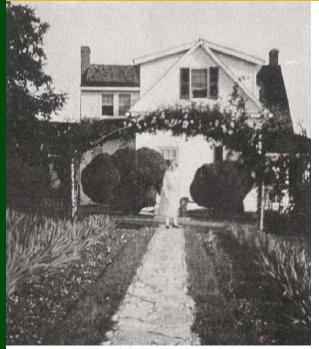
Fairfax, Virginia





For: FAIRFAX COUNTY, VIRGINIA DEPARTMENT OF PLANNING AND ZONING

September, 2011

Prepared By: FRAZIER ASSOCIATES

Date of Photograph: c.1920

ARCHITECTURE COMMUNITY PLANNING WAYFINDING

# ACKNOWLEDGEMENTS

### **CLIENT REPRESENTATIVES**

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## PURPOSE OF REPORT



Laurel Hill House - 1920 view from the north.

The deteriorated condition of the Laurel Hill House prompted the Fairfax County Department of Planning and Zoning to pursue steps to evaluate stabilization options. County agencies identify no practical or functional use for the house, which has been vacant since the 1970s. At this point in time, certain decisions must be made in response to what is becoming the irreversible decline of the building and a resulting hazardous situation.

An initial site visit was made on March 24, 2011, to assess the existing condition of the house and to document these conditions. An on-site meeting was held on April 22, 2011, with the historic preservation professionals and interested parties involved in the project. The conversation at that meeting was used to inform this report. The Memorandum of Agreement, June 2001, for the transfer of the Lorton Correctional Complex should also be considered in light of any proposed action at the Laurel Hill House.

For planning purposes, two options are outlined with budget cost estimates provided for each. Additional information can be found in Historic Structure Report & Treatment Options prepared by Frazier Associates in June of 2008.

## **CONDITION ASSESSMENT**

# II.

#### A. Exterior Condition Assessment

A detailed condition assessment is included in the Historic Structures Report prepared by Frazier Associates in June of 2008. The condition of the house at that time was poor and has continued to deteriorate in the three years since then. Only some minor maintenance appears to have taken place in this intervening period.

Based on the site visits on March 24, 2011 and April 22, 2011, the following observations on the exterior condition of the house should be noted:

- 1. The porch that wraps around the south and west sides of the house is severely deteriorated, and there is the possibility that sections of it may collapse. Gaps into the house have opened up where the porch has moved.
- 2. The bathroom addition on the south side of the house is severely deteriorated after receiving moisture infiltration for many years. The foundation in this area is also in poor condition. The floor in this area is collapsing.
- 3. The existing asphalt shingle roof is reaching the end of its serviceable life span with moisture being allowed into the building in a number of locations. Deteriorated and missing shingles were noted. Gutters and downspouts are typically missing which increases the exposure of the building to moisture.



Laurel Hill House – April 2011 view from northwest showing deteriorated porch.

- 4. Considerable moisture infiltration was noted in the northeast room on the second floor of the original house.
- 5. The entrance foyer into the north side of the one-story addition is taking on substantial water through the roof. Numerous patches to the roof are evident in this area.
- 6. Most of the paint has flaked off the existing wood siding and trim. Much of the siding is beginning to deteriorate with the worst sections at grade and at intersections with the roof. In some places, moisture is beginning to enter the house where the siding is deteriorated, broken or missing. Rotten sill plates can be anticipated where moisture saturation is evident near grade.
- Pervasive feces seen throughout the building are evidence of animal infestation. This should be considered a health hazard.
- 8. The windows are typically boarded up to protect them. They vary widely in condition.
- 9. The brick chimneys show deterioration especially at the top where they are more exposed to the elements. The east chimney is leaning with a strap added for support.
- 10. The brick foundations have deteriorating mortar joints in many locations.



Laurel Hill House - April 2011 view from northeast. Note moisture saturation of wood siding at base.



Laurel Hill House – Aprill 2011 view from north side. Note poor condition of roof above entrance.



