



**Immersive Living and Learning Environment—**

Chatham University Eden Hall Campus incorporates traditional and innovative hybrid systems representing “old farm” and “new farm,” and invites students and visitors to explore the shifting cultural relationship with nature.



### ENERGY

- E1 Energy Loop ———
- E2 Rooftop Solar PV
- E3 Rooftop Solar Thermal
- E4 Solar Canopy
- E5 Compost Heat Recovery
- E6 Geothermal Array
- E7 Radiant Floor Heating
- E8 Mixed Mode Ventilation
- E9 High-efficiency Mechanical w/Heat Recovery
- E10 High-efficiency Lighting
- E11 Real-time Energy Monitoring Display
- E12 Energy Positive Campus
- E13 Site Lighting Designed to Dark Sky Initiative
- E14 Solar Sunshades
- E15 Radiant Ceilings—Heating and Cooling
- E16 Microturbine with Future Biogas Capability

### FOOD

- F1 Agriculture
- F2 Fish Growing and Aquaponics in Aquaculture Lab
- F3 Nutrient Recycling
- F4 Soil Building from Composting
- F5 Fish Waste Used as Fertilizer
- F6 Organic-certified Garden
- F7 Root Cellar

### WATER

- W1 Rainwater Collection
- W2 Wastewater Reuse ———
- W3 Water Conserving Fixtures
- W4 Water Conserving Landscape
- W5 Stormwater Managed on Site with Raingardens
- W6 Real-time Water Monitoring Display
- W7 Constructed Wetland
- W8 Wastewater - - - - -

### TRANSPORTATION

- T1 Shuttle Bus from Campus and from Pittsburgh
- T2 Electric Carts for Campus Maintenance
- T3 Bicycle Sharing Program
- T4 Bicycle Path

### ECOLOGY

- C1 Native Plantings
- C2 Retain Existing Trees
- C3 Drought-tolerant Lawn
- C4 Invasive Management Buffer
- C5 Tenant Farmer

### BUILDING RATINGS

- LEED Platinum
- Living Building Challenge
- Passive House



**Old and New—**  
The intermixing of “old farm” and “new farm” immerses students in inquiry about tradition and innovation.



**Revealing Natural Stormwater Flows**

The campus entrance threshold is situated at the top of the watershed. Students and visitors cross under photovoltaic panels and over constructed wetlands, following the natural flow of stormwater through the site and watershed.



Incorporating Data in the Design—  
Font sizes and relationships on the corten steel entry gates reflect the site's actual soil strata. Additional gates display named and numbered water courses, scaled to illustrate the comparative length of each waterway.



**Site Design Reflects Landscape Patterns—**  
A wall of local Annandale limestone slices through the mosaic field, marking the flow of the watershed through campus.



**Design-integrated Rainwater Flows—**

Rainwater runoff is captured along the base of the wall and raingarden patches, and then flows by gravity to a stilling well at the base of a large tree beyond.



**Integrating History and New Systems—**

Foundation remnants of the pumphouse and iron forge were retained to recall the old farm. The pumphouse foundation features a stilling well and scupper. Water from the scupper continues to highlight the site's water flow.





**Community Performance Space—**

The amphitheater orients views down the ravine, towards raingardens surrounding the stage. The 350-seat venue hosts diverse events, including the Pittsburgh Symphony public summer concert series.



**Opportunities for Engaging Stormwater—**  
A series of raingardens terrace through the event space. Audiences cross the water flow on “leaky berms” and water seeps through limestone walls, recalling the geology of creeks below.



**New Roles for Native Plants in Hybrid Systems—**

The mosaic field incorporates native species organized in rows to reflect the site's agricultural history, and immerse diners in an experiential connection to the local food environment.



**Site as Classroom—**

The mosaic field is filled with autumn color. The site is integrated with the Field Lab; roll-up doors reinforce connections with the constructed wetlands and aquaculture.



**Water Research—**

Monitoring of the on-lot wastewater treatment system is part of the Field Lab experience. Four types of water are available for research and inquiry in the Hoop House: treatment system effluent, rainwater, aquaculture water and city potable water.



**Living and Learning—**

Walking to class, students pass between diners at the Esther Barazzone Center and researchers at the Field Lab.

### Legend

1. Orchard Hall South
2. Orchard Hall North (Future)
3. Field Lab
4. Esther Barazzone Center
5. Hoop House
6. Dairy Barn Cafe
7. Eco Center (Future)
8. New Lodge North (Future)
9. New Lodge South (Future)
10. Drop Off
11. PV Canopy
12. Constructed Wetlands
13. Mosaic Field
14. Amphitheater
15. Classrooms (Future)
16. Geothermal Walls
17. Rain Gardens
18. Pumphouse / Iron Forge Palimpsest

### Site Plan—

