

Seattle
Design
Commission

APPROVED
MINUTES OF THE MEETING
03 February 2005

Gregory J. Nickels,
Mayor

David Spiker
Chair

Charles Anderson

Pam Beyette

Karen Kiest

Hannah McIntosh

Anindita Mitra

Sheri Olson

Nic Rossouw

Darrell Vange

Guillermo Romano,
Executive Director

Layne Cubell,
Commission Coordinator

Projects Reviewed

Pinehurst Natural Drainage
Mercer Corridor Project
South Lake Union and Waterfront Streetcar
Restore Our Waters Citywide Initiative

Convened: 10:30am

Adjourned: 4:30pm

Commissioners Present

David Spiker, Chair
Pam Beyette
Karen Kiest
Hannah McIntosh
Anindita Mitra
Nic Rossouw
Darrell Vange

Staff Present

Guillermo Romano
Layne Cubell
Tom Iurino
Emily Podolak



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Development

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3 Feb 2005 Project: **Pinehurst Natural Drainage**
Phase: Design-Development

Previous Reviews: None

Presenter: Keith Ward, Seattle Public Utilities
Shane Dewald, Seattle Department of Transportation

Attendees: None

Time: 1 hour (SDC Ref. # 169| DC00347)

Action: The Commission thanks the proponents for their presentation of the Pinehurst Natural Drainage project

- **appreciates their efforts and recognizes the challenges to restore the City's water quality.**
- **expresses excitement about the ecological potential of natural drainage systems and commends the project's side benefits of community participation and improving the pedestrian environment. Endorses the offset street design "green grid" scheme presented today and believes it is a straight forward approach and more appropriate for urban streetscapes than the curvilinear scheme pursued at SEA Street.**
- **expresses minor concern that natural drainage projects will remain novelty items because of their relative expense and encourage proponents to find ways to make them less costly and more efficient to implement at a city-wide level.**
- **encourages the proponents to advocate for pedestrian connections to the proposed pocket park nearby.**
- **suggests that the proponents exercise delicacy in the design features of the drainage swales and encourages the proponents to explore permeable pavement as an alternative or in addition to swales.**
- **recommends approval of the Pinehurst Natural Drainage project in the design development stage.**

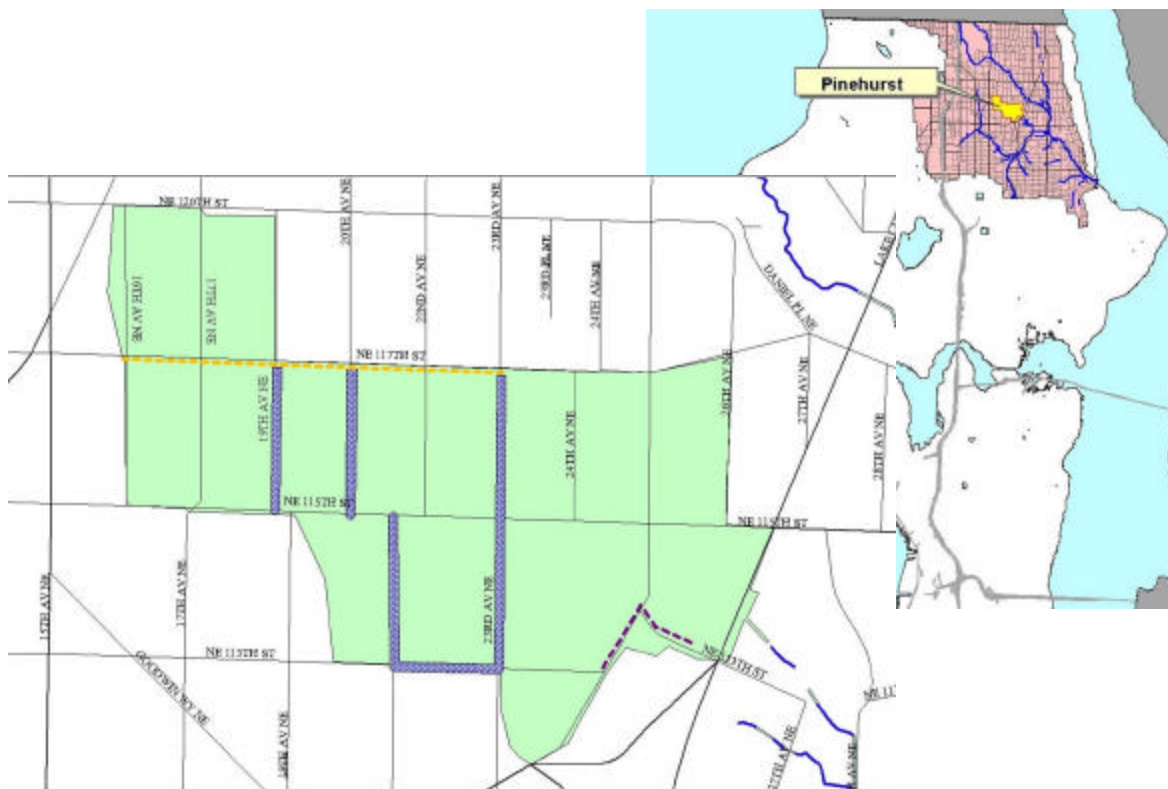
This is the first presentation of Pinehurst Natural Drainage, a joint project of Seattle Public Utilities and Seattle Department of Transportation and the fourth, and final, demonstration project funded by Seattle Public Utilities which addresses natural storm water drainage in the City of Seattle. Located in the Pinehurst neighborhood, off of NE 117th Street, along 19th Ave NE, 20th Ave NE and 23rd Ave NE, the project brings six blocks of natural drainage and five additional blocks of improved drainage infrastructure. The project is at 90% Design Development.

