

AQUIA HARBOUR PRE-SCHOOL



Aquia Harbour Pre-School & Community Space

An existing one-room school re-imagined into a modern, light-filled “pavilion” for a pre-school and community space.

HISTORY & CONTEXT

- Aquia Harbour is a community located in Stafford County, Virginia
- The community includes a variety of parks, playgrounds, and Aquia Harbour Marina.
- The historic Aquia Creek runs through the community providing a navigable waterway leading to the Potomac River.
- Aquia Harbour Preschool (AHPS) has been serving the community since 1977.

PROGRAM ELEMENTS:

- Circulation Areas
- Classroom Spaces
- Care/Administration Spaces
- Service/Utility Spaces
- Flexible-Space for community use

STRUCTURAL REVIEW:

- Determined feasibility of reusing majority of existing building structure in new design.

SOLAR AND SITE ANALYSIS:

- Informed the design footprint and program placement.

DESIGN COMPONENTS:

1. Lighthouse:

- Echoes the existing lighthouse feature located at the Aquia Harbour marina.
- Taller, skylight structure datum used to orient the plan components, as well as the user.
- North-oriented to capture indirect natural daylight.
- Reduces electric lighting needs in classrooms.

2. Pavilion:

- Uses original building for learning spaces in a "one-room schoolhouse" concept.
- Celebrates reuse with full-height ceilings and exposed collar-tie structure.
- Creates a tent-like atmosphere for learning spaces.
- Organized into separate areas (play, eating/learning, reading/soft-zone, group/audio-visual)
- Intended as a flex-space for community use.

3. Loggia:

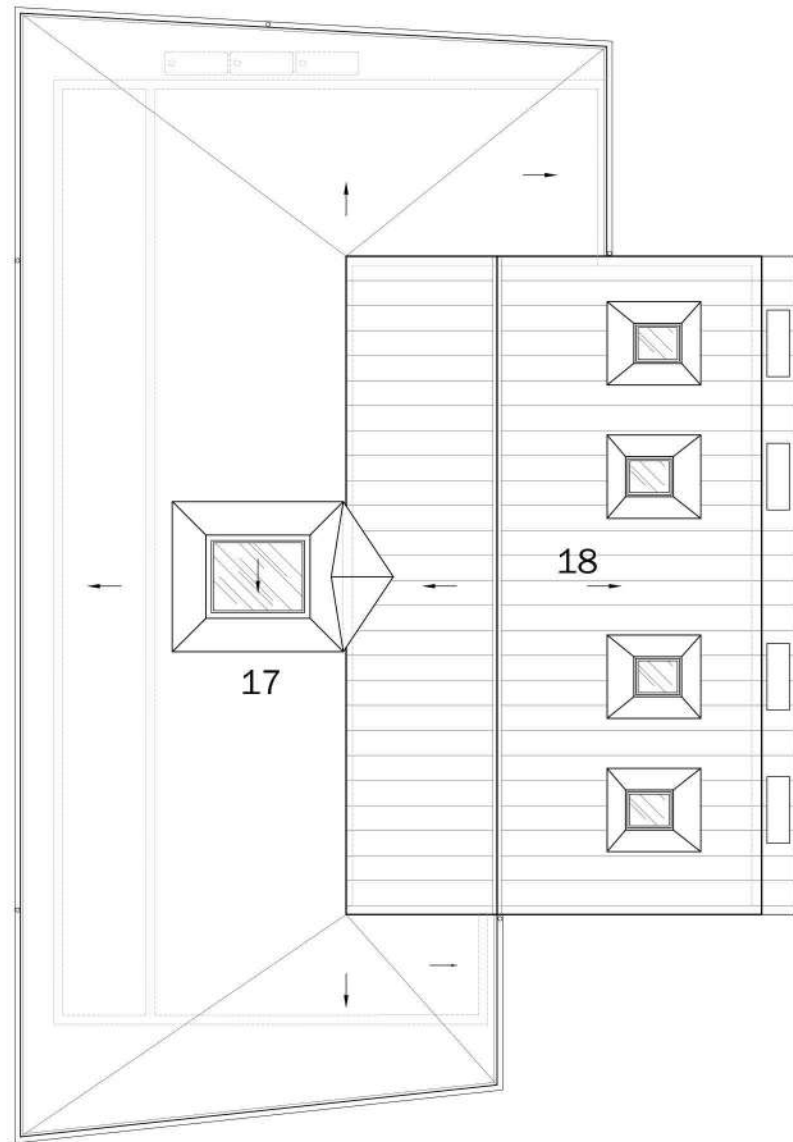
- Establishes a new and obvious front to the building.
- New entryway and signage integral to design
- Relocates main entry access to left side for uninterrupted pavilion use.
- "Wrapper" structure houses support and administrative spaces outside of pavilion.
- Provides singular access path for AHPS program needs.



