENHOUSE

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing is recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

Materials removed in the course of this rehabilitation should be evaluated for salvage and later use for replacement or repair at the Patterson Center. Warehousing these materials in a controlled environment will minimize subsequent deterioration.

SITE FEATURES

The overall preservation treatments for the area around the Gardener's Cottage and Greenhouse will be addressed in a subsequent chapter. However, it can be reiterated that the overall treatment is for rehabilitation, which will allow alterations necessary to provide accessible routes and vegetation management needed to reestablish selected lawns and views.

EXTERIOR FEATURES

A. Masonry wall:
1. Remove biological growth.
2. Repair cracks in masonry wall.
3. Repoint open joints and joints with loose mortar.
4. Patch areas of spalling.
5. Replace-in-kind parging on masonry wall.

B. Frame:
1. Remove overgrown vegetation.
2. Replace-in-kind all glazing.
3. Repair Greenhouse frame as required.
4. Repair/replace Greenhouse doors.

INTERIOR FEATURES

A. Interior:
1. Replace wood tables.
2. Remove debris.
3. Remove former boiler.

ARCHITECTURAL RECOMMENDATIONS - GREENHOUSE

None at this time.

STRUCTURAL RECOMMENDATIONS - GREENHOUSE

None at this time.

ACCESSIBILITY RECOMMENDATIONS - GREENHOUSE

A. Site:
1. Provide an accessible pathway and entrance into the building.
2. Provide accessible signage complying with IBC.

MECHANICAL RECOMMENDATIONS - GREENHOUSE

A. Plumbing:
   1. Replace water line to the Greenhouse.
   2. Connect to new well at the Gardener's Cottage.

B. Heating and Air Conditioning:
   1. Cap connection to abandoned boiler.

ELECTRICAL RECOMMENDATIONS - GREENHOUSE

A. Electrical service:
   1. Replace underground electrical line from the Garage to the Greenhouse.
   2. Replace any and all wiring.
   3. Provide light fixtures and electrical outlets.

FIRE PROTECTION IMPROVEMENTS - GREENHOUSE

None at this time.

LIFE SAFETY RECOMMENDATIONS - GREENHOUSE

Request a variance for egress door width non-compliance.

HAZARDOUS MATERIALS RECOMMENDATIONS - GREENHOUSE

None at this time.

GENERAL MAINTENANCE RECOMMENDATIONS - GREENHOUSE

None at this time.

FURTHER INSPECTION - GREENHOUSE

A. Further Inspection:
   1. If portions of the aluminum frame are deemed to be in need of replacement or parts are needed, the original supplier, Lord & Burnham, is available to provide materials through Glass Structures Limited at 508-788-6457.

COLD FRAME

OVERVIEW - COLD FRAME

The preferred use for the Cold Frame is one that will continue contributing to the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Cold Frame will be used as a gardening facility to support the restored gardens of the property. It is an non-occupiable structure.

PRESERVATION TREATMENT RECOMMENDATIONS - COLD FRAME

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for preservation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing is recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

Materials removed in the course of this rehabilitation should be evaluated for salvage and later use for replacement or repair at the Patterson Center. Warehousing these materials in a controlled environment will minimize subsequent deterioration.

EXTERIOR AND INTERIOR FEATURES

A. Walls:
1. Repoint open joints and joints with loose mortar.
2. Rebuild brick walls at sections of through-wall cracks and at corners.
3. Replace mismatched mortar.
4. Remove embedded steel anchors.
5. Replace parging.
6. Provide weepholes.

ARCHITECTURAL RECOMMENDATIONS - COLD FRAME

A. Architectural Recommendations:
1. Provide hinged wood frame with glazing for top of cold frame.

STRUCTURAL RECOMMENDATIONS - COLD FRAME

None at this time.

ACCESSIBILITY RECOMMENDATIONS - COLD FRAME

None at this time.

MECHANICAL RECOMMENDATIONS - COLD FRAME

None at this time.

ELECTRICAL RECOMMENDATIONS - COLD FRAME

None at this time.

FIRE PROTECTION IMPROVEMENTS - COLD FRAME

None at this time.

LIFE SAFETY RECOMMENDATIONS - COLD FRAME

None at this time.

HAZARDOUS MATERIALS RECOMMENDATIONS - COLD FRAME

None at this time.

GENERAL MAINTENANCE RECOMMENDATIONS - COLD FRAME

None at this time.

FURTHER INSPECTION - COLD FRAME

None at this time.

POOL HOUSE & POOL

OVERVIEW - POOL HOUSE & POOL

The preferred use for the Pool House is as a support facility for the historic house museum and its income producing events. The existing men's and women's toilet rooms would be converted into accessible toilet rooms while the pump room would become an event support space. This facility would primarily be used for events. This conversion would support the use of the area for special events. The swimming pool is no longer needed and is both a maintenance and safety concern. Therefore, the proposal here is to fill in the pool with lightweight material covered with a concrete slab and paving stones. This would allow the area to be used as a central public area. It is hoped that this would become a second major rental area for events and weddings. See Figure 14.4 for the building rehabilitation floor plan and Figure 14.5 for the pool.

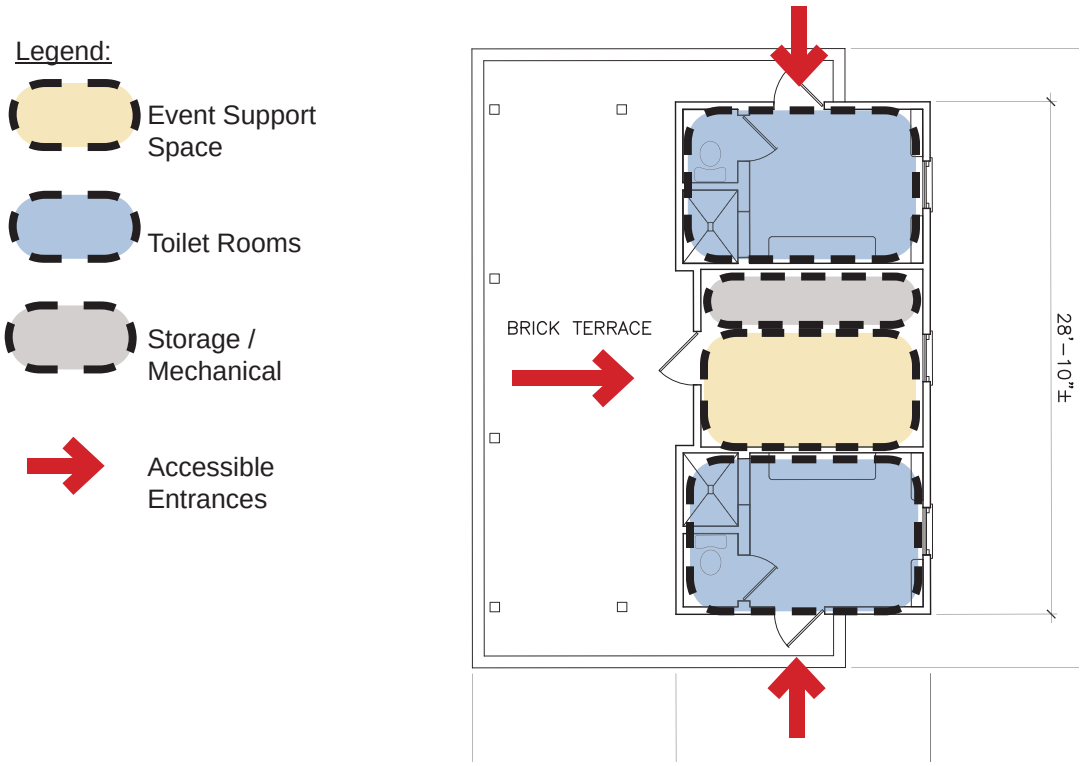


Figure 14.4. Space Utilization Plan of the Pool House, First Floor

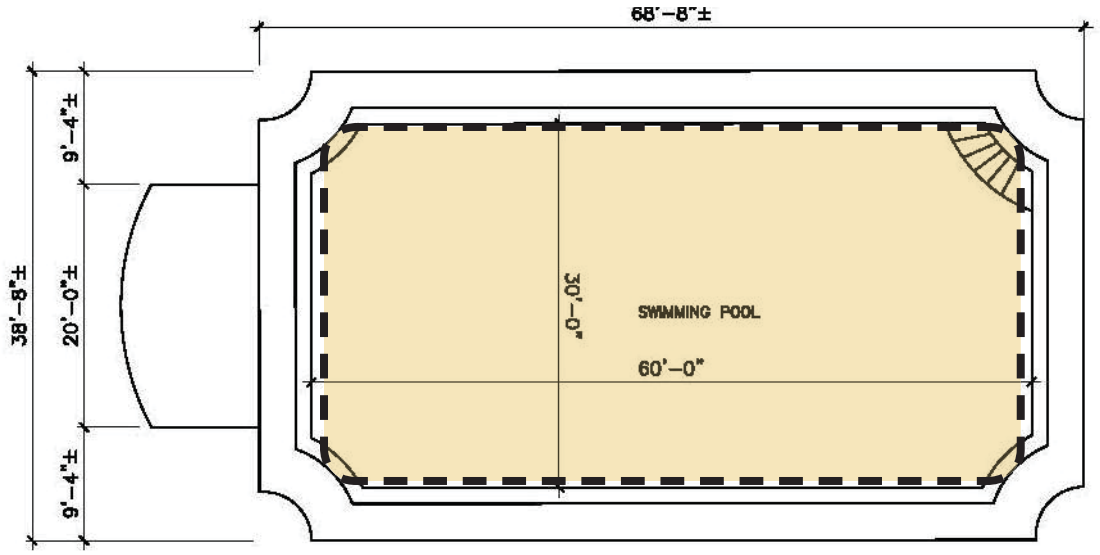


Figure 14.5. Space Utilization Plan of the Pool

PRESERVATION TREATMENT RECOMMENDATIONS - POOL HOUSE & POOL

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing will be recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

Materials removed in the course of this rehabilitation should be evaluated for salvage and later use for replacement or repair at the Patterson Center. Warehousing these materials in a controlled environment will minimize subsequent deterioration.

SITE FEATURES

The overall preservation treatments for the area around the Pool House and Pool will be addressed in a subsequent chapter. However, it can be reiterated that the overall treatment is for rehabilitation, which will allow alterations necessary to provide accessible routes and vegetation management needed to reestablish selected lawns and views.

A. Site:

1. Repoint existing stone pavers around existing pool
2. Remove existing vegetation away from face of pool house structure

EXTERIOR FEATURES

As discussed in Chapter 6, the exterior features are in the preservation zone. The significant exterior features should be repaired and restored where possible. Any exterior features that are deteriorated beyond repair should be replaced in kind.

A. Walls:
1. Replace-in-kind wood siding and deteriorated boards.
2. Provide vapor/air barrier.
3. Repair/replace in-kind diagonal sheathing as required.

B. Foundation;
1. Remove biological growth.
2. Remove vegetation close to the foundation.

C. Roofing (asbestos cement):
1. Remove asbestos shingles and replace with a non-ACM roofing material similar in scale, color, and shape (i.e. asphalt shingles).
2. Replace-in-kind flashing.
3. Replace-in-kind roofing boards (sheathing) due to deterioration of shingles (assume 50% replacement).

D. Trim (wood):
1. Repaint trim.
2. Replace deteriorated trim boards.

E. Windows, double-hung (wood):
1. Repair deteriorated wood components (muntins, stiles, rails).
2. Reglaze lites.
3. Repaint.
4. Replace hardware.

F. Shutters (wood, painted) and hardware (metal):
1. Repair broken shutters including providing new slats where missing.
2. Repair or replace shutter hardware as required.
3. Repaint.

G. Doors, entrance and screen (wood, painted):
1. Remove biological growth on Men's room door.
2. Replace door hardware.
3. Reglaze lites.

H. Pergola (wood):
1. Replace-in-kind deteriorated trellis and post components.
2. Remove biological growth.

I. Exterior lighting:
1. Remove corrosion.
2. Rewire.

J. Paving (brick, stone):
1. Re-lay brick paving to make a level surface.
2. Re-lay and repoint stone pavers along the perimeter of the paving.

INTERIOR FEATURES

As discussed in Chapter 6, the interior features are primarily within a rehabilitation zone.

The contributing (significant) and contributing (very significant) interior features should be repaired and preserved where possible. Any interior features deteriorated beyond repair should be replaced-in-kind. Documentation has been presented in the previous chapters to establish that the interior spaces have not been substantially altered over time. There is a considerable amount of building elements and finishes from the original construction period.

A. Walls (wood):
1. Replace-in-kind wood paneling.

B. Windows (wood):
1. Replace deteriorated sill and casing in Men's Changing Room.

C. Decorative trim (wood):
1. Clean.

D. Doors (wood, painted):
1. Replace door hardware.

E. Flooring (brick):
1. Remove debris and clean.

F. Lighting:
1. Remove corrosion.
2. Replace-in-kind missing globes.

ARCHITECTURAL RECOMMENDATIONS - POOL HOUSE & POOL

A. Toilet Rooms:
1. Reconfigure existing toilet rooms to accommodate accessible toilet stalls. This will include removing the existing showers.
2. Provide ADA compliant plumbing fixtures (toilets, sinks, drinking fountains).
3. Provide ADA compliant stainless steel toilet accessories (toilet paper holders, grab bars, toilet seat covers, automatic hand dryers, recessed waste bins, baby changing stations).
4. Provide a mechanical system for heating, cooling, ventilation, and exhaust.
5. Provide an electrical system.

B. Event Support Space (former Pump Room):
1. Remove mechanical equipment.
2. Provide a finished interior space (including, but not limited to, gypsum wall board ceiling, walls, carpet, overhead lighting).
3. Provide an electrical closet.
4. Provide a mechanical equipment closet.

C. Pool:
1. Cap water lines to pool.
2. Remove water in pool. Patch and repair any cracks.
3. Provide drainage piping at four locations through pool walls to facilitate proper drainage of new lawn in former pool.
4. Fill pool with lightweight fill (i.e. styrofoam) and a concrete slab. Provide appropriate paving stones on top of slab to create a programmatic space within the outline of the pool.

STRUCTURAL RECOMMENDATIONS - POOL HOUSE & POOL

A. Structural Recommendations:
   1. Replace sill plates.
   2. Stud base sistering. These repairs shall be performed in a sequential manner to minimize shoring of the exterior walls during construction.
   3. Replace-in-kind deteriorated pergola framing.

ACCESSIBILITY RECOMMENDATIONS - POOL HOUSE & POOL

A. Interior:
   1. Provide an accessible building entrance to each toilet room and the event support space. There is a current elevation change of about 3 inches to address. This will require a ramp up to the entrances.
   2. Provide ADA-compliant signage at toilet rooms.
   3. Provide accessible toilet rooms.
   4. Provide an accessible drinking fountain.
   5. Provide an accessible telephone.
   6. Accessible parking will be located at the Pump House/ Garage and at the Morgan State building.

MECHANICAL RECOMMENDATIONS - POOL HOUSE & POOL

A. Heating and Air Conditioning:
   1. Provide a mechanical system for pool house.

B. Plumbing
   1. Replace plumbing system.
   2. Remove abandoned 1930s well pump and seal well.
   3. Remove abandoned gas power engine.
   4. Provide a new well.
   5. Provide new septic tank to an increased visitorship use of the toilet rooms.

ELECTRICAL RECOMMENDATIONS - POOL HOUSE & POOL

A. Electrical Service:
   1. Replace electrical system (panels, wiring, etc.).
   2. Replace underground electrical line from the Pump House/ Garage.

B. Communications and Security:
1. Provide telephone/data service.
2. Provide a fire alarm system with heat/smoke detectors, and strobes.
3. Provide a security system.

FIRE PROTECTION IMPROVEMENTS - POOL HOUSE & POOL

A. Fire Protection:
1. Provide portable fire extinguishers at each floor and where required by the code official.

LIFE SAFETY RECOMMENDATIONS - POOL HOUSE & POOL

None at this time.

HAZARDOUS MATERIALS RECOMMENDATIONS - POOL HOUSE & POOL

A. Hazardous Materials:
1. Remove asbestos shingle roofing.

GENERAL MAINTENANCE RECOMMENDATIONS - POOL HOUSE & POOL

None at this time.

FURTHER INSPECTION - POOL HOUSE & POOL

None at this time.

BEACH HOUSE

OVERVIEW - BEACH HOUSE

The preferred use for the Beach House is one that will support the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Beach House has the most idyllic of settings for any of the buildings on this site. This building would be repaired and rehabilitated so that it could be utilized as an overnight guest accommodation for kayakers and canoers with a designated put-in location. The two sets of lavatories and showers can house an accessible toilet, sink, and shower. The actual operational issues have not been worked out yet, but the repairs will enable this building to be used. There will be running water and toilets, but only the wood burning fireplace. If reconnecting to a septic system is cost-prohibitive, then a composting toilet nearby would be necessary. See Figure 14.6 for the building rehabilitation floor plan.

Planned work will include modifications to the boardwalk to ensure that visitors with disabilities can use the Beach House.

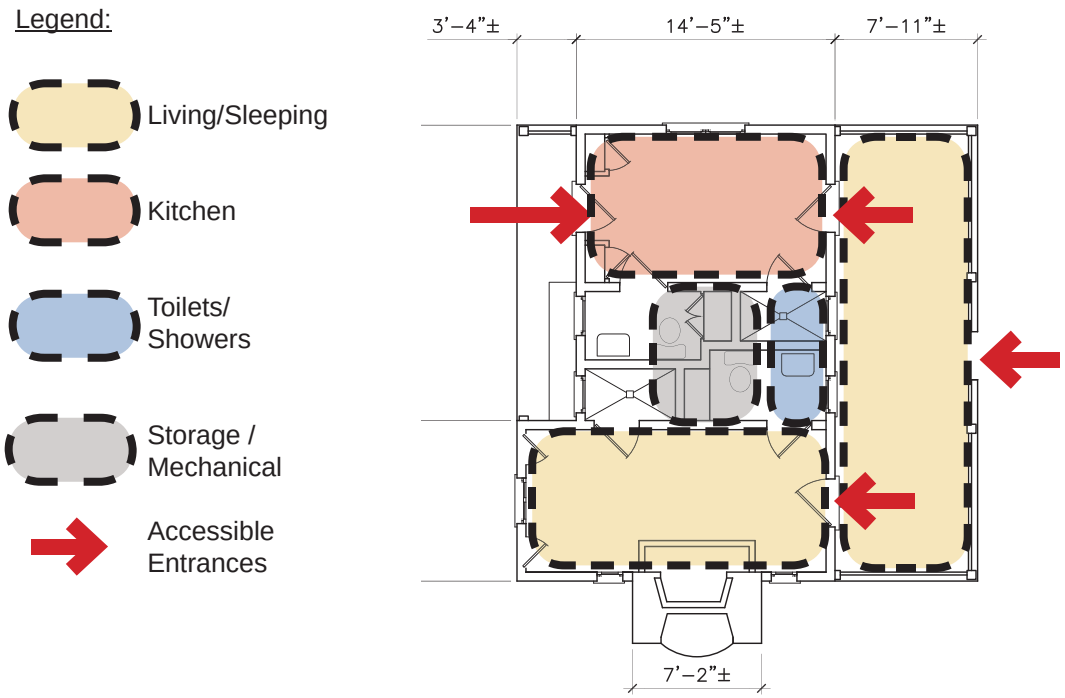


Figure 14.6. Space Utilization Plan of the Beach House, First Floor

PRESERVATION TREATMENT RECOMMENDATIONS - BEACH HOUSE

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing is recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

Materials removed in the course of this rehabilitation should be evaluated for salvage and later use for replacement or repair at the Patterson Center. Warehousing these materials in a controlled environment will minimize subsequent deterioration.

SITE FEATURES

The overall preservation treatments for the area around the Beach House will be addressed in a subsequent chapter. However, it can be reiterated that the overall treatment is for rehabilitation which, will allow alterations necessary to provide accessible routes and vegetation management needed to reestablish selected lawns and views.

A. Site:
   1. Regrade around perimeter of Beach House to allow for proper drainage.
   2. Clear excess vegetation around Beach House to provide a path.

EXTERIOR FEATURES

As discussed in Chapter 6, the exterior features are in the preservation zone. The significant exterior features should be repaired and restored where possible. Any exterior features that cannot be preserved due to excessive deterioration should be replaced-in-kind and be marine grade.

A. Walls:
1. Replace-in-kind redwood siding and trim boards (assume 100%).
2. Provide vapor/ air barrier.

B. Foundation:
None at this time.

C. Chimney:
1. Repair step cracking.
2. Repoint open joints and joints with loose mortar.
3. Replace non-matching mortar.
4. Replace-in-kind cracked and spalled bricks.
5. Inspect chimney flue and repair as necessary.

D. Roofing:
1. Replace-in-kind asphalt shingle roofing.
2. Replace-in-kind copper flashing.

E. Trim (wood):
1. Paint trim.
2. Replace deteriorated wood trim in-kind.

F. Windows, double-hung (wood):
1. Remove plywood covers.
2. Repair areas of deteriorated or broken wood (includes muntins).
3. Reglaze lites.
4. Repaint.
5. Repair/replace window hardware, as required.

G. Shutters (wood, painted) and hardware (metal):
1. Reattach shutter that is currently located inside.
2. Repair broken shutters including providing new slats where missing.
3. Repaint.
4. Remove rust on hardware/repaint.

H. Doors, entrance and screen (wood, painted):
1. Provide screen door to the porch where missing.
2. Replace hardware.
3. Replace wood doors in-kind.

I. Porches, entry and screened-in (wood):
1. Replace-in-kind wood entry porch.
2. Remove vegetation (tree stump and roots) under the entry porch.
3. Provide porch screens where missing (entire screened-in porch).
4. Repaint.

J. Exterior lighting:
1. Remove corrosion.
2. Rewire.

INTERIOR FEATURES

As discussed in Chapter 6, the interior features are within a rehabilitation zone.

The contributing (significant) and contributing (very significant) interior features should be repaired and preserved where possible. Any interior features deteriorated beyond repair should be replaced-in-kind. Documentation has been presented in the previous chapters to establish that the interior spaces have not been substantially altered over time. There is a considerable amount of building elements and finishes from the original construction period. Any new materials should be marine grade.

A. Ceilings (wood):
None at this time.

B. Walls (wood):
1. Remove white stains, salts from flooding.
2. Replace areas of deteriorated redwood paneling (typically at end grains of vertical boards near the floor).

C. Windows, casements and hopper (wood):
1. Reglaze all lites.
2. Provide new glazing where missing (nearly all windows).
3. Repair areas of deteriorated wood.
4. Replace hardware.
5. Paint.

D. Decorative trim (wood):
1. Remove debris and clean.

E. Doors (wood, painted):
1. Remove white stains, salts from flooding.
2. Replace areas of deteriorated wood (typically at end grains of vertical boards near the floor).
3. Remove rust on hardware.
4. Paint.

F. Flooring (brick):
1. Remove debris and clean.

G. Lighting:
1. Remove corrosion.
2. Rewire.

ARCHITECTURAL RECOMMENDATIONS - BEACH HOUSE

A. Toilet Rooms:
1. Reconfigure existing lavatories and shower rooms to accommodate accessible toilet stalls and showers. This may include removing the existing showers. Toilets may be compostable or chemical.
2. Provide ADA compliant plumbing fixtures (toilets, sinks, and drinking fountain).
3. Provide ADA compliant stainless steel toilet accessories (toilet paper holders, grab bars, toilet seat covers, automatic hand dryers, recessed waste bins, baby changing stations).
4. Provide mechanical system for exhaust.
5. Provide an ADA compliant drinking fountain.
6. Provide cabinets and kitchen sink.
7. Request variance for clothes washer.

B. Changing Rooms & Porch:
1. Provide picnic table.

STRUCTURAL RECOMMENDATIONS - BEACH HOUSE

A. Structural Recommendations:
   1. Replace sill plates with new anchors around perimeter of structure. Similarly, a new stud base reinforcement will be required in localized areas.
   2. Replace-in-kind decking, joists, posts and foundations at entry porch.
   3. Repair screened-in porch. Remove and replace localized areas of porch slab at area of tree interaction. Provide new base supports for existing columns at areas of slab reconstruction. Due to frequent flooding, these columns shall be base supported by new stainless steel post bases. If the tree is to remain, the new slab can be designed to span over a subgrade opening to permit tree root growth.

ACCESSIBILITY RECOMMENDATIONS - BEACH HOUSE

A. Interior:
   1. Provide an accessible building entrance from the boardwalk to the entry porch and into the Beach House. There is a current elevation change of about 4 inches from grade to the porch and an additional 3 inches to rise over the brick thresholds. This will require raising the level of the porch.
   2. Provide an accessible building entrance from the boardwalk to the screened-in-porch and into the Beach House. There is a current elevation change of about 3 inches to address to rise over the brick thresholds. This will require a ramp up to the entrances.
   3. Provide ADA-compliant signage at toilet rooms.
   4. Provide accessible toilet rooms.
   5. Accessible parking will be located at the cul-de-sac.

MECHANICAL RECOMMENDATIONS - BEACH HOUSE

A. Plumbing
   1. Replace underground water service from the Pump House/ Garage.
   1. Replace plumbing system.
   2. Provide new septic tank.
   3. Provide a composting toilet if septic tank replacement is cost-prohibitive to also include toilet waste.

4. Provide a new well.
5. Request a variance if the Beach House is required to have additional plumbing fixtures per R-3 occupancy requirements (i.e. clothes washer).

ELECTRICAL RECOMMENDATIONS - BEACH HOUSE

A. Electrical Service:
   1. Replace electrical system (meters, panels, wiring, etc.).
   2. Replace underground electrical line (feeder) from the Pump House/Garage.
   3. Repair lightning protection system.
   4. Investigate the installation of south facing solor panels.

B. Communications and Security:
   1. Provide security system.
   2. Provide a fire alarm system with heat/smoke detectors, and strobes.

FIRE PROTECTION IMPROVEMENTS - BEACH HOUSE

A. Fire Protection:
   1. Provide portable fire extinguishers where required by the code official.
   2. Request variance for automated sprinkler system required for R-3 occupancy.

LIFE SAFETY RECOMMENDATIONS - BEACH HOUSE

A. Life Safety Recommendations:
   1. Request a variance for door width and door swing non-compliance.

HAZARDOUS MATERIALS RECOMMENDATIONS - BEACH HOUSE

A. Hazardous Materials:
   1. Remove lead-based paint on exterior window casings.

GENERAL MAINTENANCE RECOMMENDATIONS - BEACH HOUSE

A. General Maintenance:
   1. Due to its low elevation, the Beach House should be inspected after each major weather event.

FURTHER INSPECTION - BEACH HOUSE

A. Further Investigation:
   1. Confirm existing septic tank is code compliant and can serve increased use of the toilet rooms.
   2. Consider raising the Beach House on a higher foundation.

CHAPTER 15:

TREATMENTS & WORK RECOMMENDATIONS - LANDSCAPE



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CHAPTER 15: TREATMENT & WORK RECOMMENDATIONS - LANDSCAPE

INTRODUCTION

In order to prepare the landscape for a continued use as an integral component of the historic house museum (or accommodations, as in the case of the Gardener's Cottage), a number of treatment and work items are recommended. This will allow the continued use of the facility well into the future while fulfilling the programmatic needs of the Jefferson Patterson Park and Museum. A continued use of any historic property is crucial to its preservation. Observation on a regular basis, and concurrent correction and maintenance, are effective deterrents of catastrophic failures. Recommendations offered herein for the rehabilitation of the landscape character areas abide by the period of significance and with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.* The greatest impact to the landscape character areas will be in a accommodating accessibility throughout the landscape and integrating new site utilities. This will be discussed in the following paragraphs.

Treatments and work recommendations fall into the following categories: preservation, landscape architecture, accessibility, and civil. In order to comply with code and accommodate accessibility, most work recommendations can be characterized as serious. No minor work recommendations have been noted. Critical recommendations include those that refer to civil engineering work to integrate new site utilities.

OVERVIEW

A proposed plan for site plan development is provided in Figure 15.1. Most all of the visitors will arrive via automobile or bus. Most parking will utilize the existing lot at the Maryland Archaeological Conservation Laboratory (MAC Lab) building. From this point, it would be a 5 minute walk to the Main Residence. A small parking lot for 8 cars would be built just west of the Main Residence to handle daily visitors to the house museum. Large groups arriving by coaches or school buses would utilize a new bus drop-off behind the Morgan State building. Once discharged, the buses would park at the MAC Lab. Those visitors would approach the Patterson Center along the paths past the Gardener's Cottage.

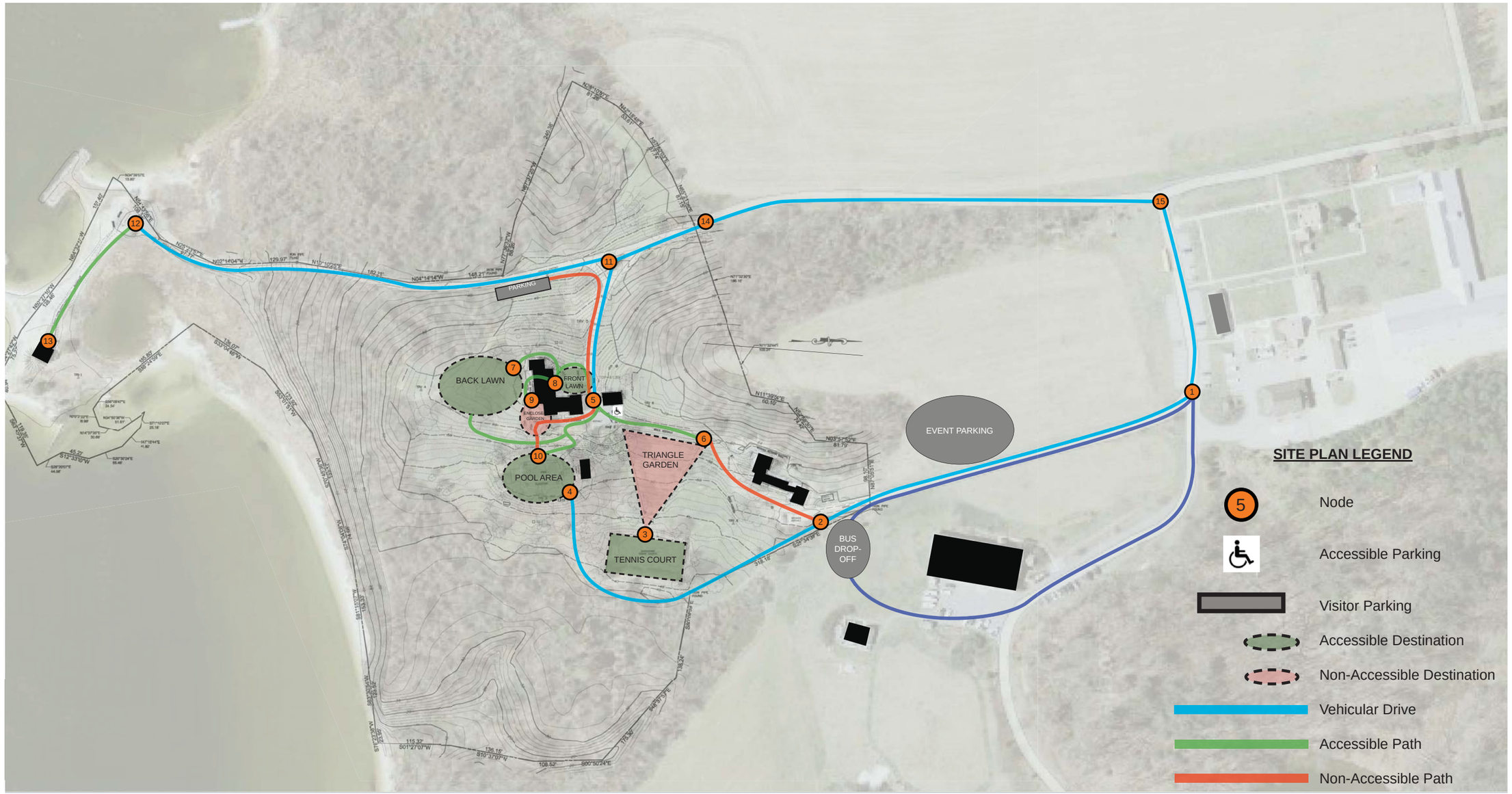
For visitor with disabilities, accessible parking will be provided at designated parking at the Pump House/Garage and they can also be dropped off in front of the Main Residence.

Many important site elements would be repaired and rehabilitated to be enjoyed by pedestrians and for use during special events. The Enclosed Garden to the main house and the Pool House and pool can become an important set of features in this regard. An accessible path would be provided from the accessible parking at the Pump House/Garage down to the pool and Pool House. A continuation of this path would lead to the back lawn. Also, there will be continued landscape restoration in the Triangle Garden. A new path is proposed behind the tennis courts which then would connect to the swimming pool. This path would have a low-slope and could be managed by vehicles and, if necessary, wheelchair users.

The roadway to the Beach House would be repaired, but not widened. The goal is for most of the roads to maintain their current character and configuration.

The site master plan includes upgrades to the underground utilities. The site is not serviced by municipal sewers, so each of the existing septic fields will be replaced to serve the new functions. The current water source is from an underground well. A new well would be installed and distribution piping replaced to increase capacity and provide high-level filtration to address naturally occurring contaminants. All of the existing underground electrical will be upgraded and replaced.

The current policies that identify the Patuxent River beaches for restricted use will remain. No fishing or camping would be allowed, but the Beach House would become an “overnight accommodation” that could be reserved by kayakers.


PARKING
BACK LAWN
FRONT LAWN
ENCLOSE GARDEN
TRIANGLE GARDEN
POOL AREA
TENNIS COURT
BUS DROP-OFF
EVENT PARKING
SITE PLAN LEGEND
Node
Accessible Parking
Visitor Parking
Accessible Destination
Non-Accessible Destination
Vehicular Drive
Accessible Path
Non-Accessible Path
GRAPHIC SCALE

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MAIN RESIDENCE AREA

OVERVIEW - MAIN RESIDENCE AREA

The preferred use for the Main Residence Landscape Character Area is one that supports the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Main Residence Area will be used as an "interpreted landscape" for the Main Residence. Main components of the interpreted landscape will be the Enclosed Garden, back lawn, terrace, and the area around the pool. The back lawn and pool areas may also be used to provide assembly space for planned events (for instance, weddings and the annual "Tea in the Garden").

The concept site plan for this preferred use, using the existing layout as a guide, would be as follows:

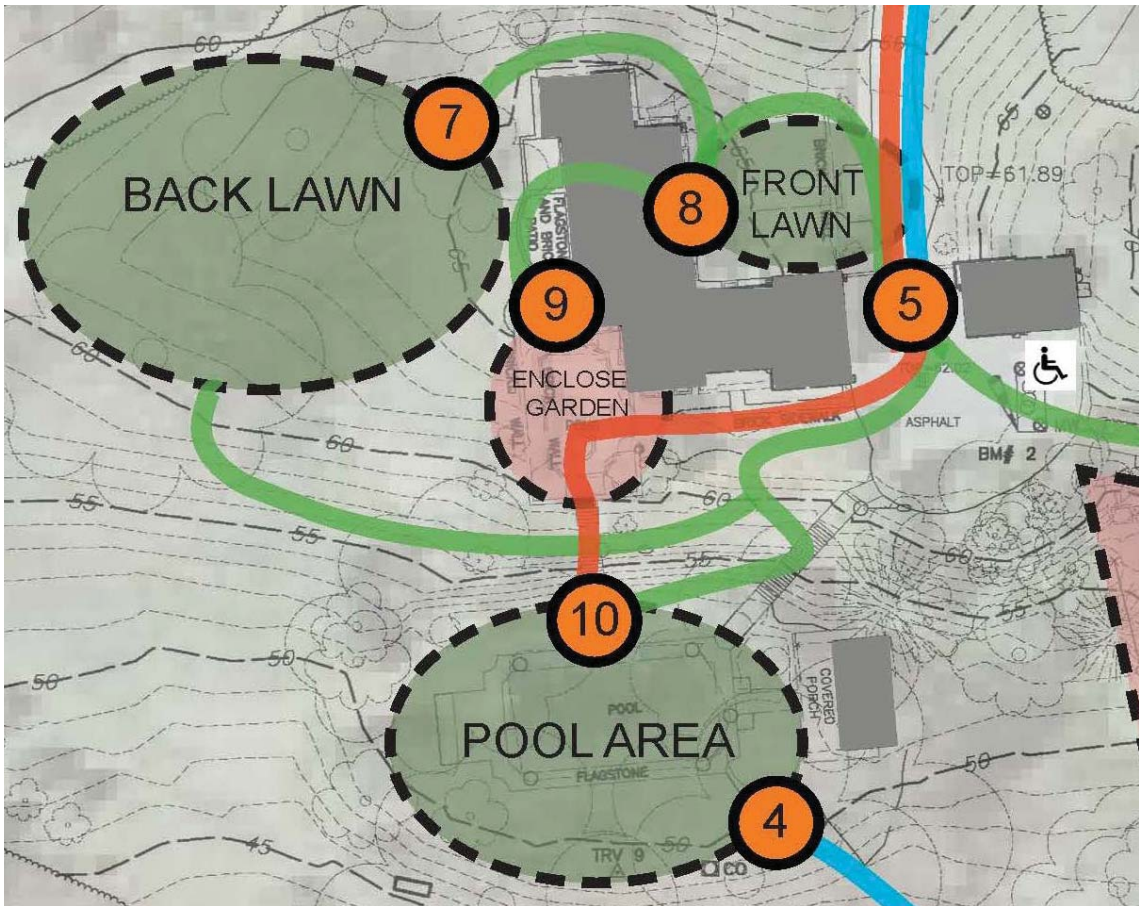


Figure 15.2. Concept Site Plan for the Enlarged Main Residence Area

PRESERVATION TREATMENT RECOMMENDATIONS - MAIN RESIDENCE AREA

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties and the Guidelines for the Treatment of Cultural Landscapes*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more specific for each significant site and building element.

Recommendations concerning treatment for all the historic features and materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing will be recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

SITE FEATURES

As discussed in Chapter 7, the site features are in the rehabilitation zone. This treatment will allow for alterations necessary to provide accessible routes and vegetation management needed to reestablish selected lawns and views. The significant site features should be repaired and restored where possible. Any site feature deteriorated beyond repair should be replaced in kind.

A. Natural systems, features, and topography:
None at this time.

B. Spatial organization:
None at this time.

C. Land use:
1. Maintain existing vistas. (Removal of vegetation from dense wooded areas to recreate open lawns and views from the Main Residence is not permitted in critical areas.)

D. Cluster arrangement:
None at this time.

E. Circulation routes:

1. Repoint open joints and locations of loose mortar at flagstone path edged in brick at north (main) entrance.
2. Repoint open joints and locations of loose mortar at flagstone south terrace.
3. Repoint open joints and locations of loose mortar at brick stairs at NW corner of the Pool to Main Residence parking area.
4. Repair stairs from Enclosed Garden down to Pool.
5. Repoint open joints and locations of loose mortar at brick walkways from Pool and Pool House.
6. Repoint open joints and locations of loose mortar at brick walkway from parking area to east entrance of the Main Residence.

F. Topography:
None at this time.

G. Vegetation:

1. Prune and clean up vegetation masses enclosing the lawns.
2. Prune and weed plantings around Main Residence.
3. Remove dead tree on south side of residence.
4. Prune magnolia and apple tree near Pump House/Garage.
5. Remove vine on retaining wall near Pump House/Garage.
6. Remove dead branches from matrure trees around Pool House.
7. Prune shrubs around Pool House.
8. Remove inappropriate plantings in Enclosed Garden.
9. Remove invasive plant species in masses of vegetation between the Main Residence and the Pool.
10. Prune vegetation to restore historic views.

H. Buildings and structures:

1. Replace deteriorated wood siding on small shed to the east of the Pool.
2. Replace the roof on the small shed to the east of the Pool.
3. Restore light fixture at Pool.
4. See Chapter 14 “Treatments - Outbuildings” for treatments regarding the pool.

I. Views and vistas:

1. Maintain current perimeter vegetation. (Removal of vegetation to restore views and vistas to the Patuxent River is not permitted in critical areas.)

J. Constructed water features:

Refer to the Pool treatment in Chapter 14.

K. Small-scale features:

1. Remove vegetation from all brick garden walls.
2. Replace-in-kind cracked bricks.
3. Repoint open joints and locations of loose mortar in brick walls at the entrance gates.
4. Repoint open joints and locations of loose mortar in low brick retaining walls in front of the Main Residence.
5. Reconstruct low brick wall in front of the Main Residence towards the west at the Linden Tree.
6. Repoint open joints and locations of loose mortar in brick walls at the Pump House/Garage.
7. Repoint open joints and locations of loose mortar in brick walls around the Enclosed Garden.
8. Restore wrought iron gate to the Enclosed Garden.
9. Clean and remove excess paint so that the wood garden gate to the Enclosed Garden closes properly.
10. Repair wood planters around Pool.
11. Repaint well house to the west of the Main Residence.
12. Remove gravel next to the Pool and provide new vegetation.
13. Remove rust and repaint ladies and gentlemen signs at the east and west ends of the Pool House.

LANDSCAPE ARCHITECTURAL RECOMMENDATIONS - MAIN RESIDENCE AREA

Beyond the repair and preservation of the historic building and site elements noted above, the following elements would become part of an architectural scope of work:

General:

1. Provide a small parking lot for 8 to 10 cars along the drive to the Beach House immediately south of Node 11.
2. Provide site lighting.

ACCESSIBILITY RECOMMENDATIONS - MAIN RESIDENCE AREA

A. Site:

1. Provide accessible parking spaces in the driveway. This will include a van accessible parking space and all required accessible parking space signs.
2. Provide at least one accessible passenger loading zone at the edge of the driveway next to the path to the main entry of the Main Residence.
3. Provide an accessible pathway from the driveway to the main entry of the Main Residence, (see Figure 15.3, Figure 15.4, Figure 15.5, and Figure 15.6).
4. Provide an accessible pathway from the driveway to the east entry of the Main Residence and continue it to the wooden gate at the Enclosed Garden.
5. Provide an accessible path from the driveway down to the Pool House and out to the Back Lawn, (see Figure 15.7).
6. Provide accessible signage complying with IBC, Section 1110.
7. Provide at least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.



Figure 15.3. Entrance portico at Main Residence, (QEA, 2012).



Figure 15.4. Altered photo of the ramp and portico at the Main Residence showing concept for an accessible path to the entry (QEA, 2012).

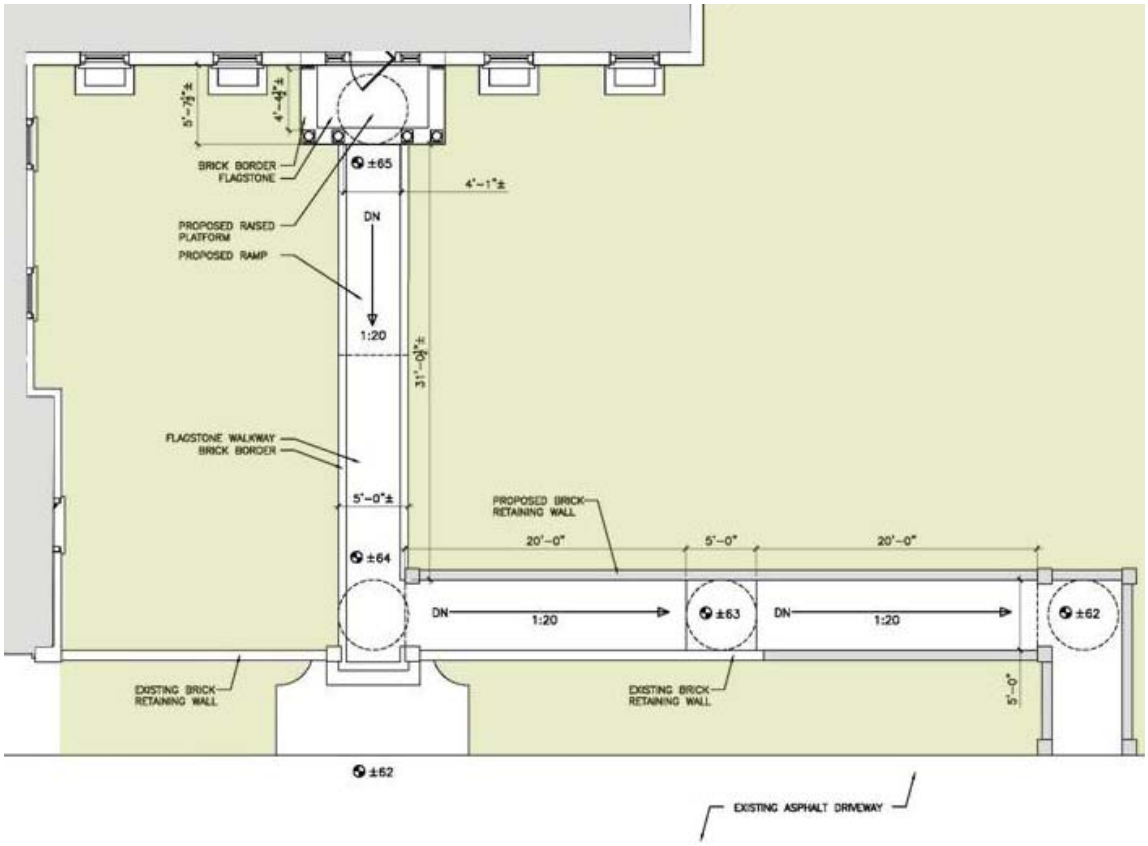


Figure 15.5. Concept for an accessible path from the driveway to the Main Residence



Figure 15.6. Main Residence and driveway (QEA, 2012).

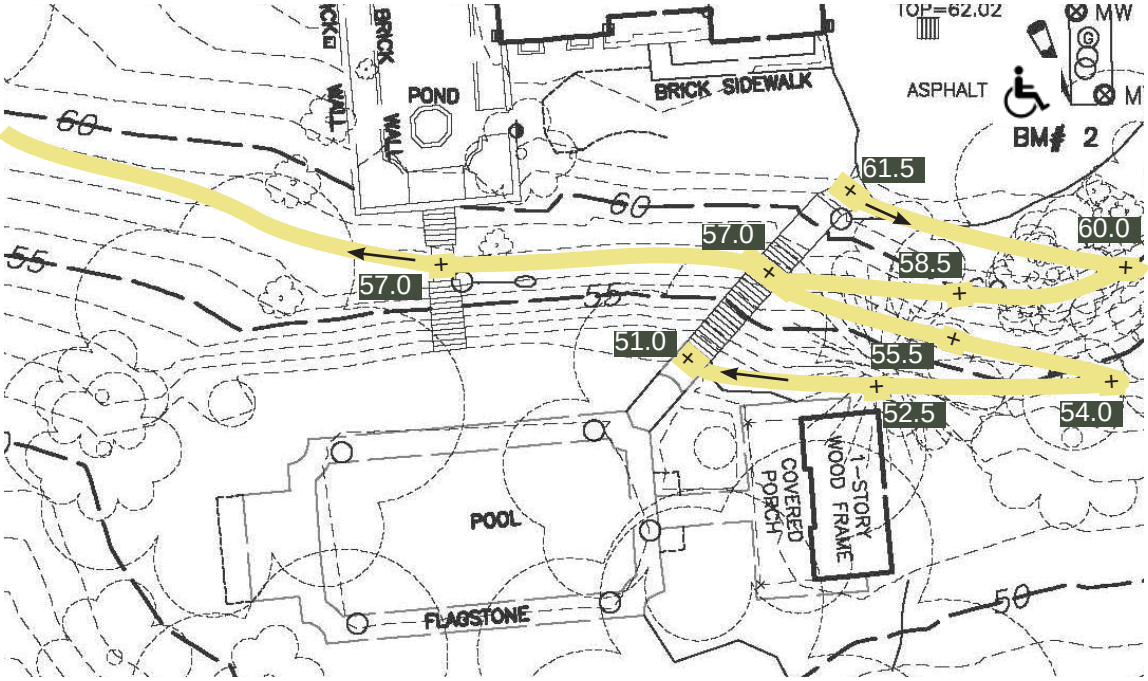


Figure 15.7. Concept for an accessible path from the driveway to the Pool

CIVIL RECOMMENDATIONS - MAIN RESIDENCE AREA

1. Replace the underground electrical lines.
2. Replace the underground water lines.
3. Abandon existing well. Provide new well.
4. Provide water service for fire hydrants as required.
5. Create parking spaces (8) with retaining walls along the road to the Beach House.

LIFE SAFETY RECOMMENDATIONS - MAIN RESIDENCE AREA

1. Request variance for existing roadways that do not meet the 20 feet width requirements for fire department apparatus.

FURTHER INSPECTION - MAIN RESIDENCE AREA

A. Fire Protection:
1. Confirm water supply system and fire flow requirements for fire service main.
2. Request variance for existing dead-end at end of Main Residence driveway that may not meet Calvert County turn-around requirements for fire department apparatus.

ADDITIONAL RECOMMENDATIONS - MAIN RESIDENCE AREA

These additional recommendations are not included in the attached cost estimate.

A. Landscape Restoration:
1. Restore vegetation around the Main Residence.
2. Restore vegetation in the Enclosed Garden.
3. Restore views and vistas to the Patuxent River by removing some of the vegetation.

GARDENER'S COTTAGE AREA

OVERVIEW - GARDENER'S COTTAGE

The preferred use for the Gardener's Cottage Landscape Character Area will primarily be residential. However, the Greenhouse and Cold Frame will be support spaces for interpretation of the historic landscape. Vehicular access from the gravel access road to the Pool House will also be provided through this area.

The concept site plan for this preferred use, using the existing layout as a guide, would be as follows:

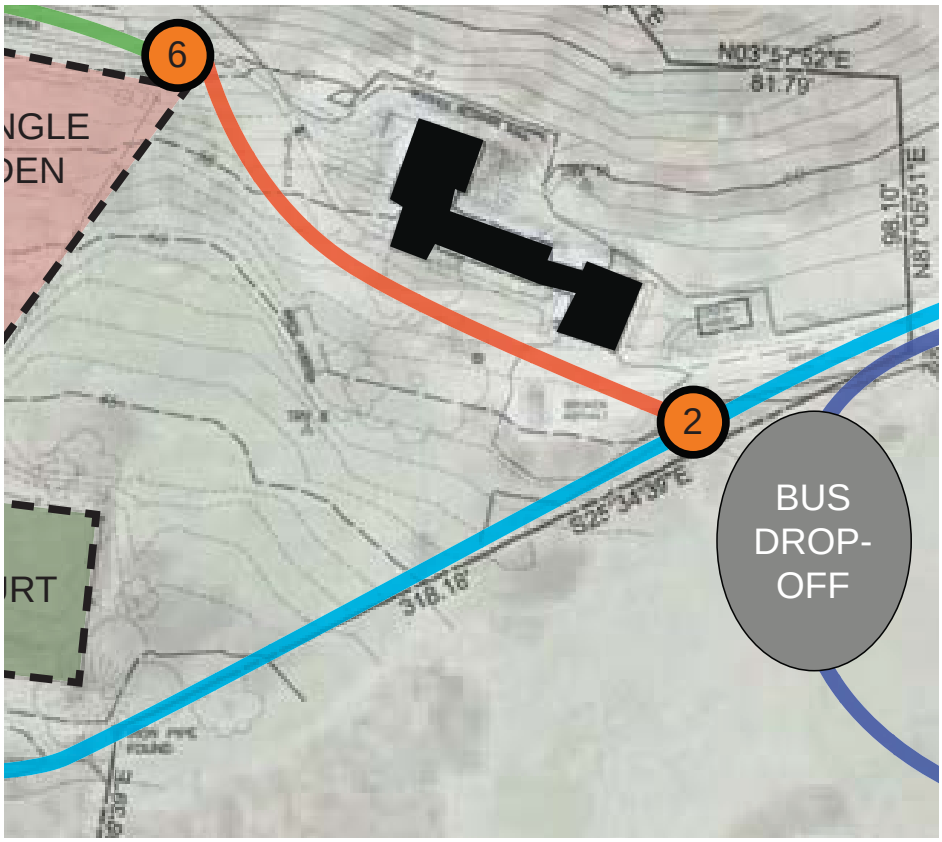


Figure 15.8. Gardener's Cottage Area

PRESERVATION TREATMENT RECOMMENDATIONS - GARDENER'S COTTAGE AREA

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties and Guidelines for the Treatment of Cultural Landscapes*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing will be recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

SITE FEATURES

As discussed in Chapter 7, the site features are in the rehabilitation zone. This treatment will allow for alterations necessary to provide accessible routes and vegetation management needed to reestablish selected lawns and views. The significant site features should be repaired and restored where possible. Any site feature that cannot be preserved due to excessive deterioration should be replaced in kind.

A. Natural systems, features, and topography:
None at this time.

B. Spatial organization:
None at this time.

C. Land use:
None at this time.

D. Cluster arrangement:
None at this time.

E. Circulation routes:
1. Remove vegetation growing in asphalt/gravel driveway.
2. Remove vegetation growing with brick walkways.
3. Repave driveway.
4. Relay brick walkways.

F. Vegetation:
1. Prune and weed all vegetation.

G. Views and vistas:
None at this time.

H. Small scale features:
1. Repoint open joints and locations of loose mortar in brick walls.
2. Repaint iron railing.

ARCHITECTURAL RECOMMENDATIONS - GARDENER'S COTTAGE AREA

Beyond the repair and preservation of the historic building and site elements noted above, the following elements would become part of an architectural scope of work:

General:
1. Provide a gravel vehicular path towards tennis courts to the Pool House for pick up and delivery for events.
2. Provide a new road and drop-off for buses arriving with large groups. The road loop would begin at Node 1 and continue to a drop-off near the Morgan State University facility.

ACCESSIBILITY RECOMMENDATIONS - GARDENER'S COTTAGE AREA

None at this time.

CIVIL RECOMMENDATIONS - GARDENER'S COTTAGE AREA

1. Replace the underground electrical lines.
2. Replace the underground water lines.
3. Create a new road and bus drop-off north of the Gardener's Cottage and Morgan State University.

LIFE SAFETY RECOMMENDATIONS - GARDENER'S COTTAGE AREA

1. Request a variance for existing roadways that do not meet the 20 feet width requirement for fire department apparatus.

FURTHER INSPECTION - GARDENER'S COTTAGE AREA

1. Confirm water supply system and fire flow requirements for the fire service main.

TRIANGLE GARDEN AND TENNIS COURT AREA

OVERVIEW - TRIANGLE GARDEN AND TENNIS COURT AREA

The preferred use for the Triangle Garden and Tennis Court Landscape Character Area is one that supports the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Triangle Garden Area will be used as an interpretive landscape. The Tennis Court may be used to provide assembly space for various events.

TThe concept site plan for this preferred use, using the existing layout as a guide, would be as follows:

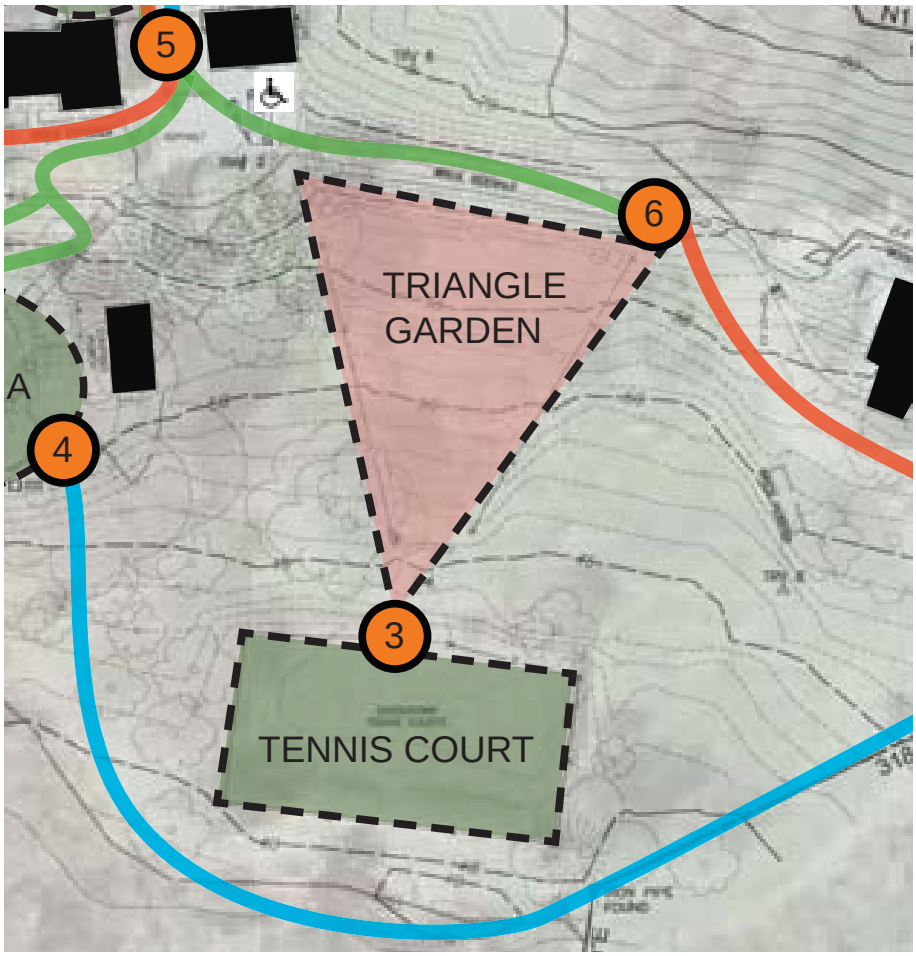


Figure 15.9. Triangle Garden and Tennis Courts Area

PRESERVATION TREATMENT RECOMMENDATIONS - TRIANGLE GARDEN AND TENNIS COURT AREA

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties and the Guidelines for the Treatment of Cultural Landscapes*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing will be recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

SITE FEATURES

As discussed in Chapter 7, the site features are in the rehabilitation zone. This treatment will allow for alterations necessary to provide accessible routes and vegetation management needed to reestablish selected lawns and views. The significant site features should be repaired and preserved where possible. Any site feature that cannot be preserved due to excessive deterioration should be replaced in kind.

A. Natural systems, features, and topography:
None at this time.

B. Spatial organization:
1. Restore stone walls and steps to recreate layout of the Triangle Garden.
2. Remove inappropriate vegetation.
3. Prune vegetation.

C. Land use:
None at this time.

D. Circulation routes:
1. Relay brick walkway at top of Triangle Garden.
2. Prune vegetation back on either side of the unpaved turf paths that extend through the Triangle Garden.

E. Vegetation
1. Prune and weed all vegetation.
2. Remove inappropriate plant species.
3. Remove invasive plast species.

F. Buildings and structures:
1. Remove vegetation within the Tennis Court.
2. Stabilize court surface for future use as a programmatic space.

G. Views and vistas:
1. Restore views (see Vegetation).

H. Small scale features:
1. Reset stone planting bed edge.
2. Reset stone steps.
3. Reset dry-laid stone retaining wall along the top of the terrace.
4. Reset stone steps at the middle of the stone retaining wall.
5. Reset stone steps on the north side.
6. Replace wood well cover in Triangle Garden.
7. Repoint open joints and locations of loose mortar on stone walls of the well.

ARCHITECTURAL RECOMMENDATIONS - TRIANGLE GARDEN AND TENNIS COURT AREA

Beyond the repair and preservation of the historic building and site elements noted above, the following elements would become part of an architectural scope of work:

General:
1. Provide a gravel vehicular path behind the tennis court to the Pool House for pick up and delivery for events.

ACCESSIBILITY RECOMMENDATIONS - TRIANGLE GARDEN AND TENNIS COURT AREA

A. Site:
   1. Provide an accessible pathway along the top of the Triangle Garden.

CIVIL RECOMMENDATIONS - TRIANGLE GARDEN AND TENNIS COURT AREA

1. Replace water line to existing hose bib.

ADDITIONAL RECOMMENDATIONS - TRIANGLE GARDEN AND TENNIS COURT AREA

These additional recommendations are not included in the attached cost estimate.

A. Landscape Restoration:
   1. Restore vegetation in the Triangle Garden.

BEACH HOUSE AREA

OVERVIEW - BEACH HOUSE AREA

The preferred use for the Beach House Landscape Character Area is one that supports the Jefferson Patterson Park and Museum's programmatic plans and objectives. The Beach House Area will be used as a put-in (launch) for kayakers and canoers who wish to use the area as a stopover in their travels and as an overnight accommodation (with a reservation).

The concept site plan for this preferred use, using the existing layout as a guide, would be as follows:



Figure 15.10. Beach House Area

PRESERVATION TREATMENT RECOMMENDATIONS - BEACH HOUSE AREA

As this property is listed on the National Register of Historic Places, all treatments will need to be in compliance with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties and the Guidelines for the Treatment of Cultural Landscapes*. The following provides a narrative regarding treatments to the major building elements. Once this project moves into a formal "design" phase, it would be expected that these general guidelines would be made much more precise for each significant site and building element.

Recommendations concerning treatment for all the historic materials will be for rehabilitation. The rehabilitation treatment will allow for features and materials from the period of significance to be preserved. For historic materials deteriorated beyond repair, replacement with new materials matching as closely as possible with to the original fabrication, composition, and detailing will be recommended. The end goal of any effort will be to provide a finished product capable of surviving for as long as possible after treatment, assuming a reasonable maintenance schedule, as well as one that respects the period of significance.

SITE FEATURES

As discussed in Chapter 7, the site features are in the rehabilitation zone. This treatment will allow for alterations necessary to provide accessible routes and vegetation management needed to reestablish selected lawns and views. The significant site features should be repaired and restored where possible. Any site feature deteriorated beyond repair should be replaced in kind.

A. Natural systems, features, and topography:
None at this time.

B. Land use:
None at this time.

Circulation routes:

1. Replace any deteriorated boards as needed on the boardwalk.

D. Topography:
None at this time.

E. Vegetation:
1. Remove tree stump at Beach House.
2. Prune cedar tree at Beach House.

F. Views and vistas:
None at this time.

G. Small scale features:
None at this time.

ARCHITECTURAL RECOMMENDATIONS - BEACH HOUSE AREA

Beyond the repair and preservation of the historic building and site elements noted above, the following elements would become part of an architectural scope of work:

None at this time.

ACCESSIBILITY RECOMMENDATIONS - BEACH HOUSE AREA

A. Site:
1. Provide an accessible pathway along the boardwalk from the cul de sac to the Beach House.
2. Provide at least one accessible passenger loading zone at the edge of the driveway next to the path to the main entry of the Main Residence.
3. Provide at least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.
4. Provide accessible signage complying with IBC, Section 1110.
5. Provide an accessible path to interpretive signage at the cul de sac.
6. Provide an accessible path along reconstructed pier.
7. Provide accessible interpretive signage.

CIVIL RECOMMENDATIONS - BEACH HOUSE AREA

1. Replace the underground electrical lines.
2. Replace the underground water lines.
3. Replace septic tank.

LIFE SAFETY RECOMMENDATIONS - BEACH HOUSE AREA

1. Request a variance for existing roadways that do not meet the 20 feet width requirement for fire department access.
2. Request a variance for existing dead-end at end of road leading to Beach House Area that may not meet Calvert County turn-around requirements for fire department. apparatus.
3. Request a variance for existing setback of Beach House to road which exceeds the 50 feet limit (if an automatic sprinkler system is not provided.)

FURTHER INSPECTION - BEACH HOUSE AREA

A. Fire Protection:

1. Confirm water supply system and fire flow requirements for fire service main (if required).

ADDITIONAL RECOMMENDATIONS - BEACH HOUSE AREA

These additional recommendations are not included in the attached cost estimate.

A. Constructed water features
   1. Reconstruct boat dock, pier, and float.

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APPENDIX A



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APPENDIX A: FEATURES CHECKLIST

OVERVIEW

The Features Checklist identifies the significance and current condition of building and landscape features within the Patterson Center complex. [Treatment recommendations will be noted in subsequent submission.]

EVALUATION OF SIGNIFICANCE

Each feature was evaluated and determined to be either 1) Contributing (Very Significant), 2) Contributing (Significant), or 3) Non-Contributing. Due to the extensive Period of Significance that extends to the very recent past, overall, very few Non-Contributing features were noted.

Contributing (Very Significant) – Character-defining features that are related to the period of significance and have an exemplary degree of craftsmanship, originality, and/or connection to important historical figures, i.e. the Pattersons.

Contributing (Significant) - Character-defining features that are related to the period of significance and have a good degree of craftsmanship, originality, and/or connection to important historical figures, i.e. the Pattersons.

Non-Contributing – Features outside the period of significance, or features within the period of significance (including original construction) that are without special craftsmanship, artistry, or connection to important historical figures, i.e. the Pattersons.

CONDITION ASSESSMENT

The following condition assessment criteria have used for the architectural elements: excellent, good, fair, and poor.

Excellent is defined as elements that perform their original function and require no renewal or repair.

Good is defined as elements that perform their original function and require only limited repair or renewal.

Fair is defined as elements with only minor or limited areas of failure. Elements would require some repair or corrective action.

Poor is defined as elements that only marginally function as originally intended. Deterioration or loss is more significant and significant repair work, partial replacement, or full replacement is required.

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MAIN RESIDENCE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
OVERALL MASSING				
	The Main Residence consists of a main block and east wing. The main block includes three stories above grade and is five bays wide, running east to west and measures approximately 54 feet wide and 30 feet deep. The main block includes a 1 1/2 story screen porch at the southwest corner. The east wing, runs north south, includes two stories above grade and measures 30 feet wide by 60 feet deep. The east wing terminates to the north with a 1 1/2 story three-car garage.	Contributing (Very Significant)	Excellent	N/A
EXTERIOR				
	Walls (brick, wood siding)	Contributing (Very Significant)	Good/Fair Isolated open mortar joints, loose/missing mortar, step cracking, inappropriate/ incompatible repointing, chipped brick units, and cracks at mortar joints	Repoint open joints and joints with loose mortar. Repair step cracking. Replace bricks with through cracks.
	Foundations (concrete)	Non-Contributing	Good	Inspect for water infiltration at grade. Retain and preserve foundations.
	Chimney (brick)	Contributing (Very Significant)	Good	Repoint open joints and joints with loose mortar.

MAIN RESIDENCE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Dormers (wood)	Contributing (Very Significant)	Good/Fair Isolated instances of deteriorated wood and paint failure	Repair wood deterioration at wood dormers. Repaint, complete.
	Roof (slate)	Contributing (Very Significant)	Roof - Good Flashing - Fair/Poor Deteriorated/missing flashing, especially problematic at re-entrant corner of Main Block and East Wing	Replace missing/damaged slates.Replace deteriorated/missing flashing. Replace damaged snow guards. Replace bent conductors in lighting protection system.
	Trim (wood)	Contributing (Very Significant)	Good	Replace/repair deteriorated wood trim. Repaint trim, complete.
	Gutters and Downspouts (copper)	Contributing (Significant)	Fair Bent and misaligned, missing/damaged gutters supports	Replace damaged gutters.

MAIN RESIDENCE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Windows (wood double hung, casement)	Contributing (Very Significant)	Good	Rehabilitate and repaint windows.
	Shutters (wood) and Hardware (metal)	Contributing (Very Significant)	Good	Confirm operability of all shutters and repair as necessary.
	Doors (wood entrance, wood screen doors, wood garage)	Contributing (Very Significant)	Good	Rehabilitate doors. Repair areas of wood deterioration and repaint doors. Repair screens at the Living Porch.

MAIN RESIDENCE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Transom and Sidelights (wood and glass)	Contributing (Very Significant)	Good/Fair Missing several pieces of ornament, lead cames show signs of oxidation	Recreate missing ornament in lead caming.
	Entrance Portico (wood)	Contributing (Very Significant)	Good	Remove biological growth at column bases. Repaint portico.
	Exterior Lighting	Contributing (Very Significant)	Good/Fair Heavy oxidation of copper, replacement plexi glass at east South Terrace wall mounted fixture	Clean existing lighting and rewire. Replace inappropriate globe material with appropriate material at rear elevation sconce on terrace.

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
SPATIAL LAYOUT					
		The basement level is dedicated largely to storage and mechanical equipment. The basement level can be accessed from the Entrance Hall 109 and from the Service Stair 103. At the first floor the primary rooms face south towards the Patuxent River. Primary rooms include the Living Room, Library, and Dining Room. The Kitchen and original Servants Hall are located in the East Wing. Like the basement, the second floor can be accessed by both the main stair and service stair. The Children's and Nanny's room are located in the East Wing above the Garage. Mr. and Mrs. Patterson's Bedroom are located in the Main Block, facing the River. There are a total of four bedroom on the second floor of the Main Block, each have an adjacent Bathroom. Access to the third floor/attic is via the main stair. A Bedroom, Bathroom and Storage Room occupy the space.	Contributing (Significant)	Good	Retain and protect the spatial layout on the first and second floors to the greatest extent possible. Allow for necessary alterations on the basement and attic levels.