Proponents presented the program review, project goals, an overview of the project description, and key design features and the project's public participation. They presented natural drainage strategy objectives which include protecting aquatic wildlife, protect creek channels, improve water quality, and solve flooding problems. They have modified their approach from implementing on the creek edge which has a higher failure rate and is more expensive to targeting areas further upstream for implementation of the natural drainage strategies.

Due to the high percentage of impervious surface and conveyance systems in the urban environment, the conveyance caused by storm water scours stream banks causing erosion and flows that are difficult for aquatic species to survive. The proponents' design goals differed based on the size of the storm. During a 6-month to 1-year storm the design's goal is to control small storms to protect aquatic biota; and in a 1-2 year storm, it is to control small to medium size storms to prevent channel erosion.

The first natural drainage project by Seattle Public Utilities, SEA Street, is currently being monitored both quantitatively and qualitatively, and has been for two years. Results gathered from the monitoring demonstrate a 98% reduction in total runoff volume. These results provided support for implementing three demonstration grids located throughout the city, High Point, Broadview and Pinehurst.

The key requirements determining the Pinehurst Natural Drainage project location include choosing a site that is located in a different area of the city from the other three projects to increase community exposure, is a site that does not have slope stability issues, and has no existing formal drainage curb and gutter. For the initial site evaluation, the proponents performed an extensive preliminary engineering study and a resident survey identifying spot flooding areas.

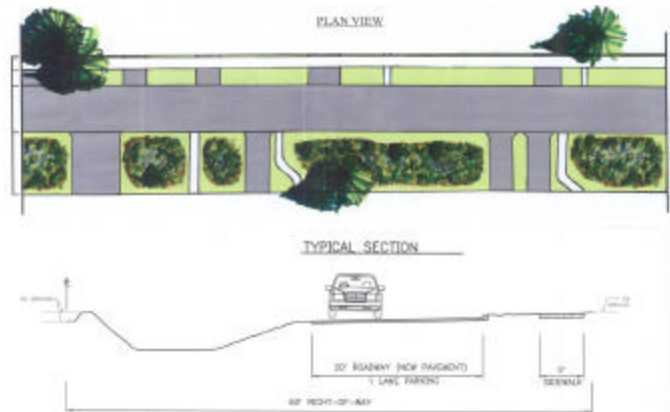


Pinehurst Natural Drainage Project Site

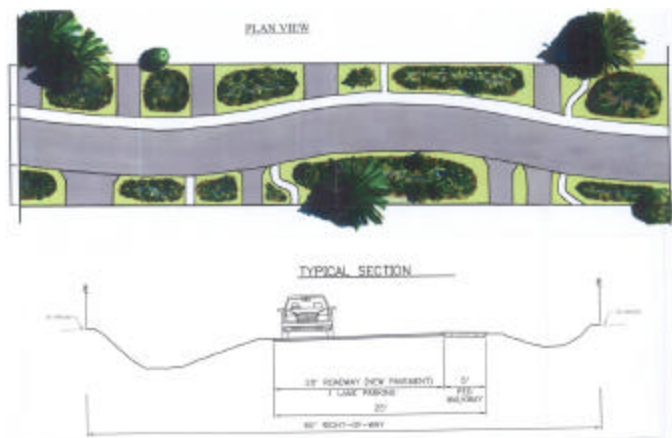
Project goals for the Pinehurst site include: providing conveyance to the 2004 CDP levels, meeting water quality and quantity levels determined by the Department of Ecology and the City of Seattle, meeting the neighborhood's street, landscaping and sidewalk needs and providing information, through modeling and monitoring, to the program's efficiency and learning objectives.

