

Roy DeBoer Travel Prize 2014 Proposal

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**GREEN INFRASTRUCTURE IN THE PACIFIC NORTHWEST: CONSTRUCTION, IMPLEMENTATION, AND PERFORMANCE**

# **GREEN INFRASTRUCTURE IN THE PACIFIC NORTHWEST: CONSTRUCTION, IMPLEMENTATION, AND PERFORMANCE**

## **OBJECTIVES**

1. Document existing, successful green infrastructure interventions in Seattle and Portland, two cities that have pioneered green infrastructure in urban streets.<sup>1</sup>
2. Analyze both the implementation/approval processes and technical designs to learn the successes and challenges through meetings with key players.
3. Observe different landscapes, habitat, and species of the Pacific Northwest through city visits and bike ride from Seattle to Portland.

## **PRODUCTS**

- Presentation of two case studies (Seattle and Portland)
- Drawings, photographs, and writings from urban and rural PNW settings
- Facebook posts during trip to Rutgers' Landscape Architecture Club and Landscape Architecture Graduate Student Facebook pages

## **SCHEDULE & PLAN**

### **DAYS 1-4: SEATTLE**

- Visit green infrastructure and street redesigns
- Interview at least two design professionals and one city official
- Observe, draw, photograph, record

### **DAYS 5-8: BIKE RIDE TO PORTLAND**

- Observe, draw, photograph, record

### **DAYS 9-11: PORTLAND**

- Visit green infrastructure and street redesigns
- Observe, draw, photograph, record

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<sup>1</sup> Seattle was awarded an Innovations in American Government Award back in 2004 by the Kennedy School of Government at Harvard, among other awards over the past decade, and was recently featured in the NRDC's Rooftops to Rivers Update publication in 2013. Seattle's green infrastructure was also featured in 2004 in the Civil Engineering journal. Portland adopted legislation in 2006 following pilot projects for green streets. Portland is cited as an exemplary city by the EPA in "Managing Wet Weather with Green Infrastructure Municipal Handbook" in 2009 and by the NRDC in "The Green Edge," Dec. 2013.

#### DAYS 1-4 and DAYS 9-11: SEATTLE AND PORTLAND

Having worked for five years as an urban planning consultant for a transportation planning firm, I want to create better, safer, and greener streets in our cities. In my first year as a landscape architecture student, I have been studying (among other things) materials, construction, and technical design of bioswales, rain gardens, and other stormwater management techniques. My goal is to learn more about how these technical designs fit into the urban street design/street allocation puzzle. As an urban planner, I am also aware that political and approval processes play a huge role in implementation, no matter how brilliant a design is. The stories of approvals, implementation, and maintenance issues are as important to the story as the technical design.

Unlike East Coast cities that have only begun constructing green infrastructure projects in the past five or so years, Seattle and Portland have been building green infrastructure for more than a decade and are leaders in making these projects a priority. My research would combine observation and documentation of built green infrastructure projects in both cities and interviews with designers and/or city staff who made the projects happen. During my trip, I will see, document, draw, and photograph as many of the green infrastructure projects as possible (using the design firm SvR's self-guided tour map as a starting point in Seattle [see attached] and Portland's Green Street Tour Map.).

My research proposal also includes two or three meetings to hear how the projects came to be and what some of the challenges have been since construction (for instance, several projects in New York have encountered maintenance difficulties, for instance<sup>2</sup>). I reached out to two design professionals who have been instrumental in constructing green streets in Seattle—Lesley Bain of Framework and Dave Rodgers of SvR Design. Both are willing to meet with me during my trip, should I receive a travel grant (see attached correspondence).

