

A S A P

Advancing Sustainability Action Plan

*“To be the leader of sustainability in higher education, a university’s **operations** must support the core mission of education, research, and outreach while promoting a sustainable economy, society, and environment.”* (Steve Golding, EVP)

Operational Sustainability

Endowment Investments

Land Use

Food and Water



Climate
Commitment
and Energy

Waste and Pollution

Built
Environment

Transportation

Materials

SUSTAINABILITY
AT CORNELL

Land Use

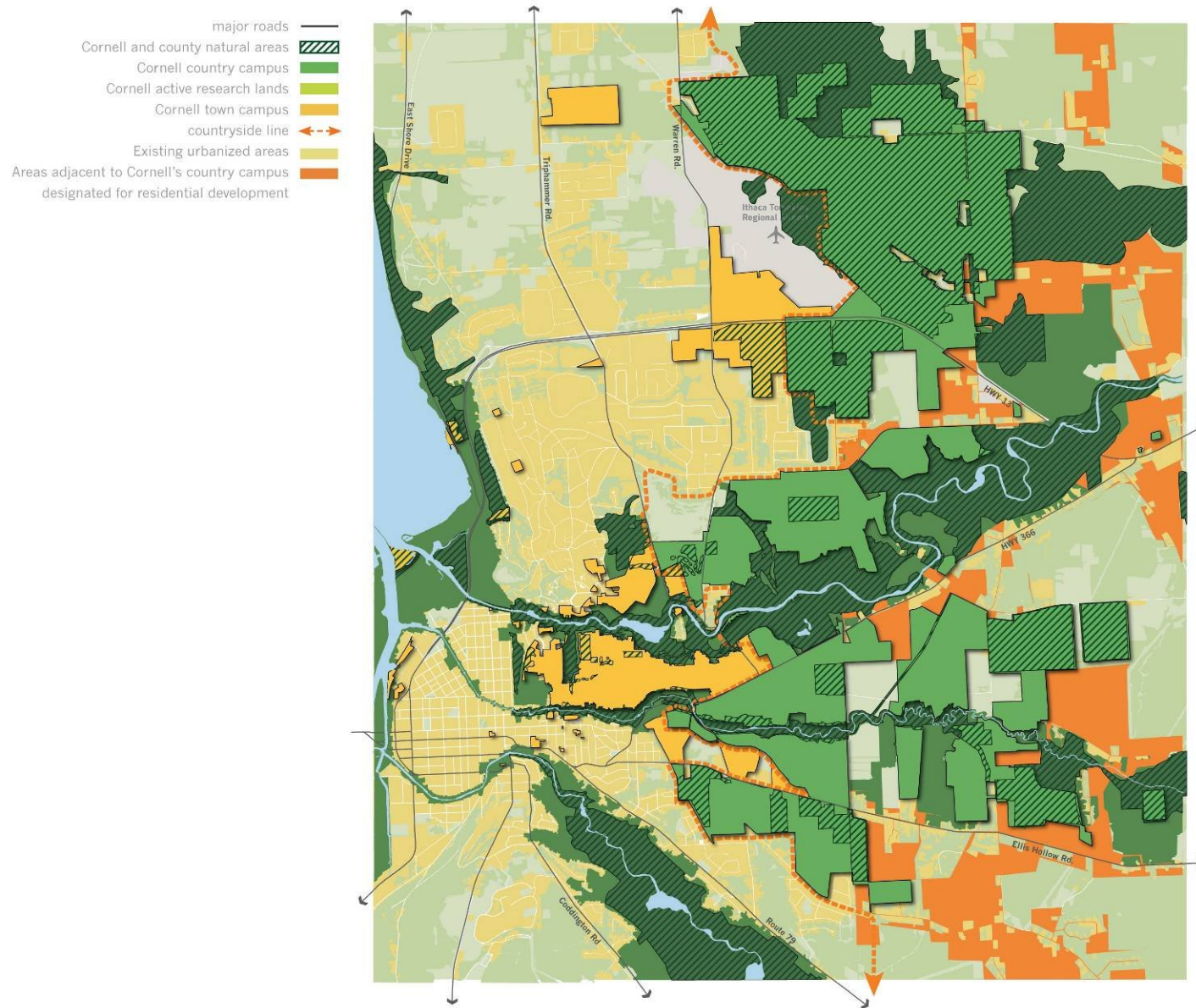
Goal: Promote a compact, environmentally responsible, mixed-use pattern of land development, infrastructure, and transportation network. Conserve and enhance our green spaces, forests, and natural areas to make the most effective use of our physical resources.



