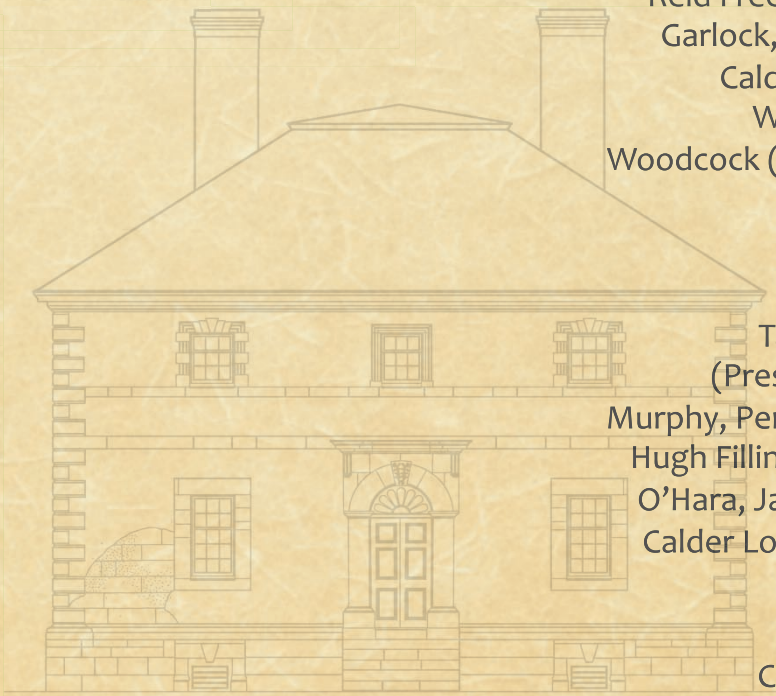
Third Meeting

22-24 October 2010

MENOKIN FOUNDATION ADVISORY COUNCIL

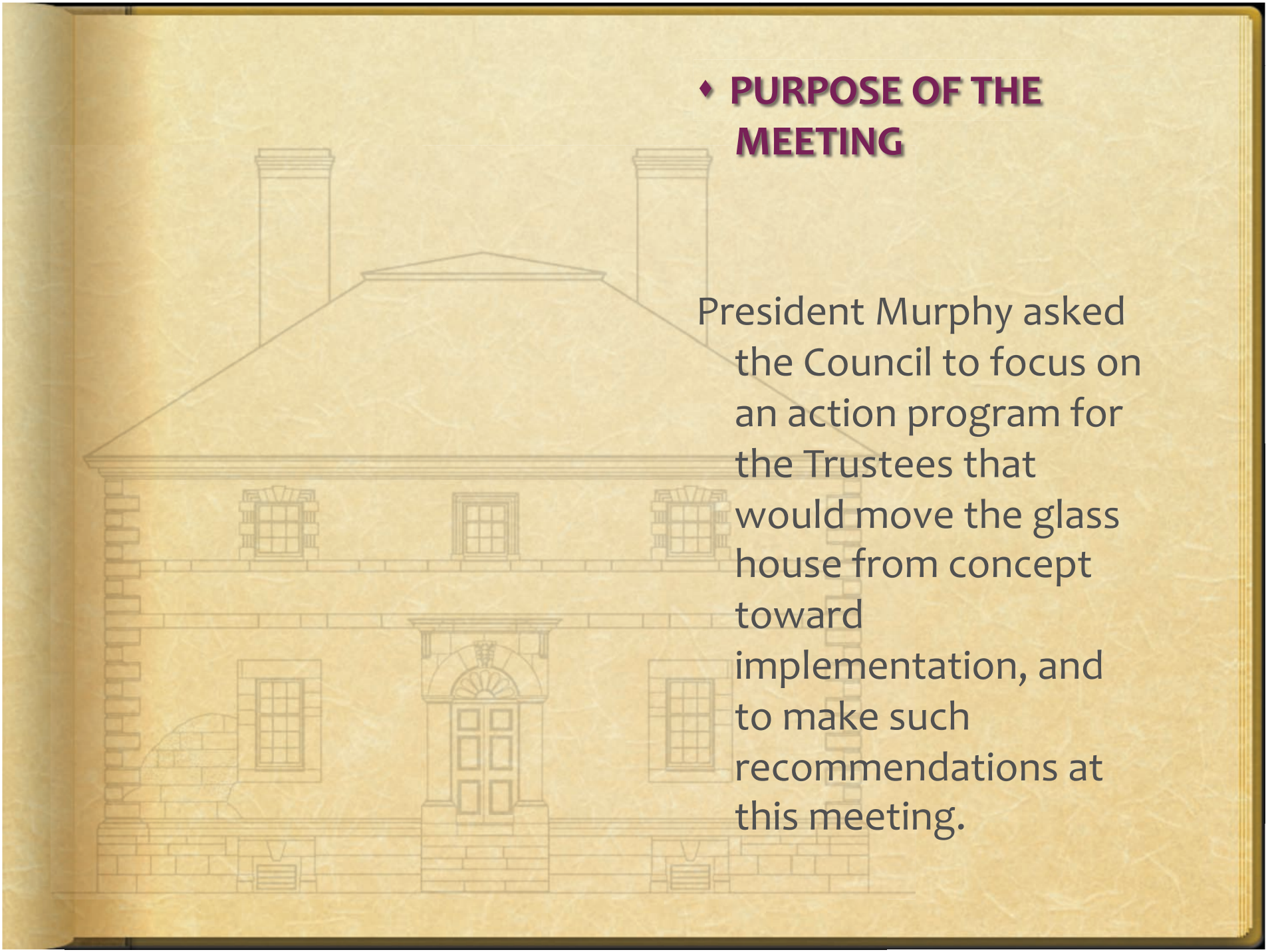


PRESENT

Advisory Council:
Reid Freeman, Richard Garlock, Lucy Lawliss, Calder Loth, Matt Webster, David Woodcock (Chair), James Zehmer

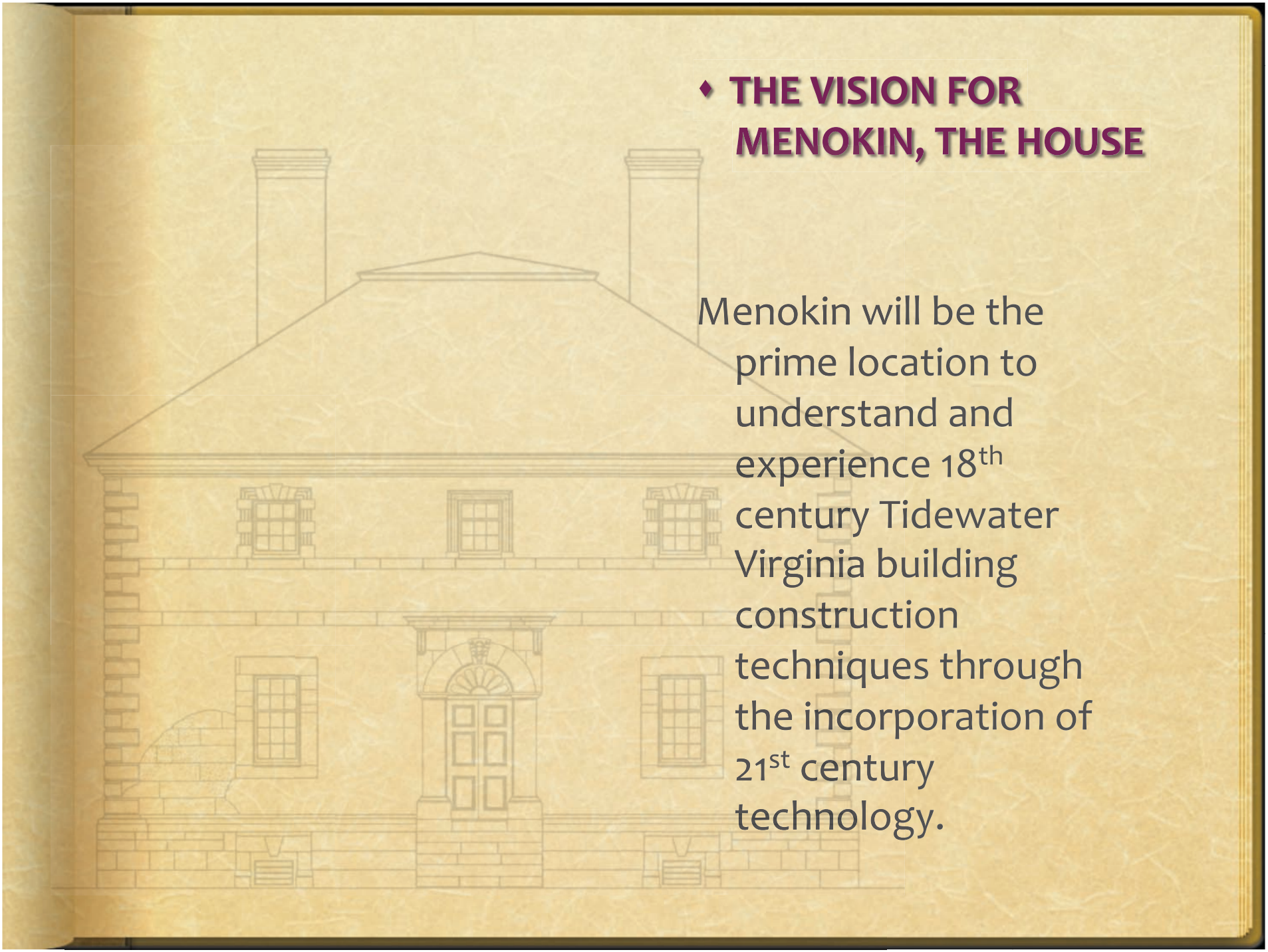
Trustees:
Tayloe Murphy (President), Helen Murphy, Penelope Saffer, Hugh Fillingane, Mercer O'Hara, James Zehmer, Calder Loth (honorary)

Design Team:
Charles Phillips



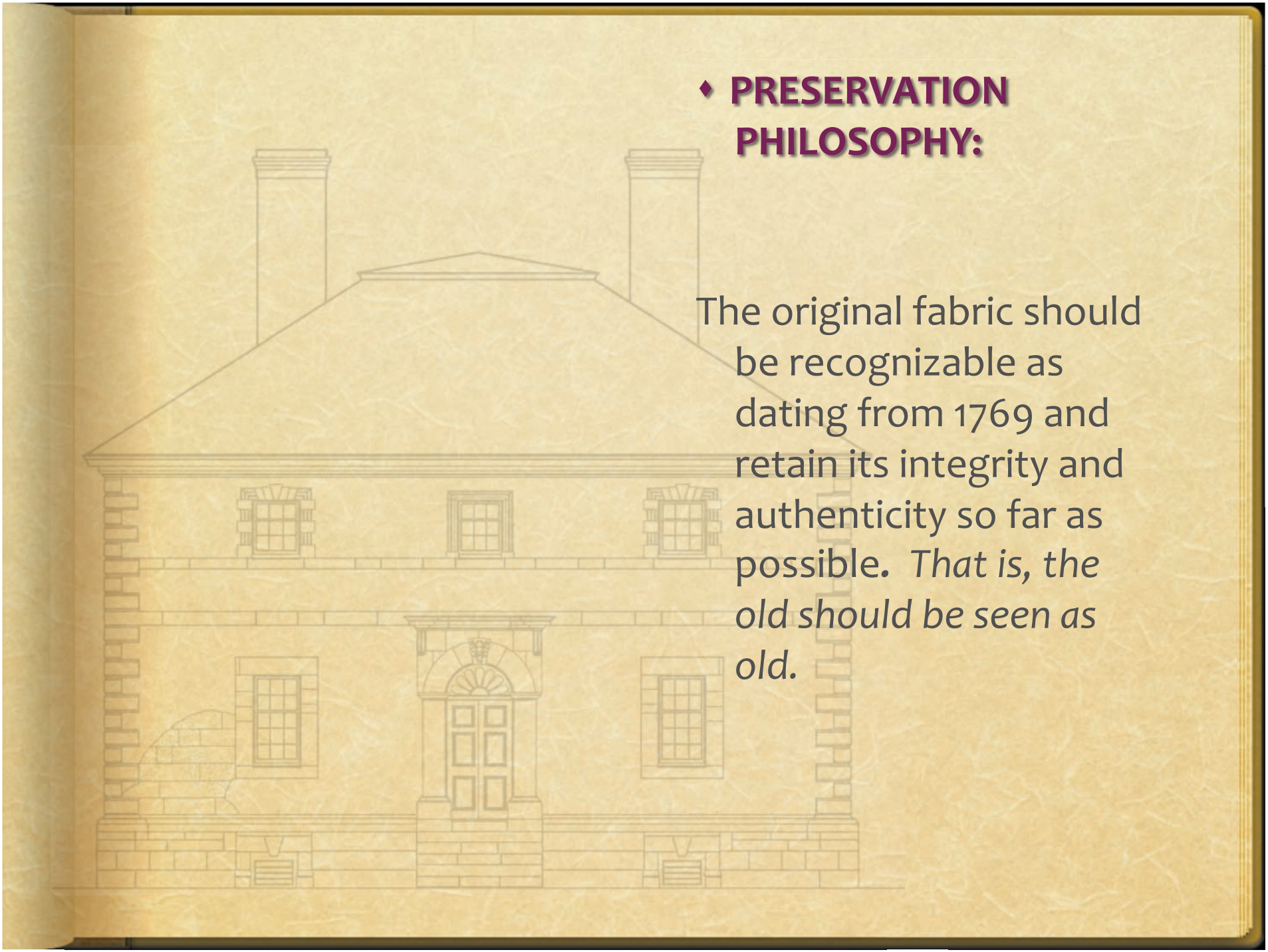
• PURPOSE OF THE MEETING

President Murphy asked the Council to focus on an action program for the Trustees that would move the glass house from concept toward implementation, and to make such recommendations at this meeting.