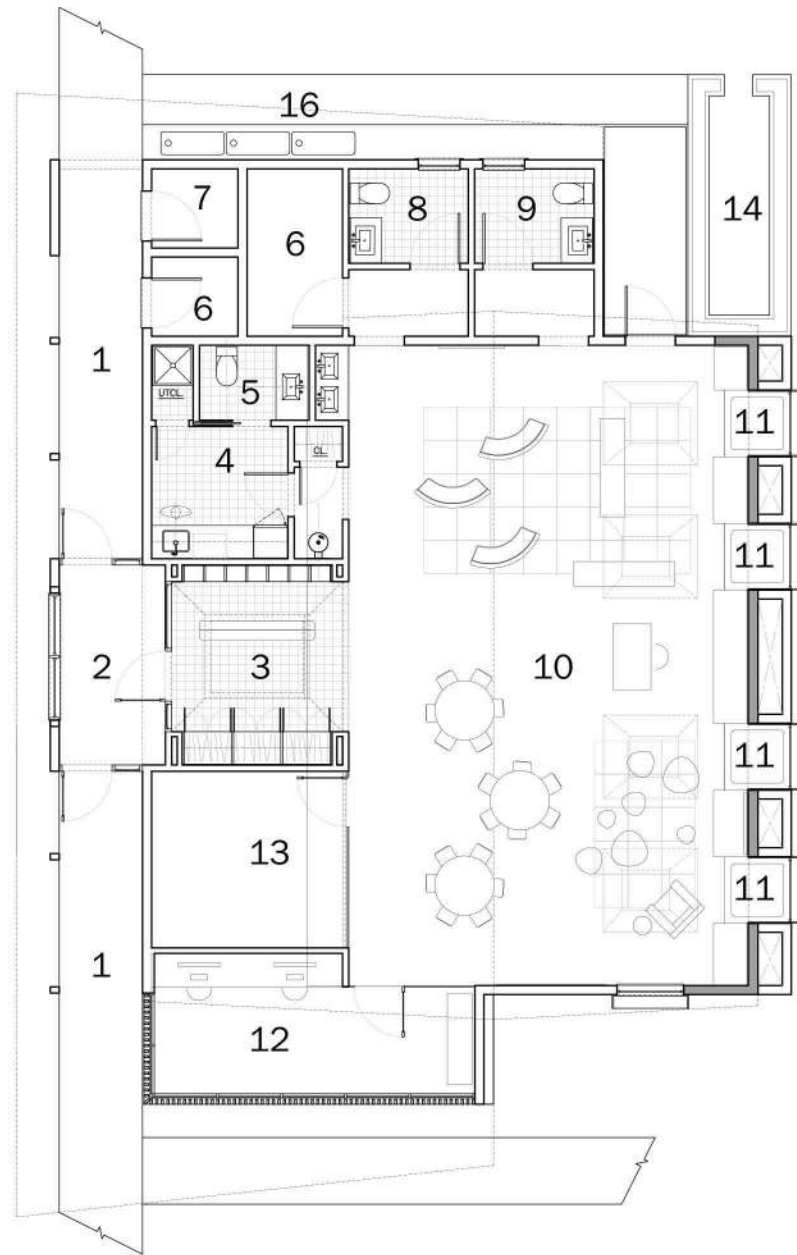
Aerial View



Existing



ROOF PLAN



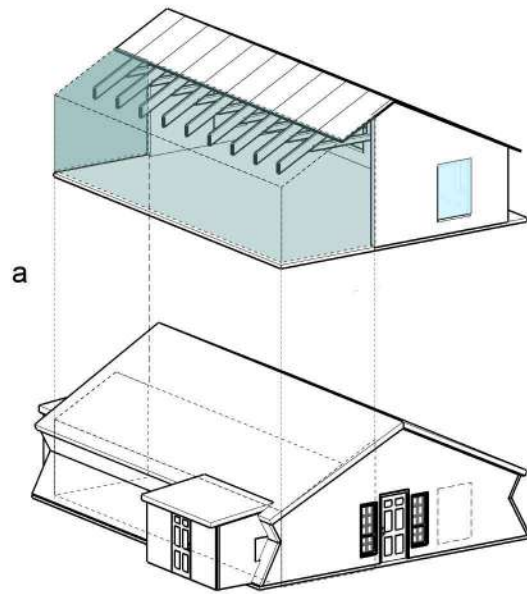
FLOOR PLAN



- | | | |
|---------------------|---------------------------|----------------------------------|
| 1. LOGGIA | 9. RESTROOM 02 | 16. RAIN WATER TANKS |
| 2. AIRLOCK | 10. CLASSROOM | 17. MAIN SKYLIGHT / "LIGHTHOUSE" |
| 3. FOYER / SKYLIGHT | 11. WINDOW NOOK / STORAGE | 18. SECONDARY SKYLIGHTS |
| 4. KITCHEN | 12. OFFICE | |
| 5. STAFF WASHROOM | 13. CARE & DRILL | |
| 6. STORAGE | 14. GARDEN BED | |
| 7. MECHANICAL | 15. PLAYGROUND | |
| 8. RESTROOM 01 | | |