Land Use Initiatives

- Campus Master Plan
 - Leverage CMP to generate campus awareness of planning and sustainability
- Naturalization
 - Develop & implement a plan to naturalize portions of the campus
- Sustainable Farms and Forests
 - Management of CALS farms, greenhouses, and research facilities
- Ongoing Initiatives
 - IPM (1986) reduce pesticide use
 - Planting – use of native & low maintenance
 - Deicing – storage, handling & application

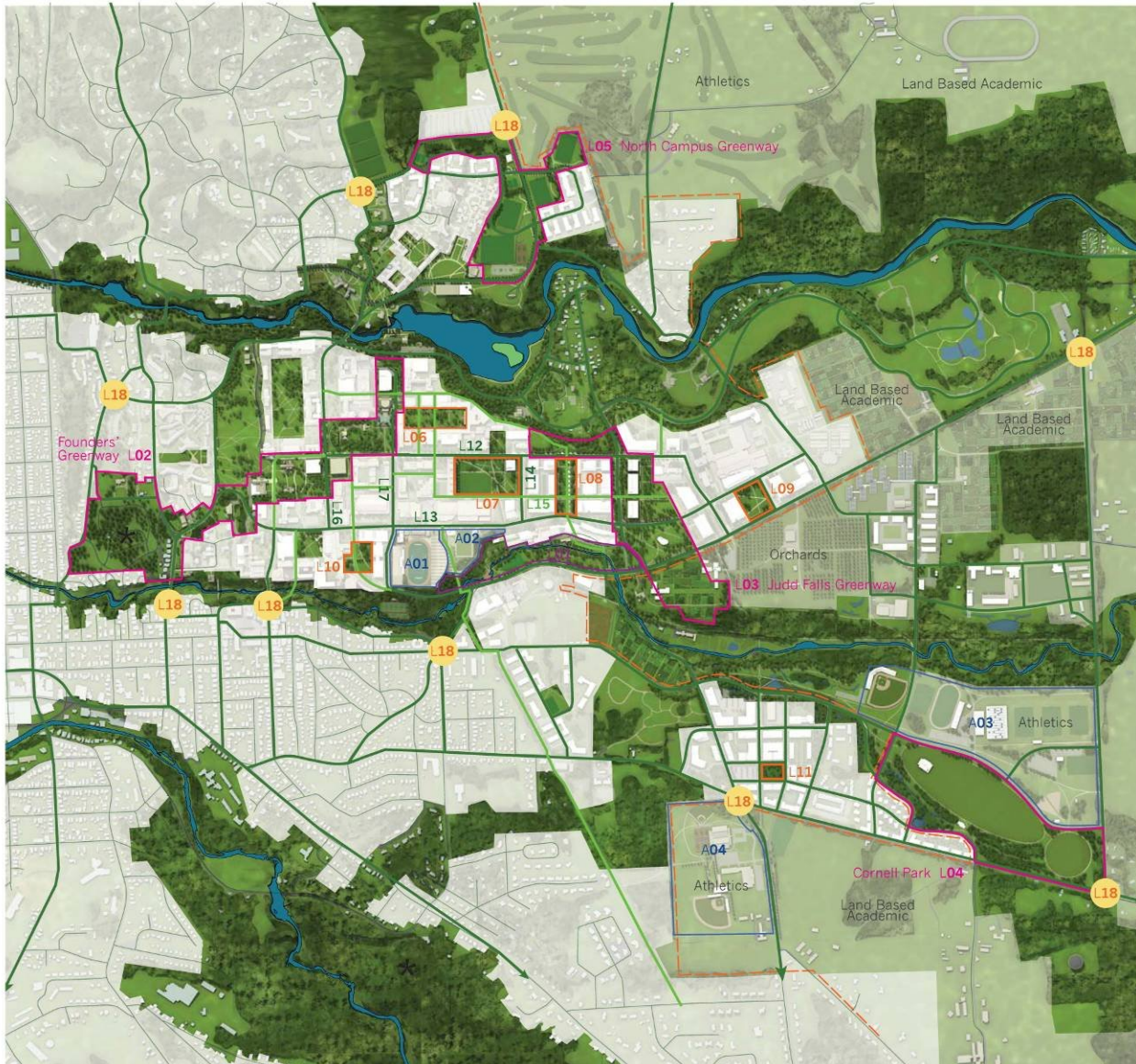
Campus Master Plan



ASAP – Land Use

Campus Master Plan

The Primary Open Space Network Plan



Landscape Initiatives:

- L01 Cascadilla Meadows restoration
- L02 Founders' Greenway landscape plan
- L03 Judd Falls Greenway landscape plan
- L04 Cornell Park
- L05 North Campus Greenway landscape plan
- L06 Ag Quad
- L07 Alumni Quad
- L08 East Center Green
- L09 Vet Quad
- L10 Hoy Green
- L11 East Hill Park
- L12 Tower Road reconstruction
- L13 Campus Road streetscape
- L14 Rice Drive streetscape
- L15 Mid-Campus Walk streetscape
- L16 East Avenue streetscape
- L17 Garden Avenue streetscape
- L18 Campus gateways

* Properties not owned by Cornell

Athletics Initiatives:

- A01 Schoellkopf Stadium
- A02 Kite Hill field and plaza
- A03 Ellis Hollow Athletic Complex
- A04 Pine Tree Road Athletic Complex

* Not all properties on these diagrams are owned by Cornell. They are included here because of the important role they play in the open space network.