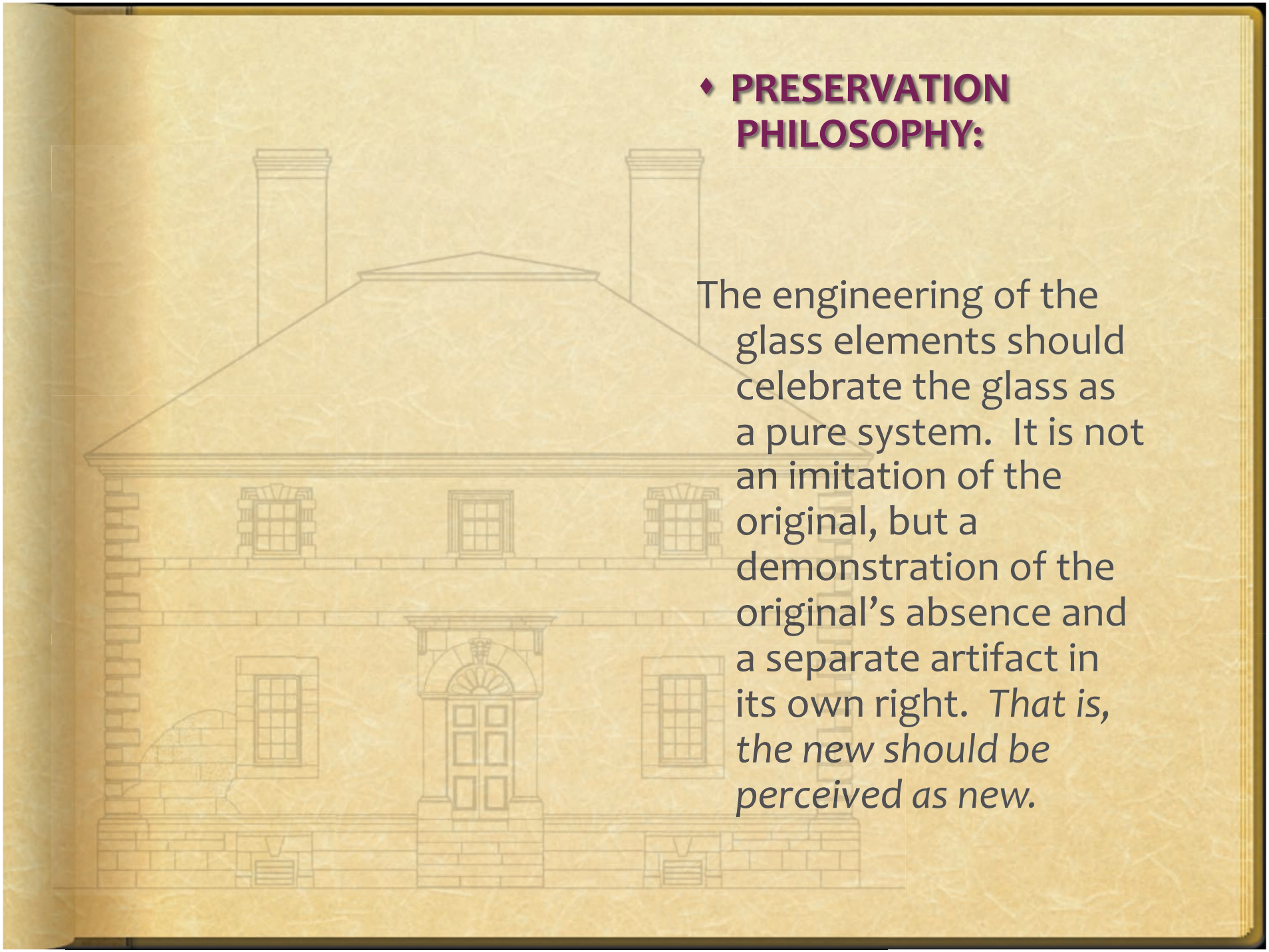
• THE VISION FOR MENOKIN, THE HOUSE

Menokin will be the prime location to understand and experience 18th century Tidewater Virginia building construction techniques through the incorporation of 21st century technology.



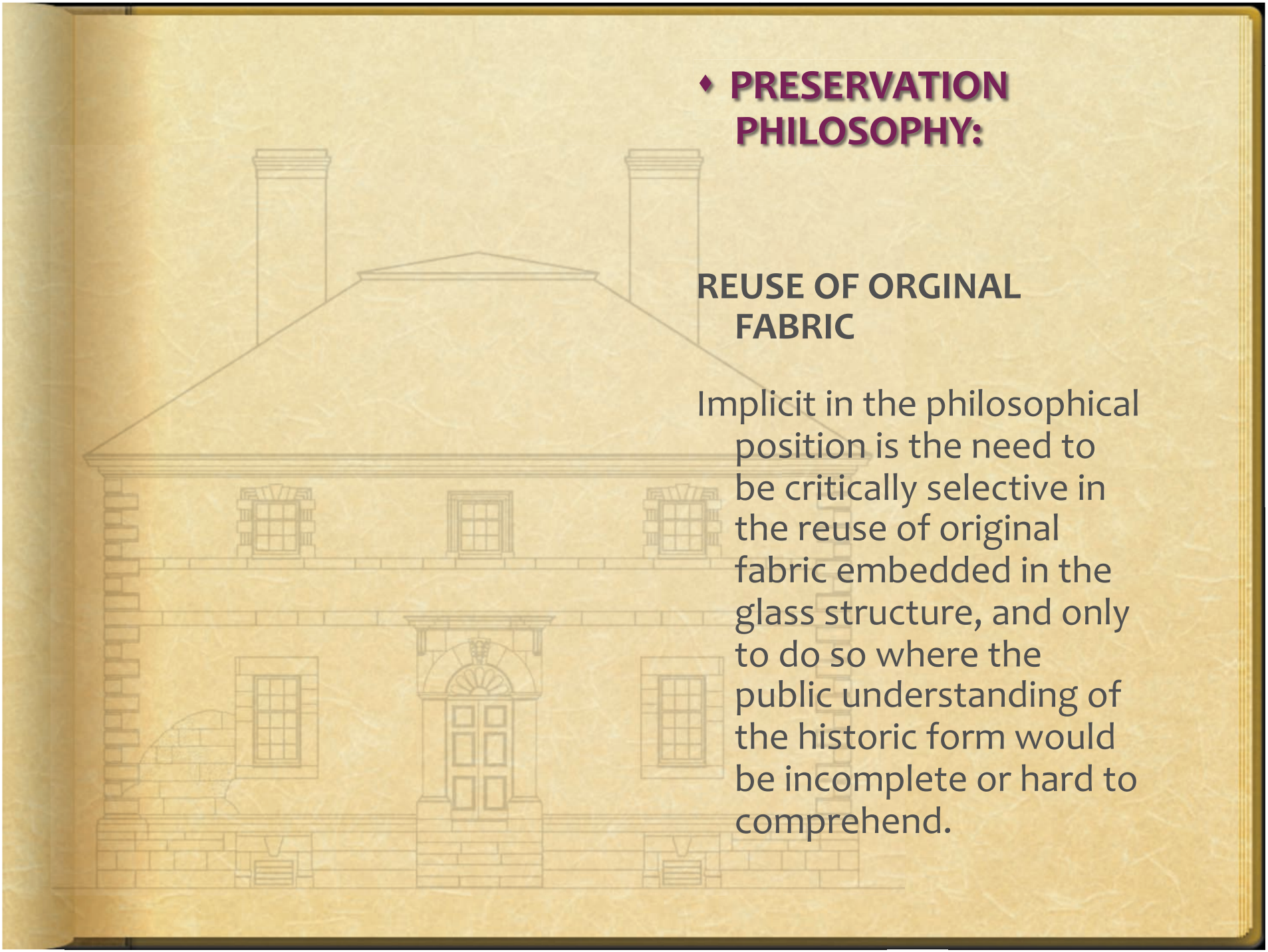
- **PRESERVATION PHILOSOPHY:**

The original fabric should be recognizable as dating from 1769 and retain its integrity and authenticity so far as possible. *That is, the old should be seen as old.*



♦ PRESERVATION PHILOSOPHY:

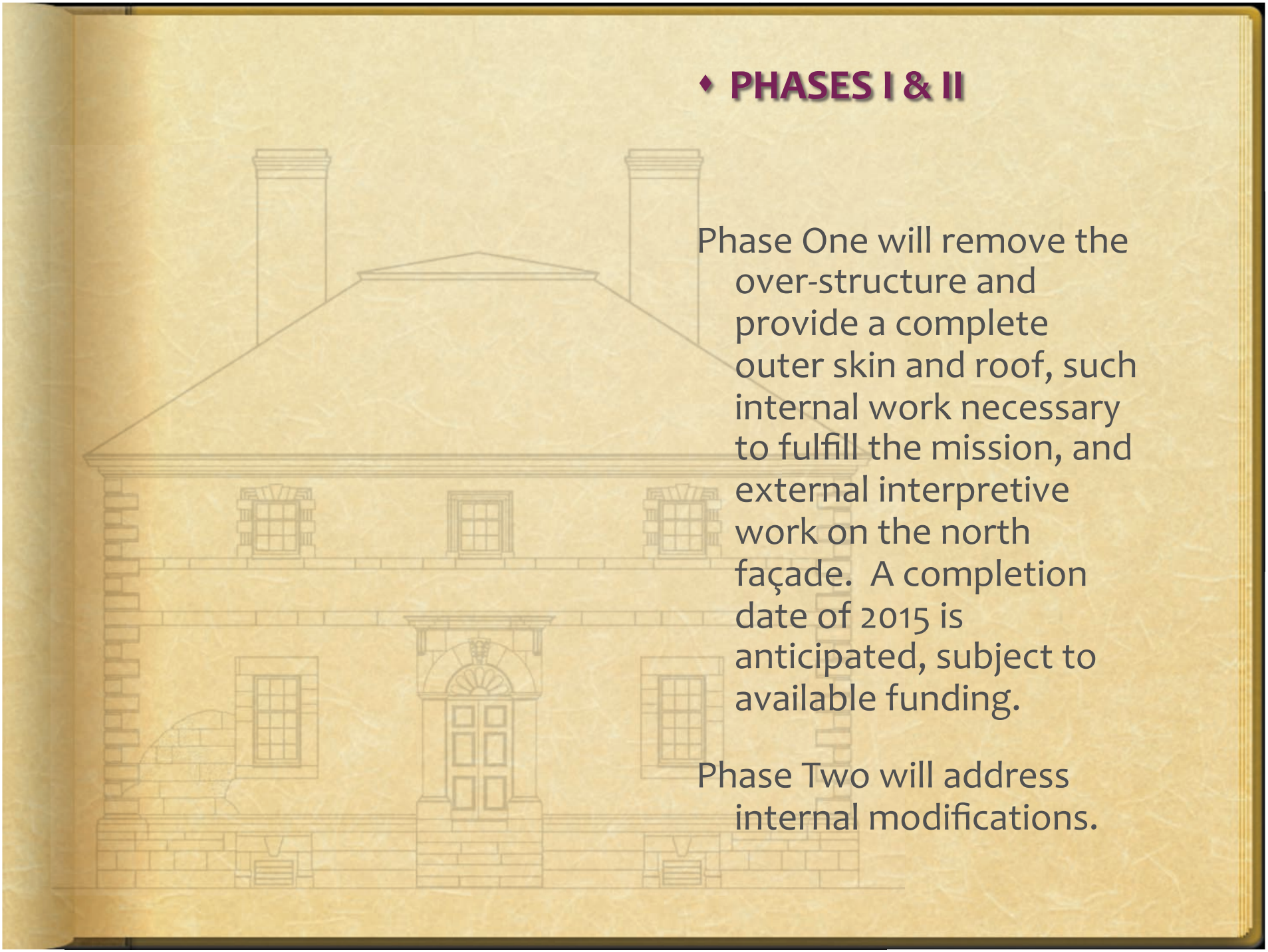
The engineering of the glass elements should celebrate the glass as a pure system. It is not an imitation of the original, but a demonstration of the original's absence and a separate artifact in its own right. *That is, the new should be perceived as new.*



