Semans-Griswold Environmental Hall

LOCATION

Washington College,
Chestertown MD

CATEGORY

Non-Residential
New Construction

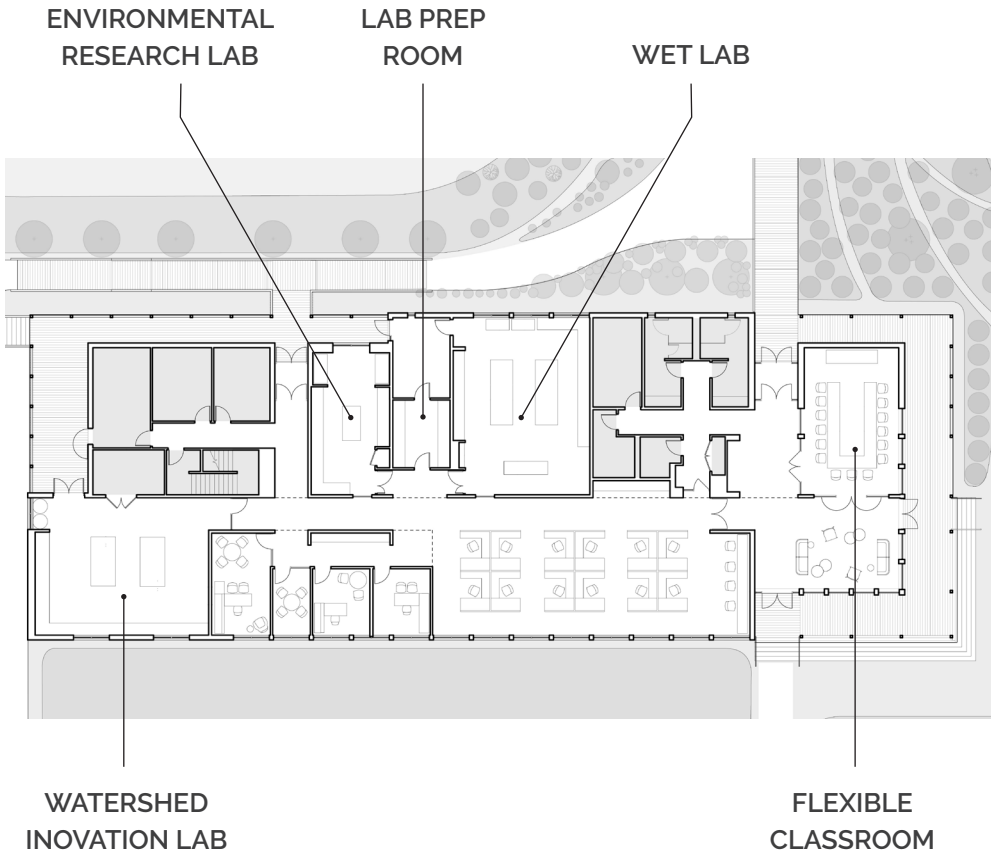
Semans-Griswold Environmental Hall (SGEH), home of Washington College's Center for Environment and Society, commands a picturesque site on the Chester River. The river is physically and programmatically integrated in every aspect of its design. In addition to providing an idyllic setting, the river acts as a living laboratory that affords students with an immersive, hands-on experience in support of the building's programs in environmental science and wetlands ecology.

A testament to Washington College's waterfront renaissance, the net-positive building relies solely on renewable energy sources to operate pollutant-free year-round. Designed to meet the rigorous standards of the Living Building Challenge Petal Certification, Semans-Griswold is expected to produce 105 percent of its energy needs on-site utilizing rooftop photovoltaic panels and a ground-source heating and cooling system.

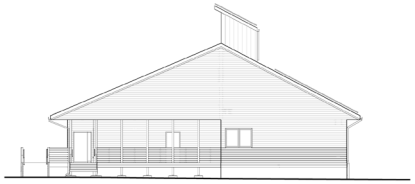
The design features clear visual and physical connections to the Chester River which reinforce the work done in the field and in the lab. Inspired by biophilic design, the building celebrates daylight with a rooftop clerestory and connections to the riverfront landscape with ample glazing. A welcoming wrap-around porch with warm wood finishes complements the scale of the building and its natural setting.