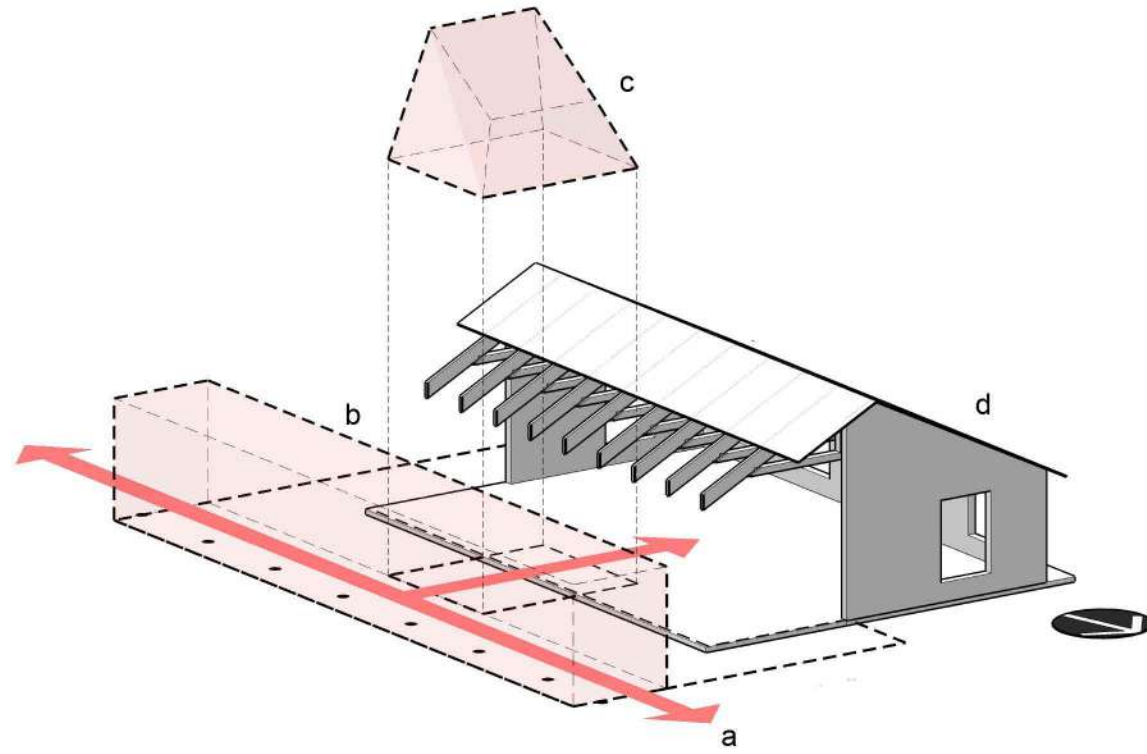


Interior Renderings



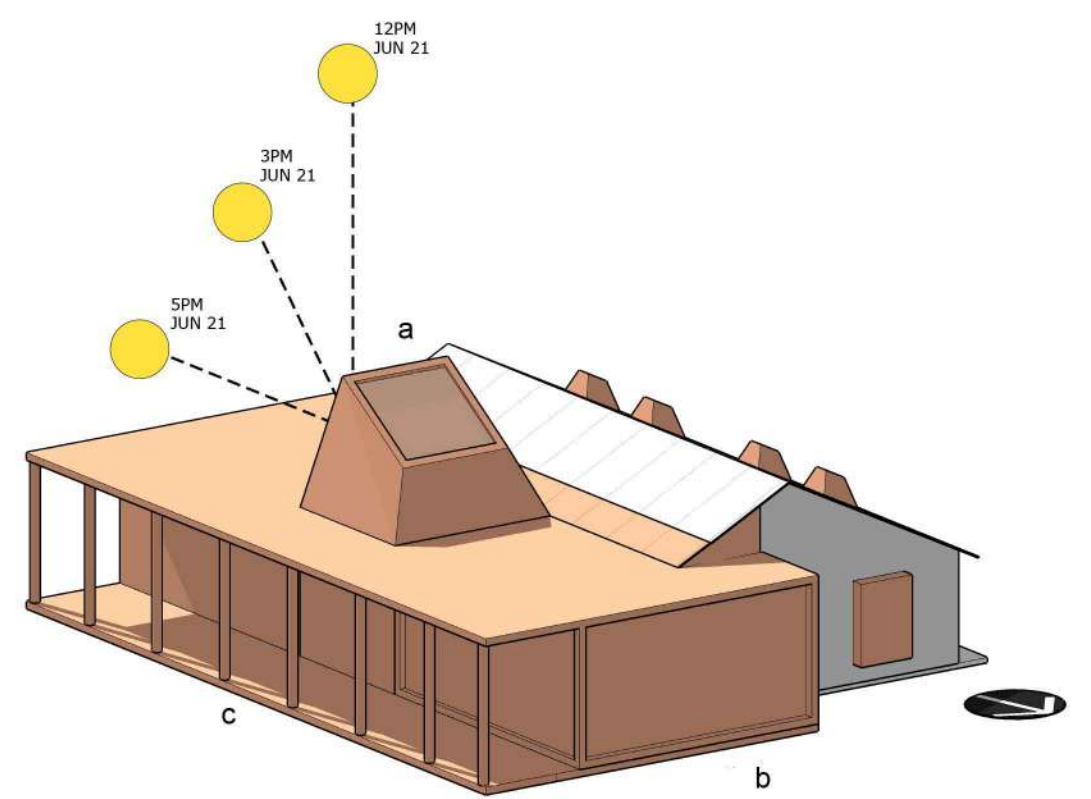
REUSE 01

- a. 3/4 of the existing structure to be removed.



FLOW 02

- a. New path and entry
- b. Loggia + airlock
- c. Skylight "lighthouse" centered to distribute natural lighting in the interiors.
- d. Original structure.