Design Overview

The offset concept of the Pinehurst Natural Drainage Project differs from the curvilinear concept that was present in all the demonstration projects thus far. The original curvilinear concept was designed for its aesthetic quality and for its calming effect on passing traffic. It has now been discovered that traffic calming can be achieved effectively by visually narrowing the roadway using a row of parked parallel cars. The offset concept maintains the straightness of the street by installing three to four foot deep swales on one side of the street and a five-foot wide sidewalk on the opposite side. The curvilinear concept had swales and sidewalks on both sides of the street. Both concepts construct a 20-foot wide asphalt concrete roadway. Condensing the swales on one side of the street, the offset concept allows sixty percent more water-storage volume and provides more space for extensive landscaping. Culvert pipes connect the swales underneath the driveways. The offset concept is the same cost as the original curvilinear concept.



Offset Concept Pinehurst Drainage Project



Curvilinear Concept

To meet parking demands, the proponents visited the site on three different occasions to count how many cars were parked in the right of way. The proposed design includes sixty percent more parking spaces than the highest amount of cars counted during one of the site visits.

The project will be constructed in periods of two, non-adjacent, blocks at a time to reduce, as much as possible, the congestion caused during the construction process.

Community Participation

The proponents discuss with the residents the construction process for building the natural drainage system and often recommend they visit SEA Streets to help them visualize the positive outcome. They work with the residents on driveway tie-ins, the planting design of the swales, holding community meetings, performing surveys of the residents' desires, and meeting with residents on a one-on-one basis to discuss planting options.

The proponents are currently developing an owners' manual that will cover the property owners' responsibilities, and offer maintenance advice. The proponents will release a newsletter several times during the design and construction process, informing residents of recent and upcoming events regarding the project.

Commissioner Questions

- Asks how much of the land used for swales is on residential property or in city right of way.
 - The total area of the swale is in the city right of way.
- Asks if there is access to the residences via alleys like along SEA Street.
 - No, there are no alleys. Access is only available from the street side.
- Asks about emergency access.
 - During construction, the access is provided by the contractors. After construction, there will be two-foot wide compacted shoulders on the swale side of the street where emergency vehicles can utilize if necessary. These compacted shoulders will be landscaped with grass or low groundcover. On the opposite side, emergency vehicles can mount a six-inch high curb.
- Asks what happens when the water reaches NE 115th Street.
 - All of the water south of NE 117th Street is sent south through the swales which will generally hold a maximum of 10 inches of water and then overflow. The additional water will travel into the surface ditch at NE 115th Street and enter a culvert system which will carry it to the three NDS streets south of NE 115th St.
- Asks if there will ever be standing water and if it will breed mosquitoes.
 - Swales are designed for complete infiltration between 48 and 72 hours, mosquitoes need 120 hours to breed.

Commissioner Comments and Recommendations

- Commends the public participation efforts and asks what proponents see happening to the project in the long term.
 - Federal regulations on water quality and quantity will continue to drive natural drainage systems in some capacity. It is much more cost effective for the city to meet the regulations than to face fines for not meeting standards. The demonstration projects have been used to leverage support for new sites. The demonstration sites have included installing sidewalks a cost not typically covered by Seattle Public Utilities. Future projects may not provide sidewalks funded by Seattle Public Utilities.
- Asks how proponents chose swale sides and if power poles would be relocated
 - The swale locations are dependent on many factors including topography and other utilities. The proponents try not to relocate power poles.
- Commends how landscape is more than aesthetics it also stabilizes the ground.
- Comments that the SEA street and the proposed Pinehurst design always seems over-engineered with the oversized swales. Asks if there is any way to employ more graceful, subtle design.
 - Proponents agree, it is partly for the demonstration factor and partly because they don't want the strategy to fail so they may overcompensate slightly. They are working to refine the design as they learn more about its function and capacity. The swales are designed to collect up to the 25-year storm within the swales without spilling out of the right of way.
- Asks if proponents have explored the use of permeable pavement