Once a petroleum fuel depot and agricultural chemical storage and distribution facility, Semans-Griswold Environmental Hall renewed the site into an ecologically restorative landscape. Pedestrian paths roam through a diverse mix of meadow grasses and other native plantings that transform the previously contaminated site to a productive habitat area. Curvilinear paths and carefully designed landscapes frame views to both the river and building.

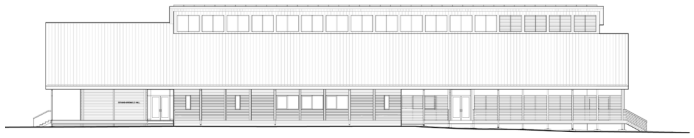
Site plan



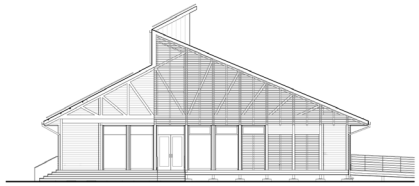
Floor plan



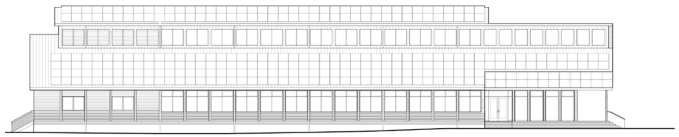
West



North



East (water side)

