



EXPLORATORIUM AT PIERS 15/17

EHDD | ARCHITECTURE

THE EXPLORATORIUM

Trust | Nurture | Inspire

INTEGRAL
GROUP

PROJECT FACTS

Sustainable Site

- 190,000 SF existing historical building on SF waterfront

Water

- 50-60% water savings
- 1 million gal/yr fixture savings
- Additional 2 million gal/yr by not using cooling tower

Energy

- 57% more efficient than ASHRAE 90.1 Baseline
- ~80% HVAC energy savings
- 47 kBTU/SF - Forecasted

Indoor Environmental Quality

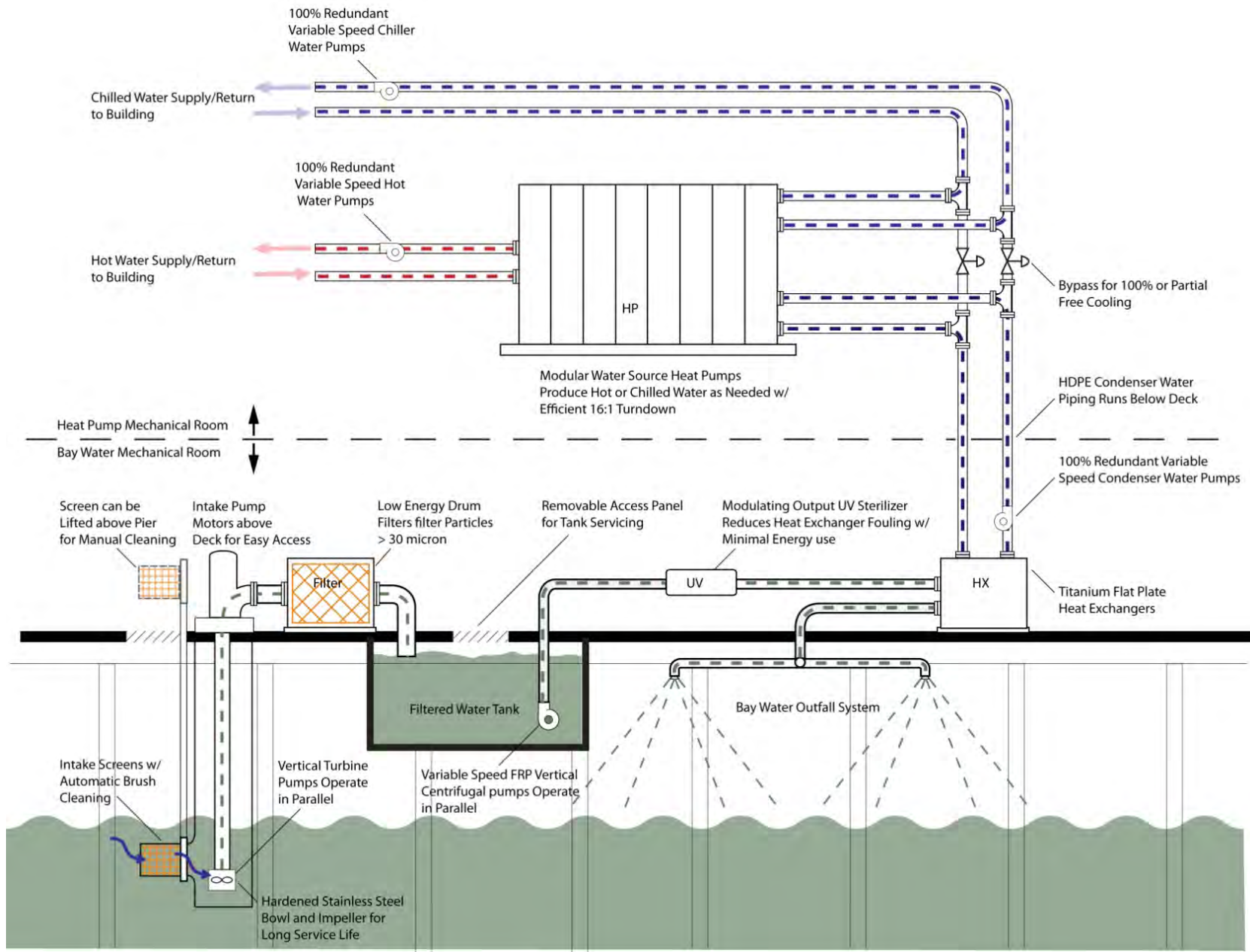
- 100% OA air handlers
- Displacement Ventilation
- 30% over ASHRAE ventilation requirements