Naturalization

- DEFINITION: Naturalization encompasses increasing the environmental benefits, i.e ecosystem services, and reducing the input of resources (for maintenance) without compromising the aesthetic, historic and cultural value of the landscape.



Ecosystem Services

- Global & Local Climate Regulation
- Air & Water Cleansing
- Water Supply & Regulation
- Erosion & Sediment Control
- Habitat Functions
- Waste Decomposition
- Food & Renewable Products
- Human Health & Well-being
- Cultural Benefits



Naturalization: Appearance or Function?



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Naturalization Goals

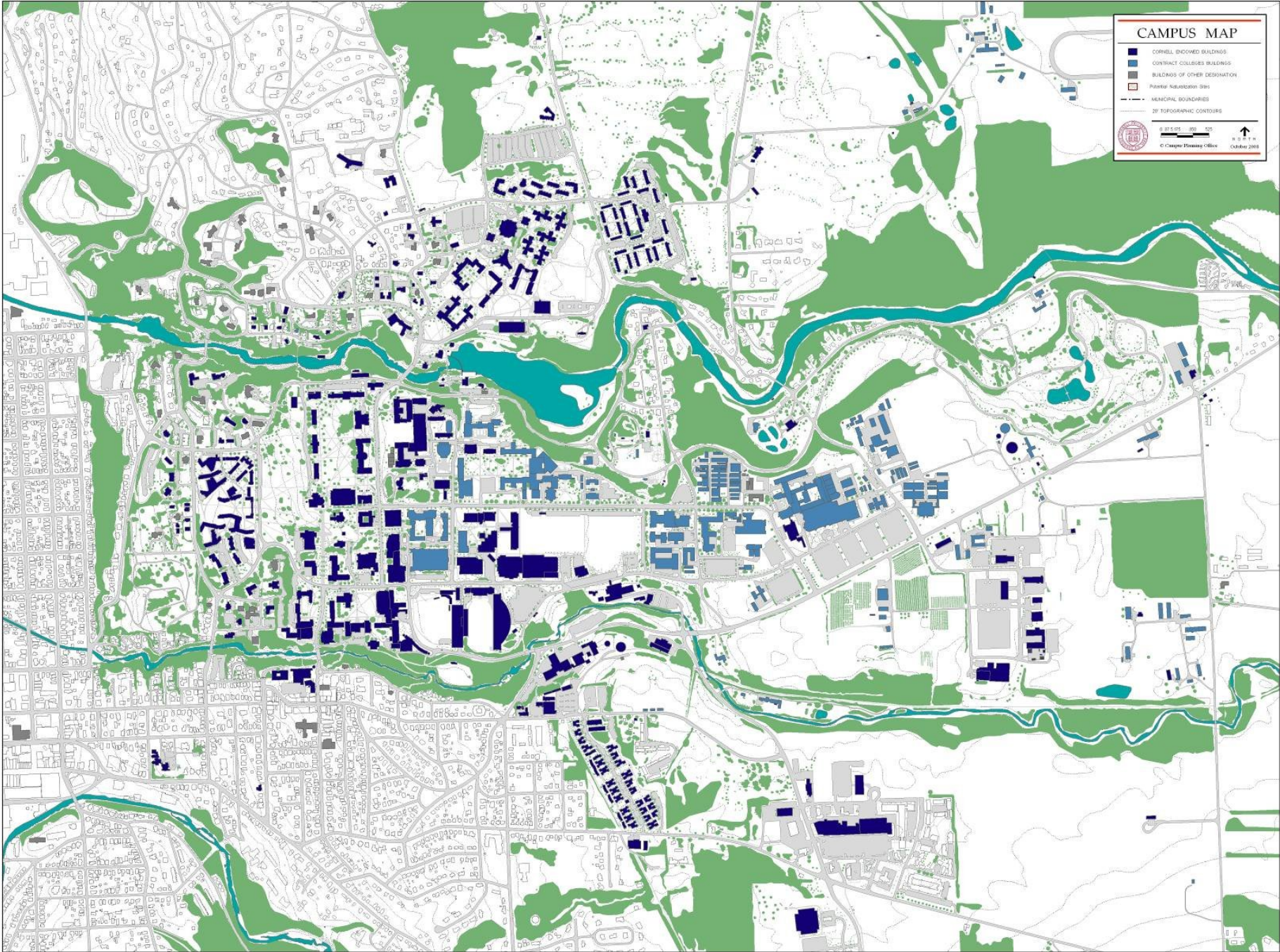
1. Campus Tree Inventory
2. Stormwater Management Plan
3. Identify Potential Naturalization Sites
4. Establish Pilot Sites
5. University Policy / Procedure on Naturalization