#### DAYS 5-8: BIKE RIDE

Instead of Amtrak (as suggested by one of the design professionals in Seattle), I prefer to take a short bike trip from Seattle to Portland. This route is very popular as a weekend ride for residents of both cities, and riding is my favorite way to observe landscapes. On a bicycle, subtle topographies are made more apparent, wildlife and plant species are more easily seen at slower bicycle speeds (approximately 15 mph), and climate is better observed outside the controlled atmosphere of a car. A bike ride would also allow me to observe plant communities and behaviors of the Pacific Northwest in a less managed habitat than in the urban areas and allow me to compare and contrast the settings. The slower pace and schedule will allow for more contemplation of the landscape and time for writing and drawing. I have taken numerous overnight bike trips, including a cross-country ride, alone or leading a small group of riders; I am careful but very comfortable traveling by this mode.

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<sup>2</sup> Informal discussion with Green Infrastructure unit employee, Oct. 2013

## **BUDGET**

Total requested funding for the trip is \$925. A flight from Newark to Seattle, returning from Portland to Newark, is currently cited as just under \$400 (kayak.com). To accommodate potential price fluctuations for the flight, baggage fees, and transportation to/from the airports (using public transportation), I added \$100.

In both Seattle and Portland I can stay with family and friends. The budget includes \$40 per day for food and other incidentals such as camping fees (10 days, total \$400).

I added \$25 for a travel sketch book and pens. I already own all bike touring and camping equipment needed for a few days on the road.

Flight	\$500
Hotels (Seattle and Portland)	\$0
Per diem (food, camping fees, etc)	\$400
Travel sketch book and pens	\$25
<b>Total</b>	<b>\$925</b>

**Lesley**

**Bain** lesley@weareframework.com

to: Elizabeth Blazeovich  
<EBlazeovich@archfoundation.org>

cc: "daver@svrdesign.com" <daver@svrdesign.com>,  
[deleted]

date: Mon, Feb 17, 2014 at 12:46 AM

subject: Re: Seattle Green Infrastructure

Hi [deleted]

I'd be happy to get together with you when you are in town; let me know what would be most helpful. You might want to see if you can fit in a visit to Portland while you are so close.

Best regards,  
Lesley

**Dave**

**Rodgers** daver@svrdesign.com

to: [deleted]

cc: Lesley Bain <lesley@weareframework.com>,  
Elizabeth Blazeovich  
<EBlazeovich@archfoundation.org>

date: Tue, Feb 18, 2014 at 12:19 PM

subject: RE: Seattle Green Infrastructure

mailed-by: svrdesign.com

Hi [deleted],

I agree with Leslie it would be great to pass through Portland as well as Seattle if you have time. The Amtrak ride is quite nice.

We have some new GSI retrofits for controlling combined sewer overflows in West Seattle under construction which may not be on our map yet.

Let us know your schedule and we can meet up.