♦ PRESERVATION PHILOSOPHY:

REUSE OF ORGINAL FABRIC

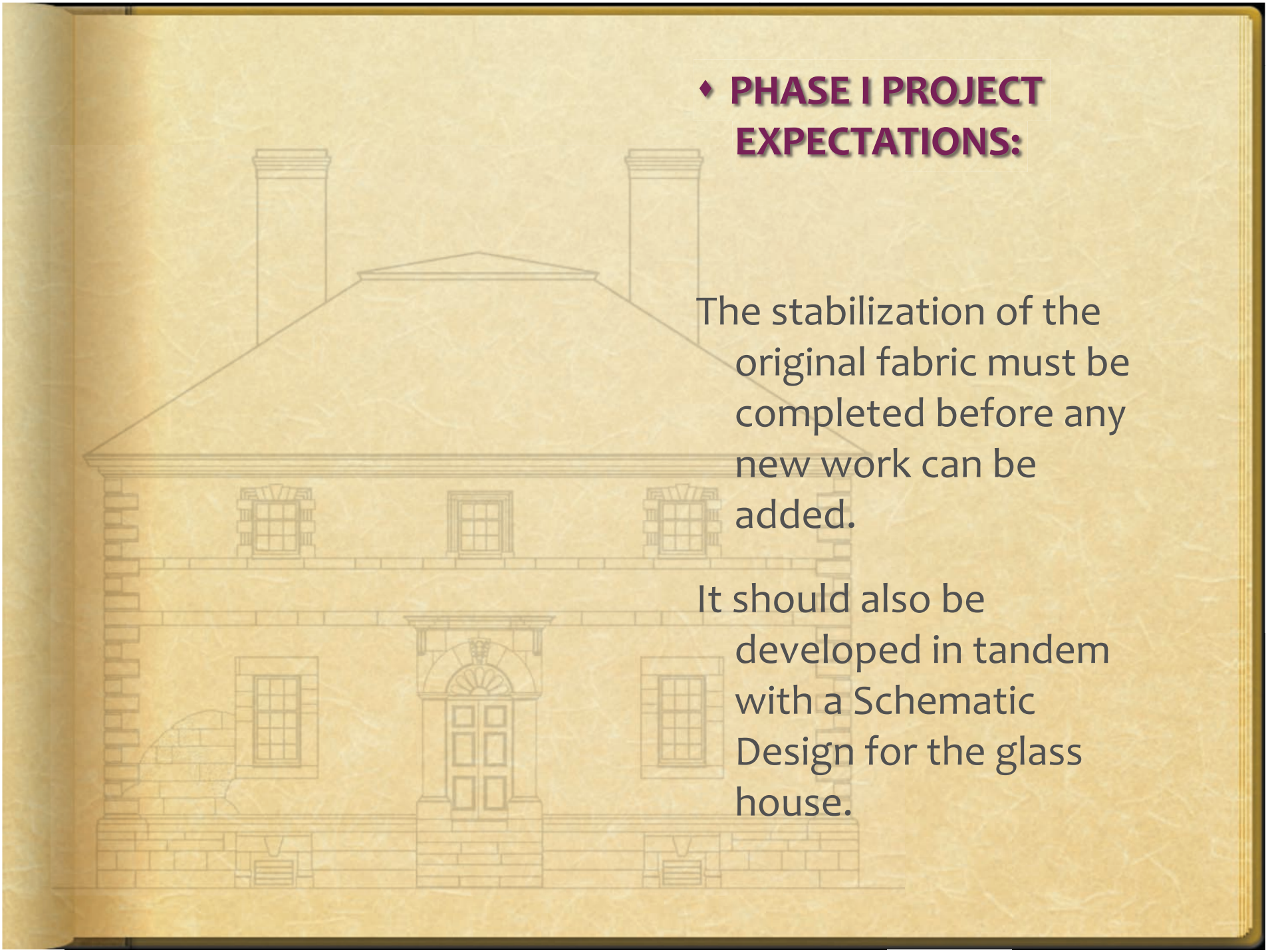
Implicit in the philosophical position is the need to be critically selective in the reuse of original fabric embedded in the glass structure, and only to do so where the public understanding of the historic form would be incomplete or hard to comprehend.



♦ PHASES I & II

Phase One will remove the over-structure and provide a complete outer skin and roof, such internal work necessary to fulfill the mission, and external interpretive work on the north façade. A completion date of 2015 is anticipated, subject to available funding.

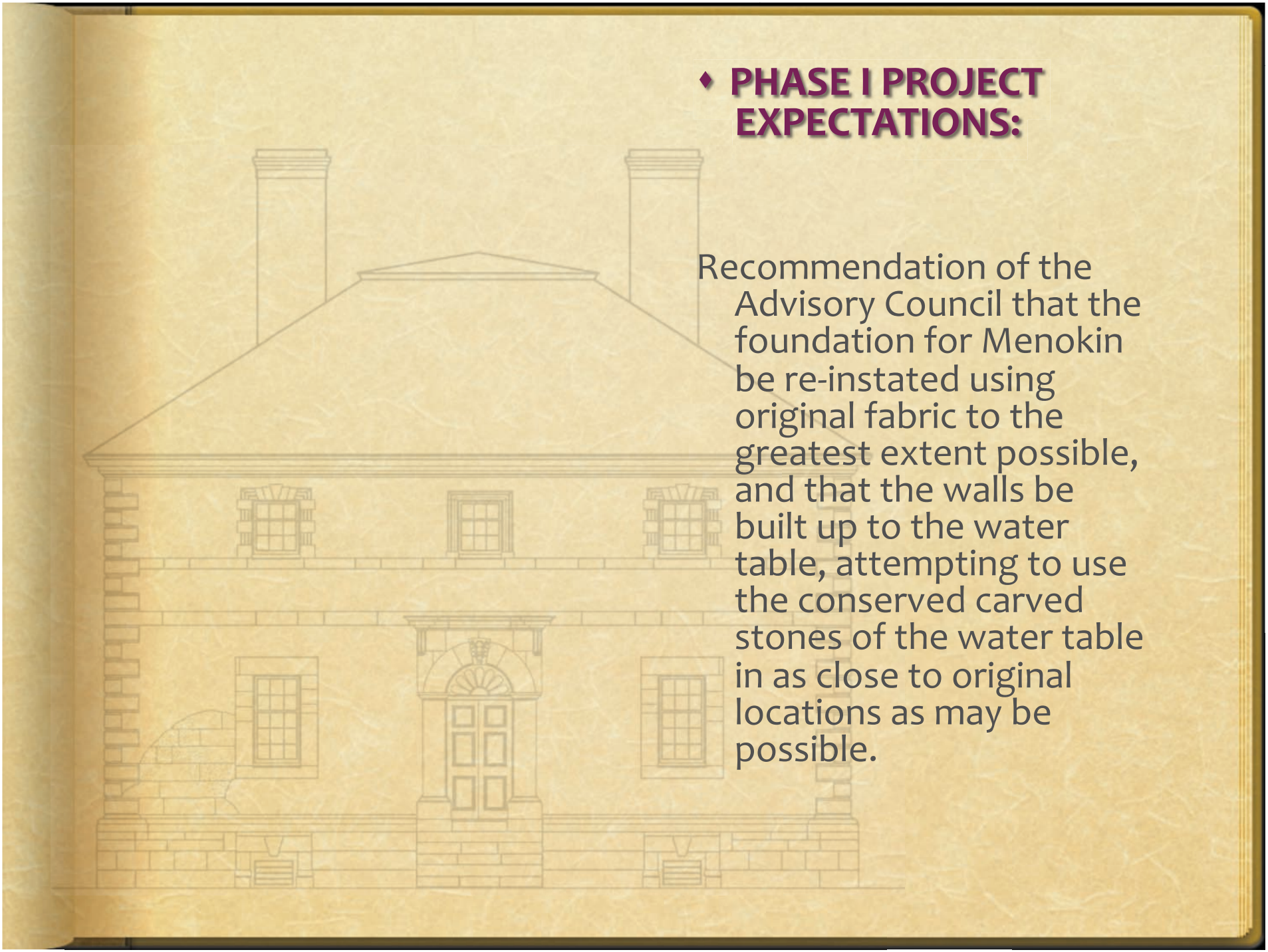
Phase Two will address internal modifications.



♦ PHASE I PROJECT EXPECTATIONS:

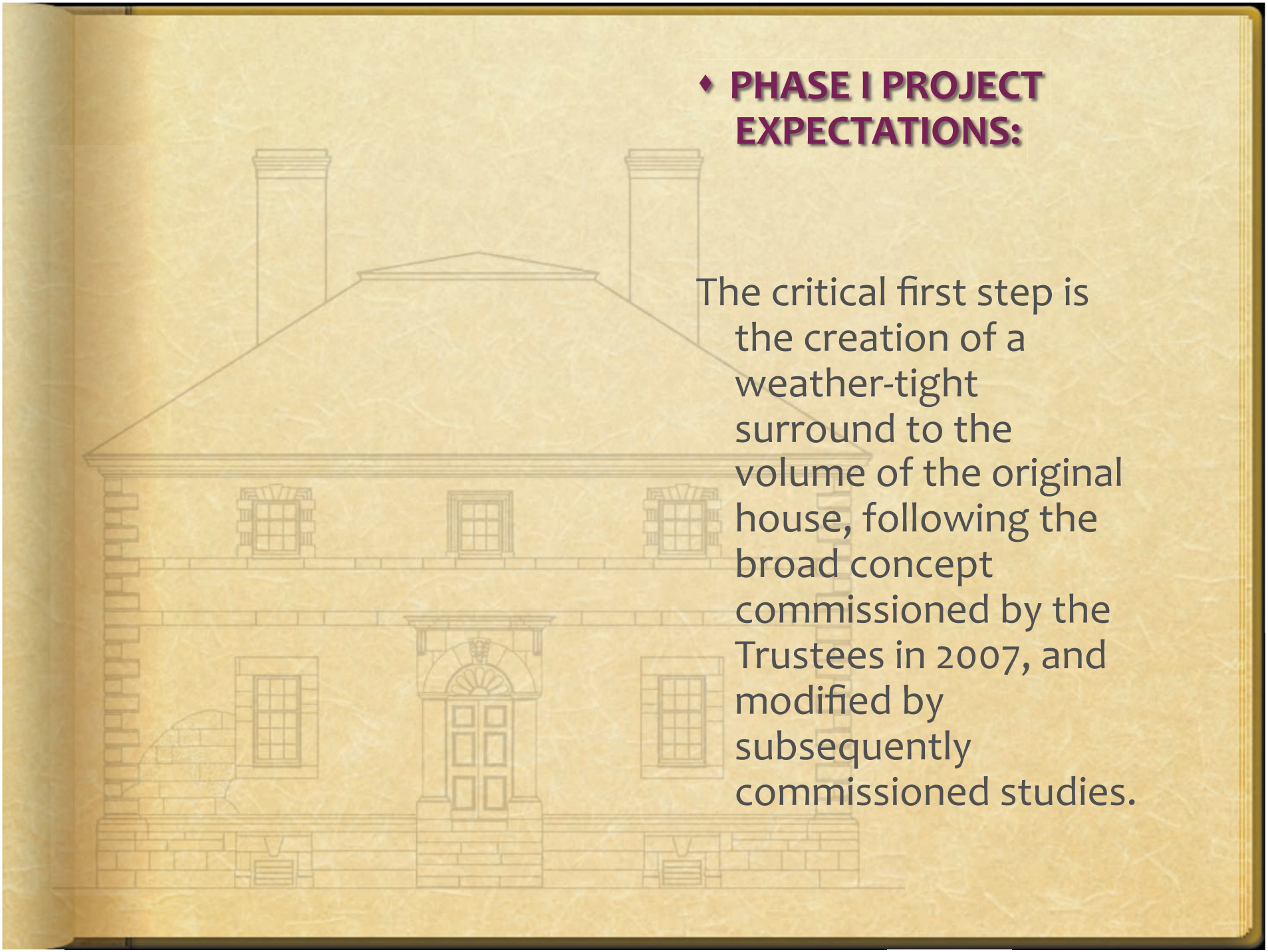
The stabilization of the original fabric must be completed before any new work can be added.

It should also be developed in tandem with a Schematic Design for the glass house.