- Yes the proponents looked into the material for the High Point Project. Questions remain in regards to its maintenance cost and contractors often are not trained to install the material appropriately.
- Applauds effort, commenting that it is not only cost-effective but also provides environmental benefit.
- Appreciates the focus on improving the pedestrian environment through sidewalk implementation and encourages the proponents to do all that they can do to put a sidewalk along the future pocket park on NE 117th St.
- Proponents are suggesting a minimum five foot wide gravel walkway on the south side of NE 117th Street and are seeking matching funds from neighborhood.
- Commends the offset concept for being a better solution than the curvilinear concept, from an urban design point of view.
- Asks what is the relative cost to a standard curb and/or sidewalk.
 - The cost of the Pinehurst project is approximately \$4.6 million. If we sent water to creek without treatment proponents estimate it would be between \$2.5 and \$3 million. However if water was treated through conventional methods, i.e. infiltration ponds, it would be over \$8 million. The question really comes down to the quality of water Seattle expects and should invest in.
- Comments that the New York Times wrote an article referring to the project as “novel,” not innovative because it can’t be implemented everywhere.
- Expresses concern that it will remain as a couple of pilot projects and not extended throughout the city as an infrastructure.
- Asks if proponents have done a cost/benefit analysis related to increase of property values.
- Proponents are in the process of completing a study but currently there are only two data points of before and after which do show about a 30% increase. Studies will need to continue to determine if this is a trend influenced by the streets’ location.
- Encourages the proponents to push the use of permeable pavement in steep areas; a place where natural drainage swales can’t be installed.
- Suggests that taking it to a sustainable neighborhood could offer it mega-scale potential, consider a partnership with Department of Energy.

3 Feb 2005 Project: **Mercer Corridor Project**
Phase: Design Update

Previous Reviews: 5 Aug 2004, Pre-Design

Presenter: Eric Tweit, SDOT
Attendees: Rachel Ben-Shmuel, Seattle Monorail Project
Phil Fujii, Vulcan Inc.
Matt Hoffman, University of Washington Student
Ken Johnsen, Shiels Oblatz Johnsen
Meg McNeil, Shiels Oblatz Johnsen
Joe Taskey, SDOT
Diego Valasco, University of Washington Student

Time: 1 hour (SDC Ref. # 169| DC00336)

Action: The Commission thanks the proponents for their presentation of the Mercer Corridor Project and acknowledges the complexity of the design and traffic issues.

- **reiterates their support for the preferred 2-way Mercer scheme.**
- **appreciates the proponents' efforts to align proposed streets with the surrounding neighborhood's street grid and the human scale of the Mercer streetscape design.**
- **supports the proponents' efforts to strengthen Mercer as a car, bike and pedestrian corridor. discourages the proponents from adding mass transit or reversible lanes to Mercer**
- **expresses concern about increasing capacity on Denny to relieve congestion on Mercer, cautioning against making Mercer a better street at Denny's expense.**
- **recommends approval of the Mercer Corridor Project Preliminary Design.**

This is the second presentation of the Mercer Corridor Project. Last presentation in August 2004, the Design Commission supported the two-way Mercer Street Alternative and asked proponents to further address traffic mitigation issues, Mercer being seen as more than an auto corridor, and how an update for Mercer will not fix all of the issues. Proponents went to the city council with the preferred alternative and were approved for funding to complete initial Environmental Impact Study (EIS). The project is managed by SDOT and is part of the larger South Lake Union (SLU) Transportation Investment study.

The purpose of the Mercer Corridor Project is to evaluate and design the principle east-west arterial route in SLU (I-5 to Seattle Center) to better accommodate vehicular, transit, pedestrian, and bicycle traffic and support the development of the SLU Urban Village, including 20,000 additional jobs, 10,000 new housing units, and a greatly enhanced SLU Park. The premise of the project stems from the inability to enter the SLU, Fremont, Interbay, and Queen Anne neighborhoods.

The objectives of the project include: improving regional access and mobility to and through South Lake Union using a multi-modal (cars, trucks, transit, pedestrians, bicycles, etc.) approach, improving circulation, access and safety for cars bicycles and pedestrians throughout the corridor, enhancing the environment around South Lake Union Park, supporting economic developments goals for South Lake Union, and reinforcing comprehensive plan goals and policies for transportation and land use.