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
INTERIOR					
		BASEMENT			
	**001**	**STORAGE**			
		Ceiling (particleboard)	Non-Contributing	Good	Repair locations of water damage.
		Walls (brick, structural tile)	Non-Contributing	Good	Repaint painted brick and structural clay tile in basement.
		Windows (aluminum)	Non-Contributing	Good	Replace-in-kind window sill in Hall 011.
		Doors (wood, painted)	Contributing (Significant)	Good/Fair Water damage and paint failure at bottom of doors and wood casing	Address water infiltration at Basement. Repaint wood door and wood casing.
		Flooring (concrete)	Non-Contributing	Good/Fair Minor cracks and paint failure	Repaint concrete floor in basement.
		Lighting	Contributing (Significant)	Good	None
		Stair treads and risers, balusters, and newels	Non-Contributing	Fair/Poor Extensive wear and tear to wood stair treads and risers	Repair deteriorated stair treads in Storage 001.
	**002**	**CLOSET - ELEVATOR EQUIPMENT**			
		Ceiling (metal panel)	Non-Contributing	Good	None
		Walls (brick, structural tile, GWB)	Non-Contributing	Good	None
		Doors (wood, painted)	Non-Contributing	Good/Fair Water damage and paint failure at bottom of doors and wood casing	Address water infiltration at Basement. Repaint wood door and wood casing.
		Flooring (concrete)	Non-Contributing	Good/Fair Minor cracks and paint failure	Repaint concrete floor in basement.
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**003**	**LAVATORY**			
		Ceiling (plaster, painted)	Non-Contributing	Good	Repair locations of water damage.
		Walls (brick)	Non-Contributing	Good	None
		Windows (aluminum)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good/Fair Water damage and paint failure at bottom of doors and wood casing	Address water infiltration at Basement. Repaint wood door and wood casing.
		Flooring (concrete)	Non-Contributing	Good/Fair Minor cracks and paint failure	Repaint concrete floor in basement.
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	None
	**004**	**MECHANICAL**			
		Ceiling (none)	N/A	N/A	N/A
		Walls (brick, structural tile)	Non-Contributing	Good/Fair Step cracking at east side of brick flue	Repair step cracking at east side of brick flue
		Windows (aluminum)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good/Fair Water damage and paint failure at bottom of doors and wood casing	Address water infiltration at Basement. Repaint wood door and wood casing.
		Flooring (concrete)	Non-Contributing	Good/Fair Minor cracks and paint failure	Repaint concrete floor in basement
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	005	**WINE STORAGE**			
		Ceiling (drywall)	Non-Contributing	Good	None
		Walls (brick, structural tile)	Non-Contributing	Good Minor paint failure at brick walls	Repaint painted brick and structural clay tile in basement.
		Windows (aluminum)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good/Fair Water damage and paint failure at bottom of doors and wood casing	Address water infiltration at Basement. Repaint wood door and wood casing.
		Flooring (concrete)	Non-Contributing	Good/Fair Minor cracks and paint failure	Repaint concrete floor in basement.
		Lighting	Contributing (Significant)	Good	None
	006	**LUGGAGE**			
		Ceiling (metal, particle board)	Non-Contributing	Good	None
		Walls (brick, structural clay tile, drywall)	Non-Contributing	Fair Minor paint failure at brick walls	Repaint painted brick and structural clay tile in basement.
		Windows (none)	N/A	N/A	N/A
		Doors (wood, painted)	Contributing (Significant)	Fair Water damage and paint failure at bottom of doors and wood casing	Address water infiltration at Basement. Repaint wood door and wood casing.
		Flooring (concrete)	Contributing (Significant)	Good/Fair Minor cracks and paint failure	Repaint concrete floor in basement.
		Lighting	Contributing (Significant)	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**007**	**HALLWAY**			
		Ceiling (none)	N/A	N/A	N/A
		Walls (brick, structural tile, plaster, painted)	Non-Contributing	Good/Fair Paint failure at bottom of walls from reoccurring water infiltration	Repaint painted brick and structural clay tile in basement.
		Windows (none)	N/A	N/A	N/A
		Doors (wood, painted)	Contributing (Significant)	Good/Fair Water damage and paint failure at bottom of doors and wood casing	Address water infiltration at Basement. Repaint wood door and wood casing.
		Flooring (concrete)	Non-Contributing	Good/Fair Minor cracks and paint failure	Repaint concrete floor in basement.
		Lighting	Contributing (Significant)	Good	None
	**008**	**LAUNDRY**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (brick, painted)	Non-Contributing	Good/Fair Paint failure at brick walls	Repaint painted brick and structural clay tile in basement.
		Windows (aluminum)	N/A	N/A	N/A
		Doors (wood, painted)	Contributing (Significant)	Good/Fair Water damage and paint failure at bottom of doors and wood casing	Address water infiltration at Basement. Repaint wood door and wood casing.
		Flooring (VAT)	Non-Contributing	Fair/Poor Water damage, water staining, dirt and debris, missing tiles at mechanical equipment.	Remove vinyl asbestos tile.
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**009**	**TREASURE ROOM**			
		Ceiling (none)	N/A	N/A	N/A
		Walls (brick, structural tile)	Non-Contributing	Good	None
		Windows (aluminum)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good/Fair Water damage and paint failure at bottom of doors and wood casing	Address water infiltration at Basement. Repaint wood door and wood casing.
		Flooring (concrete)	Non-Contributing	Good/Fair Minor cracks and paint failure	Repaint concrete floor in basement.
		Lighting	Contributing (Significant)	Good	None
	**010**	**CLOSET**			
		Ceiling (none)	N/A	N/A	N/A
		Walls (brick, structural tile)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Water damage and paint failure at bottom of doors and wood casing	None
		Flooring (concrete)	Non-Contributing	Good/Fair Minor cracks and paint failure	Repaint concrete floor in basement.
		Lighting	Contributing (Significant)	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**011**	**HALL**			
		Ceiling (non)	N/A	N/A	N/A
		Walls (plaster, painted)	Non-Contributing	Fair Water staining, and paint failure	Inspect locations of water infiltration. Repair, complete. Repaint painted brick and structural clay tile in basement.
		Windows (aluminum)	Non-Contributing	Good/Fair Heavily deteriorated wood at sill from repeated water infiltration at north elevation	Replace window sill in-kind
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (linoleum)	Non-Contributing	Fair Water damage, water staining, dirt and debris	None
		Lighting	Non-Contributing	Good	None
		Built in cabinetry	Contributing (Significant)	Good	Preserve
		Stair treads and riser, balusters, and newels	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**012**	**BATHROOM**			
		Ceiling (GWB)	Non-Contributing	Good	None
		Walls (brick, structural tile)	Non-Contributing	Fair Water damage, mold growth, significant paint failure at north elevation	Inspect locations of water infiltration. Repair, complete. Repaint painted brick and structural clay tile in basement.
		Windows (aluminum)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (VAT)	Non-Contributing	Fair Water damage, water staining, dirt and debris	Remove vinyl asbestos tile.
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None
	**013**	**PLAYROOM**			
		Ceiling (asbestos tile)	Non-Contributing	Fair Some water damage and tearing of the outer layer	Repair locations of water damage
		Walls (plaster, painted)	Non-Contributing	Fair Water damage and water staining	Inspect locations of water infiltration. Repair damaged plaster walls.
		Windows (vinyl, aluminum)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (VAT)	Non-Contributing	Good	Remove vinyl asbestos tile.
		Lighting	Non-Contributing	Good	None
		Fireplace with ceramic tile surround	Contributing (Very Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
		FIRST FLOOR			
	101	**GARAGE**			
		Ceiling	N/A	N/A	N/A
		Walls (brick, structural tile)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (concrete)	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
	102	**SERVANTS HALL**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted)	Contributing (Very Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (linoleum)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
	102A	**CLOSET - SERVANTS HALL**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**103**	**SERVANTS STAIR**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good/Fair Water damage and paint failure	Inspect locations of water infiltration. Repair.
		Decorative trim (painted,stained)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
		Stair treads and riser, balusters, and newels	Non-Contributing	Fair Wear and tear at wood stair treads and risers	Replace deteriorated and missing protective resilient tread coverings.
	103A	**CLOSET - SERVANTS STAIR**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (linoleum)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**104**	**KITCHEN**			
		Ceiling (plaster, painted)	Non-Contributing	Good/Fair Plaster damage above stove, presumably caused by water infiltration	Repair locations of water damage.
		Walls (plaster, painted)	Contributing (Significant)	Good/Fair Water infiltration, plaster damage and paint failure at re-entrant corner of Main Block and East Wing	Inspect locations of water infiltration.Repair.
		Decorative trim (painted)	Contributing (Very Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (linoleum)	Non-Contributing	Fair/Poor Isolated staining and crazing, significant wear at door to Pantry 105	Repair damaged linoleum floor.
		Lighting	Contributing (Significant)	Good	Preserve
		Architectural Features	Contributing (Significant)	Good	Preserve
		Plumbing Fixtures	Contributing (Significant)	Good	Preserve
	104A	**CLOSET - KITCHEN**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (linoleum)	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**105**	**PANTRY**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted)	Contributing (Very Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good/Fair Paint failure at window sash and apron	Repaint window sash, casing, and apron.
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (linoleum,)	Non-Contributing	Fair/Poor Isolated staining and crazing, significant wear at door to Kitchen 104	Repair damaged linoleum floor.
		Lighting	Contributing (Significant)	Good	Preserve
		Cabinetry	Contributing (Very Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**106**	**DINING ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, wallpaper)	Contributing (Very Significant)	Plaster - Good Wallpaper- Poor Water damage, overpainting and deterioration from exposure to UV light	Conserve the Chinese panel wallpaper.
		Decorative trim (painted,stained)	Contributing (Very Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Fair Water staining and soiling at raised paneling at lower half of door	Inspect cause of water infiltration. Repair wood door.
		Flooring (wood)	Contributing (Significant)	Good/Fair Water damage, staining in front of doors to South Terrace	Restore wood floor.
		Lighting	N/A	N/A	N/A
		Fireplace mantel and surround	Contributing (Very Significant)	Good	Preserve
	**107**	**DRESSING ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted,stained)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	**107A**	**TOILET**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
	107B	**CLOSET**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**107C**	**CLOSET**			
		Ceiling (plaster, painted)	Non-Contributing	Good/Fair Water infiltration at north elevation, plaster damage and paint failure	Repair locations of water damage.
		Walls (plaster, painted)	Contributing (Significant)	Good/Fair Water infiltration at north elevation, plaster damage and paint failure	Inspect locations of water infiltration. Repair.
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
	**108**	**BASEMENT STAIR**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted,stained)	Contributing (Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (carpet)	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
		Stair treads and riser, balusters, and newels	Non-Contributing	Good	None

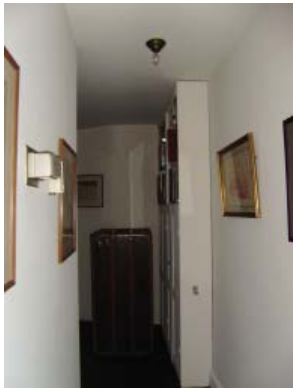
MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	**109**	**ENTRANCE HALL**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted,stained)	Contributing (Very Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Very Significant)	Good	Rewire historic fixture(s).
		Stair treads and riser, balusters, and newels	Contributing (Significant)	Good	Preserve
	**110**	**LIBRARY**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (wood, stained)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted,stained)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Fair Water staining and soiling at raised paneling at lower half of door	Inspect cause of water infiltration. Repair wood door.
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
		Fireplace mantel and surround	Contributing (Very Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	**111**	**LIVING ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
		Fireplace mantel and surround	Contributing (Very Significant)	Good	Preserve
	**112**	**LIVING PORCH**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (brick, wood, painted)	Contributing (Significant)	Good/Fair Wood porch screens, deteriorate wood frames, loose/missing hardware, holes in screen material	Repair areas of wood deterioration at porch screens. Repair/replace hardware as required. Repair/replace screen material as required.
		Decorative trim (painted,stained)	Contributing (Significant)	Good	Repair/replace deteriorated wood trim. Repaint.
		Windows (wood, painted)	Contributing (Very Significant)	Good	Repaint windows.
		Doors (wood, painted)	Contributing (Very Significant)	Good	Repair areas of wood deterioration. Repaint.
		Flooring (stone)	Contributing (Significant)	Good	None
		Lighting	Contributing (Significant)	Good	Rewire

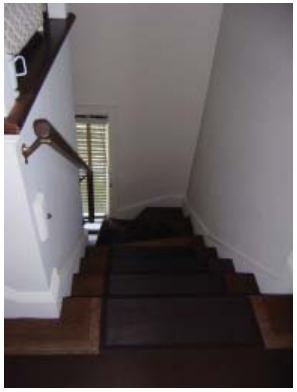
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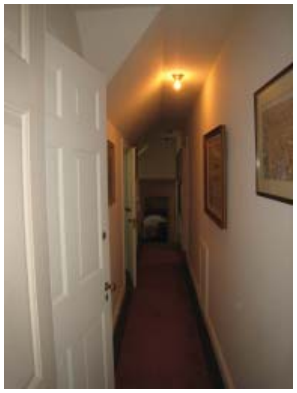
MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**201**	**MARK'S BEDROOM NO. 3**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, wallpaper)	Contributing (Significant)	Good/Fair Water staining and delaminated wallpaper at north and west elevations	Restore wall paper, to remove staining. Reattach peeling wallpaper.
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good/Fair Water damage to wood sill, at north elevation	Repair water damage at wood window sill.
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
	201A	**CLOSET - BEDROOM NO. 3**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**202**	**NANNY'S BEDROOM NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, wallpaper)	Contributing (Significant)	Good/Fair Water staining and delaminated wallpaper at north and elevation	Restore wall paper, to remove staining. Reattach peeling wallpaper.
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good /Fair Water damage to wood sill, at north elevation	Repair water damage at wood window sill.
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (carpet)	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
	202A	**CLOSET - BEDROOM NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (carpet)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	**203**	**PATRICIA'S BEDROOM NO. 1**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, wallpaper)	Contributing (Significant)	Good/Fair Water staining and delaminated wallpaper at north and east elevations	Restore wall paper, to remove staining. Reattach peeling wallpaper.
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good/Fair Water damage to wood sill, center window west elevation	Repair water damage at wood window sill.
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (cork tile)	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
	203A	**CLOSET - BEDROOM NO. 1**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None
	**204**	**SERVANTS HALL**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood, carpet runner)	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	**205**	**BATH NO. 3 - SERVANTS**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (ceramic tile, plaster painted)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (ceramic tile)	Contributing (Significant)	Good	Preserve
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
	205A	**CLOSET - BATH NO. 3 - SERVANTS**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (ceramic tile)	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**206**	**SERVANTS STAIR**			
		Ceiling (plaster, painted)	Non-Contributing	Good/Fair Plaster damage, at dormer west elevation, minor paint failure	Repair damaged plaster at dormer. Repaint.
		Walls (plaster, painted)	Contributing (Significant)	Good/Fair Plaster damage and paint failure at west elevation	Repair damaged plaster walls. Repaint.
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood, rubber runner)	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
		Stair treads and risers	Non-Contributing	Fair Wear and tear at wood treads and risers	Replace deteriorated and missing protective resilient tread coverings.
	**207**	**PRESSING ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	N/A	N/A	N/A

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**208**	**HALLWAY**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good/Fair Plaster damage and paint failure at west elevation, mold growth on door to Luggage 209	Remove mold. Repair damaged plaster walls. Repaint.
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
	**209**	**LUGGAGE ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Fair/Poor Deteriorated plaster, due to failed flashing at Main Block/East Wing re-entrant corner	Inspect locations of water infiltration. Repair. Repair damaged plaster ceiling.
		Walls (plaster, painted)	Contributing (Significant)	Fair/Poor Plaster damage and mold growth caused by flashing failure at re-entrant corner	Inspect locations of water infiltration. Repair. Repair damaged plaster walls.
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**210**	**BATH NO. 4**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (ceramic tile)	Contributing (Significant)	Fair Plaster damage, paint failure, and visible crazing at wall tiles	Repair plaster damage. Paint.
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (ceramic tile)	Contributing (Significant)	Fair Missing grout, loose/ chipped ceramic tiles at floor	Repair loose ceramic tiles.
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
	**211**	**BEDROOM NO. 4**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, wallpaper)	Contributing (Significant)	Good/Fair Water staining and de-laminated wallpaper at east elevation	Restore wall paper, to remove staining. Reat-tach peeling wallpaper.
		Decorative trim (painted)	Contributing (Significant)	Good/Fair Water damage a wood pan-eling under center window at east elevation	Repair and repaitn wood trim.
		Windows (wood, painted)	Contributing (Significant)	Good/Fair Water damage to wood sill, center window east elevation	Repair water damage at wood window sill.
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (carpet)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	211A	**CLOSET - BEDROOM NO. 4**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None
	**212**	**HALLWAY**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Windows	N/A	N/A	N/A
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
	**213**	**BATH NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Good/Fair Minor paint failure	Paint
		Walls (ceramic tile)	Contributing (Significant)	Good/Fair Visible crazing at ceramic tile	None
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (ceramic tile)	Contributing (Significant)	Good	Preserve
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
		Decorative trim	Contributing (Very Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	213A	**CLOSET - BATH NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (tile)	Non-Contributing	Good	None
	**214**	**BEDROOM NO. 3**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (wallpaper, painted)	Contributing (Significant)	Fair/Poor Delaminated wall paper	Reattach peeling wallpaper.
		Decorative trim (painted,stained)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Fair Paint failure at wood window sashes and aprons	Repaint window sash, casing, and apron.
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood, carpet, linoleum, tile)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
	214A	**CLOSET - BEDROOM NO. 3**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Decorative trim (painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	**215**	**HALLWAY**			
		Ceiling (plaster, painted)	Non-Contributing	Good/Fair Minor paint crazing at ceiling	Paint.
		Walls (plaster, painted)	Non-Contributing	Good	None
		Decorative trim (painted,stained)	Contributing (Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
	**216**	**BEDROOM NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (wallpaper, painted)	Contributing (Significant)	Fair/Poor Delaminated wall paper	Reattach peeling wallpaper.
		Decorative trim (painted,stained)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
	216A	**CLOSET - BEDROOM NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	**217**	**MAIN STAIR**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted,)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
		Stair treads and riser, balusters, and newels	Contributing (Significant)	Good	Preserve
	218	**CLOSET - BEDROOM NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	
		Flooring (wood,	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None
	**219**	**BATH NO. 5 (ADDED IN 1941)**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (ceramic tile)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (ceramic tile)	Contributing (Significant)	Good	Preserve
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**220**	**BEDROOM NO. 1**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (wallpaper)	Contributing (Significant)	Good/Fair Delaminated wall paper, water staining from previous water issue at west elevation	Reattach peeling wallpaper.
		Decorative trim (painted)	Contributing (Significant)	Good/Fair Water staining at crown molding above door to Dressing Room 222	Repair and repaint wood trim.
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good/Fair Water staining at wood door and casing to Dressing Room 222	Repair door.
		Flooring (wood)	Contributing (Significant)	Fair Significant water damage at entrance to Dressing Room 22 from previous water issue	Restore wood floor.
		Lighting	Contributing (Significant)	Good	Preserve
		Fireplace mantel and surround	Contributing (Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**221**	**BATH NO. 1**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (ceramic tile)	Contributing (Significant)	Fair Visible crazing at ceramic tiles, some chipped tiles	None
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (ceramic tile)	Contributing (Significant)	Fair Visible crazing at ceramic tiles	None
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
	**222**	**DRESSING ROOM - BEDROOM NO. 1**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good/Fair Paint failure	Paint
		Decorative trim (painted,stained)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
		Dressing cabinets	Contributing (Very Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
		THIRD FLOOR			
	**301**	**BATH**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (ceramic tile)	Contributing (Significant)	Fair Visible crazing at ceramic tiles, minor paint failure, crack in plaster wall at southeast corner	Paint
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (ceramic tile)	Contributing (Significant)	Fair Visible crazing at ceramic tiles	None
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Preserve
	301A	**CLOSET - BATH**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (tile)	Non-Contributing	Good	None
		Lighting	N/A	N/A	N/A

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	**302**	**ATTIC STAIR**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	Preserve
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (wood, carpet runner)	Contributing (Significant)	Good	Preserve
		Lighting	N/A	N/A	N/A
		Stair treads and riser, balusters, and newels	Contributing (Significant)	Good	Preserve
	**303**	**BEDROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good/Fair Plaster damage and paint failure at northwest dormer	Repair plaster damage. Paint.
		Walls (plaster, painted)	Contributing (Significant)	Good/Fair Plaster damage and paint failure at northwest dormer	Repair plaster damage. Paint.
		Decorative trim (painted)	Contributing (Significant)	Good	Preserve
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Flooring (carpet)	Contributing (Significant)	Good	Preserve
		Lighting	Contributing (Significant)	Good	Preserve
		Built in bookshelves	Contributing (Significant)	Good	Preserve

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	303A	**CLOSET - BEDROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood,)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None
	303B	**CLOSET - BEDROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
	303C	**CLOSET - BEDROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	304	**STORAGE ROOM**			
		Ceiling (fiberboard)	Non-Contributing	Good/Fair Water damage from failed chimney flashing along the west elevation	Replace fiberboard at ceiling, as required.
		Walls (fiberboard)	Contributing (Significant)	Good/Fair Water damage from failed chimney flashing along the west elevation	Replace fiberboard at walls, as required.
		Windows (wood, painted)	Contributing (Very Significant)	Good	Preserve
		Doors (wood, painted)	Contributing (Significant)	Good	Preserve
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None
	304A	**CLOSET - STORAGE ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Non-Contributing	Good	None
		Flooring (carpet)	Non-Contributing	Good	None
	304B	**CLOSET - STORAGE ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Non-Contributing	Good	None
		Flooring (carpet)	Non-Contributing	Good	None
	304C	**CLOSET - STORAGE ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Non-Contributing	Good	None
		Doors (wood, painted)	Non-Contributing	Good	None
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

MAIN RESIDENCE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
STRUCTURAL					
	Roof Framing (Southern Pine, 2 x 10)		Non-Contributing	Good	None
	Foundations		Non-Contributing	Fair Brick pavers were installed as recently as three years ago to pitch away from the structure, to reduce water infiltration into the basement.	None
	Brick Wall(s)		Contributing (Very Significant)	Fair Some cracked and open mortar joints, most likely due to settlement and/or corrosion of embedded steel lintels.	Repoint open joints and joints with loose mortar. Repair step cracking. Replace bricks with through cracks.
	Embedded Steel Angle Lintels		Non-Contributing	Fair/Poor Exhibit signs of corrosion, expanding and exerting additional levels of stress on the brick facade.	Replace steel angle lintels above windows.
	Enclosed Garden Retaining Walls (brick)		Contributing (Very Significant)	Fair A number of through wall cracks, perhaps the result of the freeze thaw cycle, water infiltration, differential lateral soil pressure.	None
	Floor Framing (2 x 10 and 2 x 12)		Non-Contributing	Good	None
	Wall Framing (Terra-cotta and brick, wood)		Non-Contributing	Good/Fair Localized areas of deterioration due to moisture intrusion.	None
MECHANICAL					
	Plumbing systems (septic tank)		Non-Contributing	Good	None
	Heating and Air Conditioning				
	Forced Air System Furnace, oil fired (circa 1998)		Non-Contributing	Fair	None
	Air Conditioning (first floor) Chrysler (circa late 1950s)		Non-Contributing	Fair Well maintained, but beyond its service life.	Replace

MAIN RESIDENCE					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	Air Conditioning (second floor and attic)		Non-Contributing	Failed and was taken offline in 2008	Remove
	Air Conditioning (second floor), window units		Non- Contributing	Fair Window units are causing damage to contributing features and should be removed completely.	Remove
	Climate Control (Playroom)		Non-Contributing	Good Well maintained, but beyond its service life.	Replace
	Hot Water Heater		Non-Contributing	Good Nearing the end of its service life.	Replace
ELECTRICAL					
	Electrical Service		Non-Contributing	Fair/Poor Wiring is from various time periods, much of which does not meet code.	Replace electrical system (panels, wiring, etc.) throughout Main Residence.
	Communications and Security				
	Telephone		Non-Contributing	Good	None
	ADT security System		Non-Contributing	Good	None
	Push-Button Call System		Contributing (Significant)	Poor No longer functioning.	None
	Fire Protection		N/A	N/A	N/A
SITE AND LANDSCAPE ELEMENTS					
	See Main Residence Area for Landscape Features				

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PUMP HOUSE / GARAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
OVERALL MASSING				
	The Pump House/Garage measures approximately 33 feet wide by 19 feet deep. The original Pump House has a gabled roof running east to west. The Garage addition has a gable roof that runs from north to south. There are two gabled dormers at the east and west roof slopes of the Garage addition.	Contributing (Very Significant)	Excellent	N/A
	Walls (brick, some wood siding)	Contributing (Very Significant)	Fair Some open and deterio-rated mortar joints, step cracking at west gable, cracked and spalled bricks to the north of garage door	Repair step cracking. Repoint open joints and joints with loose mortar. Replace-in-kind cracked and spalled bricks.
	Foundations (concrete)	Non-Contributing	Fair/Poor Visible horizontal cracking at the Garage addition	Repair cracks in parging at base of walls.
	Dormers (wood)	Contributing (Very Significant)	Fair Some wood deterioration and paint failure	Repair areas of wood deterioration. Repaint dormers.

PUMP HOUSE / GARAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Roof (slate)	Contributing (Significant)	Fair/Poor Numerous patching campaigns, broken slate tiles and bent snow guards	Replace-in-kind deteriorated flashing. Replace-in-kind damaged snow guards. Replace-in-kind chipped slate.
	Trim (wood)	Contributing (Significant)	Good	Repaint trim as required.
	Gutters and Downspouts (copper)	Contributing (Significant)	Fair Bent gutters, full of vegetation and debris	Replace in-kind damaged gutters.
	Windows (wood double-hung)	Contributing (Significant)	Fair Some deteriorated wood and paint failure	Repair areas of wood deterioration. Repaint.

PUMP HOUSE / GARAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Doors (wood entrance and wood garage)	Contributing (Significant)	Good/Fair Some deteriorated wood at the bottom of pedestrian doors, minor paint failure	Repair areas of wood deterioration. Repaint.
	Exterior Lighting	Non-Contributing	Good	None
	Planting beds	Contributing (Significant)	Fair/Poor Unmaintained	Repair brick planting beds.
	Brick walls, between Garage and Main Residence	Contributing (Significant)	Good	Preserve

PUMP HOUSE / GARAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
SPATIAL LAYOUT					
	The Pump House consists of three rooms. The main space, Pump House 103 from which the Transformer 102 room is accessed. A portion of the Pump House floor is sunken, the pumping equipment is located here. The Tool Room 104 does not relate spatially to the Pump House 104 as it is accessed only from the exterior.		Contributing (Very Significant)	Good	N/A
INTERIOR					
	**101**	**GARAGE**			
		Ceiling	Non-Contributing	Good	None
		Walls (exposed brick and clay structural tile)	Contributing (Significant)	Good	None
		Windows (wood, painted)	Contributing (Significant)	Good	Rehabilitate wood windows. Replace hardware, and weather stripping in-kind.
		Doors (wood, painted)	Contributing (Significant)	Fair Deteriorated wood at bottom of door, paint failure	Repair areas of wood deterioration. Repaint.
		Flooring (concrete)	Non-Contributing	Fair Cracks and chipped	None
		Lighting	Non-Contributing	Good	None
	**102**	**TRANSFORMER ROOM**			
		Ceiling (concrete)	Non-Contributing	Good	None
		Walls (exposed brick and clay structural tile)	Non-Contributing	Good	None
		Doors (metal)	Non-Contributing	Good	None
		Flooring (concrete)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

PUMP HOUSE / GARAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**103**	**PUMP HOUSE**			
		Ceiling (exposed)	Contributing (Significant)	Good	None
		Walls (exposed brick and clay structural tile)	Contributing (Significant)	Good	None
		Windows (wood, painted)	Contributing (Significant)	Fair Isolated areas of deteriorated wood and paint failure	Rehabilitate wood windows. Replace hardware, and weather stripping in-kind.
		Doors (wood, painted)	Contributing (Significant)	Fair Deteriorated wood at bottom of door, paint failure	Repair areas of wood deterioration. Repaint.
		Flooring (concrete)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None
	**104**	**TOOL ROOM**			
		Ceiling	N/A	N/A	N/A
		Walls (exposed brick and clay structural tile)	Contributing (Significant)	Good	None
		Doors (wood, painted)	Contributing (Significant)	Fair Deteriorated wood at bottom of door, paint failure	Repair areas of wood deterioration. Repaint.
		Flooring (concrete)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

PUMP HOUSE / GARAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**201**	**ATTIC**			
		Ceiling (drywall, painted)	Non-Contributing	Good	None
		Walls (plaster, painted)	Contributing (Significant)	Good	None
		Windows (wood, painted)	Contributing (Significant)	Fair Isolated areas of deteriorated wood and paint failure	Rehabilitate wood windows. Replace hardware, and weather stripping in-kind.
		Door (wood, painted)	Contributing (Significant)	Fair Deteriorated wood at bottom of door, paint failure	Repair areas of wood deterioration. Repaint.
		Flooring (wood)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good	None

PUMP HOUSE / GARAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
STRUCTURAL				
	Brick Facade	Contributing (Significant)	Fair Some cracked and open mortar joints, most likely due to settlement and/or corrosion of embedded steel lintels.	Repair step cracking. Repoint open joints and joints with loose mortar. Replace-in-kind cracked and spalled bricks.
	Embedded Steel Angle Lintels	Non-Contributing	Fair/Poor Exhibits signs of corrosion, expanding and exerting additional levels of stress on the brick facade.	Replace steel angle lintels above windows.
MECHANICAL				
	Plumbing system (well pump)	Non-Contributing	Good	Provide new well
	Heating and Air Conditioning	Non-Contributing	N/A	Provide mechanical system
ELECTRICAL				
	Electrical Service (240 volt)	Non-Contributing	Fair Multiple panel boards, both fuses and circuit breakers. Wiring appears to be original Bx, does not meet code.	Replace electrical system (panels, wiring, etc.) throughout Pump House / Garage
	Communications and Security	---	N/A	N/A
	Fire Protection	---	N/A	N/A
SITE AND LANDSCAPE ELEMENTS				
	See Main Residence Area in Landscape Features			

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GARDENER'S COTTAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
OVERALL MASSING				
	The Gardener's Cottage measures approximately 80 feet wide by 40 feet deep. Added onto over time, the various roofs are gabled. With the exception of the 1 1/2 story Garage, the Cottage is one-story. Primary access to the cottage is via the east elevation. The south entry is inhibited by overgrown vegetation. The Cottage and the Garage are separated by the Tool Room. A small covered porch is located at the southeast corner of the cottage.	Contributing (Significant)	Good	None
	Walls (brick, wood siding)	Contributing (Significant)	Poor Deteriorated wood, major paint failure	Replace in-kind wood lapped siding. Paint.
	Foundations (concrete)	Non-Contributing	Fair Minor cracking	Remove vegeation close to foundation. Repair cracks, paint.

GARDENER'S COTTAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Roof (asphalt shingles)	Non-Contributing	Poor Improper flashing, picked up shingles	Repalce asphalt shingles. Replace flashing.
	Trim (wood)	Contributing (Significant)	Poor Missing trim, deteriorated trim, paint failure	Replace and paint wood trim.
	Gutters and Downspouts (aluminum)	Non-Contributing	Poor Heavy vegetation growth inside gutters. Isolated instance of gutter disconnected from downspout.	Replace-in-kind gutters and downspouts.
	Windows (wood, double-hung and casement)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Replace windows with aluminum clad windows with simulated divided lites/spacers, to match existing configuration.

GARDENER'S COTTAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Shutters (wood) and Hardware (metal)	Contributing (Significant)	Poor Deteriorated wood, paint failure, missing hardware	Replace shutters in kind. Paint. Replace hardware in-kind.
	Doors (wood entrance, wood screen doors, wood garage)	Contributing (Significant)	Fair Paint failure	Replace doors with new wood doors to match existing.
	Porch (wood)	Contributing (Significant)	Poor Visible wood rot at column bases, paint failure	Replace-in-kind columns. Paint.

GARDENER'S COTTAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Exterior Lighting	Non-Contributing	Fair Modern light fixtures	Replace
	Lightening protection	Non-Contributing	Fair Numerous bent conductors	Replace lightening protection system.
SPATIAL LAYOUT				
	The interior spatial organization of the Gardener's Cottage, like the building's exterior, has evolved overtime. As a result, the spatial layout is complicated. From the main entrance at the east elevation one immediately enters the Kitchen. There is a second entrance at the south elevation of the Cottage, however, it is currently inhibited by overgrown vegetation. The Tool Room and Garage can only be accessed from the exterior.			

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**101**	**BEDROOM NO. 1**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Paint failure, mold growth detected	Replace with Gypsum Wall Board
		Decorative trim (painted)	Non-Contributing	Fair Deteriorated wood base, paint failure	Replace
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Non-Contributing	Fair Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Fair Light/ceiling fan	Replace
	101A	**CLOSET - BEDROOM NO. 1**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Paint failure, mold growth detected	Replace with Gypsum Wall Board
		Doors (wood, painted)	Non-Contributing	Fair Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Fair Exposed bulb	Replace

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**102**	**BEDROOM NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Water damage, mold growth detected	Replace with Gypsum Wall Board
		Decorative trim (painted,stained)	Non-Contributing	Fair Deteriorated wood base, paint failure	Replace
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Non-Contributing	Fair Paint failure, mold growth detected	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Fair Light/ceiling fan	Replace
	102A	**CLOSET - BEDROOM NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Paint failure, mold growth detected	Replace with Gypsum Wall Board
		Doors (wood, painted)	Non-Contributing	Fair Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Fair Exposed bulb	Replace

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**103**	**HALLWAY**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Mold detected	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Mold detected	Replace with Gypsum Wall Board
		Doors (wood, painted)	Contributing (Significant)	Poor Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
	103A	**CLOSET - HALLWAY**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Mold detected	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Mold detected	Replace with Gypsum Wall Board
		Doors (wood, painted)	Non-Contributing	Poor Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**104**	**BATH NO. 1**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Mold detected	Replace with Gypsum Wall Board
		Walls (ceramic tile)	Non-Contributing	Poor Mold detected	Replace with Gypsum Wall Board
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Contributing (Significant)	Poor Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Plumbing fixtures and Accessories	Non-Contributing	Poor	Replace
		Lighting	Non-Contributing	Fair Wall mounted	Replace
	**105**	**BEDROOM NO. 3**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Decorative trim (painted,stained)	Non-Contributing	Poor Paint failure	Replace
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Non-Contributing	Fair Paint failure	Replace
		Flooring (carpet)	Non-Contributing	Poor	Replace
		Lighting	Non-Contributing	Fair Light/ceiling fan	Replace

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	105A	**CLOSET - BEDROOM NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Doors (wood, painted)	Non-Contributing	Fair Paint failure	Replace
		Flooring (carpet)	Non-Contributing	Poor Stained, cover with debris	Replace
		Lighting	Non-Contributing	Fair Exposed bulb	Replace
	**106**	**LIVING ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Mold detected, water damage, paint failure	Replace with Gypsum Wall Board
		Decorative trim (painted,stained)	Non-Contributing	Poor Water damage, paint failure	Replace
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Contributing (Significant)	Fair Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Fair Light/ceiling fan	Replace

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**107**	**KITCHEN**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Significant plaster damage, due to failed flashing at the chimney, mold growth detected, paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Paint failure, mold growth detected	Replace with Gypsum Wall Board
		Decorative trim (wood base, painted)	Non-Contributing	Poor Paint failure	Replace
		Windows (wood, painted/aluminum)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Contributing (Significant)	Fair Paint failure	Replace
		Flooring (VCT)	Non-Contributing	Poor Stained, covered in debris	Provide new finished floor material.
		Lighting	Non-Contributing	Fair Light/ceiling fan	Replace
	**108**	**BATH NO. 2**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Fair Paint failure	Replace with Gypsum Wall Board
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood, paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Contributing (Significant)	Poor Paint failure	Replace
		Flooring (VCT)	Non-Contributing	Poor Stained, covered in debris	Provide new finished floor material.
		Plumbing fixtures and Accessories	Non-Contributing	Poor	Replace
		Lighting	Non-Contributing	Good	Replace

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**109**	**HALLWAY**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Mold growth detected	Replace with Gypsum Wall Board
		Decorative trim (painted,stained)	Non-Contributing	Poor Deteriorated wood, paint failure	Replace
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood, paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Non-Contributing	Poor Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Good	Replace
	109A	**CLOSET - HALLWAY**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Paint Failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Mold growth detected	Replace with Gypsum Wall Board
		Doors (wood, painted)	Non-Contributing	Poor Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Good Exposed bulb	Replace

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	109B	**CLOSET - HALLWAY**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Doors (wood, painted)	Non-Contributing	Fair Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Good	Replace
	110	**BEDROOM NO. 4**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Water damage, paint failure	Replace with Gypsum Wall Board
		Decorative trim (painted,stained)	Non-Contributing	Poor Deteriorated wood, paint failure	Replace
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Contributing (Significant)	Poor Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Good Ceiling mounted	Replace

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	110A	**CLOSET - BEDROOM NO. 4**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Decorative trim (painted,stained)	Non-Contributing	Poor	Replace
		Doors (wood, painted)	Non-Contributing	Fair Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Good	Replace
	**111**	**BEDROOM NO. 5**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Water damage, mold growth and paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Mold growth, paint failure	Replace with Gypsum Wall Board
		Decorative trim (painted)	Non-Contributing	Poor Water damage, at wood base	Replace
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Non-Contributing	Fair Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Good	Replace

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	111A	**CLOSET- BEDROOM NO. 5**			
		Ceiling (plaster, painted)	Non-Contributing	Fair Water damage, mold growth and paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Mold growth, paint failure	Replace with Gypsum Wall Board
		Doors (wood, painted)	Non-Contributing	Fair Paint failure	Replace
		Flooring (VAT)	Non-Contributing	Poor Asbestos	Remove abestos flooring tile. Provide new finished floor material.
		Lighting	Non-Contributing	Good Light/ceiling fan	Replace
	112	**TOOL ROOM**			
		Ceiling (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Walls (plaster, painted)	Non-Contributing	Poor Paint failure	Replace with Gypsum Wall Board
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Replace
		Flooring (concrete)	Non-Contributing	Fair Some cracks	None
		Lighting	Non-Contributing	Good Exposed bulbs	Replace

GARDENER'S COTTAGE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**113**	**GARAGE**			
		Ceiling (exposed framing)	N/A	N/A	N/A
		Walls (exposed studs)	Non-Contributing	Good	None
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood and paint failure	Provide new window caseing/aprons/stools.
		Doors (wood, painted)	Contributing (Significant)	Poor Extensive paint failure	Replace
		Flooring (concrete)	Non-Contributing	Good	None
		Lighting	Non-Contributing	Good Exposed bulbs	Replace

GARDENER'S COTTAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
STRUCTURAL				
	Foundation	Non-Contributing	Fair Visible cracking are east elevation	Remove vegeation close to foundation. Repair cracks, paint.
	Wall framing	Non-Contributing	Good	None
	Porch (East) framing	Contributing (Significant)	Good/Fair Some members exhibiting early signs of wood rot and deterioration.	Replace-in-kind deteriorated porch framing members. Paint.
	Retaining Walls (brick)	Non-Contributing	Fair Diagonal cracking and horizontal deflection due to unbalanced lateral soil pressure.	Repair localized areas of brick retaining walls.
MECHANICAL				
	Plumbing Systems	Non-Contributing	Poor Water line from Pump House/Garage broken. No active water service.	Replace plumbing system. Replace underground water line from Pump House/ Garage
	Septic Tank (1,500 gallon)	Non-Contributing	Good	Replace septic tank
	Heating and Air Conditioning	Non-Contributing	Poor Not functioning	Replace heating system. Provide air condition system.
ELECTRICAL				
	Electrical Service (120/240 volt w/ 100-150 amp service)	Non-Contributing	Good	Replace electrical system. Replace underground electrical line from maine residence.

GARDENER'S COTTAGE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Communications and Security (telephone and alarm)	Non-Contributing	Poor	Provide telephone service. Provide security system. Provide fire alarm system with heat/smoke detectors, and strobes.
	Fire Protection	Non-Contributing	Poor	Provide portable fire extinguishers at each floor and where required by the code official. Provide an automatic sprinkler system.
SITE AND LANDSCAPE				
	See Gardener's Cottage Area in Landscape Features			

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GREENHOUSE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Walls (CMU)	Contributing (Significant)	Fair/Poor Biological growth, minor cracks, open mortar joints.	Remove biological growth. Repair cracks in masonry wall. Repoint joints with loose mortar.
	Greenhouse frame (aluminum, including doors)	Contributing (Significant)	Fair/Poor Missing a significant amount of glazing.	Repair Greenhouse frame as required. Replace in-kind all glazing.
	Flooring (concrete, slab on grade)	Non-Contributing	Fair Minor cracks.	None
	Earth beds	Non-Contributing	Poor No longer extant.	Restablish earth beds.

GREENHOUSE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
STRUCTURAL				
	Foundation (CMU)	Contributing (Significant)	Good Minor crack, open mortar joints, some spalling.	Repair cracks in masonry wall. Repoint joints with loose mortar.
	Greenhouse Frame	Contributing (Significant)	Good	Repair Greenhouse frame as required.
	Greenhouse Glazing	Contributing (Significant)	Poor Limited intact glazing.	Replace in-kind all glazing.
MECHANICAL				
	Plumbing System	Non-Contributing	Poor	Replace water line to greenhouse. Connect to new well at the Gardener's Cottage.
	Heating and Air Conditioning	Non-Contributing	Poor	Cap connection to adban-doned boiler.
ELECTRICAL				
	Electrical Service	Non-Contributing	Poor No longer functioning.	Replace underground electrical line from Garage to Greenhouse
	Lighting	N/A	N/A	Provide light fixtures and elevtraicl outlets.
	Communication and Security	N/A	N/A	N/A
SITE AND LANDSCAPE ELEMENTS				
	See Gardener's Cottage Area in Landscape Features			

COLD FRAME				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Foundation	Non-Contributing	Assumed, Poor	Expose foundation. Repair as necessary.
	Walls (brick)	Contributing (Significant)	Poor Missing superstructure, several different mortar campaigns.	Remove embeded steel anchors. Provide hinged wood frame with glazing for top of Cold Frame.
STRUCTURAL				
	Walls (brick)	Contributing (Significant)	Poor Loose brick, mortar loss, thru wall cracks.	Rebuild sections with through wall cracks and at corners. Repoint open joints with loose mortar. Replaced mismatched mortar. Provide weepholes
SITE AND LANDSCAPE ELEMENTS				
	See Gardener's Cottage Area in Landscape Features			

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POOL HOUSE AND POOL				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
OVERALL MASSING				
	The Pool House is a one-story frame building with horizontal board siding. The south slope of its gable roof extends to create a deep overhang facing the pool. A wooden pergola spans this area, shading a brick patio; a brick walkway extends to the pool.	Contributing (Very Significant)	Excellent	N/A
	Walls (wood siding)	Contributing (Significant)	Fair/Poor Siding severely warped.	Replace in-kind deterio-rated boards. Provide vapor barrier.
	Foundations (concrete)	Non-Contributing	Good Limited biological growth	Remove biological growth. Remove vegetation close tot he foundation.
	Roof (asbestos shingles)	Non-Contributing	Poor Asbestos Containing Material (ACM) per Hazmat Rerport dated July 31, 2012.	Remove asbestos shingles and replace with a non-ACM roofing material of similar scale, color, and shape. Replace in-kind sheathing and flashing as required.

POOL HOUSE AND POOL				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Trim (wood)	Contributing (Significant)	Fair Paint failure, minor insect damage, and large split at rake board.	Replace deteriorated trim boards. Repaint trim.
	Windows (wood double-hung)	Contributing (Significant)	Poor Missing glazing units, paint failure, and viable wood rot.	Repair deteriorated wood components.Reglaze lites. Repaint.Replace hardware.
	Shutters (wood) and Hardware (metal)	Contributing (Significant)	Poor Missing shutter(s), paint failure, broken. and/or missing slats.	Repair broken shutters including providing new slats where missing.Repair or replace shutter hardware as required.Repaint.
	Doors (wood entrance, wood screen doors)	Contributing (Significant)	Fair Deteriorated wood, biological growth, paint failure and rusted hardware	Replace deteriorated wood. Remove biological gorwth. Reglaze as requried. Repaint. Repair/replace hardware.

POOL HOUSE AND POOL				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Pergola (wood)	Contributing (Very Significant)	Poor Deteriorated wood, biological growth and water staining	Replace-in-kind deteriorated trellis components. Remove biological growth.
	Exterior Lighting	Contributing (Significant)	Good	Remove corrosion. Rewire.
	Brick paving	Contributing (Significant)	Poor Uneven surface, misaligned border stones, cracked bricks.	Re-lay brick paving to make a level surface. Re-lay and repoint stone pavers along the perimeter of the paving.
	Pergola columns	Contributing (Significant)	Fair/Poor Deteriorating wood at column bases, typical	Replace-in-kind deteriorated columns/column bases.

POOL HOUSE AND POOL					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
SPATIAL LAYOUT					
	The Pool House consists of three primary rooms: a central mechanical room that houses pool equipment, Ladies' and Gentlemen's changing rooms on either side. Changing rooms include a small lavatory and showers.		Contributing (Very Significant)	Excellent	N/A
	**101**	**MEN'S CHANGING ROOM**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (wood vertical board)	Contributing (Significant)	Good	None
		Windows (wood, painted)	Contributing (Significant)	Poor Deteriorated wood sill and casing.	Replace deteriorated sill and casing in Men's Changing Room.
		Doors (wood, painted)	Contributing (Significant)	Fair Deteriorated wood, biological growth, paint failure and rusted hardware	Replace door hardware.
		Flooring (brick)	Contributing (Significant)	Good	Remove debris and clean.
		Lighting	Contributing (Significant)	Good	None
		Decorative trim (wood, stained)	Contributing (Very Significant)	Good	Clean

POOL HOUSE AND POOL					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**102**	**TOILET- WOMEN'S CHANGING ROOM**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (wood vertical board)	Contributing (Significant)	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	None
		Flooring (brick)	Contributing (Significant)	Good	Remove debris and clean.
		Plumbing fixtures and Accessories	Contributing (Significant)	Good	None
		Lighting	Contributing (Significant	Good	None
	**103**	**SHOWER - WOMEN'S CHANGING RM**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (wood vertical board)	Contributing (Significant)	Good	None
		Flooring (brick)	Contributing (Significant)	Good	Remove debris and clean.
		Plumbing fixtures and Accessories	Contributing (Significant)	Good	None
		Lighting	Contributing (Significant)	Good	None

POOL HOUSE AND POOL					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**104**	**PUMP ROOM**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (exposed wood studs)	Contributing (Significant)	Good	None
		Windows (wood, painted)	Contributing (Significant)	Poor Damaged wood window assembly.	Repair wood window assembly. Re-glaze as required. Paint. Repair/ replace hardware.
		Doors (wood, painted)	Contributing (Significant)	Fair Deteriorated wood, paint failure and rusted hardware	Repair wood door assebly. Paint. Repair/replace hardware.
		Flooring (concrete)	Non-Contributing	Fair Crack in concrete slab, debris/soiling	Remove debris and clean.
		Lighting	Contributing (Significant)	Good	None
	**105**	**WOMEN'S CHANGING ROOM**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (wood vertical board)	Contributing (Significant)	Good	None
		Windows (wood, painted)	Contributing (Significant)	Poor Damaged wood window assembly.	Repair wood window assembly. Re-glaze as required. Paint. Repair/ replace hardware.
		Doors (wood, painted)	Contributing (Significant)	Good	None
		Flooring (brick)	Contributing (Significant)	Good	Remove debris and clean.
		Lighting	Contributing (Significant)	Good	None
		Decorative trim (wood, stained)	Contributing (Very Significant)	Good	Clean

POOL HOUSE AND POOL					
PHOTOGRAPH	ROOM	INTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	**106**	**SHOWER - MEN'S CHANGING ROOM**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (wood vertical board)	Contributing (Significant)	Good	None
		Flooring (brick)	Contributing (Significant)	Good	Remove debris and clean.
		Plumbing fixtures and Accessories	Contributing (Significant)	Good	None
		Lighting	Contributing (Significant)	Good	None
	**107**	**TOILET- MEN'S CHANGING ROOM**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (wood vertical board)	Contributing (Significant)	Good	None
		Doors (wood, painted)	Contributing (Significant)	Good	None
		Flooring (brick)	Contributing (Significant)	Good	Remove debris and clean.
		Plumbing fixtures and Accessories	Contributing (Significant)	Good	None
		Lighting	Contributing (Significant)	Good	None

POOL HOUSE AND POOL				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
STRUCTURAL				
	Foundation (concrete, slab on grade)	Non-Contributing	Good	None
	Wall Framing (2x4 wood stud and heavy timber)	Non-Contributing	Fair Sill plate, at Pump Room, completely deteriorated.	Replace sill plates. Stud base sistering as required.
	Roof Framing (2x6 wood rafters)	Non-Contributing	Good	None
	Pergola (2x6 wood rafters, and 5x5 heavy timber posts)	Significant	Poor Rafters: signs of water infiltration and loss of section. Framing members: large amount of rot, deterioration and insect borings. Heavy timber posts: vertical splits parallel to grain.	Replace in-kind deteriorated pergola framing.
MECHANICAL				
	Plumbing System	Non-Contributing	Good Connected to the same septic system as the Main Residence.	Replace plumbing system. Remove abandonded well. Provide new well and septic tank.
	Heating and Air Conditioning	N/A	N/A	Provide mechanical system.
	Pool Equipment	Non-Contributing	Good Filter system circa 1970s	Remove
ELECTRICAL				
	Electrical Service (60 amp)	Non-Contributing	Poor Service failed in 2011 and has not been repaired.	Replace electrical system. Replace underground electrical wire from Pump house/Garage.
	Communications and Security	N/A	N/A	Provide tele/data service. Provide security system. Provide fire alarm with heat/smoke detectors.
	Fire Protection	N/A	N/A	Provide portable fire extinguishers.

POOL HOUSE AND POOL				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	The pool reinforced concrete pool measures 60’-0” in length by 30’-0” in width. At the pool edge there is a flagstone border.	Contributing (Very Significant)	Good	Cap water lines to pool. Remove water. Patch and repair any cracks. Fill pool, plant new lawn in exisitng pool.
SITE AND LANDSCAPE ELEMENTS				
	See Main Residence Area			

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BEACH HOUSE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
OVERALL MASSING				
	The Beach House is a one-story gable roofed wood frame building with a chimney at the east elevation. The building measures approximately 22 feet wide by 25 feet deep. A small covered porch is located at the northwest elevation. At the east elevation, there is a screened-in porch.	Contributing (Very Significant)	Excellent	N/A
	Walls (wood siding)	Contributing (Significant)	Poor Warped siding pulling away from sheathing.	Replace in-kind redwood siding and trim boards. Provide vapor/air barrier.
	Foundations (concrete)	Non-Contributing	Fair Visible surfaces exhibit minor cracking.	None
	Chimney (brick)	Contributing (Very Significant)	Fair Weathered brick, several mortar campaigns, minor step cracking.	Repair step cracking. Repoint open joints with loose mortar. Replace non-matching mortar. Replace in-kind spalling/cracked bricks. Inspect chimney flue.

BEACH HOUSE				
PHOTOGRAPH	EXTERIOR FEATURE	SIGNIFICANCE	CONDITION	TREATMENT
	Roof (asphalt shingles)	Non-Contributing	Fair Mismatched replacement shingles.	Replace in-kind asphalt shingle roof. Replace in-kind copper flashing.
	Trim (wood)	Contributing (Significant)	Fair Possible paint failure.	Replace in-kind deteriorated redwood trim boards. Paint.
	Windows (wood double-hung)	Contributing (Significant)	Fair/Poor Boarded, missing glazing units, broken sashes.	Remove playwood covers. Repair deteriorated/broken wooden assebly. Reglaze lites. Paint. Repair/replace in-kind hardware.
	Shutters (wood) and Hardware (metal)	Contributing (Significant)	Poor Paint failure, rusted hardware, missing shutter(s).	Repair broken shutters. Paint. Repair/replace hardware.

BEACH HOUSE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Doors (wood entrance and wood screen doors)	Contributing (Significant)	Poor Deteriorated wood, paint failure, rusted hardware	Replace wood doors in-kind. Replace in-kind hardware
	Porch (wood)	Contributing (Significant)	Fair/Poor Missing screens and screen door.	Provide screens and screen door.
	Exterior Lighting	Contributing (Significant)	Fair Broken glazing.	Replace broken glazing in-kind. Rewire.
	Brick pavers	Contributing (Significant)	Fair Uneven surface.	Remove tree stump and roots to make brick surface even.

BEACH HOUSE				
PHOTOGRAPH	**EXTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
SPATIAL LAYOUT				
	The interior of the Beach House consists of two guest/ changing rooms, each with lavatory and shower. The exposed gabled roof and exposed rafters allow the space above the lavatory and shower areas to be used as a loft for storage. There are two porches, a covered porch at the northwest corner and a screened-in porch at the east elevation. There is a unique chimney at the south elevation, it has two hearths.	Contributing (Very Significant)	Excellent	N/A

BEACH HOUSE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**101**	**DRESSING ROOM NO. 1**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (wood vertical boards)	Contributing (Significant)	Good/Fair Water staining at base of walls	Remove white stains, salts from flooding.Replace areas of deteriorated red-wood paneling.
		Decorative trim (wood, stained)	Contributing (Very Significant)	Good	None
		Windows (wood, painted)	Contributing (Significant)	Poor Damaged wood window assembly, deteriorated wood, missing broken glazing, paint failure, rusted hardware	Repair areas of deteriorated wood. Provide new glazing as required. Paint. Repair/ replace hardware.
		Doors (wood, painted)	Contributing (Significant)	Fair/Poor Damaged wood door assembly, deteriorated wood, paint failure, rusted hardware	Repair areas of deteriorated wood. Paint. Repair/replace hardware.
		Flooring (brick)	Contributing (Significant)	Fair Debris and soiling	Remove debris and clean.
		Lighting	Contributing (Significant)	Good	Remove corrosion. Rewire.
	102	**SHOWER NO. 1**			
		Ceiling (wood planks)	Contributing (Significant)	Good	None
		Walls (wood vertical board)	Contributing (Significant)	Fair Water staining at base of walls	Remove white stains, salts from flooding.Replace areas of deteriorated red-wood paneling.
		Flooring (brick)	Contributing (Significant)	Fair Debris and soiling	Remove debris and clean.
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Remove corrosion. Rewire.

BEACH HOUSE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	103	**LAVATORY NO. 1**			
		Ceiling (wood planks)	Contributing (Significant)	Good	None
		Walls	Contributing (Significant)	Fair Water staining at base of walls	Remove white stains, salts from flooding.Replace areas of deteriorated red-wood paneling.
		Windows (wood, painted)	Contributing (Significant)	Poor Damaged wood window assembly, window boarded with plywood	Repair areas of deteriorated wood. Provide new glazing as required. Paint. Repair/ replace hardware.
		Doors (wood, painted)	Contributing (Significant)	Fair Water damage/staining, rusted hardware	Repair areas of deteriorated wood. Paint. Repair/replace hardware.
		Flooring (brick)	Contributing (Significant)	Fair Debris and soiling	Remove debris and clean.
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Remove corrosion. Rewire.
	**104**	**LAVATORY NO. 2**			
		Ceiling (wood planks)	Contributing (Significant)	Good	None
		Walls (wood vertical boards)	Contributing (Significant)	Fair Water staining at base of walls	Remove white stains, salts from flooding.Replace areas of deteriorated red-wood paneling.
		Windows (wood, painted)	Contributing (Significant)	Poor Damaged wood window assembly, window boarded with plywood	Repair areas of deteriorated wood. Provide new glazing as required. Paint. Repair/ replace hardware.
		Doors (wood, painted)	Contributing (Significant)	Fair Water damage/staining, rusted hardware	Repair areas of deteriorated wood. Paint. Repair/replace hardware.
		Flooring (brick)	Contributing (Significant)	Fair Debris and soiling	Remove debris and clean.
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Remove corrosion. Rewire.

BEACH HOUSE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**105**	**SHOWER NO. 2**			
		Ceiling (wood planks)	Contributing (Significant)	Good	None
		Walls (wood vertical board)	Contributing (Significant)	Fair Water staining at base of walls	Remove white stains, salts from flooding.Replace areas of deteriorated red-wood paneling.
		Flooring (brick)	Contributing (Significant)	Fair Debris and soiling	Remove debris and clean.
		Plumbing fixtures and Accessories	Non-Contributing	Good	None
		Lighting	Contributing (Significant)	Good	Remove corrosion. Rewire.
	**106**	**DRESSING ROOM NO. 2**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (wood vertical boards)	Contributing (Significant)	Good/Fair Water staining at base of walls	Remove white stains, salts from flooding.Replace areas of deteriorated red-wood paneling.
		Decorative trim (wood,stained)	Contributing (Very Significant)	Good	None
		Windows (wood, painted)	Contributing (Significant)	Poor Damaged wood window assembly, deteriorated wood, missing broken glazing, paint failure, rusted hardware	Repair areas of deteriorated wood. Provide new glazing as required. Paint. Repair/ replace hardware.
		Doors (wood, painted)	Contributing (Significant)	Fair/Poor Damaged wood door assembly, deteriorated wood, paint failure, rusted hardware	Repair areas of deteriorated wood. Paint. Repair/replace hardware.
		Flooring (brick)	Contributing (Significant)	Fair Debris and soiling	Remove debris and clean.
		Lighting	Contributing (Significant)	Good	None

BEACH HOUSE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	**107**	**SCREENED PORCH**			
		Ceiling (exposed roof rafters)	Contributing (Significant)	Good	None
		Walls (wood studs, painted)	Contributing (Significant)	Poor Missing screens and screen door, deteriorated wood	Repair deteriorated wood. Provide porch screens where missing.
		Flooring (brick)	Contributing (Significant)	Fair Uneven surface	Remove areas of tree interation. Provide level brick floor surface.
STRUCTURAL					
	Foundation		Non- Contributing	Fair Visible settlement.	None
	Wall Framing (2x4 wood studs, 16” spacing)		Non- Contributing	Good	Replace sill plates with new anchors at perimeter of structure.
	Roof Framing (2x6 wood studs, 16” spacing)		Non- Contributing	Good	None
	Ceiling Framing ((2x4 wood studs, 16” spacing)		Non- Contributing	Good	None
	Screened-in Porch (framing members)		Significant	Fair Sill plate and timber posts: localized areas of rot and deterioration.	Replace screen porch. Replace localized areas of porch slab at area to tree interaction. Provide new base supports for existing columns.
MECHANICAL					
	Plumbing Systems		Non- Contributing	Poor Water service, from the Pump House / Garage is non-functioning.	Replace underground service from Pump House / Garage. Provide new spetic tank. Replace plumbing system.
	Heating and Air Conditioning		N/A	N/A	N/A
	Climate Control		N/A	N/A	N/A

BEACH HOUSE					
PHOTOGRAPH	**ROOM**	**INTERIOR FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
ELECTRICAL					
	Electrical Service		Non-Significant	Poor Out of service since, at least, 2000. Wiring assumed to be original does not meet code.	Replace electrical system (meters, panels, wiring, etc.).
	Communications and Security		N/A	N/A	Provide security system. Provide fire alarm system with heat/smoke detectors and strobes.
	Fire Protection		N/A	N/A	Provide portable fire extinguishers where required by code official.
SITE AND LANDSCAPE ELEMENTS					
	See Beach House Area in Landscape Features				

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LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	NATURAL SYSTEMS AND FEATURES			
	Topography and relation to rivers influenced the choice of this location for the development.	Contributing (Very Significant)	Good	None
	SPATIAL ORGANIZATION			
	Arrangement of buildings, gardens, and most landscape features on the property correspond to the master plan. The lawns on the property today represent a portion of the extensive lawns present historically. Large areas that were previously open, mown lawn have been replaced by dense woodland vegetation, interrupting the historic views between the residence, gardens, beach area and surrounding water bodies.	Contributing (Very Significant)	Good	None
	LAND USE			
	Lack of historic residential use and related activities on the property reduce integrity slightly but continued maintenance of the landscape and gardens can help the landscape to represent its condition when historic land use occurred. The former open lawns and views that have been replaced by dense wooded areas do not reflect their historic land use.	Non-Contributing	Fair Lack of residential use, overgrown areas limit historic views	Maintain existing vistas.
	CLUSTER ARRANGEMENT			
	Buildings & outdoor spaces carefully laid out to enhance/ relate to and/or screen use. Topography used extensively for this purpose.	Contributing (Very Significant)	Good	None
	CIRCULATION ROUTES			
	Main Residence - driveway/entrance route - asphalt (see historic plan drawing: GS 301-134, ACC 2003.01.0036.09101, “exterior, road to main house MSA SC 5910-1-76.pdf”)	Contributing (Very Significant)	Good	None

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Main Residence - flagstone edged with brick--North entry terrace, walkway, stoop. Removable ramp is non-contributing. (see historic plan drawing: GS 301-1, "Plot Plan", "exterior, plot plan showing main residence, trees, road and pump house, MSA SC 5910-1-1.pdf")	Contributing (Very Significant)	Fair Missing/loose mortar, some damaged flagstones	Repoint open joints at flagstone. Replace damaged flagstone in-kind.
	Main Residence - flagstone edged with brick-- South terrace (see historic drawing: GS 301-130, ACC 2003.01.0036.087, "exterior, paving for (south) terrace MSA SC 5910-1-73.pdf")	Contributing (Very Significant)	Fair Missing/loose mortar, some damaged flagstones	Repoint open joints at flagstone. Replace damaged flagstone in-kind.
	Pool - flagstone surround	Contributing (Very Siginficant)	Fair Missing/loose mortar, some damaged flagstones	Repoint open joints at flagstone. Replace damaged flagstone in-kind.
	Pool - brick walkway from pool to pool house (Designers plans called for flagstone path)	Contributing (Significant)	Good	None

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Pool - brick terrace at pool house - herringbone pattern	Contributing (Very Significant)	Poor Uneven surface	Repair
	Pool - brick stairs between house & pool (east-west orientation)	Contributing (Very Significant)	Fair	Repair
	Pool - brick stairs angled from NW corner of pool to driveway (not included in original designs)	Contributing (Significant)	Good	None
	Enclosed garden - flagstone walkways	Contributing (Very Significant)	Fair/Poor Missing/loose mortar, some damaged flagstones	Repoint open joints at flagstone. Replace damaged flagstone in-kind.
	Brick sidewalk at east side of residence.	Contributing (Very Significant)	Good	Repair

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	TOPOGRAPHY			
	Residence sited at a high point to take advantage of views of surrounding landscape and water. Historically the broad sweeping mown lawn emphasized the sloping topography surrounding the property and enhanced its visual beauty. In selected areas, topography screens views of functional activities from the residential areas.	Contributing (Very Significant)	Excellent/Good	None
	VEGETATION			
	Main Residence - plantings around building - North side	Contributing (Significant)	Poor Overgrown, in need of pruning and weeding.	Prune and weed plantings around Main Residence.
	Main Residence - foundation plantings around building - West side	Non-Contributing	Fair Overgrown, in need of pruning and weeding.	Prune and weed plantings around Main Residence.
	Main Residence - plantings around building - West side Two mature Oak trees and a mature Linden tree on the west side of the building.(see historic plan drawing: GS 301-1, “Plot Plan”, “exterior, plot plan showing main residence, trees, road and pump house, MSA SC 5910-1-1.pdf”)	Contributing (Very Significant)	Fair Overgrown, in need of pruning and weeding.	Prune and weed plantings around Main Residence.

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Main Residence - plantings around building - South side	Non-Contributing	Fair Overgrown, in need of pruning and weeding, dead tree	Prune and weed plantings around Main Residence.
	Main Residence - plantings around building - East side	Non-Contributing	Fair/Poor Overgrown, in need of pruning and weeding	Prune and weed plantings around Main Residence.
	Pump House/Garage - plantings around building	Non-Contributing	Fair Overgrown, in need of pruning and weeding	Prune and weed plantings around Main Residence.
	Driveway / parking area at Garage - planting on east side. Magnolia trees were a wedding gift to the Pattersons.	Contributing (Very Significant)	Fair Magnolia and apple tree in need of pruning	Prune and weed plantings around Main Residence.

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Well house - west of Main Residence	Contributing (Very Significant)	Good	Repaint
	Pool House - plantings to the west	Non-Contributing	Fair Overgrown, in need of pruning and weeding	Prune and weed plantings around Pool House.
	Pool - plants in wood planters - south of pool - iris	Non-Contributing	Good	None

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Pool - plants in wood planters - north of pool -nw dirt & weeds	Non-Contributing	Poor Full of weeds	Remove weeds.
	Pool - plants in wood planters - north of pool -ne - clover, brunera, fern, weeds	Non-Contributing	Poor Overgrown, in need of weeding	Remove weeds.
	Enclosed Garden - Plants in planting beds	Contributing (Significant)	Good	None
	Enclosed Garden - Grass area	Contributing (Very Significant)	Good	None

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Masses of woody vegetation enclosing the area	Non-Contributing	Fair Invasive species threaten native species, pruning needed to restore historic views	Remove invasive plant species in masses of vegetation between the Main Residence and the Pool. Prune vegetation to restore historic views.
	Open Mown Lawns	Contributing (Very Significant)	Good	None
	BUILDINGS AND STRUCTURES			
	Main Residence (see individual building sheet)			
	Pump House/Garage (see individual building sheet)			
	Pool House/Pool Pump House (see individual building sheet)			
	Small shed - enclosure for well (has water pipes and spigot)	Contributing (Significant)	Poor Overgrown with vegetation, deteriorated wood, paint failure	Replace deteriorated wood siding on small shed to the east of the Pool. Replace the roof on the small shed to the east of the Pool.
	VIEWS			
	Overall, views are an important component of the historic landscape. The residence is situated upon a high point to take advantage of views of the surrounding landscape and water.	Contributing (Very Significant)	Fair Portion of historic view remains	Maintain current perimeter vegetation.

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	View to west toward River from the driveway	Contributing (Very Significant)	Fair Portion of historic view remains	Maintain current perimeter vegetation.
	View to west from residence screened porch	Contributing (Very Significant)	Poor Historic view of water is obscured by vegetation	Maintain current perimeter vegetation.
	View to the south from the residence	Contributing (Very Significant)	Poor Portion of historic view remains	Maintain current perimeter vegetation.

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Views between residence patio, walled garden, and pool.	Contributing (Very Significant)	Good	None
	View from pool & pool house to the south	Contributing (Very Significant)	Fair/Poor Historic view of water is obscured by vegetation	Maintain current perimeter vegetation.
	CONSTRUCTED WATER FEATURES			
	Inground swimming pool	Contributing (Very Significant)	Good	Infill swimming pool. See Building Feature Checklist - Pool House and Pool
	Octagonal fish pond - Enclosed Garden	Contributing (Very Significant)	Good	None

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	SMALL SCALE FEATURES			
	Pump House/Garage - stepped retaining wall - brick and stone	Contributing (Significant)	Good/Fair Covered in vegetation, ivy should be removed from weep holes	Remove vegetation.
	Brick walls at driveway parking area entrance	Contributing (Very Significant)	Good	None
	Enclosed Garden - brick walls	Contributing (Very Significant)	Fair Chipped and cracked masonry units, cracking at coping stone	Replace in-kind cracked brick and coping stone units. Repoint open joints.
	Enclosed Garden - wrought iron garden gate 1934	Contributing (Very Significant)	Fair Crooked	Restore

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Enclosed Garden - wood garden gate 1959	Contributing (Significant)	Fair Layers of paint, prevent gate from closing properly	Clean and remove excess paint so that the wood garden gate to the Enclosed Garden closes properly.
	Brick entrance gates at base of residence area entrance drive-way	Contributing (Very Significant)	Good	Repoint open joints.
	Brick retaining wall at base of driveway	Contributing (Very Significant)	Good	Repoint open joints.
	Brick retaining wall at Linden tree (west side of house)	Contributing (Significant)	Poor Falling apart	Reconstruct

LANDSCAPE FEATURE CHECKLIST - MAIN RESIDENCE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Enclosed garden - stone bed edges	Contributing (Very Significant)	Fair Several are missing or covered over by mulch and plants	Replace missing stones in-kind.
	Pool - 3 wood planters	Non-Contributing	Good/Fair	Repair
	Pool - gravel between pool & pool house	Non-Contributing	Fair Uneven and very loose	Remove gravel next to the Pool and provide new vegetation.
	Pool - ladies & gentlemen signs at pool house	Contributing (Very Significant)	Fair Some rust	Remove rust and repaint ladies and gentlemen signs at the east and west ends of the Pool House.

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LANDSCAPE FEATURE CHECKLIST - GARDENER'S COTTAGE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	NATURAL SYSTEMS, FEATURES & TOPOGRAPHY			
	Topography, vegetation and spatial organization screen views of the cottage from the Main Residence and residential outdoor areas. (The cottage is fairly large, but by nestling the structure into the side of the hill, it is very well screened from view from the residential areas of the property. It is not clear how much woody vegetation was present historically, but today this adds to the screen between the two types of use.)	Contributing (Very Significant)	Good	None
	SPATIAL ORGANIZATION			
	The design of the property utilized patterns of circulation, topography, and vegetation to provide borders between various types of use areas. The cottage is situated lower and screened from the residence by a change in grade and vegetation. Also, the cottage is between the larger property agricultural operations, with a dedicated gardener's entrance road that minimizes circulation conflicts between service activities and residents/guests. The proximity of the triangular garden between the residence and the gardener's cottage would have been convenient for maintenance and pleasure.	Contributing (Very Significant)	Good	None
	LAND USE			
	Lack of historic residential use and related activities on the property reduce integrity slightly but continued maintenance of the landscape and gardens can help the landscape to represent its condition when historic land use occurred.	Non-Contributing	N/A	N/A
	CLUSTER ARRANGEMENT			
	The relationship between the residence, driveway/work yard, and greenhouse is tight and functional. Work related features were not located in the front yard of the residence, as this was clearly viewed from the triangle garden. It appears that a domestic space for the caretaker may have been provided at the back of the house where the brick wall is located.	Contributing (Significant)	Good	None
	CIRCULATION ROUTES			
	Gardener's Cottage - driveway / entrance route (facing south) (outside of JPPM property line)	Contributing (Significant)	Fair Dirt path/gravel/asphalt	Repave driveway

LANDSCAPE FEATURE CHECKLIST - GARDENER'S COTTAGE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Brick walkway from Gardener's Cottage to triangle garden	Contributing (Significant)	Good	None
	Brick path to South door of Gardener's Cottage	Contributing (Significant)	Goof/Fair Some vegetation growing in between brick joints	Remove vegeation
	Brick porch at Gardeners Cottage	Contributing (Significant)	Poor Uneven surface	Relay brick porch Provide level surface.
	Brick path at front of Gardener's Cottage	Contributing (Significant)	Poor Barely discernible covered with earth	Relay brick walkway. Provide level walkway.

LANDSCAPE FEATURE CHECKLIST - GARDENER'S COTTAGE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Brick path from driveway to house	Contributing (Significant)	Poor Barely discernible covered with earth	Relay brick walkway.
	Driveway/parking area	Contributing (Significant)	Poor Broken asphalt driveway, full of weeds	Repave driveway
	Brick path from driveway to Greenhouse	Contributing (Significant)	Fair Barely discernible covered with earth	Relay brick walkway.
	Brick path at north side of Gardener’s Cottage	Contributing (Significant)	Fair Barely discernible covered with earth	Relay brick walkway.

LANDSCAPE FEATURE CHECKLIST - GARDENER'S COTTAGE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	VEGETATION			
	Minimal ornamental vegetation in this area includes two over-grown honeysuckles at the south door, one mature cedar at the west between the house and the retaining wall, and a few mature canopy trees in the east "yard."	Contributing (Significant)	Fair Overgrown vegetation	Prune and weed.
	Bed in the Cold Frame (see Cold Frame image)	Non-Contributing	Fair Overgrown and full of weeds	Prune and weed.
	BUILDINGS AND STRUCTURES			
	Gardener's Cottage (see individual building sheet)			
	Greenhouse (see individual building sheet)			
	Cold Frame (see individual building sheet)			
	VIEWS AND VISTAS			
	View from triangle garden to Gardeners Cottage	Contributing (Significant)	Fair Changes to vegetation within Triangle Garden have altered view	None
	View from Gardeners Cottage to triangle garden	Contributing (Significant)	Fair Changes to vegetation within Triangle Garden have altered view	None

LANDSCAPE FEATURE CHECKLIST - GARDENER'S COTTAGE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	View from cottage to the east	Contributing (Significant)	Poor Modern, maintenance/boat/ storage facility part of the view	None
	View from cottage to the north	Contributing (Significant)	Good	None
	SMALL SCALE FEATURES			
	Cold Frame	Contributing (Significant)	Fair Overgrown and full of weeds	Remove vegetation.
	Wood retaining wall	Non-Contributing	Good	None

LANDSCAPE FEATURE CHECKLIST - GARDENER'S COTTAGE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Brick wall at house	Contributing (Significant)	Fair Missing/loose mortar, cracked bricks, biological growth	Repoint open joints and locations of loose mortar in brick walls.
	Iron rail	Contributing (Significant)	Fair Paint failure	Repaint.
	Wood post with light	Non-Contributing	Good	None

LANDSCAPE FEATURE CHECKLIST - TRIANGLE GARDEN & TENNIS COURT AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	NATURAL SYSTEMS AND TOPOGRAPHY			
	The east facing slope provided a good framework for the terraced garden concept. The topography has sloped walks, retaining walls, and stepped terraces.	Contributing (Very Significant)	Good	None
	SPATIAL ORGANIZATION			
	Careful layout using walls, shrubs, arbors, vegetables and flowers purposefully enforce the geometry of the design.	Contributing (Very Significant)	Poor Deteriorated walls and steps, loss of contributing plants, lack of maintenance	Restore stone walls and steps to recreate layout of the Triangle Garden.
	LAND USE			
	Historic use, ornamental garden. Current use, unmaintained garden	Contributing (Very Significant)	Poor Unmaintained	Remove inappropriate vegetation. Prune vegetation.
	CIRCULATION ROUTES			
	Brick sidewalk along west side of garden (facing south)	Contributing (Very Significant)	Fair/Poor Uneven surface	Relay brick walkway. Provide even surface.
	Stone steps at southwest corner of garden	Contributing (Very Significant)	Poor Ground heaving, shifted stones	Reset stone steps.

LANDSCAPE FEATURE CHECKLIST - TRIANGLE GARDEN & TENNIS COURT AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Stone steps at middle of stone retaining walls	Contributing (Very Significant)	Fair/Poor	Reset stone steps.
	Stone steps on north side of garden	Contributing (Very Significant)	Fair/Poor	Reset stone steps.
	VEGETATION			
	Planting beds (originally vegetable, later flower beds) today they are turf with scattered shrubs and perennials.	Contributing (Very Significant)	Poor	Remove inappropriate vegetation. Prune vegetation.

LANDSCAPE FEATURE CHECKLIST - TRIANGLE GARDEN & TENNIS COURT AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	BUILDINGS AND STRUCTURES			
	Tennis Court	Contributing (Significant)	Fair	None
	VIEWS AND VISTAS			
	The view of the garden from the east (base of triangle) to west was historically of the geometrically laid-out garden beds.	Contributing (Very Significant)	Poor Overgrown shrubs and lack of garden beds have degraded this view	Restore
	The view from the top (west) of the garden to the east historically provided an overview of the manicured garden, maintained tennis court, and landscape beyond.	Contributing (Very Significant)	Poor The degraded condition of the garden and tennis court have impacted this view	Restore

LANDSCAPE FEATURE CHECKLIST - TRIANGLE GARDEN & TENNIS COURT AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	SMALL SCALE FEATURES			
	Stone plant bed edge defining garden terraces.	Contributing (Very Significant)	Fair/Poor Impacted by vegetation and erosion	Reset stone planting bed edge.
	Fence/arbor at south side of garden (grapes)	Contributing (Significant)	Good	None
	Dry laid stone retaining wall along top terrace	Contributing (Very Significant)	Fair/Poor Impacted by vegetation and erosion	Reset dry-laid stone retaining wall along the top of the terrace.

LANDSCAPE FEATURE CHECKLIST - TRIANGLE GARDEN & TENNIS COURT AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Water spigot in drain tile	Contributing (Significant)	Good	None
	Water spigot	Contributing (Significant)	Good	None
	Dry laid stone retaining wall at middle terrace (about 12” high)	Contributing (Very Significant)	Poor Impacted by vegetation and erosion	Reset dry-laid stone retaining wall along the top of the terrace.
	Well (stone)	Contributing (Very Significant)	Fair Out of plane and cracked stones	Pepoint open joints and locations of loose mortar. Replace wood well cover.

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LANDSCAPE FEATURE CHECKLIST - BEACH HOUSE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	NATURAL SYSTEMS AND FEATURES			
	The beach house and associated landscape features are part of the historic designed landscape at the property. The site was selected because of its access to the water and beach.	Contributing (Very Significant)	Good	None
	Wetland areas surrounding the Beach House.	Contributing (Significant)	Good	None
	LAND USE			
	Historically used for private recreation. Today part of historic / environmental site interpretation	Non-Contributing		None
	CIRCULATION ROUTES			
	Road/path to beach from Main Residence Parking area has been enlarged.	Contributing (Very Significant)	Good	None
	Boardwalk(s) (wood) The boardwak was replaced recently using the same alignment and materials as those present historically.	Contributing (Significant)	Good	Replace any deteriorated boards as needed on the boardwalk.

LANDSCAPE FEATURE CHECKLIST - BEACH HOUSE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	TOPOGRAPHY			
	The relationship between the residence on the high point and the Beach House at the water level is enhanced by the grade change between the two areas.	Contributing (Very Significant)	Good	None
	VEGETATION			
	Beach grasses	Contributing (Significant)	Good	None
	Wetland vegetation	Contributing (Significant)	Good	None

LANDSCAPE FEATURE CHECKLIST - BEACH HOUSE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Trees and shrubs around the Beach House	Non-Contributing	Good	None
	Trees and shrubs on the west and south side of the parking lot	Non-Contributing	Good	None
	BUILDINGS AND STRUCTURES			
	Beach [Bath] House (see individual building sheet)			
	VIEWS AND VISTAS			
	View between beach area and residence area. Vegetation is blocking most of the historic view.	Contributing (Very Significant)	Fair/Poor Vegetation is blocking most of the historic view	None

LANDSCAPE FEATURE CHECKLIST - BEACH HOUSE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Views of the water surrounding the Beach House	Contributing (Very Significant)	Fair Vegetation is blocking most of the historic view	None
	View to the west and south from the parking area	Contributing (Significant)	Fair Vegetation is blocking most of the historic view	None
	CONSTRUCTED WATER FEATURES			
	Created beach cells and stone groins.	Non-Contributing	Good	None

LANDSCAPE FEATURE CHECKLIST - BEACH HOUSE AREA				
PHOTOGRAPH	**LANDSCAPE FEATURE**	**SIGNIFICANCE**	**CONDITION**	**TREATMENT**
	Boat Dock/Pier/Float	Contributing (Very Significant)	Poor In ruins	None
	SMALL SCALE FEATURES			
	Interpretive signs at parking lot	Non-Contributing	Good	None

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APPENDIX B



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APPENDIX B: STRUCTURAL CONDITION ASSESSMENT

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ROBERT SILMAN ASSOCIATES
STRUCTURAL ENGINEERS

Patterson Center Condition & Technical Assessments and Recommended Treatments

Jefferson Patterson Park and Museum

RSA PROJECT NO. W2837
11/02/2012

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Introduction

The Jefferson Patterson Center, part of the Jefferson Patterson Park and Museum, is a historic site affiliated with the Maryland Historical Trust, and is located in St. Leonard, Maryland. The Patterson home (Figure 1) serves as the center piece of the six building site that encompasses over 14,000 square feet. Designed in 1932 in the Colonial Revival style by Gertrude Sawyer, these buildings are an important representation of the late phases of the American Country House movement.



Figure 1: View of the Patterson Home looking southeast

Since its vacancy over ten years ago, some of the buildings among the Patterson site have begun to exhibit signs of deterioration. The Maryland Historical Trust plans to restore the six buildings on site to their original condition. Robert Silman Associates (RSA), Structural Engineers, was retained by Quinn Evans Architects (QEA) to perform a structural condition assessment of the various buildings chosen for restoration. These select structures were identified as the Patterson home (main residence), the Pump House/Garage, the Pool and Pool House, the Gardener's Cottage, the Greenhouse and Cold Frame, and the Beach House.



Figure 2: Vertical crack extending down from sill of second story window to top of jack arch below.

RSA initiated the investigation with a review of available documents provided by the owner. These documents included previous architectural sketches and historic drawings. (See Appendix A for a list of available documents) Following this review, RSA (Mr. John Dumsick and Mr. Michael Kostick) visited the Patterson Center on Wednesday June 20, 2012, and met with the park staff and QEA. After the meeting, RSA conducted a visual investigation of the various buildings on site. In addition, wood samples were taken from particular locations within the Patterson home to determine the material's species.

The condition assessment of the Patterson Center is broken down by building and detailed in the following sections.

Condition Assessment (Phase I)

Patterson Home (Main Residence)



Figure 3: Typical deteriorated window lintel. Note the cracked and displaced mortar/brick at either end.

Constructed in 1932, the Patterson residence is a three story wood and steel-framed historic home. Exterior load-bearing masonry walls extend below grade to rest upon cast-in-place concrete spread wall footings. Interior, wood-framed load-bearing partitions are supported by steel beams and columns to carry the floor loads. Terracotta and brick masonry infill walls are located in the basement beneath the steel beams and framing partitions. Typical floor framing is comprised of 2x10 or 2x12 wood joists spaced at 16" on center. The

original slate roof is supported on 2x10 wood roof rafters. RSA removed a total of (3) wood sample for identification at the roof, attic, and 1st floor joists. Per the results of the wood species identification performed by Quirk Consulting (Wood Scientists), all wood samples were identified as Southern Yellow Pine (see Appendix B). This species matches the wood noted on the original construction drawings. Three masonry chimneys penetrate the gabled roofline at separate locations. The following subsections summarize the conditions and findings of the Patterson Home noted by RSA during their survey of the structure.

Exterior: RSA interviewed site personnel to understand ongoing and past maintenance activities. Although the structure appeared in generally good condition, some conditions warranting structural repair and maintenance were noted. The original slate roof, approximately 80 years old, appeared largely intact with a few localized tiles exhibiting displacement. At the apex of the roof, all three brick chimneys displayed open/loose mortar joints, minor spalling of brick, and de-bonded flashing.

The exterior brick façade largely appears sound with brick and mortar joints free of deterioration. Localized portions of the brick façade exhibit cracked and open mortar joints possibly due to settlement. Most likely this settlement occurred shortly after construction. There is a large vertical crack beneath the second story window of bedroom number four extending down from the sill to the top of the jack arch of the window below. This crack appears to have been previously repaired, and possibly was the result of settlement or corrosion of embedded steel lintels (Figure 2).

Embedded steel angle lintels over all exterior wall openings were observed to exhibit corrosion. This corrosion is volumetrically expanding and exerting additional levels of stress on the brick masonry façade, causing localized brick and mortar to crack and displace (Figure 3). Significant water presence, as indicated by algae growth on the exterior surface of the building, was noted in the northwest reentrant corner where the servant wing meets the main block of the house (Figure 4). This appears to correlate to a change of roof direction where poor roof and ground drainage away from the building occurs. As a result, the surrounding brick pavers were reset three years ago by the owner, and pitched away from the home in hopes of reducing water infiltration into the basement.

The retaining wall surrounding the enclosed garden on the southeast corner of the building has a number of through-wall cracks in several locations including where the wall adjoins to the main residence. This appears to be a result of



Figure 4: Algae growth near reentrant corner where servants' quarters meet the main block of the house.



Figure 5: Water staining in attic storage room. Room is located adjacent to west chimney.



Figure 6: Signs of water infiltration and damage seen in the second floor luggage room at the location of a change in roof direction.

the freeze thaw cycle and water infiltration through open mortar joints in the brick cap at the top of the wall. Additionally, through wall cracks may be the result of a differential lateral soil pressure due to unequal depths of retained soil on either side of the wall.