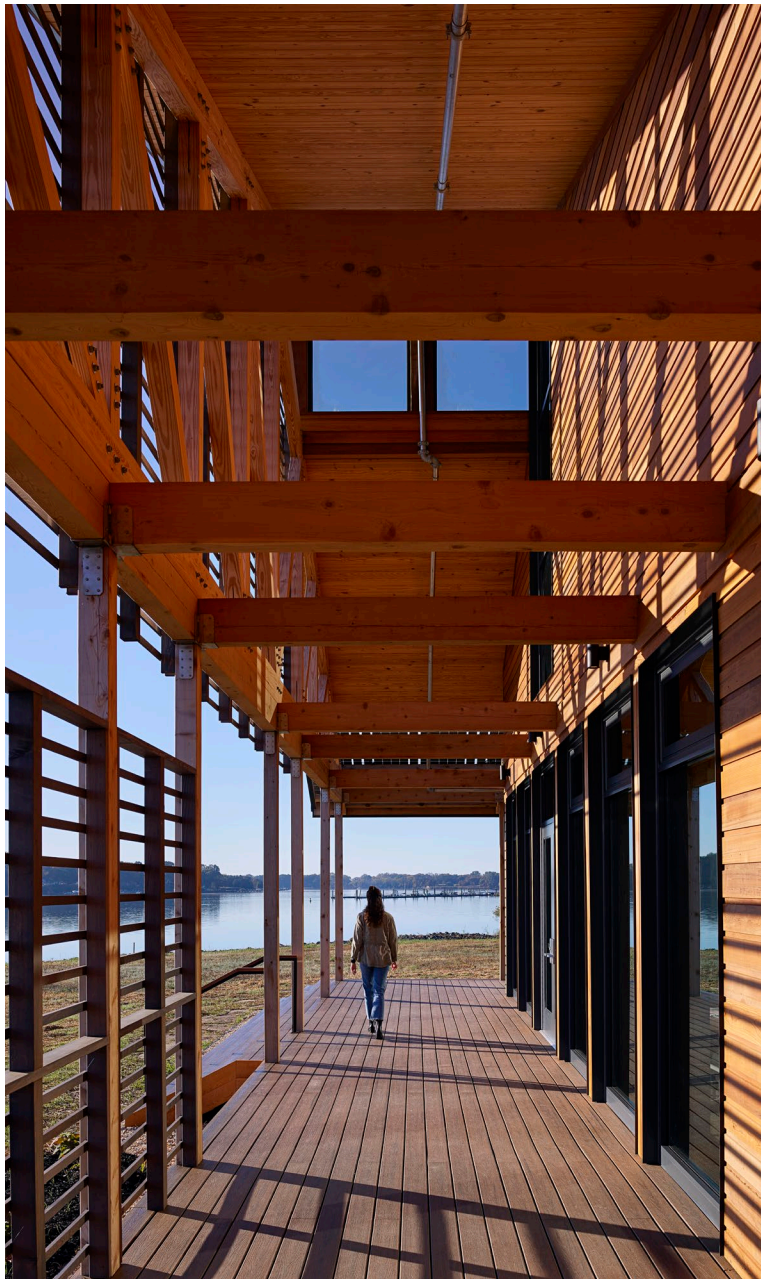


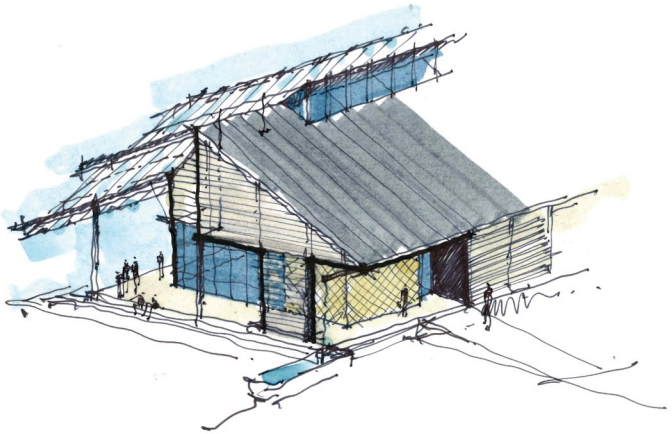
South (water side)

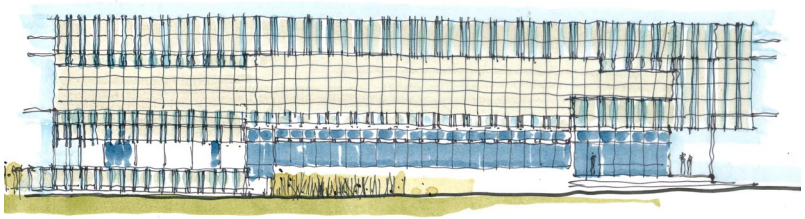
The honesty of structural expression serves to inspire students while recalling the history of Chestertown and the Chester River.

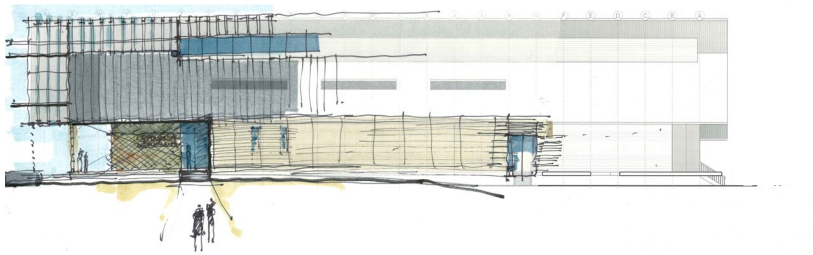
Craft and detail are displayed in the building's cedar siding, porches and screens, and exposed wood roof trusses.

The simple modesty of form and materials recall the surrounding working waterfront, as well as the tidewater vernacular of boat sheds, warehouses, and fisheries common to the area.