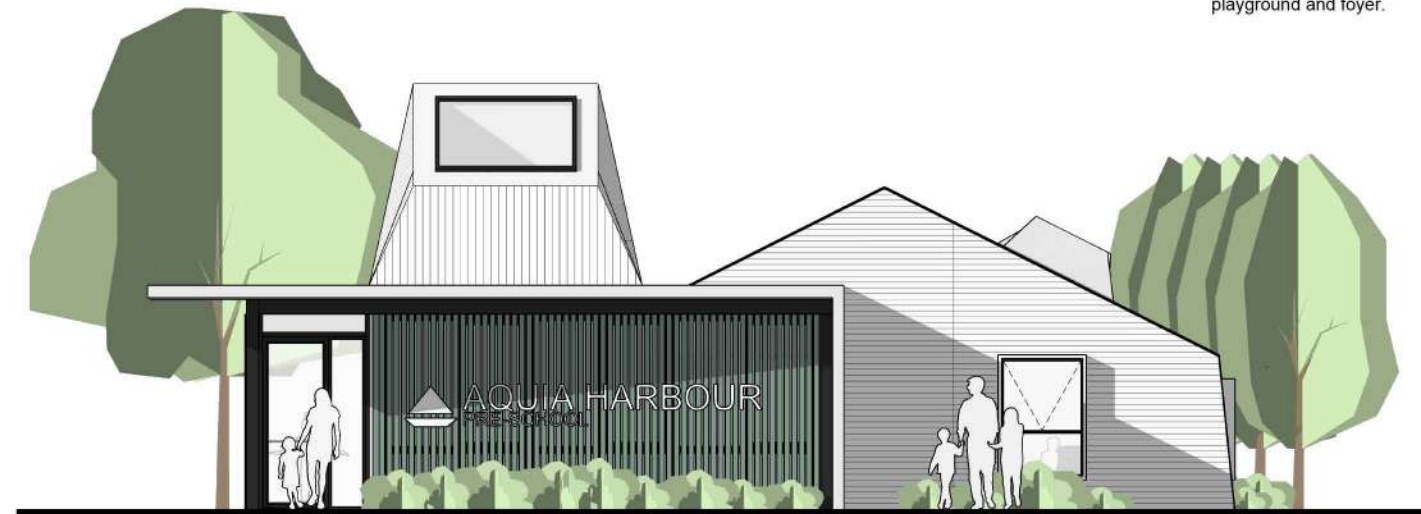


MASSING 03

- a. Skylight tower "lighthouse" oriented north to only capture indirect sunlight all year-round.
- b. Teacher's office at entrance to provide visuals of incoming visitors and students.
- c. Lateral loggia to connect to playground and foyer.