Attic: The storage room of the attic space indicated signs of water infiltration due to the presence of water stains on the ceiling of the room. Stains were concentrated around the chimney (Figure 5). This most likely represents a flashing deterioration around the roof opening to accommodate the chimney extension. Signs of water intrusion were also noted above the northwest dormer window due to the presence of sugaring on the plaster ceiling surface. Minor cracks were noted in the bathroom, and studs were observed to be cut in the south dormer storage space to accommodate mechanical ductwork.

Second Floor: Minor cracking was observed on the ceiling and walls of several of the rooms. Large water stains and signs of moisture infiltration were present in bedroom number one, the luggage room (Figure 6), servant room number one, bathroom number four, and a small portion of the wall located in the servant stair. Typically these areas of water intrusion represent changes in roof slope and roof direction or the location of chimneys. Water infiltration in locations such as these could be caused by deteriorated roof flashing.

First Floor: Most of the first floor appeared in good condition with a few vertical cracks spotted in a number of the rooms. RSA observed cracking and separation above casework in the kitchen and pantry spaces. This appears to be localized deflection in the floor framing due to the possibility of load being transferred from above. The dining room wall paper has been stained at the tops of two walls due to previous moisture infiltration. This presence of water is unrelated to previous storm damage, and does not signify a continuing issue. Horizontal and vertical cracking surround the archway in the kitchen space was observed. This possibly was due to a transfer of load from the second floor above (Figure 7). The storage closet next to the bathroom and the space through the archway of the kitchen show a large amount of water infiltration (Figure 8). These spaces are located on the interior side of the reentrant corner discussed in the previous section, justifying the presence of moisture in these locations. In addition, the storage closet displays a $^{3}/_{16}$" to a $^{1}/_{4}$" gap between the floorboards and the baseboard molding which may correlate to localized wood framing deterioration. Along the exterior, moisture damage was noticed on the underside of the roof of the east porch. This appears to correlate to roofing or flashing deterioration.



Figure 7: Horizontal and vertical cracking surrounding the archway in the kitchen.



Figure 8: Peeling plaster due to the infiltration of water, observed in the first floor storage closet.



Figure 9: Water infiltration and severe rot deterioration near north window in the hall area of the Patterson Home basement.

Basement: Site personnel informed RSA of past flooding events in which the basement space has been filled with up to 1" of water due to poor drainage surrounding the site. The area with the most water infiltration issues was located in the hall at the base of the main stair, directly beneath the reentrant corner mentioned previously (Figure 9). All exposed window lintels show signs of rust and corrosion as a result of exposure to moisture. All exterior areaways show accumulation of debris from the surrounding plantings, and the majority of the area drains appeared to be clogged. At the stair leading to the servant rooms and garage, stair stringers and handrail posts show signs of crushing where in contact with the concrete slab due to the sustained presence of moisture.

Summary: In general, the floor and wall systems of the Patterson Home appear in sound structural condition with localized areas of deterioration due to moisture intrusion. With the results of the wood species identification, analysis of the existing structure revealed that the in situ framing members appeared adequate to support live loads associated with a typical family dwelling. This analysis will be discussed in further detail in the technical sections of the report.

Pump House / Garage

As part of a two-phase construction effort, the Pump House was originally constructed in 1933 with an addition in 1959 to include the adjacent garage and chauffer's quarters. The original pump house features an exterior brick masonry façade with brick and terracotta masonry substrate whereas the garage addition features a brick façade with a brick and concrete masonry substrate. Slate roof tiles cover the structure to match the main house.

Exterior: Localized cracked and displaced mortar and brick is present above all windows due to corrosion of embedded steel lintels. This condition is identical to that observed on the exterior of the main residence. Cracking was also observed in the exterior parging course at the base on the west façade of the building. This type of cracking could be the result of moisture infiltration and the freeze/thaw cycle. Brick spalling was noticed at the north jamb of the garage door. The pattern and location of the spalled areas appears to correlate with the corrosion of the garage door anchorage and/or vehicular impact (Figure 10).

Interior: Limited deterioration was noted on the interior of the Pump House; however a ½" open vertical crack was discovered where the tool room was toothed into the remainder of the pump house (Figure 11). This type of



Figure 10: Brick spalling at the north door jamb of Garage.



Figure 11: ½" open interior crack where tool room is toothed into the remainder of the Pump House.



Figure 12: Warped horizontal sheathing boards of the Pool House prying away from the surface of the structure, exposing underlying tar paper and diagonal tongue and groove sheathing boards.

structural distress suggests that this toothed portion of the tool room is rotating away from the rest of the structure, potentially due to localized ground settlement.

Pool / Pool House

Constructed in 1934, the Patterson pool is reportedly the first private swimming pool in Calvert County. It is constructed of cast-in-place concrete and is surrounded by flagstone and brick walkways. The Pool House is located just north of the pool, and is wood-framed with 2x4 studs at 16" on center. Extending from the south façade of the building is a wooden pergola constructed of 2x6 joists at 16"± on center which are supported by 5x5 timber posts. The Pool House is clad with 1x8 horizontal sheathing boards on top of 1" tongue and groove diagonal sheathing boards with a layer of tar paper set between the two layers of sheathing. Per our interview with site personnel it was revealed that the roof is clad with asbestos shingles. These shingles are set on roofing boards which are supported by 2x6 rafters spaced at 16" on center.

Exterior: Leaves and branches from the surrounding trees, as well as moss and small vegetation have accumulated atop the roof of the Pool House. The existence of moss on the roof surface signifies the presence of moisture within the structure. Beneath the vegetation, the asbestos roof shingles were in poor condition showing signs of deterioration from years of weathering. A number of exterior horizontal sheathing boards appear to be warped due to prolonged exposure to moisture. The distortion of the members' original cross sections has caused them to pry away from the face of the structure exposing the underlying tar paper and diagonal tongue and groove sheathing boards (Figure 12). Where exposed, the tar paper between the two layers of sheathing has deteriorated. Framing members of the pergola, which tie back into the stud framing of the pool house, exhibit a large amount of rot, deterioration, and insect borings (Figure 13). The 2x6 pergola rafters also display loss of section and signs of water infiltration under the main roof projection, providing a poor bearing area for the curvilinear roof rafter outriggers. In addition, the supporting timber posts displayed vertical splits along the grain at their base. The onset of rot and splits forming along the grain of wood members is associated with the presence of moisture as expected in a shaded, damp environment. The swimming pool was unable to be surveyed because it was covered at the time of RSA's visitation; however, the perimeter walkways were observed to have localized open mortar joints.

Interior: The interior sill plates and stud and timber framing of the mechanical room of the pool house were sounded for their structural integrity. Sounding revealed that the built up



Figure 13: Pool House pergola showing signs of deterioration and insect infiltration.

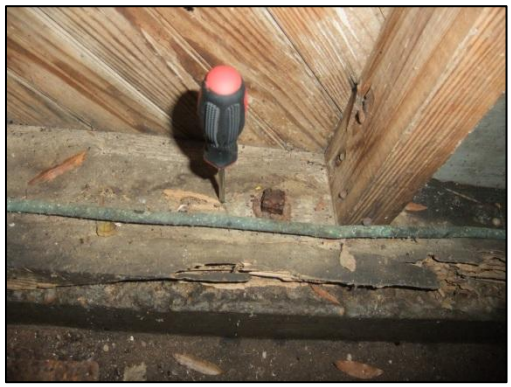


Figure 14: Advanced rot and deterioration of sill plate located in the Pool House Mechanical Room



Figure 15: Gardener's Cottage chimney showing improperly flashed south face and deteriorating wood members.

sill plate surrounding the base of the pump room has completely deteriorated due to rot and moisture infiltration (Figure 14). Although the exterior faces of the timbers and stud framing inside the Pool House were sound, rot may have developed within the interior portion of the members as a result of frequent flooding and saturation. An open crack in the slab was noticed at the entrance to the pump room. This crack appears to be $^1/_8$" in depth and extends approximately 4'. Being that this crack originates near recently installed piping that penetrates the slab, it is most likely the result of the pipe installation or refinishing of the concrete surface.



Figure 16: Gardener's Cottage east facing retaining wall displaying horizontal deflection.

Gardener's Cottage

Originally intended to house dogs, chickens, and pheasants, the Gardener's Cottage was built in 1934 and later converted into a residence between 1951 and 1952. The cottage is wood-framed with 2x4 studs spaced at 16" on center. The building is clad with 1" horizontal sheathing boards on top of 1" diagonal tongue and groove sheathing boards. The asphalt shingled roof is supported by 2x6 wood roof rafters spaced at 24" on center.

Exterior: Global observations of the Gardener's Cottage revealed heavy vegetation growth in all gutters due to improper drainage, and peeling paint on all exterior sheathing. Debris accumulation on the roof surface from the surrounding trees may have built up within the gutters, preventing them from draining properly. A disconnected gutter downspout was noted at the northeast corner of the garage; however the inlet location from the roof gutter appeared to be blocked by debris. Several locations along the roof display picked up shingles and penetrations with inadequate flashing. These areas may serve as a source of water infiltration to the interior of the cottage. Improper flashing (wood lumber) was located on the south face of the kitchen's chimney (Figure 15), leading to water infiltration on the interior of the structure (Figure 17). The east facing porch was generally in sound condition with a few members exhibiting earlier signs of rot and deterioration. Two brick masonry retaining walls located on the east side of the cottage displayed horizontal deflection accompanied by diagonal cracking potentially due to an unbalanced lateral soil pressure (Figure 16).



Figure 17: Gardener's Cottage interior kitchen showing mold growth and deterioration surrounding the chimney due to moisture infiltration

Interior: Interior portions of the Gardener's Cottage contain large amounts of mold. These areas of mold growth correspond with locations of inadequate ventilation or locations where the interior wall is set below the exterior soil grade. This creates a cool moist surface in which the mold is able to thrive. The ceiling structure surrounding the kitchen



Figure 18: Global view of the Greenhouse looking north.

chimney has deteriorated due to water infiltration caused by inadequate flashing surrounding the chimney (Figure 17). Small cracks were observed on the interior face of the low foundation wall. These cracks occurred at the location of vertical steps in the wall height, ideal locations for stress concentrations.



Figure 19: Cold Frame close up showing cracking and loss of mortar and presence of embedded steel.

Greenhouse / Cold Frame

The Greenhouse was added to the grounds of the Gardener's Cottage during the 1952 renovation. The structure features a prefabricated aluminum frame produced by the Lord and Burnham company, which sits atop an 8" nominal concrete masonry unit (CMU) wall and contains a cast-in-place concrete slab on grade (Figure 18). The Cold Frame appeared to be constructed about the same time as the greenhouse, and is constructed of two wythes of brick masonry. Unlike the Greenhouse, the frame that may have sat atop the Cold Frame's base is missing.

Greenhouse: Overall the Greenhouse frame appears in sound structural condition. The CMU base displays minor cracks and open mortar joints, as well as slight spalling on the face of the units. Limited intact glazing units were observed between the mullions of the metal superstructure.



Figure 20: Spalling of brick on south face of chimney of the Beach House.

Cold Frame: The Cold Frame contains several locations of loose brick and mortar loss between the individual wythes. Several through wall cracks have developed at various locations along the cold frame's base measuring ¼" to ¾" wide. These cracks and areas of loose mortar are most likely caused by a number of factors stemming from continued water infiltration permitted by the open mortar joints at the top of the wall. After water is able to penetrate into the substrate, further deterioration is afforded by freeze/thaw and corrosion and voluminous expansion of the embedded steel anchorages left in place from the original frame (Figure 19).

Beach House (Bath House)

Located on the shore of the Patuxent River, the Beach House was the first building constructed on the Patterson property in 1932. The structure is wood-framed with 2x4 studs spaced at 16" on center. An asphalt shingled roof is supported by 2x6 wood roof rafters spaced at 16" on center. 2x4 ceiling joists spaced at 16" on center support the ceiling over the lavatory and shower areas. The Beach House also features an indoor/outdoor brick masonry fireplace centered on the south exterior wall, a large screened-in porch located on the east elevation, and a smaller porch located on the opposite west elevation.



Figure 21: Beach House closet sill plate showing longitudinal split at location of anchor bolt.

Exterior: When approaching the Beach House, it is apparent that the structure is sunken beneath the surrounding grade possibly due to building settlement or most likely the buildup of sand and sediment from repeated flooding events. Missing asphalt shingles were noticed near the chimney on the south edge of the roof, providing an entrance point for moisture. Brick on all faces of the chimney show signs of localized spalling from typical weathering events (Figure 20). An uprooted tree adjacent to the west porch has seemingly caused the wood porch deck to heave up along its west edge creating an uneven surface. Framing members of the screened-in porch were sounded with an awl to assess their structural integrity. The east porch's perimeter sill plate as well as the 6x6 timber posts exhibited localized areas of rot and deterioration as evident by the presence of splits and material softness. Beneath the screen-in porch, lays a brick paver patio. Brick pavers located along the patio's perimeter, in close proximity to an adjacent tree, have been pried upward due to root expansion from the tree.

Interior: Generally, the interior of the structure appears in good condition. Open mortar joints were visible at the base of the chimney, and may have been the result of previous water infiltration. The most notable areas of deterioration were the sill plates located in the west closets of Dressing Room Number 2. Sills contained longitudinal splits at anchorage locations (Figure 21), and exhibited signs of soft wood material. In addition to their deteriorated condition, these sill plates were not properly supported at their base.

Technical Assessment (Phase II): Structural Analysis

Materials Testing and Estimated Grading of Wood Framing

Two main material factors affect structural capacity of wood framing members: wood species and wood grade. As noted above, wood sampling was performed on localized structural members of the Main Residence to assist in documentation of the historic building and structural analysis. Although RSA is not certified as timber graders, average size of knots and slope of grain were documented and the grading was estimated based on these factors through the use of grading software (NCPTT Grading Protocol for Structural Lumber and Timber in Historic Structures). Once the species and estimated grade are known, the allowable stress design values can be obtained and structural analysis performed to estimate an allowable load capacity (see Gravity Live Load Analysis below for additional information). The structural analysis was performed with the following assumed grades: Main House rafters and joists (Southern Yellow Pine #1); Beach House rafters (Southern Yellow Pine #2); Pool House rafters and pergola joists (Southern Yellow Pine #2); Pump House rafters and attic joists (Southern Yellow Pine #2) and Gardner's Cottage rafters and attic joists (Southern Yellow Pine #2).

Design Criteria

The original occupancy of the various structures throughout the Patterson Center can be primarily defined as residential. It is anticipated that the new use of the existing structures will be that of a house museum. While the loading requirements for residential structures are well defined those for historic house museums are not, thus the structural engineer must make judgment. Live load, as distinguished from dead load which is the self-weight of the building materials, is the allowable moveable loading which can be placed upon a floor; generally, occupancy type has corresponding live load requirements as prescribed by the building code.

Due to the limited size of anticipated tour groups, the public areas should have a live load capacity of greater than 50 pounds per square foot (psf), while corridors should have a capacity of approximately 75 to 100 psf. If rooms are to be converted to office space, not including record storage areas, a live load capacity of 50 psf would be acceptable. However, if file storage is anticipated, a minimal capacity of 100 psf would be required. Other than the Main Residence attic which has been converted to living quarters,

the attics in the various other structures throughout the site are currently uninhabitable and utilized for light storage and mechanical systems. Typically, in residential structures an allowable live load for this space would be 20 psf. This value seems adequate for the current use, since the limited head height and mechanical systems themselves grossly limits usable space.

Per our review of the current code, the minimum roof live load was determined to be 20 psf. However this minimum roof live load can be further reduced per code, pending confirmation of various factors, including tributary area and slope of roof framing. Thus, due to the steep pitch of the roof profile at the Main Residence, the roof live load may be reduced to 12 psf. Similarly, the minimum roof live loads can be reduced to 16 psf at the Beach House, 12 psf at the Pump and Pool Houses and 15 psf at the Gardeners' Cottage. Per our review of the applied snow loads, the above mentioned roof loads were found to govern the roof design over the uniform roof snow load.

Gravity Analysis Methodology

The procedure for developing the allowable load capacity of each individual member is a two part iterative process. First, the wood-framed system is evaluated based on strength, utilizing the bending and shear design values for various grades of wood species, as provided by the National Design Specification for Wood Construction. The lower of the two governs. When evaluating the steel framed elements of the Main House, similar strength analysis is performed based on an allowable working stress of the steel. Per our review of historic steel manuals of the given period of construction, RSA noted an allowable working stress of 18,000 pounds per square inch (psi). When comparing the capacity of the wood-framed members and steel beams, the lower of the two govern the capacity of the floor construction.

After the strength analysis, a second set of calculations are conducted to review the deflection requirements. This is required due to the historic nature of the architectural elements, such as the plaster ceilings suspended below. Thus for each floor and roof system two allowable live loads are determined, one for strength and the second for deflection requirements. The lesser of these two capacities will govern, as detailed below.

Calculated Live Load Capacity of Structural Elements

The calculated allowable live loadings of the various building structural framing elements were determined based on the procedures noted above and in a non-deteriorated condition. The capacities are summarized below (see the attached Appendix C for available capacities shown on structural plans). Typically, the deflection requirement governed the wood-framing member capacity throughout the various structures, while flexure (bending) governed the steel beam capacity within the Main Residence. Overall, it appears that the existing capacities of the various structures are suitable for the current and anticipated use.

Main Residence

- The roof framing of the Main Residence was determined to have sufficient capacity over the minimum roof live loads required by code noted above.
- The attic space was noted to have sufficient strength capacity for the current residential loadings of inhabitable and uninhabitable attic spaces; however, the existing framing below the tiled bathroom was calculated with a reduced capacity of 24 psf due to deflection requirements for brittle finishes (L/480 for Live Load only and L/360 for Total Load). Since the ceiling below does not exhibit cracks and or excessive deflection, it would appear that the blocking or bridging set between the floor joists contributes by distributing applied forces throughout the floor diaphragm.
- The second floor rooms primarily appear to have a capacity suitable for residential occupancies (40 psf) principally governed by joist deflection and the flexural capacity of the supporting steel

beams. The interior corridors were calculated to have an available capacity greater than 75 psf and largely suitable for corridors above the first floor level. If second floor rooms are to be converted to office use, Bedrooms No. 3 and 4 and the Pressing Room would be acceptable as their capacity exceeds 50 psf and not requiring reinforcement of the existing framing. Despite the majority of the second floor areas exhibiting a capacity less than 50 psf previously identified as the recommended capacity for house museums, since the majority of the historic furniture and collections are scheduled to remain in situ, this will effectively reduce the floor area which visitors can physically occupy and thereby restricts overloading the existing structure.

- The first floor framing largely has an available capacity suitable for residential occupancies and for the anticipated use as a house museum for both the public areas and corridors, except for the Kitchen and Pantry area. Here, the floor framing spans an increased distance than other wood-framed areas on this floor. Though the framing has a calculated capacity of 64 psf based on strength, its capacity is governed to 37 psf by deflection. This analysis appears to correlate with the existing conditions where separation was observed between the first floor ceiling and the pantry casework below and the existing plaster ceiling in the basement space below which was noted to exhibit localized sagging and unevenness.

Pump House

- The roof framing of the pump house was calculated to have an estimated allowable capacity of 64 psf which is significantly greater than the minimum roof loads required by code.
- The size of the attic framing was unobserved since the existing framing was concealed by the existing ceiling and floor finishes and hence the capacity could not be verified. However, the joist spacing was noted at 12" on-center due to the presence of nailed fasteners in the ceiling below. Since the attic was used for living quarters and its relatively steep roof profile restricts useable space to the center of the room, it would appear that the framing has an available capacity which could easily exceed 40 psf. A localized probe within the ceiling below could easily reveal the size and spacing of framing members to allow calculation of the allowable capacity.

Pool House

- The roof and pergola framing of the pool house was calculated to have sufficient available capacity, 38 psf and 33 psf respectively, exceeding the loading requirements per code.

Gardeners' Cottage

- The various roof framing was evaluated at the Gardener's Cottage and per our analysis it appears that the roof framing has an available capacity exceeding the minimum roof live load requirements per code. The attic area above the garage has a capacity of 30 psf which is suitable for residential structures with uninhabitable attic space used for storage.

Beach House

- The main roof over the Beach House was calculated to be 35 psf which exceeds the required roof live load by code. Additionally the porch roof framing has a capacity of 47 psf which exceeds the roof minimum live load.

Load Capacity Summary

Based on the calculated available capacity of all the above mentioned existing structures, it appears that the existing framing is largely suitable for the proposed use as a house museum. If office space and or file storage is to implemented, RSA recommends that these areas be isolated to framing systems which currently have sufficient live load capacity to facilitate the increased loading requirement (the placement

will need to be reviewed by the engineer), however if these new occupancies cannot be placed within these areas, a reinforcing scheme will need to be devised to bring those areas to code-compliance.

Treatment and Work Recommendations (Phase III): Structural Strengthening/ Repair Schemes

Though the existing structures currently exhibit localized areas of deterioration to structural members, it must be noted that in their current state, the conditions evaluated do not represent a life safety hazard to the building themselves, its occupants and or future visitors. That being said, there are areas which need to be strengthened and repaired to ensure the continued operation of the various structures. Due to the interpretive nature of the buildings, the historic building fabric contained in the preservation spaces identified by the architect, will have limited interaction with the repair schemes, if any. The preservation procedures at the elements in need of repair will be accessed via the basement and or attic floors as much as possible, so that they do not interrupt or disturb these significant areas. Listed below are the areas which need to be repaired to correct localized areas of deterioration and overstressed structural members.

Main Residence

- Changes of roof direction and valleys should be further investigated to evaluate if water infiltration is active and verify the condition of the existing flashing and supporting roof structure below. This will most likely require localized removals of slate tiles and plaster ceiling below to expose these elements for review. Localized repairs to flashing and roof boards should be anticipated.
- The drainage around the building should be further investigated, as the significant water infiltration has occurred previously. Possible improvements include removal of adjoining soil and installation of perimeter drainage and drainable fill. Minimally, the existing grade and brick pavers should be sloped away from the structure and their open mortar joints filled.
- Chimney repairs are required above the roof profile. These shall include localized masonry replacement of cracked and deteriorated brick units, resetting of loose brick and repointing of mortar joints. Repairs shall be made with compatible brick and mortar to match existing.
- Exterior brick masonry repairs to the building façade are required at localized areas. These repairs will include localized crack repair, repointing of open and deteriorated mortar joints and isolated brick replacement.
- Existing steel lintels over window openings are corroding and exerting significant levels of stress on the surrounding masonry which has caused masonry cracks and displacement to occur. These lintels shall be replaced with new angle lintels which are protected against corrosion due to exposure to moisture. As a minimum, these angle lintels shall be hot-dipped galvanized. Preferably and for longest durability, RSA recommends the use of stainless steel angles. Localized masonry removals and resetting will be required to enable lintel removal and replacement installation.
- Cleanout areaways and their corresponding drains on a regular basis to ensure proper drainage of these spaces and limit opportunity for flooding and foundation wall saturation.
- Garden retaining walls exhibit localized brick masonry deterioration requiring reconstruction, re-toothing of masonry around cracks and deep repointing of wall caps.
- Localized joist reinforcement is required below the Kitchen at the area of the existing wall of the pantry. Since this reinforcement will require removal of the deteriorated ceiling in the basement and the existing joists above are indicated to exhibit excessive deflections. RSA recommends further reinforcement to the joists in this localized area. Since shear strength of these joists is not limiting, these reinforcements can be comprised of partial length engineered or solid sawn lumber sister which are bolted to the deficient existing member.
- The stair leading to the basement from the servant rooms is currently exhibiting deterioration to

its base support due to continued exposure to moisture. RSA recommends partial reconstruction of the lower portion of these stairs to include new stringers and railing post.

Pump House/Garage

- Investigate condition of existing parging placed along the foundation walls. This investigation will require localized soil test pits to expose the parging below grade.
- To confirm available capacity of existing floor structure, RSA recommends performing a localized probe removal (12"x12") of existing ceiling finish to expose second floor framing above.
- Similar to the Main Residence, existing steel angles are corroding and causing deterioration to adjoining masonry. New stainless steel lintels are recommended to promote increase durability and preservation to the historic structure.
- At garage roll-up door, localized masonry repairs at wall pier are required where displaced and deteriorated. Removal of existing deteriorated steel anchor bolts will be required and replacement with new stainless steel dowels set in an epoxy adhesive anchor.
- Monitor existing vertical crack in pump house wall with a tell-tale crack gauge. This condition appears to be due to settlement which is common immediately following initial construction.

Pool House

- Repoint existing stone pavers around existing pool
- Remove existing vegetation away from face of pool house structure.
- RSA recommends removing the deteriorated asbestos shingles by the appropriate means and methods. Due to their level of deterioration and continued exposure to moisture, RSA recommends providing an allowance for roof board replacement.
- Existing tar paper was observed to be deteriorated in localized areas. Replacement of exterior wall vapor barrier is recommended. This will require temporary removal of the horizontal cladding boards. While the diagonal sheathing boards are to remain, RSA recommends reviewing the existing nailed connections to the wood studs beyond. Since the diagonal sheathing is the main component of the exterior shear walls providing resistance against lateral forces and nail hole elongation in these boards is common to resist these lateral loads, RSA recommends providing an allowance for supplemental nailed connections back to the vertical studs beyond.
- Sill replacement and stud base sistering. These repairs shall be performed in a sequential manner to minimize shoring of the exterior walls during construction.
- Deteriorated pergola framing shall be reconstructed to match existing with new materials suitable for exterior exposure.

Gardeners' Cottage

- Roof flashing and single replacement recommended.
- Localized brick masonry reconstruction at deteriorated retaining walls.
- Abate mold containing materials
- Improve attic ventilation.

Green House/Cold Frame

- (Green House) Localized repointing of existing masonry cracks and open mortar joints
- (Cold Frame) Localized masonry repairs to include reconstruction of foundation wall corners and thru wall cracks. Locate and remove existing embedded steel anchors and patch masonry. If roof is to be reconstructed, RSA recommends installation of stainless steel dowels set in an epoxy adhesive.

Beach House

- Localized replacement of spalling masonry of chimney and repointing of open mortar joints.

- Remove and replace loose shingles and flashing.
- Sill plate replacement with new anchors around perimeter of structure. Similarly, new stud base reinforcement will be required in localized areas.
- Regrade around perimeter of structure to allow drainage away from building. Alternatively, if this is not practicable, the existing foundation can be installed with a new perimeter curb to effectively raise the top of foundation. This work can be implemented with the sill and stud base repairs identified above. This option can be achieved without affecting the exterior appearance as finish clapboards can cover the outside face of the curb.
- Wood porch replacement to include decking, joists, posts and foundations.
- Localized porch slab removal and replacement at area of tree interaction. At areas of slab reconstruction, existing porch roof posts will require new base support. Due to frequent flooding, these posts shall be base supported by new stainless steel post bases. If the tree is to remain, the new slab can be designed to span over a subgrade opening to permit tree root growth.

Conclusions and Recommendations

The existing structural conditions vary throughout the various structures on the Jefferson Patterson Center and although several areas are in need of repair or reinforcement, life safety is not a current concern. RSA recommends the development of construction documents for the selected strengthening and repair schemes (as noted above) to maintain structural integrity and sufficient capacities for the existing and proposed use. In combination with the repair design phase, RSA recommends localized probes to be performed to confirm the existing conditions and verify extent of deterioration.

APPENDIX A: AVAILABLE DOCUMENTS

Reports

1. Attachment F: Patterson Center Development History and Significance Assessment. Patterson Center Condition Assessment and Treatment Plan Request for Proposals. Contributing authors: Maryland Historical Trust. 04/15/2011.

2. Historic Structures Report Phase I Significance Study: Patterson Center. Jefferson Patterson Park and Museum. Contributing authors: Ann Milkovich McKee (Ann Milkovich McKee, LCC); Peter Kurtze (Maryland Historical Trust); Marcia Miller (Maryland Historical Trust); Betty Seifert (Jefferson Patterson Park and Museum). 09/2011.

3. Jefferson Patterson Center St. Leonard, Maryland: Re-Use Analysis. Contributing authors: David H. Gleason Associates, Inc. (Baltimore, Maryland); Lipman Frizzell & Mitchell LLC (Columbia Maryland). 12/22/2011. Revised: 05/10/2012.

Drawings

1. Jefferson Patterson Residence: Original Historic Architectural Drawings. Gertrude Sawyer (Architect). Provided by: Jefferson Patterson Park and Museum (St. Leonard, Maryland). 1932-1959.

2. Jefferson Patterson Residence: Original Historic Structural Framing Drawings. Jefferson Patterson Park and Museum (St. Leonard, Maryland). 1933.

3. Jefferson Patterson Park and Museum Background Drawings. Quinn Evans Architects (Washington, District of Columbia). 06/18/2012.

APPENDIX B: WOOD SPECIES IDENTIFICATION

06/28/2007 10:50 6082382225 PAGE 02

QUIRK CONSULTING
Wood Identification and Problem Analysis
J. Thomas Quirk, Ph.D.

June 27, 2012

ATTN. Mike Kostick
Robert Silman Associates
1053 31st Street NW
Washington DC 20007

RSA project W2821

Dear Mr. Kostick,
The 3 wood samples that you sent to me for identification all are Southern Yellow Pine group **(Pinus sp).** On the basis of anatomy alone the various species in this group cannot be separated.

Thank you for the opportunity to be of assistance.

Regards,

J. Thomas Quirk, Ph.D.
Wood Technologist.

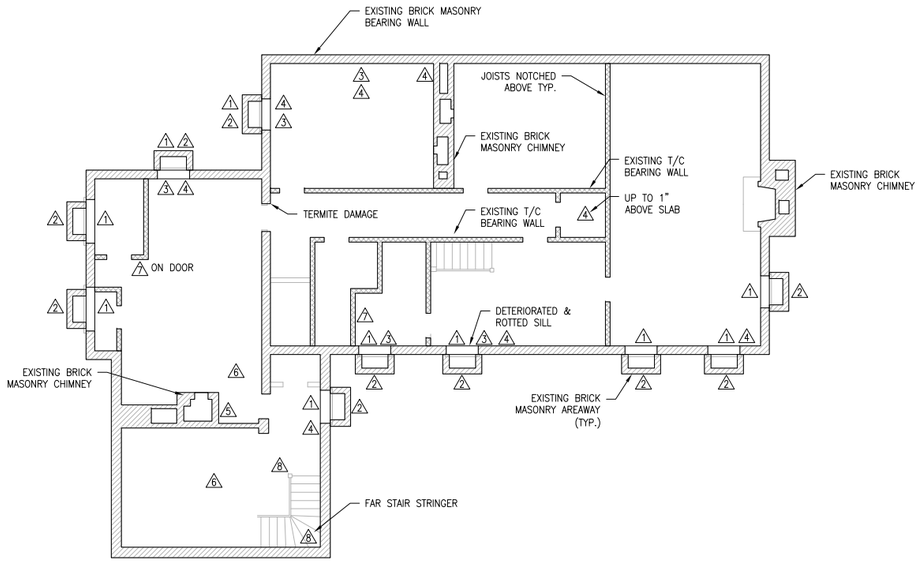
Enclosure - invoice # 1726

117 N. Franklin Avenue • Madison, WI 53705 • Phone/Fax (608) 238-2225

APPENDIX C: STRUCTURAL CONDITIONS DRAWINGS AND AVAILABLE LIVE LOADS

EXISTING CONDITIONS NOTED

1. CORRODED STEEL LINTELS.
2. DEBRIS @ BASE OF AREAWAY.
3. WATER INFILTRATION/DAMAGE.
4. WATER STAINING.
5. ⅛" VERTICAL CRACK IN BRICK.
6. OPEN CRACKS IN FLOOR SLAB.
7. MOLD GROWTH.
8. DETERIORATED WOOD FRAMING MEMBERS DUE TO CONTINUED EXPOSURE TO MOISTURE



NORTH

1 / S101 **MAIN RESIDENCE – BASEMENT FLOOR PLAN**
SCALE: 1/8" = 1'-0"

LEGEND

- EXIST. LOAD-BEARING MASONRY
- EXIST. CONCRETE FOUNDATION
- EXIST. WOOD BEARING WALL
- EXIST. WOOD JOIST
- EXIST. WOOD RAFTER
- EXIST. WOOD BEAM
- EXIST. WOOD BRACE OR COLLAR
- INDICATES EXIST. WOOD POST THRU OR DOWN
- INDICATES EXIST. WOOD POST ABOVE
- EXIST. STEEL BEAM
- EXIST. STEEL COLUMN
- EXIST. TERRA COTTA BEARING WALL

8' 0' 8' 16'
1/8" = 1'-0" SCALE OF FEET

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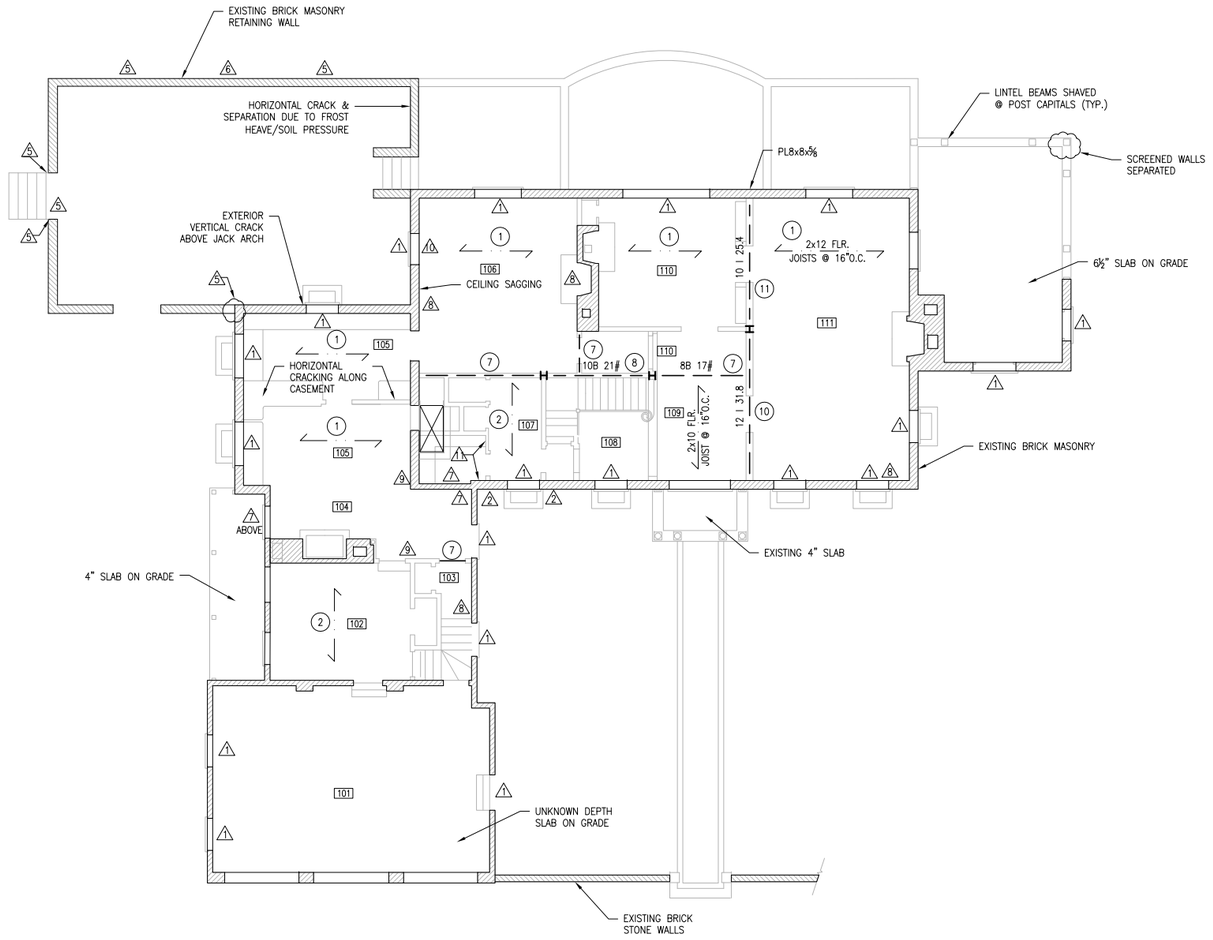
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DRAWN: BB
TECH. REVIEW: JD
DATE: 09/06/2012

SUB SHEET NO. **S101**

MAIN RESIDENCE
EXISTING STRUCTURAL CONDITIONS
PATTERSON CENTER
PATTERSON CENTER EXISTING CONDITIONS ASSESSMENT
JEFFERSON PATTERSON PARK & MUSEUM

DRAWING NO. —
PMIS/PKG NO.
SHEET 1 OF 7

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NORTH

1 / S102 FIRST FLOOR FRAMING ON FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

MAXIMUM PERMISSIBLE LIVE LOADS

102 100 PSF (JOISTS ARE OVER 100 PSF CAPACITY FOR STRENGTH & SERVICEABILITY REQUIREMENTS)

103 100 PSF (JOISTS ARE OVER 100 PSF CAPACITY FOR STRENGTH & SERVICEABILITY REQUIREMENTS)

104 62 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF THE JOISTS)

105 37 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF THE JOISTS)

106 60 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF THE JOISTS)

107 90 PSF

108 100 PSF (JOISTS ARE OVER 100 PSF CAPACITY FOR STRENGTH & SERVICEABILITY REQUIREMENTS)

109 100 PSF (JOISTS ARE OVER 100 PSF CAPACITY FOR STRENGTH & SERVICEABILITY REQUIREMENTS)

110 48 PSF (GOVERNED BY 10 I 25.4 FLEXURAL CAPACITIY)

111 48 PSF (GOVERNED BY 10 I 25.4 FLEXURAL CAPACITIY)

EXISTING CONDITIONS NOTED

1. CORRODED STEEL LINTEL W/ DISPLACED BRICK & MORTAR
2. ALGAE GROWTH ON EXTERIOR OF STRUCTURE
3. DISPLACED SLATE ROOF TILES
4. DE-BONDED FLASHING AROUND CHIMNEY OPENINGS
5. THROUGH-WALL OPEN CRACK
6. DIAGONAL CRACK IN MASONRY RETAINING WALL
7. WATER INTRUSION/MOISTURE DAMAGE
8. WATER STAINING/SUGARING
9. HORIZONTAL AND VERTICAL CRACKING AROUND KITCHEN ARCHWAY
10. ⅛" VERTICAL CRACK
11. ¼" GAP BETWEEN FLOOR & BASEBOARD MOLD
12. STUDS REMOVED FOR HVAC DUCTWORK

EXISTING FRAMING NOTES

1. EXISTING 2x12 FLOOR JOISTS @ 16" o.c.
2. EXISTING 2x10 FLOOR JOISTS @ 16" o.c.
3. EXISTING 2x12 FLOOR JOISTS @ 12" o.c.
4. EXISTING 2x10 RAFTERS @ 16" o.c.
5. EXISTING 2x8 CEILING JOISTS @ 16" o.c.
6. EXISTING 2x8 RAFTERS @ 16" o.c.
7. EXISTING 8B17 STEEL BEAM.
8. EXISTING 10B21 STEEL BEAM.
9. EXISTING 10B23 STEEL BEAM.
10. EXISTING 12 I 31.8 STEEL BEAM.
11. EXISTING 10 I 25.4 STEEL BEAM.
12. EXISTING 12B25 STEEL BEAM.
13. EXISTING 2x6 CEILING JOIST @ 16" o.c.

LEGEND

- EXIST. LOAD-BEARING MASONRY
- EXIST. CONCRETE FOUNDATION
- EXIST. WOOD BEARING WALL
- EXIST. WOOD JOIST
- EXIST. WOOD RAFTER
- EXIST. WOOD BEAM
- EXIST. WOOD BRACE OR COLLAR
- INDICATES EXIST. WOOD POST THRU OR DOWN
- INDICATES EXIST. WOOD POST ABOVE
- EXIST. STEEL BEAM
- EXIST. STEEL COLUMN
- EXIST. T.C.

8' 0' 8' 16'

1/8" = 1'-0" SCALE OF FEET

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SUB SHEET NO. S102

MAIN RESIDENCE

EXISTING STRUCTURAL CONDITIONS

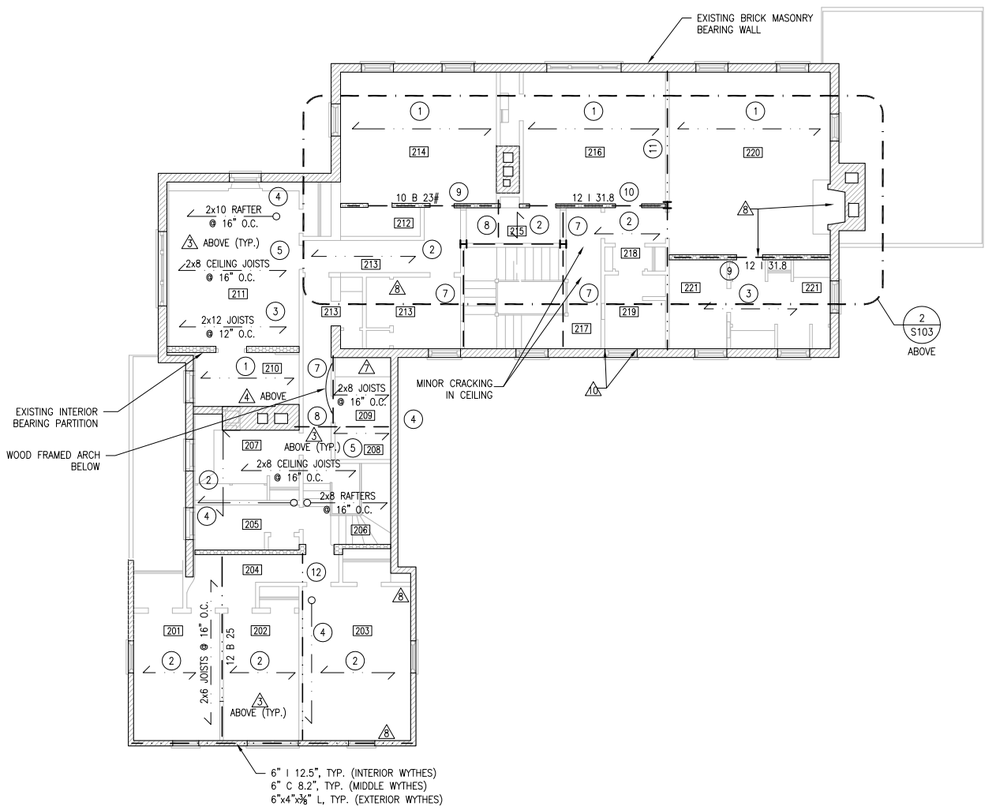
PATTERSON CENTER
PATTERSON CENTER EXISTING CONDITIONS ASSESSMENT
JEFFERSON PATTERSON PARK & MUSEUM

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SHEET 2 OF 7

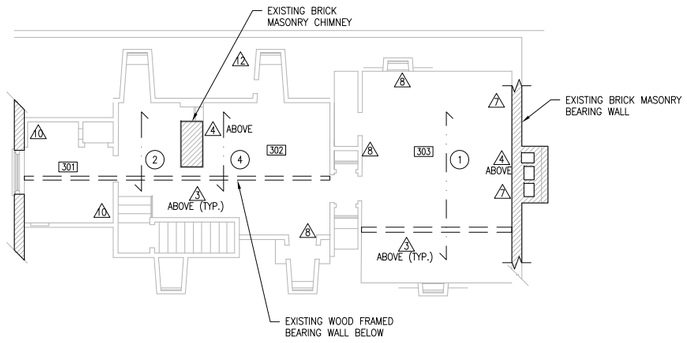
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NORTH

1 S103 **SECOND FLOOR FRAMING ON SECOND FLOOR PLAN PLAN**

SCALE: 1/8" = 1'-0"



NORTH

2 S103 **ATTIC FLOOR FRAMING ON ATTIC PLAN**

SCALE: 1/8" = 1'-0"

MAXIMUM PERMISSIBLE LIVE LOADS

201 40 PSF (GOVERNED BY 12B25 FLEXURAL CAPACITIY)

202 40 PSF (GOVERNED BY 12B25 FLEXURAL CAPACITIY)

203 40 PSF (GOVERNED BY 12B25 FLEXURAL CAPACITIY)

204 40 PSF (GOVERNED BY 12B25 FLEXURAL CAPACITIY)

205 76 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

206 76 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

207 76 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

208 76 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

209 48 PSF (GOVERNED BY 10 I 25.4 FLEXURAL CAPACITIY)

210 44 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

211 53 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

212 58 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

213 90 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

214 58 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

215 100 PSF (JOISTS ARE OVER 100 PSF CAPACITY FOR STRENGTH & SERVICEABILITY REQUIREMENTS)

216 40 PSF (GOVERNED BY 10 I 25.4 FLEXURAL CAPACITIY)

217 76 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

218 76 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

219 76 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

220 40 PSF (GOVERNED BY 10 I 25.4 FLEXURAL CAPACITIY)

221 20 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)
41 PSF (GOVERNED BY FLEXURAL CAPACITY OF JOISTS)

301 24 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

302 66 PSF (GOVERNED BY LIVE LOAD DEFLECTION OF JOISTS)

303 24 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF JOISTS)

RAFTERS

31 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF RAFTERS)

EXISTING CONDITIONS NOTED

1. CORRODED STEEL LINTEL W/ DISPLACED BRICK & MORTAR
2. ALGAE GROWTH ON EXTERIOR OF STRUCTURE
3. DISPLACED SLATE ROOF TILES
4. DE-BONDED FLASHING AROUND CHIMNEY OPENINGS
5. THROUGH-WALL OPEN CRACK
6. DIAGONAL CRACK IN MASONRY RETAINING WALL
7. WATER INTRUSION/MOISTURE DAMAGE
8. WATER STAINING/SUGARING
9. HORIZONTAL AND VERTICAL CRACKING AROUND KITCHEN ARCHWAY
10. ⅛" VERTICAL CRACK
11. ¼" GAP BETWEEN FLOOR & BASEBOARD MOLD
12. STUDS REMOVED FOR HVAC DUCTWORK

EXISTING FRAMING NOTES

1. EXISTING 2x12 FLOOR JOISTS @ 16" o.c.
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8. EXISTING 10B21 STEEL BEAM.
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11. EXISTING 10 I 25.4 STEEL BEAM.
12. EXISTING 12B25 STEEL BEAM.
13. EXISTING 2x6 CEILING JOIST @ 16" o.c.

LEGEND

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8' 0' 8' 16'

1/8" = 1'-0" SCALE OF FEET

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SUB SHEET NO. **S103**

MAIN RESIDENCE

EXISTING STRUCTURAL CONDITIONS

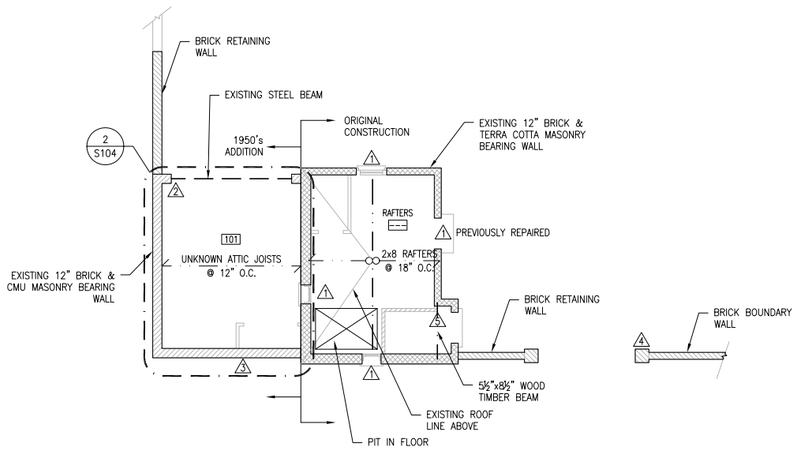
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PATTERSON CENTER EXISTING CONDITIONS ASSESSMENT
JEFFERSON PATTERSON PARK & MUSEUM

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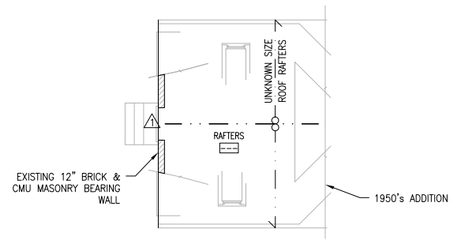
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NORTH

1 / S104 PUMP HOUSE/GARAGE – ROOF AND ATTIC FRAMING ON FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



NORTH

2 / S104 PUMP HOUSE/GARAGE – ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"

EXISTING CONDITIONS NOTED

1. CORRODED STEEL LINTEL W/ DISPLACED BRICK & MORTAR
2. SPALLING OF BRICK DUE TO GARAGE DOOR ANCHORAGE CORROSION.
3. CRACKING OF PARGING LAYER
4. COLLISION DAMAGE TO PIER
5. ½" OPEN CRACK

MAXIMUM PERMISSIBLE LIVE LOADS

RAFTERS
64 PSF (GOVERNED BY FLEXURAL CAPACITY OF THE RAFTERS)

101 40 PSF (NEED 2x10 JOISTS @ 12" O.C.)

LEGEND

- EXIST. LOAD-BEARING MASONRY
- EXIST. CONCRETE FOUNDATION
- EXIST. WOOD BEARING WALL
- EXIST. WOOD JOIST
- EXIST. WOOD RAFTER
- EXIST. WOOD BEAM
- EXIST. WOOD BRACE OR COLLAR
- INDICATES EXIST. WOOD POST THRU OR DOWN
- INDICATES EXIST. WOOD POST ABOVE
- EXIST. STEEL BEAM
- EXIST. STEEL COLUMN
- EXIST. T.C.

8' 0' 8' 16'

1/8" = 1'-0" SCALE OF FEET

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DESIGNED: MK
CADD: BB
TECH. REVIEW: JD
DATE: 09/06/2012

SUB SHEET NO. S104

PUMP HOUSE / GARAGE

EXISTING STRUCTURAL CONDITIONS

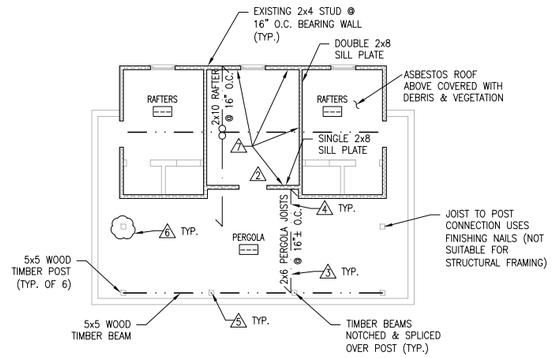
PATTERSON CENTER
PATTERSON CENTER EXISTING CONDITIONS ASSESSMENT
JEFFERSON PATTERSON PARK & MUSEUM

DRAWING NO. —

PMIS/PKG NO.

SHEET 4 OF 7

File Path: C:\TS\2010\21000021 NPS HPTC Support at MCPD, Purple Island\04_Drawings\Revit\21000021 PARRIS ISLAND.rvt



NORTH

1 / S105

POOL HOUSE – ROOF AND PERGOLA FRAMING ON FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



NORTH

2 / S105

SWIMMING POOL – PLAN

SCALE: 1/8" = 1'-0"

EXISTING CONDITIONS NOTED

1. LOCALIZED OPEN MORTAR JOINTS IN PAVERS
2. OPEN CRACKS IN CONCRETE SLAB
3. DETERIORATION DUE TO MOISTURE & INSECT INFESTATION (NOT ACTIVE)
4. LOSS OF SECTION DUE TO MOISTURE & ROT DETERIORATION (POOR BEARING CONDITION)
5. BEAM SECTION HOLLOW @ POST SUPPORTS
6. POST SPLIT ALONG GRAIN @ BASE
7. LOSS OF SILL PLATE DUE TO ROT & DETERIORATION

MAXIMUM PERMISSIBLE LIVE LOADS

RAFTERS
38 PSF (GOVERNED BY FLEXURAL CAPACITY OF THE RAFTERS)

PERGOLA
33 PSF (GOVERNED BY FLEXURAL CAPACITY OF THE PERGOLA JOISTS.)

LEGEND

EXIST. LOAD-BEARING MASONRY	EXIST. WOOD BRACE OR COLLAR
EXIST. CONCRETE FOUNDATION	INDICATES EXIST. WOOD POST THRU OR DOWN
EXIST. WOOD BEARING WALL	INDICATES EXIST. WOOD POST ABOVE
EXIST. WOOD JOIST	EXIST. STEEL BEAM
EXIST. WOOD RAFTER	EXIST. STEEL COLUMN
EXIST. WOOD BEAM	EXIST. T.C.

8' 0' 8' 16'

1/8" = 1'-0" SCALE OF FEET

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TECH. REVIEW: JD
DATE: 09/06/2012

SUB SHEET NO. S105

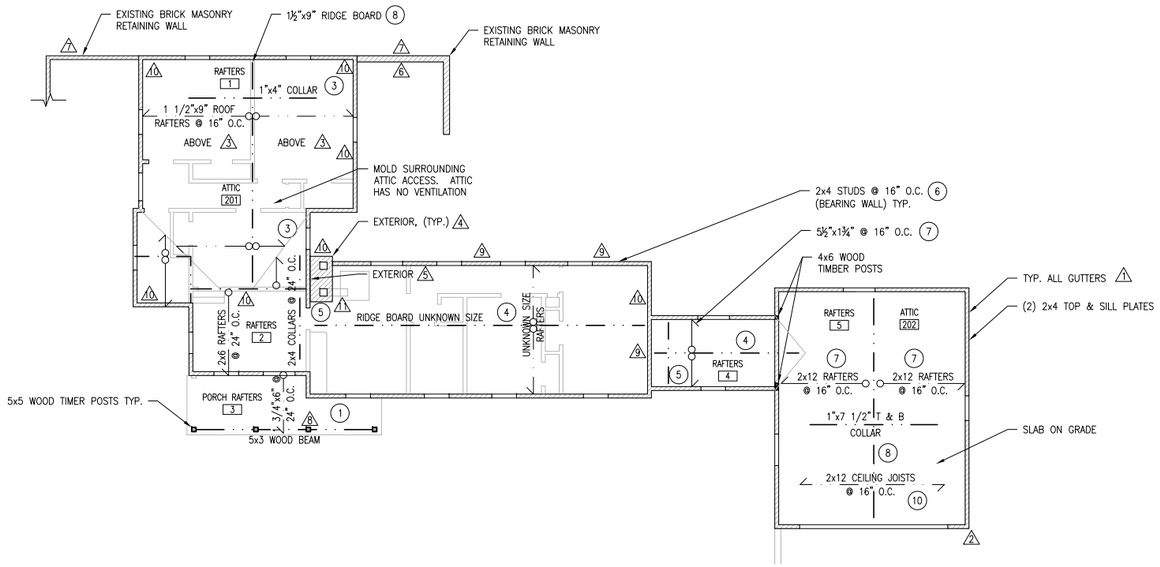
POOL / POOL HOUSE

EXISTING STRUCTURAL CONDITIONS

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PMIS/PKG NO.
SHEET 5 OF 7

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NORTH

1 / S106 GARDENERS' COTTAGE ROOF AND ATTIC FRAMING ON FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

MAXIMUM PERMISSIBLE LIVE LOADS

RAFTERS
1 26 PSF (GOVERNED BY FLEXURAL CAPACITY OF THE RAFTERS)

RAFTERS
2 25 PSF (GOVERNED BY FLEXURAL CAPACITY OF THE RAFTERS)

PORCH RAFTERS
3 16 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF THE RAFTERS)

RAFTERS
4 100 PSF (ROOF RAFTERS ARE OVER 100 PSF FOR STRENGTH & SERVICEABILITY REQUIREMENTS)

RAFTERS
5 40 PSF (GOVERNED BY FLEXURAL CAPACITY OF THE RAFTERS)

ATTIC
201 20 PSF (NEED 2x8 ATTIC JOISTS @ 16" O.C.)

ATTIC
202 30 PSF (GOVERNED BY FLEXURAL CAPACITY OF THE ATTIC JOISTS)

EXISTING CONDITIONS NOTED

1. VEGETATION GROWTH IN GUTTER
2. DISCONNECTED RAIN LEADER
3. DEBRIS ACCUMULATION ON ROOF FROM TREES
4. SPALLING BRICK
5. ROTTED WOOD MEMBERS
6. DIAGONAL CRACK ON FACE OF RETAINING WALL
7. HORIZONTAL DEFLECTION OF RETAINING WALL
8. POSTED ROTTED/SOFT @ BASE
9. VERTICAL CRACKS IN FOUNDATION WALL
10. MOLD GROWTH @ BASE OF WALL (APPROX. 3')
11. CEILING DETERIORATED & SEPARATED DUE TO WATER INFILTRATION

EXISTING FRAMING NOTES

1. EXISTING 1¾"x6" RAFTERS @ 24" o.c.
2. EXISTING 1½"x9" RAFTERS @ 16" o.c.
3. EXISTING 2x6 RAFTERS @ 24" o.c.
4. EXISTING RIDGEBOARD & RAFTERS – UNKNOWN SIZE
5. EXISTING 2x4 COLLARS @ 24" o.c.
6. EXISTING 2x4 STUDS @ 16" o.c. (BEARING WALL)
7. EXISTING 2x8 RAFTERS @ 16" o.c.
8. EXISTING 1½"x9" RIDGEBOARD
9. EXISTING 1¾"x5½" RAFTERS @ 16" o.c.
10. EXISTING 2x12 CEILING JOISTS @ 16" o.c.

LEGEND

- EXIST. LOAD–BEARING MASONRY
- EXIST. CONCRETE FOUNDATION
- EXIST. WOOD BEARING WALL
- EXIST. WOOD JOIST
- EXIST. WOOD RAFTER
- EXIST. WOOD BEAM
- EXIST. WOOD BRACE OR COLLAR
- INDICATES EXIST. WOOD POST THRU OR DOWN
- INDICATES EXIST. WOOD POST ABOVE
- EXIST. STEEL BEAM
- EXIST. STEEL COLUMN
- EXIST. T.C.

8' 0' 8' 16'

1/8" = 1'-0" SCALE OF FEET

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TECH. REVIEW: JD
DATE: 09/06/2012

SUB SHEET NO. **S106**

GARDENER'S COTTAGE

EXISTING STRUCTURAL CONDITIONS

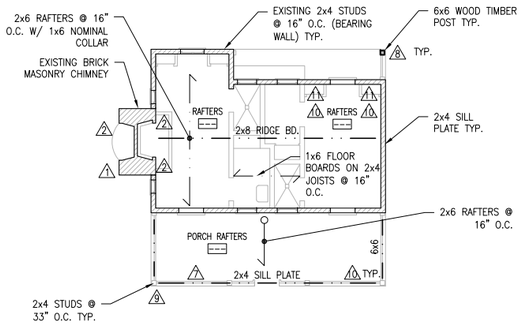
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PATTERSON CENTER EXISTING CONDITIONS ASSESSMENT
JEFFERSON PATTERSON PARK & MUSEUM

DRAWING NO. —

PMIS/PKG NO.

SHEET 6 OF 7

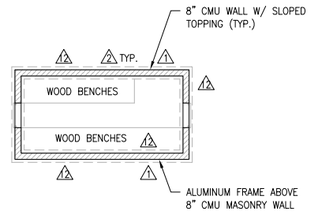
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NORTH

1 / S107 BEACH HOUSE – ROOF FRAMING ON FIRST FLOOR PLAN

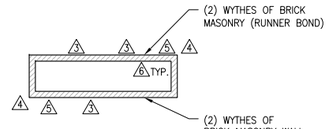
SCALE: 1/8" = 1'-0"



NORTH

2 / S107 GREENHOUSE – PLAN

SCALE: 1/8" = 1'-0"



NORTH

3 / S107 COLD FRAME – PLAN

SCALE: 1/8" = 1'-0"

EXISTING CONDITIONS NOTED

1. SPALLING MASONRY
2. OPEN MORTAR JOINTS
3. ¼"–¾" THROUGH–WALL CRACKS
4. LOOSE BRICK
5. LOSS OF MORTAR BETWEEN WYTHES
6. CORROSION OF EMBEDDED STEEL
7. PAVERS PRYED BY TREE ROOTS
8. POST SPLIT ALONG GRAIN @ BASE
9. POST HOLLOW @ BASE
10. DETERIORATED SILL DUE TO MOISTURE & ROT
11. SILL SPLIT LONGITUDINALLY & NOT PROPERLY SUPPORTED
12. MINOR CRACKING IN MASONRY

MAXIMUM PERMISSIBLE LIVE LOADS

RAFTERS
35 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF THE RAFTERS)

PORCH RAFTERS
47 PSF (GOVERNED BY TOTAL LOAD DEFLECTION OF THE RAFTERS)

LEGEND

- EXIST. LOAD–BEARING MASONRY
- EXIST. CONCRETE FOUNDATION
- EXIST. WOOD BEARING WALL
- EXIST. WOOD JOIST
- EXIST. WOOD RAFTER
- EXIST. WOOD BEAM
- EXIST. WOOD BRACE OR COLLAR
- INDICATES EXIST. WOOD POST THRU OR DOWN
- INDICATES EXIST. WOOD POST ABOVE
- EXIST. STEEL BEAM
- EXIST. STEEL COLUMN
- EXIST. T.C.

8' 0' 8' 16'

1/8" = 1'-0" SCALE OF FEET

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SUB SHEET NO. S107

BEACH HOUSE / COLD FRAME / GREEN HOUSE

EXISTING STRUCTURAL CONDITIONS

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PATTERSON CENTER EXISTING CONDITIONS ASSESMMENT
JEFFERSON PATTERSON PARK & MUSEUM

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PMIS/PKG NO.

SHEET 7 OF 7

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APPENDIX C



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APPENDIX C: SITE SURVEY

TOPOGRAPHIC SURVEY

1. PATTERSON CENTER

ARCHITECTURAL SURVEY

2. MAIN RESIDENCE AREA - LANDSCAPE FEATURES

3. GARDENER'S COTTAGE AREA,
& TRIANGLE GARDEN - TENNIS COURT -
LANDSCAPE FEATURES

4. BEACH HOUSE AREA - LANDSCAPE FEATURES

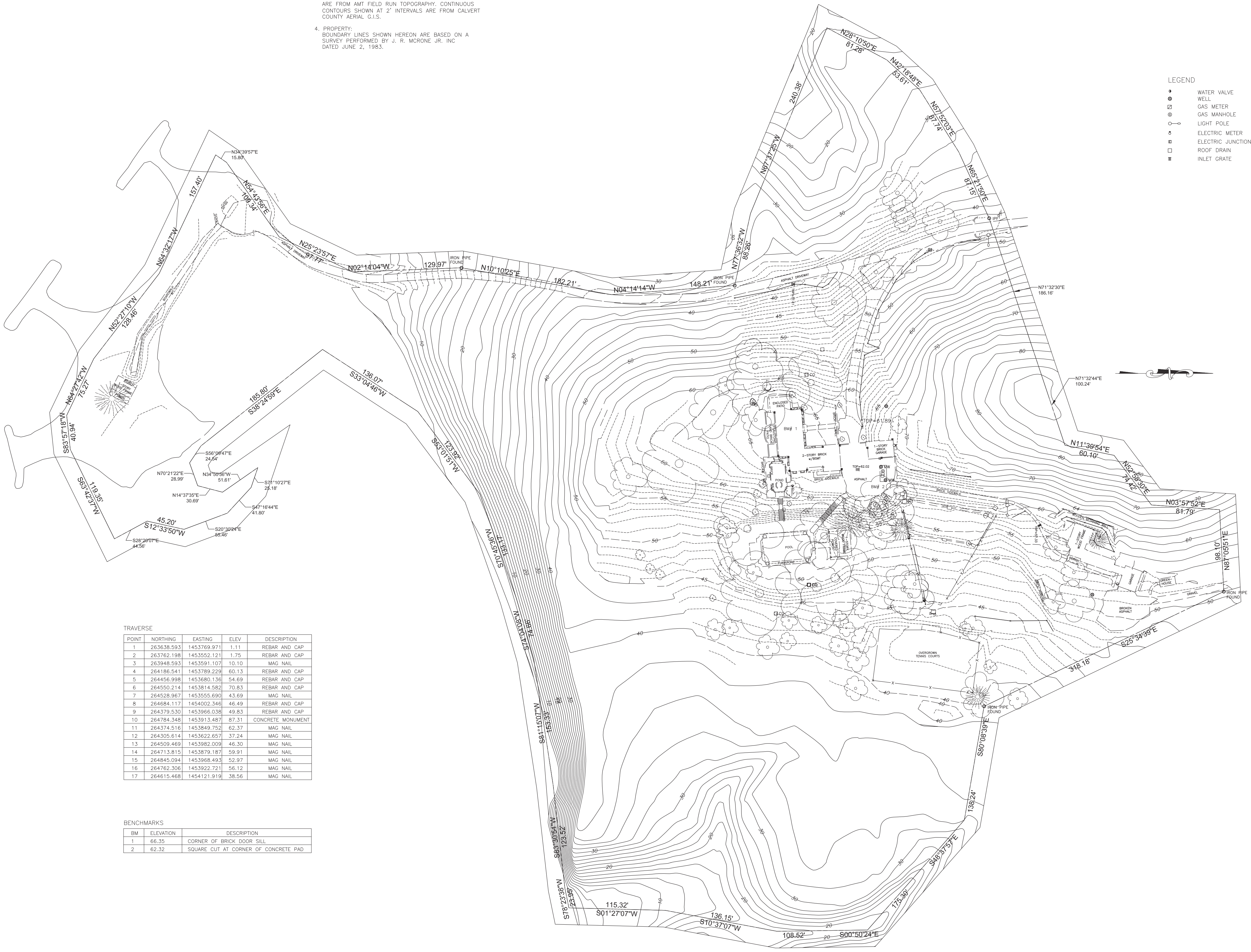
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SURVEY NOTES:

1. HORIZONTAL DATUM:
   MARYLAND STATE PLANE NAD 83/2007
   ESTABLISHED BY G.P.S. OBSERVATIONS.
2. VERTICAL DATUM:
   NAVD 1988 ESTABLISHED BY G.P.S. OBSERVATIONS.
3. CONTOURS:
   DASHED CONTOURS SHOWN AT 1 FOOT INTERVALS ARE FROM AMT FIELD RUN TOPOGRAPHY. CONTINUOUS CONTOURS SHOWN AT 2' INTERVALS ARE FROM CALVERT COUNTY AERIAL G.I.S.
4. PROPERTY:
   BOUNDARY LINES SHOWN HEREON ARE BASED ON A SURVEY PERFORMED BY J. R. MCRONE JR. INC DATED JUNE 2, 1983.

LEGEND

◑	WATER VALVE
⊗	WELL
◪	GAS METER
◎	GAS MANHOLE
○—○	LIGHT POLE
○	ELECTRIC METER
▣	ELECTRIC JUNCTION BOX
□	ROOF DRAIN
▥	INLET GRATE



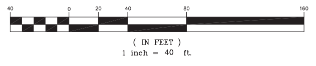
TRAVERSE

POINT	NORTHING	EASTING	ELEV	DESCRIPTION
1	263638.593	1453769.971	1.11	REBAR AND CAP
2	263762.198	1453552.121	1.75	REBAR AND CAP
3	263948.593	1453591.107	10.10	MAG NAIL
4	264186.541	1453789.229	60.13	REBAR AND CAP
5	264456.998	1453680.136	54.69	REBAR AND CAP
6	264550.214	1453814.582	70.83	REBAR AND CAP
7	264528.967	1453555.690	43.69	MAG NAIL
8	264684.117	1454002.346	46.49	REBAR AND CAP
9	264379.530	1453966.038	49.83	REBAR AND CAP
10	264784.348	1453913.487	87.31	CONCRETE MONUMENT
11	264374.516	1453849.752	62.37	MAG NAIL
12	264305.614	1453622.657	37.24	MAG NAIL
13	264509.469	1453982.009	46.30	MAG NAIL
14	264713.815	1453879.187	59.91	MAG NAIL
15	264845.094	1453968.493	52.97	MAG NAIL
16	264762.306	1453922.721	56.12	MAG NAIL
17	264615.468	1454121.919	38.56	MAG NAIL

BENCHMARKS

BM	ELEVATION	DESCRIPTION
1	66.35	CORNER OF BRICK DOOR SILL
2	62.32	SQUARE CUT AT CORNER OF CONCRETE PAD

GRAPHIC SCALE



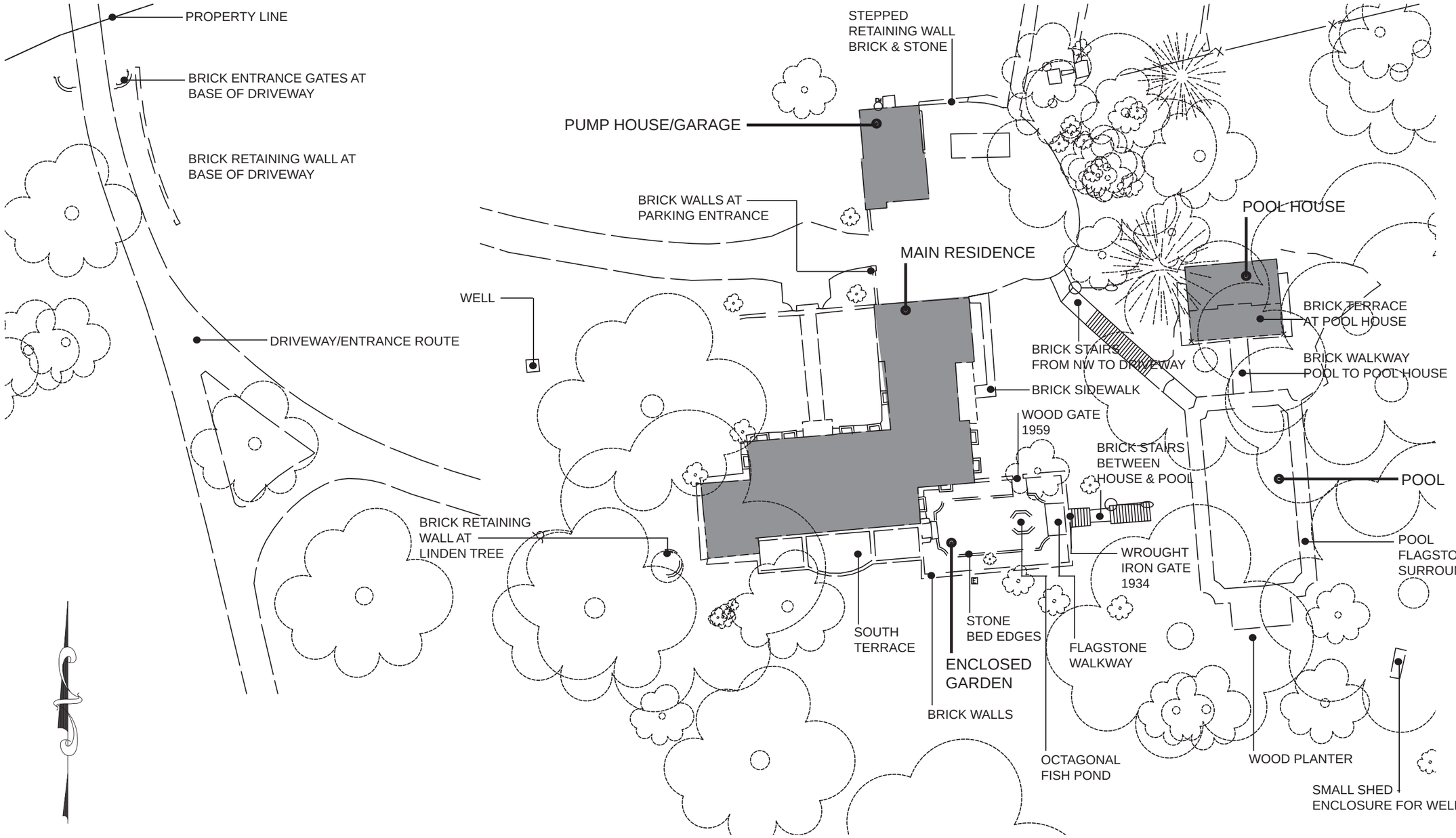
(IN FEET)
1 inch = 40 ft.

AMT
A. Morton Thomas and Associates, Inc.
Consulting Engineers
12750 Twinbrook Parkway Rockville, MD 20852
(301) 881-2545 Fax:(301) 881-0814
Email: amteng@inter.net

RES.	N/A				
SURV.	SB				
COMP.	JV				
DES.	N/A				
DRN.	JV				
CHK.	AMT	DATE	REVISION	BY	APP'R.