Laurel Hill House – April 2011 view from south with deteriorated bathroom addition in foreground.

### **B.** Historic Significance

The current building retains much of the fabric from the period of the warden's occupancy during the 1920s and 1930s which dates to the period of significance for the DC Workhouse and Reformatory Historic District (1910-1961). It was during this time that much of the eighteenth-century fabric is presumed to have been removed.

While remnants of the original eighteenth-century house still exist, they have been subsumed in the later additions. The eighteenth-century era of the building cannot be coherently experienced or understood from either the interior or exterior.

The historic character and structural integrity of the house has been greatly compromised due to its poor condition and through later incompatible alterations.

# STABILIZATION OPTION

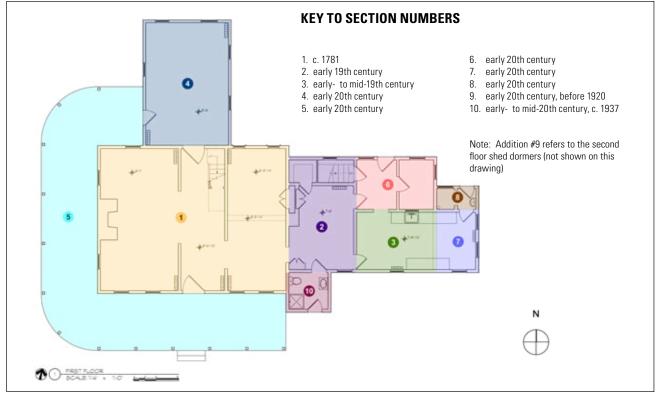


Laurel Hill House - April 2011 view from northwest.

### A. Assumptions and Work Elements

The purpose of stabilization is to extend the life of the structure while determining the future use of the house and identifying funding. Without a clear future use, assumptions must be made regarding the level of quality and extent of repairs especially as they relate to historic preservation aspects of the project.

There are many issues regarding the appropriate level of restoration attention. How accurately should replacement materials match existing materials in quality and craftsmanship? With the number of additions and alterations (refer to plan below), many different types of windows, doors, trim, hardware and other finishes exist. Which era will predominate? How carefully must materials be removed to ensure that they can be reinstalled in the future? Without a known use, great attention and expense can be focused on areas that would not be important for future plans.



First Floor Proposed Building Sequence Plan

## **III** STABILIZATION OPTION

The following stabilization Work Elements could be anticipated:

- 1. Consult with the Virginia Department of Historic Resources on materials, treatment options, and possible historic tax credit implications for related properties
- Demolish the existing porch (#5 on Building Sequence Plan) and deteriorated bathroom addition (#10 on Building Sequence Plan, previous page). Seal resulting openings in the building. Undertake additional photographic documentation during the dismantling as eighteenth-century elements are uncovered.
- 3. Test for hazardous materials in the building. Provide abatement for hazardous materials as needed including lead paint, asbestos and animal feces.
- 4. Repair deteriorated exterior brick on exterior chimneys. Repair exterior of brick foundation as required.
- 5. Remove existing roof. Patch deteriorated roof deck and repair deteriorated roof structure. Provide new fiberglass shingle roof and associated flashing. Provide new gutters and downspouts as required to take water away from the building.
- Remove deteriorated wood siding, and replace it with matching materials. Repair any deteriorated structure exposed in the process. Seal any holes in the building envelope as required to prevent water infiltration. Paint exterior siding.
- 7. Provide vented covers for doors and windows as required to provide security and ventilation.
- 8. Provide security system and lighting to protect building from vandalism.

#### **B.** Costs

The Stabilization Option is a temporary measure that will require future costs to complete the project. Refer to the June 2008 report by Frazier Associates for information related to the total costs that may be anticipated to provide a completed project at the Laurel Hill House.

Estimated total project cost of Stabilization Option: \$220,000 - \$265,000.

# DEMOLITION AND INTERPRETATION OF SITE OPTION



Mt. Air, Fairfax County, Virginia, is an example of a historic property where the site and remnants of the historic building are interpreted.