Thanks  
-dave

# SvR Green Infrastructure Projects Seattle Self-Guided Tour

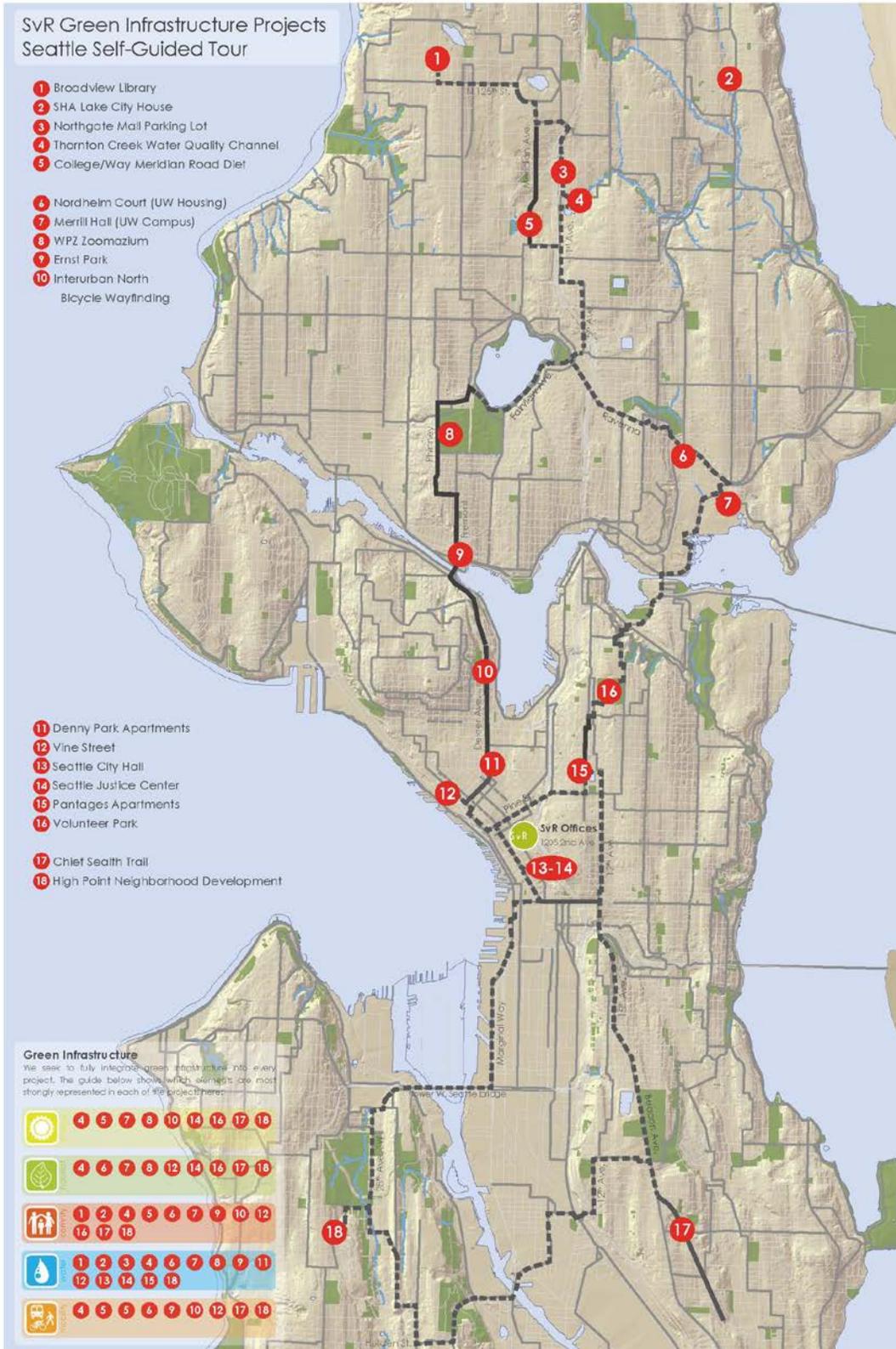
- 1 Broadview Library
- 2 SHA Lake City House
- 3 Northgate Mail Parking Lot
- 4 Thornton Creek Water Quality Channel
- 5 College/Way Meridian Road Diet
- 6 Nordheim Court (UW Housing)
- 7 Merrill Hall (UW Campus)
- 8 WPZ Zoomazium
- 9 Ernst Park
- 10 Interurban North  
Bicycle Wayfinding

- 11 Denny Park Apartments
- 12 Vine Street
- 13 Seattle City Hall
- 14 Seattle Justice Center
- 15 Pantages Apartments
- 16 Volunteer Park
- 17 Chief Sealth Trail
- 18 High Point Neighborhood Development

### Green Infrastructure

We seek to fully integrate green infrastructure into every project. The guide below shows which elements are most strongly represented in each of the projects here:

	4 5 7 8 10 14 16 17 18
	4 6 7 8 12 14 16 17 18
	1 2 4 5 6 7 9 10 12 16 17 18
	1 2 3 4 6 7 8 9 11 12 13 14 15 18
	4 5 6 7 9 10 12 17 18



### Roadway Legend

- suggested bicycle route
- bicycle facility designed by SvR
- other routes used by bicycles
- general roadway