

Fremont Siphon Replacement Project

Public Meeting Summary

May 15, 2012 6:00 – 7:30pm

Fremont Public Library, 731 N. 35th Street, Seattle, WA 98103

Overview

On May 15, 2012, the King County Wastewater Treatment Division (WTD) hosted a public meeting for the Fremont Siphon Replacement Project. The Fremont Siphon is located under the Lake Washington Ship Canal between the neighborhoods of Fremont and Queen Anne. The meeting was intended to present updates on proposed locations of construction activities and new structures, replacement of the City of Seattle's combined sewer overflow (CSO) outfall, and restoration of affected areas. The team presented next steps in the project and upcoming opportunities for public participation.

17 members of the public attended the meeting.

Presentations

Participants learned about the latest proposed recommendation for potential construction areas and new structures now that the project is in early design. The project team described their proposal for a new microtunnel under the ship canal, just west of the current tunnel. Major construction staging will be located on the north (Fremont) side of the canal. Since King County's parcel in Queen Anne was found to be insufficient for construction staging, major construction staging is proposed at the north (Fremont) side of the Ship Canal. The current proposal, which will undergo environmental review during Summer 2012, recommends staging major construction activities and the new odor control facility and access hatches on the private property located at 2nd Avenue NW and NW 36th Street.

The presentation and other relevant materials can be found at:

<http://www.kingcounty.gov/environment/wtd/Construction/Seattle/FremontSiphon/MeetingCalendar>

Before the presentation, there was an opportunity for meeting attendees to view display boards, ask questions of the project team, and express concerns related to design and construction of the proposed project. Afterwards, meeting attendees had the opportunity to once again view the display boards and ask further questions of the project team.

Meeting attendees were informed of and encouraged to use a variety of methods for submitting questions and input, including the following:

- Web: <http://www.kingcounty.gov/environment/wtd/Construction/Seattle/FremontSiphon>
- Email: Monica.vandervieren@kingcounty.gov
- Phone: 206-263-7301
- Comment forms (available at the public meeting)

Meeting attendees were encouraged to ask questions, express concerns, and provide input. King County staff indicated that input is always welcome and will be used throughout the project design process.

Summary of Questions and Input

Questions, feedback, and discussion from the meeting attendees are summarized below

Will there be noise caused by the microtunneling activities?

The tunneling machine will work far below the surface and is unlikely to cause noise at the surface. The soil separation plant, which filters soil brought to the surface from tunneling, produces noise but would only be run during the daytime. Other construction noise may result from shoring, excavation, and other activities. King County's contractor is required to comply with noise limits established in permits.

Of the two possible locations for the launch shaft on the Fremont side, which is preferred?

Hydraulic constraints limit location of permanent facilities either to Fremont Canal Park or to the adjacent private property at 2nd Avenue Northwest and Northwest Ewing Street. Locating the launch shaft, construction staging, and above ground facilities on the private property is the county's recommended proposal. The project team identified temporary and permanent park impacts, constructability and technical issues that resulted in the proposal to site construction and permanent facilities on the private property. This proposal will undergo environmental review under the State Environmental Policy Act, including a public comment period during Summer 2012.

Will the odor control facilities address the odor problems at 1st Ave NW and NW Canal St?

The odor control facility will address the ongoing odor issues from the existing pipeline in the referenced area. There may still be odors as a result of periodic maintenance and cleaning (likely annually). Currently, King County staff provides neighbors notice when odor-causing maintenance activities are scheduled.

How will the project construction affect the Fremont Fair and Fremont Oktoberfest?

Some construction is expected in Fremont Canal Park, even if the proposal to site major construction on private property is decided. King County is working with Seattle's Event Planning Committee and will also coordinate closely with event organizers. Impacts to these events will be taken into consideration during the planning of construction sequencing.

Is there a water line running through the existing tunnel? What will happen to existing pipes?

A representative from Seattle Public Utilities in attendance answered questions about the City's water pipeline. An out-of-service Seattle Public Utilities (SPU) drinking water pipe is located within the existing tunnel. SPU plans to keep this pipe out of service until the new siphon is built. SPU then plans to install a new pipe within the existing tunnel.