Mt. Air, Fairfax County, Virginia, is an example of a historic property where the site and remnants of the historic building are interpreted.

#### A. Assumptions and Work Elements

The poor condition of the house, its compromised architectural integrity, the lack of a proposed use, and the lack of identified funding merits the consideration of a demolition option, while taking measures to interpret the historic significance of the site. In combination with the planned restoration of the adjacent gardens, this interpretation of the site would create a passive recreational use linking the site to adjacent park uses with minimal required operational funding. Additional design work for this project beyond typical architecture and engineering should include historical research, exhibit design, and archaeology. This option corresponds to Option 3 in the 2008 report, which was based in part on the work done at the Mt. Air property in Fairfax County.

The following Work Elements could be anticipated for a demolition and interpretation of site option:

- Consult with the Virginia Department of Historic Resources on materials, treatment options, and possible historic tax credit implications for related properties
- 2. While proper documentation has already been completed of the building in its current form, document the building as it is removed. In particular the original eighteenth-century portion of the building should be carefully observed and recorded during its removal. Abate hazardous materials as part of the demolition process.
- 3. Repair the masonry foundation as required for maintenance and safety. Infill the foundation with structural fill to allow a planting or walking surface within the footprint of the building.
- 4. Provide interpretive elements on the site, such as a "ghost structure," exterior signage/kiosks and portals for viewing remaining belowgrade structures. A ghost structure consists of a wood or painted steel frame that outlines the profile of the original eighteenth century house (refer to the additional information on "ghost structures" below). Exterior signage/kiosks can serve to display information about the building and site history as well as display artifacts found during any archaeological investigations.
- 5. Provide lighting as required to provide safety and security on the site as well as for allowing evening use of the area.
- 6. Prepare an archaeological plan for conducting monitoring and investigations as they pertain to the demolition and future use of the site.

## **IV** DEMOLITION AND INTERPRETATION OF SITE OPTION

### **B.** Ghost Structures

Included in the work elements for the demolition of Laurel Hill House and interpretation of the site is the concept of a "ghost structure." This type of interpretation is one approach provided as a way to move the discussion forward. By recreating the profile of a building with a simple outline frame, a "ghost structure" allows a visitor to experience the size and scale of the building in its original location even though the original structure is removed.

"Ghost structures" are used at a number of historic sites for this purpose. The best known examples of "ghost structures" are for the Benjamin Franklin House and Printshop in Philadelphia. Examples have been constructed of steel (Benjamin Franklin House and Willamette Mission in Oregon) or wood (St. Mary's in Maryland and Ft. DeChartres in Illinois).

In most instances, information kiosks and/or signage are provided in conjunction with the ghost structure to provide further fuel for the imagination. Other aids to the interpretative schemes include portals for viewing below grade structures and displays of archaeological artifacts found on the site as well as displays of surviving typical structural frame elements and wood moldings.



Ghost structure – Benjamin Franklin House and Printshop, Philadelphia, PA.



Ghost structures – Willamette Mission State Park, Oregon.



Ghost structure – Benjamin Franklin House and Printshop, Philadelphia, PA.



Shadow catcher – Interpretation of Kitty Foster House, University of Virginia, Charlottesville, VA.



Shadow catcher – Site Interpretation of Kitty Foster House, University of Virginia, Charlottesville, VA.

Creative interpretations of the "ghost structure" idea can be seen in a project like the South Lawn at the University of Virginia. In this instance, a steel frame was used to suspend a re-creation of the building's footprint in order to cast shadows below. The designer involved referred to the installation as a "shadow catcher."



Glass Covered Trench for Viewing Below Grade Construction - Interpretation of Kitty Foster House, University of Virginia, Charlottesville, VA.

### C. Costs

The Demolition and Interpretation of Site Option would result in a final disposition of this portion of the property. The restoration of the adjacent gardens are not included. Approximately 20% - 25% of the cost of this option would be for the demolition of the building and hazardous materials abatement with the remainder slated for interpretive activities. Archaeology estimates for the larger site are not part of the cost estimate.

