A Concept for a Summer 2013

UMass Center for Urban Sustainability in Waltham

"This station is an undervalued 'green' jewel."



The University of Massachusetts is seeking to create a Center for Urban Sustainability at the site of the former UMass Suburban Experiment Station on Beaver Street in Waltham.

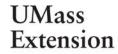
We envision this 58-acre site, 10 miles from downtown Boston, filled with practical application and demonstration of cutting-edge sustainable agriculture and landscape methods, including a 'green' 20,000 square foot building which will act as a front door portal for "all-things sustainable." Science-based practices will be showcased that benefit the citizenry and economic vitality of the Commonwealth. The vitality of the facility will be brought to life by UMass Amherst and a panoply of private and public organizations and agencies as metropolitan Boston's "sustainability mall" with organizational offices, conference and learning spaces inside the building complemented by community-supported farming, agricultural incubator enterprises practicing urban farming of the future, applied research and demonstration of best green landscape practices for urban and suburban residents on the surrounding land. Priority objectives include programs related to food security and access, environmental stewardship, urban agriculture and workforce development in urban settings.

Our goal is to create a financially self-sustaining entity. Initial steps include:

- I. We seek private and public partners, committed to the long-term responsibility for the environment, the economy and society to strengthen the current draft vision, assist with master site and business plan, and manage the effort.
- 2. We will work with partners to seek funding through the 2013 Massachusetts Environmental Bond Bill.
- We will investigate possible cooperative efforts with Mass. DCAM involving the abutting Fernald School property under its management.
- 4. We will investigate opportunities within the larger UMass System, including the UMass President's office.
- We will explore involvement and leadership from UMass Amherst Development to launch a fundraising initiative.

The land, in two parcels divided by Beaver Street, has been used for agricultural research. The north $(30\text{-}\mathrm{acre})$

parcel consists of a 16acre wetland, a meadow and some sloping land. An estimated seven acres are available for use. Buildings



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include a farmhouse, three-car garage, two barns and shed. The south (28-acre) parcel historically has had the more intensive use. In addition to flat open fertile fields, it has two administrative buildings, a boiler building and other smaller structures, all in need of replacement. The south parcel is made up of soils suitable for agricultural use and/or building construction. The site is highly accessible: one-and-a-half miles from Waltham Center and an MBTA station. It is ten miles west of Boston, two-and-a-half miles east of I-95, three-and-a-half miles south of Route 2. It is bordered or neighbored by Bentley College, Girl Scouts of Massachusetts, Fernald School and a City of Waltham recreation area.

In the new Center, agriculture and landscape demonstration activities will take place on both sides of Beaver Street and all or most of the current structures on the southern parcel will be removed and replaced with a new 20,000-square-foot LEED-certified, energy-innovative building. One portion of the new building will be used for classrooms and a conference center operated by the university. In it, agricultural and landscape organizations and related groups will provide classes, workshops and presentations, sometimes in collaboration with UMass, sometimes on their own. UMass Amherst leaders and faculty will become familiar with it as a showcase facility and academic satellite in an excellent, accessible central location for eastern Massachusetts meetings and events such as alumni gatherings, industry liaison events and media briefings. We hope that UMass Amherst and the Stockbridge School of Agriculture will use the site to provide a sense of access to the distant campus for prospective students, industry leaders, public officials, K12 students and teachers and the state's 4-H community.

A second portion of the building will feature office space available for lease to agricultural and landscape trade groups, businesses and public agencies. With full access to the conference and meeting facilities, this space will become a lively 'sustainability mall' for a variety of groups with complementary and synergistic foci. A third section

of the building, along with accompanying growing space outside the building, is envisioned as an incubator for start-up farms, businesses and organizations involved with agriculture and landscape sustainability.

This site has recently been called an "undervalued jewel" by one leader in the agricultural sector. Interested parties have consistently commented on the excellent location; it is easily accessible from all of metropolitan and suburban Boston and the larger region. The unusual nature of such

a large tract of open land within the urban landscape has also been noted. With a unifying theme of agricultural and landscape sustainability, the site will become a destination for learning and training, a nexus of leader-

The site is uniquely qualified to become a dynamic learning center.