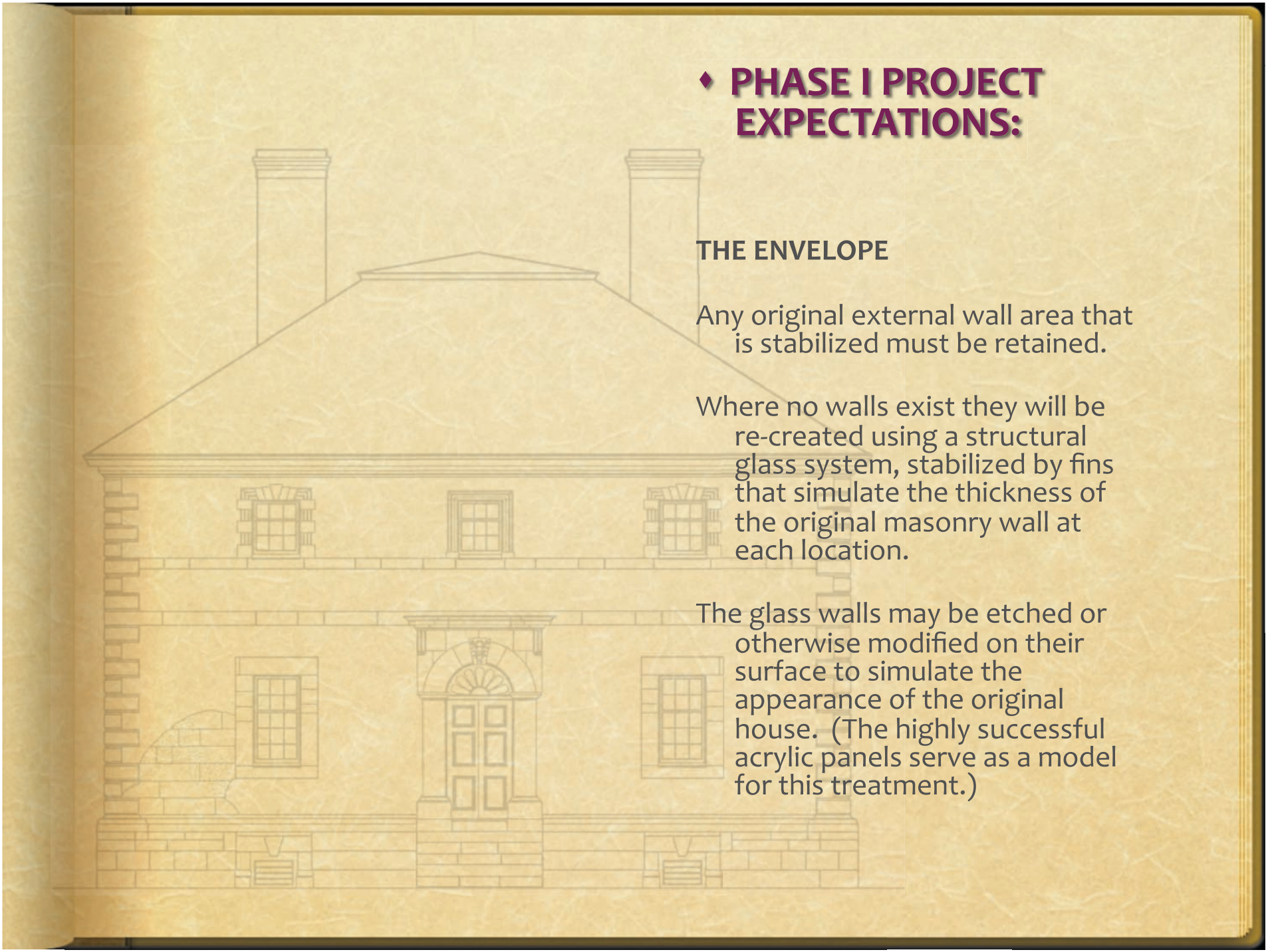
♦ PHASE I PROJECT EXPECTATIONS:

Recommendation of the Advisory Council that the foundation for Menokin be re-instated using original fabric to the greatest extent possible, and that the walls be built up to the water table, attempting to use the conserved carved stones of the water table in as close to original locations as may be possible.



♦ PHASE I PROJECT EXPECTATIONS:

The critical first step is the creation of a weather-tight surround to the volume of the original house, following the broad concept commissioned by the Trustees in 2007, and modified by subsequently commissioned studies.



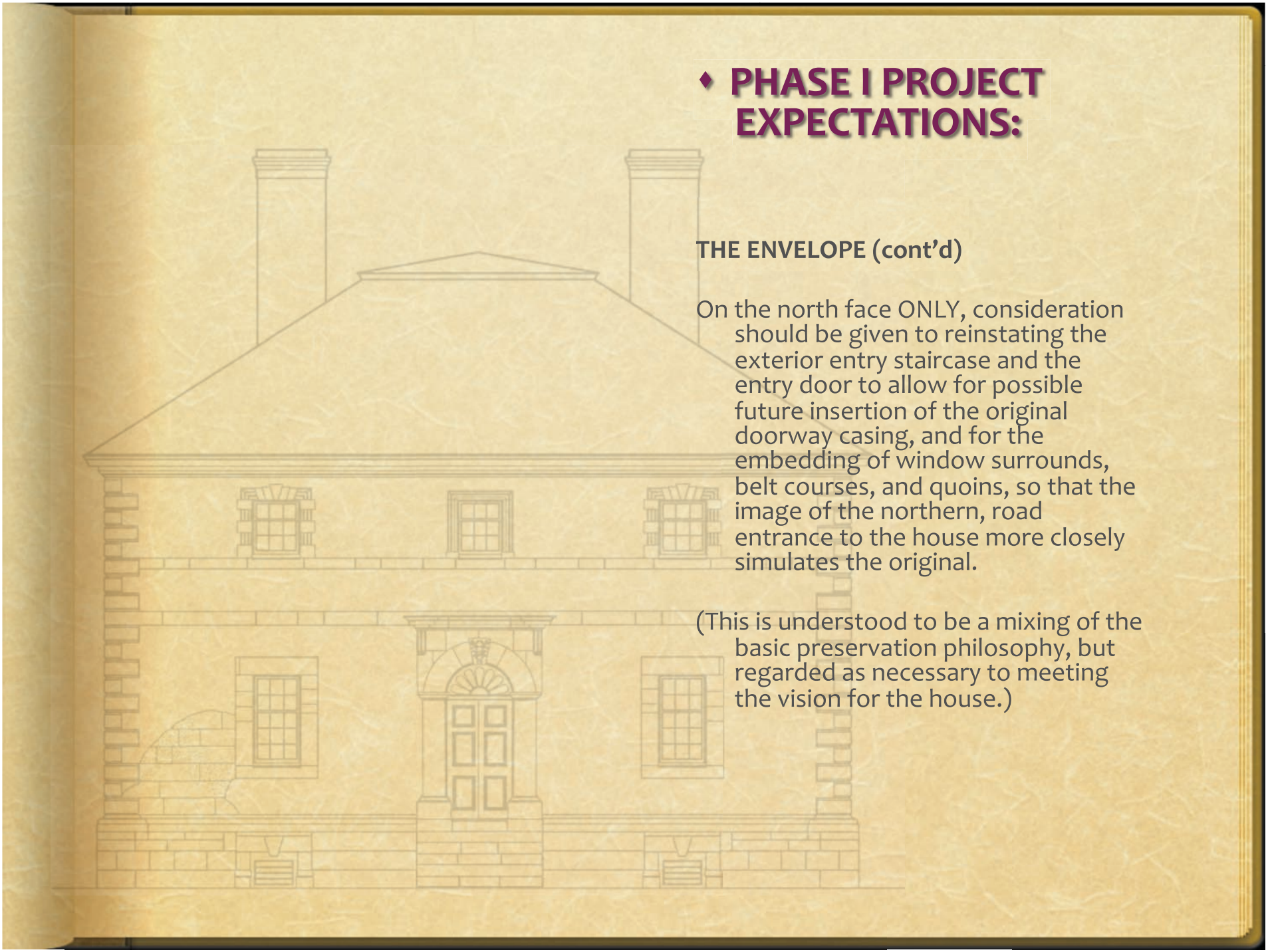
♦ PHASE I PROJECT EXPECTATIONS:

THE ENVELOPE

Any original external wall area that is stabilized must be retained.

Where no walls exist they will be re-created using a structural glass system, stabilized by fins that simulate the thickness of the original masonry wall at each location.

The glass walls may be etched or otherwise modified on their surface to simulate the appearance of the original house. (The highly successful acrylic panels serve as a model for this treatment.)

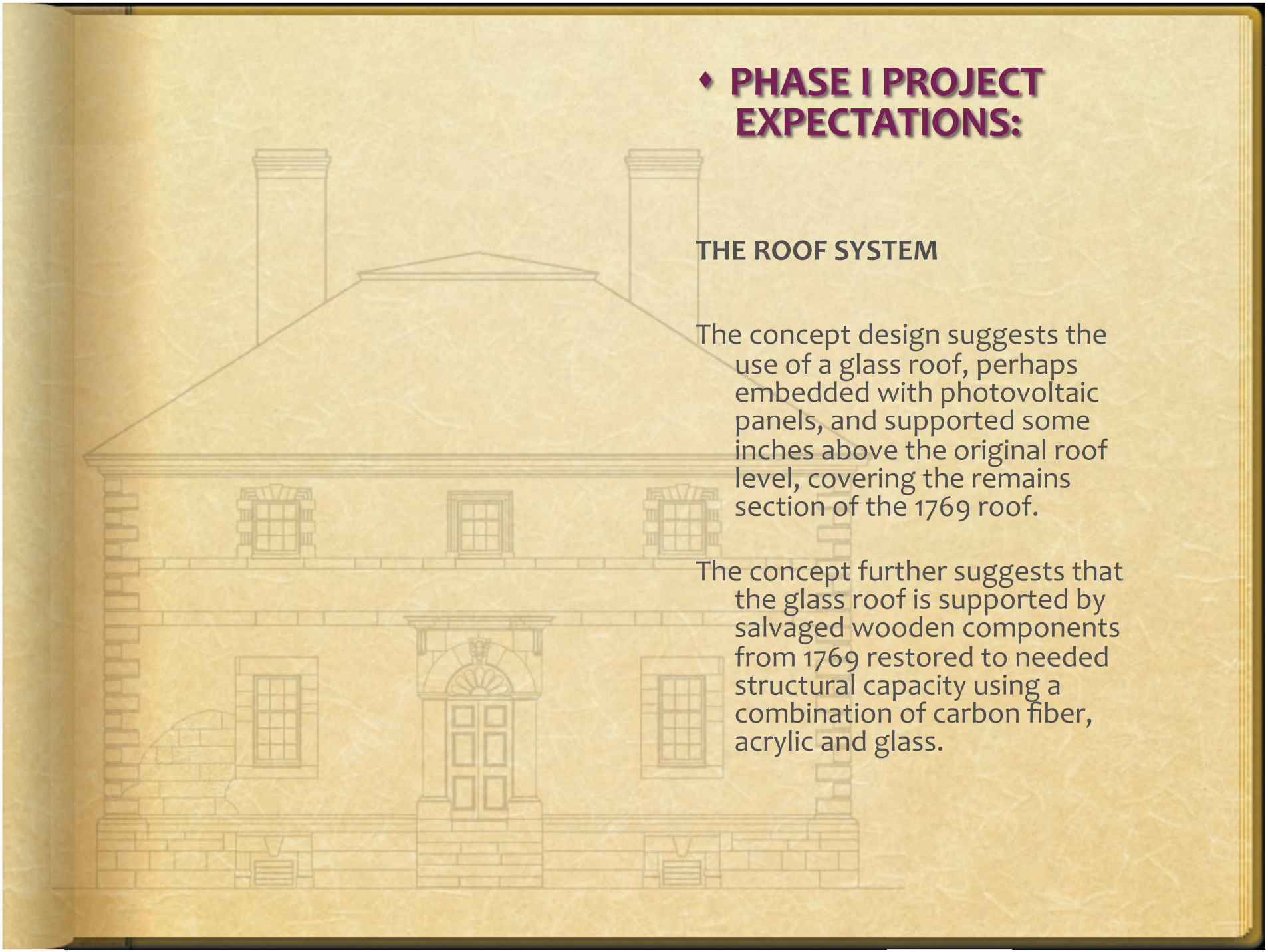


♦ PHASE I PROJECT EXPECTATIONS:

THE ENVELOPE (cont'd)

On the north face ONLY, consideration should be given to reinstating the exterior entry staircase and the entry door to allow for possible future insertion of the original doorway casing, and for the embedding of window surrounds, belt courses, and quoins, so that the image of the northern, road entrance to the house more closely simulates the original.

(This is understood to be a mixing of the basic preservation philosophy, but regarded as necessary to meeting the vision for the house.)