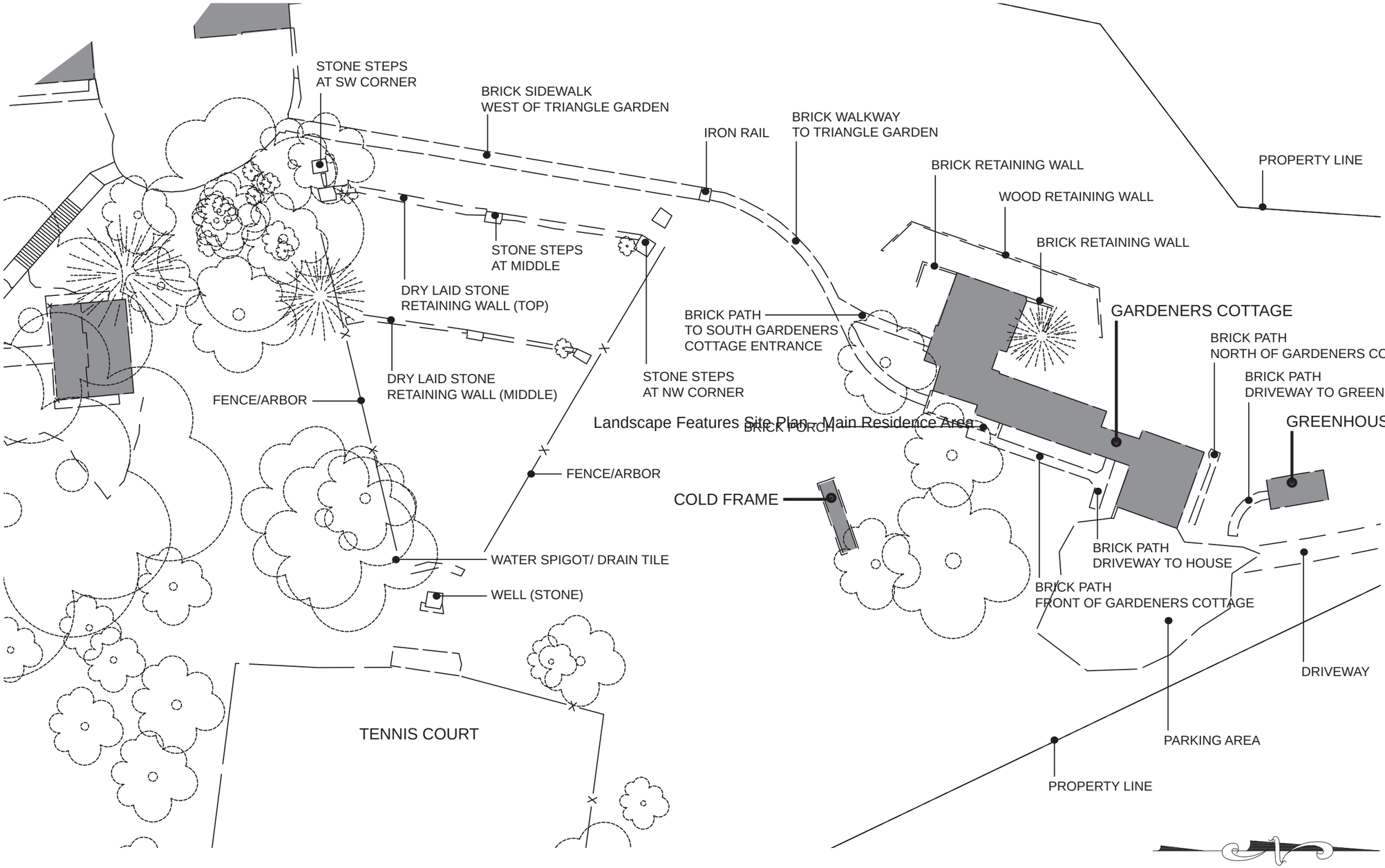
TOPOGRAPHIC SURVEY	SCALE 1 in. =40 ft.	CONTOUR INTERVAL SEE NOTES	A.M.T. FILE No. 112-122.001
PATTERSON CENTER JEFFERSON PATTERSON PARK AND MUSEUM St. LEONARD, MARYLAND CALVERT COUNTY, MARYLAND	DATE JUNE, 2012	TAX MAP No. N/A	SHEET 1

Landscape Features Site Plan - Main Residence Area



NOT TO SCALE

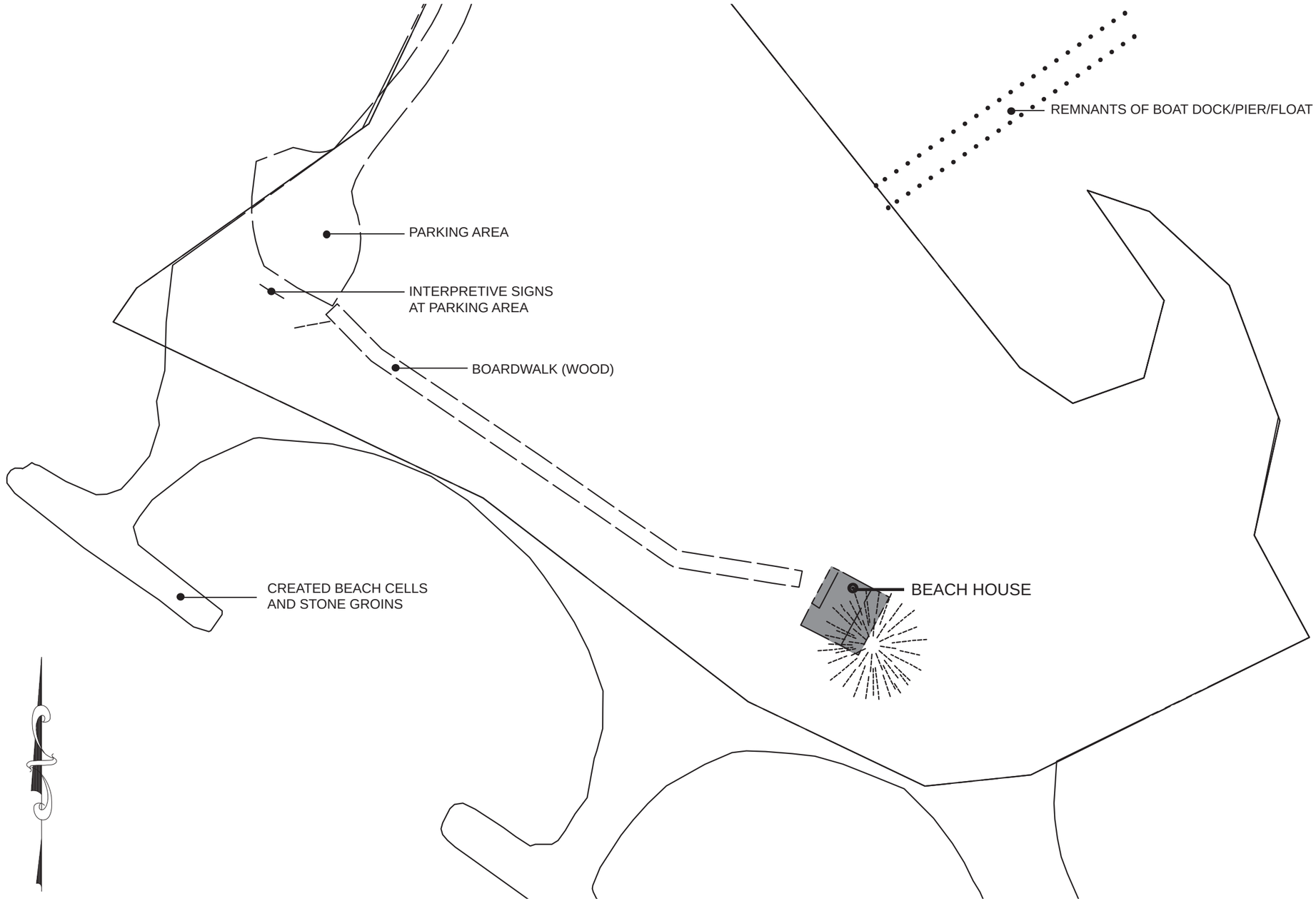
Landscape Features Site Plan - Gardeners Cottage, Triangle Garden and Tennis Courts Areas



Landscape Features Site Plan - Main Residence Area

NOT TO SCALE

Landscape Features Site Plan - Beach House Landscape Area



NOT TO SCALE

APPENDIX D



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APPENDIX D: ARCHITECTURAL EXISTING FLOOR PLAN DRAWINGS

MAIN RESIDENCE

A 1.0 MAIN RESIDENCE BASEMENT FLOOR PLAN
A 1.1 MAIN RESIDENCE FIRST FLOOR PLAN
A 1.2 MAIN RESIDENCE SECOND FLOOR PLAN
A 1.3 MAIN RESIDENCE ATTIC FLOOR PLAN
A 1.4 MAIN RESIDENCE ROOF PLAN

PUMP HOUSE/GARAGE

A 1.5 PUMP HOUSE/GARAGE FLOOR PLANS, ROOF PLAN

GARDENER'S COTTAGE, GREENHOUSE AND COLD FRAME

A 1.6 GARDENER'S COTTAGE FLOOR PLAN
A 1.7 GARDENER'S COTTAGE ROOF PLAN

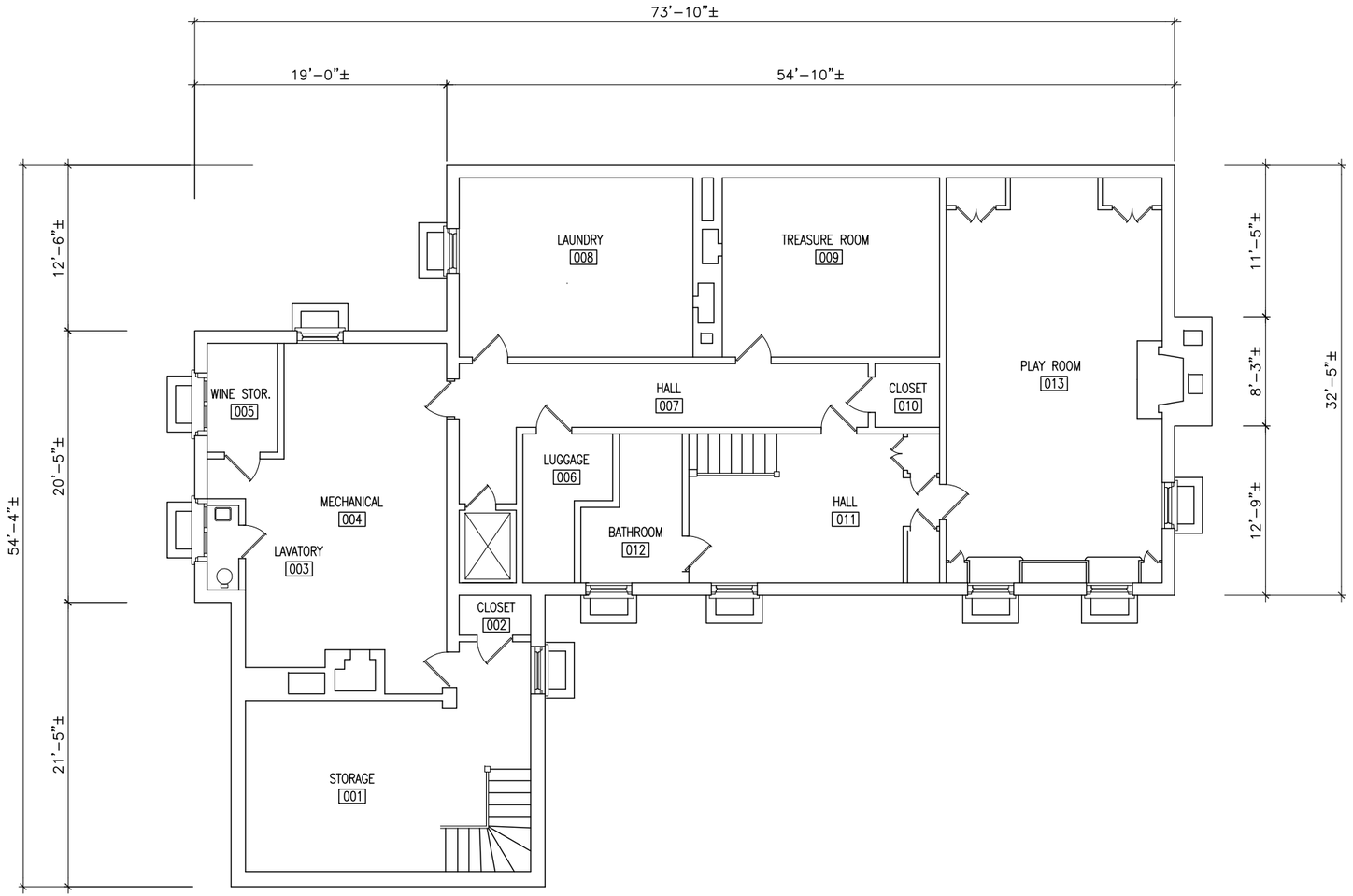
POOL HOUSE AND POOL

A 1.8 POOL HOUSE AND POOL FLOOR PLAN AND ROOF PLAN

BEACH HOUSE

A 1.9 BEACH HOUSE FLOOR PLAN AND ROOF PLAN

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1 / A1.0 MAIN RESIDENCE – BASEMENT FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

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PATTERSON CENTER

CONDITION ASSESSMENT & TREATMENT PLAN

10515 MACKALL ROAD
ST. LEONARD, MD

EXISTING FLOOR PLANS

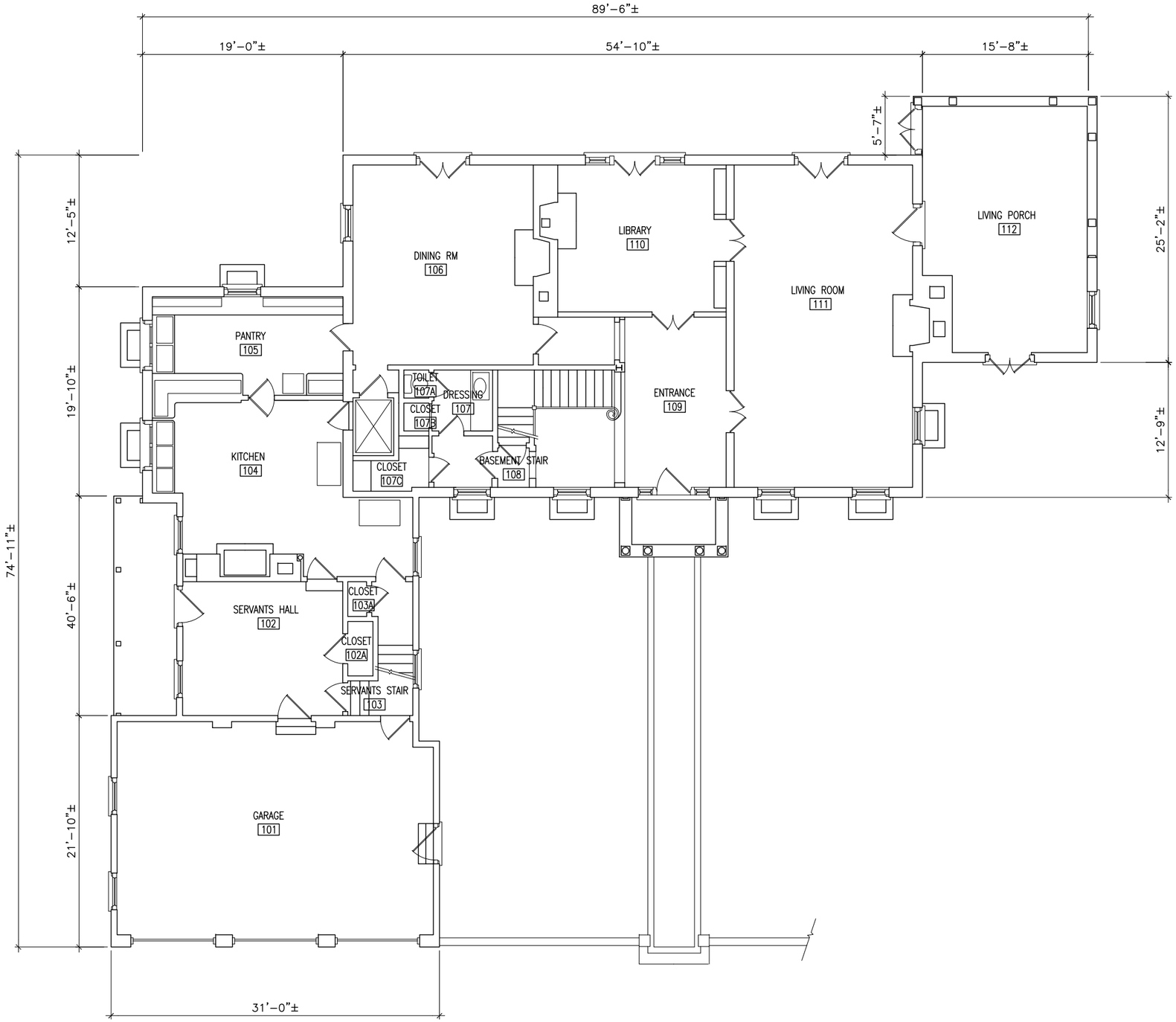
MAIN RESIDENCE

BASEMENT

NO.	TITLE	DATE

FILE NAME:

A1.0



1 / A1.1 MAIN RESIDENCE – FIRST FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

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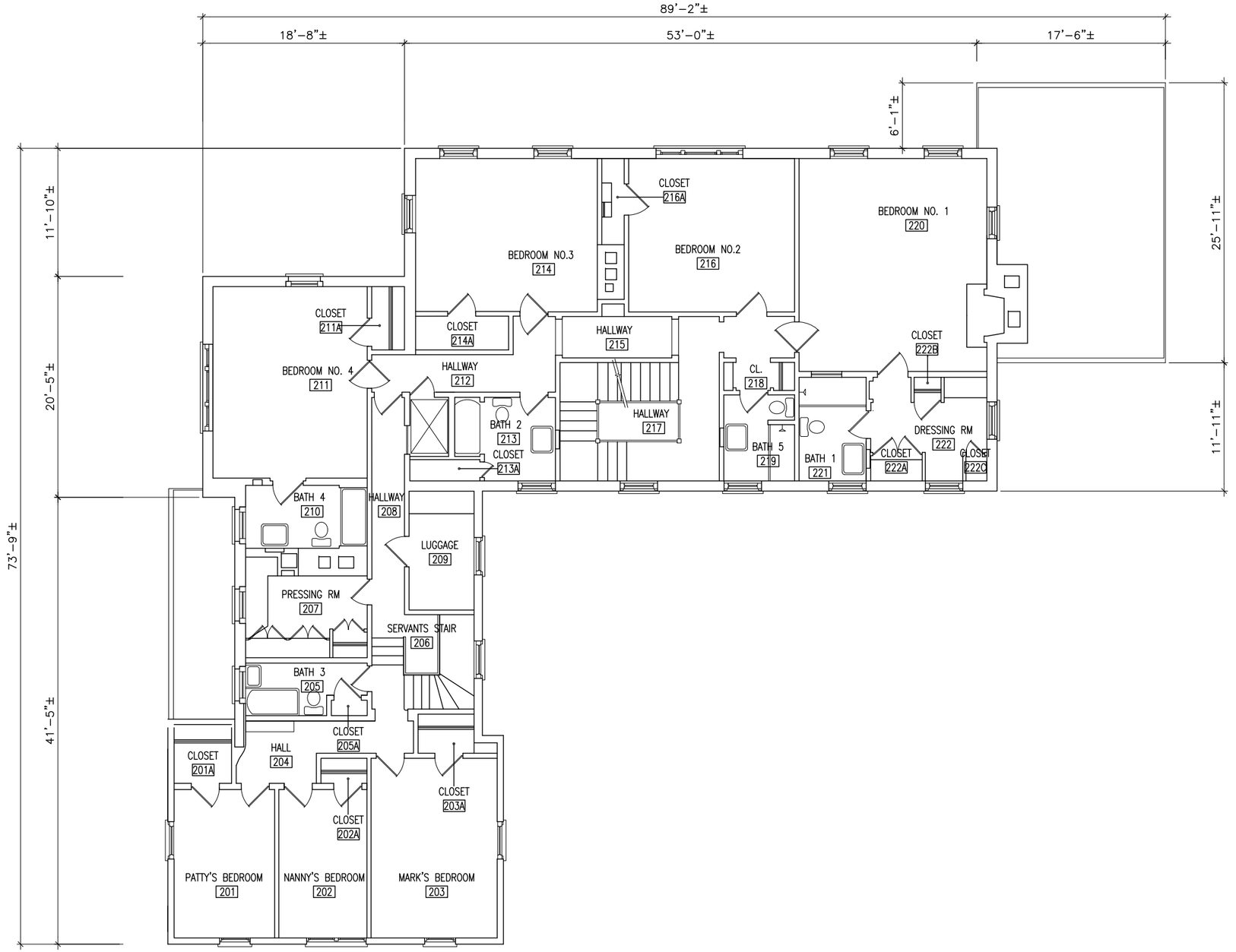
MAIN RESIDENCE

FIRST FLOOR

NO.	TITLE	DATE

FILE NAME:

A1.1



1 A1.2 MAIN RESIDENCE – SECOND FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

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EXISTING FLOOR PLANS

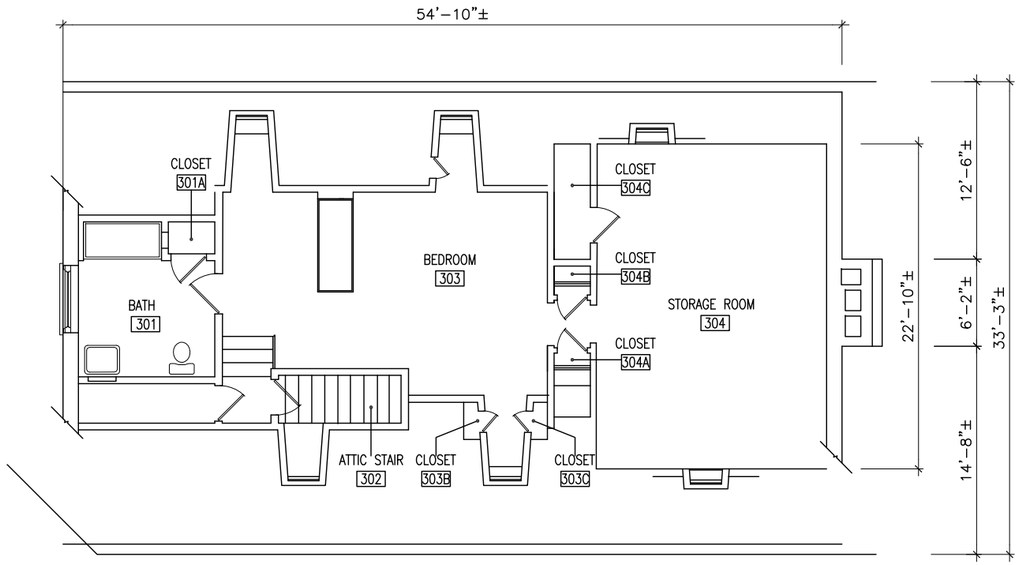
MAIN RESIDENCE

SECOND FLOOR

NO.	TITLE	DATE

FILE NAME:

A1.2



1 / A1.3 MAIN RESIDENCE – ATTIC FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

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EXISTING FLOOR PLANS

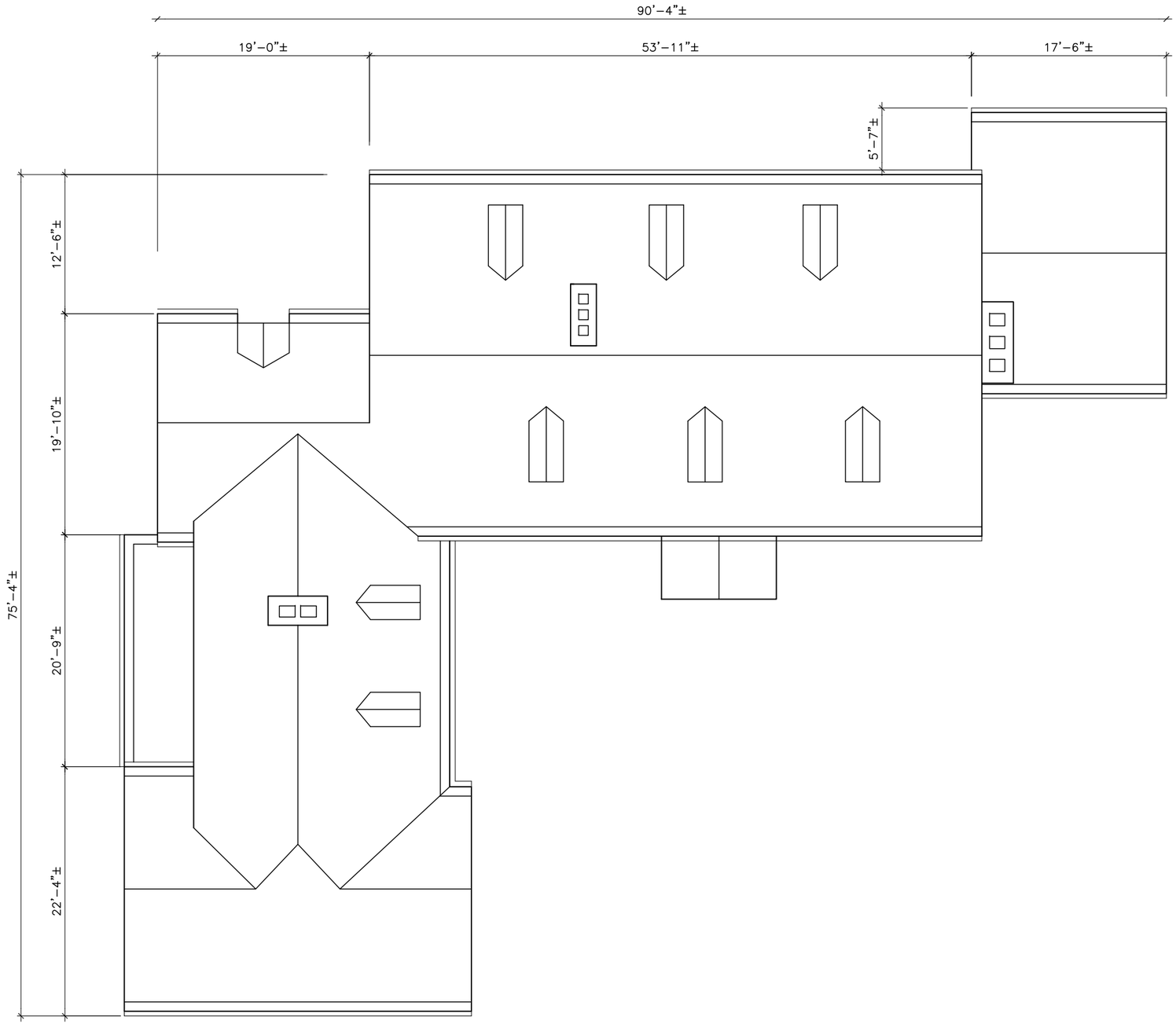
MAIN RESIDENCE

ATTIC

NO.	TITLE	DATE

FILE NAME:

A1.3



1 A1.4 MAIN RESIDENCE – ROOF PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

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EXISTING FLOOR PLANS

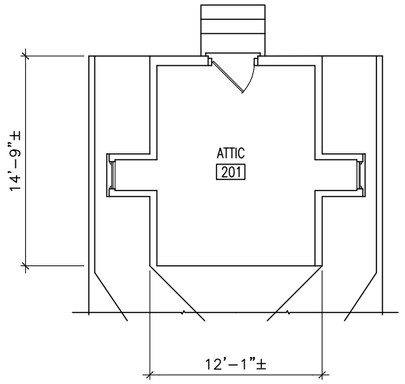
MAIN RESIDENCE

ROOF PLAN

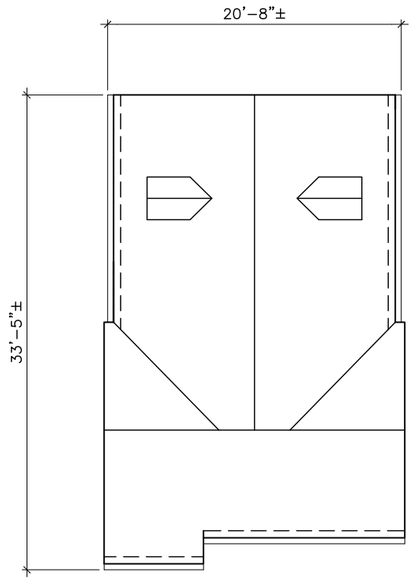
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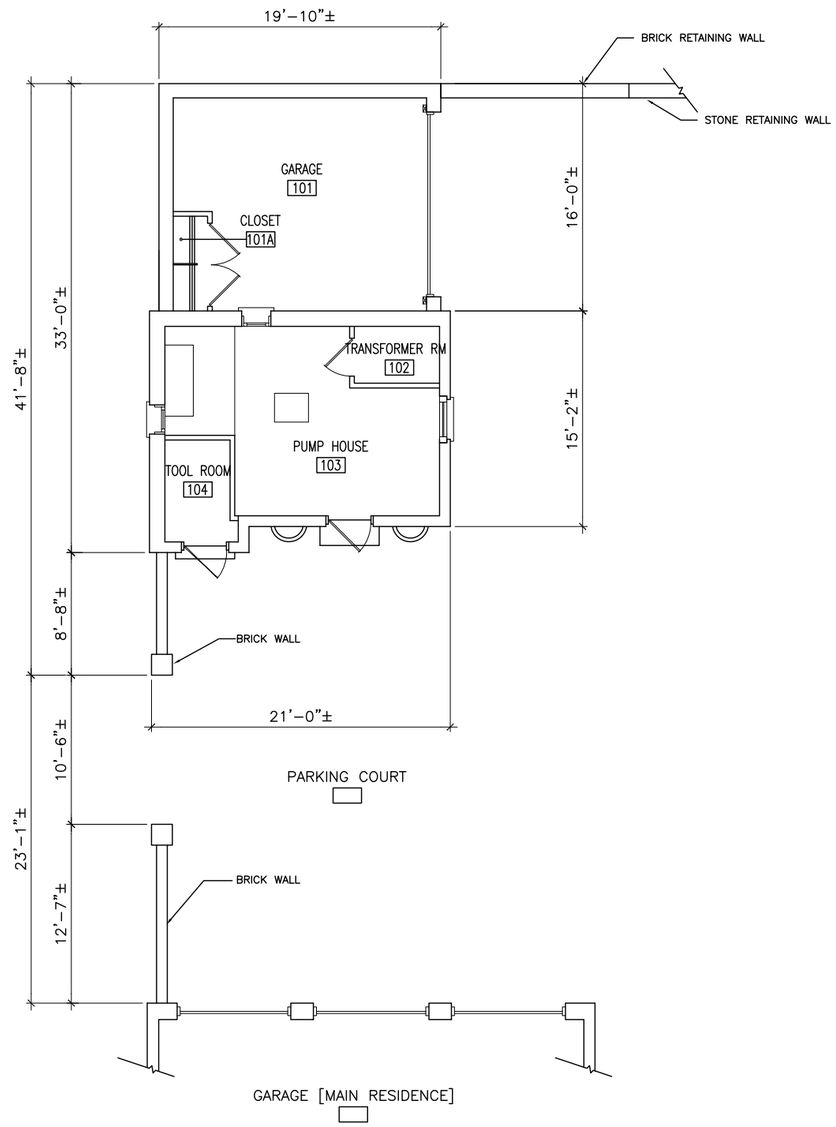
A1.4



2 A1.5 PUMP HOUSE/GARAGE – ATTIC FLOOR PLAN
SCALE: 3/32"=1'-0"



3 A1.5 PUMP HOUSE/GARAGE – ROOF PLAN
SCALE: 3/32"=1'-0"



1 A1.5 PUMP HOUSE/GARAGE – FIRST FLOOR PLAN
SCALE: 3/32"=1'-0"

16 8 0 8 16
3/32"=1'-0" SCALE OF INCHES

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EXISTING FLOOR PLANS

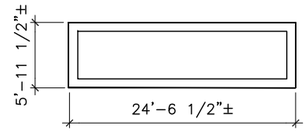
PUMP HOUSE /GARAGE

FIRST, SECOND & ROOF PLANS

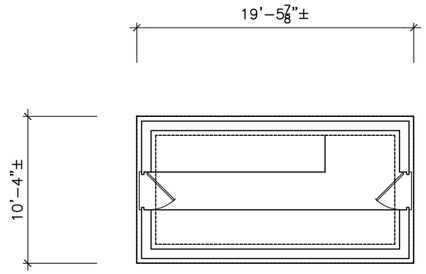
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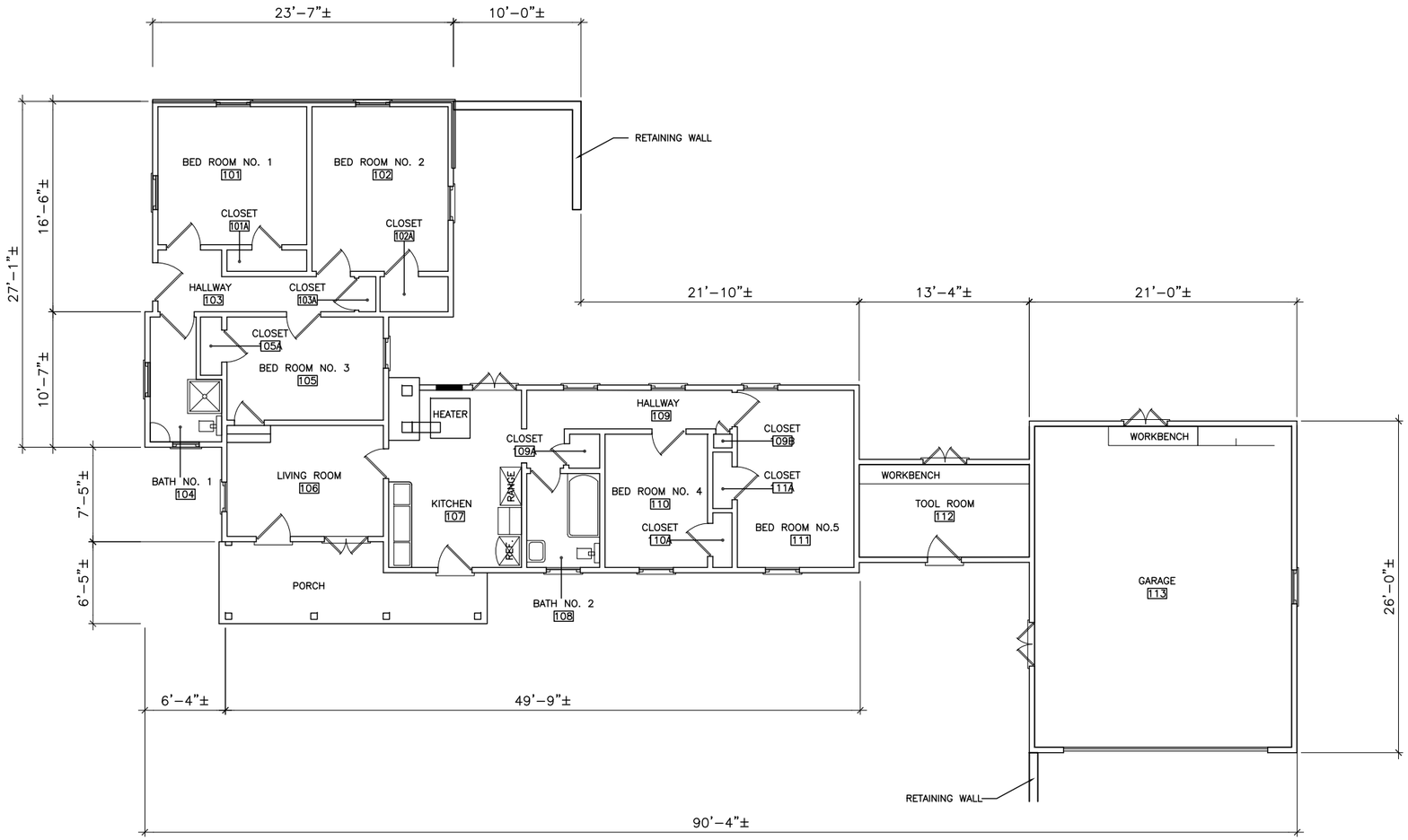
A1.5



2 A2.6 COLD FRAME – PLAN
SCALE: 3/32"=1'-0"



3 A2.6 GREENHOUSE – PLAN
SCALE: 3/32"=1'-0"



1 A2.6 GARDENERS' COTTAGE – FIRST FLOOR PLAN
SCALE: 3/32"=1'-0"

1/8"=1'-0" SCALE OF FEET

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EXISTING FLOOR PLANS

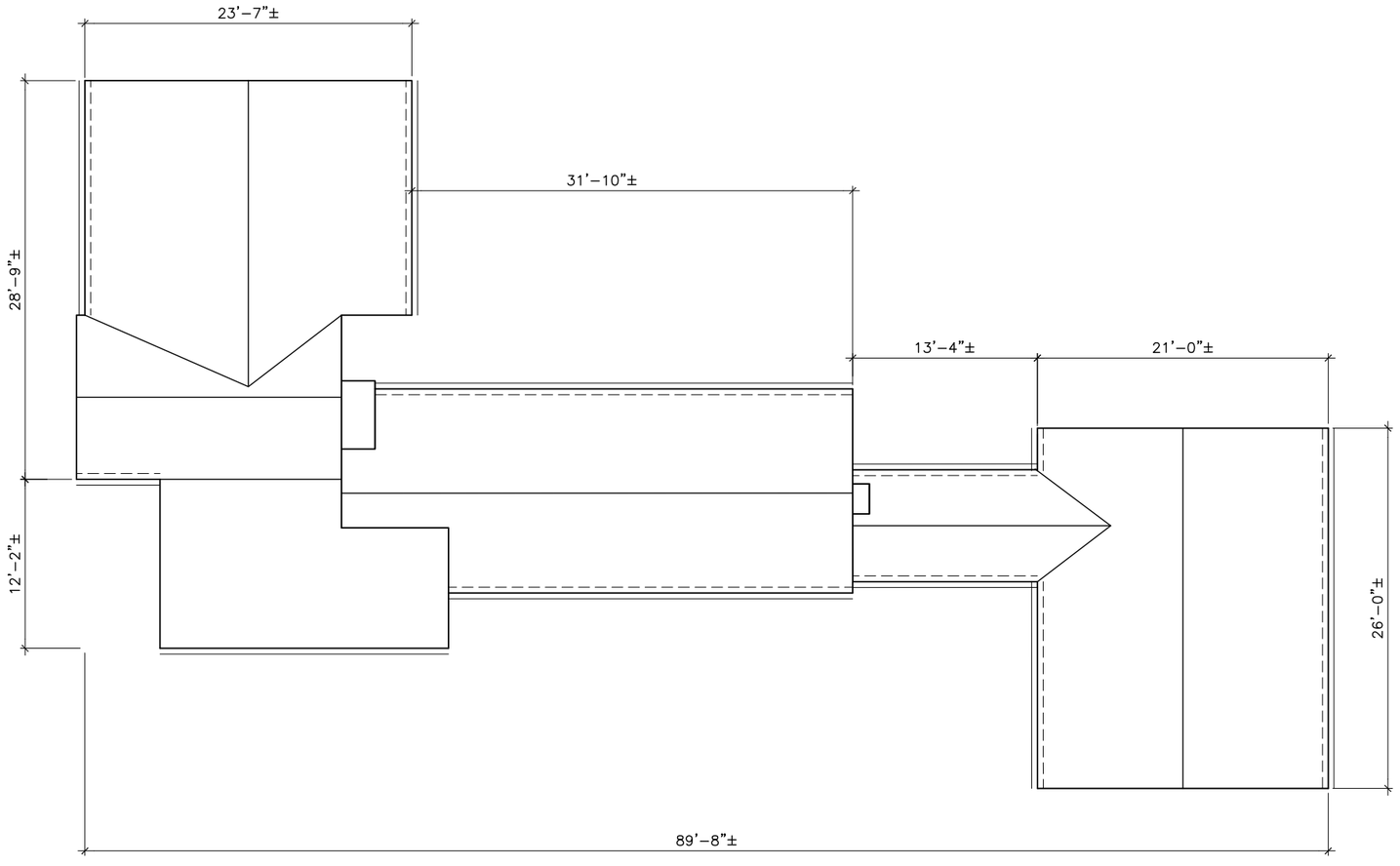
GARDENERS COTTAGE, GREENHOUSE, COLD FRAME

FIRST FLOOR

NO.	TITLE	DATE

FILE NAME:

A1.6



1 / A2.7 GARDENERS' COTTAGE – ROOF PLAN
SCALE: 3/32"=1'–0"

1/8"=1'–0" SCALE OF FEET

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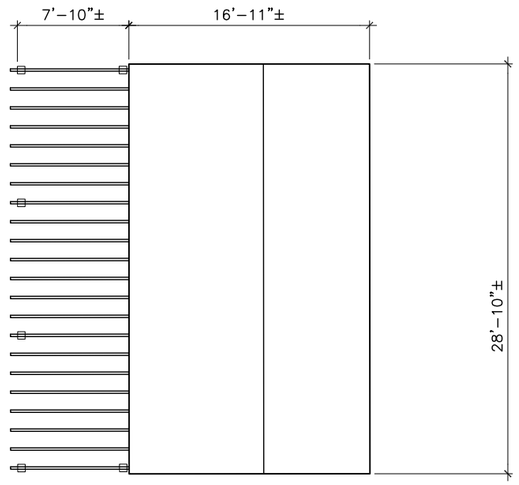
GARDENERS COTTAGE

ROOF PLAN

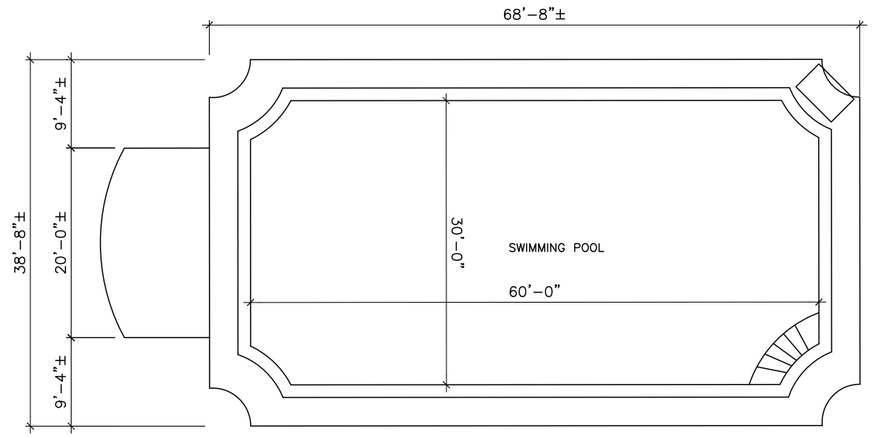
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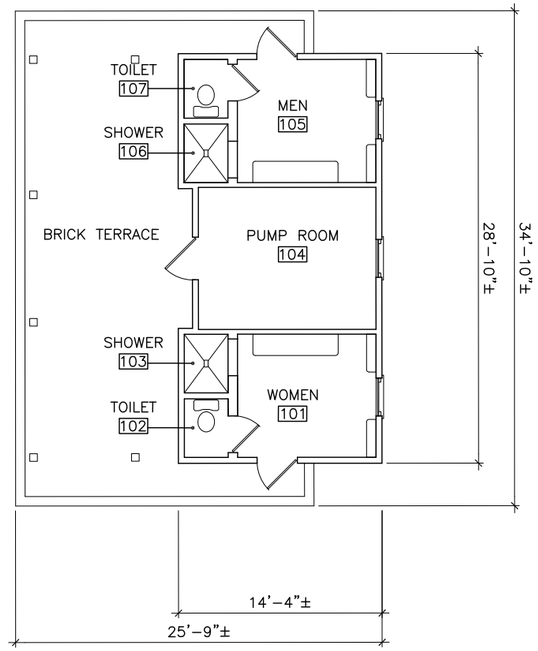
A1.7



3 A1.8 POOL HOUSE – ROOF PLAN
SCALE: 3/32"=1'–0"



1 A1.8 SWIMMING POOL – PLAN
SCALE: 1/16"=1'–0"



2 A1.8 POOL HOUSE – FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

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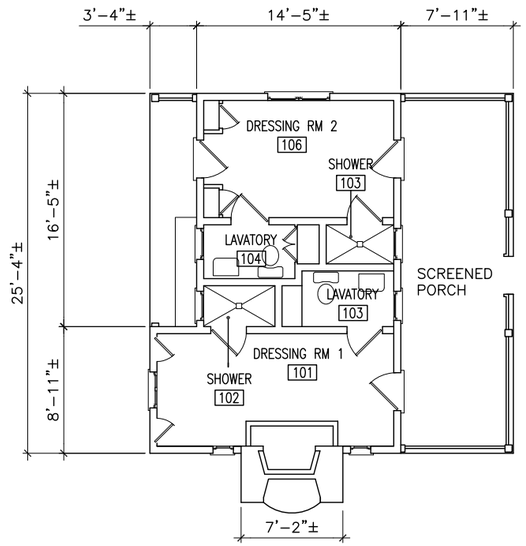
POOL HOUSE & POOL

FIRST FLOOR & ROOF PLAN

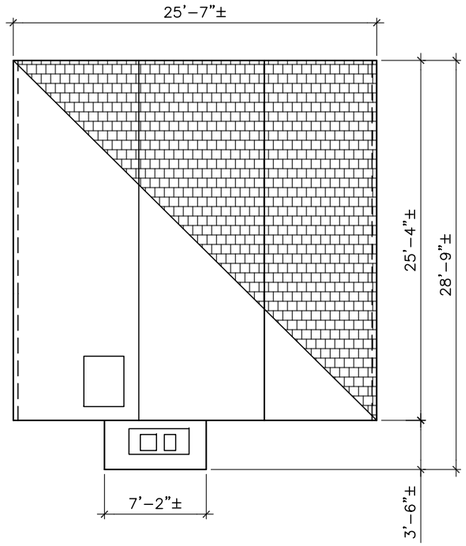
NO.	TITLE	DATE

FILE NAME:

A1.8



2 A1.9 BEACH HOUSE – ROOF PLAN
SCALE: 3/32"=1'–0"



1 A1.9 BEACH HOUSE – FIRST FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

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EXISTING FLOOR PLANS

BEACH HOUSE

FIRST FLOOR & ROOF PLAN

NO.	TITLE	DATE

FILE NAME:

A1.9

APPENDIX E



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APPENDIX E: ARCHITECTURAL EXISTING FLOOR PLAN DRAWINGS WITH ASSESSMENT FINDINGS

MAIN RESIDENCE

A 2.0 MAIN RESIDENCE BASEMENT FLOOR PLAN
A 2.1 MAIN RESIDENCE FIRST FLOOR PLAN
A 2.2 MAIN RESIDENCE SECOND FLOOR PLAN
A 2.3 MAIN RESIDENCE ATTIC FLOOR PLAN
A 2.4 MAIN RESIDENCE ROOF PLAN

PUMP HOUSE/GARAGE

A 2.5 PUMP HOUSE/GARAGE FLOOR PLANS AND ROOF PLAN

GARDENER'S COTTAGE, GREENHOUSE AND COLD FRAME

A 2.6 GARDENER'S COTTAGE, GREENHOUSE AND COLD FRAME FLOOR PLANS
A 2.7 GARDENER'S COTTAGE ROOF PLAN

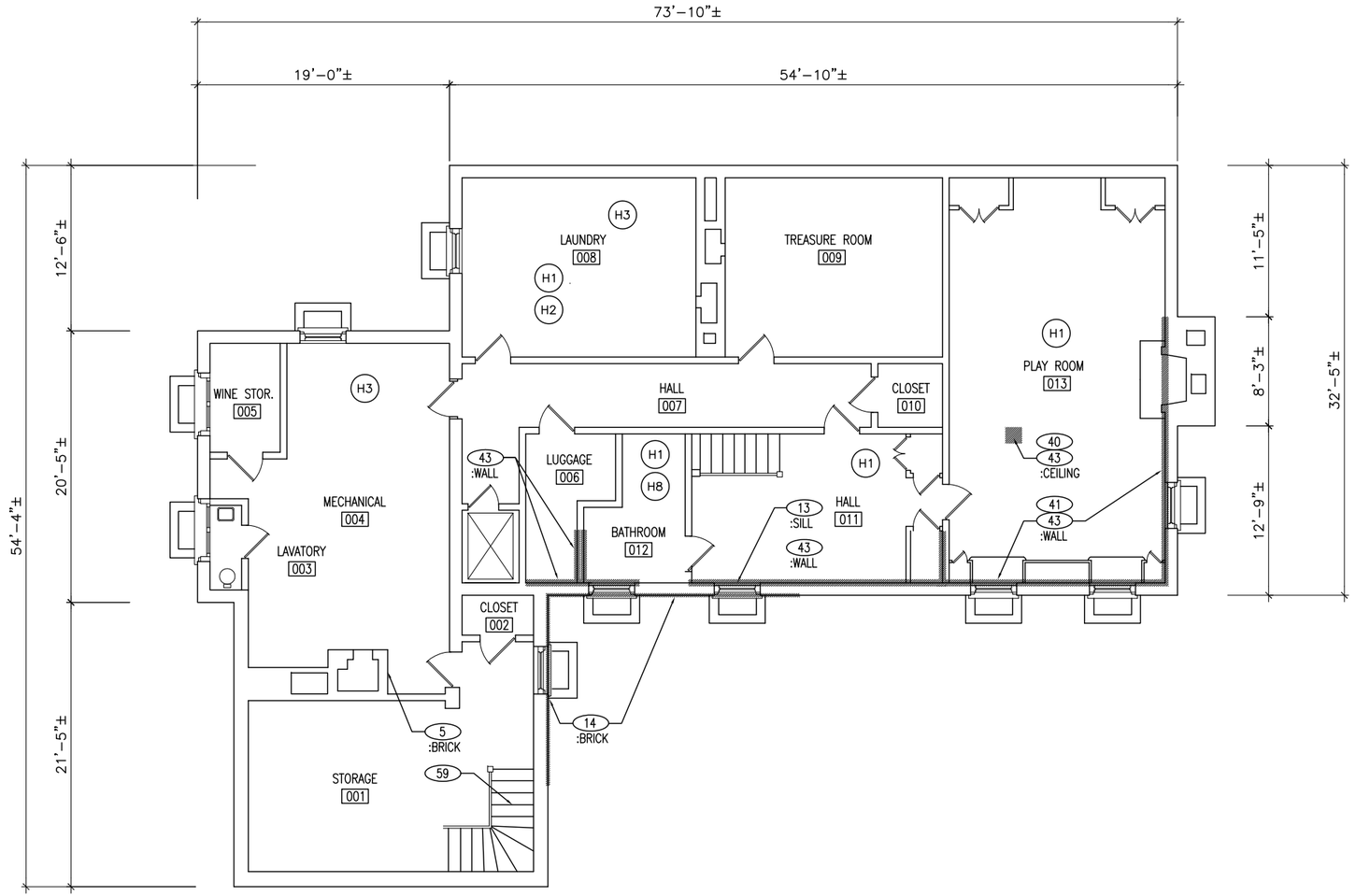
POOL HOUSE AND POOL

A 2.8 POOL HOUSE AND POOL FLOOR PLAN AND ROOF PLAN

BEACH HOUSE

A 2.9 BEACH HOUSE FLOOR PLAN AND ROOF PLAN

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1 / A2.0 MAIN RESIDENCE – BASEMENT FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

- 5 STEP CRACKING.
- 13 DETERIORATED WOOD.
- 14 BIOLOGICAL/ALGAE GROWTH.
- 40 TEARING OF OUTERMOST LAYER OF ACT CEIING TILE.
- 43 WATER DAMAGE.
- 59 WORN STAIR TREADS. MISSING PROTECTIVE RESILIENT TREAD COVERINGS.

HAZARDOUS MATERIALS

(PER PAGE REPORT, 2012)

- H1 ACM - FLOOR TILE
- H2 ACM - MASTIC
- H3 ACM - PLASTER - CEILING
- H8 BIOLOGICAL HAZARD - MOLD - WALL

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM	ASBESTOS CONTAINING MATERIAL
UNO	UNLESS NOTED OTHERWISE
ETR	EXISTING TO REMAIN

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ASSESSMENT FINDINGS

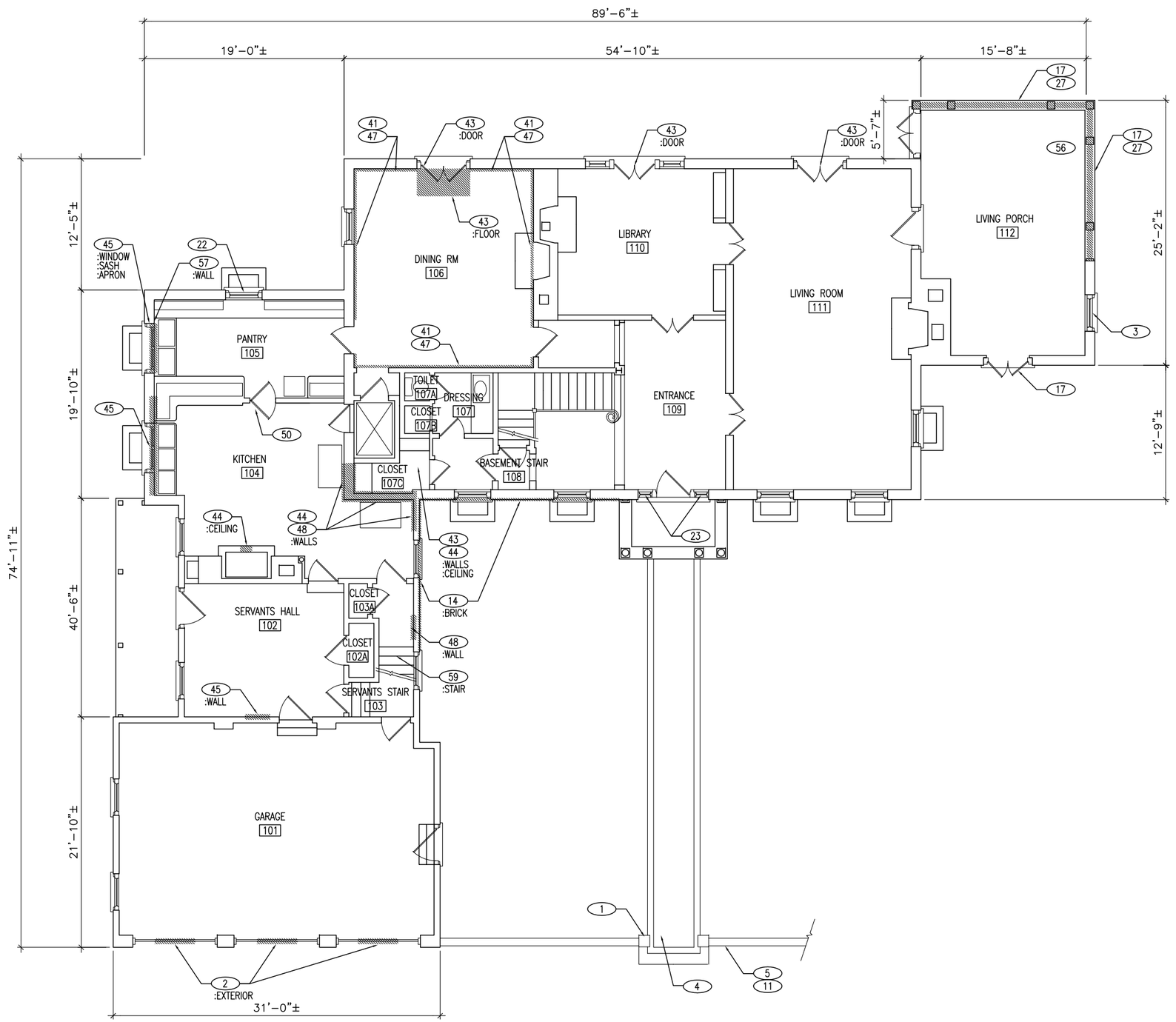
MAIN RESIDENCE

BASEMENT

NO.	TITLE	DATE

FILE NAME:

A2.0



1 / A2.1 MAIN RESIDENCE – FIRST FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

1. CHIPPED MASONRY (BRICK).
2. CRACKS AT MORTAR JOINTS.
3. ISOLATED OPEN JOINTS (BRICK).
4. LOOSE/MISSING MORTAR.
5. STEP CRACKING.
11. OUT OF PLANE MASONRY (BRICK).
14. BIOLOGICAL/ALGAE GROWTH.
17. DAMAGED WOOD SCREEN PANEL(S).
22. CRACKED/MISSING GLAZING.
23. MISSING ORNAMENT. LEAD GLASS SIDELIGHT.
27. DAMAGED MLLWORK.
41. WATER STAINING.
43. WATER DAMAGE.
44. PLASTER DAMAGE.
45. PAINT FAILURE.
47. DAMAGED WALL PAPER. DINING ROOM.
48. BLISTERING PAINT.
50. DAMAGED LINOLEUM FLOOR.
56. BROKEN/MISSING STONE PAVERS.
57. CRACK(S) IN PLASTER.
59. WORN STAIR TREADS. MISSING PROTECTIVE RESILIENT TREAD COVERINGS.

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM	ASBESTOS CONTAINING MATERIAL
UNO	UNLESS NOTED OTHERWISE
ETR	EXISTING TO REMAIN

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ASSESSMENT FINDINGS

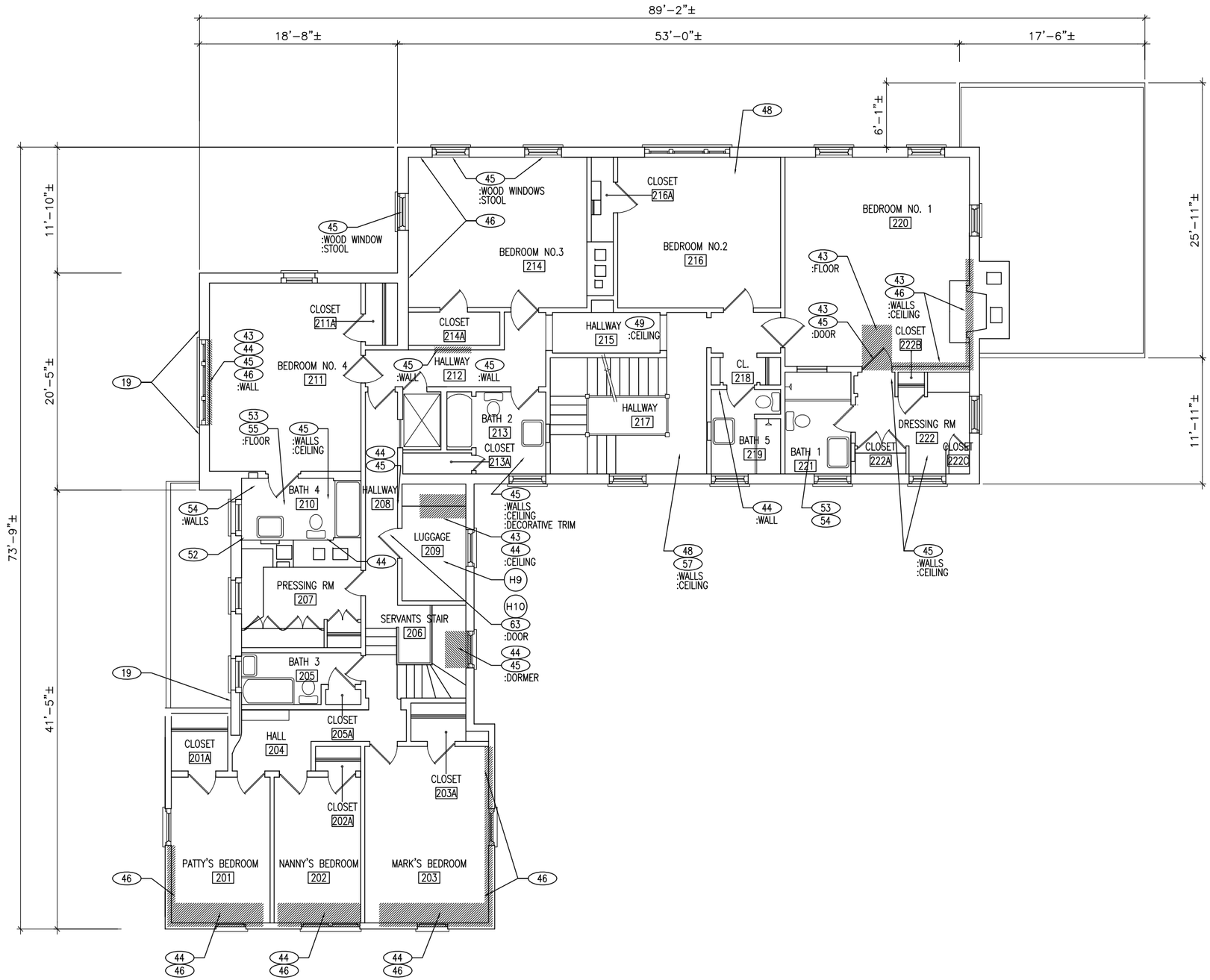
MAIN RESIDENCE

FIRST FLOOR

NO.	TITLE	DATE

FILE NAME:

A2.1



1 A2.2 MAIN RESIDENCE – SECOND FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

- 19 MISSING SHUTTER(S).
- 43 WATER DAMAGE.
- 44 PLASTER DAMAGE.
- 45 PAINT FAILURE.
- 46 DELAMINATED WALLPAPER.
- 49 PAINT CRAZING.
- 52 MISSING GROUT.
- 53 CHIPPED/CRACKED CERAMIC TILE(S).
- 54 CERAMIC TILE CRAZING.
- 63 MOLD GROWTH.

HAZARDOUS MATERIALS

(PER PAGE REPORT, 2012)

- H9 BIOLOGICAL HAZARD - MOLD - CEILING
- H10 BIOLOGICAL HAZARD - MOLD - DOOR

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM	ASBESTOS CONTAINING MATERIAL
UNO	UNLESS NOTED OTHERWISE
ETR	EXISTING TO REMAIN

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ASSESSMENT FINDINGS

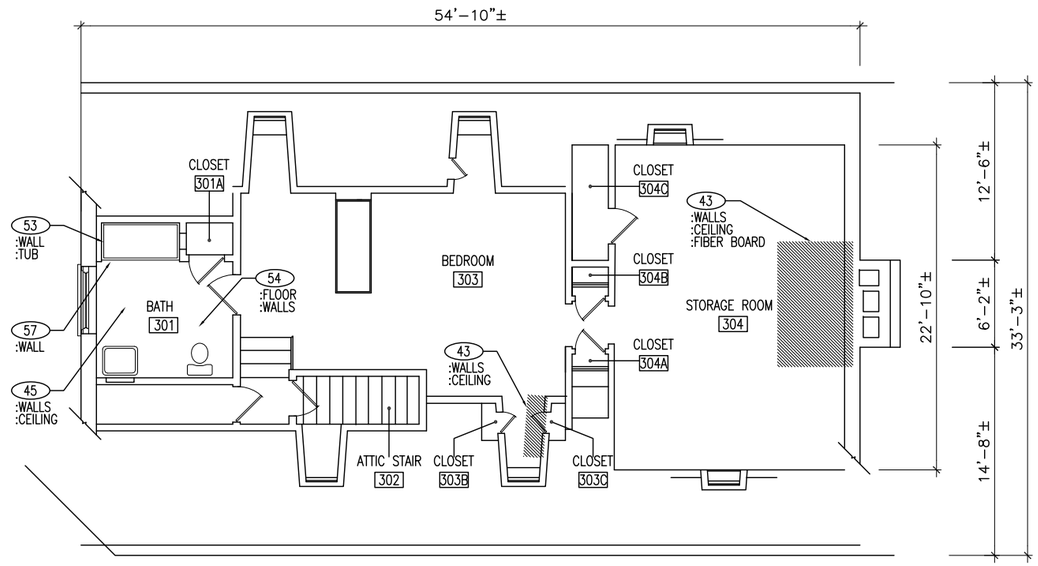
MAIN RESIDENCE

SECOND FLOOR

NO.	TITLE	DATE

FILE NAME:

A2.2



1 / A2.3 MAIN RESIDENCE – ATTIC FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

(43) WATER DAMAGE.
(45) PAINT FAILURE.
(53) CHIPPED/CRACKED CERAMIC TILE(S).
(54) CERAMIC TILE CRAZING.
(57) CRACK(S) IN PLASTER.

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM	ASBESTOS CONTAINING MATERIAL
UNO	UNLESS NOTED OTHERWISE
ETR	EXISTING TO REMAIN

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ASSESSMENT FINDINGS

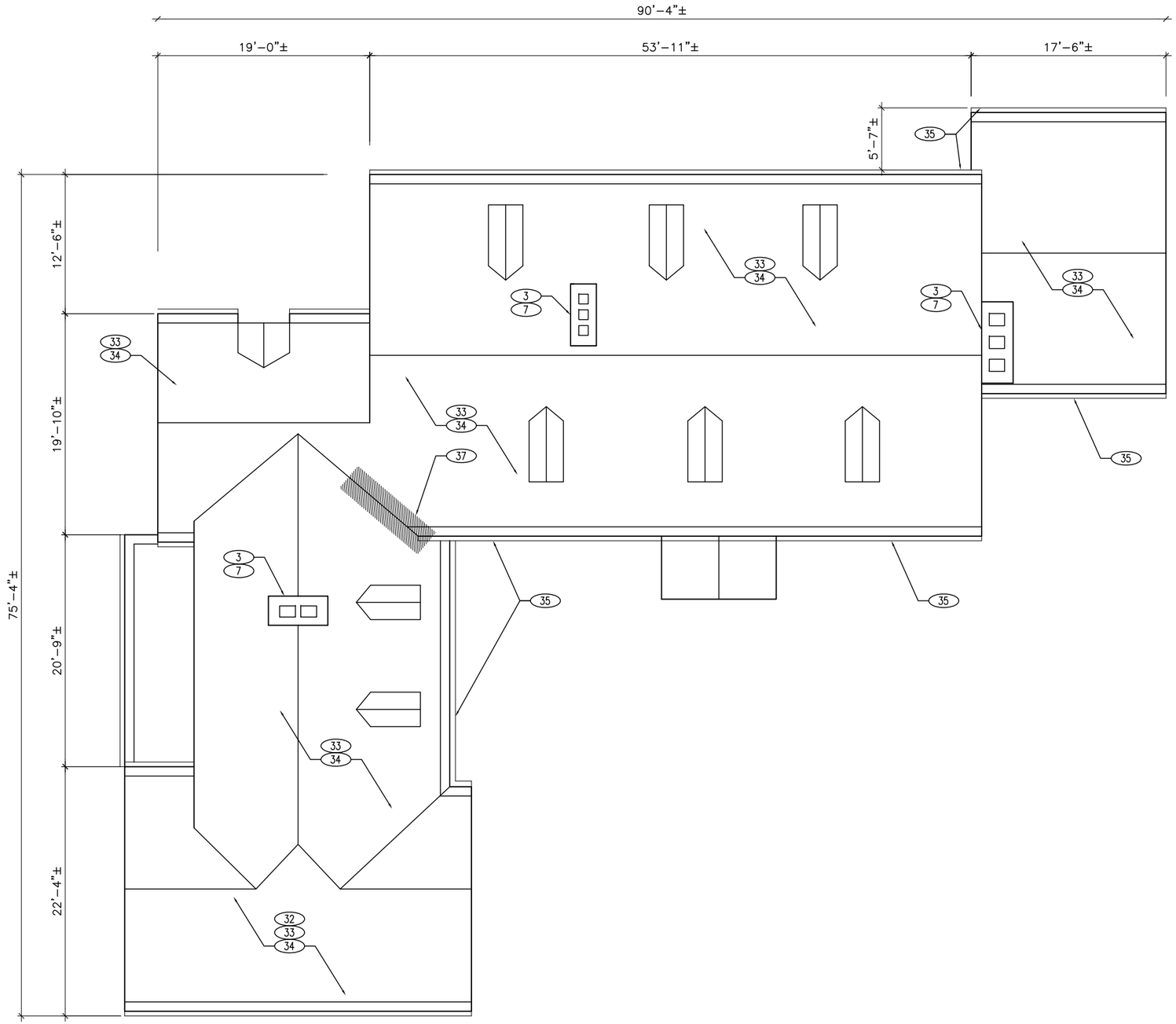
MAIN RESIDENCE

ATTIC

NO.	TITLE	DATE

FILE NAME:

A2.3



1 A2.4 MAIN RESIDENCE – ROOF PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

- (3) ISOLATED OPEN JOINTS (BRICK).
- (7) SPALLING BRICK/ LOOSE MORTAR.
- (32) BROKEN SLATE ROOF TILES.
- (33) BENT CONDUCTORS AT LIGHTNING PROTECTION.
- (34) BENT SNOW GUARDS.
- (35) BENT/DAMAGED GUTTER(S).
- (37) FLASHING IN POOR CONDITION.

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM	ASBESTOS CONTAINING MATERIAL
UNO	UNLESS NOTED OTHERWISE
ETR	EXISTING TO REMAIN

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ASSESSMENT FINDINGS

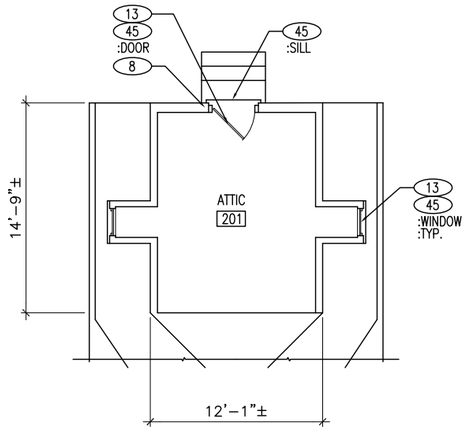
MAIN RESIDENCE

ROOF PLAN

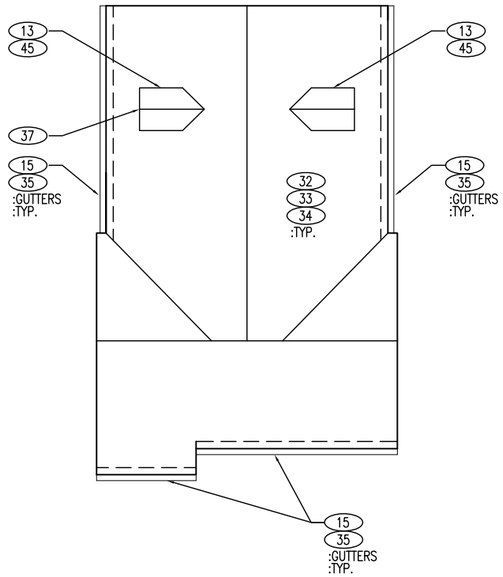
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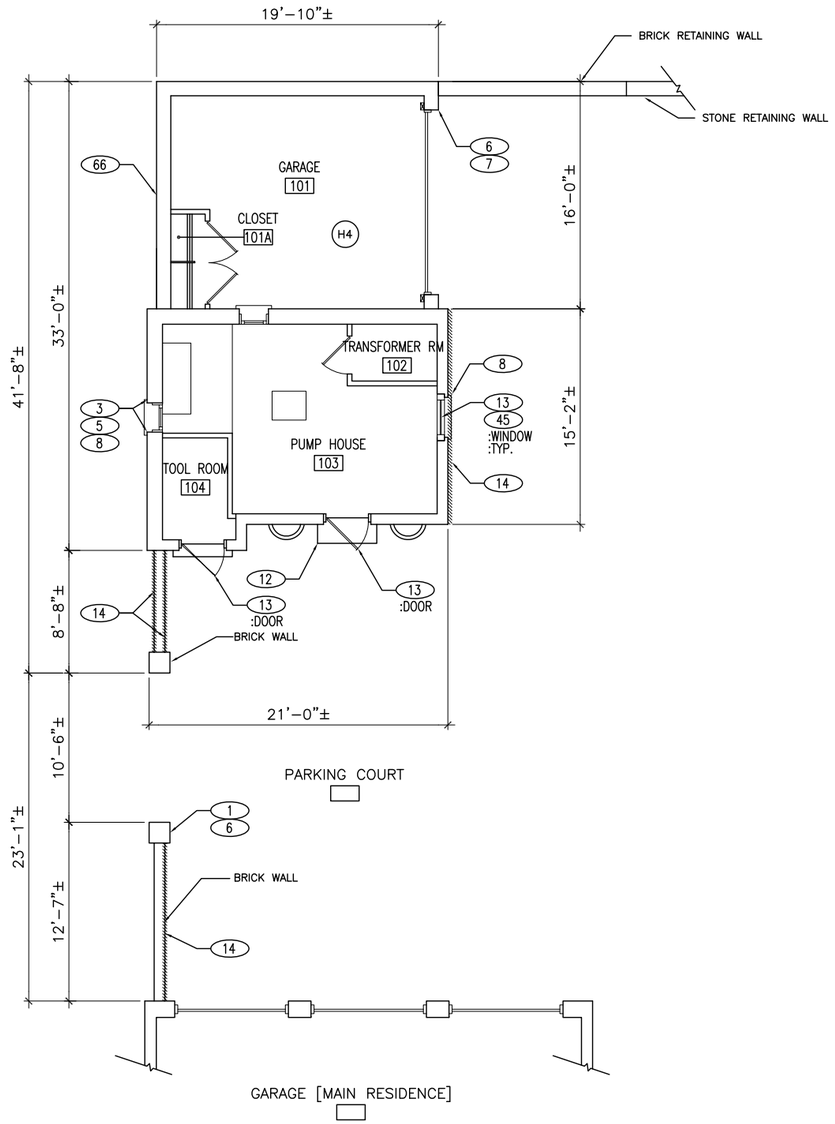
A2.4



2 A2.5 PUMP HOUSE/GARAGE – ATTIC FLOOR PLAN
SCALE: 3/32"=1'-0"



3 A2.5 PUMP HOUSE/GARAGE – ROOF PLAN
SCALE: 3/32"=1'-0"



1 A2.5 PUMP HOUSE/GARAGE – FIRST FLOOR PLAN
SCALE: 3/32"=1'-0"

16 8 0 8 16
3/32"=1'-0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

1 CHIPPED MASONRY (BRICK).
3 ISOLATED OPEN JOINTS (BRICK).
5 STEP CRACKING.
6 MISSING BRICK.
7 SPALLING BRICK/ LOOSE MORTAR.
8 CRACKING AT LINTEL.
12 BRICK EROSION.
13 DETERIORATED WOOD.
14 BIOLOGICAL/ALGAE GROWTH.
15 OVERGROWN VEGATATION.
32 BROKEN SLATE ROOF TILES.
33 BENT CONDUCTORS AT LIGHTNING PROTECTION.
34 BENT SNOW GUARDS.
35 BENT/DAMAGED GUTTER(S).
37 FLASHING IN POOR CONDITION.
45 PAINT FAILURE.
66 CRACKING AT FOUNDATION.

HAZARDOUS MATERIALS
(PER PAGE REPORT, 2012)

H4 ACM - TRANSITE - CEILING

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM ASBESTOS CONTAINING MATERIAL
UNO UNLESS NOTED OTHERWISE
ETR EXISTING TO REMAIN

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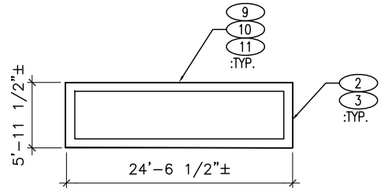
PUMP HOUSE /GARAGE

FIRST, SECOND & ROOF PLANS

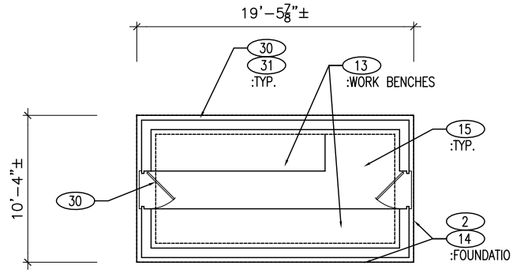
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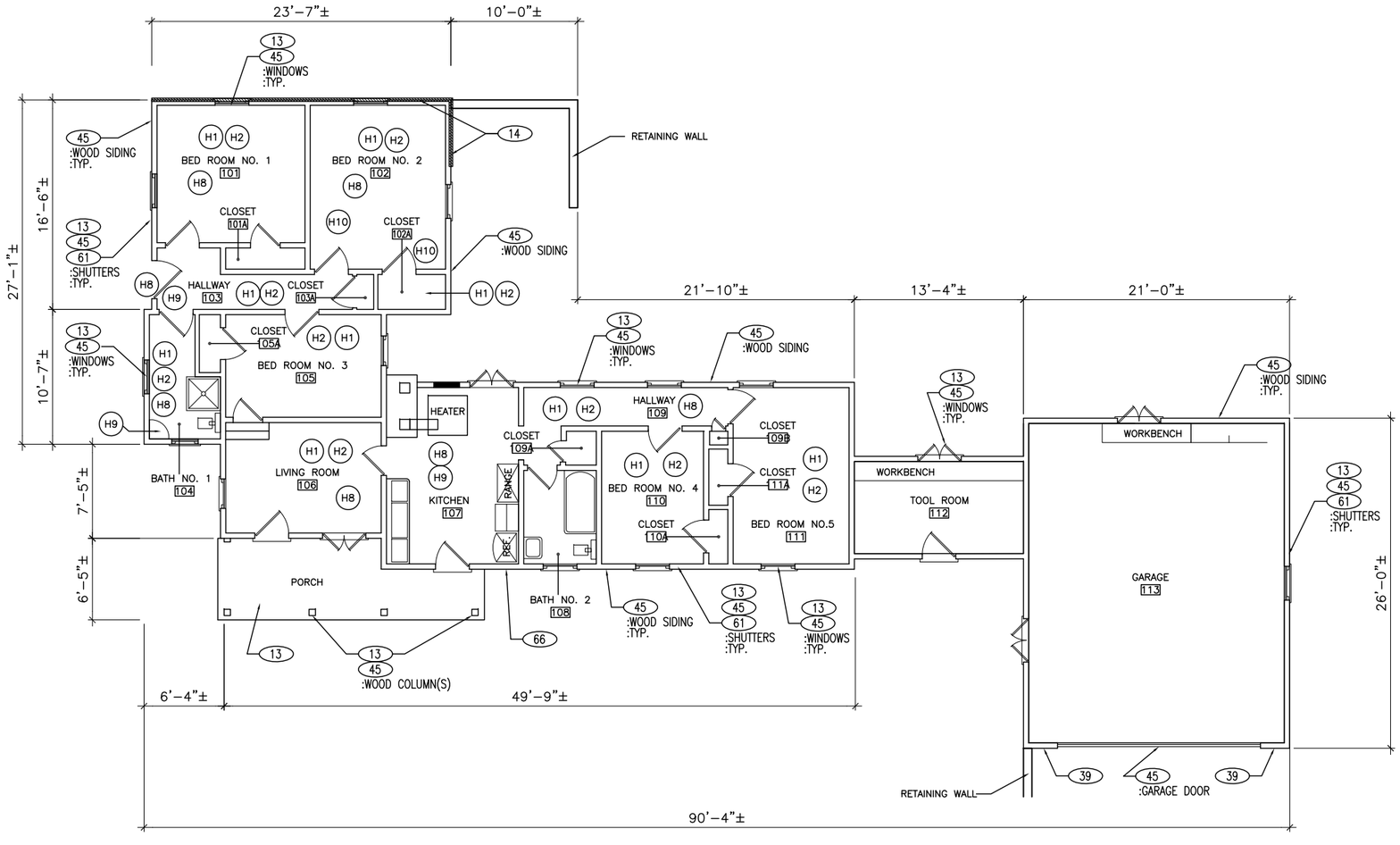
A2.5



2 / A2.6 COLD FRAME – PLAN
SCALE: 3/32"=1'-0"



3 / A2.6 GREENHOUSE – PLAN
SCALE: 3/32"=1'-0"



1 / A2.6 GARDENERS' COTTAGE – FIRST FLOOR PLAN
SCALE: 3/32"=1'-0"

16 8 0 8 16
3/32"=1'-0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

- 2 CRACKS AT MORTAR JOINTS.
- 3 ISOLATED OPEN JOINTS (BRICK).
- 7 SPALLING BRICK/ LOOSE MORTAR.
- 9 VERTICAL CRACK THROUGH WALL.
- 10 INAPPROPRIATE/INCOMPATIBLE MORTAR.
- 11 OUT OF PLANE MASONRY (BRICK).
- 13 DETERIORATED WOOD.
- 14 BIOLOGICAL/ALGAE GROWTH.
- 15 OVERGROWN VEGATATION.
- 30 CRACKED/MISSING TEMPERED GLASS.
- 31 BENT/DAMAGED U-CHANNEL AND H-CAME.
- 39 MISSING EXTERIOR WOOD TRIM.
- 45 PAINT FAILURE.
- 61 RUSTED HARDWARE.
- 66 CRACKING AT FOUNDATION.