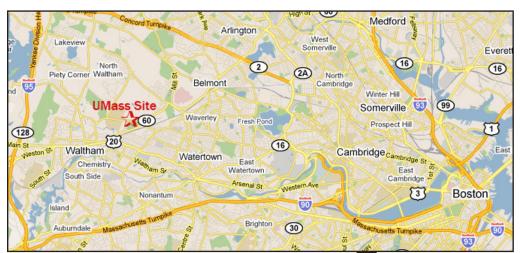
ship in these areas and fertile ground for new progressive efforts in landscape and agriculture.

Both the north and south parcels are directly accessible to the proposed Waltham Western Greenway and the Mass Central/Wayside Rail Trail. The borders of our site follow the Greenway maps along 60% of the footprint. The trails offer significant educational and recreational opportunities for the citizens of the Metropolitan Boston area.

The new center will have an underlying ethic of partnership and collaboration; as such, it will complement other existing eastern Massachusetts resources in these areas, not compete with them.

The land that comprises this site was left to the then Massachusetts Agricultural College, predecessor of the University of Massachusetts Amherst, in the estate of Cornelia Warren in 1922, for "use in carrying on the work of the College." By creating an innovative dynamic collaboration with partnering organizations, the Univer-

sity of Massachusetts can bring vitality and a renewed sense of the original purpose of the bequest. As they would have when the site was deeded 90 years ago, the unique characteristics of this "jewel" will be used in the educational interests of the farmers, landscapers, residents, communities and all those who act as stewards of the land in eastern Massachusetts.



Key Concepts Envisioned

During 2011, UMass conducted a series of structured interviews with thirty key current and potential stakeholders of a revitalized UMass presence in Waltham. Key concepts emerged in those interviews, summarized here.

Anchor Concept

The All-Things-Sustainable "Mall" – possible construction of a 20,000 square foot "green" building to house a training and conference center for use by partner organizations, UMass and the Stockbridge School of Agriculture. This building could serve as a front door portal to the entire operations of the UMass Center for Urban Sustainability.

Complementary Concepts

Urban Harvest of the Future

The land will be strategically planned and managed sustainably for community supported agriculture, an incubator for entrepreneurial, beginning farmer and innovative agricultural and green industry enterprises, on-site training and demonstration areas for existing and beginning growers, youth and schools. The plan will incorporate attention to food access for underserved populations and a public access destination component.

Green Spaces of the Future

The land will be planned and managed to demonstrate use of urban open space to contribute to the Commonwealth's economy and its natural resources while simultaneously strengthening a sense of community and public well-being. Objectives include integrating landscapes around and within the Sustainability Mall to demonstrate close to zero input use of turf and landscape spaces, and use of urban space for "edible cities." The site will be a hub for workforce development and professional development training for green industry professionals, as well as businesses, municipal managers and planners.

Construction of a ZFarm

A zero acreage farm cultivates fruits and vegetables by using existing inner-city buildings (particularly outdated municipal properties). Cultivation techniques that are adapted to inner-city structures are at the center of the ZFarm concept. Examples include roof-top greenhouses,

hanging gardens or in-house plantations. ZFarms improve the microclimate of cities and the buildings themselves

and create new spaces for recreation and social inclusion. The joint production of food can also fulfill an educational and socially integrative function for municipalities. In the context of ZFarms, different commercial as well as non-commercial operating models can be developed.

Sustainable Urban Homestead of the Future

We envision the devel-

Priorities:
food security/
access, environmental stewardship, urban
agriculture &
workforce
development.

opment of a sustainable urban homestead for the 30-acre parcel (which includes the farmhouse, forest, sloping land, meadow and a 16-acre wetland). The six key features of this site include: I) demonstrating how small farmers and home owners can raise animals for human consumption and produce fruit and vegetables in a sustainable systems approach that protects a critical environmental wetland resource; 2) inclusion of youth education/development as a priority for the effort; 3) renovating the farmhouse sustainably so that is can be used as a venue for fundraising, education and agri-tourism events; 4) incorporating small-scale food processing, kitchen garden and food storage features; 5) utilization of forest edge for permaculture; 6) implementation of a public reality TV program or social media outlet chronicling the 24/7 experience on the homestead - following regulations, milking the cows, feeding the chickens, dealing with the mud and manure etc.

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Photographs on first and second pages are from the Ahern Report, 2010, and are used courtesy of Jack Ahern. Map image created with Google maps.

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