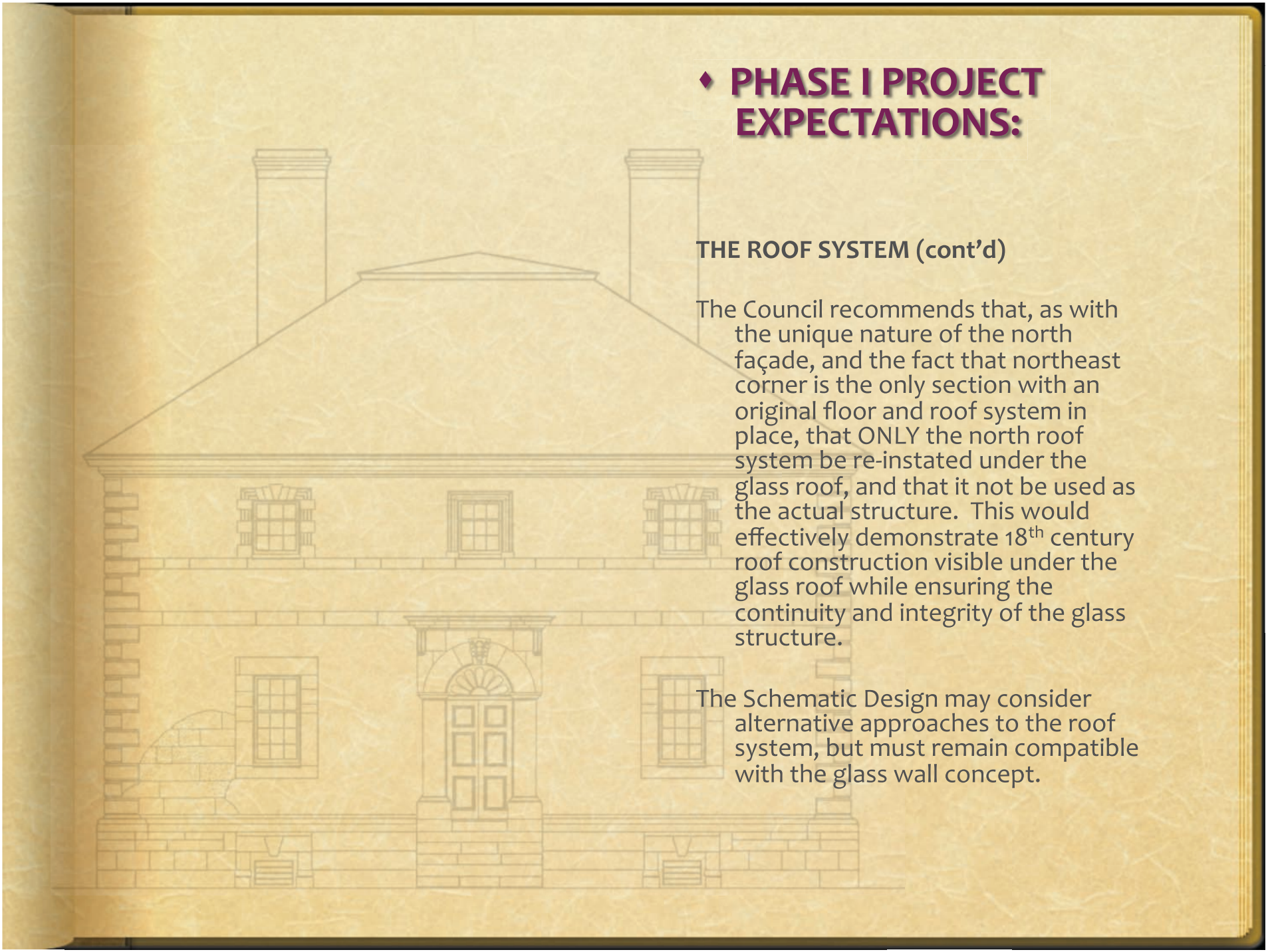


♦ PHASE I PROJECT EXPECTATIONS:

THE ROOF SYSTEM

The concept design suggests the use of a glass roof, perhaps embedded with photovoltaic panels, and supported some inches above the original roof level, covering the remains section of the 1769 roof.

The concept further suggests that the glass roof is supported by salvaged wooden components from 1769 restored to needed structural capacity using a combination of carbon fiber, acrylic and glass.



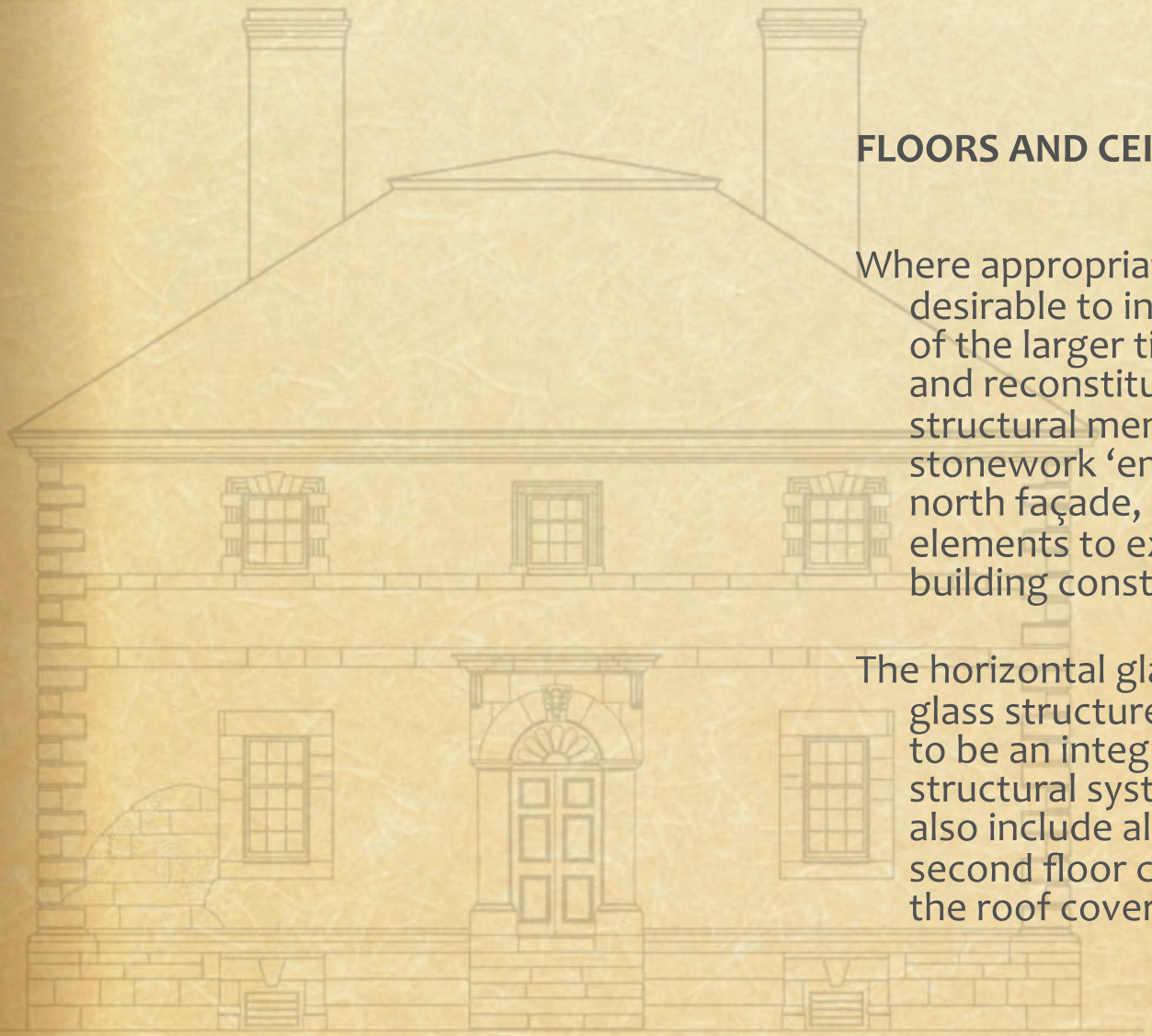
♦ PHASE I PROJECT EXPECTATIONS:

THE ROOF SYSTEM (cont'd)

The Council recommends that, as with the unique nature of the north façade, and the fact that northeast corner is the only section with an original floor and roof system in place, that ONLY the north roof system be re-instated under the glass roof, and that it not be used as the actual structure. This would effectively demonstrate 18th century roof construction visible under the glass roof while ensuring the continuity and integrity of the glass structure.

The Schematic Design may consider alternative approaches to the roof system, but must remain compatible with the glass wall concept.

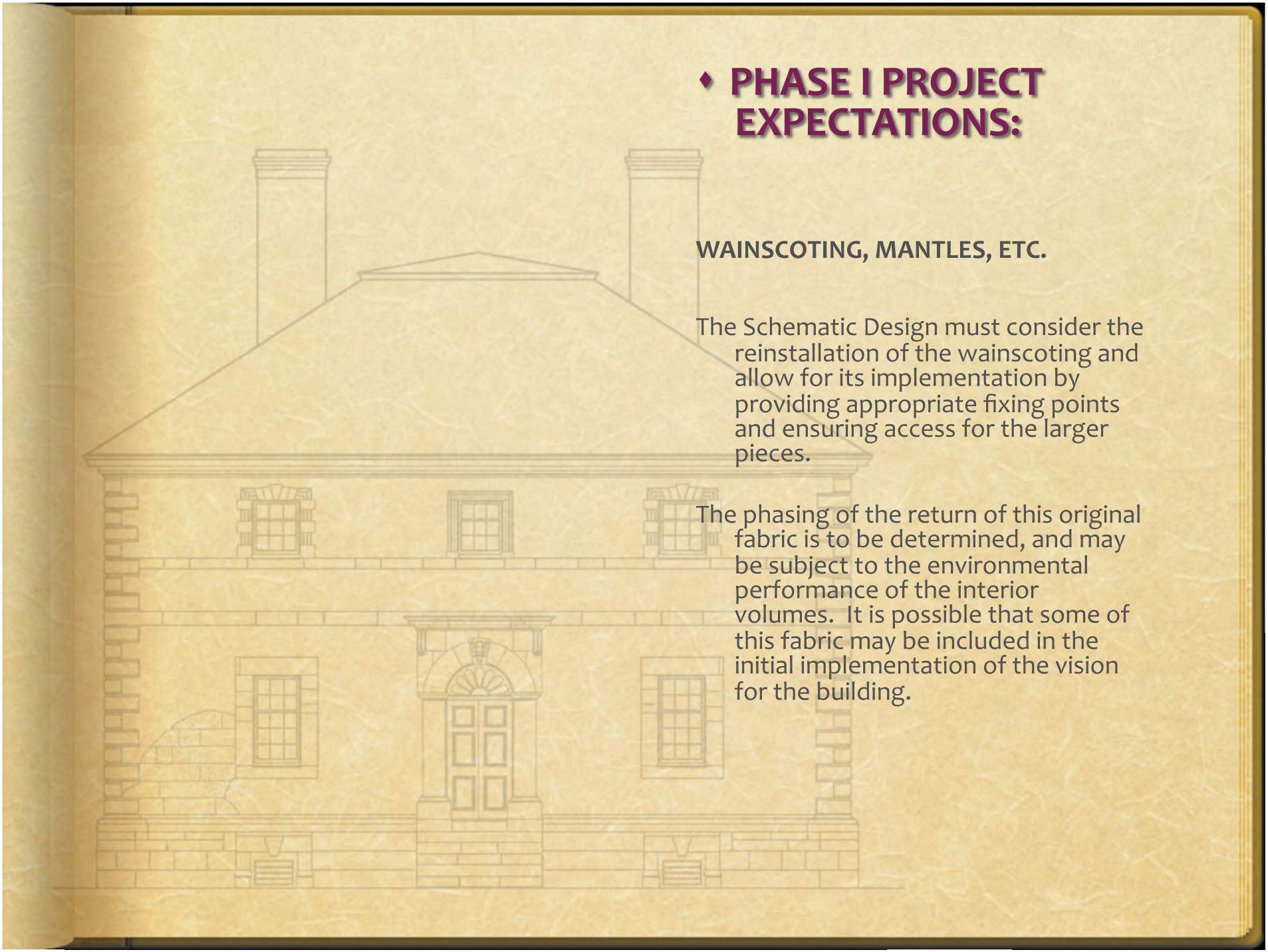
♦ PHASE I PROJECT EXPECTATIONS:



FLOORS AND CEILINGS

Where appropriate it may be desirable to incorporate some of the larger timbers repaired and reconstituted, either as structural members or, like the stonework 'embedded' in the north façade, as interpretive elements to explain 18th century building construction.

The horizontal glass planes in the glass structure are understood to be an integral part of the structural system, and that may also include all or part of the second floor ceiling level under the roof covering.