A Two-way Mercer and Narrow Valley Street improves the travel time between I-5 and the Queen Anne/Uptown neighborhood and an important freight route between I-5 and Westlake north toward Fremont and Interbay, creates a pedestrian-friendly gateway to South Lake Union at Mercer, simplifies the routing for traffic entering this area and traveling through to the other neighborhoods (including the many visitors to Seattle Center and the freight to Interbay, creates a true street grid that greatly improves neighborhood access and circulation without increasing overall delays, improves pedestrian mobility through safe and convenient crossings of Mercer and Valley, enhances the environment around South Lake Union Park, connects bicyclists from Eastlake to Dexter with bicycle lanes on Valley Street/Roy Street and provides the street network for safe and accessible east-west transit service

Design Overview

The Two-Way Mercer Corridor alternative widens Mercer Street between Dexter Avenue North and Fairview Avenue North to allow three lanes of traffic in both directions and parallel parking on both sides of the street. There will be a 20-foot center median and bulbs at most intersections. The plan will widen Mercer’s right of way to between 60 and 70’.



Two Way Mercer with Viaduct Project and Lowered Aurora

A square intersection will be created at the intersection of Fairview Ave N and Valley Street. Valley Street will be narrowed to two lanes with parallel parking and a 12-15’ sidewalk on the south side of the street, and a 30’ wide walkway on the north, South Lake Union Park, side of the street. Valley Street will also contain bike lanes running from Dexter Ave. N to Fairview Ave N.

The proviso ordinance to gain city council approval requires the proponents to further investigate

- Options to improve overall performance of the transportation system
- Other measures to enhance traffic flow in South Lake Union
- Travel Demand Management Program
- Financing Options, including impact fees



Aerial View, Two-Way Mercer Corridor – approaching Mercer from I-5

In response the proponents have updated the city’s forecast models and looked at Seattle Center event traffic. They plan to study possible locations for additional bike lanes, study the feasibility for transit traveling east/west on Mercer, Republican and Harrison, evaluate on-street parking option versus reversible lane option on Mercer, and study freight traffic making sure that trucks can make the proposed turns, the freight traffic’s relationship with pedestrians, and the impact of removing Broad Street.

Other measures to enhance traffic flow in South Lake Union include :

- South Lake Union Transit Study
- Management of traffic flow from I-5
- SR 520 weave to Mercer-looked at problem with people crossing over inhibited by physical barrier and how to allow crossing but make efficient
- Denny Way
- Looked at possibility to add capacity; the limited right of way makes this challenging option Reversible lanes
- Challenge to maintaining pedestrian-friendly environment
- Looked at car pool transit only lane
- Travel Demand Management Program

A study is being completed for South Lake Union. The current plans do not increase traffic capacity. Through the study, proponents will determine if it is adequate.

Project Schedule

EIS work will be done over summer/fall 2005 and completed during the beginning of 2006. Stakeholder workshops are scheduled for early March 2006; proponents request the Commission's participation in the workshops. The proponents plan to hold quarterly City Council updates.

Commissioner Questions

- Asks if the 520 project will remedy the current weave.
 - The long term plan is to put the 520 ramp on the right hand side of I-5; it is not in the current funding. The state's current I-5 study plans to address this also.
- Asks if Broad Street will be maintained.
 - Broad Street will be vacated and grid restored with 6th N rebuilt through lot 2. Proponents are also exploring a non-viaduct option.
- Asks for funding situation and estimates.
 - Construction of the project is estimated at \$70 million, which is not yet secured. The study is funded through 2006 for planning and development.

Commissioner Comments and Recommendations

- Appreciates the more logical arrangement of streets in area, which is apparent through the 3D animation.
- Discourages proposals for reversible lane and transit on Mercer arguing that it would detract from the pedestrian experience necessary on Mercer.
- Applauds the proponents focus on TDM traffic realignment to reach goals rather than road expansion.
- Questions use of street parking, suggests using landscape to buffer pedestrians instead.
- Expresses support for street parking on Mercer for calming to create feeling of a boulevard.
- Encourages proponents to not use Denny as a solution for Mercer to relieve capacity, it is already challenged.
- Suggests switching parking lane with bike lane on valley to provide bicyclists a buffer from traffic.