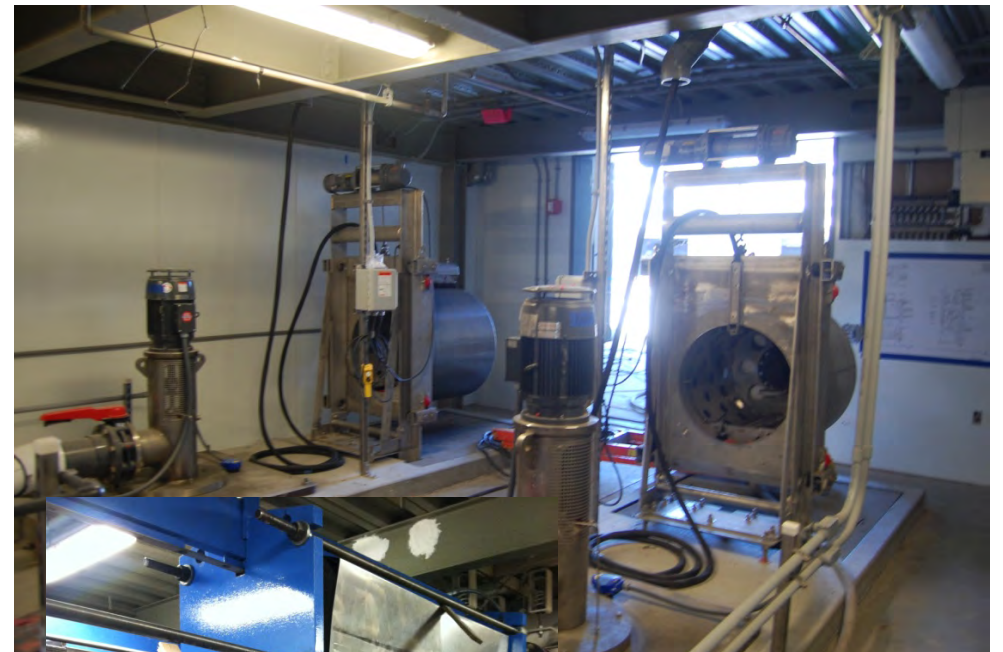
THE BUILDING



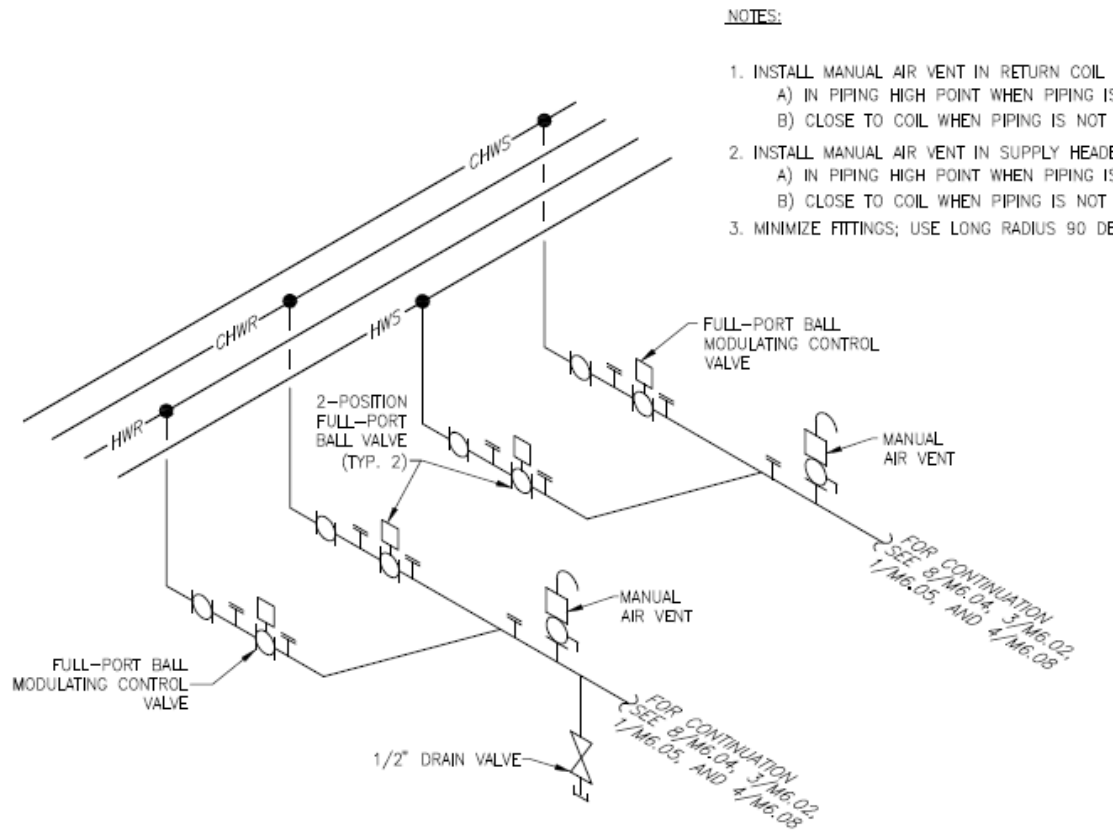
ALL ELECTRIC COMBINED HHW AND CHW CENTRAL PLANT



BAY WATER ROOM EQUIPMENT



4-PIPE SYSTEM W/ ZONAL HW/CHW SWITCHOVER



- Variable Primary Pumping
- Each Zone Modulates to Maintain a Unique Slab Water Avg Temp Setpoint

2ND FLOOR SLAB PREP



CURRENTLY RENEWING



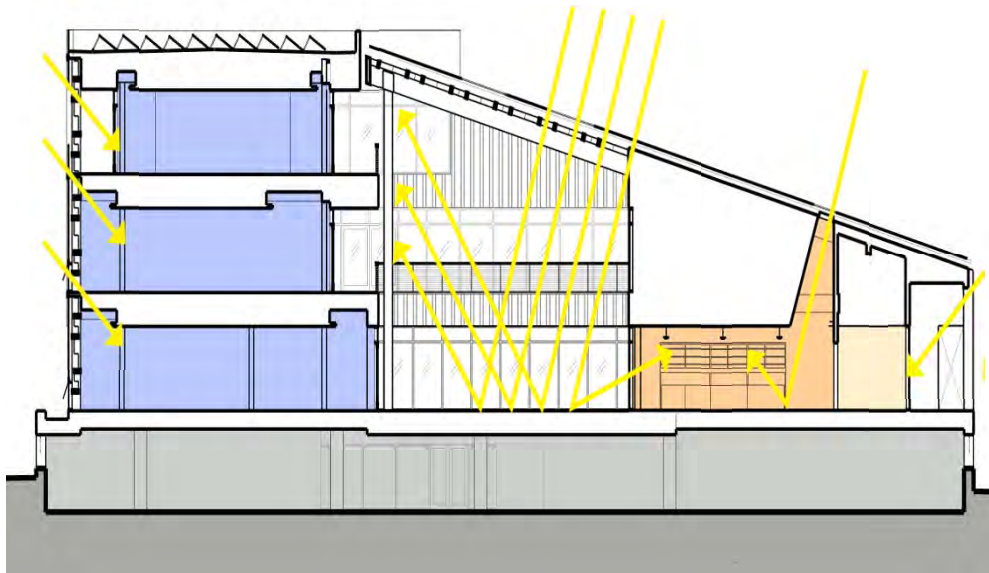
CURRENTLY RENEWING – FIRST NZE MUSEUM



Projects| **J. Craig Venter Institute**



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FOREST STEWARDSHIP COUNCIL (FSC) CERTIFIED WOOD

All structural timber and wood members are certified by FSC. This ensures the sustainable logging of trees and use of plantation grown wood.



RECYCLED CONTENT

Recycled / reclaimed wood is used for the wall framing and possibly in posts. Fly ash is used in the concrete.



NATURAL DAYLIGHTING AND VIEWS

The local micro-climate and views are honored by using filtered direct sunlight in public spaces with strategic glass placement.