HAZARDOUS MATERIALS

(PER PAGE REPORT, 2012)

- H1 ACM - FLOOR TILE
- H2 ACM - MASTIC
- H8 BIOLOGICAL HAZARD - MOLD - WALL
- H9 BIOLOGICAL HAZARD - MOLD - CEILING
- H10 BIOLOGICAL HAZARD - MOLD - DOOR

NOTE: IDENTIFIED IN ATTIC OF GARDENER'S COTTAGE

- H6 ACM - PIPE INSULATION
- H7 ACM - PIPE ELBOW/FITTING

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM	ASBESTOS CONTAINING MATERIAL
UNO	UNLESS NOTED OTHERWISE
ETR	EXISTING TO REMAIN

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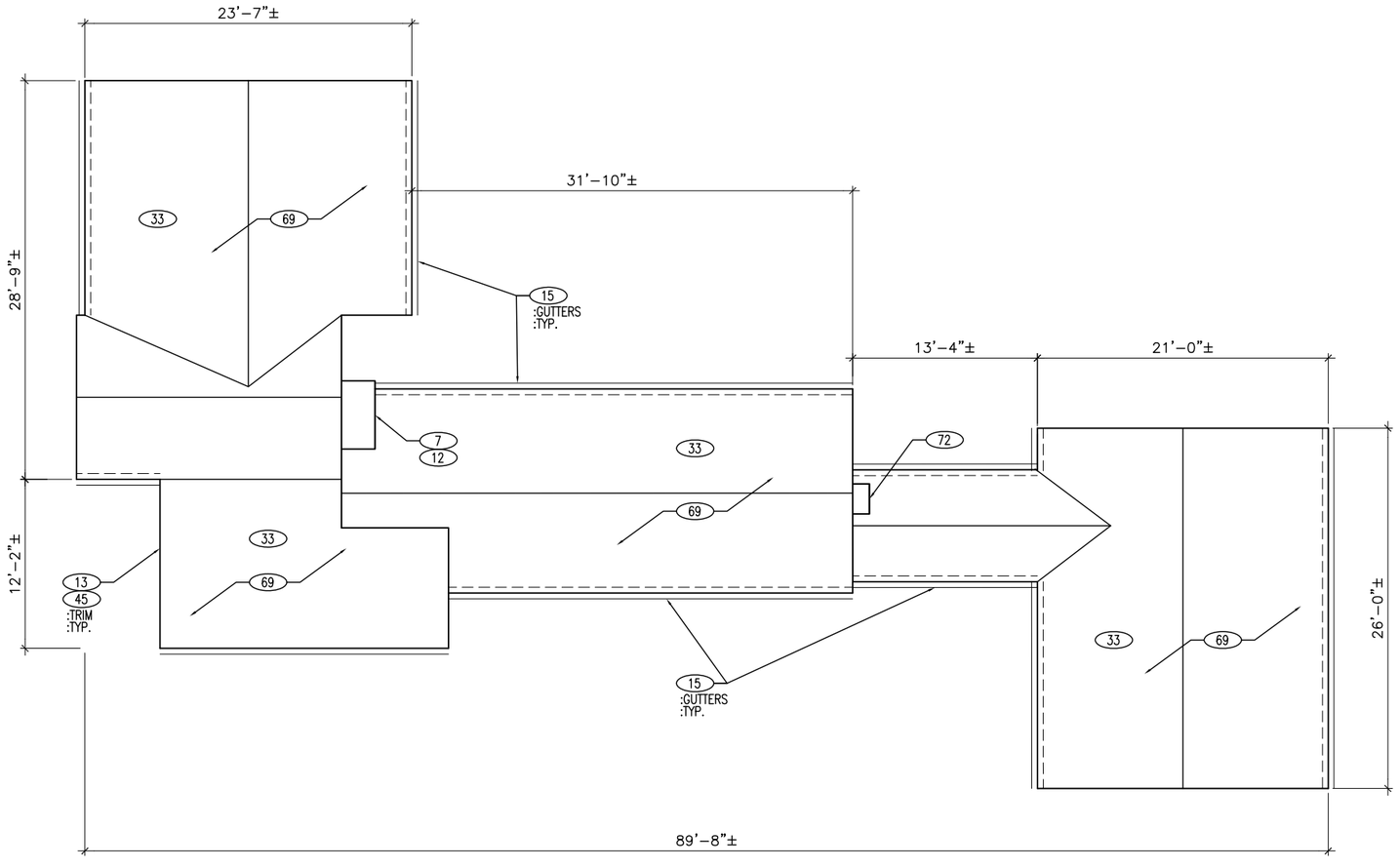
GARDENERS COTTAGE, GREENHOUSE, COLD FRAME

FIRST FLOOR

NO.	TITLE	DATE

FILE NAME:

A2.6



1 A2.7 GARDENERS' COTTAGE – ROOF PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

7	SPALLING BRICK/ LOOSE MORTAR.
12	BRICK EROSION.
13	DETERIORATED WOOD.
15	OVERGROWN VEGATATION.
33	BENT CONDUCTORS AT LIGHTNING PROTECTION.
45	PAINT FAILURE.
69	DETERIORATED ASPHALT ROOF SHINGLES.
72	RUSTED MTL. CHIMNEY CAP

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM	ASBESTOS CONTAINING MATERIAL
UNO	UNLESS NOTED OTHERWISE
ETR	EXISTING TO REMAIN

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PATTERSON CENTER

CONDITION ASSESSMENT & TREATMENT PLAN

10515 MACKALL ROAD
ST. LEONARD, MD

ASSESSMENT FINDINGS

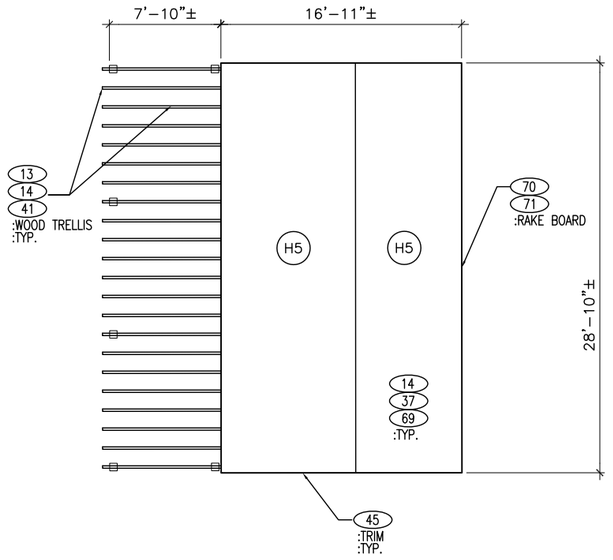
GARDENERS COTTAGE

ROOF PLAN

NO.	TITLE	DATE

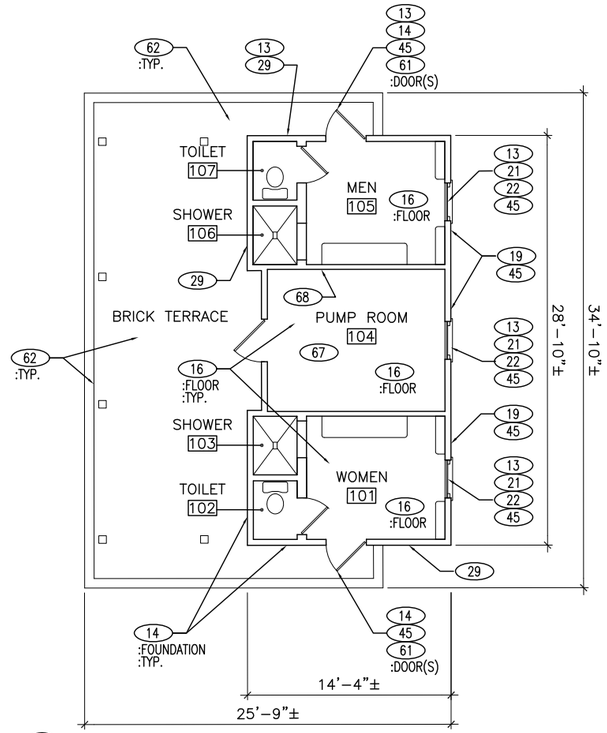
FILE NAME:

A2.7



3 A2.8 POOL HOUSE – ROOF PLAN
SCALE: 3/32"=1'–0"

1 A2.8 SWIMMING POOL – PLAN
SCALE: 1/16"=1'–0"



2 A2.8 POOL HOUSE – FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

- 13 DETERIORATED WOOD.
- 14 BIOLOGICAL/ALGAE GROWTH.
- 16 DEBRIS/SOILING.
- 19 MISSING SHUTTER(S).
- 21 DAMAGED WOOD WINDOW ASSEMBLY.
- 22 CRACKED/MISSING GLAZING.
- 29 WARPED WOOD SIDING.
- 37 FLASHING IN POOR CONDITION.
- 41 WATER STAINING.
- 45 PAINT FAILURE.
- 56 BROKEN/MISSING STONE PAVERS.
- 60 CHIPPED STONE PAVER
- 61 RUSTED HARDWARE.
- 62 UNEVEN BRICK TERRACE AND SLATE BORDER.
- 67 CRACK IN CONCRETE SLAB.
- 68 ROTTED WOOD SILL PLATE.
- 69 DETERIORATED ASBESTOS ROOF SHIN
- 70 INSECT DAMAGE AT WOOD RAKE BOAR
- 71 SPLIT IN WOOD IN RAKE BOARD.

HAZARDOUS MATERIALS

(PER PAGE REPORT, 2012)

- H5 ACM - ROOFING

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM	ASBESTOS CONTAINING MATERIAL
UNO	UNLESS NOTED OTHERWISE
ETR	EXISTING TO REMAIN

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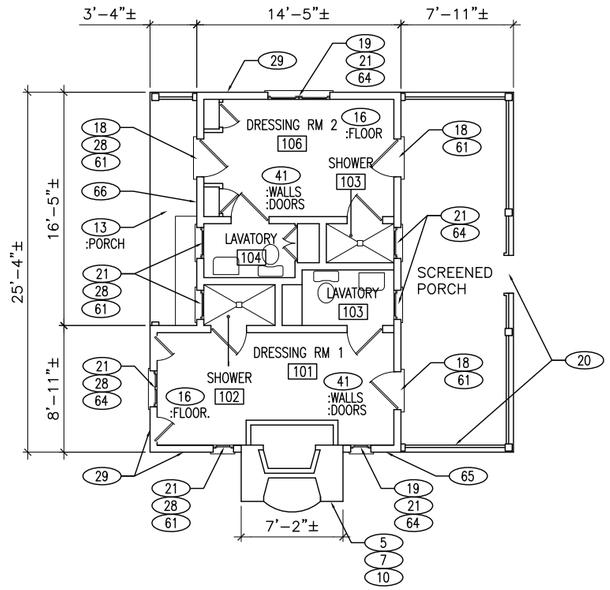
POOL HOUSE & POOL

FIRST FLOOR & ROOF PLAN

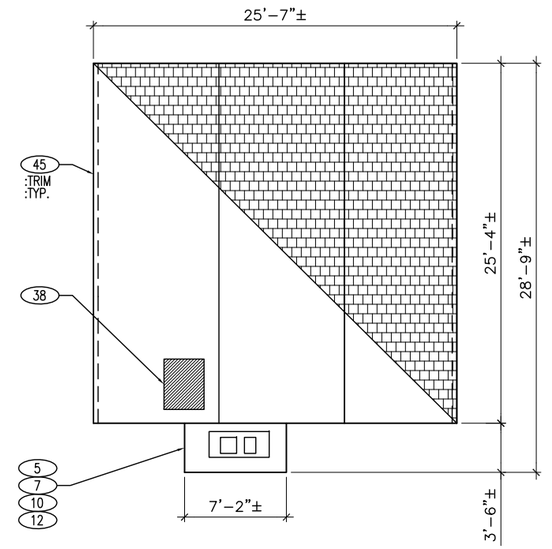
NO.	TITLE	DATE

FILE NAME:

A2.8



2 / A2.9 BEACH HOUSE – ROOF PLAN
SCALE: 3/32"=1'–0"



1 / A2.9 BEACH HOUSE – FIRST FLOOR PLAN
SCALE: 3/32"=1'–0"

16 8 0 8 16
3/32"=1'–0" SCALE OF INCHES

SHEET NOTES

1. LEAD BASED PAINTS WERE FOUND THROUGHOUT THE PROPERTY ON EXTERIOR AND INTERIOR BUILDING MATERIALS. REFER TO HAZARDOUS MATERIALS REPORT IN APPENDIX F FOR DETAILS.

KEY NOTES

- 5 STEP CRACKING.
- 7 SPALLING BRICK/ LOOSE MORTAR.
- 10 INAPPROPRIATE/INCOMPATIBLE MORTAR.
- 12 BRICK EROSION.
- 13 DETERIORATED WOOD.
- 16 DEBRIS/SOILING.
- 18 DAMAGED WOOD DOOR ASSEMBLY.
- 19 MISSING SHUTTER(S).
- 20 MISSING PORCH SCREENS AND SCREEN DOOR ASSEMBLY.
- 21 DAMAGED WOOD WINDOW ASSEMBLY.
- 28 PAINT FAILURE AT WOOD SHUTTERS.
- 29 WARPED WOOD SIDING.
- 38 INAPPROPRIATE/INCOMPATIBLE ASPHAULT SHINGLE REPLACEMENT.
- 41 WATER STAINING.
- 45 PAINT FAILURE.
- 61 RUSTED HARDWARE.
- 64 PLYWOOD COVERED WINDOW.
- 65 MISSING WOOD SIDING.
- 66 CRACKING AT FOUNDATION.

LEGEND

EXTENT OF CONDITION NOTED

ABBREVIATIONS

ACM	ASBESTOS CONTAINING MATERIAL
UNO	UNLESS NOTED OTHERWISE
ETR	EXISTING TO REMAIN

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PATTERSON CENTER

CONDITION ASSESSMENT & TREATMENT PLAN

10515 MACKALL ROAD
ST. LEONARD, MD

ASSESSMENT FINDINGS

BEACH HOUSE

FIRST FLOOR & ROOF PLAN

NO.	TITLE	DATE

FILE NAME:

A2.9

APPENDIX F



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APPENDIX F: ASBESTOS AND LEAD-BASED PAINT INSPECTION REPORT

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APPENDIX F: ASBESTOS AND LEAD-BASED PAINT INSPECTION REPORT

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Hazardous Materials Survey

Report

Jefferson Patterson Park and Museum
10515 Mackall Road St.
St. Leonard, MD 20685



Prepared for
Quinn Evans Architects
2121 Ward Place NW
Washington, DC 20037

Prepared by
PAGE Technologies, Inc.
1412 South Carey Street
Baltimore, Maryland 21230

July 31, 2012

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Acronyms

1	ACM	Asbestos-containing material
2	AHERA	Asbestos Hazard Emergency Response Act
3	AIHA	American Industrial Hygiene Association
4	ASTM	American Society for Testing and Materials
5	ESA	Environmental Site Assessment
6	HEPA	High Efficiency Particulate Air Filters
7	NESHAP	National Emission Standards for Hazardous Air Pollutants
8	NIOSH	United States National Institute for Occupational Safety and Health
9	LF	Linear Foot
10	NVLAP	National Voluntary Laboratory Accreditation Program
11	OSHA	Occupational Safety and Health Administration
12	PACM	Presumed asbestos-containing material
13	PAGE	PAGE Technologies, Inc.
14	PCM	Phase contrast microscopy
15	PLM	Polarized light microscopy
16	RACM	Regulated asbestos-containing material
17	SF	Square foot
18	TEM	Transmission electron microscopy
19	TSI	Thermal system insulation
20	US EPA	United States Environmental Protection Agency

INTRODUCTION

PAGE Technologies, Inc. was retained by Quinn Evans Architects to conduct a Hazardous Materials Survey for Jefferson Patterson Park and Museum located at 10515 Mackall Road, St. Leonard, MD 20685.

The property is currently being used as a state museum of archaeology and history. PAGE was asked to identify potentially hazardous materials on the portion of the property now called the Patterson Center. The survey included the Main Residence, Garage/Pump House, Gardener's Cottage, Pool House, and Beach House. The Survey was conducted on July 16, 2012.

Building Descriptions

- **Main Residence**
  - Initial construction for the Main Residence began in 1932. It is a large brick house in the Colonial Revival style which stands 2-1/2 stories high, and faces the north. Brick for the structure is laid in Flemish bond and contains an approximate square footage of 7,500. The structure is the former residence of Jefferson Patterson and family.
- **Garage Pump/House**
  - This building was constructed in two phases. The one-story, gable roofed Pump House was built in 1933 to accommodate equipment for the water well that served the main residence and a generator. The garage portion of the building was built in 1959. The approximate square footage is 1,200.
- **Pool House**
  - The Pool house is a one-story frame building with horizontal board siding and gable roofing. The building has three rooms: a central mechanical room, housing equipment, and Ladies' and Gentlemen's changing rooms on either side. The approximate square footage is 2,200.
- **Gardner's Cottage**
  - The Gardner's cottage is a 1-1/2 story structure originally built in 1934 to house "chickens, dogs, and pheasants". Alterations and additions were made to convert the building to its later use as a residence in 1951-52. The approximate square footage is 2,000. The Gardner's Cottage shows extensive deterioration and mold infestation.
- **Beach House**
  - The Beach House, located on the shore of the Patuxent River below the Main Residence and gardens, was the first building in the complex, constructed in 1932. A one-story gable roofed wood frame building with horizontal board siding, it provides two guest/changing rooms, each with lavatory and shower, and a loft above. The approximate square footage is 1,200.

The Hazardous Materials Survey focused on the following materials: Asbestos Containing Materials (ACM), Lead-Based Paint (LBP), and other Biological hazards (Mold).

The results of the Hazardous Materials Survey have identified hazardous materials located at the subject property. Renovation and/or demolition activities performed in the future may disturb such hazardous materials. These materials are summarized below:

Asbestos Containing Materials (ACM):

The results of the survey show that asbestos containing material (ACM) is present at the property. The OSHA "Asbestos in Construction Standard" 29 CFR 1926.1101 imposes restrictions on the disturbance of asbestos during demolition, remodeling, and renovation activities.

Removal of the following item identified in the building is considered Class I asbestos work by the OSHA Regulation:

- Transite and Plaster Ceiling, White/Grey
- Pipe Insulation Elbows and Fittings, White/Grey

Removal of the following item identified in the building is considered Class II asbestos work by the OSHA Regulation:

- Floor Tile 9x9, Multiple Colors
- Floor Tile Mastic, Black
- Roofing Material, Black

Class I and II asbestos work must be performed by trained employees using work practices required by the OSHA standard.

Total Quantities for Positive Asbestos Containing Materials (ACMs)		
Material Type	**Quantity**	**Unit of Measure**
Floor Tile	1885	Sf ft
Floor Tile Mastic	1885	Sq ft
Transite Ceiling	280	Sq ft
Plaster Ceiling	657	Sq ft
Roofing Material	1050	Sq ft
Pipe Insulation	190	Lf
Pipe Fittings/Elbows	48	Each

Lead-Based Paint (LPB):

All five buildings were surveyed for lead-based paint using an XRF spectrometer. Sufficient representative surfaces were tested to draw general conclusions of the quantity of lead-based paint used in the property and its condition.

The presence of lead based paints triggers EPA and OSHA regulatory standards (29 CFR 1926.62)

Lead-based paints were found throughout the property on exterior and interior building materials.

Demolition debris with LBP atop stairs, railings, plaster wall, baseboards, doors/door casings, and other materials may be disposed of in a Construction and Debris (C&D) landfill provided the material is not classified as a hazardous waste in accordance with 40 CFR Part 261 and SW-846 (Test Methods for Evaluating Waste Physical/Chemical). Metal objects that have LBP can be recycled at a proper landfill.

Biological Hazards:

An inspection was done to identify infested materials, as well as their condition and location throughout the buildings. Upon inspection, extensive mold damage was identified, specifically at the Main Residence and Gardener's Cottage. The location, condition, as well as recommendations for dealing with the damage are listed in the report below.

SECTION I:

ASBESTOS CONTAINING MATERIALS (ACM)

Asbestos Containing Materials (ACM)

On July 16, 2012, Mr. Ene Udoh (AHERA Inspector Number 114595 expires 11/21/2012), Peter Asuquo and Enobong Umoh inspected the property located at 10515 Mackall Road, St. Leonard, MD for asbestos. The purpose of the inspection was to identify asbestos containing materials (ACM) that may be impacted by the upcoming renovation.

Materials identified by EPA as being suspect of containing asbestos were visually identified. Each material that was visually unique was determined to be a homogeneous material. The number of samples collected was based on the USEPA AHERA methodology. A total of 59 samples were taken from materials ranging from floor tile, floor tile mastic, plaster ceiling, ceiling tile, linoleum flooring, roofing material, pipe insulation, mudded elbows, and transite panels. Samples were submitted to EMSL Analytical, Inc. for analysis by Polarized Light Microscopy (PLM) in accordance with the EPA Method for the Determination of Bulk Asbestos Samples (EPA 600M4-82-020). These materials were located in the Main Residence, Garage/Pump House, Gardener's Cottage, Pool House, and Beach House.

OSHA Definitions from the 29 CFR 1926.1101- "Asbestos in Construction"

- Aggressive method means removal or disturbance of building material by sanding, abrading, grinding or other method that breaks, crumbles, or disintegrates intact ACM.
- Amended water means water to which surfactant (wetting agent) has been added to increase the ability of the liquid to penetrate ACM.
- Asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, actinolite asbestos and any of these minerals that have been chemically treated and/or altered. For purposes of this standard, "asbestos" includes PACM, as defined below.
- Asbestos-containing material (ACM) means any material containing more than one percent asbestos.
- Class I asbestos work means activities involving the removal of TSI and surfacing ACM and PACM
- Class II Asbestos means activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
- Friable asbestos material means any material containing more than 1 percent asbestos as determined using the method speicified using Polarized Light Microscopy, that, when, dry, can be crumbled, pulverized or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM) verify the asbestos content by point using PLM.
- Nonfriable asbestos-containing material means any material containing more than 1 percent asbestos using PLM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- Presumed asbestos-containing material (PACM) Presumed asbestos-containing materials (PACM) include surfacing material, such as soundproofing applications that were sprayed on, a common industrial practice until the 1980s, and thermal insulation which OSHA calls thermal system insulation (TSI) and defines as: "ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain." If these materials are suspected to be present, they must be examined to determine whether they have asbestos-containing material of more than 1 percent.

- Regulated asbestos-containing material (RACM) means (a) Friable asbestos material, (b) Catergory 1 nonfriable ACM that has become friable, (c) Catergory 1 nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

Sample Results:

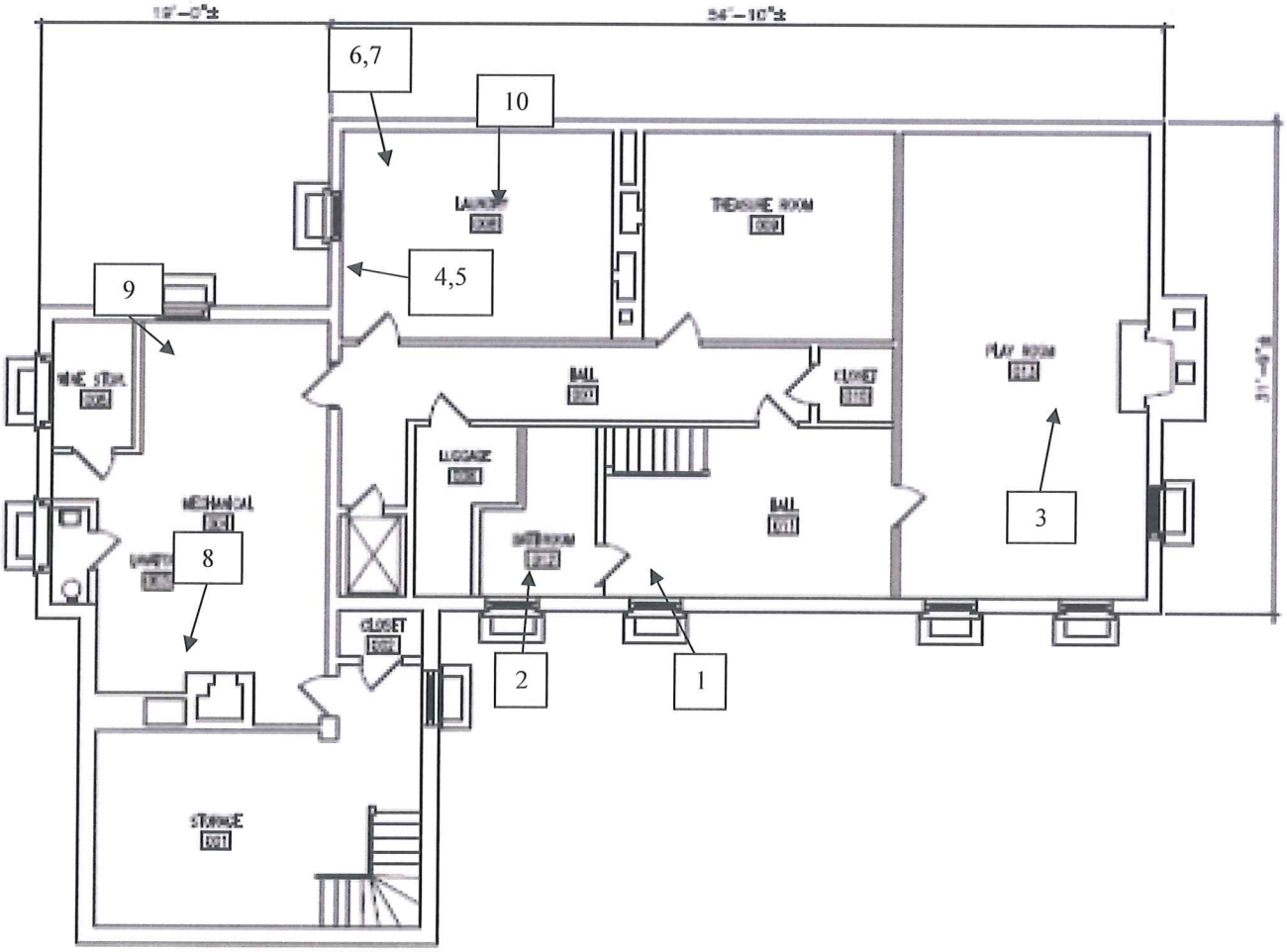
Sample #	Building	Sample ID	Material	Color	Floor	Room	Results
1	Main Residence	JPPMB1	FT 9x9	Brown/Tan	Basement	Hall 011	4% Chrysotile
2	Main Residence	JPPMB2	FT 9x9	Brown/Tan	Basement	Bathroom	5% Chrysotile
3	Main Residence	JPPMB3	FT 9x9	Brown/Tan	Basement	Play Room	3% Chrysotile
4	Main Residence	JPPMB4	FT 9x9	Brown	Basement	Laundry Room	5% Chrysotile
5	Main Residence	JPPMB4	Mastic	Black	Basement	Laundry Room	5% Chrysotile
6	Main Residence	JPPMB5	FT 9x9	Light Green	Basement	Laundry Room	5% Chrysotile
7	Main Residence	JPPMB5	Mastic	Black	Basement	Laundry Room	10% Chrysotile
8	Main Residence	JPPMB6	Plaster Ceiling	White	Basement	Mechanical	2% Chrysotile
9	Main Residence	JPPMB7	Plaster Ceiling	White	Basement	Mechanical	4% Chrysotile
10	Main Residence	JPPMB8	Plaster Ceiling	White	Basement	Laundry Room	2% Chrysotile
11	Main Residence	JPPMB9	Ceiling Tile Panel	White	Basement	Luggage Room	None Detected
12	Main Residence	JPPMB10	Ceiling Tile Panel	White	Basement	Luggage Room	None Detected
13	Main Residence	JPPMF1	Linoleum Flooring	Dark Brown	1st Floor	Kitchen	None Detected
14	Main Residence	JPPMF1	Mastic	Black	1st Floor	Kitchen	None Detected
15	Main Residence	JPPMF2	Linoleum Flooring	Brown	1st Floor	Kitchen	None Detected
16	Main Residence	JPPMF2	Mastic	Brown	1st Floor	Kitchen	None Detected
17	Main Residence	JPPMS1	FT	Brown	2nd Floor	Bedroom	None Detected
18	Main Residence	JPPMS1	Mastic	Black	2nd Floor	Bedroom	None Detected
19	Garage/Pump House	JPPMG-13A	Transite Ceiling	Grey	1st Floor	Main Garage	15% Chrysotile
20	Pool House	JPP-PH-1	Roofing Material	Black	Roof	N/A	8% Chrysotile
21	Pool House	JPP-PH-2	Roofing Material	Black	Roof	N/A	10% Chrysotile
22	Pool House	JPP-PH-3	Roofing Material	Black	Roof	N/A	12% Chrysotile
23	Gardener's Cottage	JPP-GC-1	FT 9x9	Brown	1st Floor	Living Room	5% Chrysotile
24	Gardener's Cottage	JPP-GC-1	Mastic	Black	1st Floor	Living Room	5% Chrysotile

25	Gardener's Cottage	JPP-GC-2	FT 9x9	Tan	1st Floor	Living Room	4% Chrysotile
26	Gardener's Cottage	JPP-GC-2	Mastic	Black	1st Floor	Living Room	6% Chrysotile
27	Gardener's Cottage	JPP-GC-3	FT 9x9	Grey w Blue Spots	1st Floor	Hallway 109	5% Chrysotile
28	Gardener's Cottage	JPP-GC-3	Mastic	Black	1st Floor	Hallway 109	7% Chrysotile
29	Gardener's Cottage	JPP-GC-4	FT 9x9	Grey w Blue Spots	1st Floor	Bedroom #4	4% Chrysotile
30	Gardener's Cottage	JPP-GC-4	Mastic	Black	1st Floor	Bedroom #4	2% Chrysotile
31	Gardener's Cottage	JPP-GC-5	FT 9x9	Grey w Blue Spots	1st Floor	Bedroom #5	3% Chrysotile
32	Gardener's Cottage	JPP-GC-5	Mastic	Black	1st Floor	Bedroom #5	5% Chrysotile
33	Gardener's Cottage	JPP-GC-6	Linoleum Flooring	White	1st Floor	Bathroom #2	None Detected
34	Gardener's Cottage	JPP-GC-6	Mastic	Tan	1st Floor	Bathroom #2	None Detected
35	Gardener's Cottage	JPP-GC-7	Linoleum Flooring	White	1st Floor	Kitchen	None Detected
36	Gardener's Cottage	JPP-GC-7	Mastic	Tan	1st Floor	Kitchen	None Detected
37	Gardener's Cottage	JPP-GC-8	FT 9x9	Grey w Blue Spots	1st Floor	Hallway 103	6% Chrysotile
38	Gardener's Cottage	JPP-GC-8	Mastic	Black	1st Floor	Hallway 103	2% Chrysotile
39	Gardener's Cottage	JPP-GC-9	FT 9x9	Brown	1st Floor	Bedroom #2 Closet	7% Chrysotile
40	Gardener's Cottage	JPP-GC-9	Mastic	Black	1st Floor	Bedroom #2 Closet	5% Chrysotile
41	Gardener's Cottage	JPP-GC-10	FT 9x9	Brown	1st Floor	Bedroom #2	2% Chrysotile
42	Gardener's Cottage	JPP-GC-10	Mastic	Black	1st Floor	Bedroom #2	7% Chrysotile
43	Gardener's Cottage	JPP-GC-11	FT 9x9	Grey w Black Spots	1st Floor	Bedroom #1	5% Chrysotile
44	Gardener's Cottage	JPP-GC-11	Mastic	Black	1st Floor	Bedroom #1	4% Chrysotile
45	Gardener's Cottage	JPP-GC-12	Pipe Insulation	White	Attic	N/A	25% Chrysotile
46	Gardener's Cottage	JPP-GC-13	Pipe Insulation	White	Attic	N/A	27% Chrysotile
47	Gardener's Cottage	JPP-GC-14	Pipe Insulation	White	Attic	N/A	25% Chrysotile
48	Gardener's Cottage	JPP-GC-15	Mudded Elbow/Fitting	White	Attic	N/A	20% Chrysotile
49	Gardener's Cottage	JPP-GC-16	Mudded Elbow/Fitting	White	Attic	N/A	30% Chrysotile
50	Gardener's Cottage	JPP-GC-17	Mudded Elbow/Fitting	White	Attic	N/A	50% Chrysotile
51	Gardener's Cottage	JPP-GC-18	Linoleum Flooring	White	1st Floor	Bathroom #1	None Detected
52	Gardener's Cottage	JPP-GC-18	Mastic	Brown	1st Floor	Bathroom #1	None Detected
53	Gardener's Cottage	JPP-GC-19	FT 9x9	Brown w Green Spots	1st Floor	Bathroom #1	5% Chrysotile
54	Gardener's Cottage	JPP-GC-19	Mastic	Black	1st Floor	Bathroom #1	7% Chrysotile
55	Gardener's Cottage	JPP-GC-20	FT 9x9	Brown w Green Spots	1st Floor	Bedroom #3	6% Chrysotile
56	Gardener's Cottage	JPP-GC-20	Mastic	Black	1st Floor	Bedroom #3	8% Chrysotile

57	Beach House	JPP-BH-1	Roofing Material	Black	Roof	Hall 011	None Detected
58	Beach House	JPP-BH-2	Roofing Material	Black	Roof	Bathroom	None Detected
59	Beach House	JPP-BH-3	Roofing Material	Black	Roof	Play Room	None Detected

Quantities for Positive Asbestos Containing Materials (ACMs) at Main Residence		
Material Type	**Quantity**	**Unit of Measure**
Floor Tile	980	Sq ft
Floor Tile Mastic	980	Sq ft
Plaster Ceiling	657	Sq ft
Quantities for Positive Asbestos Containing Materials (ACMs) at Garage/Pump House		
Material Type	**Quantity**	**Unit of Measure**
Transite Ceiling	280	Sq ft
Quantities for Positive Asbestos Containing Materials (ACMs) at Pool House		
Material Type	**Quantity**	**Unit of Measure**
Roofing Material	1050	Sq ft
Quantities for Positive Asbestos Containing Materials (ACMs) at Gardner's Cottage		
Material Type	**Quantity**	**Unit of Measure**
Floor Tile	905	Sf ft
Floor Tile Mastic	905	Sq ft
Pipe Insulation	190	Lf
Pipe Fittings/Elbows	48	Each
Quantities for Positive Asbestos Containing Materials (ACMs) at Garage/Pump House		
Material Type	**Quantity**	**Unit of Measure**
NONE FOUND		

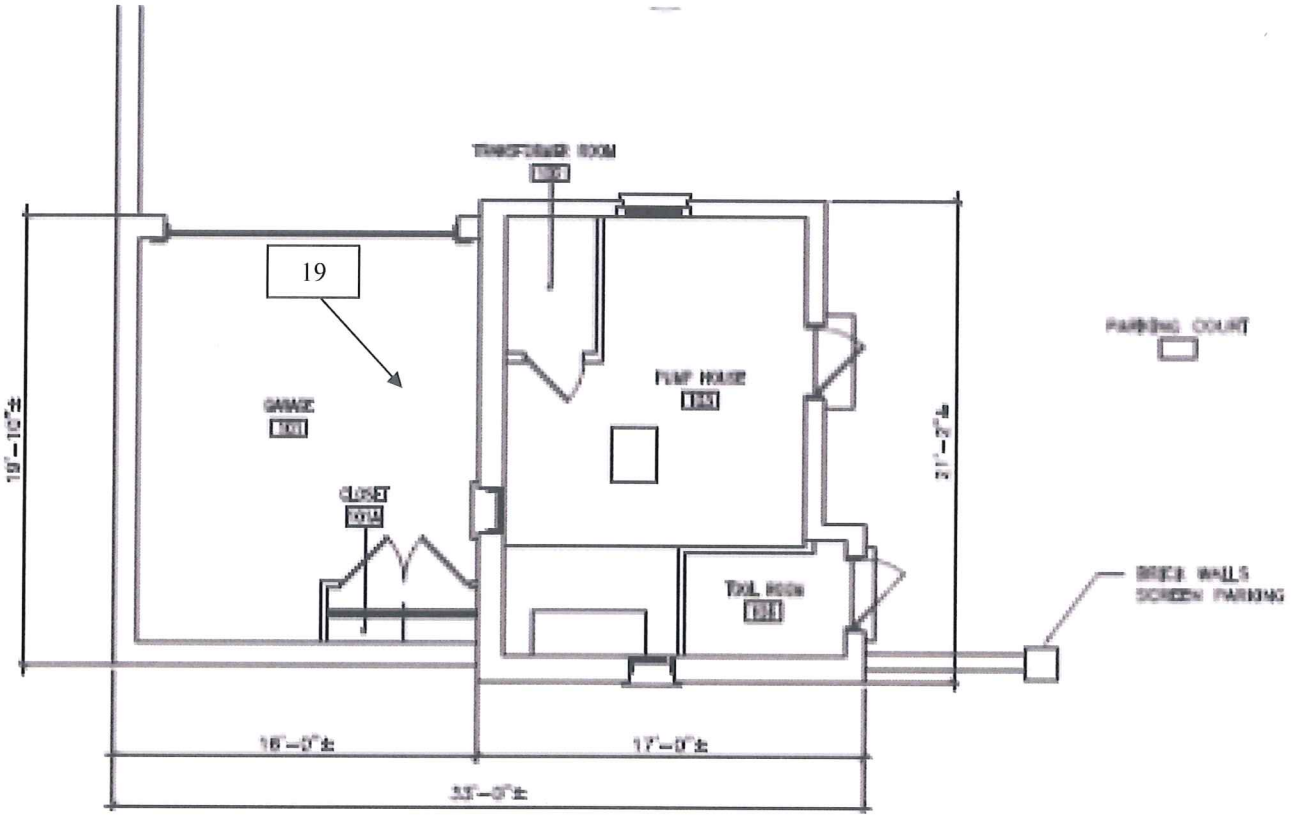
Main Residence: Basement



Numbers correspond to 'Sample #' from the results

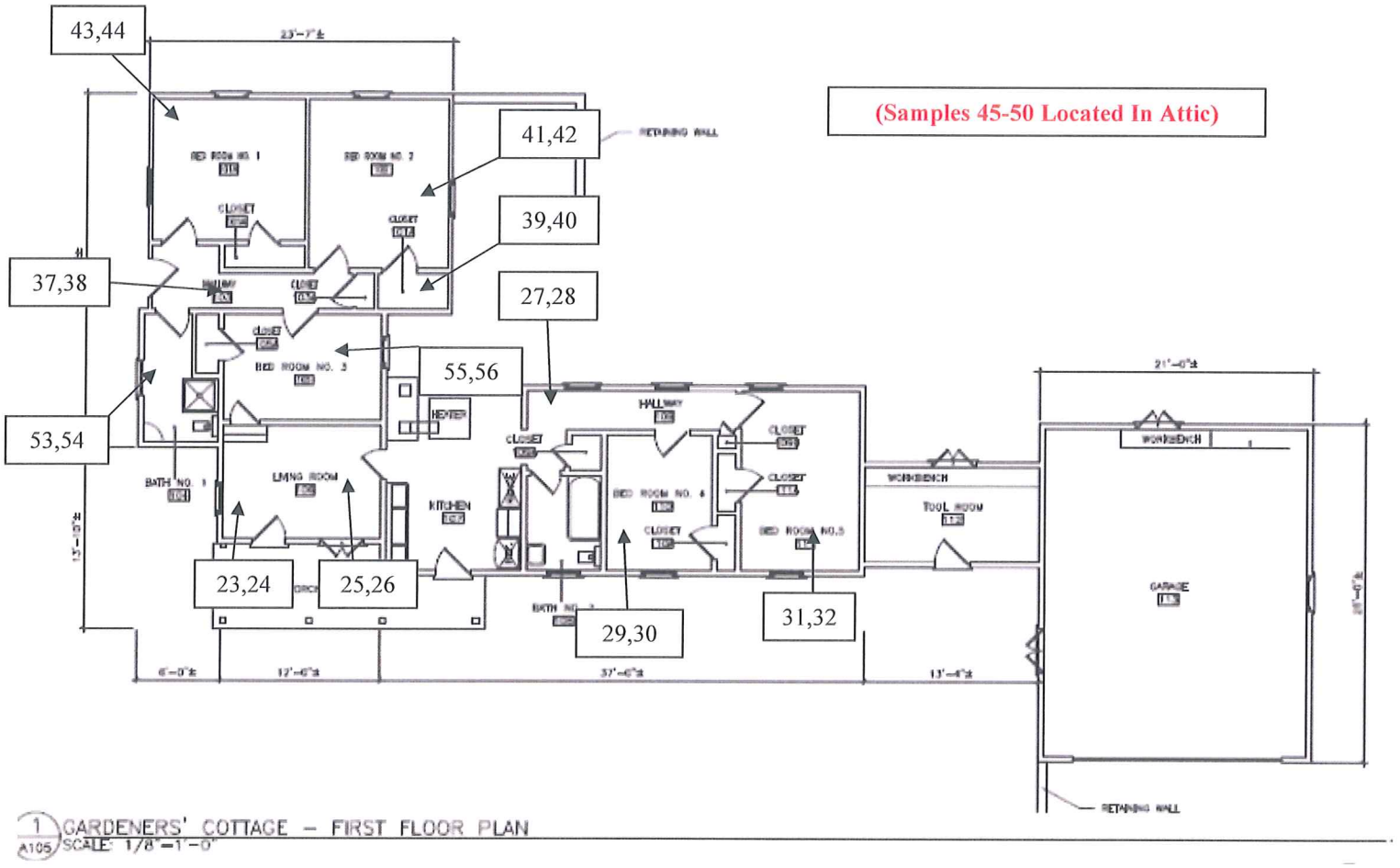
1 A101 MAIN RESIDENCE – BASEMENT FLOOR PLAN
SCALE: 3/32"=1'-0"

Garage/Pump House



1 / A10A PUMP HOUSE/GARAGE – FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

Gardener's Cottage



Conclusions/Recommendations:

1. The results of the survey show that asbestos containing materials (ACM) are present at the property. The OSHA "Asbestos in Construction Standard" 29 CFR 1926.1101 imposes restrictions on the disturbance of asbestos during demolition, remodeling, and renovation activities.

   Removal of the following item identified in the building is considered Class I asbestos work by the OSHA Regulation:
   - Transite and Plaster Ceiling, White/Grey
   - Pipe Insulation Elbows and Fittings, White/Grey

Removal of the following item identified in the building is considered Class II asbestos work by the OSHA Regulation:

- Floor Tile 9x9, Multiple Colors
- Floor Tile Mastic
- Roofing Material

Class I and II asbestos work must be performed by trained employees using work practices required by the OSHA standard.

2. An asbestos management plan is being prepared and will be submitted under separate cover.

3. According to the forms for the Asbestos Management Plan for state buildings, all asbestos containing material must receive periodic surveillance at least twice a year to verify its condition. The results of the surveillance must be recorded in the management plan.

4. According to the forms of the Asbestos Management Plan for state buildings, training of custodial and maintenance employees including health effects or asbestos, the location and quantity of asbestos in the buildings, and work practices that will keep them safe is required.

5. Any projects which will result in the disturbance of asbestos containing materials must be done by a licensed asbestos abatement contractor or by properly trained and equipped employees of the Administration.

SECTION II:

LEAD-BASED PAINT (LBP)

Lead Based Paint (LBP)

July 16, 2012 PAGE Technologies (PAGE) conducted a limited-scope lead-based paint inspection of the 'Patterson Center' property located at 10515 Mackall Road, St. Leonard, MD 20685. Dharam Kissoondath, a State of Maryland Lead Paint Risk Assessor (Accreditation Number 7148. OSE is an MDE accredited Lead Paint Inspection Contractor – Accreditation Number 10401), performed the inspection.

The inspection was conducted in accordance with the State of Maryland Regulations and followed protocols on file with the Maryland Department of the Environment as a condition of accreditation as a lead paint inspection contractor in the State of Maryland. The Maryland definition of lead-based paint, which includes concentrations of lead greater than 0.7 milligrams per square centimeter, was observed. Paint testing was conducted with a portable x-ray fluorescence analyzer (XRF), RMD model LPA-1. The instrument is calibrated to a 1.0 mg/cm2 calibration block at the beginning and end of each shift and a minimum of every four hours.

The inspection included readings from painted representative painted or ceramic surfaces as referenced above. Each painted surface was classified as being in Intact (I) or Poor (P) condition. The wall facing the front of each Building was designated as Wall A. The remaining walls, Wall B, Wall C and Wall D were assigned clockwise from Wall A. This allows a uniform method for describing sample locations.

The attached RMD LPA-1 reports include a Summary Report, which shows only readings positive for LBP, a Detailed Report, which shows readings taken sorted by area, a Sequential Report, which shows all readings in the order they were taken, and a Distribution Report which sorts readings by like components.

Findings

A total of 292 individual XRF readings were collected during the screening inspection. The results of the sampling indicated that 165 readings were above the MDE regulatory level of greater than 0.7 mg/cm^2. The following tables summarize the results of the inspection:

NO.	XRF report	Number of Readings	Number of Positive
1	Main House	181	125
2	Guest House	62	22
3	Garage/Pump House	22	17
4	Pool House	15	0
5	Beach House	12	1
	Property Totals	**292**	**165**

Lead-based Paint (LBP) or elevated lead levels were identified on the following components:

Main House

Location/Area(s)	Component(s)	Substrate	Color	Condition
Exterior	Garage Door and Door Jamb	Wood	White	Intact
Exterior	Fascia and Soffit	Wood	White	Intact
Exterior	Awning Soffit and Column	Wood	White	Intact
Exterior	Window Sash, Mullion, Casing, and Sill	Wood	White	Intact
Exterior	Window Shutter	Wood	Green	Intact
Exterior	Door, Door Header, Jamb, and Casing	Wood	White	Intact
Storage Room 1	HVAC Vent	Metal	White	Intact
Hallway	Duct	Metal	White	Intact
Hallway	Concrete Block Wall	Block	White	Intact
Stairs	Handrails, Newel Posts, and Stair Stringers	Wood	White/Stained	Intact
Laundry Room	Sink	Metal	White	Intact

Location/Area(s)	Component(s)	Substrate	Color	Condition
Laundry Room	Window Lintel	Metal	White	Intact
Boiler Room	Door, Door Casing and Jamb	Wood	Green	Intact
Storage Room 1	Window Lintel	Metal	White	Intact
Storage Room 1	Stair Handrails, and Newel Posts,	Wood	Green/Stained	Intact
Storage Room 1	Stair Stringers	Wood	Green	Poor
Storage Room 1	Beam	Metal	White	Intact
Storage Room 1	Door Lintel	Metal	Green	Intact
Family Room	Fireplace Mantle and Casing	Wood	White	Intact
Family Room	Walls	Wood/Plaster	White	Intact
Family Room	Baseboard	Wood	White	Intact
Family Room	Window Mullion and Casing	Wood	White	Intact
Family Room	Window Sash and Sill	Wood	White	Poor
Family Room	Crown Molding	Wood	White	Intact
Family Room	Door, Door Casing and Jamb	Wood	White	Intact
Foyer	Baseboard, Chair Rail and Crown Molding	Wood	White	Intact
Foyer	Door and Door Casing	Wood	White	Intact
Foyer	Stair Stringers and Balusters	Wood	White	Intact
Bathroom 2	Sink and Toilet	Ceramic	White	Intact
Bathroom 2	Wall	Plaster	White	Intact
Dining Room	Chair Rail and Baseboard	Wood	Green	Intact
Dining Room	Wall	Plaster	Green	Intact
Dining Room	Fireplace Mantle and Casing	Wood	Green	Intact
Kitchen	Wall	Plaster	White	Intact
Kitchen	Ceiling	Plaster	White	Intact
Kitchen	Door	Wood	White	Poor
Kitchen	Door Casing and Jamb	Wood	White	Intact
Kitchen	Sink	Ceramic	White	Intact
Kitchen	Cabinet and Cabinet Door	Wood	White	Intact
Kitchen	Window Sash, Mullion, Casing, and Sill	Wood	White	Intact
Kitchen	Baseboard	Wood	Black	Intact
Living Room 2	Closet Door, Door Casing and Jamb, Shelf and Shelf Support	Wood	White	Intact
Living Room 2	Closet Wall	Plaster	Green	Intact
Living Room 2	Baseboard	Wood	White	Intact

Location/Area(s)	Component(s)	Substrate	Color	Condition
Living Room 2	Window Sash, Mullion, Casing, Apron, and Sill	Wood	White	Intact
Living Room 2	Door and Door Casing	Wood	White	Intact
Garage	Door and Door Casing	Wood	White	Intact
Bedroom 1	Baseboard, Chair Rail and Crown Molding	Wood	Green	Intact
Bedroom 1	Fireplace Mantle and Casing	Wood	White	Intact
Bedroom 1	Window Sash, Mullion, Casing, Apron, and Sill	Wood	White	Intact
Bedroom 1	Closet Door, Door Casing, Shelf and Shelf Support	Wood	White	Intact
Bedroom 1	Closet Wall	Plaster	White	Intact
Bedroom 1	Door, Door Casing and Jamb	Wood	White	Intact
Bathroom 3	Sink, Toilet, and Tub	Ceramic	White	Intact
Bathroom 3	Walls and Floor	Ceramic	White	Intact
Bathroom 4	Sink and Toilet	Ceramic	Tan	Intact
Bathroom 4	Walls and Floor	Ceramic	Tan	Intact
Bathroom 4	Door, Door Casing and Jamb	Ceramic	White	Intact
Bathroom 4	Window Sash and Sill	Wood	White	Intact

Gardener's Cottage

Location/Area(s)	Component(s)	Substrate	Color	Condition
Exterior	Porch Ceiling, Fascia, Soffit and Column	Wood	White	Poor
Exterior	Garage Door and Casing	Wood	White	Poor
Exterior	Wall	Wood	White	Poor
Exterior	Window Mullion and Sash	Wood	White	Poor
Exterior	Window Casing and Sill	Wood	White	Intact
Exterior	Window Shutter	Wood	Green	Poor
Exterior	Door and Door Jamb	Wood	White	Intact
Living Room	Door and Door Casing	Wood	White	Intact
Living Room	Window Sash, Mullion, Casing, and Apron	Wood	White	Intact
Living Room	Window Sill	Wood	White	Poor
Bathroom 1	Tub	Metal	White	Intact

Garage/Pump House

Location/Area(s)	Component(s)	Substrate	Color	Condition
Storage Room 1	Window Mullion, Casing and Sash	Wood	White	Intact
Storage Room 1	Closet Door Jamb	Metal	Brown	Intact
Storage Room 1	Door	Wood	White	Intact
Storage Room 1	Door Jamb	Wood	White	Poor
Storage Room 2	Window Sill, Casing and Sash	Wood	White	Intact
Exterior	Window Mullion, Casing, Sill, and Sash	Wood	White	Intact
Exterior	Fascia and Soffit	Wood	White	Intact
Exterior	Door and Door Jamb	Wood	White	Poor

Pool House – No LBP Identified

Beach House

Location/Area(s)	Component(s)	Substrate	Color	Condition
Exterior	Window Casing	Wood	Green	Poor

Note – These tables were developed from the attached XRF Summary Reports.

These and Similar Like-Components throughout the property should be presumed to be positive for LBP unless further testing refutes the XRF readings.

Discussion of EPA Regulations

Also as of April 22, 2010 all renovation and maintenance workers are also required to have a one day EPA renovator class when working in Residential and Child occupied facilities constructed prior to 1978 that contain LBP.

EPA also regulates disposal of debris containing greater than 5 parts per million (ppm) lead. A composite sample of debris generated from the project should be sampled and analyzed for lead content using the Toxicity Characteristics Leaching Procedure (TCLP) to determine if it is classified as hazardous waste prior to disposal.

Discussion of OSHA Regulations

In addition to the referenced components that tested positive for lead by the LBP standard, the XRF testing revealed lead concentrations less than 1.0 mg/cm^2, but greater than the limit of detection (0.1 mg/cm^2) for the instrument used, for some other surfaces.

Components identified as containing lead in ***any concentration*** are required be handled in accordance with 29 CFR 1926.62, the OSHA "Lead Exposure in Construction" Standard (OSHA does not define LBP). Note – ceramic components are not subject to MDE LBP regulations as they are not painted surfaces, but they are subject to OSHA and EPA regulations.

The OSHA Standard requires an employer to assure that no employee is exposed to airborne lead at concentrations greater than 50 micrograms of lead per cubic meter of air (*u*g/M^3) averaged over an eight-hour period. The standard further requires the employer to make a determination of its employee's potential exposure to lead by blood testing if airborne exposures reach 30 *u*g/M^3 over an eight hour time weighted average. The standard presumes exposure levels for various activities such as sanding, grinding, welding, blasting or other activities that may create lead hazards.

If necessary, the employer must provide adequate personal and respiratory protection to match the presumed exposures listed in the Standard. Deviation from the presumed exposure is typically achieved by performing personal monitoring during various "representative" construction activities. The level of personal and respiratory protection can then be modified based upon the results of monitoring.

Conclusions/Recommendations

At a minimum the LBP should be managed in place as part of an Operation and Maintenance (O&M) Program which should include repair of LBP in poor condition.

The owner could forgo the long term cost of a Lead Paint O&M Program by removing and replacing the component coated with LBP, permanently enclosing the components, or stripping the LBP from the component.

Any renovation work should also follow lead safe work practices outlined in 29 CFR 1926.62, the OSHA "Lead Exposure in Construction" Standard. All workers on the site should have a minimum of one day EPA renovator training.

Disclaimer

This is our report of a visual survey, and X-Ray Fluorescence (XRF) analysis of the readily accessible areas of this building and tested components. The testing performed during this screening inspection does NOT constitute a HUD Chapter 7 Guidelines compliant lead paint inspection of the property. The presence or absence of lead-based paint or lead-based paint hazards applies only to the tested or assessed surfaces on the date of the field visit and it should be understood that conditions noted within this report were accurate at the time of the inspection and in no way reflect the conditions at the property after the date of the inspection. Ongoing monitoring by the owner may be necessary. No other environmental concerns were

addressed during this screening inspection. Attached please find copies of the LPA-1 Lead Paint Reports for each Building which includes Site Diagrams, Photographs, as well as the Risk Assessor's relevant Certifications and Accreditations.

SECTION III:

BIOLOGICAL HAZARDS SURVEY

Biological Hazards Survey

On July 16, 2012 Ene Udoh and Peter Asuquo inspected the property located at 10515 Mackall Road, St. Leonard, MD to identify infested materials and hazards. The purpose of the inspection was to verify the extent of mold damage. Significant mold damage was observed at the Main Residence and Gardener's Cottage.

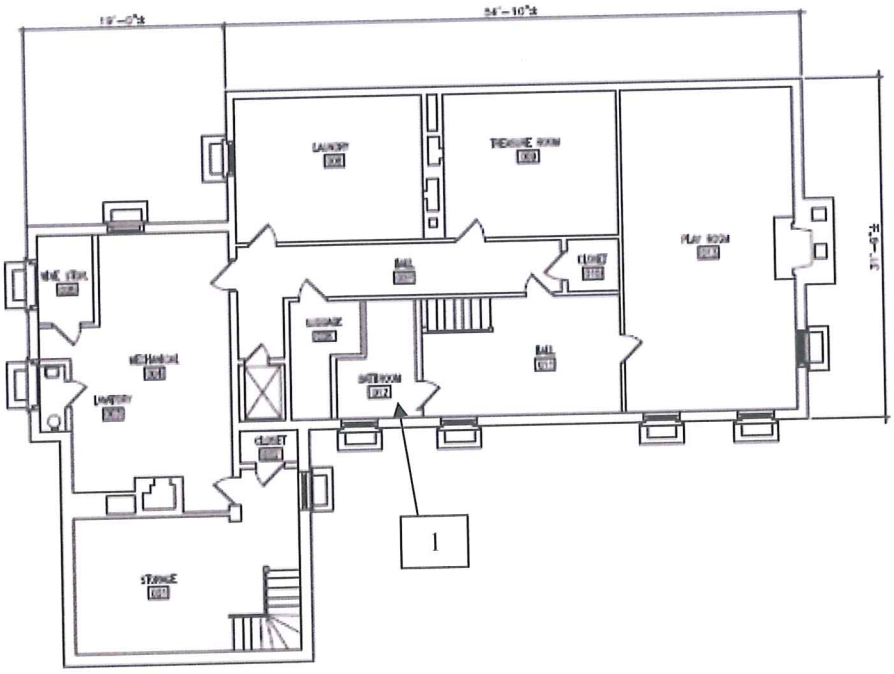
Main Residence-

Description/Condition	Sample ID	Room	Floor	Quantity (Sq ft)	Recommendation
Dry Wall/Intact	JPP-MB-M1	Bathroom	Basement	42	Treatment
Plaster Ceiling/Poor	JPP-MB-M2	Hallway Closet	2nd	85	Remove/Replace
Door/Intact	N/A	Hallway Closet	2nd	20	Treatment
Total Quantity				**147**	

Gardner's Cottage-

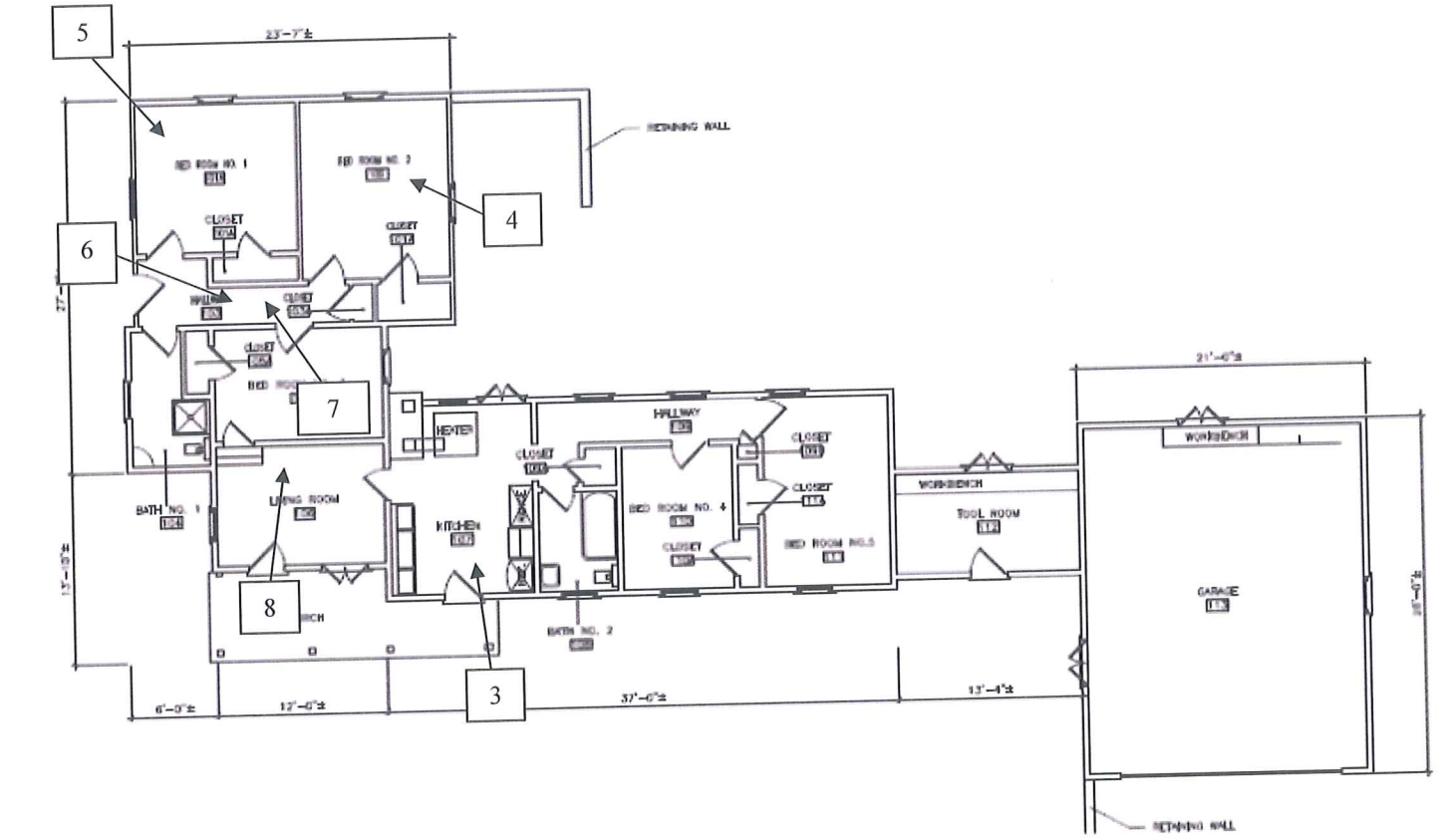
Description/Condition	Sample ID	Room	Floor	Quantity (Sq ft)	Recommendation
Dry Wall/Intact	N/A	Kitchen	1st	48	Treatment
Dry Wall Ceiling/Poor	JPP-GC-M3	Kitchen	1st	25	Remove/Replace
Dry Wall/Intact	JPP-GC-M8	Living Room	1st	60	Treatment
Dry Wall/Intact	N/A	Hallway 109	1st	76	Treatment
Dry Wall Ceiling/Intact	N/A	Bathroom #1	2nd	55	Treatment
Dry Wall/Intact	N/A	Bathroom #1	2nd	110	Treatment
Dry Wall/Intact	JPP-GC-M4	Bedroom #2	2nd	113	Treatment
2 Doors	N/A	Bedroom #2	2nd	40	Treatment
Dry Wall/Intact	JPP-GC-M5	Bedroom #1	2nd	182	Treatment
Dry Wall Ceiling/Poor	JPP-GC-M6	Hallway 103	2nd	85	Remove/Replace
Dry Wall/Intact	JPP-GC-M7	Hallway 103	2nd	340	Remove/Replace
Total Quantity				**1,134**	

Main Residence: Basement



1 MAIN RESIDENCE – BASEMENT FLOOR PLAN
A101 SCALE: 3/32 = 1'-0"

Gardener's Cottage



1 A105 GARDENERS' COTTAGE – FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

Conclusions/Recommendations:

TREATMENT IN PLACE
Material that is viewed as "Intact" is considered to be in good condition. Proper treatment can be performed by a trained professional to ensure no further damage is done during remediation.

REMOVAL
The first step would be the encapsulation and removal of moisture causing/retaining material. All material removed should be placed in the appropriate biohazard disposal bags and taken to the appropriate bio-hazard disposal facility in Maryland. Encapsulate 48 inches of drywall, and remove the drywall from the premises. All of the doors should be encapsulated, removed from the premises and disposed in the bio-hazard disposal facility in Maryland.

FUNGICIDE
A fungicide should be applied to all remaining surfaces, including the floors and walls. The contractor would then allow the fungicide to dry and apply a second treatment which would also contain a bactericide. The Fungicide that will be used should be certified and tested by the EPA and the USDA as killing most mold types.

ENCAPSULATION
After the final application of the fungicide, all non-porous surfaces, such as the floor and appliances, materials would be encapsulated with an encapsulating chemical, and the remaining porous surfaces would be encapsulated with an encapsulating chemical.

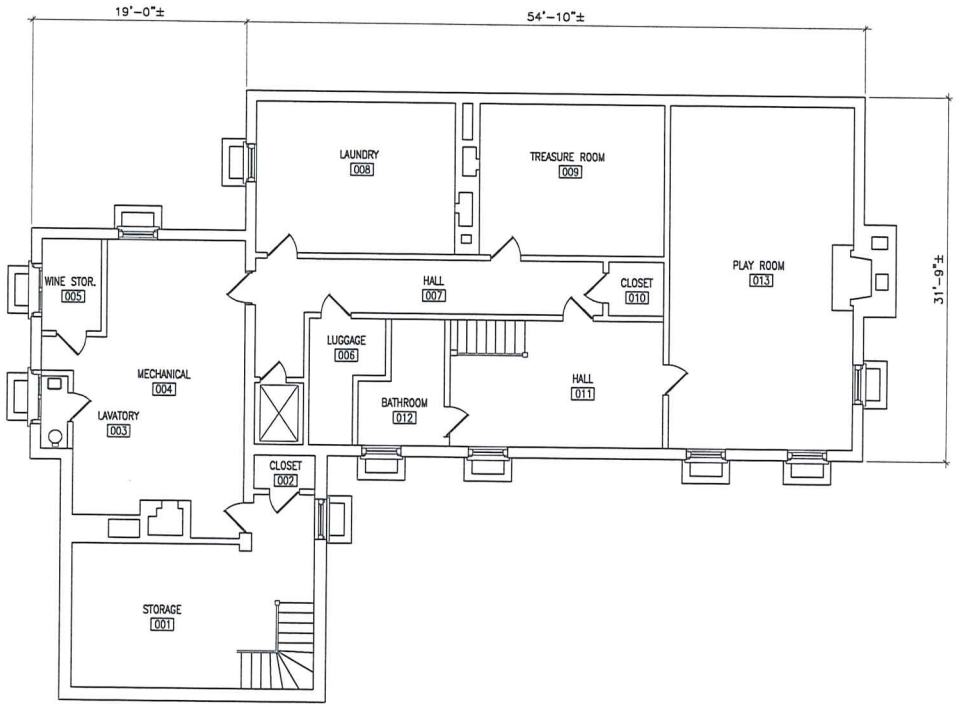
OZONAZATION
Ozone has been proven to be extremely effective in killing mold spores. Once the encapsulating chemicals have dried, contractor should deploy an ozone generator. The ozone generator should produce 24,000 milligrams of ozone per hour, and would completely fill the entire house with ozone in a 36 hour period. This ozone will kill any hidden remaining mold.

TESTING/RETREATING
Once the ozone treatment has been completed, an industrial hygienist should come back and perform tests throughout the house to determine mold levels. If the mold levels are determined to be high, another round of treatments should be scheduled.