Estimated total project cost of Demolition and Interpretation of Site Option: \$290,000 - \$363,000.

## **CONCLUSIONS AND SUGGESTED NEXT STEPS**

V.

#### A. Conclusions

- 1. The condition of the house makes future uses cost-challenging or prohibitive.
  - a. Restoring the house to the eighteenth-century era is not recommended. Almost all of the original historic fabric of the eighteenth-century house has been removed. In addition, there is little known documentation or any other evidence on which to base a historically accurate restoration.
  - b. Rehabilitation of the twentieth-century era house is not recommended. Its architectural significance is limited due in part to incompatible alterations made in the mid- to late twentieth century. The poor condition, lack of any viable use, and the high cost (\$2M+) makes this option infeasible.

# 2. County agencies and prospective developers identify no viable use for the house.

County agencies reviewing the property identify no practical or functional use for the house. Specifically, the County Park Authority indicates no interest in the house as a museum, visitor's center, or destination site. Such uses also require operational budgets for staff, maintenance, and utilities. Similar type uses on properties owned and operated by the Park Authority typically run annual deficits. Disinterest is not solely a reaction to the condition of the house. Other Board and Park-owned houses in Laurel Hill, many in better condition than the Laurel Hill House, also lack reuse interest from county agencies.

The prospective developers of the Adaptive Reuse site identify no potential use of the house as part of the redevelopment of the prison site. Deterrents include location, the high cost of rehabilitation and utility service.

Citizen and special interest group suggestions for the future use of the Laurel Hill House include a public reception facility associated with activities at the adjacent garden, a retail coffee shop, or a tea house.

The high cost of bringing the house to county code, the cost of ADA requirements, the location of the house deep within the Adaptive Reuse property, and lack of vehicular access and parking are deterrents to reuse. These constraints must be addressed by any potential developer of the house.

#### 3. No further County investment to stabilize the house is recommended.

A lack of a viable reuse, the high cost of rehabilitation, and the lack of eighteenth-century elements justifies discontinuing any further investment in stabilizing the house.

### B. Suggested Next Steps

 Any future actions require coordination of citizens, stakeholders, and agencies in the context of the Memorandum of Agreement, the National Register Historic District designation, planned park activities, and plans for the development of the Adaptive Reuse Area.

Coordinate all plans and proposals with the Board of Supervisors, the Fairfax County Park Authority, the Virginia Department of Historic Resources, the Architectural Review Board, the Lorton Heritage Society, and the South County Federation.

2. Conduct demolition of the house.

#### 3. Consider options for interpretation as an archaeological site.

Demolishing the house and creating an archaeological park presents opportunities to:

- a. preserve the few remaining eighteenth-century elements of the house,
- b. conduct archaeological research on the history of the house and the plantation,
- c. create open space to compliment the prison-era gardens, and
- d. display elements of the house and artifacts in a creative fashion to tell the story of the history of the site and relationship to its context.

## COST ESTIMATE

# VI.

### A. Notes on Cost Estimate

The cost estimates provided here are conceptual in nature and based on the limited information available at this early point in the design process. They represent Frazier Associates' judgment as design professionals familiar with the construction industry and similar projects.

It is recognized that neither the architect nor the owner has control over the cost of labor, materials or equipment, over the contractor's methods of determining bid prices, or over competitive bidding, market or negotiating conditions. Accordingly, the architect cannot and does not warrant or represent that bids or negotiated prices will not vary from any estimate of construction cost or evaluation prepared or agreed to by the architect.

Unit prices, provided by suppliers, subcontractors, and past experience, reflect standard construction methods and materials. Prices include overhead and profit.

These costs are based on 2011 estimates. No escalation is included in the estimates. Escalation estimates can increase due to inflation and market conditions, which are speculative and unpredictable. Escalation should be re-evaluated on a quarterly basis or more frequently in an unstable market.