3 Feb 2005 Project: **South Lake Union and Waterfront Streetcar**
Phase: Schematic Design

Previous Reviews: 5 Aug 2004 (Design Update), 15 April 2004 (Briefing), 21 June 2001 (Briefing)

Presenters: Kristin Simpson, SDOT
Ken Johnsen, OPM
Dennis Haskell, Parsons Brinckerhoff
Art Borst, Parsons Brinckerhoff

Attendees: Aaron Asis, UW student
Andrea Flower, UW student
Diego Velasco, UW student
Wayne Hom
Phil Fujii, Vulcan Inc.
Michael Mann, OPM
John Taylor, SPU
Joe Taskey, SDOT
Jack Whisner
Rury Yampolsky, OACA

Time: 1 hour (SDC Ref. # 169 | DC00330)

Action: The Commission thanks the proponents for their excellent presentation of the South Lake Union Streetcar and believes it will have a catalytic effect for the community development of South Lake Union.

- **applauds a design that appears to create the best possible framework for a pedestrian friendly urban design.**
- **appreciates the clean, simple and flexible station/ shelter design.**
- **applaud the attention to detail that has led to a design that responds to the neighborhood plan vision for Terry Avenue, Westlake Avenue and Valley Street.**
- **encourages a design for the maintenance building that will allow for views in from the public right of way.**
- **encourages the incorporation of natural drainage strategies along the right of way, and the involvement of an artist and designation of City 1% art funding to develop an art plan along the corridor.**
- **supports Council's concern for looking at both future extensions of the SLU streetcar to UW along the east side of the lake and of the Waterfront streetcar to the International District and encourage ongoing dialogue with the local communities. The extension of these lines will likely be critical to the long term success of these as transportation systems**
- **The Commission recommends approval of the South Lake Union Streetcar Schematic Design.**

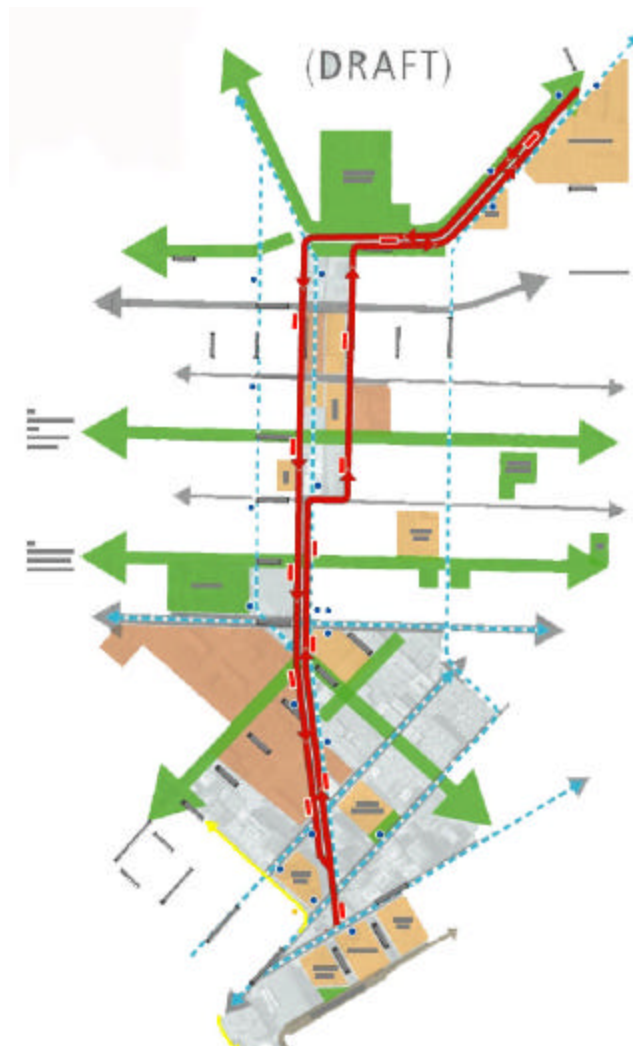
This is the fourth presentation of the South Lake Union Streetcar to the Design Commission and is in schematic design. The South Lake Union Streetcar is part of a larger comprehensive action plan for the South Lake Union neighborhood. Last review, the Commission recommended approval for proponents to move forward on design and engineering of Phase I, as long as the proponents explored extensions to the International District and University/Eastlake Area per the Council's request. An email expressing community's concern that the streetcar route will not include the Eastlake area was read at the beginning of the presentation.