Is there a similar odor control facility design I can visit?

King County operates a range of odor control facilities, some associated with treatment plants and pump stations, and others that control odors from conveyance facilities. Some of these facilities are accessible to the public, but others are not. Contact Monica Van der Vieren to discuss visiting existing odor control facilities.

How is the size and capacity of the odor control facility determined?

There are a number of factors used to determine the size of odor control facility. King County has meters installed to record flow, and using this information the volume of air flow can be calculated. King County will work with vendor suppliers to determine the necessary capacity and size. This site will likely contain an odor control component that is approximately 14 ft in diameter with a building that is 25-30 ft square.

How will traffic be affected on 2nd Ave NW and NW Canal St?

An existing pipeline runs down the center of NW Canal St, so the pipeline-siphon tie-in work will be the biggest impact to NW Canal St, with anticipated closure. This work is expected to take approximately 3

months, but the exact details are not yet determined. The project team understands that the 2nd Ave NW is a one way road, and there are delivery and parking needs.

How long will 2nd Ave NW be closed? Will there be access to the alley?

The street closure could extend up to 3 months. The alley is not expected to be affected by this work.

The project team will be conducting an updated business and resident survey to help further understand the community's usage of the streets and other access needs. All information from local residents and businesses is helpful, especially early in the planning and design process.

How much will the project cost?

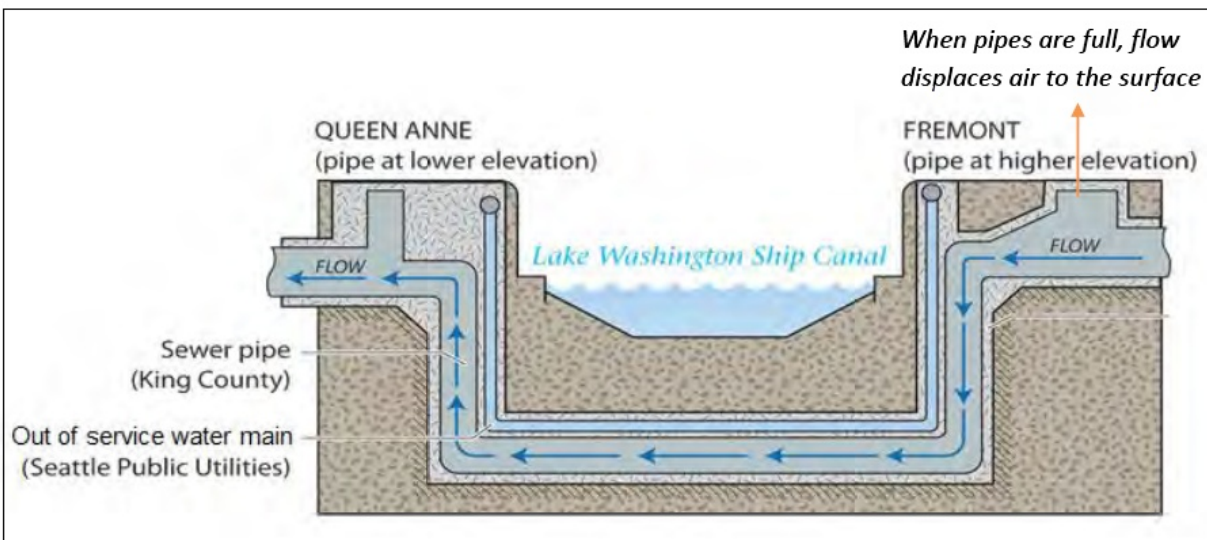
The total project is estimated to cost approximately \$40 million. Approximately \$20 million of the total cost is for construction. This planning level estimate is reevaluated as the project progresses and more specific details are known.

How long are the tunnel drives?

The microtunneling work under the Ship Canal will involve two runs approximately 450 feet in length each.

Will there be an odor control facility on the Queen Anne side of the canal?