Results: (Lab Results Listed in Appendix D)

APPENDIX A:

SITE DRAWINGS



1 / A101 MAIN RESIDENCE – BASEMENT FLOOR PLAN
SCALE: 3/32"=1'-0"

16 8 0 8 16
3/32"=1'-0" SCALE OF INCHES

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Washington, DC 20037
v 202 298 6700 f 202 298 6666
www.quinnevans.com

PATTERSON CENTER CONDITION ASSESSMENT

10515 MACKALL ROAD ST. LEONARD, MD

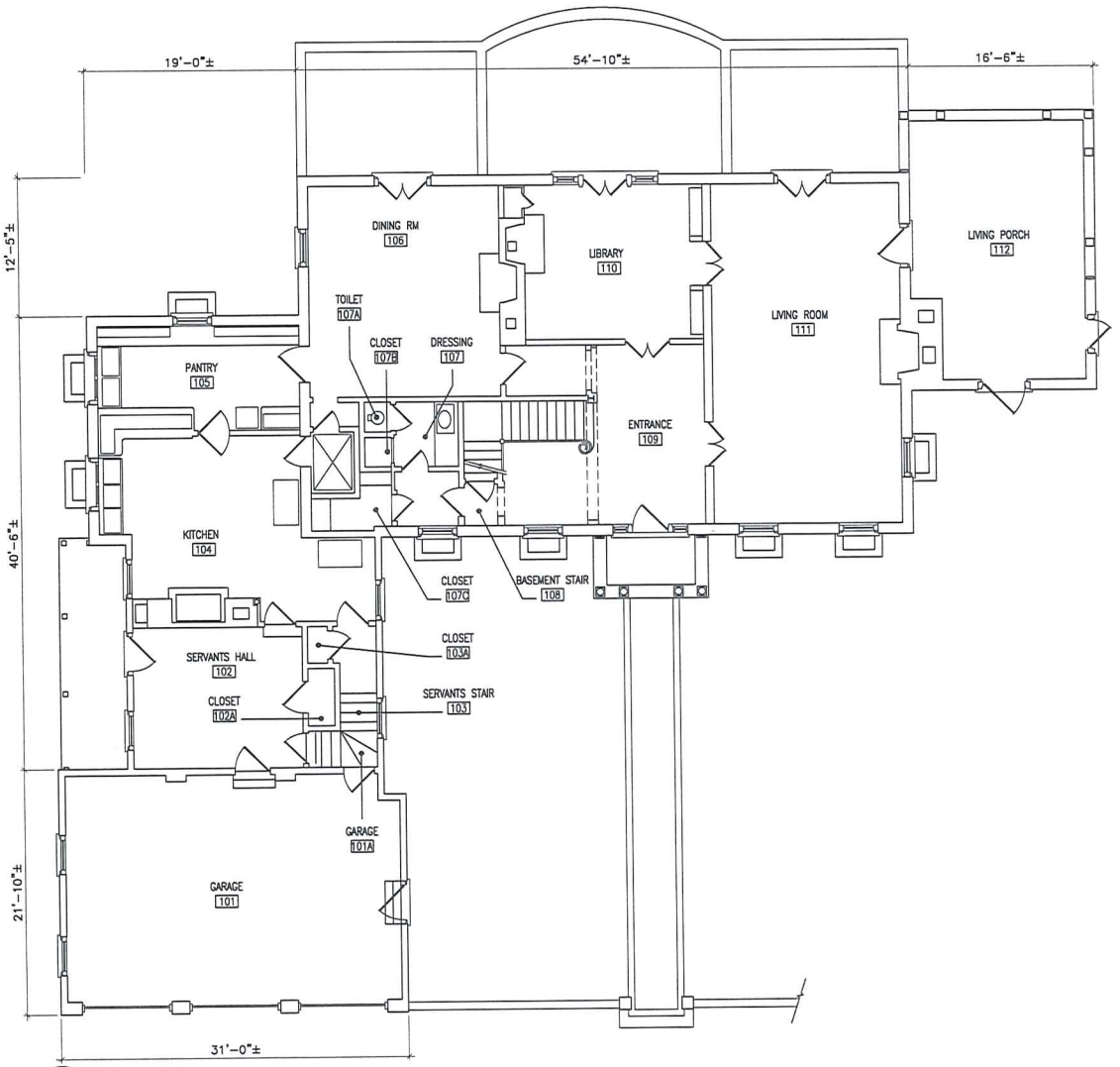
QEA Project No. 31203300

MAIN RESIDENCE

NO.	TITLE	DATE

FILE NAME

A101



1 / A102 MAIN RESIDENCE – FIRST FLOOR PLAN
SCALE: 3/32"=1'-0"

16 8 0 8 16
3/32"=1'-0" SCALE OF INCHES

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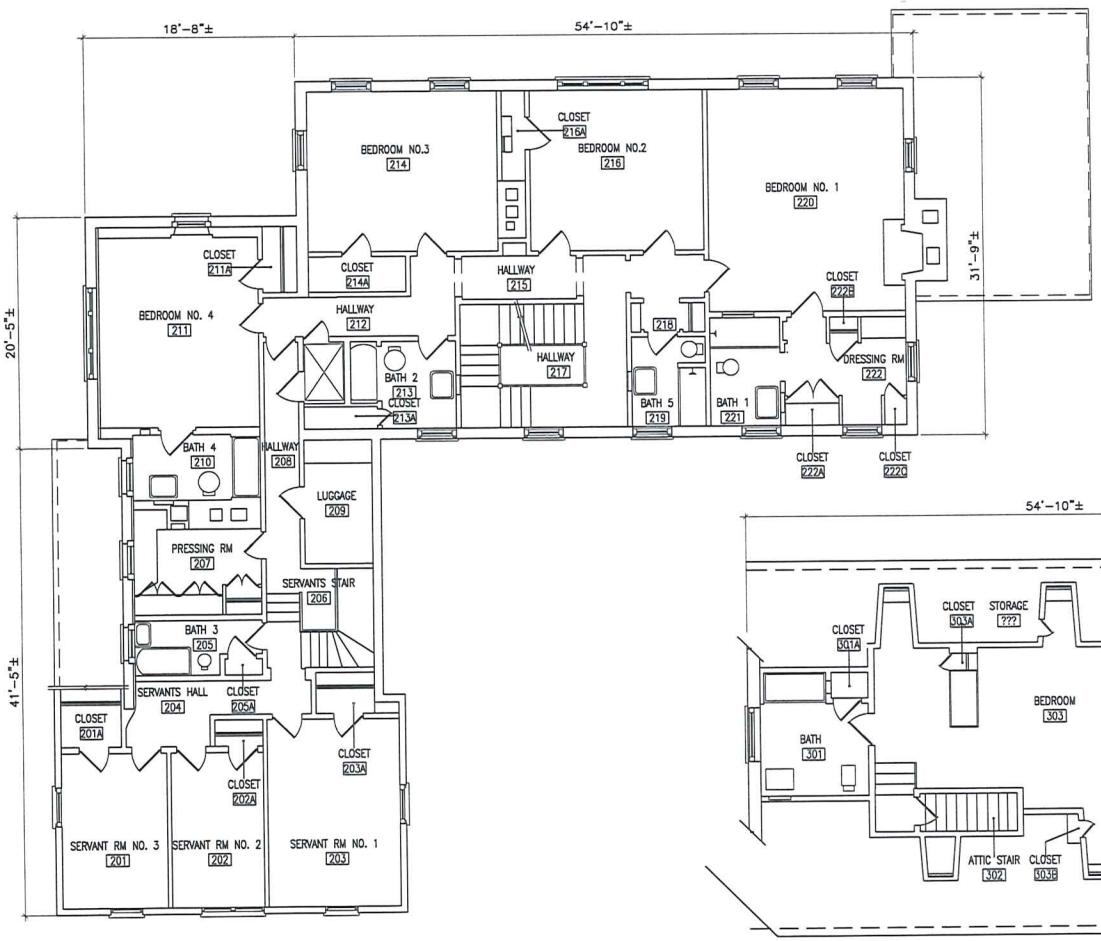
QEA Project No. 31203300

MAIN RESIDENCE

NO.	TITLE	DATE

FILE NAME

A102



2 A103 MAIN RESIDENCE – SECOND FLOOR PLAN
SCALE: 3/32"=1'-0"

1 A103 MAIN RESIDENCE – ATTIC FLOOR PLAN
SCALE: 3/32"=1'-0"

16 8 0 8 16
3/32"=1'-0" SCALE OF INCHES

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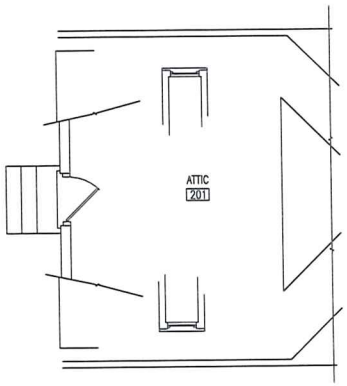
QEA Project No. 31203300

MAIN RESIDENCE

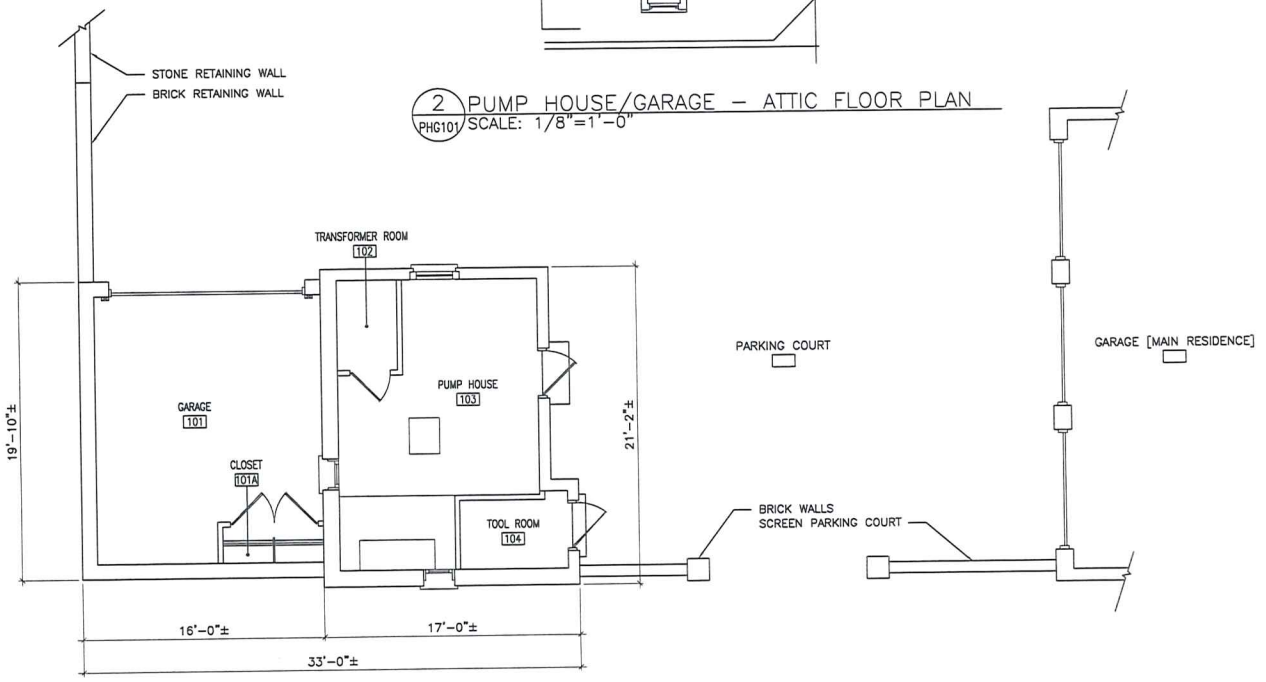
NO.	TITLE	DATE

FILE NAME:

A103



2 PHG101 PUMP HOUSE/GARAGE – ATTIC FLOOR PLAN
SCALE: 1/8"=1'-0"



1 A104 PUMP HOUSE/GARAGE – FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

8 4 0 8 16
1/8"=1'-0" SCALE OF FEET

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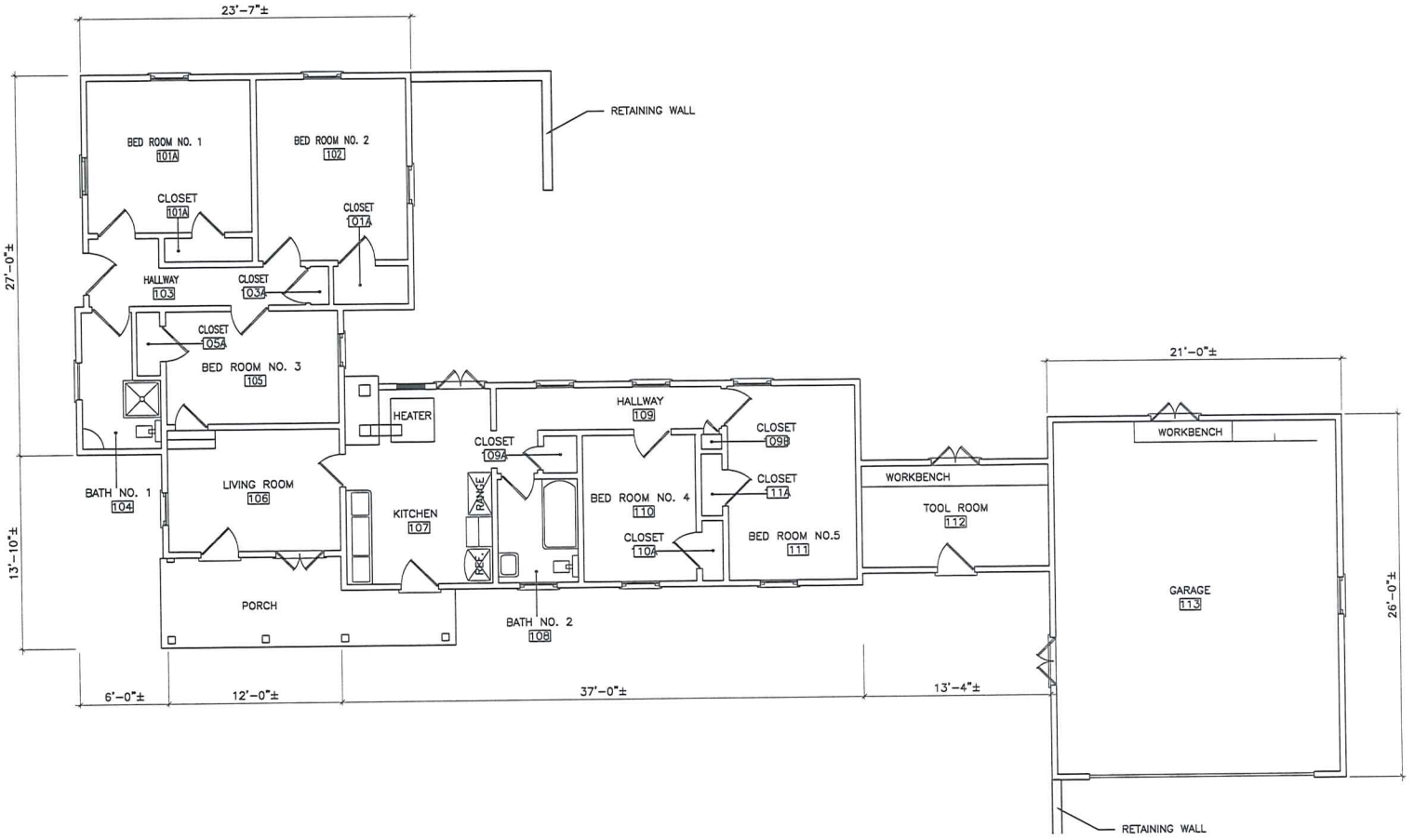
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PUMP HOUSE/ GARAGE

NO.	TITLE	DATE

FILE NAME

A104



1 / A105 GARDENERS' COTTAGE – FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

8 4 0 8 16
1/8"=1'-0" SCALE OF FEET

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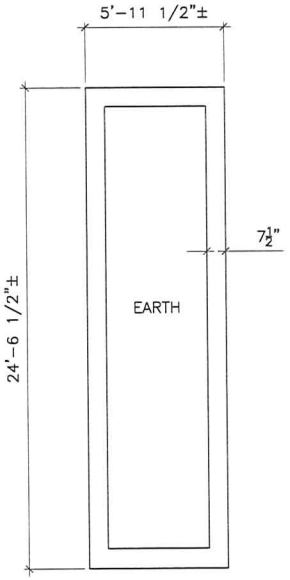
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GARDENERS' COTTAGE

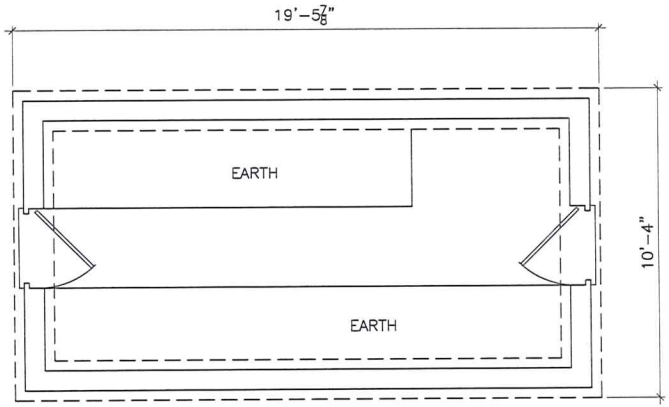
NO.	TITLE	DATE

FILE NAME:

A105



2/106 COLD FRAME – PLAN
SCALE: 1/4"=1'-0"



1/106 GREENHOUSE – PLAN
SCALE: 1/4"=1'-0"

4 2 0 4 8
1/4"=1'-0" SCALE OF FEET

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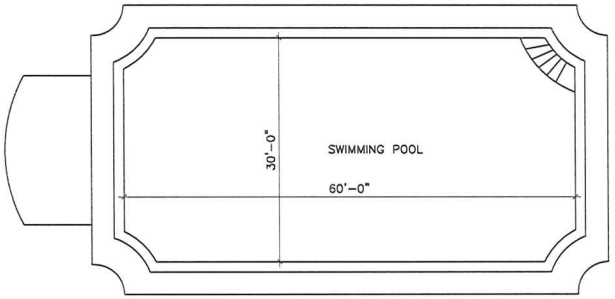
QEA Project No. 31203300

GREENHOUSE AND COLDFRAME

NO.	TITLE	DATE

FILE NAME

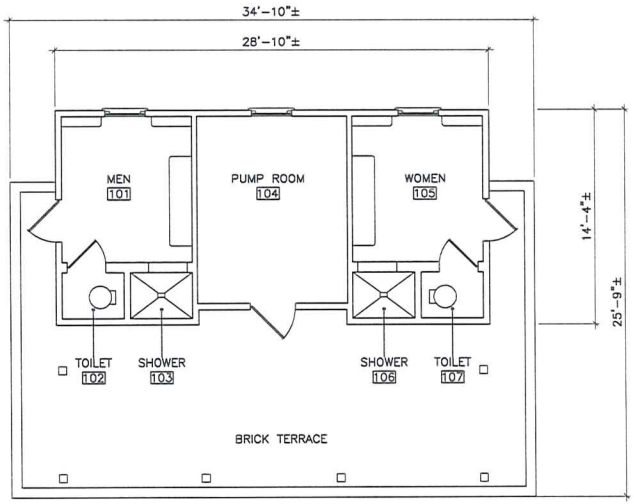
A106



2 / A107 SWIMMING POOL – PLAN
SCALE: 1/16"=1'-0"

16 8 0 16 32

1/16"=1'-0" SCALE OF FEET



1 / A107 POOL HOUSE FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

8 4 0 8 16

1/8"=1'-0" SCALE OF FEET

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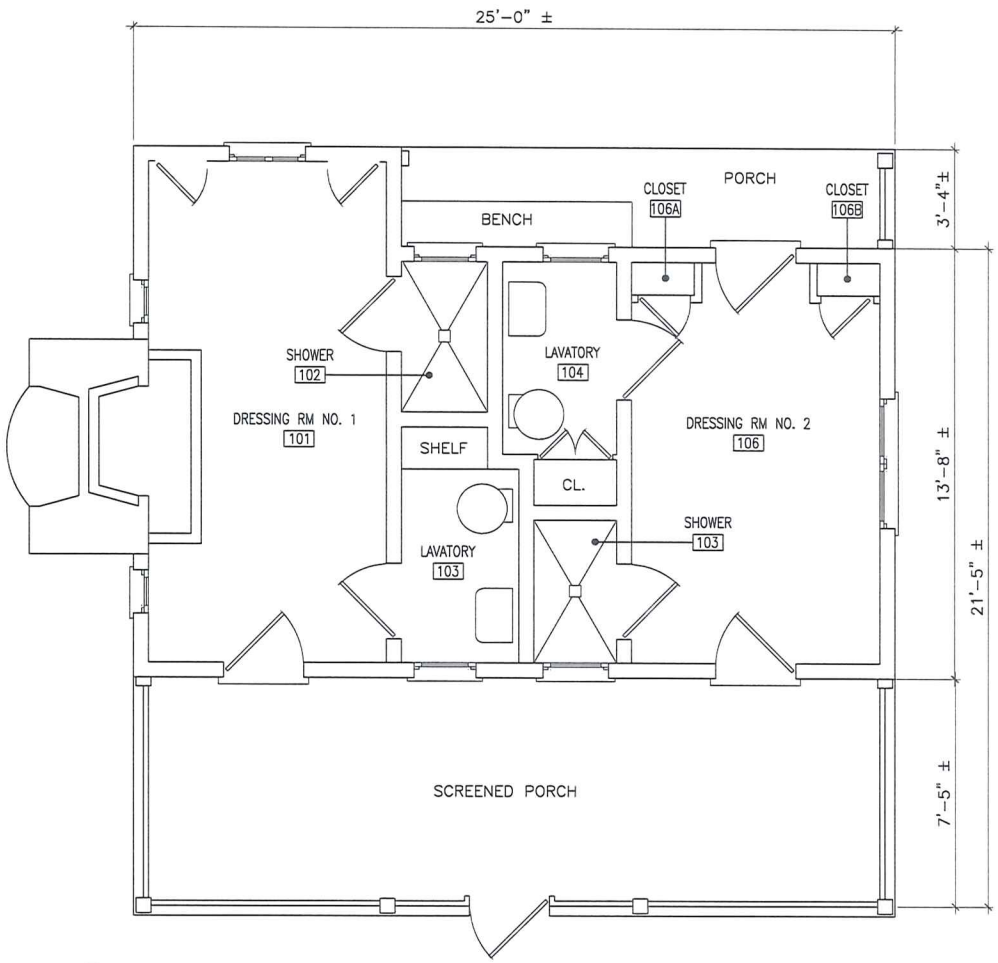
QEA Project No. 31203300

POOL HOUSE

NO.	TITLE	DATE

FILE NAME

A107



1/108 BEACH HOUSE – FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"

4 2 0 4 8
1/4"=1'-0" SCALE OF FEET

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PATTERSON CENTER CONDITION ASSESSMENT

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QEA Project No. 31203300

BEACH HOUSE

NO.	TITLE	DATE

FILE NAME

A108

APPENDIX B:

ASBESTOS LAB RESULTS

EMSL Analytical, Inc.
10768 Baltimore Avenue, Beltsville, MD 20705
Phone/Fax: (301) 937-5700 / (301) 937-5701
http://www.emsl.com beltsvillelab@emsl.com

EMSL Order:	191207036
CustomerID:	PAGE50
CustomerPO:	
ProjectID:	

Attn: **Tom Umoh**
Page Environmental
1412 S Carey St.
Baltimore, MD 21230

Phone:	(410) 230-0733
Fax:	(410) 230-0735
Received:	07/17/12 2:10 PM
Analysis Date:	7/19/2012
Collected:	7/16/2012

Project: **JPPM**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
JPPM-B1 *191207036-0001*	FT 9X9	Brown/Tan Non-Fibrous Heterogeneous		96% Non-fibrous (other)	**4% Chrysotile**
		no mastic			
JPPM-B2 *191207036-0002*	FT 9X9	Brown/Tan Non-Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**
		no mastic			
JPPM-B3 *191207036-0003*	FT 9X9	Brown/Tan Non-Fibrous Heterogeneous		97% Non-fibrous (other)	**3% Chrysotile**
		no mastic			
JPPM-B4-Floor Tile *191207036-0004*	FT 9X9	Brown Non-Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**
JPPM-B4-Mastic *191207036-0004A*	FT 9X9	Black Non-Fibrous Heterogeneous	3% Cellulose	92% Non-fibrous (other)	**5% Chrysotile**
JPPM-B5-Floor Tile *191207036-0005*	FT 9X9 MASTIC	White Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**
JPPM-B5-Mastic *191207036-0005A*	FT 9X9 MASTIC	Black Fibrous Heterogeneous	7% Cellulose	83% Non-fibrous (other)	**10% Chrysotile**

Analyst(s)
Emily Baker (53)

Joe Centifonti, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from 07/19/2012 16:34:33

EMSL Analytical, Inc.
10768 Baltimore Avenue, Beltsville, MD 20705
Phone/Fax: (301) 937-5700 / (301) 937-5701
http://www.emsl.com beltsvillelab@emsl.com

EMSL Order:	191207036
CustomerID:	PAGE50
CustomerPO:	
ProjectID:	

Attn: **Tom Umoh**
Page Environmental
1412 S Carey St.
Baltimore, MD 21230

Phone:	(410) 230-0733
Fax:	(410) 230-0735
Received:	07/17/12 2:10 PM
Analysis Date:	7/19/2012
Collected:	7/16/2012

Project: **JPPM**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
JPPM-B6 *191207036-0006*	PLASTER CEILING	White/Beige Non-Fibrous Heterogeneous	7% Cellulose	31% Non-fibrous (other) 60% Quartz	**2% Chrysotile**
JPPM-B7 *191207036-0007*	PLASTER CEILING	White/Beige Non-Fibrous Heterogeneous	5% Cellulose	41% Non-fibrous (other) 50% Quartz	**4% Chrysotile**
JPPM-B8 *191207036-0008*	PLASTER CEILING	Beige Non-Fibrous Heterogeneous	5% Cellulose	38% Non-fibrous (other) 50% Quartz 5% Mica	**2% Chrysotile**
JPPM-B9 *191207036-0009*	CEILING TILE PANEL	Tan/White Fibrous Heterogeneous	75% Cellulose	25% Non-fibrous (other)	**None Detected**
JPPM-B10 *191207036-0010*	CEILING TILE PANEL	Tan/White Fibrous Heterogeneous	80% Cellulose	20% Non-fibrous (other)	**None Detected**
JPPM-F1-Linoleum *191207036-0011*	LINOLEUM FLOORING	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
JPPM-F1-Mastic *191207036-0011A*	LINOLEUM FLOORING	Brown Fibrous Heterogeneous	20% Cellulose	80% Non-fibrous (other)	**None Detected**
JPPM-F2-Linoleum *191207036-0012*	LINOLEUM FLOORING	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
Emily Baker (53)

Joe Centifonti, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from 07/19/2012 16:34:33

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Analysis Date:	7/19/2012
Collected:	7/16/2012

Project: **JPPM**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
JPPM-F2-Mastic *191207036-0012A*	LINOLEUM FLOORING	Brown Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	**None Detected**
JPPM-S1-Floor Tile *191207036-0013*	FT	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
JPPM-S1-Mastic *191207036-0013A*	FT	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
JPPM6-13-A *191207036-0014*	TRANSITE CEILING	Beige Non-Fibrous Heterogeneous		85% Non-fibrous (other)	**15% Chrysotile**
JPP-PH-1 *191207036-0015*	ROOFING MATERIAL	Brown/Gray Fibrous Heterogeneous		92% Non-fibrous (other)	**8% Chrysotile**
JPP-PH-2 *191207036-0016*	ROOFING MATERIAL	Brown/Gray/Tan Fibrous Heterogeneous		90% Non-fibrous (other)	**10% Chrysotile**
JPP-PH-3 *191207036-0017*	ROOFING MATERIAL	Brown/Gray/Tan Non-Fibrous Heterogeneous		88% Non-fibrous (other)	**12% Chrysotile**
JPP-GC-1-Floor Tile *191207036-0018*	FT 9X9	Brown Non-Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**

Analyst(s)
Emily Baker (53)

Joe Centifonti, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

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Fax:	(410) 230-0735
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Analysis Date:	7/19/2012
Collected:	7/16/2012

Project: **JPPM**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
JPP-GC-1-Mastic *191207036-0018A*	FT 9X9	Black Non-Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**
JPP-GC-2-Floor Tile *191207036-0019*	FT MASTIC	Tan Non-Fibrous Heterogeneous		96% Non-fibrous (other)	**4% Chrysotile**
JPP-GC-2-Mastic *191207036-0019A*	FT MASTIC	Black Non-Fibrous Heterogeneous		94% Non-fibrous (other)	**6% Chrysotile**
JPP-GC-3-Floor Tile *191207036-0020*	FT 9X9	Brown Non-Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**
JPP-GC-3-Mastic *191207036-0020A*	FT 9X9	Black Non-Fibrous Heterogeneous		93% Non-fibrous (other)	**7% Chrysotile**
JPP-GC-4-Floor Tile *191207036-0021*	FT 9X9	Tan Non-Fibrous Heterogeneous		96% Non-fibrous (other)	**4% Chrysotile**
JPP-GC-4-Mastic *191207036-0021A*	FT 9X9	Black Non-Fibrous Heterogeneous		98% Non-fibrous (other)	**2% Chrysotile**
JPP-GC-5-Floor Tile *191207036-0022*	FT 9X9	Brown Non-Fibrous Heterogeneous		97% Non-fibrous (other)	**3% Chrysotile**

Analyst(s)
Emily Baker (53)

Joe Centifonti, Laboratory Manager
or other approved signatory

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Phone:	(410) 230-0733
Fax:	(410) 230-0735
Received:	07/17/12 2:10 PM
Analysis Date:	7/19/2012
Collected:	7/16/2012

Project: **JPPM**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
JPP-GC-5-Mastic *191207036-0022A*	FT 9X9	Black Non-Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**
JPP-GC-6-Linoleum *191207036-0023*	LINOLEUM FLOORING	White Fibrous Heterogeneous	20% Glass 10% Cellulose	70% Non-fibrous (other)	**None Detected**
JPP-GC-6-Mastic *191207036-0023A*	LINOLEUM FLOORING	Tan Non-Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (other)	**None Detected**
JPP-GC-7-Linoleum *191207036-0024*	LINOLEUM FLOORING	White Fibrous Heterogeneous	15% Glass	85% Non-fibrous (other)	**None Detected**
JPP-GC-7-Mastic *191207036-0024A*	LINOLEUM FLOORING	Tan Fibrous Heterogeneous	6% Cellulose	94% Non-fibrous (other)	**None Detected**
JPP-GC-8-Floor Tile *191207036-0025*	FT 9X9	Tan Non-Fibrous Heterogeneous		94% Non-fibrous (other)	**6% Chrysotile**
JPP-GC-8-Mastic *191207036-0025A*	FT 9X9	Black Non-Fibrous Heterogeneous	4% Cellulose	94% Non-fibrous (other)	**2% Chrysotile**
JPP-GC-9-Floor Tile *191207036-0026*	FT 9X9	Tan Non-Fibrous Heterogeneous		93% Non-fibrous (other)	**7% Chrysotile**

Analyst(s)
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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

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EMSL Order:	191207036
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Phone:	(410) 230-0733
Fax:	(410) 230-0735
Received:	07/17/12 2:10 PM
Analysis Date:	7/19/2012
Collected:	7/16/2012

Project: **JPPM**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
JPP-GC-9-Mastic *191207036-0026A*	FT 9X9	Black Non-Fibrous Heterogeneous	4% Cellulose	91% Non-fibrous (other)	**5% Chrysotile**
JPP-GC-10-Floor Tile *191207036-0027*	FT 9X9	Beige Non-Fibrous Heterogeneous		98% Non-fibrous (other)	**2% Chrysotile**
JPP-GC-10-Mastic *191207036-0027A*	FT 9X9	Non-Fibrous Heterogeneous		93% Non-fibrous (other)	**7% Chrysotile**
JPP-GC-11-Floor Tile *191207036-0028*	FT 9X9	Tan Non-Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**
JPP-GC-11-Mastic *191207036-0028A*	FT 9X9	Black Non-Fibrous Heterogeneous		96% Non-fibrous (other)	**4% Chrysotile**
JPP-GC-12 *191207036-0029*	PIPE INSULATION	White Fibrous Heterogeneous		75% Non-fibrous (other)	**25% Chrysotile**
JPP-GC-13 *191207036-0030*	PIPE INSULATION	White Fibrous Heterogeneous		73% Non-fibrous (other)	**27% Chrysotile**
JPP-GC-14 *191207036-0031*	PIPE INSULATION	White Fibrous Heterogeneous		75% Non-fibrous (other)	**25% Chrysotile**

Analyst(s)
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Joe Centifonti, Laboratory Manager
or other approved signatory

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Initial report from 07/19/2012 16:34:33

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CustomerPO:
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Fax: (410) 230-0735
Received: 07/17/12 2:10 PM
Analysis Date: 7/19/2012
Collected: 7/16/2012

Project: **JPPM**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
JPP-GC-15 *191207036-0032*	MUDDED ELBOW FITTING	Gray/White Fibrous Heterogeneous		80% Non-fibrous (other)	**20% Chrysotile**
JPP-GC-16 *191207036-0033*	MUDDED ELBOW FITTING	Gray/White Fibrous Heterogeneous		70% Non-fibrous (other)	**30% Chrysotile**
JPP-GC-17 *191207036-0034*	MUDDED ELBOW FITTING	Gray/White Fibrous Heterogeneous		50% Non-fibrous (other)	**50% Chrysotile**
JPP-BH-1 *191207036-0035*	ROOFING MATERIAL	Black Fibrous Heterogeneous	20% Glass	80% Non-fibrous (other)	**None Detected**
JPP-BH-2 *191207036-0036*	ROOFING MATERIAL	Black Fibrous Heterogeneous	35% Glass	65% Non-fibrous (other)	**None Detected**
JPP-BH-3 *191207036-0037*	ROOFING MATERIAL	Black Non-Fibrous Heterogeneous	30% Glass	70% Non-fibrous (other)	**None Detected**

Analyst(s)
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EMSL Order:	191207458
CustomerID:	PAGE50
CustomerPO:	
ProjectID:	

Attn: **Tom Umoh**
Page Environmental
1412 S Carey St.
Baltimore, MD 21230

Phone:	(410) 230-0733
Fax:	(410) 230-0735
Received:	07/26/12 3:30 PM
Analysis Date:	7/26/2012
Collected:	7/24/2012

Project: **JEFFERSON PATTERSON CENTER**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
JPP-GC-18-Linoleum *191207458-0001*	LINOLEUM FLOORING WHITE	Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	**None Detected**
JPP-GC-18-Mastic *191207458-0001A*	LINOLEUM FLOORING WHITE	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
JPP-GC-19-Floor Tile *191207458-0002*	FT 9X9 BROWN/GREEN	Cream Non-Fibrous Heterogeneous		95% Non-fibrous (other)	**5% Chrysotile**
JPP-GC-19-Mastic *191207458-0002A*	FT 9X9 BROWN/GREEN	Black Non-Fibrous Heterogeneous		93% Non-fibrous (other)	**7% Chrysotile**
JPP-GC-20-Floor Tile *191207458-0003*	FT 9X9 BROWN/GREEN	Cream Non-Fibrous Heterogeneous		94% Non-fibrous (other)	**6% Chrysotile**
JPP-GC-20-Mastic *191207458-0003A*	FT 9X9 BROWN/GREEN	Black Non-Fibrous Heterogeneous		92% Non-fibrous (other)	**8% Chrysotile**

Analyst(s)
Emily Baker (6)

Joe Centifonti, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Beltsville, MD NVLAP Lab Code 200293-0

Initial report from 07/27/2012 12:20:13

APPENDIX C:

XRF ANALYSIS REPORT

XRF Reading Summary
Patterson Center

	XRF report	# of Readings	# of Positive
1	Main House	181	125
2	Guest House	62	22
3	Garage/Pump House	22	17
4	Pool House	15	0
5	Beach House	12	1
	Property Totals	**292**	**165**

LEAD PAINT INSPECTION REPORT

REPORT NUMBER: 07/16/12 09:10

INSPECTION FOR: Page Technologies, Inc
1412 South Carey Street
Baltimore, MD 21230
Attn: Enobong Umoh

PERFORMED AT: 10515 Mackall Road
Saint Leonard MD 20685
Main House

INSPECTION DATE: 07/16/12

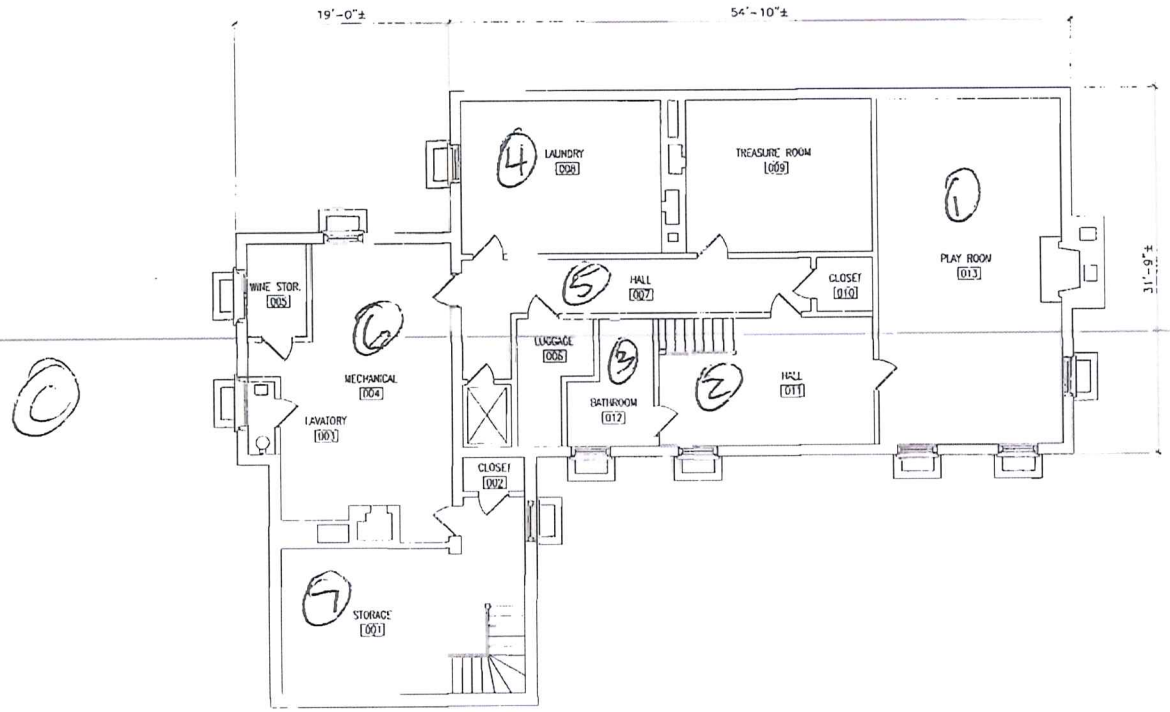
INSTRUMENT TYPE: R M D
MODEL LPA-1
XRF TYPE ANALYZER
Serial Number: 2599

ACTION LEVEL: 0.8 mg/cm^2

OPERATOR LICENSE: 7148

SIGNED: _____ Date: 7/16/12

Dharam Kissoondath



1 / A101 MAIN RESIDENCE - BASEMENT FLOOR PLAN

SCALE: 3/32"=1'-0"

16 8 0 8 16

3/32" 1' 0" SCALE OF INCHES

QUINN EVANS
2121 Ward Place, NW, Floor 4
Washington, DC 20037
t 202 298 6700 f 202 298 6666
www.quinnevans.com

PATTERSON CENTER CONDITION ASSESSMENT

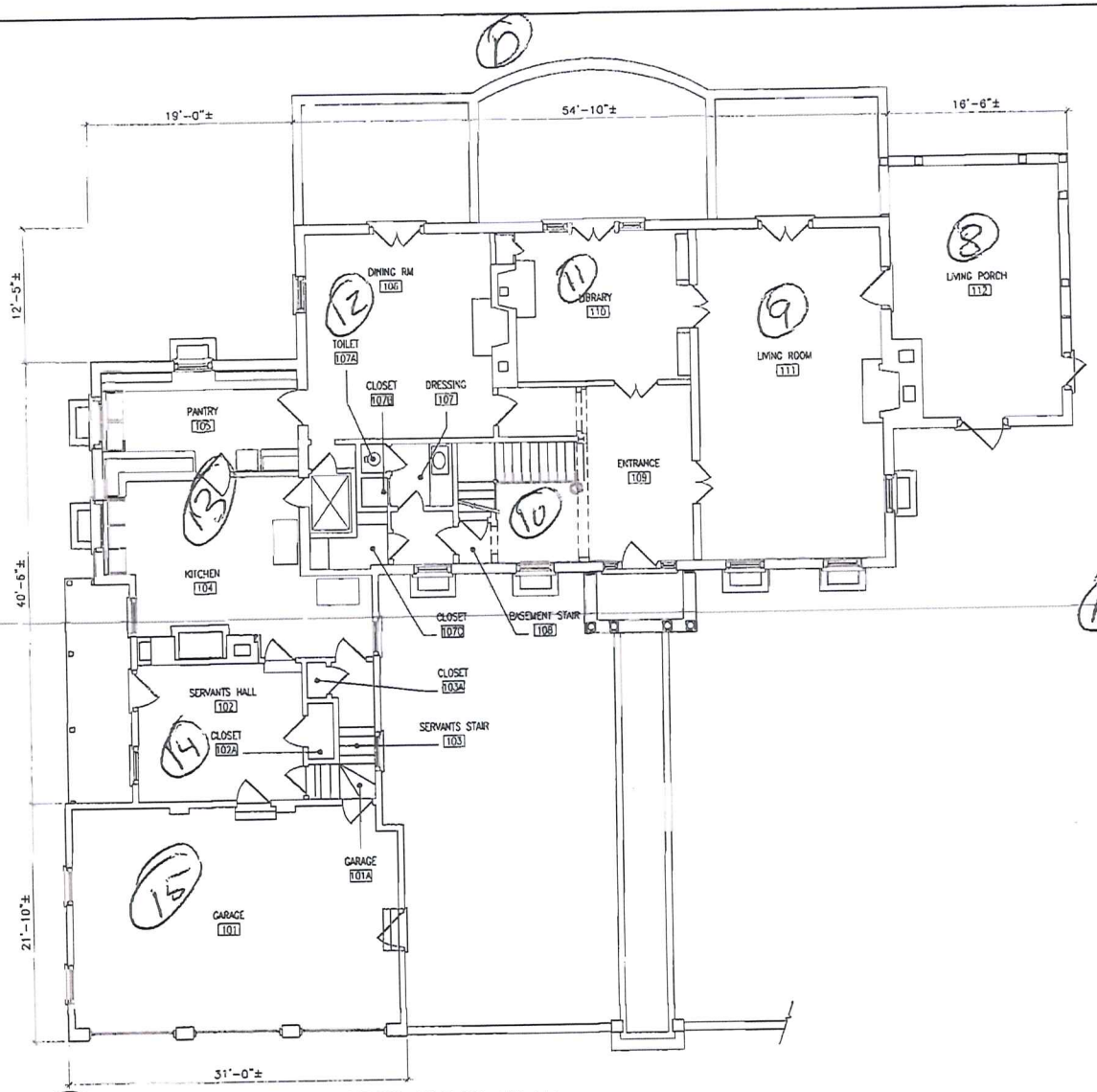
10515 MACKALL ROAD ST. LEONARD, MD

QEA Project No. 31703.00

MAIN RESIDENCE

NO.	TITLE	DATE

A101



1 / A102 MAIN RESIDENCE – FIRST FLOOR PLAN
SCALE: 3/32"=1'-0"

16 8 0 8 16
3/32"=1'-0" SCALE OF INCHES

QUINN EVANS
2121 Ward Place, NW, Floor 4
Washington, DC 20037
v 202 298 6500 f 202 298 6655
www.quinnevans.com

PATTERSON CENTER CONDITION ASSESSMENT

10515 MACKALL ROAD ST. LEONARD, MD

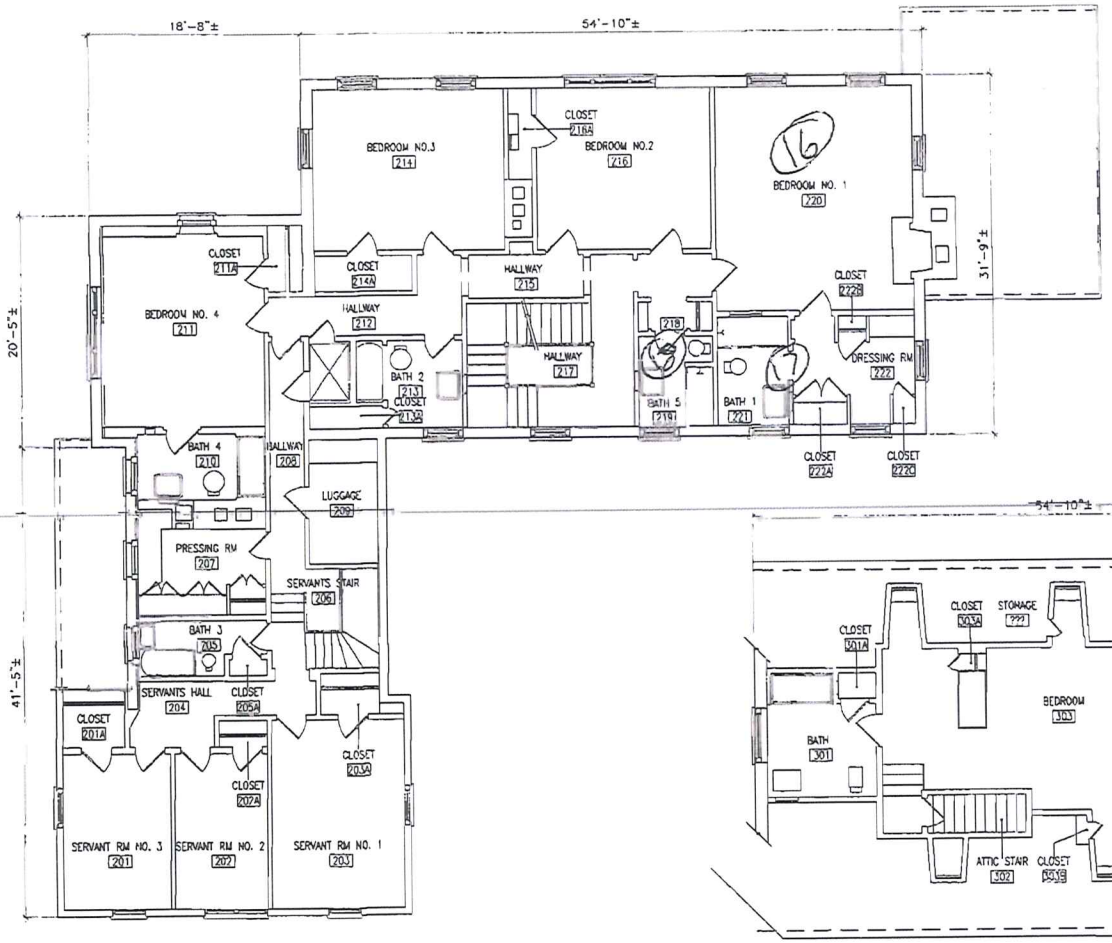
QEA Project No. 3190330

MAIN RESIDENCE

NO.	TITLE	DATE

PERMIT

A102



2 A103 MAIN RESIDENCE – SECOND FLOOR PLAN
SCALE: 3/32"=1'-0"

1 A103 MAIN RESIDENCE – ATTIC FLOOR PLAN
SCALE: 3/32"=1'-0"

16 8 0 8 16
3/32"=1'-0" SCALE OF INCHES

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2121 West Place, NW, Floor 4
Washington, DC 20037
t 202 298 6700 f 202 298 6555

PATTERSON CENTER CONDITION ASSESSMENT

10515 MACKCALL ROAD
ST. LEONARD, MD

MAIN RESIDENCE

NO.	TITLE	DATE

A103

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 09:10
Total Readings: 181 Actionable: 125
Job Started: 07/16/12 09:10
Job Finished: 07/16/12 11:00

10515 Mackall Road
Saint Leonard MD 20685
Main House

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Exterior Room 001 SD B									
177	B	garage	Lft	door	I	Wood	White	9.9	QM
178	B	garage	Lft	door jamb	I	Wood	White	9.9	QM
179	B	fascia	Lft		I	Wood	White	8.3	QM
180	B	soffit	Lft		I	Wood	White	9.9	QM
170	B	Awning	Rgt	column	I	Wood	White	8.0	QM
171	B	Awning	Rgt	soffit	I	Wood	White	8.3	QM
175	B	Window	Lft	Mullion	I	Wood	White	8.3	QM
176	B	Window	Lft	shutter	I	Wood	green	9.9	QM
173	B	Window	Lft	Rgt casing	I	Wood	White	9.3	QM
174	B	Window	Lft	Sash	I	Wood	White	7.3	QM
172	B	Window	Lft	Sill	I	Wood	White	8.3	QM
168	B	Door	Rgt	Header	I	Wood	White	9.9	QM
167	B	Door	Rgt	Lft casing	I	Wood	White	9.9	QM
166	B	Door	Rgt	Lft jamb	I	Wood	White	9.9	QM
165	B	Door	Rgt	U Rgt	I	Wood	White	9.9	QM
Interior Room 001 Storage									
008	C	HVAC vent	Lft		I	Metal	White	0.8	QM
Interior Room 002 Hallway									
014	A	duct	Lft		I	Metal	White	9.2	QM
013	A	Wall	U Ctr		I	Block	White	1.3	QM
017	A	Stairs	Ctr	Hand Rail	I	Wood	Stained	2.1	QM
018	A	Stairs	Ctr	Hand Rail	I	Wood	White	2.2	QM
016	A	Stairs	Ctr	Newel post	I	Wood	Stained	2.3	QM
015	A	Stairs	Rgt	Stringers	I	Wood	White	6.6	QM
Interior Room 004 Laundry Rm									
028	C	sink	Ctr		I	Metal	White	9.9	QM
027	C	Window	Ctr	Lintel	I	Metal	White	6.3	QM
Interior Room 006 Boiler rm									
043	A	Door	Rgt	Lft casing	I	Wood	green	8.5	QM
041	A	Door	Rgt	Lft jamb	I	Wood	green	9.1	QM
042	A	Door	Rgt	U Rgt	I	Wood	green	7.7	QM
Interior Room 007 Storage 2									
046	A	Window	Rgt	Lintel	I	Metal	White	9.9	QM
051	B	Stairs	Lft	Stringers	P	Wood	green	5.3	QM
052	B	Stairs	Lft	Hand Rail	I	Wood	Stained	0.8	QM

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
053	B	Stairs	Lft	Hand Rail	I	Wood	green	2.2	QM
054	B	Stairs	Lft	Newel post	I	Wood	Stained	0.8	QM
047	C	beam	Rgt		I	Metal	White	3.2	QM
048	C	Door	Rgt	Lintel	I	Metal	green	6.5	QM
Interior Room 008 Family Rm									
062	A	fireplace	Ctr	Mantle	I	Wood	White	9.9	QM
063	A	fireplace	Ctr	Casing	I	Wood	White	9.9	QM
056	A	Wall	U Rgt		I	Wood	White	8.3	QM
057	A	Baseboard	Rgt		I	Wood	White	9.9	QM
061	A	Window	Rgt	Mullion	I	Wood	White	7.3	QM
060	A	Window	Rgt	Rgt casing	I	Wood	White	9.3	QM
059	A	Window	Rgt	Sash	P	Wood	White	8.2	QM
058	A	Window	Rgt	Sill	P	Wood	White	5.3	QM
055	B	Wall	U Lft		I	Plaster	White	9.1	QM
068	C	Crown Mldg	Lft		I	Wood	White	9.9	QM
067	C	Door	Lft	Lft casing	I	Wood	White	8.9	QM
066	C	Door	Lft	Lft jamb	I	Wood	White	9.9	QM
065	C	Door	Lft	U Rgt	I	Wood	White	9.9	QM
Interior Room 009 Foyer									
071	A	Chair Rail	Rgt		I	Wood	White	9.9	QM
072	A	Baseboard	Rgt		I	Wood	White	9.9	QM
073	B	Crown Mldg	Rgt		I	Wood	White	9.9	QM
070	B	Door	Lft	Lft casing	I	Wood	White	9.9	QM
069	B	Door	Lft	U Rgt	I	Wood	White	9.9	QM
076	C	Stairs	Rgt	Stringers	I	Wood	White	8.3	QM
075	C	Stairs	Rgt	Balusters	I	Wood	White	2.2	QM
Interior Room 010 Bathroom 2									
083	A	sink	Lft		I	Ceramic	White	5.3	QM
084	C	toilet	Rgt		I	Ceramic	White	5.3	QM
077	D	Wall	U Rgt		I	Plaster	White	9.9	QM
Interior Room 012 Dining Rm									
095	A	Chair Rail	Lft		I	Wood	green	5.2	QM
096	A	fireplace	Ctr	Mantle	I	Wood	green	4.3	QM
097	A	fireplace	Ctr	Casing	I	Wood	green	4.3	QM
093	A	Wall	L Lft		I	Plaster	green	5.0	QM
094	A	Baseboard	Lft		I	Wood	green	3.0	QM
Interior Room 013 Kitchen									
098	A	Wall	U Ctr		I	Plaster	White	8.3	QM
099	A	Ceiling	Ctr		I	Plaster	White	8.3	QM
109	B	Door	Lft	Lft casing	I	Wood	White	9.9	QM
108	B	Door	Lft	Lft jamb	I	Wood	White	8.3	QM
110	B	Door	Lft	U Rgt	P	Wood	White	9.9	QM
101	C	sink	Ctr		I	Ceramic	White	9.9	QM
102	C	cabinet	Rgt		I	Wood	White	3.3	QM

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
103	C	cabinet	Rgt	door	I	Wood	White	5.2	QM
100	C	Baseboard	Ctr		I	Wood	black	9.9	QM
107	C	Window	Ctr	Mullion	I	Wood	White	5.2	QM
105	C	Window	Ctr	Rgt casing	I	Wood	White	4.2	QM
106	C	Window	Ctr	Sash	I	Wood	White	5.5	QM
104	C	Window	Ctr	Sill	I	Wood	White	2.3	QM
Interior Room 014 Living rm2									
120	A	Closet	Ctr	Door	I	Wood	green	8.3	QM
122	A	Closet	Ctr	Door Casing	I	Wood	green	8.3	QM
121	A	Closet	Ctr	Door Jamb	I	Wood	green	9.3	QM
125	A	Closet	Ctr	Wall	I	Plaster	green	8.3	QM
124	A	Closet	Ctr	Shelf Sup.	I	Wood	green	5.3	QM
123	A	Closet	Ctr	Shelf	I	Wood	green	7.2	QM
111	C	Wall	U Lft		I	Plaster	White	8.3	QM
112	C	Baseboard	Lft		I	Wood	White	8.3	QM
119	C	Window	Lft	Mullion	I	Wood	White	9.9	QM
117	C	Window	Lft	Rgt casing	I	Wood	White	9.9	QM
118	C	Window	Lft	Sash	I	Wood	White	9.9	QM
116	C	Window	Lft	Apron	I	Wood	White	9.9	QM
115	C	Window	Lft	Sill	I	Wood	White	9.9	QM
114	C	Door	Rgt	Lft casing	I	Wood	White	8.3	QM
113	C	Door	Rgt	U Rgt	I	Wood	White	9.9	QM
Interior Room 015 Garage									
128	B	Door	Lft	Lft casing	I	Wood	White	8.3	QM
127	B	Door	Lft	U Rgt	I	Wood	White	9.9	QM
Interior Room 016 Bedroom 1									
131	A	Chair Rail	Rgt		I	Wood	green	9.9	QM
133	A	Crown Mldg	Rgt		I	Wood	green	9.9	QM
140	A	fireplace	Rgt	Mantle	I	Wood	green	8.8	QM
141	A	fireplace	Rgt	Casing	I	Wood	green	9.3	QM
132	A	Baseboard	Rgt		I	Wood	green	9.9	QM
138	A	Window	Lft	Mullion	I	Wood	White	8.2	QM
136	A	Window	Lft	Rgt casing	I	Wood	White	9.2	QM
137	A	Window	Lft	Sash	I	Wood	White	9.9	QM
135	A	Window	Lft	Apron	I	Wood	White	8.9	QM
134	A	Window	Lft	Sill	I	Wood	White	9.9	QM
145	B	Closet	Lft	Door	I	Wood	White	5.3	QM
146	B	Closet	Lft	Door Casing	I	Wood	White	8.3	QM
149	B	Closet	Lft	Wall	I	Plaster	White	9.9	QM
148	B	Closet	Lft	Shelf Sup.	I	Wood	White	5.3	QM
147	B	Closet	Lft	Shelf	I	Wood	White	4.3	QM
144	C	Door	Lft	Lft casing	I	Wood	White	8.3	QM
143	C	Door	Lft	Lft jamb	I	Wood	White	8.2	QM
142	C	Door	Lft	U Rgt	I	Wood	White	6.3	QM
Interior Room 017 Bathroom 3									

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
153	A	sink	Rgt		I	Ceramic	White	9.9	QM
150	A	Wall	U Lft		I	Ceramic	White	8.3	QM
154	C	toilet	Rgt		I	Ceramic	White	5.3	QM
151	C	Wall	U Lft		I	Ceramic	White	3.3	QM
152	C	Floor	Lft		I	Ceramic	White	4.3	QM
155	D	tub	Lft		I	Ceramic	White	9.3	QM
Interior Room 018 Bathroom 4									
161	A	toilet	Lft		I	Ceramic	Tan	6.3	QM
156	A	Wall	U Lft		I	Ceramic	Tan	5.3	QM
159	B	Floor	Rgt		I	Ceramic	Tan	5.3	QM
158	B	Window	Rgt	Sash	I	Wood	White	3.3	QM
157	B	Window	Rgt	Sill	I	Wood	White	5.3	QM
160	C	sink	Ctr		I	Ceramic	Tan	8.3	QM
164	D	Door	Ctr	Lft casing	I	Ceramic	White	8.3	QM
163	D	Door	Ctr	Lft jamb	I	Ceramic	White	4.3	QM
162	D	Door	Ctr	L Rgt	I	Ceramic	White	5.3	QM
Calibration Readings									

---- End of Readings ----

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 09:10
Total Readings: 181
Job Started: 07/16/12 09:10
Job Finished: 07/16/12 11:00

10515 Mackall Road
Saint Leonard MD 20685
Main House

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Exterior Room 001 SD B									
177	B	garage	Lft	door	I	Wood	White	9.9	QM
178	B	garage	Lft	door jamb	I	Wood	White	9.9	QM
179	B	fascia	Lft		I	Wood	White	8.3	QM
180	B	soffit	Lft		I	Wood	White	9.9	QM
181	B	roof	Lft		I	slate	Grey	0.2	QM
169	B	Awning	Rgt	ceiling	I	Plaster	White	0.2	QM
170	B	Awning	Rgt	column	I	Wood	White	8.0	QM
171	B	Awning	Rgt	soffit	I	Wood	White	8.3	QM
175	B	Window	Lft	Mullion	I	Wood	White	8.3	QM
176	B	Window	Lft	shutter	I	Wood	green	9.9	QM
173	B	Window	Lft	Rgt casing	I	Wood	White	9.3	QM
174	B	Window	Lft	Sash	I	Wood	White	7.3	QM
172	B	Window	Lft	Sill	I	Wood	White	8.3	QM
168	B	Door	Rgt	Header	I	Wood	White	9.9	QM
167	B	Door	Rgt	Lft casing	I	Wood	White	9.9	QM
166	B	Door	Rgt	Lft jamb	I	Wood	White	9.9	QM
165	B	Door	Rgt	U Rgt	I	Wood	White	9.9	QM
Interior Room 001 Storage									
004	A	Wall	U Lft		I	Dry wall	White	0.0	QM
006	A	Window	Rgt	Rgt jamb	I	Wood	Tan	-0.2	QM
007	A	Window	Rgt	Rgt casing	I	Wood	Tan	0.0	QM
005	A	Window	Rgt	Sill	I	Wood	Tan	0.0	QM
011	A	Door	Lft	Lft casing	I	Wood	Tan	0.1	QM
010	A	Door	Lft	Lft jamb	P	Wood	Tan	0.0	QM
009	A	Door	Lft	U Rgt	I	Wood	White	0.1	QM
008	C	HVAC vent	Lft		I	Metal	White	0.8	QM
Interior Room 002 Hallway									
014	A	duct	Lft		I	Metal	White	9.2	QM
013	A	Wall	U Ctr		I	Block	White	1.3	QM
019	A	Ceiling	Ctr		I	gypsum	White	0.0	QM
017	A	Stairs	Ctr	Hand Rail	I	Wood	Stained	2.1	QM
018	A	Stairs	Ctr	Hand Rail	I	Wood	White	2.2	QM
016	A	Stairs	Ctr	Newel post	I	Wood	Stained	2.3	QM
015	A	Stairs	Rgt	Stringers	I	Wood	White	6.6	QM
020	D	pipe	Ctr		I	Metal	White	0.1	QM
012	D	Wall	U Lft		P	Concrete	Tan	0.1	QM
Interior Room 003 Bathroom 1									
021	D	Wall	U Ctr		P	Dry wall	Tan	0.0	QM

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
022	D	Baseboard	Ctr		P	Wood	Tan	0.0	QM
023	D	Ceiling	Ctr		I	Dry wall	Tan	0.0	QM
Interior Room 004 Laundry Rm									
024	A	Wall	U Ctr		P	Brick	White	0.0	QM
025	A	Ceiling	Ctr		I	Plaster	White	-0.2	QM
028	C	sink	Ctr		I	Metal	White	9.9	QM
029	C	pipe	Ctr		P	Metal	White	0.2	QM
027	C	Window	Ctr	Lintel	I	Metal	White	6.3	QM
026	D	Wall	U Ctr		I	Block	White	0.0	QM
Interior Room 005 Hallway 2									
034	B	drain pipe	Rgt		I	Metal	White	0.1	QM
033	B	Door	Rgt	Lft casing	I	Wood	green	0.1	QM
032	B	Door	Rgt	U Rgt	I	Wood	green	0.0	QM
030	C	Wall	U Ctr		I	Brick	White	0.2	QM
031	D	Wall	U Ctr		I	Block	White	0.2	QM
Interior Room 006 Boiler rm									
039	A	Fuse Panel	Ctr	door	I	Metal	black	0.0	QM
040	A	Fuse Panel	Ctr	door case	I	Metal	black	0.1	QM
035	A	Wall	U Rgt		I	Brick	White	0.2	QM
043	A	Door	Rgt	Lft casing	I	Wood	green	8.5	QM
041	A	Door	Rgt	Lft jamb	I	Wood	green	9.1	QM
042	A	Door	Rgt	U Rgt	I	Wood	green	7.7	QM
038	C	drain pipe	Lft		I	Metal	White	0.1	QM
036	C	Wall	U Rgt		I	Brick	White	0.1	QM
037	C	Ceiling	Rgt		I	Plaster	White	0.2	QM
Interior Room 007 Storage 2									
045	A	Wall	L Rgt		I	Concrete	White	0.3	QM
044	A	Wall	U Rgt		I	Brick	White	0.1	QM
046	A	Window	Rgt	Lintel	I	Metal	White	9.9	QM
051	B	Stairs	Lft	Stringers	P	Wood	green	5.3	QM
052	B	Stairs	Lft	Hand Rail	I	Wood	Stained	0.8	QM
053	B	Stairs	Lft	Hand Rail	I	Wood	green	2.2	QM
049	B	Stairs	Lft	Treads	P	Wood	Grey	0.2	QM
050	B	Stairs	Lft	Risers	P	Wood	Grey	0.1	QM
054	B	Stairs	Lft	Newel post	I	Wood	Stained	0.8	QM
047	C	beam	Rgt		I	Metal	White	3.2	QM
048	C	Door	Rgt	Lintel	I	Metal	green	6.5	QM
Interior Room 008 Family Rm									
062	A	fireplace	Ctr	Mantle	I	Wood	White	9.9	QM
063	A	fireplace	Ctr	Casing	I	Wood	White	9.9	QM
056	A	Wall	U Rgt		I	Wood	White	8.3	QM
057	A	Baseboard	Rgt		I	Wood	White	9.9	QM
064	A	Floor	Ctr		I	Wood	Stained	0.0	QM
061	A	Window	Rgt	Mullion	I	Wood	White	7.3	QM

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
060	A	Window	Rgt	Rgt casing	I	Wood	White	9.3	QM
059	A	Window	Rgt	Sash	P	Wood	White	8.2	QM
058	A	Window	Rgt	Sill	P	Wood	White	5.3	QM
055	B	Wall	U Lft		I	Plaster	White	9.1	QM
068	C	Crown Mldg	Lft		I	Wood	White	9.9	QM
067	C	Door	Lft	Lft casing	I	Wood	White	8.9	QM
066	C	Door	Lft	Lft jamb	I	Wood	White	9.9	QM
065	C	Door	Lft	U Rgt	I	Wood	White	9.9	QM
Interior Room 009 Foyer									
071	A	Chair Rail	Rgt		I	Wood	White	9.9	QM
072	A	Baseboard	Rgt		I	Wood	White	9.9	QM
073	B	Crown Mldg	Rgt		I	Wood	White	9.9	QM
070	B	Door	Lft	Lft casing	I	Wood	White	9.9	QM
069	B	Door	Lft	U Rgt	I	Wood	White	9.9	QM
074	C	Stairs	Rgt	Hand Rail	I	Wood	Stained	0.0	QM
076	C	Stairs	Rgt	Stringers	I	Wood	White	8.3	QM
075	C	Stairs	Rgt	Balusters	I	Wood	White	2.2	QM
Interior Room 010 Bathroom 2									
083	A	sink	Lft		I	Ceramic	White	5.3	QM
080	B	Door	Rgt	Lft casing	I	Wood	Stained	0.0	QM
079	B	Door	Rgt	Lft jamb	I	Wood	Stained	-0.2	QM
078	B	Door	Rgt	U Rgt	I	Wood	Stained	0.0	QM
084	C	toilet	Rgt		I	Ceramic	White	5.3	QM
082	D	Crown Mldg	Rgt		I	Wood	Stained	0.0	QM
077	D	Wall	U Rgt		I	Plaster	White	9.9	QM
081	D	Baseboard	Rgt		I	Wood	Stained	0.0	QM
Interior Room 011 Living Rm									
090	A	Shelf	Lft		I	Wood	Stained	0.0	QM
091	A	Shelf	Lft	support	I	Wood	Stained	0.0	QM
086	A	Crown Mldg	Rgt		I	Wood	Stained	-0.3	QM
085	A	Wall	U Rgt		I	Wood	Stained	0.0	QM
087	B	Baseboard	Ctr		I	Wood	Stained	0.0	QM
089	D	Door	Ctr	Lft casing	I	Wood	Stained	-0.2	QM
088	D	Door	Ctr	U Rgt	I	Wood	Stained	0.0	QM
Interior Room 012 Dining Rm									
095	A	Chair Rail	Lft		I	Wood	green	5.2	QM
096	A	fireplace	Ctr	Mantle	I	Wood	green	4.3	QM
097	A	fireplace	Ctr	Casing	I	Wood	green	4.3	QM
093	A	Wall	L Lft		I	Plaster	green	5.0	QM
092	A	Wall	U Lft	wallpaper	I	Plaster	Beige	0.2	QM
094	A	Baseboard	Lft		I	Wood	green	3.0	QM
Interior Room 013 Kitchen									
098	A	Wall	U Ctr		I	Plaster	White	8.3	QM
099	A	Ceiling	Ctr		I	Plaster	White	8.3	QM

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
109	B	Door	Lft	Lft casing	I	Wood	White	9.9	QM
108	B	Door	Lft	Lft jamb	I	Wood	White	8.3	QM
110	B	Door	Lft	U Rgt	P	Wood	White	9.9	QM
101	C	sink	Ctr		I	Ceramic	White	9.9	QM
102	C	cabinet	Rgt		I	Wood	White	3.3	QM
103	C	cabinet	Rgt	door	I	Wood	White	5.2	QM
100	C	Baseboard	Ctr		I	Wood	black	9.9	QM
107	C	Window	Ctr	Mullion	I	Wood	White	5.2	QM
105	C	Window	Ctr	Rgt casing	I	Wood	White	4.2	QM
106	C	Window	Ctr	Sash	I	Wood	White	5.5	QM
104	C	Window	Ctr	Sill	I	Wood	White	2.3	QM
Interior Room 014 Living rm2									
120	A	Closet	Ctr	Door	I	Wood	green	8.3	QM
122	A	Closet	Ctr	Door Casing	I	Wood	green	8.3	QM
121	A	Closet	Ctr	Door Jamb	I	Wood	green	9.3	QM
125	A	Closet	Ctr	Wall	I	Plaster	green	8.3	QM
124	A	Closet	Ctr	Shelf Sup.	I	Wood	green	5.3	QM
123	A	Closet	Ctr	Shelf	I	Wood	green	7.2	QM
111	C	Wall	U Lft		I	Plaster	White	8.3	QM
112	C	Baseboard	Lft		I	Wood	White	8.3	QM
119	C	Window	Lft	Mullion	I	Wood	White	9.9	QM
117	C	Window	Lft	Rgt casing	I	Wood	White	9.9	QM
118	C	Window	Lft	Sash	I	Wood	White	9.9	QM
116	C	Window	Lft	Apron	I	Wood	White	9.9	QM
115	C	Window	Lft	Sill	I	Wood	White	9.9	QM
114	C	Door	Rgt	Lft casing	I	Wood	White	8.3	QM
113	C	Door	Rgt	U Rgt	I	Wood	White	9.9	QM
Interior Room 015 Garage									
126	A	Ceiling	Ctr		I	Plaster	White	0.1	QM
128	B	Door	Lft	Lft casing	I	Wood	White	8.3	QM
127	B	Door	Lft	U Rgt	I	Wood	White	9.9	QM
Interior Room 016 Bedroom 1									
131	A	Chair Rail	Rgt		I	Wood	green	9.9	QM
133	A	Crown Mldg	Rgt		I	Wood	green	9.9	QM
140	A	fireplace	Rgt	Mantle	I	Wood	green	8.8	QM
141	A	fireplace	Rgt	Casing	I	Wood	green	9.3	QM
129	A	Wall	U Rgt	wallpaper	P	Plaster	green	0.1	QM
132	A	Baseboard	Rgt		I	Wood	green	9.9	QM
139	A	Floor	Lft		I	Wood	Stained	0.1	QM
138	A	Window	Lft	Mullion	I	Wood	White	8.2	QM
136	A	Window	Lft	Rgt casing	I	Wood	White	9.2	QM
137	A	Window	Lft	Sash	I	Wood	White	9.9	QM
135	A	Window	Lft	Apron	I	Wood	White	8.9	QM
134	A	Window	Lft	Sill	I	Wood	White	9.9	QM
145	B	Closet	Lft	Door	I	Wood	White	5.3	QM
146	B	Closet	Lft	Door Casing	I	Wood	White	8.3	QM

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
149	B	Closet	Lft	Wall	I	Plaster	White	9.9	QM
148	B	Closet	Lft	Shelf Sup.	I	Wood	White	5.3	QM
147	B	Closet	Lft	Shelf	I	Wood	White	4.3	QM
130	C	Wall	U Rgt	wallpaper	I	Dry wall	green	0.0	QM
144	C	Door	Lft	Lft casing	I	Wood	White	8.3	QM
143	C	Door	Lft	Lft jamb	I	Wood	White	8.2	QM
142	C	Door	Lft	U Rgt	I	Wood	White	6.3	QM
Interior Room 017 Bathroom 3									
153	A	sink	Rgt		I	Ceramic	White	9.9	QM
150	A	Wall	U Lft		I	Ceramic	White	8.3	QM
154	C	toilet	Rgt		I	Ceramic	White	5.3	QM
151	C	Wall	U Lft		I	Ceramic	White	3.3	QM
152	C	Floor	Lft		I	Ceramic	White	4.3	QM
155	D	tub	Lft		I	Ceramic	White	9.3	QM
Interior Room 018 Bathroom 4									
161	A	toilet	Lft		I	Ceramic	Tan	6.3	QM
156	A	Wall	U Lft		I	Ceramic	Tan	5.3	QM
159	B	Floor	Rgt		I	Ceramic	Tan	5.3	QM
158	B	Window	Rgt	Sash	I	Wood	White	3.3	QM
157	B	Window	Rgt	Sill	I	Wood	White	5.3	QM
160	C	sink	Ctr		I	Ceramic	Tan	8.3	QM
164	D	Door	Ctr	Lft casing	I	Ceramic	White	8.3	QM
163	D	Door	Ctr	Lft jamb	I	Ceramic	White	4.3	QM
162	D	Door	Ctr	L Rgt	I	Ceramic	White	5.3	QM
Calibration Readings									
001								0.8	TC
002								1.0	TC
003								0.9	TC

---- End of Readings ----

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date:	07/16/12
Report Date:	7/18/2012
Abatement Level:	0.8
Report No.	07/16/12 09:10
Total Readings:	181
Job Started:	07/16/12 09:10
Job Finished:	07/16/12 11:00

10515 Mackall Road
Saint Leonard MD 20685
Main House

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
1		CALIBRATION								0.8	TC
2		CALIBRATION								1.0	TC
3		CALIBRATION								0.9	TC
4	001	Storage	A	Wall	U Lft		I	Dry wall	White	0.0	QM
5	001	Storage	A	Window	Rgt	Sill	I	Wood	Tan	0.0	QM
6	001	Storage	A	Window	Rgt	Rgt jamb	I	Wood	Tan	-0.2	QM
7	001	Storage	A	Window	Rgt	Rgt casing	I	Wood	Tan	0.0	QM
8	001	Storage	C	HVAC vent	Lft		I	Metal	White	0.8	QM
9	001	Storage	A	Door	Lft	U Rgt	I	Wood	White	0.1	QM
10	001	Storage	A	Door	Lft	Lft jamb	P	Wood	Tan	0.0	QM
11	001	Storage	A	Door	Lft	Lft casing	I	Wood	Tan	0.1	QM
12	002	Hallway	D	Wall	U Lft		P	Concrete	Tan	0.1	QM
13	002	Hallway	A	Wall	U Ctr		I	Block	White	1.3	QM
14	002	Hallway	A	duct	Lft		I	Metal	White	9.2	QM
15	002	Hallway	A	Stairs	Rgt	Stringers	I	Wood	White	6.6	QM
16	002	Hallway	A	Stairs	Ctr	Newel post	I	Wood	Stained	2.3	QM
17	002	Hallway	A	Stairs	Ctr	Hand Rail	I	Wood	Stained	2.1	QM
18	002	Hallway	A	Stairs	Ctr	Hand Rail	I	Wood	White	2.2	QM
19	002	Hallway	A	Ceiling	Ctr		I	gypsum	White	0.0	QM
20	002	Hallway	D	pipe	Ctr		I	Metal	White	0.1	QM
21	003	Bathroom 1	D	Wall	U Ctr		P	Dry wall	Tan	0.0	QM
22	003	Bathroom 1	D	Baseboard	Ctr		P	Wood	Tan	0.0	QM
23	003	Bathroom 1	D	Ceiling	Ctr		I	Dry wall	Tan	0.0	QM
24	004	Laundry Rm	A	Wall	U Ctr		P	Brick	White	0.0	QM
25	004	Laundry Rm	A	Ceiling	Ctr		I	Plaster	White	-0.2	QM
26	004	Laundry Rm	D	Wall	U Ctr		I	Block	White	0.0	QM
27	004	Laundry Rm	C	Window	Ctr	Lintel	I	Metal	White	6.3	QM
28	004	Laundry Rm	C	sink	Ctr		I	Metal	White	9.9	QM
29	004	Laundry Rm	C	pipe	Ctr		P	Metal	White	0.2	QM
30	005	Hallway 2	C	Wall	U Ctr		I	Brick	White	0.2	QM
31	005	Hallway 2	D	Wall	U Ctr		I	Block	White	0.2	QM
32	005	Hallway 2	B	Door	Rgt	U Rgt	I	Wood	green	0.0	QM
33	005	Hallway 2	B	Door	Rgt	Lft casing	I	Wood	green	0.1	QM
34	005	Hallway 2	B	drain pipe	Rgt		I	Metal	White	0.1	QM
35	006	Boiler rm	A	Wall	U Rgt		I	Brick	White	0.2	QM
36	006	Boiler rm	C	Wall	U Rgt		I	Brick	White	0.1	QM
37	006	Boiler rm	C	Ceiling	Rgt		I	Plaster	White	0.2	QM
38	006	Boiler rm	C	drain pipe	Lft		I	Metal	White	0.1	QM
39	006	Boiler rm	A	Fuse Panel	Ctr	door	I	Metal	black	0.0	QM

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
40	006	Boiler rm	A	Fuse Panel	Ctr	door case	I	Metal	black	0.1	QM
41	006	Boiler rm	A	Door	Rgt	Lft jamb	I	Wood	green	9.1	QM
42	006	Boiler rm	A	Door	Rgt	U Rgt	I	Wood	green	7.7	QM
43	006	Boiler rm	A	Door	Rgt	Lft casing	I	Wood	green	8.5	QM
44	007	Storage 2	A	Wall	U Rgt		I	Brick	White	0.1	QM
45	007	Storage 2	A	Wall	L Rgt		I	Concrete	White	0.3	QM
46	007	Storage 2	A	Window	Rgt	Lintel	I	Metal	White	9.9	QM
47	007	Storage 2	C	beam	Rgt		I	Metal	White	3.2	QM
48	007	Storage 2	C	Door	Rgt	Lintel	I	Metal	green	6.5	QM
49	007	Storage 2	B	Stairs	Lft	Treads	P	Wood	Grey	0.2	QM
50	007	Storage 2	B	Stairs	Lft	Risers	P	Wood	Grey	0.1	QM
51	007	Storage 2	B	Stairs	Lft	Stringers	P	Wood	green	5.3	QM
52	007	Storage 2	B	Stairs	Lft	Hand Rail	I	Wood	Stained	0.8	QM
53	007	Storage 2	B	Stairs	Lft	Hand Rail	I	Wood	green	2.2	QM
54	007	Storage 2	B	Stairs	Lft	Newel post	I	Wood	Stained	0.8	QM
55	008	Family Rm	B	Wall	U Lft		I	Plaster	White	9.1	QM
56	008	Family Rm	A	Wall	U Rgt		I	Wood	White	8.3	QM
57	008	Family Rm	A	Baseboard	Rgt		I	Wood	White	9.9	QM
58	008	Family Rm	A	Window	Rgt	Sill	P	Wood	White	5.3	QM
59	008	Family Rm	A	Window	Rgt	Sash	P	Wood	White	8.2	QM
60	008	Family Rm	A	Window	Rgt	Rgt casing	I	Wood	White	9.3	QM
61	008	Family Rm	A	Window	Rgt	Mullion	I	Wood	White	7.3	QM
62	008	Family Rm	A	fireplace	Ctr	Mantle	I	Wood	White	9.9	QM
63	008	Family Rm	A	fireplace	Ctr	Casing	I	Wood	White	9.9	QM
64	008	Family Rm	A	Floor	Ctr		I	Wood	Stained	0.0	QM
65	008	Family Rm	C	Door	Lft	U Rgt	I	Wood	White	9.9	QM
66	008	Family Rm	C	Door	Lft	Lft jamb	I	Wood	White	9.9	QM
67	008	Family Rm	C	Door	Lft	Lft casing	I	Wood	White	8.9	QM
68	008	Family Rm	C	Crown Mldg	Lft		I	Wood	White	9.9	QM
69	009	Foyer	B	Door	Lft	U Rgt	I	Wood	White	9.9	QM
70	009	Foyer	B	Door	Lft	Lft casing	I	Wood	White	9.9	QM
71	009	Foyer	A	Chair Rail	Rgt		I	Wood	White	9.9	QM
72	009	Foyer	A	Baseboard	Rgt		I	Wood	White	9.9	QM
73	009	Foyer	B	Crown Mldg	Rgt		I	Wood	White	9.9	QM
74	009	Foyer	C	Stairs	Rgt	Hand Rail	I	Wood	Stained	0.0	QM
75	009	Foyer	C	Stairs	Rgt	Balusters	I	Wood	White	2.2	QM
76	009	Foyer	C	Stairs	Rgt	Stringers	I	Wood	White	8.3	QM
77	010	Bathroom 2	D	Wall	U Rgt		I	Plaster	White	9.9	QM
78	010	Bathroom 2	B	Door	Rgt	U Rgt	I	Wood	Stained	0.0	QM
79	010	Bathroom 2	B	Door	Rgt	Lft jamb	I	Wood	Stained	-0.2	QM
80	010	Bathroom 2	B	Door	Rgt	Lft casing	I	Wood	Stained	0.0	QM
81	010	Bathroom 2	D	Baseboard	Rgt		I	Wood	Stained	0.0	QM
82	010	Bathroom 2	D	Crown Mldg	Rgt		I	Wood	Stained	0.0	QM
83	010	Bathroom 2	A	sink	Lft		I	Ceramic	White	5.3	QM
84	010	Bathroom 2	C	toilet	Rgt		I	Ceramic	White	5.3	QM
85	011	Living Rm	A	Wall	U Rgt		I	Wood	Stained	0.0	QM
86	011	Living Rm	A	Crown Mldg	Rgt		I	Wood	Stained	-0.3	QM

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
87	011	Living Rm	B	Baseboard	Ctr		I	Wood	Stained	0.0	QM
88	011	Living Rm	D	Door	Ctr	U Rgt	I	Wood	Stained	0.0	QM
89	011	Living Rm	D	Door	Ctr	Lft casing	I	Wood	Stained	-0.2	QM
90	011	Living Rm	A	Shelf	Lft		I	Wood	Stained	0.0	QM
91	011	Living Rm	A	Shelf	Lft	support	I	Wood	Stained	0.0	QM
92	012	Dining Rm	A	Wall	U Lft	wallpaper	I	Plaster	Beige	0.2	QM
93	012	Dining Rm	A	Wall	L Lft		I	Plaster	green	5.0	QM
94	012	Dining Rm	A	Baseboard	Lft		I	Wood	green	3.0	QM
95	012	Dining Rm	A	Chair Rail	Lft		I	Wood	green	5.2	QM
96	012	Dining Rm	A	fireplace	Ctr	Mantle	I	Wood	green	4.3	QM
97	012	Dining Rm	A	fireplace	Ctr	Casing	I	Wood	green	4.3	QM
98	013	Kitchen	A	Wall	U Ctr		I	Plaster	White	8.3	QM
99	013	Kitchen	A	Ceiling	Ctr		I	Plaster	White	8.3	QM
100	013	Kitchen	C	Baseboard	Ctr		I	Wood	black	9.9	QM
101	013	Kitchen	C	sink	Ctr		I	Ceramic	White	9.9	QM
102	013	Kitchen	C	cabinet	Rgt		I	Wood	White	3.3	QM
103	013	Kitchen	C	cabinet	Rgt	door	I	Wood	White	5.2	QM
104	013	Kitchen	C	Window	Ctr	Sill	I	Wood	White	2.3	QM
105	013	Kitchen	C	Window	Ctr	Rgt casing	I	Wood	White	4.2	QM
106	013	Kitchen	C	Window	Ctr	Sash	I	Wood	White	5.5	QM
107	013	Kitchen	C	Window	Ctr	Mullion	I	Wood	White	5.2	QM
108	013	Kitchen	B	Door	Lft	Lft jamb	I	Wood	White	8.3	QM
109	013	Kitchen	B	Door	Lft	Lft casing	I	Wood	White	9.9	QM
110	013	Kitchen	B	Door	Lft	U Rgt	P	Wood	White	9.9	QM
111	014	Living rm2	C	Wall	U Lft		I	Plaster	White	8.3	QM
112	014	Living rm2	C	Baseboard	Lft		I	Wood	White	8.3	QM
113	014	Living rm2	C	Door	Rgt	U Rgt	I	Wood	White	9.9	QM
114	014	Living rm2	C	Door	Rgt	Lft casing	I	Wood	White	8.3	QM
115	014	Living rm2	C	Window	Lft	Sill	I	Wood	White	9.9	QM
116	014	Living rm2	C	Window	Lft	Apron	I	Wood	White	9.9	QM
117	014	Living rm2	C	Window	Lft	Rgt casing	I	Wood	White	9.9	QM
118	014	Living rm2	C	Window	Lft	Sash	I	Wood	White	9.9	QM
119	014	Living rm2	C	Window	Lft	Mullion	I	Wood	White	9.9	QM
120	014	Living rm2	A	Closet	Ctr	Door	I	Wood	green	8.3	QM
121	014	Living rm2	A	Closet	Ctr	Door Jamb	I	Wood	green	9.3	QM
122	014	Living rm2	A	Closet	Ctr	Door Casing	I	Wood	green	8.3	QM
123	014	Living rm2	A	Closet	Ctr	Shelf	I	Wood	green	7.2	QM
124	014	Living rm2	A	Closet	Ctr	Shelf Sup.	I	Wood	green	5.3	QM
125	014	Living rm2	A	Closet	Ctr	Wall	I	Plaster	green	8.3	QM
126	015	Garage	A	Ceiling	Ctr		I	Plaster	White	0.1	QM
127	015	Garage	B	Door	Lft	U Rgt	I	Wood	White	9.9	QM
128	015	Garage	B	Door	Lft	Lft casing	I	Wood	White	8.3	QM
129	016	Bedroom 1	A	Wall	U Rgt	wallpaper	P	Plaster	green	0.1	QM
130	016	Bedroom 1	C	Wall	U Rgt	wallpaper	I	Dry wall	green	0.0	QM
131	016	Bedroom 1	A	Chair Rail	Rgt		I	Wood	green	9.9	QM
132	016	Bedroom 1	A	Baseboard	Rgt		I	Wood	green	9.9	QM
133	016	Bedroom 1	A	Crown Mldg	Rgt		I	Wood	green	9.9	QM

