King County
Department of Natural Resources and Parks
Wastewater Treatment Division

Fremont Siphon Replacement Project

Lake Union District Council
Briefing Summary
June 4, 2012 5:30 – 7:00pm
History House – 790 North 34th Street, Seattle, WA

Overview

On June 4, 2012, the King County Wastewater Treatment Division (WTD) gave a presentation on the Fremont Siphon Replacement Project at the Lake Union District Council's (LUDC) monthly meeting. LUDC is a citizen advisory group, one of thirteen in Seattle, which provides the means for cooperative action by Lake Union organizations and with all branches of city government. The LUDC also provides a forum to encourage discussion of common concerns among residents, businesses and community organizations.

The Fremont Siphon is located under the Lake Washington Ship Canal between the neighborhoods of Fremont and Queen Anne. The briefing 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.

11 council members attended the meeting.

Presentation

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.

A similar presentation was given at the May 15, 2012 community meeting, which can be found at: www.kingcounty.gov/environment/wtd/Construction/Seattle/FremontSiphon/MeetingCalendar

The council was 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

Briefing 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.

General Project Information

What will happen to the existing pipes?
The existing siphon will be removed from service. The existing siphon pipelines may be cleaned, disinfected and the ends capped.

Will this project increase capacity of the Fremont Siphon?
King County is planning to maintain the current capacity of the existing Fremont Siphon. The siphon is part of the combined wastewater and stormwater system in the City of Seattle. The capacity of the existing system can be exceeded during large storms, resulting in Combined Sewer Overflows (CSOs), untreated discharges from a permitted outfall into a local waterbody (in this area, the Lake Washington Ship Canal). Expanding or restricting the capacity of the Fremont Siphon could change upstream and downstream flows and affect CSO discharges.

Is the odor control the same type that King County installed at the north end of the University Bridge? That is a nice piece of property and it is now occupied forever by a building that does not use the space very well. Is it possible to have the odor control facility underground?
The planned aboveground odor control facility is somewhat similar to the facility located at the north end of the University Bridge. King County does have some underground odor control facilities, but there are risks and life cycle costs associated with underground facilities, and in some cases, not all elements can be located underground depending on local code. At this time, an above ground facility is planned.

How large is the siphon compared to the sewer line underneath the University Bridge?
The project team is not aware of a King County or Seattle Public Utilities (SPU) sewer line underneath the University Bridge. We will check on this and follow up with additional information.

Will Seattle Public Utilities be able to comment on the project plans?
King County has been, and continues to work closely with Seattle Public Utilities throughout project planning since the County conveys wastewater from SPU's system and the project involves reconfiguration and relocation of SPU's CSO outfall.

Does Seattle Public Utilities own the tunnel where the Fremont Siphon is now located?
SPU owns the utilidor, a concrete tunnel that runs under the Lake Washington Ship Canal. King County has an easement for the siphon pipelines within this tunnel.

Construction

Will the community be involved in the development of traffic management plans during construction?
Throughout project design, the team will work with the community to understand access needs and concerns about a variety of construction elements including traffic control. Several permits for the project include public comment periods, and the project team will make sure people know when there are opportunities to provide input on permits and plans. We will let the community know how to comment as opportunities arise for input on environmental review and permitting processes.

During tunneling under the ship canal, will soils be removed by trucking? Can the material be transported by barge instead?
During the microtunnelling, material is brought to the surface in a soil-water mix. A soil separation plant screens out soil, rocks and other materials. The water is recycled back into the microtunneling process, and the soils and other materials will be hauled offsite. Hauling of excess materials will occur during the daytime.

Will the microtunneling occur 24-7?
Microtunneling does not need to be carried out around the clock like the large-bore tunneling operation being used to install the new Ballard Siphon. Microtunneling work will occur in the daytime, unless there is an unanticipated need to work after hours. If this occurs, we will notify project neighbors.

We encourage King County to use local businesses, especially for materials like gravel and concrete.
All of King County's capital projects are put through an evaluation for sustainability elements, including use of local materials to reduce energy use. We recognize local companies like Lakeside Industries barge their materials to their facility. Contractors that bid for the Fremont Siphon Replacement Project construction can contact them and make arrangements. We are hoping that a general contractor will use local suppliers such as Lakeside and Salmon Bay Sand & Gravel, but that is an arrangement established between the contractor and the supplier. We will note this suggestion in project action logs to ensure that it moves forward through design.

When the City of Seattle used a tunneling machine during a previous pipeline project, the machine went off course and tunneled under private property. If the microtunneling machine were to go off course on the Fremont Siphon project, would the Ship Canal be compromised?

The type of guidance technology used for microtunneling has advanced since that particular project occurred. The current machines use Global Positioning System and gyroscope technology for guidance, reducing the likelihood of tunneling outside of the designated alignment. A post-construction survey verifies the alignment.

It is unlikely that the Ship Canal would be affected by this work, since the machine will travel 20-30 feet below the bottom of the canal. If soils were compromised, the only the area of pipe that was installed below the canal level could flood. There would be no impacts to the surrounding community.

Are you planning to do a substantial amount of the construction overnight? It is important to note that it is an industrial area, and workers tend to park 6 am-4:30 pm.
Most construction work is currently planned to occur during normal work hours, but the details of construction work times will be further refined as the project approaches construction.

LUDC members expressed concern over several construction related issues and offered some suggestions to minimize impacts to the community. These include:

- Requiring the contractor to consolidate construction worker parking offsite to reduce the impact on existing parking in the area
- Using surface drops for power instead of generators. Generators tend to be noisy and disrupting.
- Creating truck and haul routes that do not require vehicles to back up, which eliminates the loud noise associated with vehicles moving in reverse.

These types of community concerns are important for the project team to hear early in the project, and it is valuable input at the current phase. When developing the specifications for construction, King County will look at including these types of requirements for the contractors.

Proposed Property Acquisition

The LUDC members expressed concerns regarding the proposed property acquisition. They noted that the Fremont Canal Park area is Seattle Department of Transportation (SDOT) property designated as a utility corridor, allowing installation of infrastructure like the Fremont Siphon without consideration of ordinances protecting Seattle Parks property. LUDC encouraged King County to use the SDOT owned land (Fremont Canal Park) instead of acquiring the private property, and LUDC may pass a resolution expressing this formally.

Council members noted the North Seattle Industrial Association will oppose the acquisition of private industrial property for this project. They noted that the business provides local jobs and goods and services to other businesses in the area, and there are not similar businesses providing industrial compressed air products in the area. Local businesses will have to get these types of products from outside of the local area. They

An LUDC member commented that it would be less expensive over the long run to utilize the SDOT property (Fremont Canal Park), instead of taking employees and property taxes out of the Fremont area.

Another member suggested that if King County must acquire the property, all facilities should be built underground as a utility easement, and the surface use returned to private ownership.

Closing

The project team thanked the LUDC members for letting the project team present on the project. Local 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
Monica Van der Vieren, Community Relations

MWH Global Americas
Joseph Clare, Design Consultant Project Manager

EnviroIssues
Hannah Litzenberger, Community Relations