Inventory Work

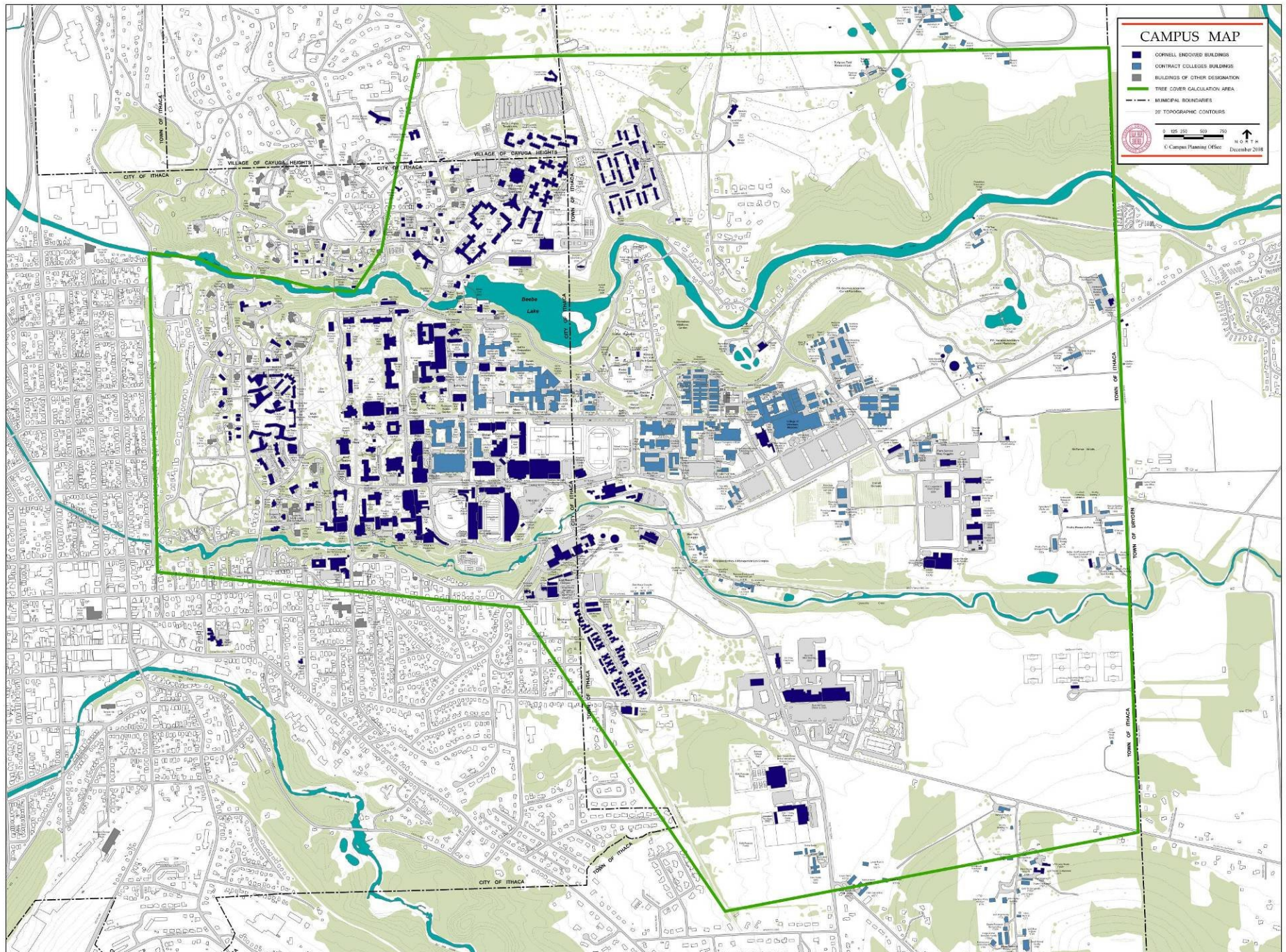
- Tree Canopy
 - Managed vs. Natural
- Tree Inventory
 - Species & Size
- Mowed Areas
- Stormwater Management Facilities