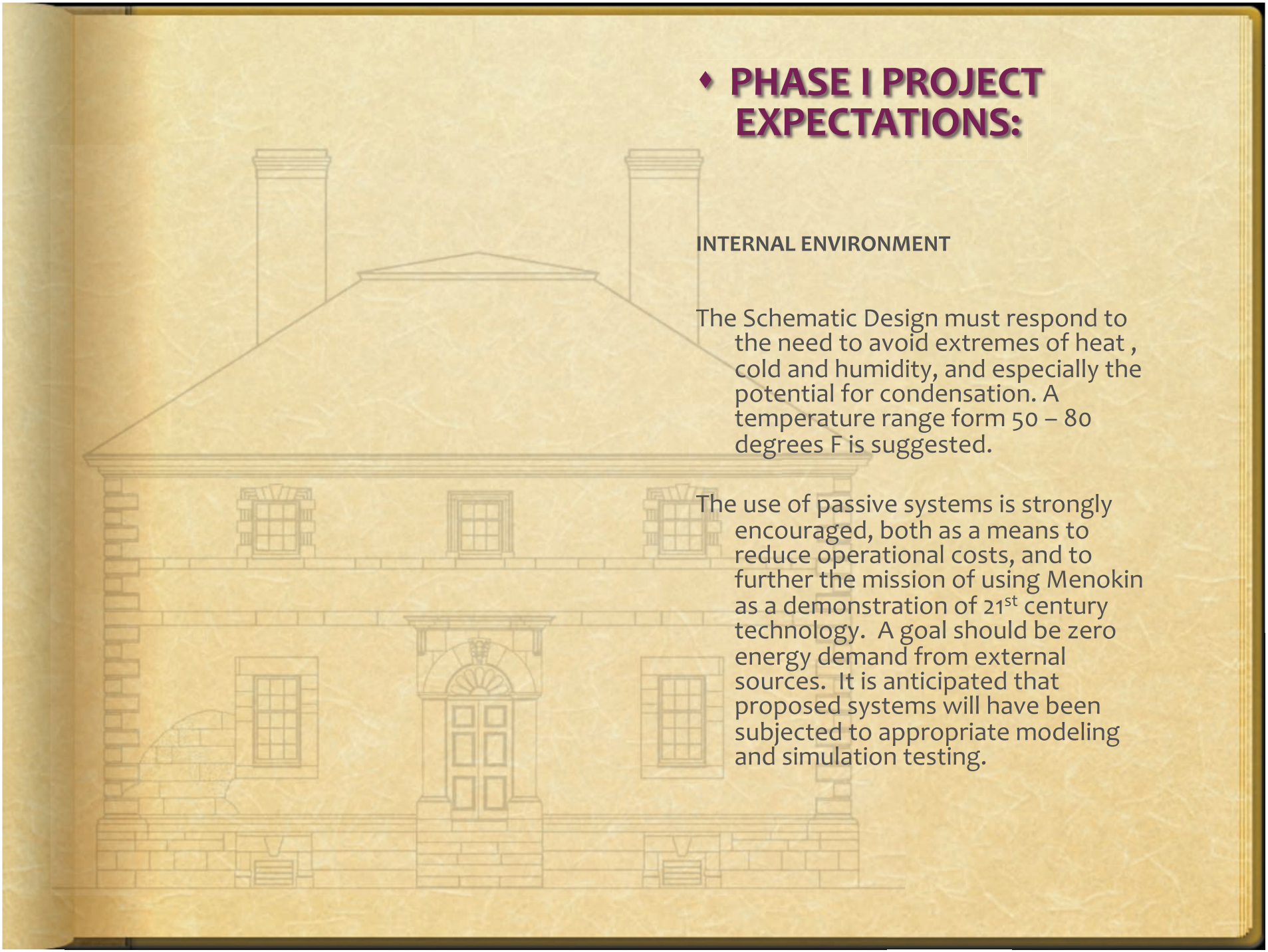


♦ PHASE I PROJECT EXPECTATIONS:

WAINSCOTING, MANTLES, ETC.

The Schematic Design must consider the reinstallation of the wainscoting and allow for its implementation by providing appropriate fixing points and ensuring access for the larger pieces.

The phasing of the return of this original fabric is to be determined, and may be subject to the environmental performance of the interior volumes. It is possible that some of this fabric may be included in the initial implementation of the vision for the building.

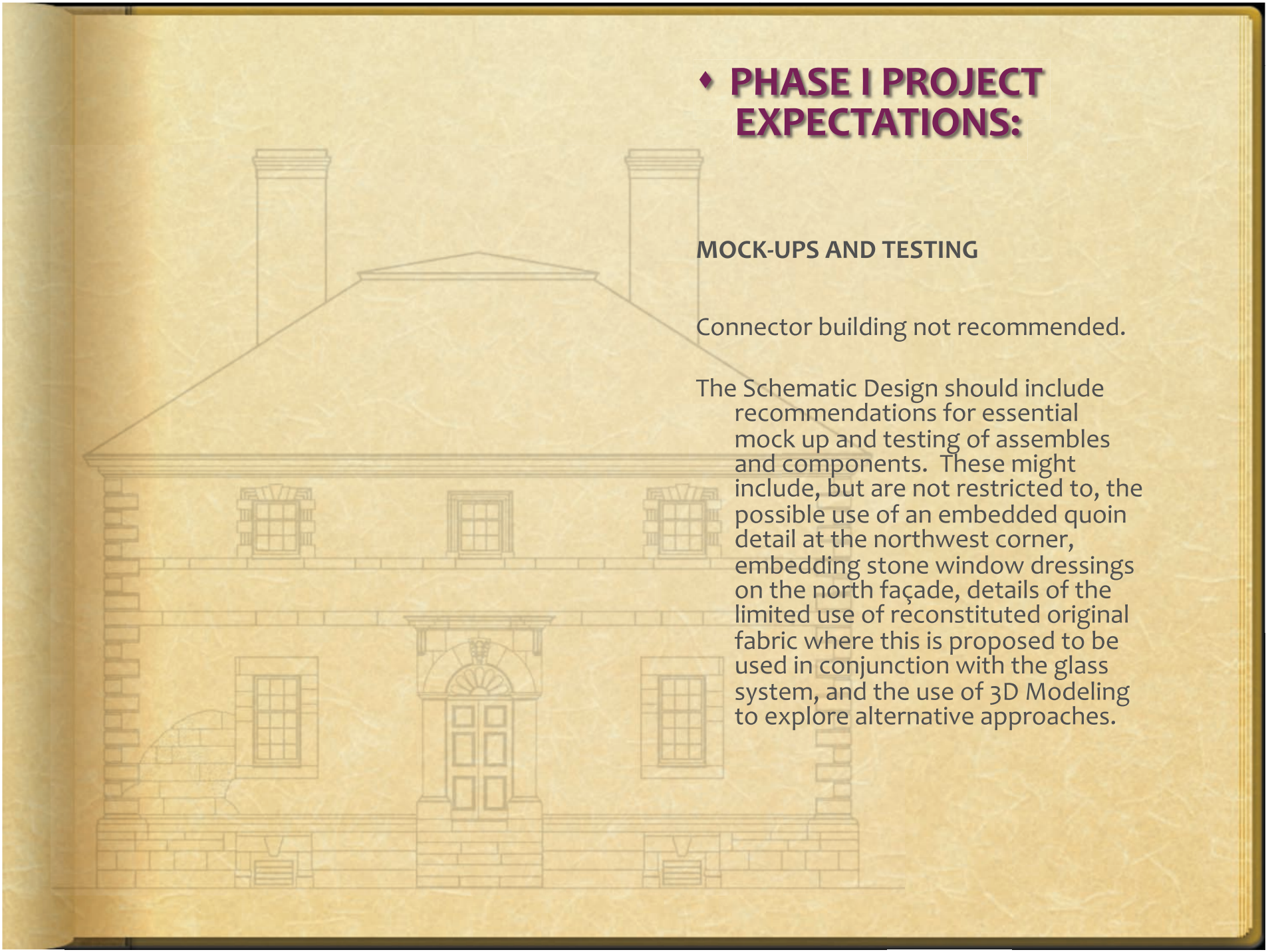


♦ PHASE I PROJECT EXPECTATIONS:

INTERNAL ENVIRONMENT

The Schematic Design must respond to the need to avoid extremes of heat , cold and humidity, and especially the potential for condensation. A temperature range form 50 – 80 degrees F is suggested.

The use of passive systems is strongly encouraged, both as a means to reduce operational costs, and to further the mission of using Menokin as a demonstration of 21st century technology. A goal should be zero energy demand from external sources. It is anticipated that proposed systems will have been subjected to appropriate modeling and simulation testing.

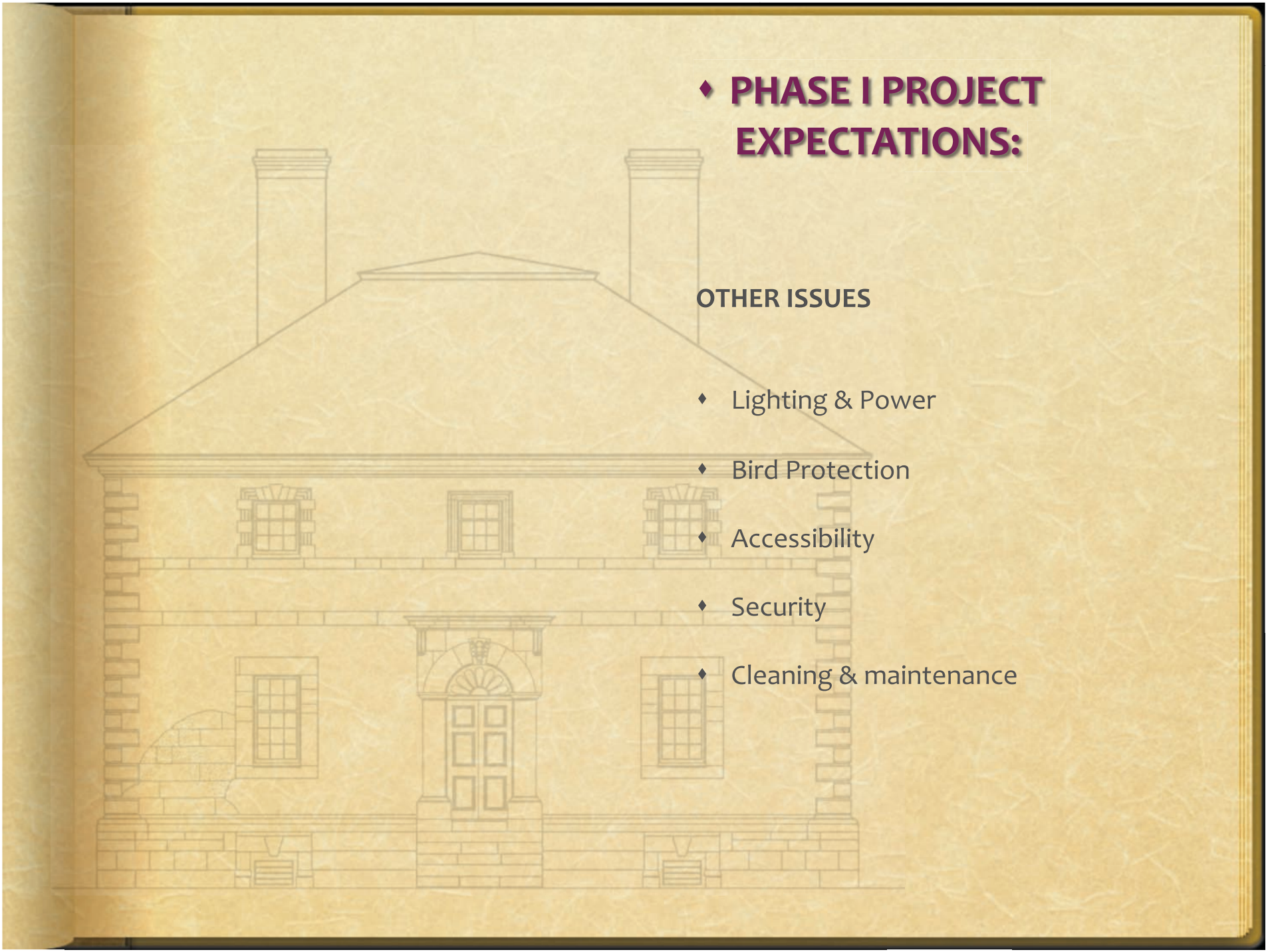


♦ PHASE I PROJECT EXPECTATIONS:

MOCK-UPS AND TESTING

Connector building not recommended.