A design and construction contingency of 20% is included in this estimate. A design contingency allows for variations in the costs of details and design changes or scope increases. A construction contingency allows a reserve to cover the cost of unforeseen circumstances particular to the site.

The following are not included in the construction cost estimate:

- Construction testing and inspection
- Owner's project administration

### **B.** Cost Estimate

LAUREL HILL HOUSE - STABILIZATION	
ITEM	COST
DIVISION 1 - GENERAL CONDITIONS	
GENERAL CONDITIONS	25,000
GENERAL CONTRACTOR FEE	20,000
DIVISION 2 - SITE WORK	
SELECTIVE DEMOLITION	23,460
HAZARDOUS MATERIALS ALLOWANCE	25,000
DIVISION 3 - CONCRETE (NOT USED)	
DIVISION 4 -MASONRY	
CHIMNEY REPAIRS	4,500
DIVISION 5 - METALS (NOT USED)	
DIVISION 6 - CARPENTRY	
STRUCTURAL FRAMING REPAIRS	15,000
ROOF DECK REPAIRS	4,000
DIVISION 7 - THERMAL AND MOISTURE PROTECTION	
FIBERGLASS SHINGLE ROOFING	13,000
GUTTERS AND DOWNSPOUTS	3,000
SIDING REPAIR	15,000
SIDING PAINT	26,000
CORNICE REPAIR	5,000
DIVISION 8 - DOORS AND WINDOWS	
COVER/REPAIR DOORS/WINDOWS	8,500
DIVISION 9 - FINISHES DIVISION 10 - SPECIALTIES	
DIVISION 11 - EQUIPMENT	
DIVISION 12 - FURNISHINGS (NOT USED)	
DIVISION 13 - SPECIAL CONSTRUCTION (NOT USED)	
DIVISION 14 - CONVEYING SYSTEMS (NOT USED)	
DIVISION 15 - MECHANICAL	
DIVISION 16 - ELECTRICAL	
PROVIDE SECURITY SYSTEM AND LIGHTING	9,500

CONSTRUCTION COST (SUBTOTAL)	\$196,960
CONTINGENCY @ 20%	\$39,392
CONSTRUCTION COST (TOTAL)	\$236,352
CONSTRUCTION COST/SF	\$51
SOFT COSTS 12%	\$28,362
PROJECT (HARD + SOFT) COST	\$264,714
PROJECT COSTS/SQUARE FOOT	\$57

LAUREL HILL HOUSE - DEMOLITION/INTERPRETATION OPTION	
ITEM	COST
DIVISION 1 - GENERAL CONDITIONS	0.051
	20,000,00
GENERAL CONDITIONS GENERAL CONTRACTOR FEE	20,000.00 25,000.00
OENERAL CONTRACTOR FEE	23,000.00
DIVISION 2 - SITE WORK	
CAPUTILITIES	2,500.00
FOUNDATION DRAINAGE	4,500.00
LANDSCAPE	10,000.00
BUILDING DEMOLITION	37,080.00
HAZARDOUS MAT. ALLOWANCE	25,000.00
INFILL FOUNDATION	5,000.00
DIVISION 3 - CONCRETE (NOT USED)	
DIVISION 4 -MASONRY	
FOUNDATION REPAIRS	5,000.00
DIVISION 5 - METALS	
MTL GHOST STRUCTURE	32,000.00
DIVISION 6 - CARPENTRY (NOT USED) DIVISION 7 - THERMAL AND MOISTURE PROTECTION	N (NOT USED)
DIVISION 9 - FINISHES (NOT USED)	
DIVISION 10 - SPECIALTIES (NOT USED)	
EXTERIOR SIGNAGE, KIOSKS	35,000.00
DIVISION 11 - EQUIPMENT (NOT USED)	
DIVISION 12 - FURNISHINGS (NOT USED)	
DIVISION 13 - SPECIAL CONSTRUCTION (NOT USED)	
DIVISION 14 - CONVEYING SYSTEMS (NOT USED)	
DIVISION 15 - MECHANICAL (NOT USED)	
DIVISION 16 - ELECTRICAL (NOT USED)	
SECURITY LIGHTING	6,500.00
CONSTRUCTION COST (SUBTOTAL)	\$207,580
CONTINGENCY @ 25%	\$51,895
CONSTRUCTION COST (TOTAL)	\$259,475
CONSTRUCTION COST/SF	\$56
SOFT COSTS 40% (ARCHITECT, STRUCTURAL ENGINEE	ER, \$103,790.0
EXHIBIT DESIGN, ARCHAEOLGY, HAZ MAT TESTING ET	
	- /
PROJECT (HARD + SOFT) COST	\$363,265.0