East Elevation



Front Elevation



West Elevation

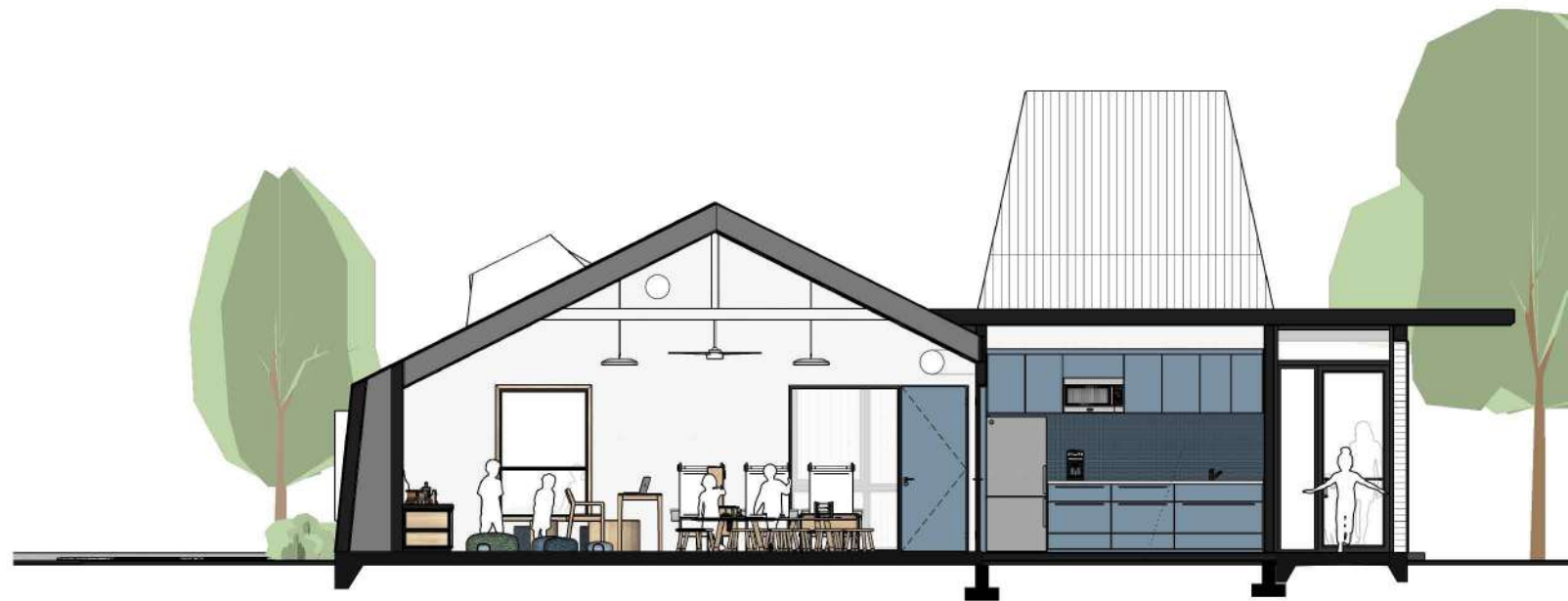
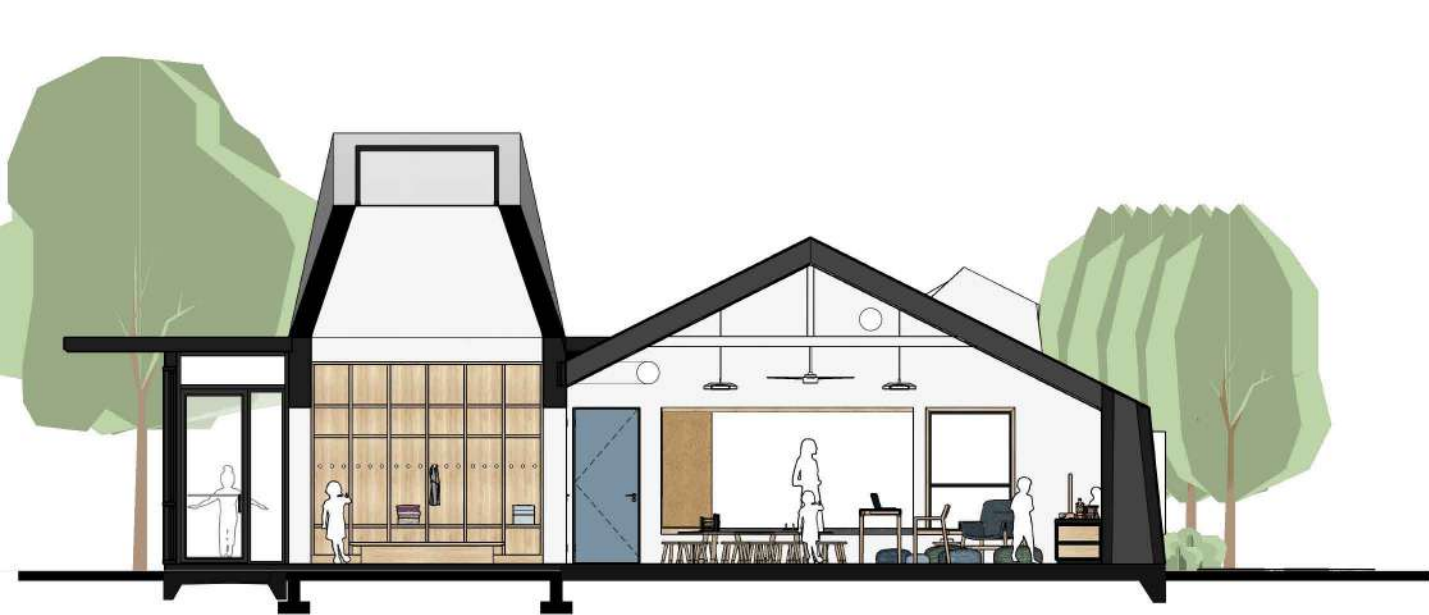
Rear Elevation



West Rendering



Rear Rendering



Skylight Sections



Loggia Renderings



Skylight Sections