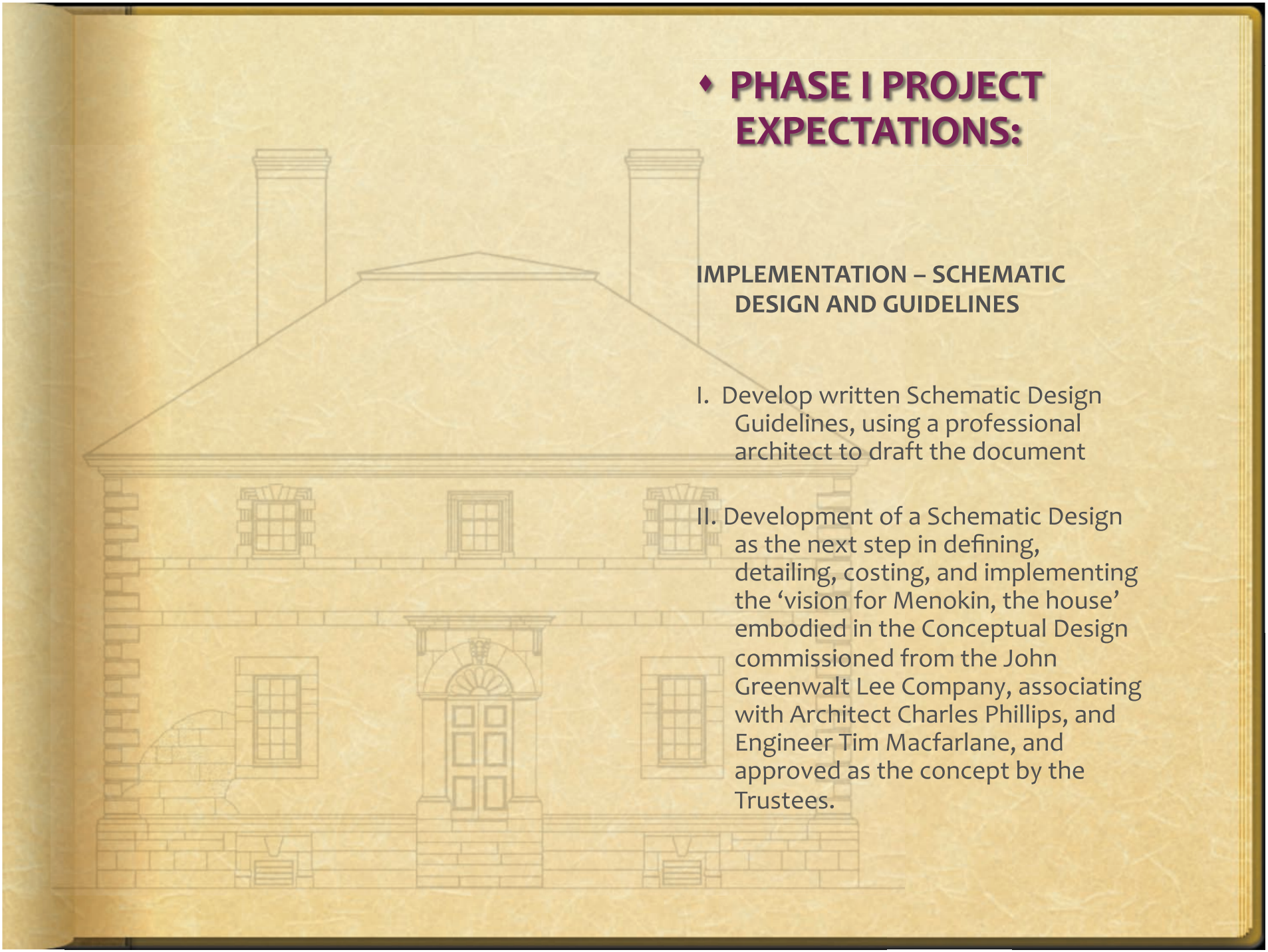
The Schematic Design should include recommendations for essential mock up and testing of assembles and components. These might include, but are not restricted to, the possible use of an embedded quoin detail at the northwest corner, embedding stone window dressings on the north façade, details of the limited use of reconstituted original fabric where this is proposed to be used in conjunction with the glass system, and the use of 3D Modeling to explore alternative approaches.



♦ PHASE I PROJECT EXPECTATIONS:

OTHER ISSUES

- Lighting & Power
- Bird Protection
- Accessibility
- Security
- Cleaning & maintenance



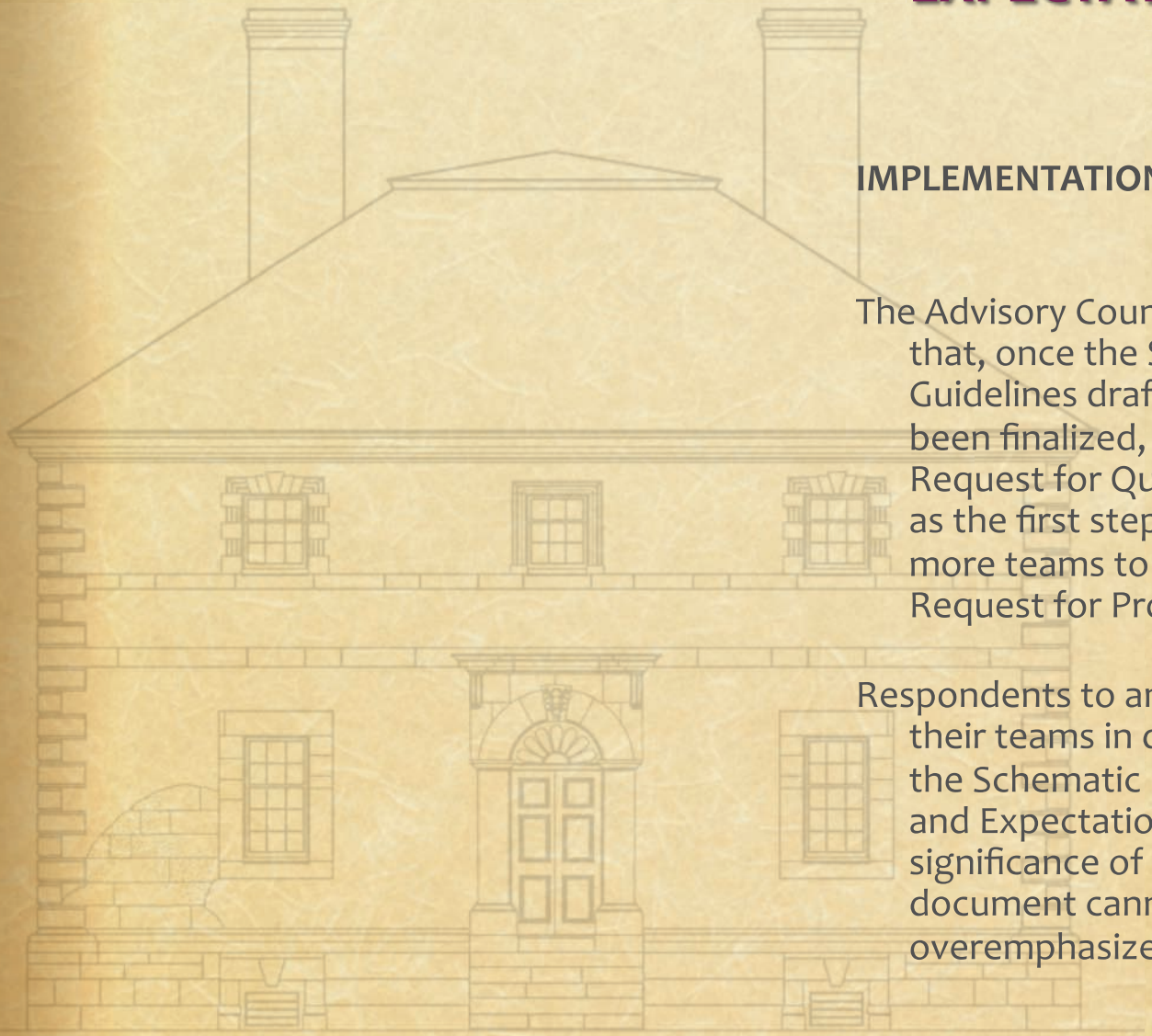
♦ PHASE I PROJECT EXPECTATIONS:

IMPLEMENTATION – SCHEMATIC DESIGN AND GUIDELINES

I. Develop written Schematic Design Guidelines, using a professional architect to draft the document

II. Development of a Schematic Design as the next step in defining, detailing, costing, and implementing the 'vision for Menokin, the house' embodied in the Conceptual Design commissioned from the John Greenwalt Lee Company, associating with Architect Charles Phillips, and Engineer Tim Macfarlane, and approved as the concept by the Trustees.

♦ PHASE I PROJECT EXPECTATIONS:

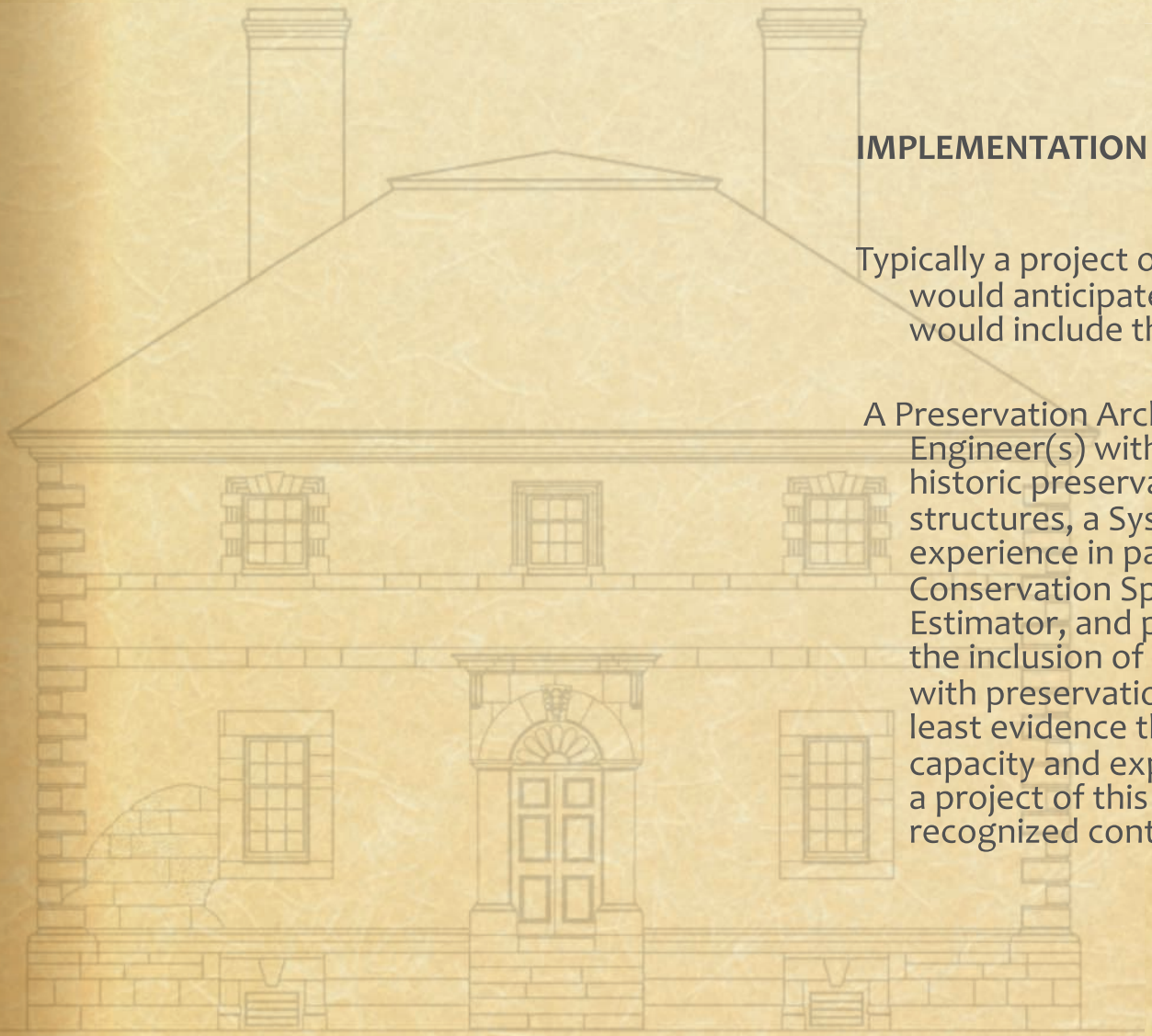


IMPLEMENTATION – RFQ

The Advisory Council recommends that, once the Schematic Design Guidelines drafted above have been finalized, the Trustees issue a Request for Qualifications (RFQ) as the first step in selecting one or more teams to respond to a Request for Proposal (RFP).

Respondents to an RFQ assemble their teams in direct response to the Schematic Design Guidelines and Expectations, so the significance of the content of this document cannot be overemphasized.

