



Urban Forestry Project

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To: Saratoga Springs City Council
From: Rayna Caldwell
Subject: Woodlawn Avenue Parking Facility
Date: April 5, 2012

Sustainable Saratoga's Urban Forestry Project is assisting the City of Saratoga Springs in developing an urban forestry program. At present, we are organizing an extensive effort to inventory street trees throughout the City, as well as trees on City parklands, and assisting the City in the preparation of an urban forest management plan.

Once all of our data is collected, vital statistics about our street trees, like location, size, species and condition, will be entered into a program called iTree. Developed by the U.S. Forest Service, the iTree program has the ability to take the raw data from the inventory and calculate the magnitudes and dollar values of the important services that the trees included in the inventory are providing, such as energy savings, air quality improvement, carbon dioxide removal and carbon sequestration, stormwater runoff reduction, and property value enhancement. We plan to present that data to the community with the goal of increasing support, among both citizens and City officials, for a healthy urban forest.

As a City, we would be wise to incorporate our appreciation of the array of aesthetic, environmental and economic benefits that trees provide into the design and maintenance of our streets, parks and public buildings. By designing sites that include trees that are as large as reasonable, given site conditions and constraints, we can maximize the amount of stormwater we can keep from flooding our streets, the amount of particulate pollution we can keep out of our lungs, and when it comes to parking lots, in the amount of shade they provide to keep us and our cars cool in the summer.

Members of Sustainable Saratoga's Urban Forestry Project thought it would be a good exercise to calculate the value of the trees that originally occupied the site of the Woodlawn Avenue parking deck, as an example of the benefits of just a small number of the City's street trees. In total there were 9 trees in the current lot, 8 honeylocusts and 1 boxelder clump. All of the honeylocusts were mature and ranged in size from 17 to 28 inches in diameter. Tree size is important, since the larger the tree, the greater the benefits. According to calculations using iTree, those 9 trees provided approximately \$2,280 in services to the City every year. That included dealing with nearly 34,000 gallons of stormwater and sequestering over 7,100 pounds of CO₂, something very important in a parking lot. We also are impressed by the results of several studies on the positive effect of trees on the economic success of businesses. City business districts with higher levels of tree cover are rated more attractive by visitors, who will pay more for products than they would in areas with little or no tree cover.

We hope that the City will incorporate an appreciation of the environmental and economic benefits of trees into all its construction and maintenance decisions, both on private developments and City lands. Although the City apparently is technically exempt from oversight by the City's land use boards (something that perplexes us), we would argue that the City has a responsibility, except under extreme circumstances, to live up to the planning wisdom embodied in the regulations that the land-use boards apply to other development. On the site of the new parking complex, we ask you to support the planting of more than the 4 larger trees scheduled for planting. The City's subdivision regulations for transect zones call for the planting of a tree every 40 feet along streets. Since the ground-level parking area has approximately 230 feet of frontage along Woodlawn Avenue, at least 4 trees should be planted, assuming that the existing honeylocust on the north end will remain.

In addition, it appears that unpaved islands will be left at the north and south ends of the center tier of parking spaces. Each island will be more than 30 feet long. It would be desirable to plant a tree at each end of the islands, for a total of 4 trees. Honeylocusts are great at thriving in confined spaces, and their broad spreading crowns shade parked cars from the sun.

We also wonder about the border between the ground-level parking lot and Long Alley. Couldn't a row of at least 3 honeylocust trees be planted from the parking deck north, again following the spirit of the regulations for private developments, and assuming an existing tree at the north end will remain? This is a great opportunity to add signs of life in the area that people will be walking between the parking lot and Broadway. Without a small investment in trees, apparently not included in the project as currently designed, this area will remain a fairly bleak world of concrete and asphalt. Shouldn't people leaving their parked cars and heading toward Broadway see more than an unimproved utilitarian alley serving the rear entrances of Broadway buildings?

When we spoke, you mentioned that there would be a wide walkway along the southern edge of the parking deck covered by pervious pavement. Pervious pavement would provide ideal growing conditions for trees. A row of at least 3 large trees, such as hackberry or red maple, not only would serve to make this strip attractive as a sort of pocket park, but also would contribute to the function of reducing surface runoff from the adjacent paved areas. In fact, in addition to all their other benefits, the additional trees throughout the parking area would help in reducing surface runoff.

For all the good reasons that trees are planted and maintained in cities, and in the spirit of the regulations in our zoning ordinance, we hope that you will do everything possible to add more trees to the design of the City's new parking area. Our group would be happy to discuss the details of individual tree selections with you or your staff.

Sincerely,

Rayna Caldwell
Interim Chair