Proponents presented an overview of the development proposed and occurring in South Lake Union and reviewed the streetcar's role as a local circulation system arguing that the streetcar will be a catalyst for future development. They discussed the benefits of the streetcar, stating that it supports pedestrian-friendly development patterns, reduces parking pressures, connects to the transit hub, can be operated in mixed-traffic environments, and can be constructed at a rate of approximately three blocks per three weeks. As a key part of the vision for South Lake Union and Denny Triangle the capital cost estimate for the South Lake Union Streetcar project is \$45 million and the operation and maintenance cost estimate is \$1.4 million for 15 minute headways. The streetcar will attract more riders than a bus route estimating 1,070,000 to 1,230,000 riders by 2020.

Proposed Alignment Description - South Lake Union from Westlake to Yale

The proposed South Lake Union from Westlake to Yale was the most promising route of the routes reviewed. It provides a circulator for neighborhoods undergoing jobs and housing growth. Both the Denny Triangle and SLU Neighborhood Plans call for better transit. Adjacent property owners are willing to provide financial support and the implementation timing would not be affected by the Viaduct or Mercer construction. The route also allows a potential extension to the University of Washington.

The 1.3 mile route will take approximately 8-10 minutes. With the proposed monorail located one block east of Westlake, the proposed Streetcar route would start at Westlake and Olive and travel north on Westlake in the first travel lane adjacent to the parking lane, two blocks past Denny, the Streetcar would turn right on Thomas and travel east to Terry, turn right on Terry and travel north to Valley, turn right and travel east in the rail bank area just north of Valley, then travel on Fairview to about Yale.



South Lake Union Trolley Route

The route south will travel southwest on Fairview, west in the Valley rail bank and then return south on Westlake. The potential Eastlake/University of Washington extension would continue northeast from Yale on Fairview and Eastlake.

The northern-most stop will be located at Fred Hutchinson Medical Center and the southern-most stop and terminus will be located at Westlake and Olive. Streetcar stops will typically occur on the far side of intersections and may share with some Metro bust stops. Some mid-block stops will occur on Terry to adapt to the City's master plan for Terry Ave. Continued work is being done to integrate the proposed stops into the system.

The stations located either on the sides or in the center medians of the streets will meet ADA requirements and may provide rain shelters and leaning rails, or may be integrated with building canopies. The length of the individual cars measure 66' and proponents are currently working to integrate the station prototypes into each station location.

Proponents plan to return to Council in March or April for final design approval and additional funds.

Commissioner Questions

- Asks if the route is 2-way on Westlake.
 - Yes, between Stewart and Thomas.
- Asks where the maintenance yard will be located.
 - It will be located on Valley/Fairview on 2-3 parcels north of Lincoln Towing, 30,000 to 35,000 square feet for both the building and vehicles.
- Asks if there is an art component.
 - Yes, proponents are working with the Office of Arts and Cultural Affairs on 2005 work plan.
- Asks how many stations will be located on Fairview.
 - One at Fred Hutchinson
- Asks about potential for future extensions.
 - Performing feasibility studies of Eastlake extension to SLU Streetcar and Jackson extension to Waterfront Trolley.
- Asks if powered by overhead wire.
 - Yes, it will be a single overhead wire.
- Asks if proponents have chosen the car manufacturer yet.
 - No, but they have a few prospects.
- Asks how tickets will work.
 - A smart card for the whole region's transit is in the future and will be accepted on the streetcar.

Commissioner Comments and Recommendations

- Appreciates the clean, flexible approach to the station shelters and stop features.

- Encourages celebrating the maintenance facility as an educational opportunity; don't hide it, keep it visually accessible to the public.
- Comments that it is a small project that covers a big area and encourages proponents to work with Seattle Public Utilities to incorporate natural drainage into the design.
 - Proponents are working actively with SPU on this topic
- Encourages proponents to make project happen soon as a way to encourage other projects.
 - Yes, it is an important signal project for the mayor. Like Portland, hope that this project will trigger other projects to follow.
- Encourages proponents to pursue future Jackson extension.