Tree Canopy



Existing Tree Canopy – 24%

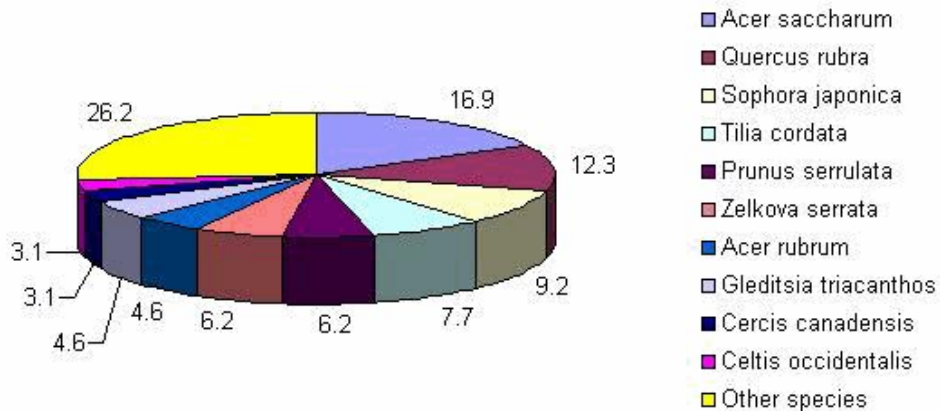


Inventory Work

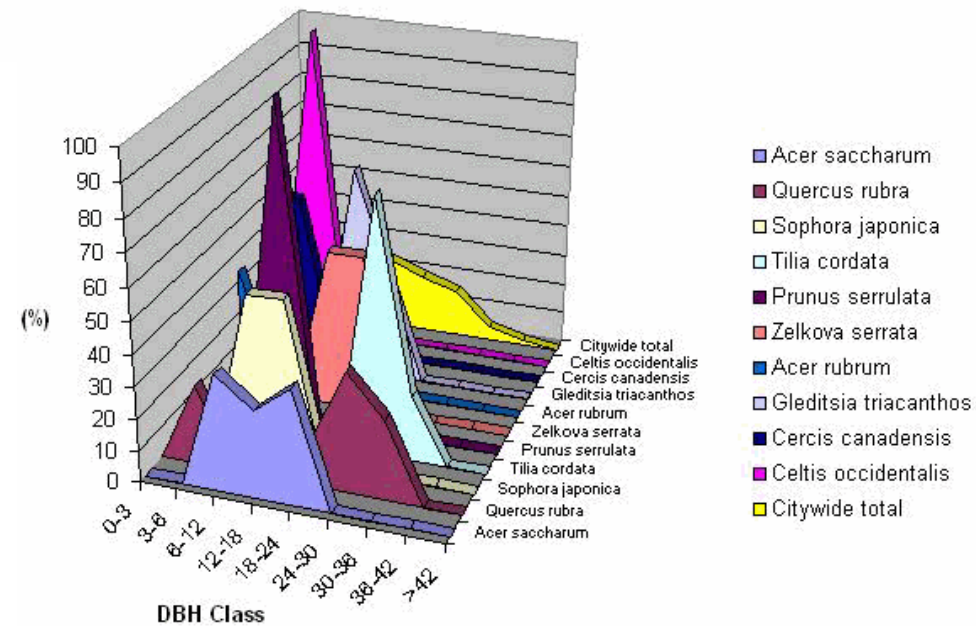


ASAP – Land Use

Stratum analysis of Urban Forest – Ag Quad

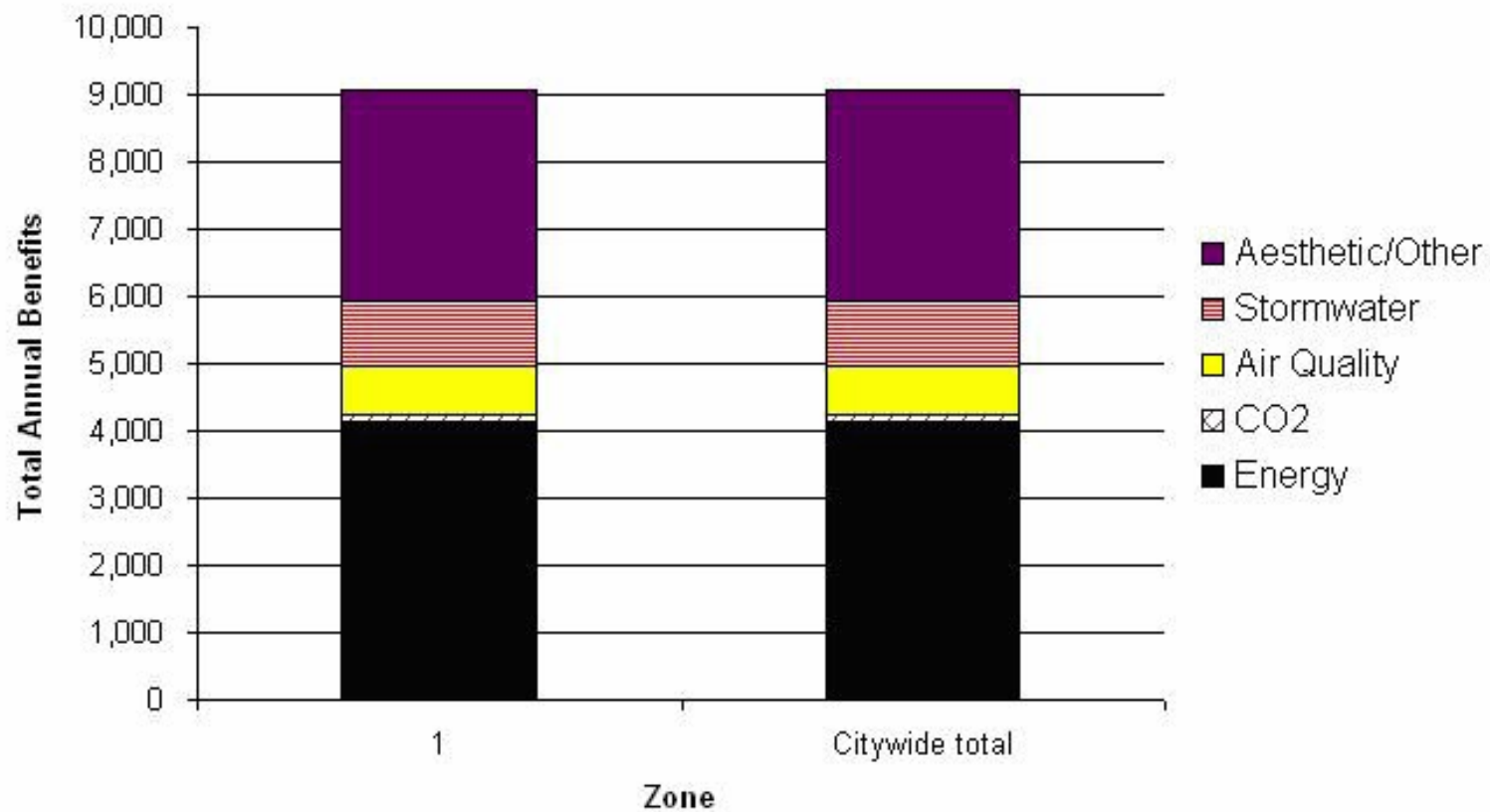


Species Distribution

