

Transitioning from Traditional to Sustainable Grounds Maintenance



Providence St. Peter Hospital
Olympia, Washington

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157 Acre Campus with a –
835,323 SF Hospital
53,000 SF M.O.B
12,000 SF 'Visitor' Hotel

Providence St. Peter Hospital Gardens

**Providence Way Garden
The Critical Care / Surgery Waiting Area Garden
The Healing Garden
The Emergency Room Garden
The Emilie Gamelin Pavilion Garden**

Providence Way Garden



Providence Way Garden



Providence Way Garden



Providence Way Garden



Providence Way Garden



Providence Way Garden



How we save money and be sustainable

- *Irrigation- Saved money, add slide from LOTT*
 - *Native drought resistant plants*
 - *Water audit by Howard Stenn through the City of Olympia*
 - *Paid up to \$1000 for water saving heads and controllers*
- *More Costly to hand weed instead of pesticides*
 - *No difference in reduction of invasive species from hand weeding to use of chemicals.*
- *Addition of a New Green Roof*
 - *We save money by adding a longer life to the existing roof.*
 - *We also save money by better insulating the building (reduction in energy use)*
 - *This has been so successful we have plans to add a 3000SF garden on our 3rd Floor that will have a pathway and seating area for all patients in our Patient Tower.*

How we save money and be sustainable continued....

- **Onsite Composting**
 - Saved money by not buying new compost material or to have yard debris hauled away.
 - Delivered Compost = \$35 CuYd : **Annual Savings for Onsite Composting = \$2100**
 - Haul Away Yard Waste = \$85 CuYd : **Annual Savings for Onsite Composting = \$5100**
 - ****Assume we have delivered 60 yards of Compost and 60 yards hauled off**
 - **Reduction in grass- less watering**
- **Electric Vehicle**
 - 160 days of use X 2 miles a day X \$3.50 a gallon of gas = **\$1120 saved a year.**
 - No maintenance costs (oil change, engine maintenance)- **Approx. \$100 a year**
 - **Vehicle Cost = \$25k ROI = 20 Years**
 - Battery in the winter is an issue
- **Tree removal- saves on car damage. Plant new trees**
- **Reducing costs while continuing to beautify our campus.**
 - We have **expanded** the amount of plants on the property while **reducing** the amount of water used annually. Show 1998 total water use!

Providence St. Peter Hospital Irrigation Data

Acct/Location	2009	2010	2011	2012	2013
15624-28877	35,810	18,140	15,780	18,030	22,110
15624-31545	83,810	63,300	35,660	39,940	55,810
TOTAL CF:	119,620	81,440	51,440	57,970	77,920
TOTAL GALLONS	894,758	609,171	384,771	433,616	582,842
% Reduction		-32%	-57%	-52%	-35%
Total Annual Rainfall (inches)	49	58	60	48	58
Increase in Annaul Rainfall		16%	18%	-1%	16%
July & August Total Rainfall	1.82	0.88	1.92	1.2	1.84*
*No recorded rainfall for July					

Pesticide & Herbicide Free Operations

Given the nature of our hospital as a healing environment as well as our proximity to a salmon rearing wetland, Providence St. Peter Hospital is committed to minimizing any toxic products used in our grounds maintenance program. As a result, weed killers are not allowed for use on the campus.

This policy is for the benefit of patients, visitors and staff to the campus but places a big burden for hand weeding on our grounds maintenance staff.

Our Grounds Electric Vehicle



Jeremy our Head Grounds Supervisor showing off our Electric Rig!

Challenges

- Much of the Campus is land locked by Wetlands.
 - The wetlands create several issues in maintaining the campus
 - Storm Water Drainage Systems
 - Invasive Species Mitigation (Scotch Broom, Tansy and Thistle)



Upgraded Hunter Controls



Vegetative Debris Management

- Compost Material consists of leaves, grass clippings, limbs and plant material
- We currently have 60 Cubic Yards of material



Critical Care Garden



Critical Care Garden



Critical Care Garden



Critical Care Garden



Healing Garden



Healing Garden



Emergency Department Garden



Emergency Department Garden



Emilie Gamelin Pavilion Garden



Our Green Roof!



Walking Trail System



1.5 miles of trails





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