An odor control facility is not needed on the south side of the Ship Canal because air in the system is excluded before flows enter the siphon in Fremont. Sewage travels through the siphon from the Fremont side of the canal to the Queen Anne side. On the Fremont side, the North Interceptor pipelines contain wastewater and air. When the North Interceptor flows enter the Fremont Siphon, the smaller diameter pipe traveling underneath the canal fills up with sewage, and the excess air is left behind, finding its way to the surface. The siphon replacement project will not change how air flows through King County's system in Queen Anne. Under most conditions the air in Queen Anne will still be free to travel down the North Interceptor to West Point Treatment Plant. The new odor control facility in Fremont will alleviate the odor problem in that area by pulling the air out of the pipelines through vacuum, and fans will send the air through carbon scrubbers to treat odors.



Will the odors that come from the manholes on 2nd Ave NW be removed?

Some manholes owned by SPU will remain. However, the new odor control facility will treat odors from the King County system.

Does the odor control facility run 24-7? What kind of noise will it make?

The facility is operational around the clock. There will be some noise from the fans and motors. A concrete structure will be built around the facility to mitigate noise. Additional noise control details will be determined further in the design.

If the project team's siting proposal is implemented, what will happen to the rest of the acquired property?

The space will include manholes and aboveground facilities for maintenance access, as well as the odor control facility. Maintenance access in and out of the facility uses flatbed and boom trucks, so parking and driveway access for a range of vehicle sizes is needed. As part of the project, King County may be required to implement stormwater control measures on site.

Will the property become a County-owned site?

Yes. If this proposal is implemented, the area will be purchased from the owner by King County and fenced for safety and security purposes. Restoration details would be refined as the project design progresses with community input on flexible elements. The project is expected to include a public art component which includes community input.

The proposal is for King County to purchase private property just north of the Fremont Canal Park. How is the project affected if the owner is unwilling to sell or the sale price is high?

If King County proceeds with the proposal, the County works closely with the property owner following a process guided by state law. The process includes assessment of fair market value for the property and relocation benefits. A final decision on property acquisition will be made sometime after completion of environmental review, which will occur Summer 2012.

While the project team is not recommending this location, the Fremont Canal Park location is feasible for major construction activities and permanent facilities. Location in the park would result in closure of the area for two years during construction, and a permanent loss of some surface area to accommodate up to four at-grade slabs measuring 10 x 10 feet each, an above ground odor control/electrical facility of about 30 x 30 feet, and driveway access for large trucks to access odor control units for scheduled carbon changes.

What input do tribal entities in our area have on the project?

Consultation with tribal entities is included in the permit review process, specifically the Muckleshoot and Suquamish tribes for this project. Aside from in-water work associated with replacing the City of Seattle's CSO outfall, King County will also address on cultural/archeological resources.

Could an earthquake impact microtunneling?

Generally, tunnels are one of the safest places to be during an earthquake so tunneling activities are not expected to be impacted. Depending on the severity of the earthquake, construction could be affected, much like all other community activities could be, following an earthquake that disrupted roads, utilities, and services.

What happens if the existing tunnel collapses due to a natural disaster, like an earthquake?

Many underground structures, including pipelines and tunnels, move with soils during earthquakes and are not affected. The existing concrete tunnel has survived multiple earthquakes throughout its 100 year service life. King County has established an emergency contingency plan to address failure of the siphon in an emergency.

When was the 108 inch pipeline that connects to the siphon installed?

The North Trunk Sewer was installed, like the Fremont Siphon, prior to 1917.

Closing

The project team thanked the participating citizens for their active involvement in the project. Local business and resident input is very important to informing the decision process, resulting in a design that will meet the needs of the community. Staff encouraged the audience to remain involved and continue to provide input.

Fremont Siphon Replacement Project Team Attendance

King County Wastewater Treatment Division

Will Sroufe, Project Manager

Monica Van der Vieren, Community Relations Lead

Eric Mendenhall, ROW/Permitting

Sue Meyer, Environmental Planning

Adair Muth, Community Relations

MWH Global Americas

Joseph Clare, Design Consultant Project Manager

Jacobs Associates

Jeremy Johnson, Project Engineer

EnviroIssues

Penny Mabie, Community Relations

Hannah Litzenberger, Community Relations