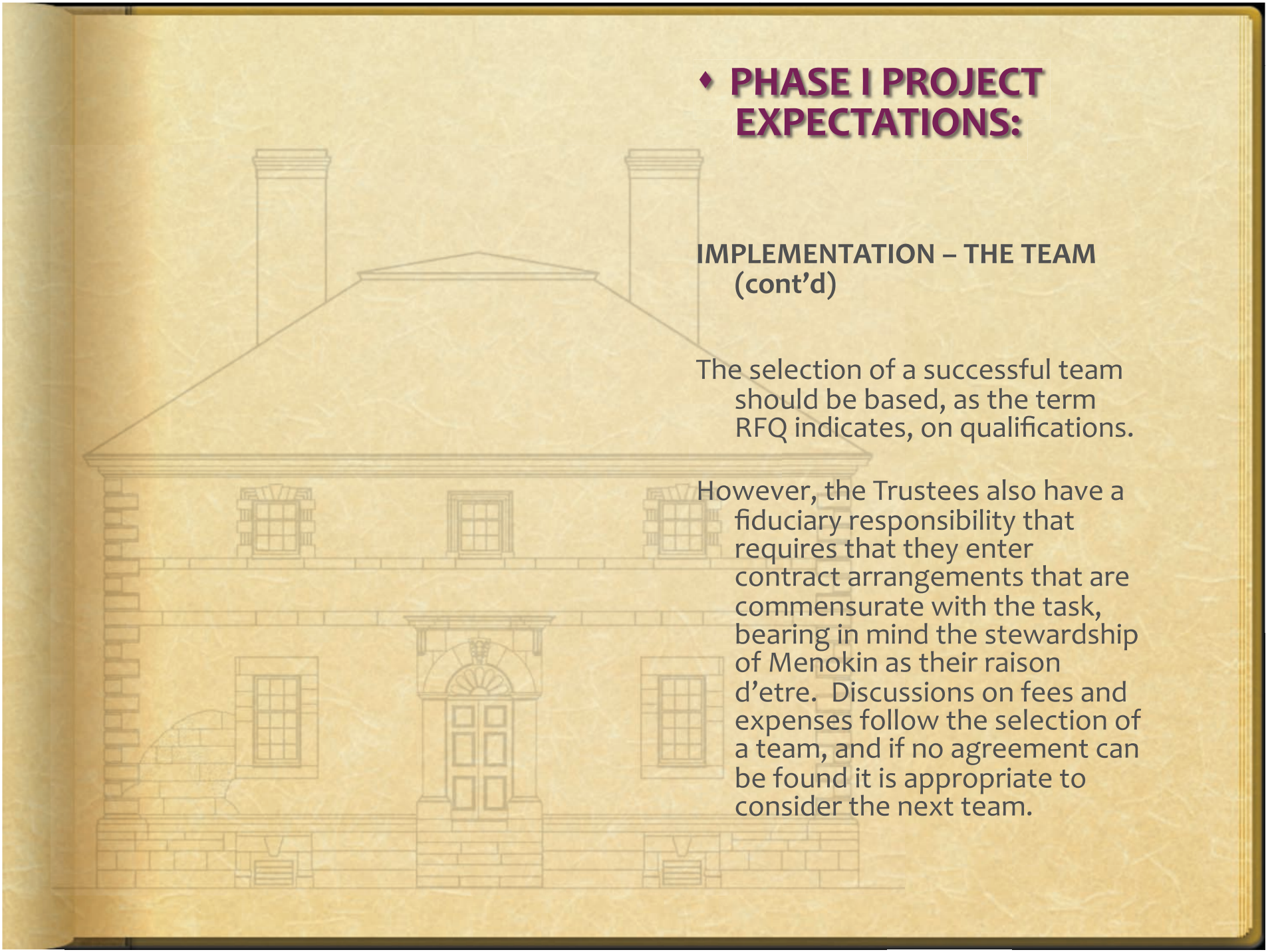
♦ PHASE I PROJECT EXPECTATIONS:



IMPLEMENTATION – THE TEAM

Typically a project of this complexity would anticipate that the team would include the following:

A Preservation Architect, Structural Engineer(s) with experience with historic preservation and glass structures, a Systems Engineer with experience in passive systems, Conservation Specialists, Cost Estimator, and possibly anticipate the inclusion of a General Contractor with preservation experience, or at least evidence that the team has the capacity and experience to manage a project of this complexity using recognized contract teams.



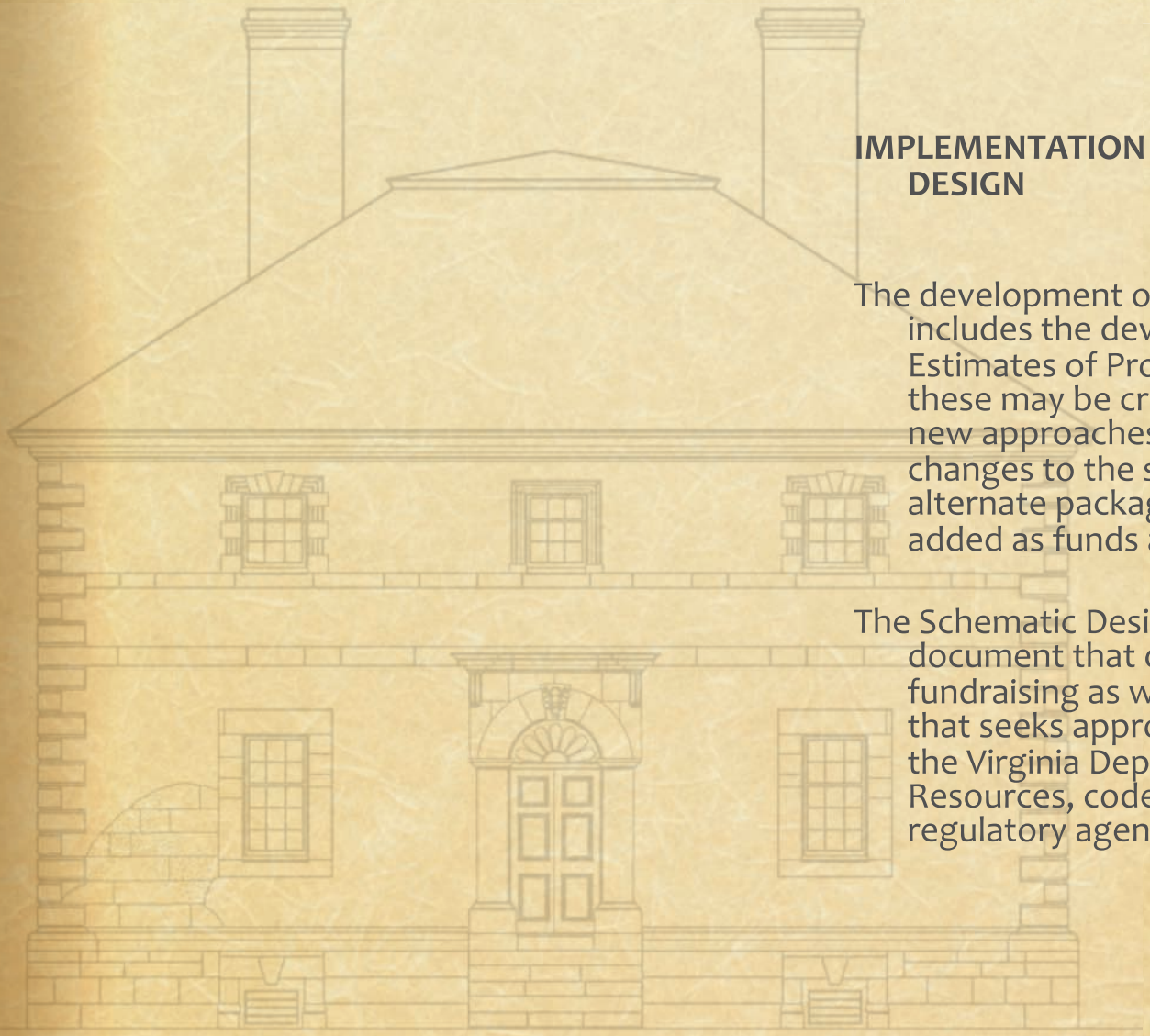
♦ PHASE I PROJECT EXPECTATIONS:

IMPLEMENTATION – THE TEAM (cont'd)

The selection of a successful team should be based, as the term RFQ indicates, on qualifications.

However, the Trustees also have a fiduciary responsibility that requires that they enter contract arrangements that are commensurate with the task, bearing in mind the stewardship of Menokin as their raison d'etre. Discussions on fees and expenses follow the selection of a team, and if no agreement can be found it is appropriate to consider the next team.

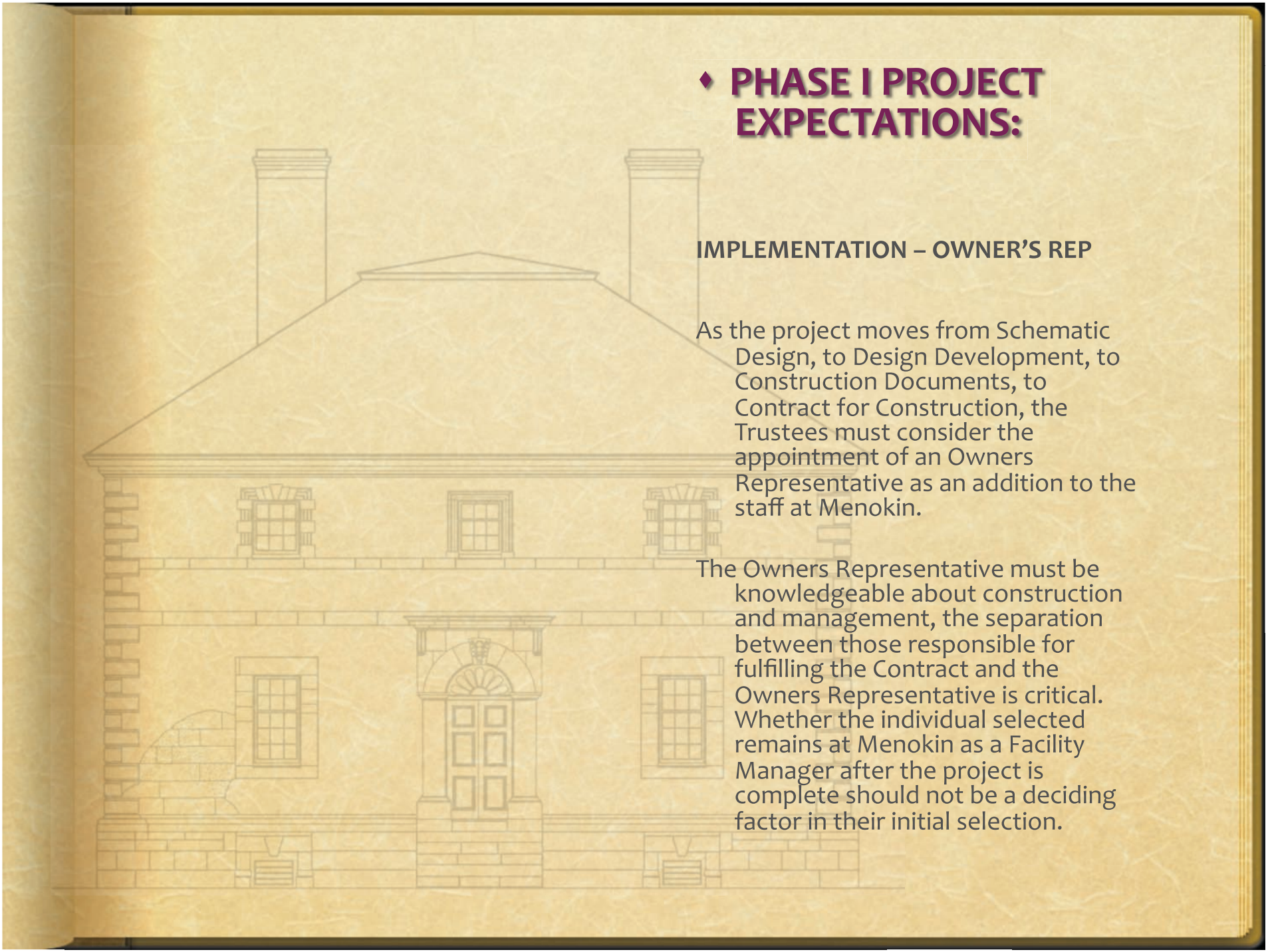
♦ PHASE I PROJECT EXPECTATIONS:



IMPLEMENTATION – SCHEMATIC DESIGN

The development of a Schematic Design includes the development of Estimates of Probable Cost, and these may be created to allow for new approaches and materials, changes to the scope of work, and alternate packages that can be added as funds allow.

The Schematic Design is thus the document that defines the goals for fundraising as well as the vehicle that seeks approval in principle from the Virginia Department of Historic Resources, code officials, and other regulatory agencies.



♦ PHASE I PROJECT EXPECTATIONS:

IMPLEMENTATION – OWNER'S REP

As the project moves from Schematic Design, to Design Development, to Construction Documents, to Contract for Construction, the Trustees must consider the appointment of an Owners Representative as an addition to the staff at Menokin.

The Owners Representative must be knowledgeable about construction and management, the separation between those responsible for fulfilling the Contract and the Owners Representative is critical. Whether the individual selected remains at Menokin as a Facility Manager after the project is complete should not be a deciding factor in their initial selection.