# APPENDIX



**MEETING MINUTES** 

FRAZIER ASSOCIATES

Date: 4.22.11

#### **On Site Meeting**

Job Name: Project Number:

In attendance: Name	Representing
Chris Caperton	Fairfax County Department of Planning and Zoning
Linda Blank	Fairfax County Department of Planning and Zoning
Aimee Wells	Fairfax County Park Authority
Marc Holma	Virginia Department of Historic Resources
John Burns	Fairfax County Architectural Review Board
Richard Bierce	Fairfax County Architectural Review Board
Irma Clifton	Lorton Heritage Society
John Wilson	Lorton Heritage Society
Linwood Gorham	Fairfax County Park Authority Board
Anne Gorham	Lorton Heritage Society

Given the deteriorated condition of the Laurel Hill House, the Fairfax County Department of Planning and Zoning is pursuing steps to evaluate stabilization work needed to halt its decline. At this point in time certain decisions must be made in response to what is becoming the irreversible decline of the building and a hazardous situation. The purpose of the meeting was to gather historic preservation professionals and interested parties involved in the project to frankly address the condition of the house, potential uses of the structure, and the ultimate disposition of the building.

Frazier Associates' initial evaluations find that any cost effective stabilization of the building needs to be done in the context of an ultimate use, which has not been determined. Otherwise, considerable funds could be spent repairing elements that will be ultimately removed.

The periods of historic significance of the house were discussed by all in attendance. The original 18<sup>th</sup> century portion of the house is compelling to some due to the relative scarcity of buildings from this era, the building's relationship to the naming of the site and its still impressive timber frame The importance of the original house, however, is greatly diminished due to the removal of most of its original 18th century historic fabric by detrimental alterations, and its envelopment by the later 20th century house.

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The 20<sup>th</sup> century house is within the period of significance of the overall DC Workhouse and Reformatory Historic District (1910-1961) and has a direct relationship to the adjacent reformatory site, but it is not highly significant architecturally and is in generally poor condition. The tour of the building found the roof and siding becoming compromised. The resulting moisture infiltration has ruined many of the interior finishes. The concealed structure can be assumed to be deteriorating while the bathroom addition and porch are near the point of collapse. The condition results largely from the fact that the building has been vacant since the early 1970's with only intermittent maintenance.

Conversations with County staff indicate a lack of interest in the house from other County agencies. One participant expressed concern about the house serving as a visitor center due to the remote nature of the property. The value of the site was seen by some participants in its relationship to the adjacent reformatory and its potential for archaeological research dating back to the eighteenth century. The adjacent terraced gardens from the period of significance also have value and are under evaluation for restoration by the Fairfax County Park Authority.

Challenges for moving ahead with stabilization include the high cost of performing basic structural improvements, competing priorities for county funding, the lack of a viable use for the building, and its poor condition. An option discussed among the group is the interpretation of the site, with partial or complete removal of the building, along with additional archaeological interpretation and investigation. This general approach is similar to the Option 3 – Selective Demolition to Foundations, Preserve Foundations and Interpretive Treatment Plan described in the 2008 "Historic Structures Report and Treatment Options." This approach could be coordinated with passive uses envisioned for the adjacent gardens.

CC: All meeting attendees

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