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
134	016	Bedroom 1	A	Window		Lft Sill	I	Wood	White	9.9	QM
135	016	Bedroom 1	A	Window		Lft Apron	I	Wood	White	8.9	QM
136	016	Bedroom 1	A	Window		Lft Rgt casing	I	Wood	White	9.2	QM
137	016	Bedroom 1	A	Window		Lft Sash	I	Wood	White	9.9	QM
138	016	Bedroom 1	A	Window		Lft Mullion	I	Wood	White	8.2	QM
139	016	Bedroom 1	A	Floor		Lft	I	Wood	Stained	0.1	QM
140	016	Bedroom 1	A	fireplace		Rgt Mantle	I	Wood	green	8.8	QM
141	016	Bedroom 1	A	fireplace		Rgt Casing	I	Wood	green	9.3	QM
142	016	Bedroom 1	C	Door		Lft U Rgt	I	Wood	White	6.3	QM
143	016	Bedroom 1	C	Door		Lft Lft jamb	I	Wood	White	8.2	QM
144	016	Bedroom 1	C	Door		Lft Lft casing	I	Wood	White	8.3	QM
145	016	Bedroom 1	B	Closet		Lft Door	I	Wood	White	5.3	QM
146	016	Bedroom 1	B	Closet		Lft Door Casing	I	Wood	White	8.3	QM
147	016	Bedroom 1	B	Closet		Lft Shelf	I	Wood	White	4.3	QM
148	016	Bedroom 1	B	Closet		Lft Shelf Sup.	I	Wood	White	5.3	QM
149	016	Bedroom 1	B	Closet		Lft Wall	I	Plaster	White	9.9	QM
150	017	Bathroom 3	A	Wall	U	Lft	I	Ceramic	White	8.3	QM
151	017	Bathroom 3	C	Wall	U	Lft	I	Ceramic	White	3.3	QM
152	017	Bathroom 3	C	Floor		Lft	I	Ceramic	White	4.3	QM
153	017	Bathroom 3	A	sink		Rgt	I	Ceramic	White	9.9	QM
154	017	Bathroom 3	C	toilet		Rgt	I	Ceramic	White	5.3	QM
155	017	Bathroom 3	D	tub		Lft	I	Ceramic	White	9.3	QM
156	018	Bathroom 4	A	Wall	U	Lft	I	Ceramic	Tan	5.3	QM
157	018	Bathroom 4	B	Window		Rgt Sill	I	Wood	White	5.3	QM
158	018	Bathroom 4	B	Window		Rgt Sash	I	Wood	White	3.3	QM
159	018	Bathroom 4	B	Floor		Rgt	I	Ceramic	Tan	5.3	QM
160	018	Bathroom 4	C	sink		Ctr	I	Ceramic	Tan	8.3	QM
161	018	Bathroom 4	A	toilet		Lft	I	Ceramic	Tan	6.3	QM
162	018	Bathroom 4	D	Door		Ctr L Rgt	I	Ceramic	White	5.3	QM
163	018	Bathroom 4	D	Door		Ctr Lft jamb	I	Ceramic	White	4.3	QM
164	018	Bathroom 4	D	Door		Ctr Lft casing	I	Ceramic	White	8.3	QM
165	001	SD B	B	Door		Rgt U Rgt	I	Wood	White	9.9	QM
166	001	SD B	B	Door		Rgt Lft jamb	I	Wood	White	9.9	QM
167	001	SD B	B	Door		Rgt Lft casing	I	Wood	White	9.9	QM
168	001	SD B	B	Door		Rgt Header	I	Wood	White	9.9	QM
169	001	SD B	B	Awning		Rgt ceiling	I	Plaster	White	0.2	QM
170	001	SD B	B	Awning		Rgt column	I	Wood	White	8.0	QM
171	001	SD B	B	Awning		Rgt soffit	I	Wood	White	8.3	QM
172	001	SD B	B	Window		Lft Sill	I	Wood	White	8.3	QM
173	001	SD B	B	Window		Lft Rgt casing	I	Wood	White	9.3	QM
174	001	SD B	B	Window		Lft Sash	I	Wood	White	7.3	QM
175	001	SD B	B	Window		Lft Mullion	I	Wood	White	8.3	QM
176	001	SD B	B	Window		Lft shutter	I	Wood	green	9.9	QM
177	001	SD B	B	garage		Lft door	I	Wood	White	9.9	QM
178	001	SD B	B	garage		Lft door jamb	I	Wood	White	9.9	QM
179	001	SD B	B	fascia		Lft	I	Wood	White	8.3	QM
180	001	SD B	B	soffit		Lft	I	Wood	White	9.9	QM

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
181	001	SD B	B	roof		Lft		I slate	Grey	0.2	QM
			---- End of Readings ----								

DISTRIBUTION REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 09:10
Total Reading Sets: 178
Job Started: 07/16/12 09:10
Job Finished: 07/16/12 11:00

10515 Mackall Road
Saint Leonard MD 20685
Main House

Structure	Total	Structure Distribution Positive	Negative	Inconclusive
Awning ceiling	1	0 <0%>	1 <100%>	0 <0%>
Awning column	1	1 <100%>	0 <0%>	0 <0%>
Awning soffit	1	1 <100%>	0 <0%>	0 <0%>
Baseboard	9	6 <67%>	3 <33%>	0 <0%>
beam	1	1 <100%>	0 <0%>	0 <0%>
cabinet	1	1 <100%>	0 <0%>	0 <0%>
cabinet door	1	1 <100%>	0 <0%>	0 <0%>
Ceiling	6	1 <17%>	5 <83%>	0 <0%>
Chair Rail	3	3 <100%>	0 <0%>	0 <0%>
Closet Door	2	2 <100%>	0 <0%>	0 <0%>
Closet Door Casing	2	2 <100%>	0 <0%>	0 <0%>
Closet Door Jamb	1	1 <100%>	0 <0%>	0 <0%>
Closet Shelf	2	2 <100%>	0 <0%>	0 <0%>
Closet Shelf Sup.	2	2 <100%>	0 <0%>	0 <0%>
Closet Wall	2	2 <100%>	0 <0%>	0 <0%>
Crown Mldg	5	3 <60%>	2 <40%>	0 <0%>
Door Header	1	1 <100%>	0 <0%>	0 <0%>
Door L Rgt	1	1 <100%>	0 <0%>	0 <0%>
Door Lft casing	13	9 <69%>	4 <31%>	0 <0%>
Door Lft jamb	8	6 <75%>	2 <25%>	0 <0%>
Door Lintel	1	1 <100%>	0 <0%>	0 <0%>
Door U Rgt	12	8 <67%>	4 <33%>	0 <0%>
drain pipe	2	0 <0%>	2 <100%>	0 <0%>
duct	1	1 <100%>	0 <0%>	0 <0%>
fascia	1	1 <100%>	0 <0%>	0 <0%>
fireplace Casing	3	3 <100%>	0 <0%>	0 <0%>
fireplace Mantle	3	3 <100%>	0 <0%>	0 <0%>
Floor	4	2 <50%>	2 <50%>	0 <0%>
Fuse Panel door	1	0 <0%>	1 <100%>	0 <0%>
Fuse Panel door case	1	0 <0%>	1 <100%>	0 <0%>
garage door	1	1 <100%>	0 <0%>	0 <0%>
garage door jamb	1	1 <100%>	0 <0%>	0 <0%>
HVAC vent	1	1 <100%>	0 <0%>	0 <0%>
pipe	2	0 <0%>	2 <100%>	0 <0%>
roof	1	0 <0%>	1 <100%>	0 <0%>
Shelf	1	0 <0%>	1 <100%>	0 <0%>
Shelf support	1	0 <0%>	1 <100%>	0 <0%>
sink	5	5 <100%>	0 <0%>	0 <0%>
soffit	1	1 <100%>	0 <0%>	0 <0%>
Stairs Balusters	1	1 <100%>	0 <0%>	0 <0%>
Stairs Hand Rail	5	4 <80%>	1 <20%>	0 <0%>
Stairs Newel post	2	2 <100%>	0 <0%>	0 <0%>
Stairs Risers	1	0 <0%>	1 <100%>	0 <0%>
Stairs Stringers	3	3 <100%>	0 <0%>	0 <0%>

DISTRIBUTION REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Stairs Treads	1	0 <0%>	1 <100%>	0 <0%>
toilet	3	3 <100%>	0 <0%>	0 <0%>
tub	1	1 <100%>	0 <0%>	0 <0%>
Wall	22	10 <45%>	12 <55%>	0 <0%>
Wall wallpaper	3	0 <0%>	3 <100%>	0 <0%>
Window Apron	2	2 <100%>	0 <0%>	0 <0%>
Window Lintel	2	2 <100%>	0 <0%>	0 <0%>
Window Mullion	5	5 <100%>	0 <0%>	0 <0%>
Window Rgt casing	6	5 <83%>	1 <17%>	0 <0%>
Window Rgt jamb	1	0 <0%>	1 <100%>	0 <0%>
Window Sash	6	6 <100%>	0 <0%>	0 <0%>
Window shutter	1	1 <100%>	0 <0%>	0 <0%>
Window Sill	7	6 <86%>	1 <14%>	0 <0%>
Inspection Totals:	178	125 < 70%>	53 < 30%>	0 < 0%>

LEAD PAINT INSPECTION REPORT

REPORT NUMBER: 07/16/12 11:50

INSPECTION FOR: Page Technologies, Inc
1412 South Carey Street
Baltimore, MD 21230
Attn: Enobong Umoh

PERFORMED AT: 10515 Mackall Road
St Leonard MD 20685
Guest House

INSPECTION DATE: 07/16/12

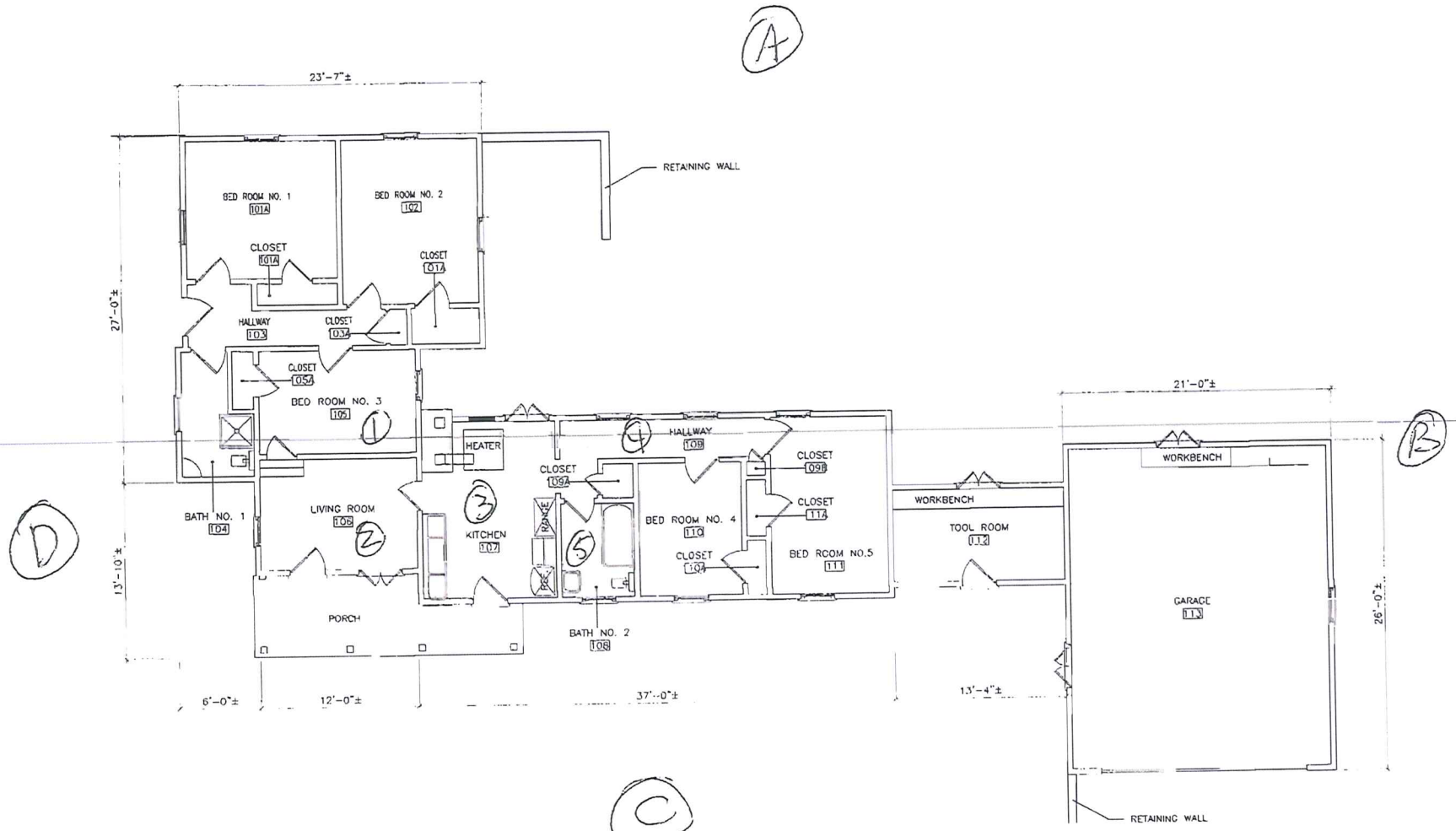
INSTRUMENT TYPE: R M D
MODEL LPA-1
XRF TYPE ANALYZER
Serial Number: 2599

ACTION LEVEL: 0.8 mg/cm²

OPERATOR LICENSE: 71419

SIGNED: _____ Date: 7/17/12

Dharam Kissoondath



1 / A105 GARDENERS' COTTAGE -- FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

8 4 0 8 16
1/8"=1'-0" SCALE OF FEET

QUINN EVANS
2121 Ward Place, NW, Floor 2
Washington, DC 20037
v 202 998 6700 f 202 998 6665
www.quinnevans.com

PATTERSON CENTER CONDITION ASSESSMENT

10515 MACKCALL ROAD
ST. LEONARD, MD

QEA Project No. 31203.000

GARDENERS' COTTAGE

NO	TITLE	DATE

FILENAME

A105

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 11:50
Total Readings: 62 Actionable: 22
Job Started: 07/16/12 11:50
Job Finished: 07/16/12 12:45

10515 Mackall Road
St Leonard MD 20685
Guest House

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Exterior Room 001 SD C									
058	C	porch	Lft	ceiling	P	Wood	White	5.3	QM
059	C	porch	Lft	column	P	Wood	White	9.9	QM
060	C	porch	Lft	fascia	P	Wood	White	8.3	QM
061	C	porch	Lft	soffit	P	Wood	White	6.3	QM
056	C	garage door	Rgt		P	Wood	White	0.8	QM
057	C	garage door	Rgt	Casing	P	Wood	White	1.0	QM
055	C	Wall	U Rgt		P	Wood	White	0.8	QM
054	C	Window	Lft	Mullion	P	Wood	White	4.3	QM
053	C	Window	Lft	Rgt casing	I	Wood	White	6.3	QM
051	C	Window	Lft	Sash	P	Wood	White	5.3	QM
052	C	Window	Lft	Sill	I	Wood	White	5.2	QM
062	C	Window	Ctr	shutter	P	Wood	green	5.3	QM
050	C	Door	Lft	Lft jamb	I	Wood	White	8.3	QM
049	C	Door	Lft	U Rgt	I	Wood	White	5.3	QM
Interior Room 002 Living Rm									
030	C	Door	Rgt	Lft casing	I	Wood	White	2.0	QM
029	C	Door	Rgt	U Rgt	I	Wood	White	5.3	QM
028	D	Window	Lft	Mullion	I	Wood	White	2.0	QM
025	D	Window	Lft	Rgt casing	I	Wood	White	0.8	QM
027	D	Window	Lft	Sash	I	Wood	White	2.3	QM
026	D	Window	Lft	Apron	I	Wood	White	0.8	QM
024	D	Window	Lft	Sill	P	Wood	White	0.8	QM
Interior Room 005 Bathroom 1									
046	B	tub	Lft		I	Metal	White	9.9	QM

---- End of Readings ----

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date:	07/16/12	10515 Mackall Road
Report Date:	7/18/2012	St Leonard MD 20685
Abatement Level:	0.8	Guest House
Report No.	07/16/12 11:50	
Total Readings:	62	
Job Started:	07/16/12 11:50	
Job Finished:	07/16/12 12:45	

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Exterior Room 001 SD C									
058	C	porch	Lft	ceiling	P	Wood	White	5.3	QM
059	C	porch	Lft	column	P	Wood	White	9.9	QM
060	C	porch	Lft	fascia	P	Wood	White	8.3	QM
061	C	porch	Lft	soffit	P	Wood	White	6.3	QM
056	C	garage door	Rgt		P	Wood	White	0.8	QM
057	C	garage door	Rgt	Casing	P	Wood	White	1.0	QM
055	C	Wall	U Rgt		P	Wood	White	0.8	QM
054	C	Window	Lft	Mullion	P	Wood	White	4.3	QM
053	C	Window	Lft	Rgt casing	I	Wood	White	6.3	QM
051	C	Window	Lft	Sash	P	Wood	White	5.3	QM
052	C	Window	Lft	Sill	I	Wood	White	5.2	QM
062	C	Window	Ctr	shutter	P	Wood	green	5.3	QM
050	C	Door	Lft	Lft jamb	I	Wood	White	8.3	QM
049	C	Door	Lft	U Rgt	I	Wood	White	5.3	QM
Interior Room 001 Bedroom 3									
001	A	Wall	U Lft		I	Plaster	White	0.1	QM
015	B	Radiator	Lft		I	Metal	White	0.1	QM
018	B	Window	Lft	Rgt casing	I	Wood	White	0.0	QM
019	B	Window	Lft	Sash	I	Wood	White	0.1	QM
017	B	Window	Lft	Apron	I	Wood	White	-0.2	QM
016	B	Window	Lft	Sill	I	Wood	White	0.0	QM
014	C	Door	Rgt	Lft casing	I	Wood	White	-0.3	QM
013	C	Door	Rgt	Lft jamb	I	Wood	White	0.0	QM
012	C	Door	Rgt	U Rgt	P	Wood	White	0.0	QM
002	D	Wall	U Lft		P	Plaster	White	0.0	QM
004	D	Baseboard	Lft		I	Wood	White	0.0	QM
003	D	Ceiling	Lft		I	Plaster	White	-0.2	QM
010	D	Closet	Rgt	Baseboard	I	Wood	White	0.1	QM
005	D	Closet	Rgt	Door	I	Wood	White	0.1	QM
007	D	Closet	Rgt	Door Casing	I	Wood	White	0.1	QM
006	D	Closet	Rgt	Door Jamb	I	Wood	White	0.1	QM
011	D	Closet	Rgt	Wall	I	Plaster	White	0.2	QM
009	D	Closet	Rgt	Shelf Sup.	I	Wood	White	0.0	QM
008	D	Closet	Rgt	Shelf	I	Wood	White	0.1	QM
Interior Room 002 Living Rm									
020	C	Wall	U Lft		I	Plaster	White	0.2	QM
030	C	Door	Rgt	Lft casing	I	Wood	White	2.0	QM
029	C	Door	Rgt	U Rgt	I	Wood	White	5.3	QM
023	D	Radiator	Lft		I	Metal	White	0.1	QM

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
021	D	Fuse Panel	Rgt	door	I	Metal	White	0.1	QM
022	D	Fuse Panel	Rgt	door case	I	Metal	White	0.1	QM
028	D	Window	Lft	Mullion	I	Wood	White	2.0	QM
025	D	Window	Lft	Rgt casing	I	Wood	White	0.8	QM
027	D	Window	Lft	Sash	I	Wood	White	2.3	QM
026	D	Window	Lft	Apron	I	Wood	White	0.8	QM
024	D	Window	Lft	Sill	P	Wood	White	0.8	QM
Interior Room 003 Kitchen									
034	A	Wall	L Lft		I	Concrete	White	0.1	QM
031	A	Ceiling	Lft		P	Plaster	White	0.1	QM
035	B	Radiator	Lft		I	Metal	White	0.1	QM
032	D	cabinet	Lft		P	Metal	White	0.1	QM
033	D	cabinet	Lft	door	P	Metal	White	0.1	QM
Interior Room 004 Hallway									
038	A	Radiator	Lft	pipe	P	Metal	White	0.2	QM
037	A	Wall	L Lft		I	Concrete	White	0.1	QM
036	A	Wall	U Lft		I	Plaster	White	0.1	QM
044	C	Closet	Ctr	Baseboard	I	Wood	White	0.0	QM
039	C	Closet	Ctr	Door	I	Wood	White	0.1	QM
041	C	Closet	Ctr	Door Casing	I	Wood	White	-0.2	QM
040	C	Closet	Ctr	Door Jamb	I	Wood	White	0.0	QM
045	C	Closet	Ctr	Wall	I	Plaster	White	0.2	QM
043	C	Closet	Ctr	Shelf Sup.	I	Wood	White	0.1	QM
042	C	Closet	Ctr	Shelf	I	Wood	White	0.0	QM
Interior Room 005 Bathroom 1									
046	B	tub	Lft		I	Metal	White	9.9	QM
047	D	sink	Lft		I	Metal	White	-0.2	QM
048	D	toilet	Lft		I	Metal	White	-0.3	QM

---- End of Readings ----

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date:	07/16/12	10515 Mackall Road	
Report Date:	7/18/2012	St Leonard MD 20685	
Abatement Level:	0.8	Guest House	
Report No.	07/16/12 11:50		
Total Readings:	62		
Job Started:	07/16/12 11:50		
Job Finished:	07/16/12 12:45		

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
1	001	Bedroom 3	A	Wall	U	Lft	I	Plaster	White	0.1	QM
2	001	Bedroom 3	D	Wall	U	Lft	P	Plaster	White	0.0	QM
3	001	Bedroom 3	D	Ceiling		Lft	I	Plaster	White	-0.2	QM
4	001	Bedroom 3	D	Baseboard		Lft	I	Wood	White	0.0	QM
5	001	Bedroom 3	D	Closet		Rgt Door	I	Wood	White	0.1	QM
6	001	Bedroom 3	D	Closet		Rgt Door Jamb	I	Wood	White	0.1	QM
7	001	Bedroom 3	D	Closet		Rgt Door Casing	I	Wood	White	0.1	QM
8	001	Bedroom 3	D	Closet		Rgt Shelf	I	Wood	White	0.1	QM
9	001	Bedroom 3	D	Closet		Rgt Shelf Sup.	I	Wood	White	0.0	QM
10	001	Bedroom 3	D	Closet		Rgt Baseboard	I	Wood	White	0.1	QM
11	001	Bedroom 3	D	Closet		Rgt Wall	I	Plaster	White	0.2	QM
12	001	Bedroom 3	C	Door		Rgt U Rgt	P	Wood	White	0.0	QM
13	001	Bedroom 3	C	Door		Rgt Lft jamb	I	Wood	White	0.0	QM
14	001	Bedroom 3	C	Door		Rgt Lft casing	I	Wood	White	-0.3	QM
15	001	Bedroom 3	B	Radiator		Lft	I	Metal	White	0.1	QM
16	001	Bedroom 3	B	Window		Lft Sill	I	Wood	White	0.0	QM
17	001	Bedroom 3	B	Window		Lft Apron	I	Wood	White	-0.2	QM
18	001	Bedroom 3	B	Window		Lft Rgt casing	I	Wood	White	0.0	QM
19	001	Bedroom 3	B	Window		Lft Sash	I	Wood	White	0.1	QM
20	002	Living Rm	C	Wall	U	Lft	I	Plaster	White	0.2	QM
21	002	Living Rm	D	Fuse Panel		Rgt door	I	Metal	White	0.1	QM
22	002	Living Rm	D	Fuse Panel		Rgt door case	I	Metal	White	0.1	QM
23	002	Living Rm	D	Radiator		Lft	I	Metal	White	0.1	QM
24	002	Living Rm	D	Window		Lft Sill	P	Wood	White	0.8	QM
25	002	Living Rm	D	Window		Lft Rgt casing	I	Wood	White	0.8	QM
26	002	Living Rm	D	Window		Lft Apron	I	Wood	White	0.8	QM
27	002	Living Rm	D	Window		Lft Sash	I	Wood	White	2.3	QM
28	002	Living Rm	D	Window		Lft Mullion	I	Wood	White	2.0	QM
29	002	Living Rm	C	Door		Rgt U Rgt	I	Wood	White	5.3	QM
30	002	Living Rm	C	Door		Rgt Lft casing	I	Wood	White	2.0	QM
31	003	Kitchen	A	Ceiling		Lft	P	Plaster	White	0.1	QM
32	003	Kitchen	D	cabinet		Lft	P	Metal	White	0.1	QM
33	003	Kitchen	D	cabinet		Lft door	P	Metal	White	0.1	QM
34	003	Kitchen	A	Wall	L	Lft	I	Concrete	White	0.1	QM
35	003	Kitchen	B	Radiator		Lft	I	Metal	White	0.1	QM
36	004	Hallway	A	Wall	U	Lft	I	Plaster	White	0.1	QM
37	004	Hallway	A	Wall	L	Lft	I	Concrete	White	0.1	QM
38	004	Hallway	A	Radiator		Lft pipe	P	Metal	White	0.2	QM
39	004	Hallway	C	Closet		Ctr Door	I	Wood	White	0.1	QM

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
40	004	Hallway	C	Closet	Ctr	Door Jamb	I	Wood	White	0.0	QM
41	004	Hallway	C	Closet	Ctr	Door Casing	I	Wood	White	-0.2	QM
42	004	Hallway	C	Closet	Ctr	Shelf	I	Wood	White	0.0	QM
43	004	Hallway	C	Closet	Ctr	Shelf Sup.	I	Wood	White	0.1	QM
44	004	Hallway	C	Closet	Ctr	Baseboard	I	Wood	White	0.0	QM
45	004	Hallway	C	Closet	Ctr	Wall	I	Plaster	White	0.2	QM
46	005	Bathroom 1	B	tub	Lft		I	Metal	White	9.9	QM
47	005	Bathroom 1	D	sink	Lft		I	Metal	White	-0.2	QM
48	005	Bathroom 1	D	toilet	Lft		I	Metal	White	-0.3	QM
49	001	SD C	C	Door	Lft	U Rgt	I	Wood	White	5.3	QM
50	001	SD C	C	Door	Lft	Lft jamb	I	Wood	White	8.3	QM
51	001	SD C	C	Window	Lft	Sash	P	Wood	White	5.3	QM
52	001	SD C	C	Window	Lft	Sill	I	Wood	White	5.2	QM
53	001	SD C	C	Window	Lft	Rgt casing	I	Wood	White	6.3	QM
54	001	SD C	C	Window	Lft	Mullion	P	Wood	White	4.3	QM
55	001	SD C	C	Wall	U Rgt		P	Wood	White	0.8	QM
56	001	SD C	C	garage door	Rgt		P	Wood	White	0.8	QM
57	001	SD C	C	garage door	Rgt	Casing	P	Wood	White	1.0	QM
58	001	SD C	C	porch	Lft	ceiling	P	Wood	White	5.3	QM
59	001	SD C	C	porch	Lft	column	P	Wood	White	9.9	QM
60	001	SD C	C	porch	Lft	fascia	P	Wood	White	8.3	QM
61	001	SD C	C	porch	Lft	soffit	P	Wood	White	6.3	QM
62	001	SD C	C	Window	Ctr	shutter	P	Wood	green	5.3	QM

---- End of Readings ----

DISTRIBUTION REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 11:50
Total Reading Sets: 62
Job Started: 07/16/12 11:50
Job Finished: 07/16/12 12:45

10515 Mackall Road
St Leonard MD 20685
Guest House

Structure	Total	Structure Distribution Positive	Negative	Inconclusive
Baseboard	1	0 <0%>	1 <100%>	0 <0%>
cabinet	1	0 <0%>	1 <100%>	0 <0%>
cabinet door	1	0 <0%>	1 <100%>	0 <0%>
Ceiling	2	0 <0%>	2 <100%>	0 <0%>
Closet Baseboard	2	0 <0%>	2 <100%>	0 <0%>
Closet Door	2	0 <0%>	2 <100%>	0 <0%>
Closet Door Casing	2	0 <0%>	2 <100%>	0 <0%>
Closet Door Jamb	2	0 <0%>	2 <100%>	0 <0%>
Closet Shelf	2	0 <0%>	2 <100%>	0 <0%>
Closet Shelf Sup.	2	0 <0%>	2 <100%>	0 <0%>
Closet Wall	2	0 <0%>	2 <100%>	0 <0%>
Door Lft casing	2	1 <50%>	1 <50%>	0 <0%>
Door Lft jamb	2	1 <50%>	1 <50%>	0 <0%>
Door U Rgt	3	2 <67%>	1 <33%>	0 <0%>
Fuse Panel door	1	0 <0%>	1 <100%>	0 <0%>
Fuse Panel door case	1	0 <0%>	1 <100%>	0 <0%>
garage door	1	1 <100%>	0 <0%>	0 <0%>
garage door Casing	1	1 <100%>	0 <0%>	0 <0%>
porch ceiling	1	1 <100%>	0 <0%>	0 <0%>
porch column	1	1 <100%>	0 <0%>	0 <0%>
porch fascia	1	1 <100%>	0 <0%>	0 <0%>
porch soffit	1	1 <100%>	0 <0%>	0 <0%>
Radiator	3	0 <0%>	3 <100%>	0 <0%>
Radiator pipe	1	0 <0%>	1 <100%>	0 <0%>
sink	1	0 <0%>	1 <100%>	0 <0%>
toilet	1	0 <0%>	1 <100%>	0 <0%>
tub	1	1 <100%>	0 <0%>	0 <0%>
Wall	7	1 <14%>	6 <86%>	0 <0%>
Window Apron	2	1 <50%>	1 <50%>	0 <0%>
Window Mullion	2	2 <100%>	0 <0%>	0 <0%>
Window Rgt casing	3	2 <67%>	1 <33%>	0 <0%>
Window Sash	3	2 <67%>	1 <33%>	0 <0%>
Window shutter	1	1 <100%>	0 <0%>	0 <0%>
Window Sill	3	2 <67%>	1 <33%>	0 <0%>
Inspection Totals:	62	22 < 35%>	40 < 65%>	0 < 0%>

LEAD PAINT INSPECTION REPORT

REPORT NUMBER: 07/16/12 11:05

INSPECTION FOR: Page Technologies, Inc
1412 South Carey Street
Baltimore, MD 21230
Attn: Enobong Umoh

PERFORMED AT: 10515 Mackall Road
Saint Leonard MD 20685
Garage

INSPECTION DATE: 07/16/12

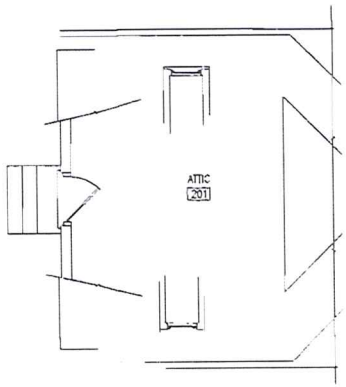
INSTRUMENT TYPE: R M D
MODEL LPA-1
XRF TYPE ANALYZER
Serial Number: 2699

ACTION LEVEL: 0.8 mg/cm²

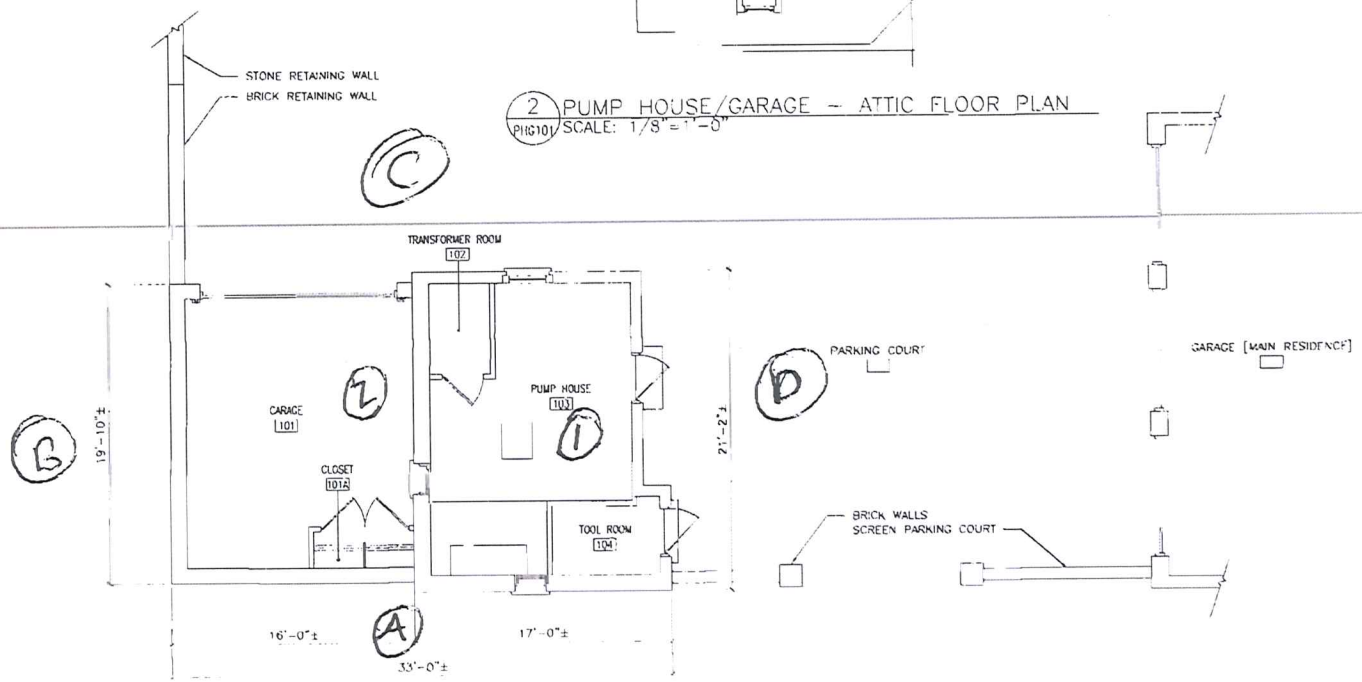
OPERATOR LICENSE: 7148

SIGNED: _____ Date: 7/16/12

Dharam Kissoondath



2 PUMP HOUSE/GARAGE – ATTIC FLOOR PLAN
P1\G101 SCALE: 1/8"=1'-0"



1 PUMP HOUSE/GARAGE – FIRST FLOOR PLAN
A104 SCALE: 1/8"=1'-0"

8 4 0 8 16
1/8"=1'-0" SCALE OF FEET

QUINN EVANS
2121 [illegible], Suite 4
Washington, DC 22037
t 202 298 8700 f 202 298 6666
www.quinnevans.com

PATTERSON CENTER CONDITION ASSESSMENT

10515 MACKCALL ROAD
ST. LEONARD, MD

DEP Project No. 31003300

PUMP HOUSE/ GARAGE

NO. TITLE DATE

A104

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 11:05
Total Readings: 22 Actionable: 17
Job Started: 07/16/12 11:05
Job Finished: 07/16/12 11:32

10515 Mackall Road
Saint Leonard MD 20685
Garage

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Exterior Room 001 Storage1									
005	B	Window	Lft	Mullion	I	Wood	White	8.3	QM
004	B	Window	Lft	Rgt casing	I	Wood	White	9.3	QM
003	B	Window	Lft	Sash	I	Wood	White	5.3	QM
007	C	Closet	Lft	Door Jamb	I	Metal	Brown	9.9	QM
002	D	Door	Lft	Lft jamb	P	Wood	White	9.9	QM
001	D	Door	Lft	U Rgt	I	Wood	White	9.9	QM
Exterior Room 002 Storage2									
010	D	Window	Rgt	Rgt casing	I	Wood	White	6.3	QM
009	D	Window	Rgt	Sash	I	Wood	White	8.2	QM
008	D	Window	Rgt	Sill	I	Wood	White	5.3	QM
Exterior Room 003 BLDG EXT									
018	C	Window	Lft	Mullion	I	Wood	White	4.3	QM
016	C	Window	Lft	Rgt casing	I	Wood	White	9.9	QM
017	C	Window	Lft	Sash	I	Wood	White	8.2	QM
015	C	Window	Lft	Sill	I	Wood	White	0.8	QM
013	D	soffit	Lft		I	Wood	White	9.9	QM
014	D	fascia	Lft		I	Wood	White	9.9	QM
012	D	Door	Lft	Lft jamb	P	Wood	White	9.9	QM
011	D	Door	Lft	U Rgt	P	Wood	White	9.9	QM

---- End of Readings ----

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 11:05
Total Readings: 22
Job Started: 07/16/12 11:05
Job Finished: 07/16/12 11:32

10515 Mackall Road
Saint Leonard MD 20685
Garage

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Exterior Room 001 Storage1									
005	B	Window	Lft	Mullion	I	Wood	White	8.3	QM
004	B	Window	Lft	Rgt casing	I	Wood	White	9.3	QM
003	B	Window	Lft	Sash	I	Wood	White	5.3	QM
006	C	Closet	Lft	Door	P	Metal	black	0.2	QM
007	C	Closet	Lft	Door Jamb	I	Metal	Brown	9.9	QM
002	D	Door	Lft	Lft jamb	P	Wood	White	9.9	QM
001	D	Door	Lft	U Rgt	I	Wood	White	9.9	QM
Exterior Room 002 Storage2									
010	D	Window	Rgt	Rgt casing	I	Wood	White	6.3	QM
009	D	Window	Rgt	Sash	I	Wood	White	8.2	QM
008	D	Window	Rgt	Sill	I	Wood	White	5.3	QM
Exterior Room 003 BLDG EXT									
022	C	roof	Rgt		I	slate	Grey	0.1	QM
018	C	Window	Lft	Mullion	I	Wood	White	4.3	QM
016	C	Window	Lft	Rgt casing	I	Wood	White	9.9	QM
017	C	Window	Lft	Sash	I	Wood	White	8.2	QM
015	C	Window	Lft	Sill	I	Wood	White	0.8	QM
021	C	Door	Rgt	Lintel	I	Metal	White	0.3	QM
020	C	Door	Rgt	Lft casing	I	Wood	White	0.3	QM
019	C	Door	Rgt	L Rgt	I	Wood	White	0.2	QM
013	D	soffit	Lft		I	Wood	White	9.9	QM
014	D	fascia	Lft		I	Wood	White	9.9	QM
012	D	Door	Lft	Lft jamb	P	Wood	White	9.9	QM
011	D	Door	Lft	U Rgt	P	Wood	White	9.9	QM

---- End of Readings ----

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date:	07/16/12	10515 Mackall Road
Report Date:	7/18/2012	Saint Leonard MD 20685
Abatement Level:	0.8	Garage
Report No.	07/16/12 11:05	
Total Readings:	22	
Job Started:	07/16/12 11:05	
Job Finished:	07/16/12 11:32	

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
1	001	Storage1	D	Door	Lft	U Rgt	I	Wood	White	9.9	QM
2	001	Storage1	D	Door	Lft	Lft jamb	P	Wood	White	9.9	QM
3	001	Storage1	B	Window	Lft	Sash	I	Wood	White	5.3	QM
4	001	Storage1	B	Window	Lft	Rgt casing	I	Wood	White	9.3	QM
5	001	Storage1	B	Window	Lft	Mullion	I	Wood	White	8.3	QM
6	001	Storage1	C	Closet	Lft	Door	P	Metal	black	0.2	QM
7	001	Storage1	C	Closet	Lft	Door Jamb	I	Metal	Brown	9.9	QM
8	002	Storage2	D	Window	Rgt	Sill	I	Wood	White	5.3	QM
9	002	Storage2	D	Window	Rgt	Sash	I	Wood	White	8.2	QM
10	002	Storage2	D	Window	Rgt	Rgt casing	I	Wood	White	6.3	QM
11	003	BLDG EXT	D	Door	Lft	U Rgt	P	Wood	White	9.9	QM
12	003	BLDG EXT	D	Door	Lft	Lft jamb	P	Wood	White	9.9	QM
13	003	BLDG EXT	D	soffit	Lft		I	Wood	White	9.9	QM
14	003	BLDG EXT	D	fascia	Lft		I	Wood	White	9.9	QM
15	003	BLDG EXT	C	Window	Lft	Sill	I	Wood	White	0.8	QM
16	003	BLDG EXT	C	Window	Lft	Rgt casing	I	Wood	White	9.9	QM
17	003	BLDG EXT	C	Window	Lft	Sash	I	Wood	White	8.2	QM
18	003	BLDG EXT	C	Window	Lft	Mullion	I	Wood	White	4.3	QM
19	003	BLDG EXT	C	Door	Rgt	L Rgt	I	Wood	White	0.2	QM
20	003	BLDG EXT	C	Door	Rgt	Lft casing	I	Wood	White	0.3	QM
21	003	BLDG EXT	C	Door	Rgt	Lintel	I	Metal	White	0.3	QM
22	003	BLDG EXT	C	roof	Rgt		I	slate	Grey	0.1	QM

---- End of Readings ----

DISTRIBUTION REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 11:05
Total Reading Sets: 22
Job Started: 07/16/12 11:05
Job Finished: 07/16/12 11:32

10515 Mackall Road
Saint Leonard MD 20685
Garage

Structure	Total	Structure Distribution Positive	Negative	Inconclusive
Closet Door	1	0 <0%>	1 <100%>	0 <0%>
Closet Door Jamb	1	1 <100%>	0 <0%>	0 <0%>
Door L Rgt	1	0 <0%>	1 <100%>	0 <0%>
Door Lft casing	1	0 <0%>	1 <100%>	0 <0%>
Door Lft jamb	2	2 <100%>	0 <0%>	0 <0%>
Door Lintel	1	0 <0%>	1 <100%>	0 <0%>
Door U Rgt	2	2 <100%>	0 <0%>	0 <0%>
fascia	1	1 <100%>	0 <0%>	0 <0%>
roof	1	0 <0%>	1 <100%>	0 <0%>
soffit	1	1 <100%>	0 <0%>	0 <0%>
Window Mullion	2	2 <100%>	0 <0%>	0 <0%>
Window Rgt casing	3	3 <100%>	0 <0%>	0 <0%>
Window Sash	3	3 <100%>	0 <0%>	0 <0%>
Window Sill	2	2 <100%>	0 <0%>	0 <0%>
Inspection Totals:	22	17 < 77%>	5 < 23%>	0 < 0%>

LEAD PAINT INSPECTION REPORT

REPORT NUMBER: 07/16/12 11:37

INSPECTION FOR: Page Technologies, Inc
1412 South Carey Street
Baltimore, MD 21230
Attn: Enobong Umoh

PERFORMED AT: 10515 Mackall Road
Saint Leonard MD 20685
Pool House

INSPECTION DATE: 07/16/12

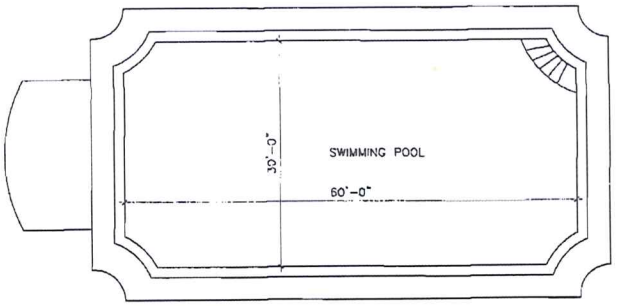
INSTRUMENT TYPE: R M D
MODEL LPA-1
XRF TYPE ANALYZER
Serial Number: 2599

ACTION LEVEL: 0.8 mg/cm²

OPERATOR LICENSE: 7148

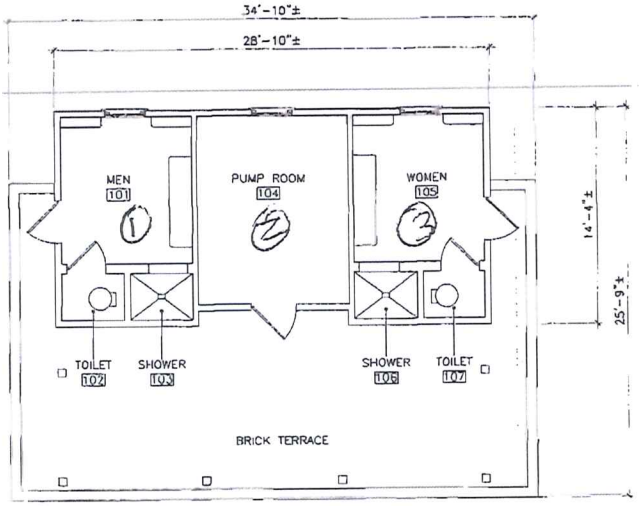
SIGNED: [signature] Date: 7/17/12

Dharam Kissoondath



2 / A107 SWIMMING POOL – PLAN
SCALE: 1/16"=1'-0"

16 8 0 16 32
1/16"=1'-0" SCALE OF FEET



1 / A107 POOL HOUSE FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

8 4 0 8 16
1/8"=1'-0" SCALE OF FEET

QUINN EVANS
2121 Ward Place NW, Floor 4
Washington, DC 20037
v 202 298 6700 f 202 298 6656
www.quinnevans.com

PATTERSON CENTER CONDITION ASSESSMENT

10515 MACKCALL ROAD
ST. LEONARD, MD

CIRA Project No. 31703300

POOL HOUSE

NO.	TITLE	DATE

FILENAME

A107

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: **Page Technologies, Inc**

Inspection Date:	07/16/12	10515 Mackall Road
Report Date:	7/18/2012	Saint Leonard MD 20685
Abatement Level:	0.8	Pool House
Report No.	07/16/12 11:37	
Total Readings:	15 Actionable: 0	
Job Started:	07/16/12 11:37	
Job Finished:	07/16/12 11:45	

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Calibration Readings									
---- End of Readings ----									

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 11:37
Total Readings: 15
Job Started: 07/16/12 11:37
Job Finished: 07/16/12 11:45

10515 Mackall Road
Saint Leonard MD 20685
Pool House

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Exterior Room 001 Men									
001	A	Wall	U Lft		I	Wood	Stained	0.0	QM
003	A	Door	Ctr	U Rgt	I	Wood	Stained	0.0	QM
002	C	Wall	U Lft		I	Wood	Stained	-0.2	QM
Exterior Room 002 Pump rm									
004	D	sink	Ctr		P	Metal	White	0.1	QM
Exterior Room 003 women									
005	A	Wall	U Ctr		I	Wood	Stained	0.0	QM
010	B	Window	Ctr	Rgt casing	I	Wood	Stained	-0.2	QM
009	B	Window	Ctr	Sash	I	Wood	Stained	0.0	QM
008	B	Window	Ctr	Sill	I	Wood	Stained	0.1	QM
007	C	Door	Ctr	Lft jamb	I	Wood	Stained	-0.1	QM
006	C	Door	Ctr	U Rgt	I	Wood	Stained	-0.3	QM
Exterior Room 004 BLDG EXT									
011	A	Railing	Ctr	Hand Rail	I	Metal	black	0.1	QM
012	A	Railing	Ctr	newel post	I	Metal	black	0.0	QM
Calibration Readings									
013								0.9	TC
014								1.0	TC
015								0.9	TC

---- End of Readings ----

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 11:37
Total Readings: 15
Job Started: 07/16/12 11:37
Job Finished: 07/16/12 11:45

10515 Mackall Road
Saint Leonard MD 20685
Pool House

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
1	001	Men	A	Wall	U	Lft	I	Wood	Stained	0.0	QM
2	001	Men	C	Wall	U	Lft	I	Wood	Stained	-0.2	QM
3	001	Men	A	Door	Ctr	U Rgt	I	Wood	Stained	0.0	QM
4	002	Pump rm	D	sink	Ctr		P	Metal	White	0.1	QM
5	003	women	A	Wall	U	Ctr	I	Wood	Stained	0.0	QM
6	003	women	C	Door	Ctr	U Rgt	I	Wood	Stained	-0.3	QM
7	003	women	C	Door	Ctr	Lft jamb	I	Wood	Stained	-0.1	QM
8	003	women	B	Window	Ctr	Sill	I	Wood	Stained	0.1	QM
9	003	women	B	Window	Ctr	Sash	I	Wood	Stained	0.0	QM
10	003	women	B	Window	Ctr	Rgt casing	I	Wood	Stained	-0.2	QM
11	004	BLDG EXT	A	Railing	Ctr	Hand Rail	I	Metal	black	0.1	QM
12	004	BLDG EXT	A	Railing	Ctr	newel post	I	Metal	black	0.0	QM
13		CALIBRATION								0.9	TC
14		CALIBRATION								1.0	TC
15		CALIBRATION								0.9	TC

---- End of Readings ----

DISTRIBUTION REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date:	07/16/12	10515 Mackall Road
Report Date:	7/18/2012	Saint Leonard MD 20685
Abatement Level:	0.8	Pool House
Report No.	07/16/12 11:37	
Total Reading Sets:	12	
Job Started:	07/16/12 11:37	
Job Finished:	07/16/12 11:45	

Structure	Total	Structure Distribution Positive	Negative	Inconclusive
Door Lft jamb	1	0 <0%>	1 <100%>	0 <0%>
Door U Rgt	2	0 <0%>	2 <100%>	0 <0%>
Railing Hand Rail	1	0 <0%>	1 <100%>	0 <0%>
Railing newel post	1	0 <0%>	1 <100%>	0 <0%>
sink	1	0 <0%>	1 <100%>	0 <0%>
Wall	3	0 <0%>	3 <100%>	0 <0%>
Window Rgt casing	1	0 <0%>	1 <100%>	0 <0%>
Window Sash	1	0 <0%>	1 <100%>	0 <0%>
Window Sill	1	0 <0%>	1 <100%>	0 <0%>
Inspection Totals:	12	0 < 0%>	12 <100%>	0 < 0%>

LEAD PAINT INSPECTION REPORT

REPORT NUMBER: 07/16/12 13:00

INSPECTION FOR: Page Technologies, Inc
1412 South Carey Street
Baltimore, MD 21230
Attn: Enobong Umoh

PERFORMED AT: 10645 Mackall Road
Saint Leonard MD 20685
Beach House

INSPECTION DATE: 07/16/12

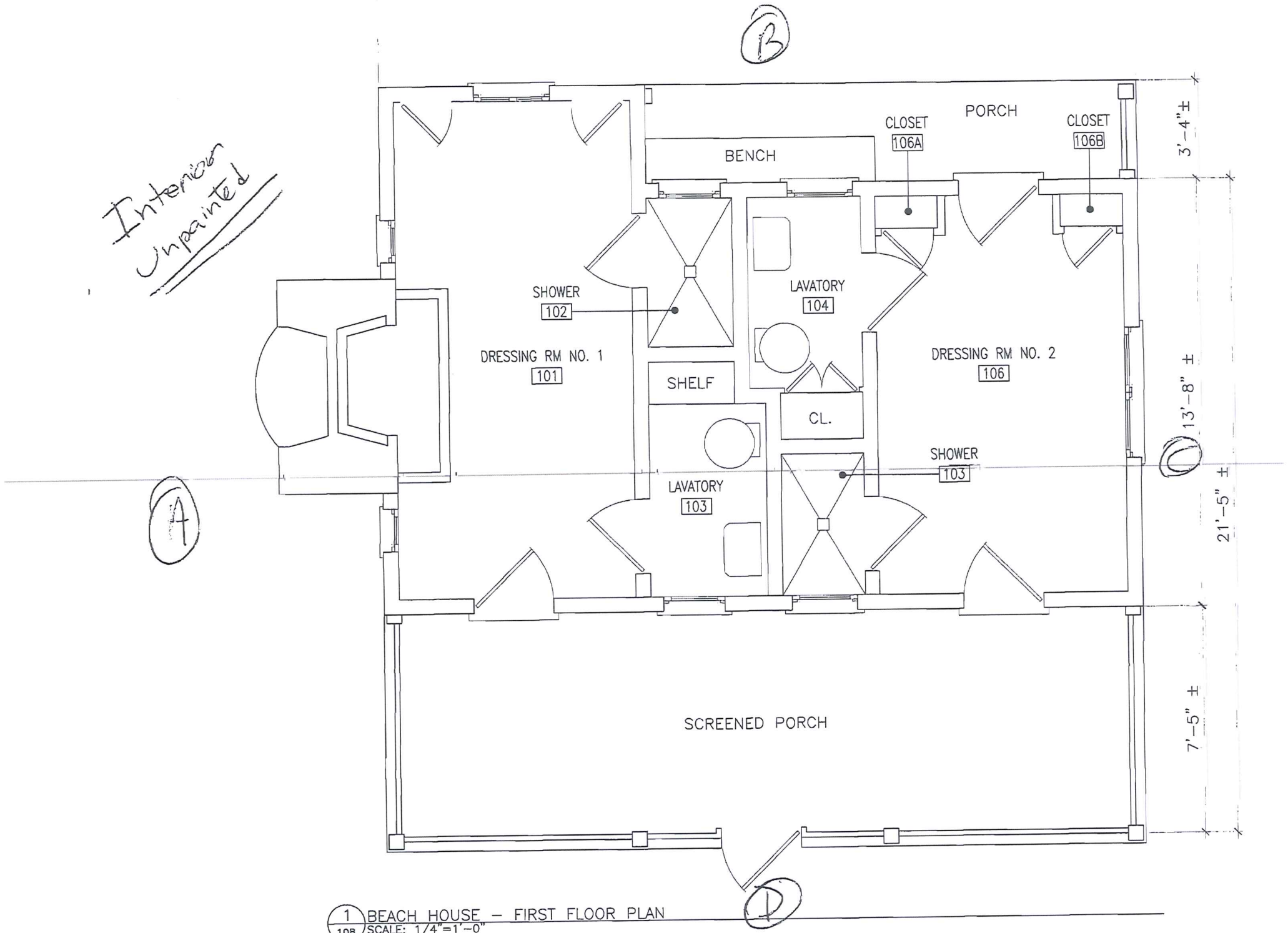
INSTRUMENT TYPE: R M D
MODEL LPA-1
XRF TYPE ANALYZER
Serial Number: 2599

ACTION LEVEL: 0.8 mg/cm²

OPERATOR LICENSE: 7148

SIGNED: _____ Date: 7/17/12

Dharam Kissoondath



1/108 BEACH HOUSE – FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date:	07/16/12	10645 Mackall Road
Report Date:	7/18/2012	Saint Leonard MD 20685
Abatement Level:	0.8	Beach House
Report No.	07/16/12 13:00	
Total Readings:	12 Actionable: 1	
Job Started:	07/16/12 13:00	
Job Finished:	07/16/12 13:15	

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Exterior Room 001 BLDG EXT									
005	B	Window	Lft	Rgt casing	P	Wood	green	5.3	QM
Calibration Readings									
---- End of Readings ----									

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 13:00
Total Readings: 12
Job Started: 07/16/12 13:00
Job Finished: 07/16/12 13:15

10645 Mackall Road
Saint Leonard MD 20685
Beach House

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
Exterior Room 001 BLDG EXT									
009	A	fascia	Rgt		I	Wood	Stained	0.1	QM
001	A	Wall	U Lft		P	Wood	Stained	0.0	QM
002	B	Wall	U Lft		P	Wood	Stained	-0.2	QM
005	B	Window	Lft	Rgt casing	P	Wood	green	5.3	QM
006	B	Door	Rgt	U Rgt	P	Wood	green	0.1	QM
003	C	Wall	U Lft		P	Wood	Stained	-0.3	QM
007	D	porch	Rgt	ceiling	I	Wood	Stained	0.0	QM
008	D	porch	Rgt	post	I	Wood	Stained	0.0	QM
004	D	Wall	U Lft		P	Wood	Stained	0.0	QM
Calibration Readings									
010								0.9	TC
011								1.1	TC
012								0.9	TC

---- End of Readings ----

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date: 07/16/12
Report Date: 7/18/2012
Abatement Level: 0.8
Report No. 07/16/12 13:00
Total Readings: 12
Job Started: 07/16/12 13:00
Job Finished: 07/16/12 13:15

10645 Mackall Road
Saint Leonard MD 20685
Beach House

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
1	001	BLDG EXT	A	Wall	U	Lft	P	Wood	Stained	0.0	QM
2	001	BLDG EXT	B	Wall	U	Lft	P	Wood	Stained	-0.2	QM
3	001	BLDG EXT	C	Wall	U	Lft	P	Wood	Stained	-0.3	QM
4	001	BLDG EXT	D	Wall	U	Lft	P	Wood	Stained	0.0	QM
5	001	BLDG EXT	B	Window	Lft	Rgt casing	P	Wood	green	5.3	QM
6	001	BLDG EXT	B	Door	Rgt	U Rgt	P	Wood	green	0.1	QM
7	001	BLDG EXT	D	porch	Rgt	ceiling	I	Wood	Stained	0.0	QM
8	001	BLDG EXT	D	porch	Rgt	post	I	Wood	Stained	0.0	QM
9	001	BLDG EXT	A	fascia	Rgt		I	Wood	Stained	0.1	QM
10		CALIBRATION								0.9	TC
11		CALIBRATION								1.1	TC
12		CALIBRATION								0.9	TC

---- End of Readings ----

DISTRIBUTION REPORT OF LEAD PAINT INSPECTION FOR: Page Technologies, Inc

Inspection Date:	07/16/12	10645 Mackall Road
Report Date:	7/18/2012	Saint Leonard MD 20685
Abatement Level:	0.8	Beach House
Report No.	07/16/12 13:00	
Total Reading Sets:	9	
Job Started:	07/16/12 13:00	
Job Finished:	07/16/12 13:15	

		Structure Distribution		
Structure	Total	Positive	Negative	Inconclusive
Door U Rgt	1	0 <0%>	1 <100%>	0 <0%>
fascia	1	0 <0%>	1 <100%>	0 <0%>
porch ceiling	1	0 <0%>	1 <100%>	0 <0%>
porch post	1	0 <0%>	1 <100%>	0 <0%>
Wall	4	0 <0%>	4 <100%>	0 <0%>
Window Rgt casing	1	1 <100%>	0 <0%>	0 <0%>
Inspection Totals:	9	1 < 11%>	8 < 89%>	0 < 0%>



Photo #1:	Main House

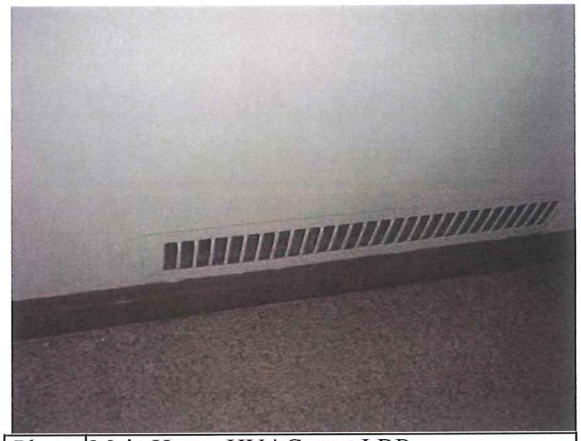


Photo #2:	Main House HVAC vent LBP

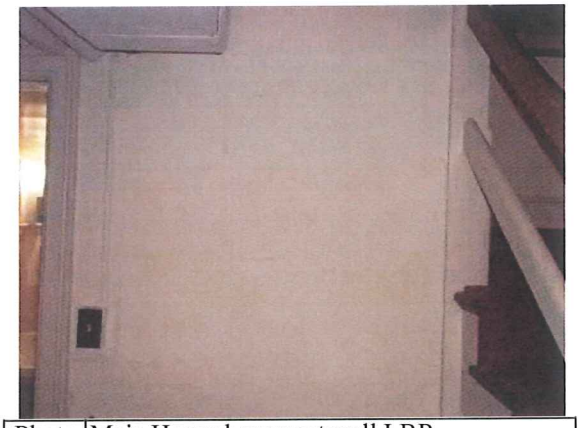


Photo #3:	Main House basement wall LBP



Photo #4:	Main House basement duct LBP

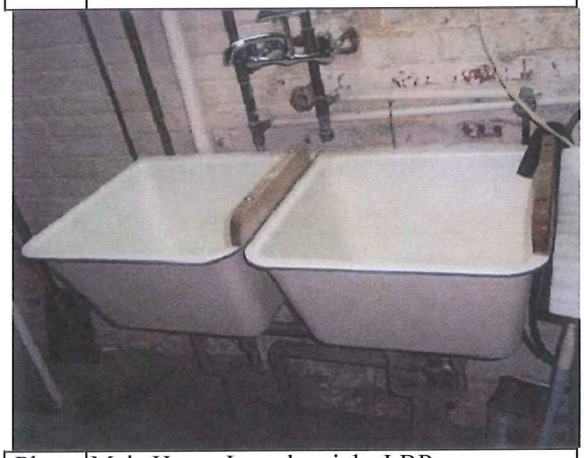


Photo #5:	Main House Laundry sinks LBP



Photo #6:	Main House laundry window lintel LBP

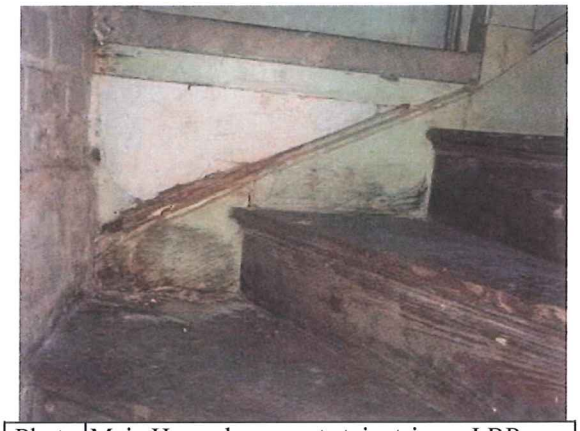


Photo #7:	Main House basement stair stringer LBP



Photo #8:	Main House Family room window sash LBP



Photo #9:	Main House kitchen window sash LBP



Photo #10:	Main House door LBP



Photo #11:	Pump house



Photo #12:	Pump house door jamb poor LBP



Photo #13:	Pump house interior



Photo #14:	Pump house door poor LBP

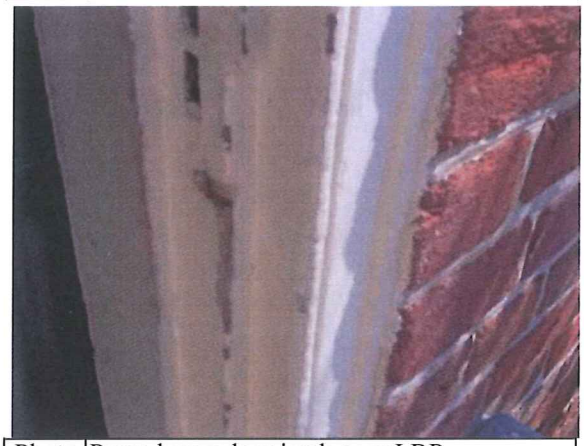


Photo #15:	Pump house door jamb poor LBP



Photo #16:	Pool house



Photo #17:	Gardeners Cottage



Photo #18:	Gardeners Cottage nursery unpainted



Photo #19:	Gardeners Cottage garage wall poor LBP



Photo #20:	Gardeners Cottage window casing poor LBP



Photo #21:	Gardeners Cottage window sash poor LBP



Photo #22:	Gardeners Cottage porch ceiling



Photo #23:	Gardeners Cottage porch post



Photo #24:	Gardeners Cottage porch soffit/fascia



Photo #25:	Gardeners Cottage window shutters poor LBP



Photo #26:	Gardeners Cottage wall poor LBP



Photo #27:	Beach House

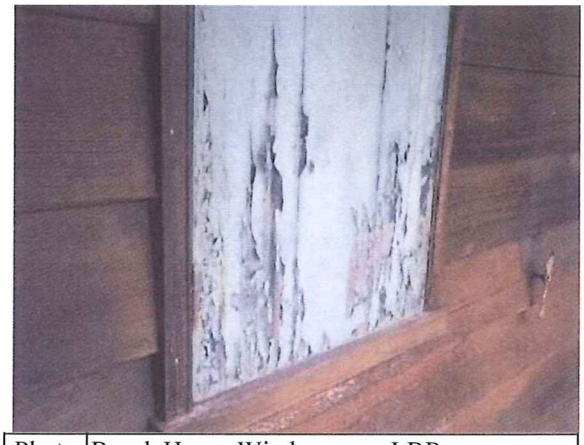


Photo #28:	Beach House Window poor LBP

APPENDIX D:

MOLD LAB RESULTS

EMSL Analytical, Inc.
10768 Baltimore Avenue Beltsville, MD 20705
Phone/Fax: (301) 937-5700 / (301) 937-5701
http://www.emsl.com / beltsvillelab@emsl.com

EMSL Order ID: 191207459
Customer ID: PAGE50
Customer PO:
Project ID:

Attn: Tom Umoh
Page Environmental
1412 S Carey St.
Baltimore, MD 21230

Phone: (410) 230-0733
Fax: (410) 230-0735
Collected: 07/26/2012
Received: 07/26/2012
Analyzed: 07/27/2012

Proj: JEFFERSON PATTERSON CENTER

Test Report: Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, and Other Particulates from Bulk Samples (EMSL Method: M041)

Lab Sample Number: / Client Sample ID: / Sample Location:	191207459-0001 JPP-MB-M1 DRYWALL	191207459-0002 JPP-MD-M2 PLASTER	191207459-0003 JPP-GC-M3 DRYWALL	191207459-0004 JPP-GC-M4 DRYWALL	191207459-0005 JPP-GC-M5 DRYWALL
Spore Types	Category	Category	Category	Category	Category
Agrocybe/Coprinus	-	-	-	-	-
Alternaria	-	-	-	-	-
Ascospores	-	-	Low	Rare	-
Aspergillus/Penicillium	-	-	-	Rare	-
Basidiospores	-	-	-	-	-
Bipolaris++	-	-	-	-	-
Chaetomium	-	Rare	Low	*Medium*	*High*
Cladosporium	*Medium*	-	-	-	-
Curvularia	-	-	-	-	-
Epicoccum	Rare	-	-	-	-
Fusarium	-	-	-	-	-
Ganoderma	-	-	-	-	-
Myxomycetes++	-	-	Rare	-	-
Paecilomyces	-	-	-	-	-
Rust	-	-	-	-	-
Scopulariopsis	-	-	-	-	-
Stachybotrys	-	-	*High*	*High*	*High*
Torula	-	-	-	-	-
Ulocladium	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-
Zygomycetes	-	-	-	-	-
Fibrous Particulate	Low	-	-	-	-
Hyphal Fragment	-	Low	Rare	-	Rare
Insect Fragment	-	-	Low	Low	-
Pollen	-	Rare	Rare	-	-

Category: Count/per area analyzed
Rare: 1 to 10 Low: 11 to 100 Medium: 101 to 1000 High: >1000

Bipolaris++ = Bipolaris/Dreschlera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut
* = Sample contains fruiting structures and/or hyphae associated with the spores.

No discernable field blank was submitted with this group of samples.

Mikhail Sogonov Ph.D., Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation of the data contained in this report is the responsibility of the client. "-" denotes not detected. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC--EMLAP Lab 102891

Initial report from: 07/27/2012 10:58:36

For Information on the fungi listed in this report please visit the Resources section at www.emsl.com

EMSL Analytical, Inc.
10768 Baltimore Avenue Beltsville, MD 20705
Phone/Fax: (301) 937-5700 / (301) 937-5701
http://www.emsl.com / beltsvillelab@emsl.com

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Phone: (410) 230-0733
Fax: (410) 230-0735
Collected: 07/26/2012
Received: 07/26/2012
Analyzed: 07/27/2012

Proj: JEFFERSON PATTERSON CENTER

Test Report: Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, and Other Particulates from Bulk Samples (EMSL Method: M041)

Lab Sample Number:	191207459-0006	191207459-0007	191207459-0008		
Client Sample ID:	JPP-GC-M6	JPP-GC-M7	JPP-GC-M8		
Sample Location:	DRYWALL	DRYWALL	DRYWALL		
Spore Types	Category	Category	Category		
Agrocybe/Coprinus	-	-	-		
Alternaria	-	-	Rare		
Ascospores	Rare	Low	-		
Aspergillus/Penicillium	Rare	Rare	Low		
Basidiospores	-	-	-		
Bipolaris++	-	-	-		
Chaetomium	-	-	Low		
Cladosporium	*Low*	Low	Rare		
Curvularia	-	-	-		
Epicoccum	-	-	-		
Fusarium	-	-	-		
Ganoderma	-	-	-		
Myxomycetes++	-	-	-		
Paecilomyces	-	-	-		
Rust	-	-	-		
Scopulariopsis	-	-	-		
Stachybotrys	-	-	*High*		
Torula	-	-	-		
Ulocladium	-	-	-		
Unidentifiable Spores	-	-	-		
Zygomycetes	-	-	-		
Fibrous Particulate	-	-	-		
Hyphal Fragment	-	Low	Rare		
Insect Fragment	Rare	-	-		
Pollen	Rare	-	-		

Category: Count/per area analyzed
Rare: 1 to 10 Low: 11 to 100 Medium: 101 to 1000 High: >1000

Bipolaris++ = Bipolaris/Dreschlera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut
* = Sample contains fruiting structures and/or hyphae associated with the spores.

Mikhail Sogonov Ph.D., Laboratory Manager
or Other Approved Signatory

No discernable field blank was submitted with this group of samples.

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation of the data contained in this report is the responsibility of the client. "-" denotes not detected. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC--EMLAP Lab 102891

Initial report from: 07/27/2012 10:58:36

For Information on the fungi listed in this report please visit the Resources section at www.emsl.com

APPENDIX E:

INSPECTOR CERTIFICATIONS

ATC ASSOCIATES INC.

9231 RUMSEY ROAD COLUMBIA, MD 21045 (410) 381-0232

CERTIFICATE OF ACHIEVEMENT

AWARDED TO

ENE UDOH

IN RECOGNITION OF SUCCESSFUL COMPLETION OF THE COURSE

ASBESTOS INSPECTOR/ MANAGEMENT PLANNER REVIEW

AN 8-HOUR ANNUAL REVIEW PROGRAM OF STUDY PRESENTED IN ACCORDANCE WITH THE PROVISIONS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY MODEL ACCREDITATION PLAN, 40 CFR PART 763, APPENDIX C TO SUBPART E, FOR ACCREDITATION UNDER TSCA TITLE II.

PRESENTED BY

VATC

114595		Clayton E. Miller
CERTIFICATE #		COURSE DIRECTOR CLAYTON E. MILLER
November 21, 2011	November 21, 2011	November 21, 2012
COURSE DATE	EXAMINATION DATE	EXPIRATION DATE

THIS IS TO CERTIFY THAT

Dharam Kissoondath

HAS MET THE LEAD PAINT SERVICES ACCREDITATION REQUIREMENTS FOR

Risk Assessor

EXPIRATION DATE 07 15 2013

TRAINING PROVIDER Aerosol Monitoring and Analysis, Inc.

ADMINISTRATOR, LEAD PAINT ACCREDITATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT

7/19/11
DATE

COURSE DATE 06 27 2011

STATE OF MARYLAND

Certificate # 7148

Application for reaccreditation shall be submitted to MDE 30 days prior to accreditation expiration indicated on this certificate.

Certificate of Achievement

This is to certify that

Dharam Kissoondath
Progressive Environmental

on the 9th day of March 2004 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to, the topics of Radiation Safety and the Proper Use of the Instrument.

Jacob Paster, Vice President, RMD
44 Hunt St., Watertown, Massachusetts

APPENDIX F:

LAB CREDENTIALS

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200293-0

EMSL Analytical, Inc.

Beltsville, MD

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

BULK ASBESTOS FIBER ANALYSIS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2012-01-01 through 2012-12-31

Effective dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

David F. Alderman

For the National Institute of Standards and Technology

NVLAP-01C (REV. 2009-01-28)

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

10768 Baltimore Avenue, Beltsville, MD 20705

Laboratory ID: 102891

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories in t*he following:

LABORATORY ACCREDITATION PROGRAMS

✓	**INDUSTRIAL HYGIENE**	Accreditation Expires: 09/01/2013
☐	**ENVIRONMENTAL LEAD**	Accreditation Expires:
✓	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: 09/01/2013
☐	**FOOD**	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Christine Powell

Christine Powell

Chairperson, Analytical Accreditation Board

Cheryl O. Morton

Cheryl O. Morton

Director, AIHA Laboratory Accreditation Programs, LLC

Revision 11: 01/13/2011

Date Issued: 09/01/2011

APPENDIX G:

PHOTO LOG



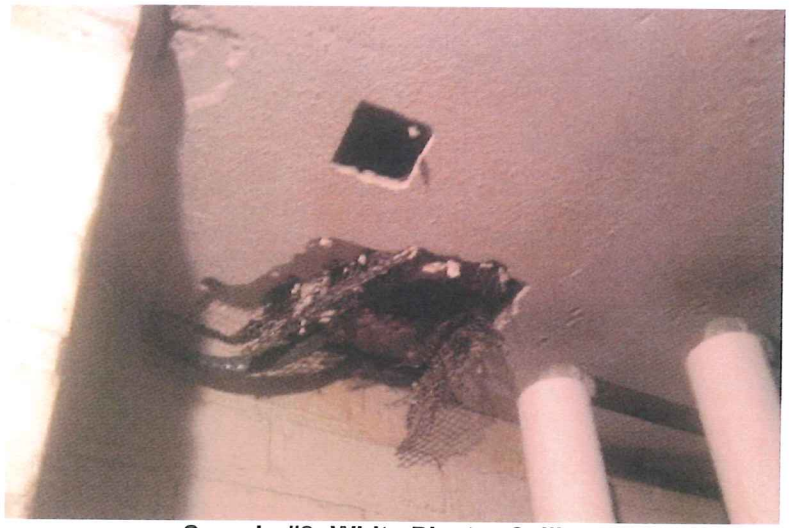
Sample #1- Brown/Tan Floor Tile 9x9
Location: Main Residence- Basement/Walkway near Bathroom



Sample #3- Tan Floor Tile 9x9
Location: Main Residence- Basement/Bathroom



Sample #6- Light Green Floor Tile 9x9
Location: Main Residence- Basement/Laundry Room



Sample #8- White Plaster Ceiling
Location: Main Residence- Basement/Air Handling Unit



Sample #20- Black Roofing Material
Location: Pool House



Sample #23- Brown/Green Floor Tile 9x9
Location: Gardner's Cottage/Dining Room



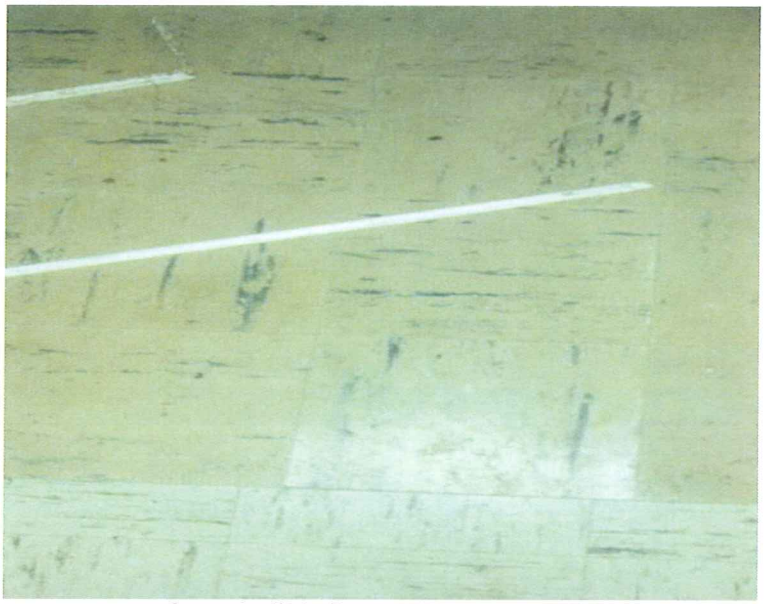
Sample #27- Brown/Green Floor Tile 9x9
Location: Gardner's Cottage- Hallway By Kitchen



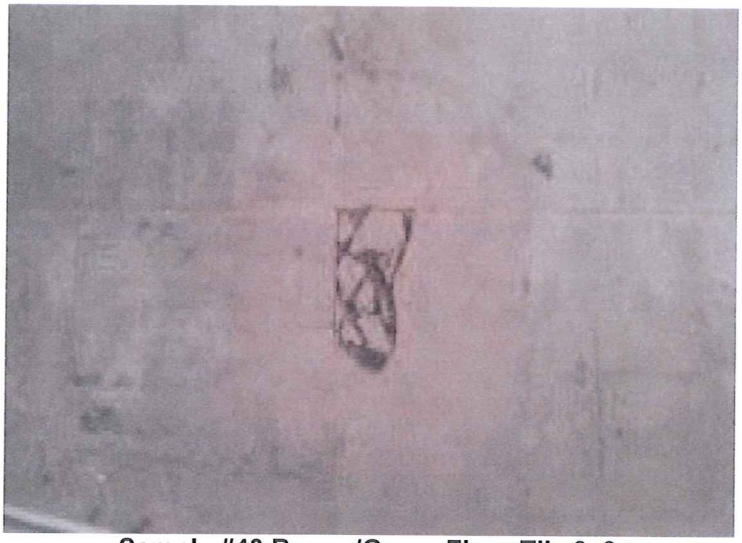
Sample #29- Floor Tile 9x9
Location: Gardner's Cottage- Bedroom #1



Sample #37- Brown/Green Floor Tile 9x9
Location: Gardner's Cottage- Hallway #2



Sample #39- Brown Floor Tile 9x9
Location: Gardner's Cottage- Bedroom #3 Closet



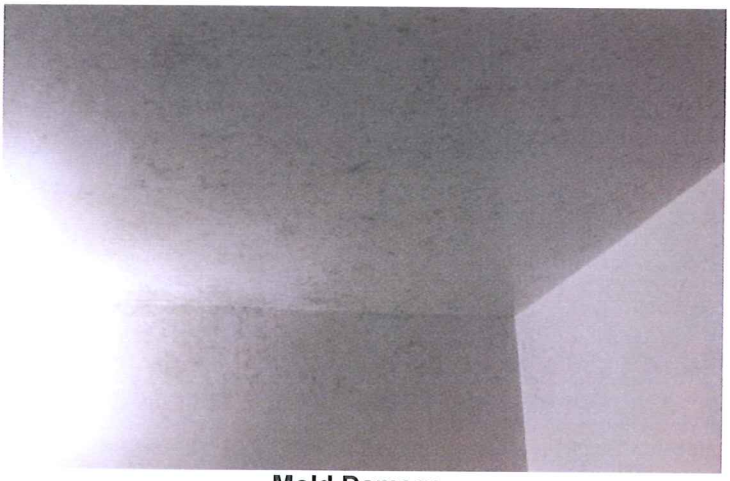
Sample #43 Brown/Green Floor Tile 9x9
Location: Gardner's Cottage- Bedroom #4



Sample #45 White Pipe Insulation
Location: Gardner's Cottage- Attic



Sample #45 White Mudded Elbows/Fittings
Location: Gardner's Cottage- Attic



Mold Damage
Location: Main Residence- Basement Bathroom



Mold Damage
Location: Main Residence- 2nd Floor Hallway Closet



Mold Damage
Location: Gardener's Cottage- Kitchen



Mold Damage
Location: Garderner's Cottage- Bathroom #1



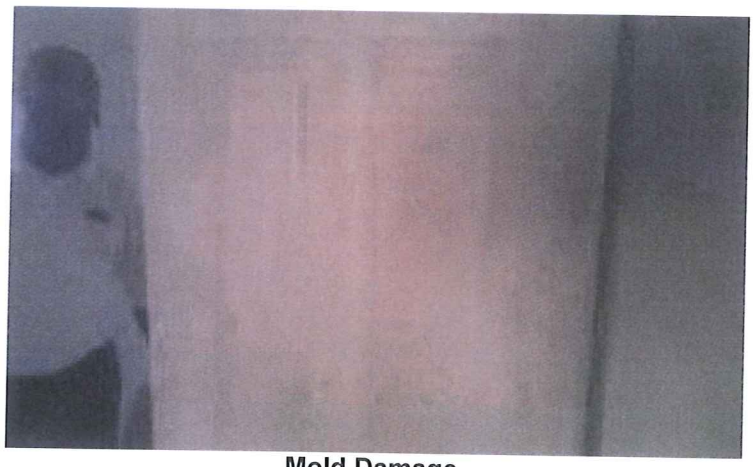
Mold Damage
Location: Gardener's Cottage- Hallway 103



Mold Damage
Location: Gardener's Cottage- Living Room



Mold Damage
Location: Gardener's Cottage- Kitchen



Mold Damage
Location: Gardener's Cottage- Bedroom #2

APPENDIX H:

ASBESTOS MANAGEMENT PLAN

ASBESTOS MANAGEMENT PLAN INSTRUCTIONS

AT THE BOTTOM OF EVERY PAGE BEGINNING WITH PAGE 2 FILL-IN THE TOTAL NUMBER OF PAGES PER REPORT ** AND **THE DEPARTMENT AND FACILITY INFORMATION**

****Remember there may be multiple pages of one form that will obviously increase the total number of pages.**

TITLE PAGE (PAGE 1)

Fill in the Facility Name, Facility Address, and the Department this facility is under.
Indicate the Fiscal Year (FY) of the plan**, NOT** the fiscal year it's turned in. They may not be the same.