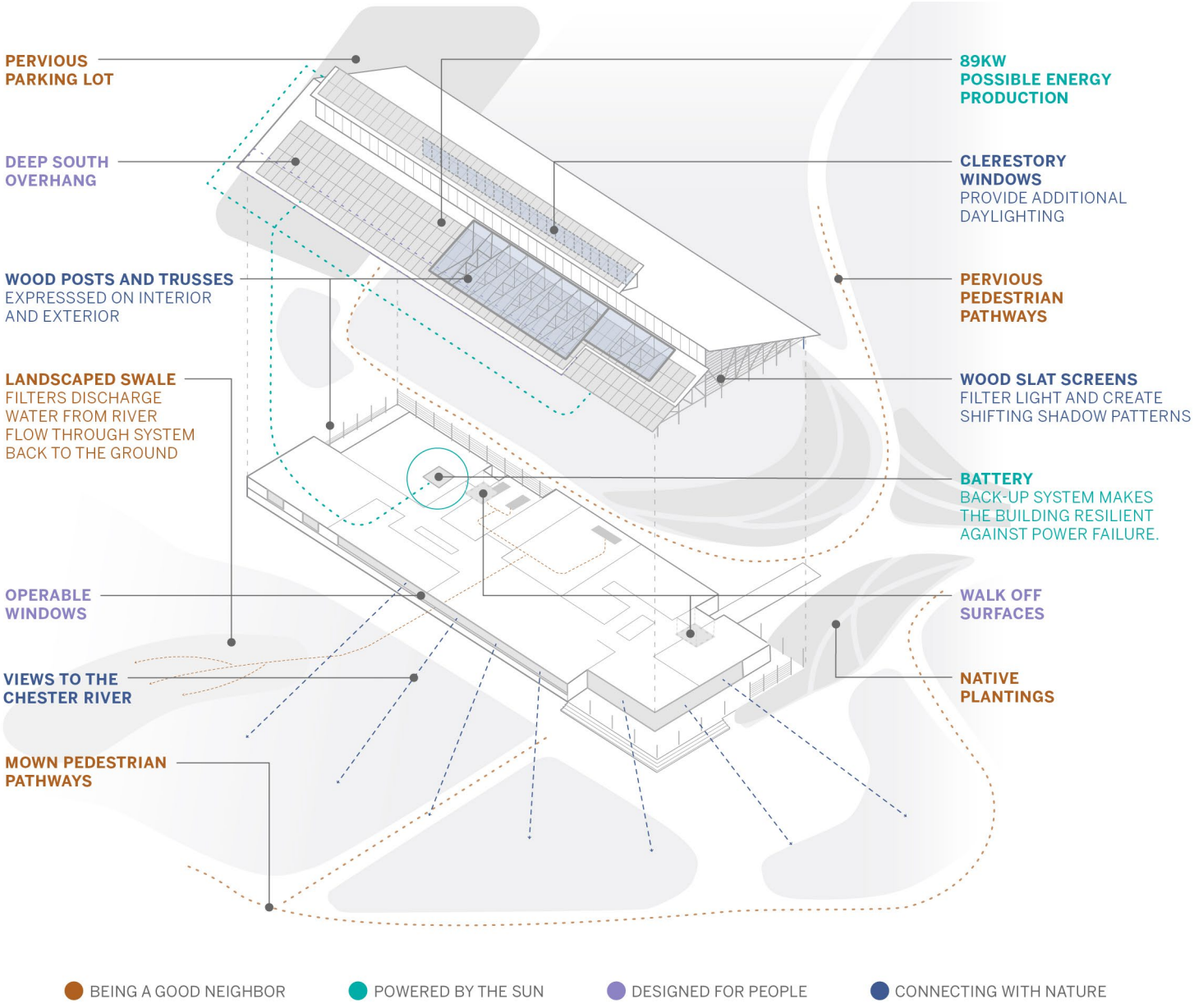






Heavy timber trusses, cedar siding, and maple window trim showcase craftsmanship within each material and design detail while complementing the building's site and context.

Designed to meet the rigorous standards of the Living Building Challenge Petal Certification, high-efficiency systems including a geothermal field and dynamic filtration system elevate building performance and comfort.



105%

projected building energy needs produced on-site

89

kW rooftop solar array

60

kWh energy storage system

35

anticipated EUI (not including on-site energy production)

386

tons of carbon sequestered in the landscape annually

The interior circulation spine is a vaulted space with clerestory reflecting the building's exterior profile bringing daylight deep into the center of the building.

An innovative wet lab with a river flow-through system pumps water from the Chester River directly into the lab to be tested in a controlled environment. The capabilities of these labs create a regional hub for hands-on research of the Chester River, serve as a magnet for thought leadership centered on the environment, and allow the river to be used as a living laboratory. The Center for Environment and Society's mission recognizes that we live in a world with increasing environmental threats rapidly reaching crisis levels and works to address these issues in direct and meaningful ways.