USE OF REGIONAL MATERIALS

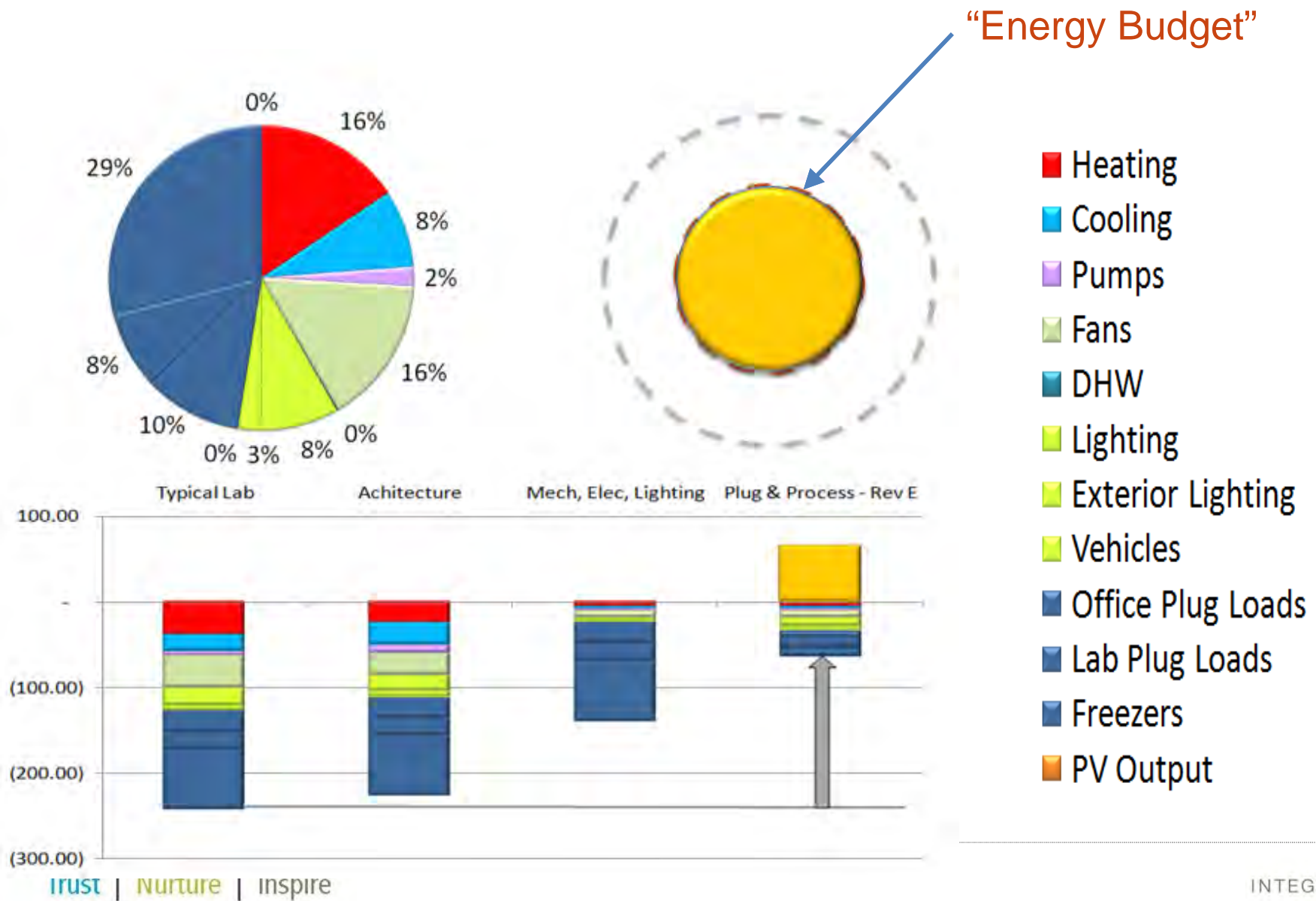
The stone used is from local quarries, and the concrete contains local aggregates.



NATURAL VENTILATION

Operable windows improve the occupant comfort, and radiant floors cool and heat office spaces efficiently without unnecessary fan power.

Projects| J. Craig Venter Institute



Projects | Heritage Buildings – Major Renov.

Empire State Building Retrofit

New York, NY

Office: : New York, NY

Services:
Sustainable Design &
Modeling

*Revitalize & Renew Existing
Infrastructure*

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Talbot Norfolk Triangle EcoDistrict Charette





Thank You!



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