The Facility's Asbestos Program Manager **signs** and **dates** that the report has been approved.
The Facility Superintendent/Agency Head **signs** and **dates** that the report has been reviewed and approved.

PAGE 2: PROGRAM PERSONNEL AND PREPARER

Fill in the personnel information requested on this page. On the bottom right section of the page, the form's preparer information must be provided. All information should be filled in or an explanation given as to why it is not.

Make sure that accreditation #'s are listed (It's the red # on the photo ID card) and not the course #'s. For example, 034453 is an accreditation # while 21-25-00-IMP is a course #.

Make sure that accreditation #'s are NOT duplicated between individuals or courses.

If a position is not applicable to your agency put N/A with an explanation.

PAGE 3: ACCREDITED SUPERVISOR'S LIST

Fill in the department and facility, names, MDE photo identification card number, and date of their supervisor's initial and re-certification training dates. These dates must be current for the FY being reported on.

Having the Worker or Building Inspector/Management Planner course DOES NOT qualify an employee to be a supervisor. It's a separate 5 day course.

PAGE 4: FACILITY ASBESTOS OVERVIEW

NOTE: The information needed to fill in this page will be obtained and totaled from all of the page 5s. Each **STATE-OWNED BUILDING** will have a page 5 covering it.

BUILDINGS CLASSED BY ASBESTOS CONTENT:
Identify all of the classes of all of the facility's buildings.

NUMBER OF BUILDINGS:
In each class should be the total of each classification of buildings for the facility. Each building may **only** be placed in **one building class, (i.e. Class A, Class B, etc.). If there is no building of that class, put in a 0 (zero) or N/A.**

You will place each building in the category of **worst** building classification. If a building has

both Class B and Class C materials in it, it will be recorded as a Class C Building **on this page**.

BUILDINGS WITHOUT RESTRICTED AREAS:
Enter the total number of buildings that **DO NOT** have any restricted areas.

RESTRICTED AREAS:
The information required for this section must be compiled from the Page 5s and broken down according to listed types of restricted areas. BE SURE TO FILL IN ALL BLANKS, USE **N/A** OR **0 (ZERO)** IF NECESSARY!

BUILDING USE CHANGES:
Fill in the number that relates to the number of buildings that were demolished/sold/transferred **OR** closed for other reasons than asbestos. If the building has been demolished, sold, or transferred, list it. Record for only this year's Management Plan, then remove those building pages from the Plan for subsequent years.

PAGE 5: **BUILDING ASBESTOS CONTENT CLASSIFICATIONS**

MAKE A SEPARATE PAGE 5 FOR EACH STATE-OWNED BUILDING (NO MATTER HOW MANY BUILDINGS ARE IN THE COMPLEX). Number these pages as 5a, 5b, etc.

If satellite locations are affiliated with your complex, (i.e. half-way houses, warehouses, storage buildings or farm buildings), **A SEPARATE PAGE 5 SHALL BE FILLED OUT FOR EACH STATE-OWNED SATELLITE BUILDING IDENTIFYING THE BUILDING'S NAME AND LOCATION ADDRESS.**

FILL IN ALL THE BLANKS USING N/A IF NECESSARY.

For Class B, C, or D, take note of the percentages of area and localized damages and the amounts of this damage. You do not need to list amounts for Class A buildings.

GUIDELINES FOR CLASSES OF ACM

CLASS A: **Asbestos free** -- proof is required to declare a building to be asbestos free.

The purpose of qualifying a building as "asbestos free" is to streamline the preparation of Facility Asbestos Managements. The term "Asbestos Free" does not necessarily signify or guarantee the absence of asbestos containing materials. **Should "Asbestos Free Status" be obtained, it does not relieve the facility of its obligation to diligently investigate the presence of asbestos and other hazards before any work is performed that will disturb building materials.**

"Asbestos Free" Status will be granted after evaluation and approval of the required documentations outlined below once an site assessment made by MDE has determined that there is a high probability that an "Asbestos-Free" status can be achieved.

"Asbestos Free" Status will be valid for one year, and must be renewed annually.

"Asbestos Free" Status will be considered for those buildings in which construction commenced after January 1, 1985. This designation may also be considered for buildings constructed or renovated before 1985, if additional documentation is provided. In both cases, the following information is required.

Evidence for Initial "Asbestos Free" Status

(1) Building Name
(2) Facility & Department
(3) Address or GPS coordinates
(4) Date of Commencement of Construction
(5) Date of Occupancy
(6) Drawing(s) showing homogeneous areas of all materials which could potential contain asbestos containing materials, including, but not limited to:
- **a. Floor Tile & Mastic**
- **b. Pipe and Fitting Insulation not know to be fiberglass or closed-cell rubber insulation**
- **c. Duct Covering, Furnace, Boiler, &/or Tank insulation not know to be fiberglass**
- **d. Woven Fabric Vibration Dampers**
- **e. Gaskets**
- **f. Fireproofing Insulation**

(7) For buildings Constructed after 1985, at least two 6-month periodic surveillance inspection reports of sufficient quality to indicate that all areas of building have been observed.

(8) For buildings Constructed before 1985, a full inspection, covering all observable areas of the building along with crawlspaces, underground utilities, and insulated utilities and structures within wall cavities and ceiling plenums. In addition to the full inspection, evidence that at least two 6-month periodic surveillance inspection reports have been made which are of sufficient quality to indicate that all areas of building have been observed.

(9) Complaint logs for the last two years documenting either
- **a. No complaints received, or**
- **b. Complaint(s) with findings regarding asbestos containing materials**

(10) Bulk Sample results for all materials in each homogeneous area(s) which could have asbestos or which typically had asbestos in the past.
- a. The number of bulk samples shall follow the AHERA protocol.
- b. Analysis shall be done by Polarized Light Microscopy (PLM) except for Floor Tile and Mastic & Fireproofing Insulation.
- c. Bulk Sample analysis for Floor Tile and Mastic & Fireproofing Insulation shall be done by Transmission Electron Microscopy (TEM).
- **d. Material Safety Data Sheets (MSDS) may be accepted in lieu of bulk sampling, provided there is documentation that an architect's representative, governmental construction inspector, or similar official, has inspected the material in question prior to installation, and certified that the MSDS matches the physical material.**

(11) A Self-Certification form issued by MDE, is signed by the Agency Health and Safety Specialist and Facility Asbestos Manager (both of whom shall be valid accredited Building Inspector/Management Planners) along with the Facility Head and Departmental Asbestos Coordinator.

Evidence for Annual Renewal of "Asbestos Free" Status.

(1) By September 30th of each year, the following documents shall be submitted to MDE in order to retain "Asbestos Free" Status.

- **a. Newly signed Self-Certification Form**
- **b. Complaint Log for past fiscal year.**

The Renewal Request shall be evaluated by MDE and may grant or deny the request based on the merits of the information and observations of a site inspection, if deemed necessary

CLASS B: **MISCELLANEOUS ACM ONLY and only if it is in GOOD condition with less than or equal to (≤) 1 % of its total area damaged OR less than or equal to (≤) 1 % localized damage**

CLASS C: **SURFACING and/or THERMAL ACM only in GOOD condition which means it has less than (≤) 1 % of its total area damage OR less than or equal to (≤) 1 % localized damage**

and/or

CLASS C-1: **MISCELLANEOUS ACM with MODERATE damage with greater than (>) 1 % TO less than or equal to (≤) 10% of its total area damaged OR >1 % to less than or equal to (≤) 25 % localized damage.**

CLASS D: **SURFACING and/or THERMAL ACM with MODERATE damage with greater than (>) 1 % TO less than or equal to (≤) 10% of its total area damaged.**

and/or

CLASS D-1: **MISCELLANEOUS ACM with SIGNIFICANT damage of greater than (>) 10% of its total area damaged OR greater than (>) 25% localized damage.**

and/or

CLASS D-2: **SURFACING and/or THERMAL ACM with SIGNIFICANT damage with greater than (>) 10% of its total area damaged OR greater than (>) 25% of localized damage.**

These building classifications require you to assess the condition of the material in question **and list the amounts**. Suspected ACM may be sampled to confirm the presence of asbestos, you may obtain the information from old building reports/sampling reports or you may assume the material to be asbestos. In any case, when any material is disturbed, it must be sampled prior to the time of a planned disturbance and this information shall be used to update the management plan for the upcoming reporting year.

RESTRICTED AREAS:

This is an area or room where the asbestos containing material(s) within is friable and has contaminated the area or where any work to be done in the area has the potential for contaminating the area. The door(s) to the area must bear a sign indicating restriction into the area (i.e. OSHA Danger sign). Only Level II employees may enter the area and only with proper protective equipment (i.e., disposable coveralls and powered air purifying respirator).

Indicate by a check mark if either the entire building is restricted or if it does not have any restrictions at all.

If only part of the building is restricted, indicate the specific area that is restricted by recording the number of such areas and the total amount of asbestos containing material contained within that restricted area. If none of the areas are listed, indicate in "Other". If not applicable, place "N/A" or "NONE" in the appropriate space.

DEMOLISHED/SOLD/TRANSFERRED OR CLOSED FOR REASONS OTHER THAN ASBESTOS:

Fill in the number that relates to the number of buildings that were demolished/sold/transferred OR closed for other reasons than asbestos. Record for only this year's Management Plan, then remove those building pages from subsequent year's Plans.

Identification of the Building Inspector who inspected this building and his/her Accreditation Number needs to placed at the bottom of this form for each building.

PAGE 6: **ANTICIPATED RENOVATIONS FOR NON-LEVEL II / NON-AOC PROJECTS**

The information needed for this page concerns future projects by fiscal year that may cause a disturbance of asbestos in the facility. NOTE: these projects are performed by licensed contractors and NOT by Level II State employees. They also DO NOT include AOC projects.

In the second column note the building and area where the project will take place.

In the third column identify what the project is and whether it's capital or maintenance renovation.

In the last column put the type and amount of asbestos in the area if any. If there wasn't any asbestos in the area, put NONE.

Fill in the information for the Facility Planner, Asbestos Program Manager, Department Planner, and date. **Include signatures**.

If no projects are anticipated then put N/A or NONE in the FY areas of the table.

PAGE 7: **PLANNED RENOVATION PROJECTS AND EMERGENCY RESPONCES DURING FY '___ WHICH INVOLVED CONTRACTUAL ASBESTOS PROJECTS ACCOMPLISHED OR IN PROGRESS**

Fill in the information for the building or area. The type of project, type of asbestos involved, project name and number(if applicable), start date, finish date, contractor's name and asbestos license number.

NOTE: these projects are performed by licensed contractors and not by Level II State employees.

If there were no projects then put N/A or NONE in the "name of building" space of the table.

PAGE 8: **FACILITY'S ASBESTOS OPERATIONS BUDGET**

Fill in the information for each month of the fiscal year relating to cost of supplies, labor cost, equipment cost, and other miscellaneous costs, and totals of the preceding. Add any `Notes' relative to these sections at the bottom. **It doesn't matter where the money comes from, just put in how much was spent for each category.**

In the comments section do a comparison of cost per sq., lin., or cu. feet this FY versus last FY.

PAGE 9: **EQUIPMENT USAGE AND MAINTENANCE SYSTEM**
PAGE 10:

Fill in the information on the person responsible for the usage and maintenance of equipment for asbestos operations.

Give the location(s) where equipment is kept.

Describe the procedures that personnel who need access to this equipment and supplies will follow. **Remember that only currently accredited, medically monitored, and fit tested Level II employees/supervisors can access this equipment.**

Person, position, and phone number who employees will notify when equipment is found in an inoperable or unsafe condition and will tag the equipment out-of-service.

Describe the tag-out procedures that will be used and **supply/attach either a sample of the tag or a photocopy**.

Identify who will perform routine maintenance of this equipment.

Provide the name, position, and phone number of the person who maintains the operating and maintenance manual(s) on this equipment and where they will be kept. **Be specific about which manuals etc.** are included. Identify who will keep and the location of any supplemental or alternative procedures developed in conjunction with the manufacturers' recommendations.

Provide/Identify the procedures the facility will use to ensure that all equipment will be serviced under a **p**reventive **m**aintenance program. **Give the P/M schedule.**

PAGE 11: **EQUIPMENT INVENTORY SUMMARY**

Equipment is the non-consumable items used in asbestos work such as: ladders, scaffolds, buckets, respirators, vacuums, etc.

List the piece of equipment item, its age or when it was obtained, period of time between maintenance, last date it was inspected, functional status, useful life, replacement or overhaul plans (when, replaced with, funding).

If there is no equipment, then the equipment item spaces should be marked N/A or NONE and an explanation given.

PAGE 12: **EMERGENCY RESPONSE SYSTEM**
PAGE 13:

Fill in information as who will be the **EMERGENCY** response contact person and the back-up person.

Location of the emergency response equipment.

Procedures for emergency equipment access. **Remember that only currently accredited, medically monitored, and fit tested Level II employees/supervisors can access this equipment.**

List the medically-monitored and trained Level II personnel that will be used for these responses.

Explain the procedures for accessing the list of these accredited workers and supervisors.

Identify who will review this list on an annual basis to ensure that it is up-to-date.

Identify who will perform a more extensive hazard assessment after the initial response.

Identify the accredited project designer and how they will be reached.

PAGE 14: **WASTE STORAGE AND DISPOSAL PROGRAM**
PAGE 15:

MANAGEMENT:
Identify the management person who will be responsible for asbestos waste and disposal operations according to COMAR 26.11.21.

STORAGE:
Location(s) of any temporary storage site. Give information as to the physical characteristics relative to security (i.e. fencing, lock ability, key access), protection from weather, signs, etc.

MANIFESTS:
Fill in where the manifests will be kept and by whom.

Also put in the number of days that manifests must be received in.

HANDLING PROCEDURES:
Describe the procedures for handling the asbestos waste (i.e., who will handle, what protective equipment will be used, how heavy containers will be handled, etc.).

Identify who will review these handling procedures on an annual basis to ensure they are still sufficient.

PROCEDURES TO ACCESS STORAGE AREA:
Describe how access will be obtained. **Remember that only currently accredited, medically monitored, and fit tested Level II employees/supervisors can access this area.**

WASTE STORAGE INVENTORY:
Fill in the quantity amounts asked for as of the specific date. The **dates** need to be reflective of the reporting period. **This needs to be done even if the amounts are 0.**

DISPOSAL RECORD FOR THE NOTED PERIOD:
Fill in the date; amount; identifying information of the hauler or if handled by the contractor, their asbestos abatement license number; and the name, location, and permit number of the landfill. **This is to include waste disposed of by contractors and Level II personnel.**

In the comments section reference the amount of ACM still remaining in the building.

PAGE 16: **NOTIFICATION SYSTEM**

This information will address how the facility will notify maintenance, custodial, and building occupants who have potential exposure to asbestos.

Procedurally explain how maintenance and custodial workers will be informed of the asbestos locations within the facility. Fill in how many days **(must be within 10 working days)** it will initially take to notify newly hired employees of these locations.

Describe how building occupants will be informed of the precautions to take to avoid disturbing ACM and within how many days this notification will take place **(must be within 10 working days)**. Identify the persons, their positions, and phone numbers of who will be responsible for providing this notification information to those noted above.

PAGE 17: **ASBESTOS TRAINING PROGRAM**

Provide the name and phone number of the Departmental Coordinator, the Departmental Asbestos Coordinator's designee and their phone number at the facility, name and phone number of the person who will notify employees of their scheduled training date(s), and the period of time prior to the training when employees will be notified.

Fill in the information for the location of employees' asbestos training records, the person responsible for maintaining these records, and the procedures for accessing these records.

Fill in the procedures that the facility uses to ensure that employees keep their training appointments and to track no shows and cancellations.

PAGE 18: **SUMMARY OF ASBESTOS TRAINING AT THE FACILITY**

FOR THE NOTED FISCAL YEAR PERIOD

NOTE: This is for Level I training and Level II automotive retraining given at/by the facility. It is NOT for the training that MDE gives.

Give the date(s), name of the course, period of time expended for the course, identification of the instructor, the location where the course records and documents are stored/filed, course outline, copies of handouts, location where training was conducted, list of participants, resume of instructor(s) including credentials, and any other appropriate records. **Reminder: Level I training must be 2 hours in length** and Level II auto re-training must be 4 hours in length.

If not training was given, then NONE or N/A should be put in the "nature of training" space of the table and an explanation given as to why it was not conducted.

PAGE 19:
PAGE 20:

ASBESTOS MEDICAL MONITORING PROGRAM

Provide the name and phone number of the Departmental Coordinator, the Departmental Asbestos Coordinator's designee and their phone number at the facility, name and phone number of the person who will notify employees of their appointments, and the period of time prior to the appointment when employees will be notified.

Identify the procedures that will be used to ensure employees keep appointments and track cancellations.

Identify procedures used to determine who goes to medical monitoring, where, and how often.

Identify who will maintain employee's medical records and where they will be kept.

Identify the procedures that employees and their designated representatives will use to access these records.

Identify employees who have been re-designated from a **Level II** category to a **Level I** category **BUT will remain in the medical monitoring program.** List the employee's name, their classification, and their MDE Identification Card number for their designation.

Identify employees who have been re-designated from a **Level II** category to a **Level I** category **BUT will NOT remain in the medical monitoring program.** List the employee's name, their classification, and their MDE Identification Card number for their designation.

PAGE 21:

WORK PERMIT POLICY FOR OUTSIDE CONTRACTORS
(TELEPHONE, ELECTRICAL, COMPUTER, PLUMBING, ETC.)

This page requires the facility to have in place a system to avoid inadvertent disturbance of any ACM by any Contractor.

The Asbestos Program Manager shall approve two to three employees who are aware of asbestos locations and precautions that are necessary as points of contact for outside contractors who may come in contact with asbestos containing materials. The Program Manager shall validate the approval of these employees by his/her signature.

Identify the name, position, and phone number of an accredited supervisor who will oversee

the work of contractors and ensure proper work practices during the project. This supervisor will also issue a work permit to the contractor when their work occurs in an area containing asbestos.

Location where the work permits will be kept.

Procedures used to access the work area.

Provide an example of a Work Permit or an explanation of your policy.

PAGE 22: **PERIODIC SURVEILLANCE PROGRAM**
PAGE 23:

Identify who will be implementing this surveillance program and under whose authority he/she was chosen.

Identify the employees who will be involved in these activities. Give their name, position/title, and phone number.

Indicate where the inspectors training records will be located and who will maintain the records.

Indicate how many times per year these inspections will be conducted.

Identify the procedures that will be used if samples have to be taken and the area may be occupied by other workers/personnel.

Note where the surveillance records will be located and maintained by whom.

Indicate where the surveillance inspection supplies and equipment are available.

Also indicate who keeps them and how they are accessed.

Note the procedures for access to these records.

Indicate who will be responsible for incorporating the inspection's finding into the records of the conditions of the facility and the time period that this will be conducted in.

PAGE 24: **RESPIRATORY PROTECTION PROGRAM**
PAGE 25:

Identify who will be responsible for implementing and writing the RPP and if there are any assistants.

Note how often per year exposures and job tasks will be evaluated **and the procedures/methods that will be used in the evaluation.**

Identify who will be responsible for employee fit testing.

Identify where the written program and the fit testing records will be located and how access will be obtained. **Also indicate who to contact to gain access.**

Identify the procedures of how employees will be told about the use and care of respirators.

Identify how respirator will be stored including cartridges and other components.

Identify cleaning and disinfection requirements.

For emergencies, identify how PAPRs will be maintained in a state of readiness particularly regarding their availability and being charged.

Describe the flow test device's availability for verifying adequate air flow.

PAGE 26: **LEVEL II RESPONSE ACTION SUMMARY**
FOR THE NOTED REPORTING PERIOD

Identify each response that was conducted for the noted reporting period. Identify the location, the action, who assessed the hazard, the project designer, and the supervisor of outside firm who responded. Also **include the amounts of ACM removed or disturbed.**

If no work was performed, N/A or NONE should be put in the "date" space of the table.

PAGE 27: **HAZARD ASSESSMENT-RESPONSE ACTION PLANNING METHOD**

Identify the facility's Management Planner.

Identify the location and the person to contact for accessing these records.

Identify where response action records are kept and the person to contact for accessing these records.

PAGE 28: **PURCHASE AND SUPPLY INVENTORY SYSTEM**

Please Note: supplies are the "consumable" items used for asbestos work such as poly, suits, filters, glovebags, etc.

Identify who will be overseeing the purchasing.

Identify the purchasing agent.

Identify who has developed the specifications and requisitions for supplies.

Identify who has the specifications. Specify the procedures on how an inventory of supplies will be maintained and monitored.

Identify employee access procedures. Note the location of these supplies.

If no supplies are kept put N/A or NONE in the inventory procedure space with an explanation.

PAGE 29: **RECORDKEEPING SYSTEM**

From the eleven categories of record types, identify who maintains the record, the location of the record, procedures for accessing each.

If the information for some of the categories is Not Applicable, then N/A should be put in the "maintained by" space in the table for that type of record **and an explanation given as to why it's not applicable.**

State of Maryland

Jefferson Patterson Park and Museum
(FACILITY)

10515 Mackall Road, St. Leonard, MD 20685
(ADDRESS)

Agriculture
(DEPARTMENT)

FY 2012

REVIEWED AND APPROVED BY:

_____
ASBESTOS PROGRAM MANAGER

_____
DATE

REVIEWED AND APPROVED BY:

_____
FACILITY SUPERINTENDENT/AGENCY HEAD

_____
DATE

PROGRAM PERSONNEL

ASBESTOS PROGRAM MANAGER:

Name	
Title	
Phone #	Ext.
Bldg Insp/Mgmt Planner Accreditation #	
Date of Training/Recert Training	

PROJECT DESIGNER:

Name: **PAGE Technologies** **Ene Udoh and Enobong Umoh**	
Phone #: **410-230-0733**	Ext.
Project Designer Accreditation #: **MD 89620**	

AGENCY SAFETY & HEALTH SPECIALIST:

Name	
Phone #	Ext.
Bldg Insp/Mgmt Planner Accreditation #	
Date of Training/Recert Training	
Supervisor Accreditation #	
Date of Training/Recert Training	

DEPARTMENTAL COORDINATOR:

Name	
Phone #	Ext.

PHYSICAL PLANT MANAGER:

Name	
Phone #	Ext.

FACILITY PLANNER:

Name	
Phone #	Ext.

DEPARTMENT PLANNER:

Name		
Phone #		Ext.
Address		
City	State	Zip

BUILDING INSPECTORS:

List the following information for each person: Name, phone, Building Inspector/Management Planner Accreditation #, date of training/recert (use additional pages as necessary)

Name: **Ene Udoh**	
Phone#: **410-230-0733**	Ext.
Accreditation#: **114595**	
Training/Recert Date: **November 21, 2011**	

Name:	
Phone #:	Ext.
Accreditation#:	
Training/Recert Date:	

Name:	
Phone #:	Ext.
Accreditation #:	
Training/Recert Date:	

MANAGEMENT PLAN PREPARED BY:

Name: **Enobong Umoh**	
Title: **Project Manager**	
Phone #: **410-230-0733**	Date: **7/27/2012**

ACCREDITED SUPERVISORS AS OF

Date:

(Use additional pages as need)

NAME	SUPERVISOR ACCREDITATION #	DATE OF SUPERVISOR TRAINING/RECERT TRAINING
All accredited supervisors:		

FACILITY ASBESTOS OVERVIEW

BUILDINGS CLASSED BY ASBESTOS CONTENT		NO. OF BUILDINGS
Class A	Asbestos free	2
Class B	Misc. Asbestos Only in Good Condition	3
Class C	Surface/Thermal in Good Condition	3
Class C-1	Misc. w/ Moderate Damage	3
Class D	Surface/Thermal w/ Moderate Damage	3
Class D-1	Misc. w/ High Damage	3
Class D-2	Surface/Thermal w/ High Damage	3

TOTAL NUMBER OF BUILDINGS WITHOUT RESTRICTED AREAS: These buildings do not have **any** restricted areas.	

RESTRICTED AREAS Due to asbestos damage/deterioration, the following areas are restricted and access is limited to trained/medically monitored Level II employees using protective clothing and respirators.		NO. OF BUILDINGS
(1)	Entire Buildings	
(2)	Boiler Rooms	
(3)	Crawl Spaces	
(4)	Attics	
(5)	Spaces between ceiling decks and suspended ceilings	
(6)	Pipe Chases	
(7)	Steam Tunnels	
(8)	Basements	
(9)	Classroom/Office/Residential Areas	
(10)	Auditorium/Cafeteria/Gym Areas	
(11)	Other:	

BUILDING USE CHANGES:		NO. OF BUILDINGS
(12)	Demolished/Sold/Transferred (Only record for the FY this occurred in, then removed from the Management Plan)	
(13)	Closed for reasons other than Asbestos	

DEPT: **Agriculture** FACILITY: **Jefferson Patterson Park and Museum** DATE: **07/31/2012**

BUILDING **Main Residence**

CLASS A:	**Amount**
Asbestos Free	

CLASS B: Good Condition (≤1% area; ≤1% local)	**Amount**
Floor Tile	**980sf**
Floor Tile Mastic	**980sf**
Plaster Ceiling	**657sf**
Other Misc. ACM	

Comments

CLASS C: Good Condition (≤1% area; ≤1% local)	**Amount**
Surfacing	
Thermal System	

CLASS C-1: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Surfacing	
Thermal System	

CLASS D-1: Significant Damage (>10% area; >25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D-2: Significant Damage (>10% area; >25% local)	**Amount**
Surfacing	
Thermal System	

RESTRICTED AREA(S):	
None	Check if none ☐
Entire Building	Check if entire bldg. ☐

	No.	**Total Amt**
Boiler Room		
Crawl Space		
Basement		
Attic		
Space between Ceiling Deck & Suspended Ceiling		
Pipe Chase		
Steam Tunnels		
Classroom/Office/Residential		
Auditorium/Cafeteria/Gym		

Other (List)

	DATE
Demolished, Sold or Transferred	
Closed for Reasons Other than Asbestos	

List Reason for closure:

Building Inspector:

Ene Udoh	
Accreditation #	**114595**

BUILDING **Pump House/Garage**

CLASS A:	**Amount**
Asbestos Free	

CLASS B: Good Condition (≤1% area; ≤1% local)	**Amount**
Transite Ceiling	**280sf**
Other Misc. ACM	

Comments

CLASS C: Good Condition (≤1% area; ≤1% local)	**Amount**
Surfacing	
Thermal System	

CLASS C-1: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Surfacing	
Thermal System	

CLASS D-1: Significant Damage (>10% area; >25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D-2: Significant Damage (>10% area; >25% local)	**Amount**
Surfacing	
Thermal System	

RESTRICTED AREA(S):	
None	Check if none ☐
Entire Building	Check if entire bldg. ☐

	No.	**Total Amt**
Boiler Room		
Crawl Space		
Basement		
Attic		
Space between Ceiling Deck & Suspended Ceiling		
Pipe Chase		
Steam Tunnels		
Classroom/Office/Residential		
Auditorium/Cafeteria/Gym		

Other (List)

	DATE
Demolished, Sold or Transferred	
Closed for Reasons Other than Asbestos	

List Reason for closure:

Building Inspector:

Ene Udoh	
Accreditation #	**114595**

BUILDING **Pool House**

CLASS A:	**Amount**
Asbestos Free	

CLASS B: Good Condition (≤1% area; ≤1% local)	**Amount**
Roofing Material	**1050sf**
Other Misc. ACM	

Comments

CLASS C: Good Condition (≤1% area; ≤1% local)	**Amount**
Surfacing	
Thermal System	

CLASS C-1: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Surfacing	
Thermal System	

CLASS D-1: Significant Damage (>10% area; >25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D-2: Significant Damage (>10% area; >25% local)	**Amount**
Surfacing	
Thermal System	

RESTRICTED AREA(S):	
None	Check if none ☐
Entire Building	Check if entire bldg. ☐

	No.	**Total Amt**
Boiler Room		
Crawl Space		
Basement		
Attic		
Space between Ceiling Deck & Suspended Ceiling		
Pipe Chase		
Steam Tunnels		
Classroom/Office/Residential		
Auditorium/Cafeteria/Gym		

Other (List)

	DATE
Demolished, Sold or Transferred	
Closed for Reasons Other than Asbestos	

List Reason for closure:

Building Inspector:

Ene Udoh	
Accreditation #	**114595**

BUILDING **Gardener's Cottage**

CLASS A:	**Amount**
Asbestos Free	

CLASS B: Good Condition (≤1% area; ≤1% local)	**Amount**
Floor Tile	**905sf**
Floor Tile Mastic	**905sf**
Pipe Insulation	**190**
Pipe Elbows/Fittings	**48**
Other Misc. ACM	

Comments

CLASS C: Good Condition (≤1% area; ≤1% local)	**Amount**
Surfacing	
Thermal System	

CLASS C-1: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Surfacing	
Thermal System	

CLASS D-1: Significant Damage (>10% area; >25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D-2: Significant Damage (>10% area; >25% local)	**Amount**
Surfacing	
Thermal System	

RESTRICTED AREA(S):	
None	Check if none ☐
Entire Building	Check if entire bldg. ☐

	No.	**Total Amt**
Boiler Room		
Crawl Space		
Basement		
Attic		
Space between Ceiling Deck & Suspended Ceiling		
Pipe Chase		
Steam Tunnels		
Classroom/Office/Residential		
Auditorium/Cafeteria/Gym		

Other (List)

	DATE
Demolished, Sold or Transferred	
Closed for Reasons Other than Asbestos	

List Reason for closure:

Building Inspector:

Ene Udoh	
Accreditation #	**114595**

BUILDING **Beach House**

CLASS A:	**Amount**
Asbestos Free	

CLASS B: Good Condition (≤1% area; ≤1% local)	**Amount**
Other Misc. ACM	

Comments

CLASS C: Good Condition (≤1% area; ≤1% local)	**Amount**
Surfacing	
Thermal System	

CLASS C-1: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D: Moderate Damage (>1% area to ≤10% area) (>1% to ≤ 25% local)	**Amount**
Surfacing	
Thermal System	

CLASS D-1: Significant Damage (>10% area; >25% local)	**Amount**
Vinyl Asbestos Tile	
Ceiling Tile	
Transite Materials	
Other Misc. ACM	

Comments

CLASS D-2: Significant Damage (>10% area; >25% local)	**Amount**
Surfacing	
Thermal System	

RESTRICTED AREA(S):	
None	Check if none ☐
Entire Building	Check if entire bldg. ☐

	No.	**Total Amt**
Boiler Room		
Crawl Space		
Basement		
Attic		
Space between Ceiling Deck & Suspended Ceiling		
Pipe Chase		
Steam Tunnels		
Classroom/Office/Residential		
Auditorium/Cafeteria/Gym		

Other (List)

	DATE
Demolished, Sold or Transferred	
Closed for Reasons Other than Asbestos	

List Reason for closure:

Building Inspector:

Ene Udoh	
Accreditation #	**114595**

ANTICIPATED RENOVATION PROJECTS (NON-LEVEL II/NON-AOC)

NAME OF BUILDING	AREA	TYPE OF PROJECT	ASBESTOS IN AREA (Type i.e. Surface, TSI or Misc. and estimated amount)
		Capital Renovation ☐ Maintenance Renovation ☐	
		Capital Renovation ☐ Maintenance Renovation ☐	
		Capital Renovation ☐ Maintenance Renovation ☐	
		Capital Renovation ☐ Maintenance Renovation ☐	
		Capital Renovation ☐ Maintenance Renovation ☐	

Facility Planner	Asbestos Program Manager
Department Planner	Date

PLANNED RENOVATION PROJECTS & EMERGENCY RESPONSES DURING FY _____ WHICH INVOLVED ASBESTOS (NON-AOC/NON-LEVEL II)

PROJECTS THAT ARE EITHER ACCOMPLISHED OR IN-PROGRESS

NAME OF BUILDING	AREA	TYPE OF PROJECT	ASBESTOS INVOLVED	PROJECT NAME AND NUMBER	START/FINISH DATES
		Capital Renovation ☐ Maintenance Renovation ☐			Start Finish
Asbestos Contractor					License #
		Capital Renovation ☐ Maintenance Renovation ☐			Start Finish
Asbestos Contractor					License #
		Capital Renovation ☐ Maintenance Renovation ☐			Start Finish
Asbestos Contractor					License #
		Capital Renovation ☐ Maintenance Renovation ☐			Start Finish
Asbestos Contractor					License #
		Capital Renovation ☐ Maintenance Renovation ☐			Start Finish
Asbestos Contractor					License #
		Capital Renovation ☐ Maintenance Renovation ☐			Start Finish
Asbestos Contractor					License #

MONEY SPENT ON IN-HOUSE ASBESTOS WORK

MONTH	YEAR (FY)	SUPPLIES	LABOR	EQUIPMENT	TOTAL
July		$	$	$	$
August		$	$	$	$
September		$	$	$	$
October		$	$	$	$
November		$	$	$	$
December		$	$	$	$
January		$	$	$	$
February		$	$	$	$
March		$	$	$	$
April		$	$	$	$
May		$	$	$	$
June		$	$	$	$
TOTAL		$	$	$	$

Comments:

EQUIPMENT USAGE AND MAINTENANCE SYSTEM

Asbestos related equipment usage and maintenance at this facility will be overseen by:

Name:	Position/Title:	Phone #:

The asbestos related equipment is kept in the following location(s):

Employees who need access to equipment *shall provide proof of current accreditation, medical monitoring and fit testing and* shall use the following procedures: (Use additional sheets as necessary)

Equipment must be checked by the user to determine if it is in safe operating condition. Anytime the equipment is not in safe operating condition, the user will notify:

Name	Position/Title	Phone #

and tag the equipment out of service. The following tagout procedure will be used: (Use additional sheets as necessary. Describe the procedures and either enclose tag, or a catalog cut of the tag used.) *Only Level II employees can handle equipment.*

Routine maintenance is performed according to the manufacturer's recommendations by:

Name	Position/Title	Phone #

EQUIPMENT USAGE AND MAINTENANCE SYSTEM (continued)

Copies of the manufacturer's user's manuals and maintenance manuals and/or operating and maintenance procedures developed by the facility as either a supplement or alternative to the manufacturer's recommendations *for vacuums, respirators, scaffolds etc.* are kept by:

Name:	Position/Title	Phone #

and located

The following procedures will be used to ensure that each piece of equipment is serviced according to a preventive maintenance schedule set by the manufacturer or empirically through actual experience *(Include PM schedule)*: (Use additional sheets as necessary)

EQUIPMENT INVENTORY SUMMARY (Use additional sheets as necessary)

(This includes ALL non-consumables i.e. – respirators, vacuums, ladders etc.)

EQUIPMENT ITEM	AGE OR YEAR OBTAINED	PERIOD BETWEEN MAINTENANCE	LAST DATE INSPECTED	FUNCTIONAL (Does it work? Yes/No)	LIFE CYCLE (What is useful life of device?)

PLANS FOR REPLACEMENT/OVERHAUL When will device be replaced or overhauled? What will replace it? Has/will funds be available for replacement/overhaul?	

Item	Age/Year	Maintenance	Inspected	Functional	Life Cycle

PLANS FOR REPLACEMENT/OVERHAUL When will device be replaced or overhauled? What will replace it? Has/will funds be available for replacement/overhaul?	

Item	Age/Year	Maintenance	Inspected	Functional	Life Cycle

PLANS FOR REPLACEMENT/OVERHAUL When will device be replaced or overhauled? What will replace it? Has/will funds be available for replacement/overhaul?	

Item	Age/Year	Maintenance	Inspected	Functional	Life Cycle

PLANS FOR REPLACEMENT/OVERHAUL When will device be replaced or overhauled? What will replace it? Has/will funds be available for replacement/overhaul?	

Item	Age/Year	Maintenance	Inspected	Functional	Life Cycle

PLANS FOR REPLACEMENT/OVERHAUL When will device be replaced or overhauled? What will replace it? Has/will funds be available for replacement/overhaul?	

EMERGENCY RESPONSE SYSTEM

An emergency response plan is designed to anticipate and plan for unexpected asbestos fiber release episodes so that fiber release is minimized through prompt corrective action.

The emergency response contact person is

Name:	Position/Title:	Phone #:

The back up contact person is:

Name:	Position/Title:	Phone#:

Other than restricting access to the area and evacuating it, personnel in the area are to take no other action after contacting the emergency response contact person. The emergency response contact person will direct the initial response, including ensuring that the project is designed by an accredited project designer, debris clean up, patch and repair or other actions as necessary.

For those responding to the emergency, *(only Level II workers and supervisors with current training, medical monitoring and fit testing)* equipment can be found at the following location(s): (Use additional sheets as necessary)

In the event of an emergency, Jefferson Patterson is responsible for the following tasks:

1. **Evacuate the area.**
2. **Shut down the HVAC system servicing the affected area.**
3. **Post labels at all entrances to affected area indicating that area is not to be entered until further notice.**
4. **Call the emergency response contractor.**

Abatement Contractor shall design and implement an appropriate response action.

The procedures for access to the equipment include: (Use additional sheets as necessary)

EMERGENCY RESPONSE SYSTEM (continued)

Only trained and medically monitored Level II personnel (both workers and supervisors) can respond to the emergency. A list of who is available will be located at: (Use additional sheets as necessary)

Access to the list of accredited workers and supervisors will be through the following procedure: (Use additional sheets as necessary)

*This list will be reviewed annually by:*_____ *at* _____
Name/Position *Phone #*

to ensure that only currently trained, medically monitored, and fit tested personnel are on it.

If a more extensive hazard assessment is required after the initial response, it will be done by

The accredited project designer that this facility will use is

Name:	Phone #:

WASTE STORAGE & DISPOSAL PROGRAM

Asbestos waste, including both actual ACM, plastic used for containment barriers, glovebags, used disposable clothing, used respirator filters, and any other materials or furnishings contaminated with asbestos fibers.

The purpose of a waste disposal program is to prevent asbestos exposure/contamination by incorrect handling of asbestos waste. It also serves to document what happens to the ACM waste from the time that it is generated until it is buried in an approved landfill.

MANAGEMENT: Waste Storage and Disposal Operations will be managed in accordance with COMAR 26.11.21, & Asbestos Program Policy by:

Name:	Position/Title:	Phone#:

CONTROLLED ACCESS TEMPORARY STORAGE SITE(S): [Give detailed description of each location. Use additional sheets if necessary]

MANIFESTS: Chain of Custody manifests are kept at:

Location:

by:

Name:	Position/Title:	Phone#:

Manifests shall be received in ***90*** *days from the waste hauler.*

PROCEDURES USED TO HANDLE ASBESTOS WASTE CONSIST OF: (Use additional sheets as necessary)

Prior to sealing waste bags, all waste will be adequately wet.

All waste will be double bagged in 6-mil polyethylene bags with all labels required by OSHA, EPA, DOT, and MDE.

Waste will be picked up by a licensed waste hauling company to a licensed asbestos landfill for disposal site. Signed copies of the manifest indicating final disposal will be returned to the facility management.

These procedures will be reviewed annually by: _____ *at* _____

Name/Position *Phone*

WASTE STORAGE & DISPOSAL PROGRAM (continued)

ONLY CURRENTLY TRAINED, MEDICALLY MONITORED AND FIT TESTED LEVEL II EMPLOYEES AND SUPERVIOSRS SHALL HAVE ACCESS TO TEMPORARY STORAGE AREAS. **PROCEDURES TO ACCESS TEMPORARY STORAGE AREA(S) CONSIST OF:** (Use additional sheets as necessary)

No waste will be stored at the Jefferson Patterson Park and Museum.

WASTE STORAGE INVENTORY:	**Date**	**Quantity**
Quantity of Asbestos Waste Stored as of		
Quantity of Asbestos Waste Generated during reporting period		
Quantity of Asbestos Waste Disposed during reporting period		
Quantity of Asbestos Waste Still in Storage as of		

DISPOSAL RECORD FOR PERIOD: (Use additional Sheets as necessary)

DATE	**AMOUNT**	**HAULER** (Name of Person, Firm, Address, and Phone Number. If done by Asbestos Contractor - Give license #)	**LANDFILL** (Name, Address, Landfill Permit Number)
		Name Company Address Phone License No.	Name Address Phone Permit No.
		Name Company Address Phone License No.	Name Address Phone Permit No.

Further Information/Comments: *(Identify how much ACM is Left)*

NOTIFICATION SYSTEM

A notification program is designed to do two things:

1. **Inform maintenance workers and custodial workers of what they need to know to be able to work safely in a building that contains ACM.**

2. **Inform building occupants on how to work safely in a building that contains ACM and let them know what precautions are already being taken.**

General maintenance and custodial workers working in areas with ACM with a high potential for disturbance are informed of asbestos locations through the following methods: (Use additional Sheets as necessary)

1. **An annual 2-hour asbestos awareness training will be conducted for all maintenance and custodial workers.**
2. **Access to the asbestos database will be available upon request to Facility Manager within 24 hours after receipt of request.**
3. **All mechanical rooms with friable asbestos will have signs posted warning workers.**
4. **Danger labels will be placed on accessible, friable asbestos containing materials.**

Number of days maintenance and custodial employees will receive this notification within their initial hire and annually thereafter. *(Within 10 working days maximum)*	No. of Days 10

Building occupants in buildings containing ACM are informed on what precautions must be taken to avoid disturbing the ACM by the following methods.: (Use additional Sheets as necessary)

An informational letter will be provided to each employee when this plan is implemented, within 10 days of initial employment and again on an annual basis. The letter may be delivered via e-mail or as a hard copy.

Number of days building occupants will receive this notification within their initial occupancy and annually thereafter. *(Within 10 working days maximum)*	No. of Days 10

The person or position responsible for providing this notification is

Name	Position/Title	Phone #

ASBESTOS TRAINING PROGRAM

The purpose of the training program is to inform employees of those aspects of asbestos hazard recognition, reporting, and response which they must follow to minimize the risk of exposure to themselves and others.

Level II building maintenance employees and their supervisors will receive both initial training and refresher training from the Maryland Department of the Environment.

Level II automotive mechanics, involved with asbestos brake and clutch work will receive initial training from the Maryland Department of the Environment and annual refresher training for the Agency Safety and Health Specialist.

Asbestos Safety & Health Specialists and Asbestos Program Managers, and Building Inspectors will attend Maryland Department of the Environment sponsored training classes, including, but not limited to Building Inspector/Management Planner Initial training and annual refresher training.

Level I Employees shall be trained annually by the Agency Safety and Health Specialist, using guidelines furnished by the Maryland Department of the Environment.

The Department Coordinator is:

Name	Position/Title	Phone #

The Department Coordinator's Training Contact at the facility is:

Name	Position/Title	Phone #

Employees will be notified of their scheduled training dates by:

Name	Position/Title	Phone#

No. of days within scheduled training date notification of training will be made to employees.	No. of Days

Procedures for access to training records involves: (Use additional sheets as necessary)

Procedures to ensure that employees keep their training appointments, track no shows, and ensure proper cancellations:

SUMMARY OF ASBESTOS TRAINING ACTIVITIES AT THE FACILITY FOR THE REPORTING PERIOD _____TO _____

(For Level I Training and Level II Automotive Retraining Only) (Use additional Sheets as necessary)

1. **DATE** (If several courses were given on same day, list each separately)
2. **NATURE OF TRAINING AND COURSE TITLE**
3. **TIME EXPENDED FOR TRAINING COURSE** (For example, 2 hours minimum for Level I training course)
4. **INSTRUCTOR** (Name -- If person is from outside agency, give name, agency and address)
5. **LOCATION WHERE COURSE RECORDS AND DOCUMENTS ARE FILED** (Should contain course outline, copy of any handouts, location where training was conducted, list of participants, biography of instructor including his/her credentials, and other appropriate records

DATE	NATURE OF TRAINING AND COURSE TITLE	TIME EXPENDED *(Min. 2hrs.)*	INSTRUCTOR	LOCATION OF COURSE RECORDS
	Nature Title		Name Agency Address City, State, Zip	
	Nature Title		Name Agency Address City, State, Zip	
	Nature Title		Name Agency Address City, State, Zip	
***Notes**				

ASBESTOS MEDICAL MONITORING PROGRAM

In accordance with Executive Order 01.01.1987.22, employees classified as Level II workers must participate in the medical monitoring program. Employees who do not participate in medical monitoring or who are disapproved for respirator use cannot work with asbestos. Those employees who were exposed to asbestos in the past while in State service (i.e., in a Level II type position) are also eligible for medical monitoring, even if they are not currently working in a Level II capacity. Exams are scheduled by the Maryland Department of the Environment with Departmental Coordinators who in turn notify their facilities.

The Departmental Coordinator is

Name	Position/Title	Phone #

The Departmental Coordinator's Medical Monitoring Contact at the facility is:

Name	Position/Title	Phone #

Employees will be notified of their medical monitoring appointments by:

Name	Position/Title	Phone #

No. of days within scheduled appointment date notification of appointments will be made to employees.	No. of Days

The following procedures are instituted to ensure individuals keep appointments and to track cancellations: (Use additional sheets as needed)

No medical monitoring is required because all response actions shall be performed by outside contractors.

The following procedures are used to determine who needs medical monitoring, where they go, and how often they go:

ASBESTOS MEDICAL MONITORING PROGRAM (continued)

Medical monitoring records will be maintained at the following location:

Location

by

Name	Position/Title	Phone #

The following procedures are in place for access to medical monitoring records: (Use additional sheets as needed)

During the reporting period the following persons have been re-designated from a Level II category to a Level I category **BUT WILL** be kept in the Medical Monitoring Program: (Use additional sheets as needed)

NAME	JOB CLASSIFICATION	MDE NUMBER

During the reporting period the following persons have been re-designated from a Level II category to a Level I category **AND WILL NOT** be kept in the Medical Monitoring Program: (Use additional sheets as needed)

NAME	JOB CLASSIFICATION	MDE NUMBER

WORK PERMIT POLICY FOR OUTSIDE CONTRACTORS (TELEPHONE, ELECTRICAL, COMPUTER, PLUMBING, ETC.)

Purpose: The work permit policy ensures that authorization is obtained prior to outside contractors performing maintenance, repair, or renovation work, in order to avoid inadvertent disturbance of ACM.
All plans for work by outside contractors must be reviewed for asbestos disturbing potential by:

A. Any one of the following persons/positions approved by the Asbestos Program Manager as being aware of asbestos locations and any precautions that are necessary to work in those areas.

Name	Position/Title	Phone #

Name	Position/Title	Phone #

OR

B. The Asbestos Program Manager

Name	Position/Title	Phone #

All jobs occurring in an area containing ACM must have a work permit which will be issued by the person who reviews the work order. If special work procedures precautions are necessary, such as not placing ladders against pipes, not hanging wires into fireproofing, etc. they will be overseen by (i.e. an accredited Supervisor) from the facility:

Name	Position/Title	Phone #

Copies of the work permits will be kept at:

Location

The following procedures for access will be used: (Use additional sheets as necessary)

The following attachments (are) examples of the Work Permit used at the facility. (Attach copies of Work Permits and provide a brief narrative on their use).

PERIODIC SURVEILLANCE PROGRAM

Asbestos which remains in a building must be periodically surveyed to note and respond to changes in its condition. The elements of the surveillance program include the following:

1. Assignment of trained individuals knowledgeable in the inspection and assessment of ACM and its potential for disturbance.
2. Pre-surveillance record review of asbestos locations and any abatements done since the last survey.
3. Scheduling which is consistent with the ACM's general condition and access: twice a year and more often if the condition or access warrant it.
4. Occupancy control if obtaining samples during periodic surveillance.
5. Recordkeeping.
6. Transmittal of information to the person performing the hazard assessment and response action planning.

The periodic surveillance program will be implemented by:

Name:	Position/Title:	Phone#:

under the authority of the Asbestos Program Manager

Name	Position/Title	Phone #

Individuals/Positions performing periodic surveillance shall be Level II employees that are accredited workers, accredited supervisors, or accredited building inspector.

The following individuals will be involved in periodic surveillance activities: (Use additional sheets as necessary)

Name:	Position/Title	Phone #
Name	Position/Title	Phone #
Name	Position/Title	Phone #

Records of inspection training for these positions/individuals are kept at

Location:

by

Name:	Position/Title:	Phone #:

Number of times periodic surveillance will be performed at this facility each year but not less than once every six months.	No. of Times: **2**

In the event that samples must be taken, the following procedures will be used to control occupancy: (Use additional sheets as necessary)

PERIODIC SURVEILLANCE PROGRAM (continued)

Records pertaining to surveillance activities are kept at

Location:

Supplies necessary to perform periodic surveillance can be obtained at

Location:

The following procedures for access to periodic surveillance supplies and/or records: Where are they kept? Who keeps them? How are they accessed? (Use additional sheets as necessary)

Where are they kept? Who keeps them? How are they accessed?

At the conclusion of each survey, a copy of the findings will be sent to the Management Planner, who will do the hazard assessment and response action planning. The original copy will be sent to the appropriate record keeper.

The following person or persons shall be responsible for incorporating period surveillance information into the records pertaining to asbestos conditions:

Name:	Position/Title:	Phone #

Number of days from the end of each period surveillance survey new information regarding the condition of asbestos materials will be incorporated in the files.	No. of Days: **10 business days**

RESPIRATORY PROTECTION PROGRAM

A written respiratory protection program shall be maintained at the facility. The purpose of such a program is to ensure that employees are adequately protected against respiratory hazards.

This facility will not have a respiratory protection program.

The following person will be responsible for writing and implementing this facility's respiratory protection program:

Name:	Position/Title	Phone #

He/She will be assisted by

Name	Position/Title	Phone #

Number of times per year employee asbestos exposures, job tasks, etc. shall be evaluated to see if conditions have changed.

The followings procedures will be used to evaluate employee job tasks:

The following person or persons will be responsible for fit testing of employees after they have received an initial *qualitative* fit test from MDE. Fit tests will be done as least *once* a year.

Name	Position/Title	Phone #

Name	Position/Title	Phone #

A copy of the written respiratory protection program as well as copies of individual employee fit tests will be kept at the following location:

Procedures of access include: *Who to contact and how to access* (Use additional sheets as necessary)

RESPIRATORY PROTECTION PROGRAM (continued)

The following procedures were used to inform Level II Employees on policies and procedures in place at the facility regarding use and care of respirators: Describe the procedures and indicate how they were implemented. (Use additional sheets as necessary)

The following procedures are in place for storage of respirators filter cartridges, and other related components: (Use additional sheets as necessary)

The following requirements are in place regarding cleaning and disinfection of respirators: Describe the procedure, the frequency of cleaning/disinfection, and the party or parties responsible. (Use additional sheets as necessary)

For PARRs (powered air purifying respirators), the following procedures are used to ensure that batteries are properly charged and available for emergency response: (Use additional sheets as necessary)

For PARRs, describe how the flow testing device is made available to respirator users so they can verify that they have sufficient air flow through the unit, as recommended by the manufacturer: (Use additional sheets as necessary)

RESPONSE ACTION SUMMARY FOR THE REPORTING PERIOD (Level II Work)
____/____/___ TO ____/____/____

(Use additional sheets as necessary)

Date	Work Location

Response Action (Include the amounts of ACM removed/disturbed)

Hazard Assessment Made By	Project Designer (If Used)	Level II Supervisor Or Outside Firm
Name	Name	Name

Date	Work Location

Response Action (Include the amounts of ACM removed/disturbed)

Hazard Assessment Made By	Project Designer (If Used)	Level II Supervisor Or Outside Firm
Name	Name	Name

Date	Work Location

Response Action (Include the amounts of ACM removed/disturbed)

Hazard Assessment Made By	Project Designer (If Used)	Level II Supervisor Or Outside Firm
Name	Name	Name

Date	Work Location

Response Action (Include the amounts of ACM removed/disturbed)

Hazard Assessment Made By	Project Designer (If Used)	Level II Supervisor Or Outside Firm
Name	Name	Name

HAZARD ASSESSMENT - RESPONSE ACTION PLANNING METHOD

The following accredited Management Planner will perform the hazard assessment using the decision tree method taught in Building Inspector - Management Planner class.

Name:	Position/Title:	Phone #

The hazard assessment must be completed before any response action planning can be done.

Additional consultation for hazard assessment or response action design is available through The Sate Employees Asbestos Program (410) 537-3801.

Records of hazard assessments and response actions are kept on file at the following location:

Location

and may be accessed by contacting :

Name	Position/Title	Phone #

PURCHASE AND SUPPLY INVENTORY SYSTEM

(This includes consumable items only i.e. – Glovebags, duct tape, suits etc.)

Purchase of supplies and equipment for asbestos related work at this facility will be overseen by:

Name:	Position/Title	Phone #

Specifications and requisitions for supplies have been developed by:

Name	Position/Title	Phone #

Copies of supply specifications can be obtained from:

Name	Position/Title	Phone #

The following inventory procedure will be used to ensure a sufficient quantity of supplies are maintained on hand at the facility and to monitor the expenditure of consumable supplies: (Use additional sheets as necessary)

Employees who need access to equipment and supplies shall use the following procedures: (Use additional sheets as necessary)

Supplies are stored in the following location(s): (Use additional sheets as necessary)

APPENDIX G



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APPENDIX G: COST ESTIMATE

The estimate of construction costs provided has utilized the cost estimate format provided by the Department of General Services (DGS). The following definitions or assumptions were utilized to prepare the estimate:

Direct Construction Costs: This could be taken to be the same as the bid award amount to the general contractor. Factors are included in the estimate to account for the complexity of this historic preservation work and the minor remoteness of the site.

Contingencies @ 20%: Two contingencies have been included in the estimate. A "design" contingency of 10% is included to account for the fact that the design or technical aspects of this project are only at the concept design level. This means many assumptions were made regarding the quantity and nature of the various work treatments. As the design becomes more firm through the design process, this contingency would be reduced and go to zero when the design documents were 100% complete. At that point exact quantities and content of each work element are known so no design contingency is needed.

The second contingency, also at 10%, is often called the owner's contingency. This is maintained through every estimate and is used during the construction phases to cover the costs of unforeseen conditions or to allow the owner to add additional work.

A/E Fees and Reimbursements: The percentages used here are provided by DGS for use in estimates such as this. This includes A/E basic services at 15%, A/E special services at 5% and A/E reimbursables at 2.6%.

The "project budget" is the total of these three values.

The total project budget by component can be summarized as follows:

COMPONENT	BUDGET TOTAL
Main Residence	$2,976,500
Pump House/Garage	$256,300
Pool & Pool House	$156,000
Gardener's Cottage – Two Rental Apts.	$399,000
Beach House & Boardwalk	$126,600
Site Improvements	$952,000
GRAND TOTAL	$ 4,866,400

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Recapitulation & Summary - Patterson Center Rehabilitation
Location: Jefferson Patterson Park & Museum

Estimate By: BMS
Date: 2/22/2103

COST ESTIMATE WORKSHEET

Reviewed By: _____
Date: _____

1 Design Phase: Budgets/Concepts
2 Project Type: Extensive site development, rehabilitation of 5 buildings (and greenhouse, pool, and cold frame)
3 Design Period: 18 months
4 Const. Period: Assume 24 months, 2016-17 - Estimate based on one project, not a phased approach.
5 Description: Re-use and improvement of early 20th century country house, outbuildings and gardens.

		Main Residence	Pump House/ Garage	Pool & Pool House	Gardener's Cottage (Two Rental Apts)	Beach House & Boardwalk	Site Improvements	TOTAL
9	ST Structure	$ 1,942,446	$ 166,254	$ 59,569	$ 235,479	$ 61,994	$ -	$ 2,465,741
10	ST Site Work	$ 48,280	$ 6,390	$ 41,180	$ 8,946	$ 14,910	$ 426,284	$ 545,990
11	ST Utilities	$ 96,560	$ 7,100	$ 8,520	$ 35,358	$ 11,857	$ 241,329	$ 400,724
12	**Subtotal Direct Construction Costs**	$ 2,087,286	$ 179,744	$ 109,269	$ 279,783	$ 88,761	$ 667,613	$ 3,412,455
	Design Contingency @ 10% of line 12.	$ 208,729	$ 17,974	$ 10,927	$ 27,978	$8,876	$ 66,761	$ 341,246
	Construction Contingency @ 10% of line 12.	$ 208,729	$ 17,974	$ 10,927	$ 27,978	$8,876	$ 66,761	$ 341,246
	A/E Basic Services Fee @ 15% of line 12.	$ 313,093	$ 26,962	$ 16,390	$ 41,967	$13,314	$ 100,142	$ 511,868
	A/E Special Services @ 5% of line 12.	$ 104,364	$ 8,987	$ 5,463	$ 13,989	$4,438	$ 33,381	$ 170,623
	A/E Reimbursables @ 2.6% of line 12.	$ 54,269	$ 4,673	$ 2,841	$ 7,274	$2,308	$ 17,358	$ 88,724
	TOTAL PROJECT COST	$ 2,976,470	$ 256,314	$ 155,818	$ 398,970	$ 126,573	$ 952,016	$ 4,866,161
	SAY	**2,976,500**	**256,300**	**$156,000**	**$399,000**	**$126,600**	**$952,000**	**$ 4,866,400**

General Notes - Budget Estimate Assumptions **Estimate By:** BMS
Patterson Center **Date:** 2/22/2103
Location: Jefferson Patterson Park & Museum
COST ESTIMATE WORKSHEET

Reviewed By: _____
GENERAL NOTES TO BE APPLIED TO EACH WORK SHEET: **Date:** _____

1 Design Phase: Budgets/Concepts
2 Project Type: Extensive site development, rehabilitation of 5 buildings (and greenhouse, pool, and cold frame)
3 Design Period: 18 months
4 Const. Period: Assume 24 months, Commencing in FY 2016
Estimate based on one project, not a phased approach.
5 Description: Re-use and improvement of early 20th century country house and gardens.

Analysis of Add-on Factors:	% Premium
Regional Construction Factor (Distance and market access)	15%
Historic Preservation Factor (Special skills and equipment)	15%
Price Escalation to mid-point of construction (9/2017)	12%
Total add-on Factor:	**42%**

Other Estimate Assumptions:

Design contingency: Since project plannning is only at concepts phase, at least 10% pricing/design contingency is recommended
Construction contingency @ 10%: Contingency level typical for this type of work.
A/E Basic Services Fee @ 15%
A/E Special Services @ 5%: This would cover any special studies or testing.
A/E Reimbursables @ 2.6%

5 Buildings:
1 Main Residence
2 Pump House/Garage
3 Pool House
4 Beach House
5 Gardener's Cottage

Pool (included in Pool House)
Greenhouse (included in Gardener's Cottage)
Cold Frame (included in Site Work)

Main Residence, Patterson Center **Estimate By:** BMS
Location: Jefferson Patterson Park & Museum **Date:** 2/22/2103

COST ESTIMATE WORKSHEET

Reviewed By: _____
Date: _____

1 Design Phase: Budgets/Concepts
2 Project Type: Extensive site development, rehabilitation of 5 buildings (and greenhouse, pool, and cold frame)
3 Design Period: 18 months
4 Const. Period: Assume 24 months, 2016-17 - Estimate based on one project, not a phased approach.
5 Description: Re-use and improvement of early 20th century country house, outbuildings and gardens.
6 Area: B: 2,620 gsf; 1st 3,700 gsf; 2nd 3,300 gsf; Attic: 880 gsf; Total = 10,500 gsf

		Quantity	Unit	Cost/Unit	Total
9	Structure				
a	Basic rehabilitaton: arch. & struct.	10,500	SF	$60.00	$630,000
b	Electrical	10,500	SF	$18.00	$189,000
c	Heating and Cooling, plumbing	10,500	SF	$35.00	$367,500
d	Exterior repairs - Roofing	1	LS	$10,000	$10,000
e	Exterior repairs - masonry, windows, trim	1	LS	$18,000	$18,000
f	Special preservation & conservation (museum rooms)	3,560	SF	$ 32.00	$113,920
g	Selective demolition & hazmat abatement	1	LS	$4,500	$4,500
h	Special finishes repair	1	LS	$35,000	$35,000
	ST				$1,367,920
	Add-on Factor @ 42% (see assumptions - page 1)				$574,526
	ST - Structure				$1,942,446
10	Site Work				
a	Replace plantings around residence	1	LS	$15,000	$15,000
b	Exterior security lighting	1	LS	$5,000	$5,000
c	Accessible entry ramp at front door	1	LS	$14,000	$14,000
d					
	ST				$34,000
	Add-on Factor @ 42%				$14,280
	ST - Site				$48,280
11	Utilities				
a	New electrical service entry, site sub-station	1	LS	$20,000	$20,000
b	New domestic water entry, site sub-station, fire water	1	LS	$8,000	$8,000
c	New BAT septic and drain field	1	LS	$40,000	$40,000
	ST				$68,000
	Add-on Factor @ 42%				$28,560
	ST - Utilities				$96,560
12	**Subtotal Direct Construction Costs**				**$2,087,286**
	Design Contingency @ 10% of line 12.				$208,729
	Construction Contingency @ 10% of line 12.				$208,729
	A/E Basic Services Fee @ 15% of line 12.				$313,093
	A/E Special Services @ 5% of line 12.				$104,364
	A/E Reimbursables @ 2.6% of line 12.				$54,269
	TOTAL PROJECT COST				**$2,976,470**
	Summary -				

Pump House/Garage, Patterson Center **Estimate By:** BMS
Location: Jefferson Patterson Park & Museum **Date:** 2/22/2103

COST ESTIMATE WORKSHEET

Reviewed By: _____
Date: _____

1 Design Phase: Budgets/Concepts
2 Project Type: Extensive site development, rehabilitation of 5 buildings (and greenhouse, pool, and cold frame)
3 Design Period: 18 months
4 Const. Period: Assume 24 months, 2016-17 - Estimate based on one project, not a phased approach.
5 Description: Re-use and improvement of early 20th century country house, outbuildings and gardens.
6 Area: First: 660 SF

		Quantity	Unit	Cost/Unit	Total
9	Structure				
a	Basic rehabilitaton: arch. & struct.	660	SF	$60.00	$39,600
b	Electrical	660	SF	$18.00	$11,880
c	Heating and Cooling, plumbing	660	SF	$35.00	$23,100
d	Exterior repairs - Roofing	1	LS	$5,000	$5,000
e	Exterior repairs - masonry, windows, trim	1	LS	$5,000	$5,000
f	Special preservation & conservation	-	SF		$0
g	Selective demolition & hazmat abatement	1	LS	$2,500	$2,500
h	Introduce two toilet rooms and catering kitchen	2	LS	$15,000	$30,000
	ST				$117,080
	Add-on Factor @ 42% (see assumptions - page 1)				$49,174
	ST - Structure				$166,254
10	Site Work				
a	Replace plantings around Pump House/Garage	1	LS	$2,000	$2,000
b	Exterior security lighting	1	LS	$1,000	$1,000
c	Accessible entry ramp	1	LS	$1,500	$1,500
d					
	ST				$4,500
	Add-on Factor @ 42%				$1,890
	ST - Site				$6,390
11	Utilities (Within Building)				
a	New electrical service entry	1	LS	$2,500	$2,500
b	New domestic water entry	1	LS	$2,500	$2,500
c	New BAT septic and drain field, with Main Residence	-	LS	$40,000	$0
	ST				$5,000
	Add-on Factor @ 42%				$2,100
	ST - Utilities				$7,100
12	**Subtotal Direct Construction Costs**				**$179,744**
	Design Contingency @ 10% of line 12.				$17,974
	Construction Contingency @ 10% of line 12.				$17,974
	A/E Basic Services Fee @ 15% of line 12.				$26,962
	A/E Special Services @ 5% of line 12.				$8,987
	A/E Reimbursables @ 2.6% of line 12.				$4,673
	TOTAL PROJECT COST				**$256,314**
	Summary -				

Pool House & Pool, Patterson Center **Estimate By:** BMS
Location: Jefferson Patterson Park & Museum **Date:** 2/22/2103

COST ESTIMATE WORKSHEET

Reviewed By: _____
Date: _____

1 Design Phase: Budgets/Concepts
2 Project Type: Extensive site development, rehabilitation of 5 buildings (and greenhouse, pool, and cold frame)
3 Design Period: 18 months
4 Const. Period: Assume 24 months, 2016-17 - Estimate based on one project, not a phased approach.
5 Description: Re-use and improvement of early 20th century country house, outbuildings and gardens.
6 Area: Pool House - 490 gsf; Pool - 2,700 gsf

		Quantity	Unit	Cost/Unit	Total
9	Structure				
a	Basic rehabilitation: arch. & struct. (toilet rooms, event space	490	SF	$25.00	$12,250
b	Electrical	490	SF	$15.00	$7,350
c	Heating and cooling, plumbing (12 month usage)	490	SF	$15.00	$7,350
d	Exterior repairs - Roofing	1	LS	$6,000	$6,000
e	Exterior repairs - siding or masonry, windows	1	LS	$9,000	$9,000
f	Special preservation & conservation				$0
g	Selective demolition & hazmat abatement				$0
h					$0
	ST				$41,950
	Add-on Factor @ 42% (see assumptions - page 1)				$17,619
	ST - Structure				$59,569
10	Site Work - Pool				
a	Replace plantings	1	LS	$6,000	$6,000
b	Exterior security lighting	1	LS	$5,000	$5,000
c	Fill pool, build deck, landscape	1	LS	$18,000	$18,000
d					
	ST				$29,000
	Add-on Factor @ 42%				$12,180
	ST - Site				$41,180
11	Utilities (Within Building)				
a	New electrcial service entry,	1	LS	$2,500	$2,500
b	New domestic water entry,	1	LS	$3,500	$3,500
c	New BAT septic and drain field - with Main Residence				$0
	ST				$6,000
	Add-on Factor @ 42%				$2,520
	ST - Utilities				$8,520
12	**Subtotal Direct Construction Costs**				**$109,269**
	Design Contingency @ 10% of line 12.				$10,927
	Construction Contingency @ 10% of line 12.				$10,927
	A/E Basic Services Fee @ 15% of line 12.				$16,390
	A/E Special Services @ 5% of line 12.				$5,463
	A/E Reimbursables @ 2.6% of line 12.				$2,841
	TOTAL PROJECT COST				**$155,818**
	Summary -			**SAY**	

Two Rental Apartments (former Gardener's Cottage), Patterson Center **Estimate By:** BMS
Location: Jefferson Patterson Park & Museum **Date:** 2/22/2103

COST ESTIMATE WORKSHEET

Reviewed By: _____
Date: _____

1 Design Phase: Budgets/Concepts
2 Project Type: Extensive site development, rehabilitation of 5 buildings (and greenhouse, pool, and cold frame)
3 Design Period: 18 months
4 Const. Period: Assume 24 months, 2016-17 - Estimate based on one project, not a phased approach.
5 Description: Re-use and improvement of early 20th century country house, outbuildings and gardens.
6 Area: Two Apartments - 1,920 gsf, Greenhouse - 200 gsf

		Quantity	Unit	Cost/Unit	Total
9	Structure				
a	Basic rehabilitation: arch. & struct.	1,920	SF	$32.00	$61,440
b	Electrical	1,920	SF	$10.00	$19,200
c	Heating, cooling & plumbing	1,920	SF	$20.00	$38,400
d	Exterior repairs - Replace Roofing	2,500	SF	$ 3.50	$8,750
e	Exterior repairs - siding , replace windows	1	LS	$15,000	$15,000
f	Special preservation & conservation				$0
g	Selective demolition & hazmat abatement	1,920	SF	$8.00	$15,360
h	Residential fire sprinkler system	1,920	SF	$4	$7,680
	ST				$165,830
	Add-on Factor @ 42% (see assumptions - page 1)				$69,649
	ST - Structure				$235,479
10	Site Work				
a	Replace plantings	1	LS	$1,000	$1,000
b	Exterior security lighting	1	LS	$1,500	$1,500
c	Repair Greenhouse	1	LS	$3,800	$3,800
d					
	ST				$6,300
	Add-on Factor @ 42%				$2,646
	ST - Site				$8,946
11	Utilities				
a	New electrical service entry,	1	LS	$1,500	$1,500
b	New domestic water entry,	1	LS	$2,000	$2,000
c	New BAT septic and drain field	1	LS	$21,400	$21,400
	ST				$24,900
	Add-on Factor @ 42%				$10,458
	ST - Utilities				$35,358
12	**Subtotal Direct Construction Costs**				**$279,783**
	Design Contingency @ 10% of line 12.				$27,978
	Construction Contingency @ 10% of line 12.				$27,978
	A/E Basic Services Fee @ 15% of line 12.				$41,967
	A/E Special Services @ 5% of line 12.				$13,989
	A/E Reimbursables @ 2.6% of line 12.				$7,274
	TOTAL PROJECT COST				**$398,970**
	Summary -			**SAY**	

Beach House & Boardwalk, Patterson Center **Estimate By:** BMS
Location: Jefferson Patterson Park & Museum **Date:** 2/22/2103

COST ESTIMATE WORKSHEET

Reviewed By: _____
Date: _____

1 Design Phase: Budgets/Concepts
2 Project Type: Extensive site development, rehabilitation of 5 buildings (and greenhouse, pool, and cold frame)
3 Design Period: 18 months
4 Const. Period: Assume 24 months, 2016-17 - Estimate based on one project, not a phased approach.
5 Description: Re-use and improvement of early 20th century country house, outbuildings and gardens.
6 Area: Beach House - 675 gsf, Boardwalk - 220 LF

		Quantity	Unit	Cost/Unit	Total
9	Structure				
a	Basic rehabilitation: arch. & struct.	675	SF	$22.00	$14,850
b	Electrical	675	SF	$8.00	$5,400
c	Plumbing with winterization capability	675	SF	$12.00	$8,100
d	Exterior repairs - Replace Roofing	945	SF	$ 3.50	$3,308
e	Exterior repairs - siding, windows	1	LS	$12,000	$12,000
f	Special preservation & conservation				$0
g	Selective demolition & hazmat abatement				$0
h					$0
	ST				$43,658
	Add-on Factor @ 42% (see assumptions - page 1)				$18,336
	ST - Structure				$61,994
10	Site Work				
a	Replace plantings	1	LS	$1,000	$1,000
b	Exterior security lighting	1	LS	$1,500	$1,500
c	Modifications to boardwalk for accessibility	1	LS	$8,000	$8,000
d					
	ST				$10,500
	Add-on Factor @ 42%				$4,410
	ST - Site				$14,910
11	Utilities (Within Building)				
a	New electrcial service entry,	1	LS	$1,000	$1,000
b	New domestic water entry,	1	LS	$1,000	$1,000
c	New BAT septic and drain field	1	LS	$6,350	$6,350
	ST				$8,350
	Add-on Factor @ 42%				$3,507
	ST - Utilities				$11,857
12	**Subtotal Direct Construction Costs**				**$88,761**
	Design Contingency @ 10% of line 12.				$8,876
	Construction Contingency @ 10% of line 12.				$8,876
	A/E Basic Services Fee @ 15% of line 12.				$13,314
	A/E Special Services @ 5% of line 12.				$4,438
	A/E Reimbursables @ 2.6% of line 12.				$2,308
	TOTAL PROJECT COST				**$126,573**
	Summary -			**SAY**	

Overall Site Work, Patterson Center **Estimate By:** BMS
Location: Jefferson Patterson Park & Museum **Date:** 2/22/2103

COST ESTIMATE WORKSHEET

Reviewed By: _____
Date: _____

1 Design Phase: Budgets/Concepts
2 Project Type: Extensive site development, rehabilitation of 5 buildings (and greenhouse, pool, and cold frame)
3 Design Period: 10 months
4 Design Period: 18 months
5 Const. Period: Assume 24 months, 2016-17 - Estimate based on one project, not a phased approach.
6 Area: Aprox. Area: 15 acres at Patterson Center, 650 LF to MAC Lab buildings

		Quantity	Unit	Cost/Unit	Total
9	Structure				
a	Basic rehabilitation: arch. & struct.				
b	Electrical				
c	Heating, cooling & plumbing				
d	Exterior repairs - Replace Roofing				
e	Exterior repairs - siding or masonry, windows				
f	Special preservation & conservation				
g	Selective demolition & hazmat abatement				
h					$0
	ST				$0
	Add-on Factor @ 42% (see assumptions - page 1)				$0
	ST - Structure				$0
10	Site Work				
a	New Vehicular & Bus Loop & Drop-off	1,000	LF	$195	$195,000
b	Ramp accessibility structure at pool	1	LS	$32,000	$32,000
c	Visitor parking for 8 cars with retaining walls	1	LS	$40,000	$40,000
d	Two accessible pedestrian pathways	200	LF	$125	$25,000
e	Stabilize tennis court surface	1	LS	$8,200	$8,200
	ST				$300,200
	Add-on Factor @ 42%				$126,084
	ST - Site				$426,284
11	Utilities				
a	Excavate , backfill, and restore site for trench	1,300	Cu. Yard	$50	$65,000
a	New u.g. 4-way, concrete duct bank - MAC Lab to Main Resi	650	LF	$45	$29,250
b	New well	1	LS	$25,000	$25,000
c	Electric high voltage line by Utility company				$0
d	New u.g utilities to 4 outbuildings: elec, water, data	740	LF	$105	$77,700
e	Site Fire Hydrants	4	EA	$2,500	$10,000
f	Site Security Lighting - tall poles	8	EA	$3,500	$28,000
	ST				$169,950
	Add-on Factor @ 42%				$71,379
	ST - Utilities				$241,329
12	**Subtotal Direct Construction Costs**				**$667,613**
	Design Contingency @ 10% of line 12.				$66,761
	Construction Contingency @ 10% of line 12.				$66,761
	A/E Basic Services Fee @ 15% of line 12.				$100,142
	A/E Special Services @ 5% of line 12.				$33,381
	A/E Reimbursables @ 2.6% of line 12.				$17,358
	TOTAL PROJECT COST				**$952,016**
	Summary -				

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