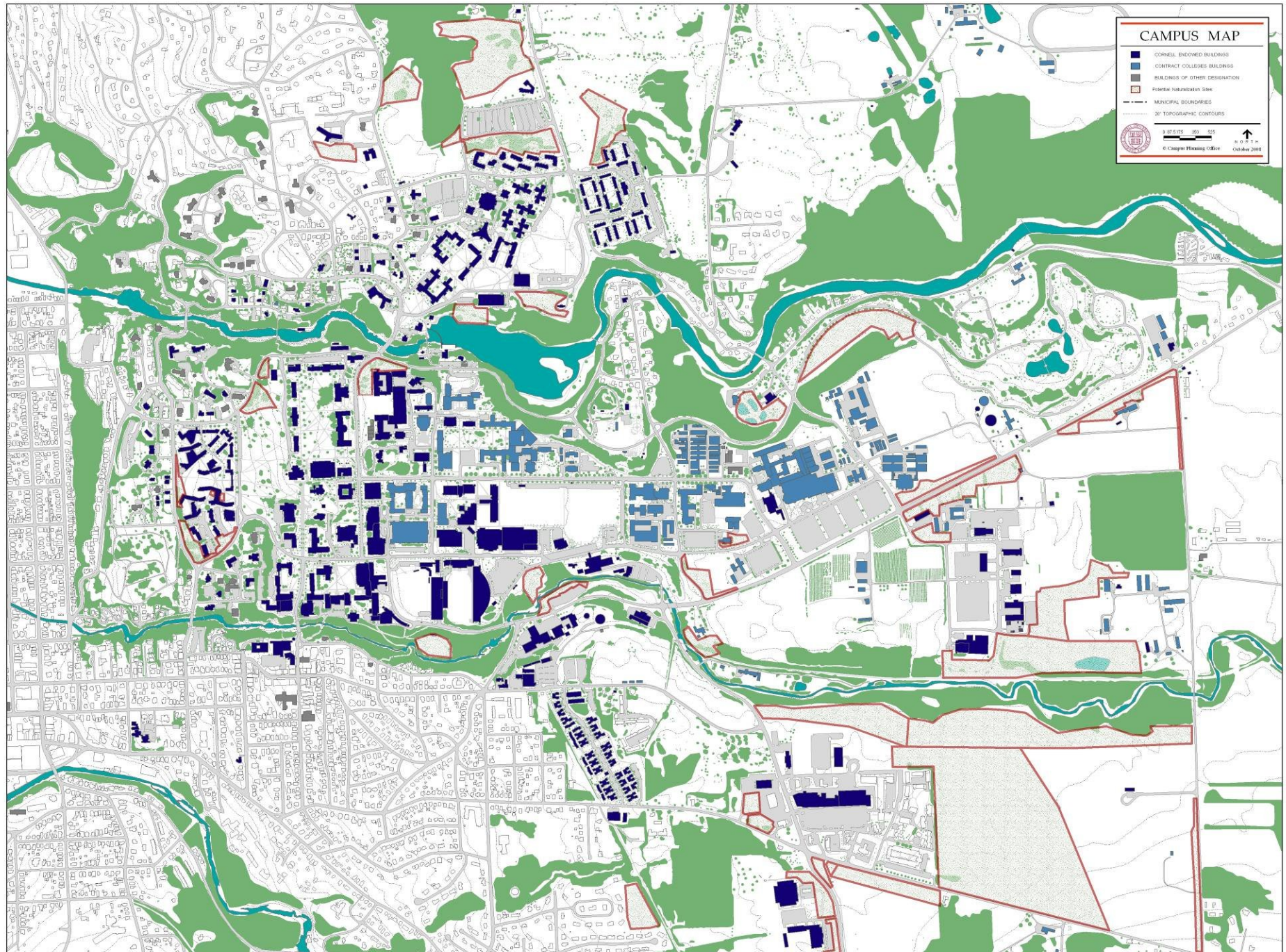


Age by Species

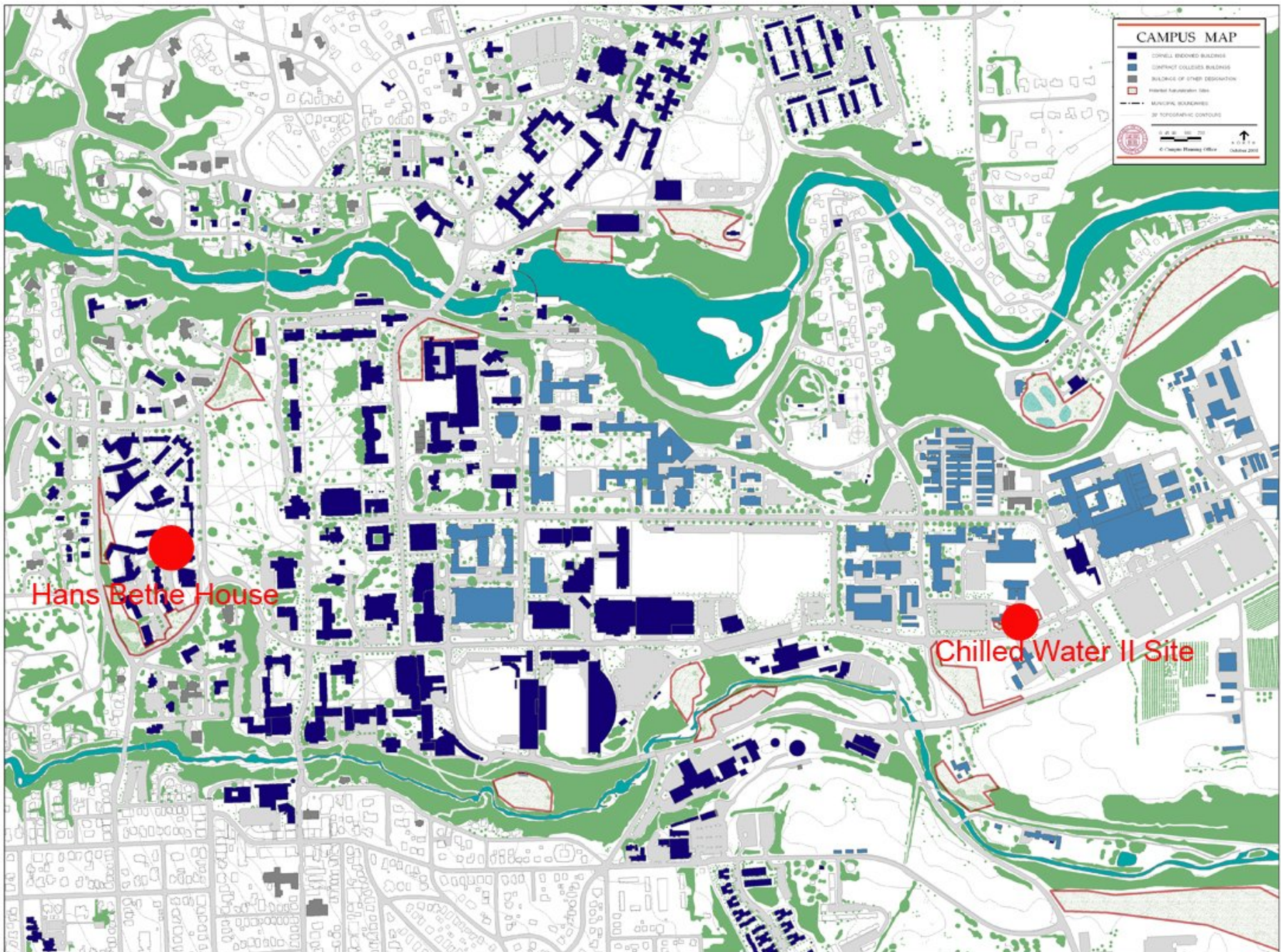
Stratum analysis of Benefits – Ag Quad



Potential Naturalization Sites



Pilot Naturalization Sites

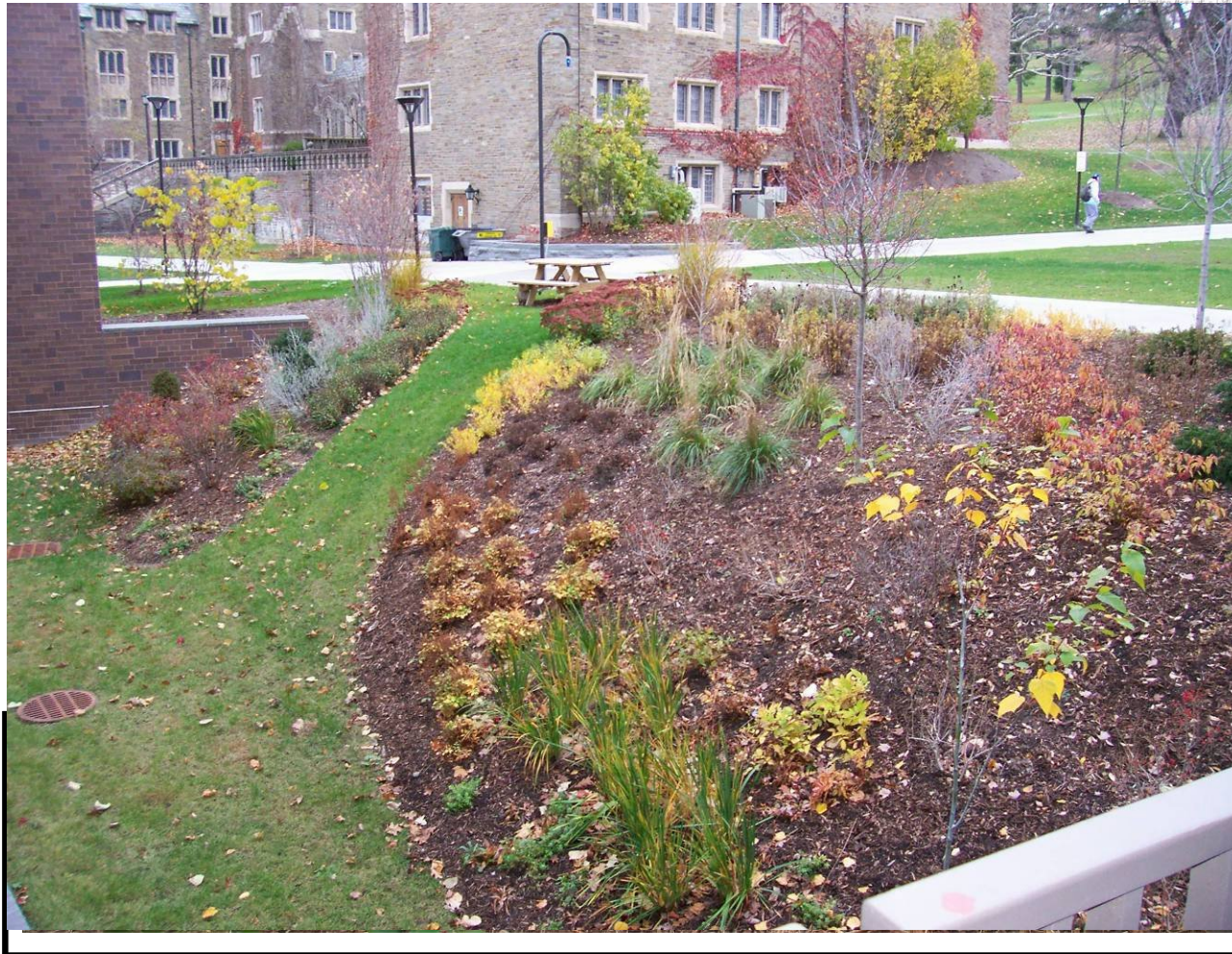


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ASAP – Land Use

Hans Bethe



ASAP – Land Use

Chilled Water II Site



ASAP – Land Use

Signage



Cornell
University

Campus **NATURALIZATION** ZONE

The landscape in this area has been designed to increase environmental benefits and to reflect the university's campus-wide sustainability goals. By utilizing the correct plants, soil improvements, and mulches, we have been able to greatly reduce the need for irrigation, fertilization, pest control, and mowing.

The result: an attractive landscape with fewer of our precious resources needed for its maintenance.