03 Feb 2005 Project: **Restore Our Waters Citywide Initiative**
Phase: Briefing

Presenters: John Taylor, Seattle Public Utilities
Previous Reviews: None

Attendees: none

Time: 1 hour (PreCIP (DC00348))

Summary: The Commission thanks SPU staff for their presentation of the Restore Our Waters Initiative

- **appreciates their hard work towards coordinating city agencies to improve our water supply.**
- **encourages SPU and its interdepartmental team to explore larger infrastructure projects in addition to smaller scale and site specific projects**
- **commends the strategic effort to leverage CIP budgets and long range plans for capital investments in City departments to include natural drainage systems and other water improvement/protection strategies.**

This is the first presentation of the Restore Our Waters Citywide Initiative to the Commission. As a PreCIP project, no action is required by the Commission but instead offer a summary of the presentation. Initiated by the mayor's office, the Restore Our Waters Citywide Initiative is a comprehensive strategy to restore, protect and enhance the water bodies of Seattle. The strategy sets goals for each body of water and requires City departments to work with each other and invest smartly in the programs that make the most improvement. The City also encourages residents and businesses to do their part to restore and protect our waters.

The strategy to restore Seattle's waters aims to improve cross-department cooperation, maximize the benefit of City expenditures, clarify city-wide accountability and priorities, and eliminate ambiguities/gaps in city policies and regulations. The strategy targets public property which makes up 20-30% of Seattle and also includes a focus on encouraging participation from the private sector which controls most of the city's land. The outcomes gained from the initiative include the creation of science-based investment guidelines, long term aspirations for water resource areas, recommended capital projects, recommended regulatory and policy changes, property owner restoration incentives, recommended education and stewardship programs, the formation of a Citywide Restore Our Waters Team to coordinate city investments across departments and draft Restore Our Waters design principles, the formation of a community stakeholder group and qualitative/quantitative measures of success.

The focus of the proponent's presentation to the Commission focused on how Restore Our Waters strategy can maximize the benefit of city expenditures through targeting capital improvement projects that are suitable for the integration of Restore Our Waters design elements. Targeted priority capital improvement projects could include large-budget projects and projects situated on the water's edge. Forty capital projects with a combined budget total of sixty million dollars have been identified. The Restore Our Waters approaches include natural drainage techniques, pre-engineering of flow control projects in targeted watersheds, CSO projects, sediment remediation on Lake Union and the Duwamish, shoreline restoration projects, fish barrier removal projects and Green Seattle reforestation projects. Seattle Public Utilities has a \$4-5 million dollar interdepartmental grant fund, underwriting some of the cost, to encourage the use natural drainage strategies. Thus far, most aid has been given to Seattle Department of Transportation

for natural drainage strategies as Seattle Public Utilities identifies storm water detention as a clear nexus between the utilities' functions.

The proponent requested the Commission's support asking that the Commission encourage the use of Restore Our Waters approaches during their reviews of capital improvement projects. The proponent also requested that the Commission review a draft of the Restore Our Waters design principles.

Commissioner Questions

- Asks why South Lake Union isn't listed on the 40 priority projects.
 - It is on the list but didn't make the top 40 priority project list because they are not performing a lot of habitat restoration.
- Asks, if natural drainage strategies not possible in existing urban conditions, what else can be done to improve water quality.
 - More frequent street sweeping and improved street sweeping equipment help a lot. SPU and SDOT wanted to underwrite fund to upgrade equipment but it did not happen.
- Asks if it is better to focus on outer lying areas since 70% of the city ties into CSOs.
 - Need long term approach, pick specific points and tie together in some way.

Commissioner Comments and Recommendations

- Appreciates efforts but encourages proponents to explore broader-scale approaches like perhaps day lighting entire creeks in addition to detention on each site project.
 - Restore Our Waters is addressing these broad-scale approaches, the focus of this presentation was application to capital improvement projects so didn't discuss those efforts.
 - Department of Planning and Development is also currently in the process of creating a code for mitigation that would require restoration.
- Appreciates presentation and comments that Seattle Public Utilities has not often presented to the board in the past because their projects were seen as infrastructure and engineering rather than design and so don't need review; encourages Seattle Public Utilities to present more often to the Commission.
 - Proponents agree.
- Appreciates the Initiative's holistic approach and believes that the Scientific Based Investments make sense. Yes, at least the question gets asked, can it be done? It identifies the issues important enough to be addressed
- Suggests presenting a map that maps the city in a different way demonstrating the City's natural systems and where they have collapsed.
- Endorses increase of street sweeping.
 - Agreed has considered giving incentives: For example in exchange for street sweeping in parking lots, they would reduce drainage fees.

- Comments that the Commission currently sees 15% of the total capital improvement projects occurring, encourages the proponents to bring more capital improvement projects in front of the Commission for feedback.