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C.F. 313666

**FINDINGS, CONCLUSIONS AND DECISION
OF THE CITY COUNCIL OF THE CITY OF SEATTLE**

Council Concept Approval to allow the replacement and expansion of a utility service use (Seattle Public Utilities storm water facility) located at 5895 Lake Washington Boulevard S (Project No. 3015640, Type V).

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DPD Application #3015640

FINDINGS, CONCLUSIONS
AND DECISION

Background

Seattle Public Utilities (SPU) has proposed to install a 2.65 million gallon Combined Sewer Overflow (CSO) tank at Basin 44 in Seward Park. The proposed CSO tank and related infrastructure will be mostly located beneath existing tennis courts at the southwestern corner of Seward Park. Piping and related infrastructure would be located below the park, in the water, and above grade within the park and would extend south to Basin 45 at Martha Washington Park, 6612 57th Ave S.

The proposed CSO tank would be approximately 390 feet long by 50 feet wide by 30 feet deep. The tank and its related infrastructure (including an electrical cabinet, irrigation control cabinet, motor actuators for mechanical gates, odor control ducts, meter cabinet, and a 680 linear foot outfall pipe) will be partially located under the existing tennis courts, but would extend beyond the current boundary of the tennis courts. The project site is zoned Single Family 9600 (SF 9600) and in the Conservancy Recreation (CR) and Conservancy Protection (CP) shoreline environments. SPU will own the CSO; the Seattle Department of Parks and Recreation (Parks Department) owns the property.

CSO tanks are a "utility service use", "city facility" and "public facility" within the meaning of the City's land use code (SMC 23.84A.006, .030, and .040). New public facilities are permitted in SF 9600 zones by City Council approval. Public facilities and utility lines require a shoreline substantial development permit in the CP and CR environments. Utility service uses require shoreline conditional use approval in the CR environment.

This project is a required part of SPU's strategy to protect public health and the environment by improving its existing wastewater system. In June 2012, the City of Seattle approved a consent decree with the United States Environmental Protection Agency, Department of Justice, and Washington State Department of Ecology that included this project as one measure to reduce sanitary sewer overflow and CSO, along with timelines for implementing those measures. This CSO tank will store untreated stormwater and wastewater that the system would otherwise discharge into Lake Washington during peak storm events. In this particular drainage basin, there have been an average of seventeen untreated discharges a year. The improvements to this facility will help SPU meet a goal of no more than one such event in any year.

On April 3, 2014, the Department of Planning and Development (DPD) issued its Analysis and Recommendations and published a Notice of Public Hearing for Council to consider the request for concept approval. DPD recommended approval of the project with eight conditions to mitigate both construction and use impacts.

On May 6, 2014, the Parks, Seattle Center, Libraries, and Gender Pay Equity Committee (Parks Committee) held a public hearing on DPD's recommendation and received a briefing on the project. On May 20, 2014, the Parks Committee had an additional briefing and heard public comment on the proposal prior to making its recommendation to the full City Council.

Findings of Fact

The City Council hereby adopts the following Findings of Fact:

1. As reflected in Attachment A, the proposed CSO tank is located in the southwest corner of Seward Park at 5895 Lake Washington Boulevard South.
2. The project site is zoned Single Family 9600 (SF 9600). The project site is also located in two Shoreline environments (SMC Chapter 23.60A): areas landward of the ordinary high water mark of Lake Washington are located in the CR environment, areas waterward of the ordinary high water mark are in the CP environment. The project site is subject to a substantial shoreline development permit and a shoreline conditional use permit due to its location within the shoreline environments and the cost of construction.
3. The Parks Department owns the site. Concurrent with consideration of this application, the Council is considering a partial transfer of jurisdiction of the site from the Parks Department to SPU (Council Bill 118066).
4. The project site is predominantly flat, paved and is in use as two tennis courts and a small parking lot. The parking lot serves the tennis courts and visitors to the rest of Seward Park. The site is east of and shares property boundaries with ten single family homes zoned SF 9600. To the east of the site is Lake Washington. Seward Park extends north and east of the site. Surrounding uses outside the park are primarily single family houses.
5. The project is subject to environmental review under the Washington State Environmental Policy Act (SEPA). SPU issued a SEPA determination of significance on May 26, 2011. In September 2012, SPU issued a Draft Environmental Impact Statement (EIS). On January 3, 2013 SPU issued a Final Environmental Impact Statement. A coalition of local neighbors (Seward Park Neighbors Coalition) appealed the adequacy of the Final EIS to the Office of the Hearing Examiner, pursuant to Chapter 25.05 of the Seattle Municipal Code. The Hearing Examiner conducted an appeal hearing on March 25, 2013. As documented in a decision dated April 8, 2013, the Hearing Examiner remanded the SPU Director's adequacy determination on the Final EIS on the sole issue of project-related operational noise. The Hearing Examiner affirmed the SPU Director's Final EIS adequacy determination with respect to all other issues addressed in the appeal. On September 5, 2013, SPU issued a Revised EIS and Technical Memorandum, addressing project-related operational noise. On September 30, 2013, SPU issued an Addendum to the Revised EIS and Technical

Memorandum analyzing a modified project that SPU determined could be more cost-effective and perform better than the project as initially proposed.

6. SPU submitted a Master Use Permit (MUP) application to DPD in December 2013 (DPD Application Number 3015640). A public comment period on the MUP ran from January 9, 2014 to February 7, 2014. DPD received comments from six neighbors of the site recommending denial of the application, as shown in the Analysis and Recommendation of the DPD Director. Comments voiced concern regarding the noise, vibration and dust impacts of construction. Comments also cited impacts on trees, plants and wildlife in the park; impacts on adjacent steep slopes and liquefaction prone areas, and noise and odor impacts of the facility when it is in operation. Instead of installing the CSO tank at the proposed site, many commenters recommended siting the facility at an alternative location analyzed in the EIS, the park's south parking lot.
7. In making a recommendation to Council, SMC 23.76.050 requires that the DPD Director draft an evaluation of the proposal based on the following standards and criteria:
 1. The written recommendations or comments of any affected City departments and other governmental agencies having an interest in the application or request;
 2. Responses to written comments from the public;
 3. An evaluation of the proposal based on the standards and criteria for the approval sought and consistency with applicable City policies;
 4. All environmental documentation, including any checklist, EIS or DNS; and
 5. The Director's recommendation to approve, approve with conditions, or deny a proposal.
8. The following findings were included in the Analysis and Recommendation of the DPD Director concerning the project's compliance with criteria in SMC 23.76.050:
 - a. SPU conducted public outreach and meetings for the project prior to submitting the application to DPD. From those public meetings, SPU maintains their own email and mailing lists, as well as public comments, all of which informed the project prior to submittal to DPD. MUP plans were referred to the Parks Department for comment.
 - b. The required comment period for this proposal was held from January 9, 2014 to February 7, 2014. DPD noted comments from six members of the public opposed to this project. Comments stated that the proposed use and construction impacts are incompatible with the adjacent single family uses. Comments noted that the proposed site would impact more trees than the alternative site, the south parking lot. Comments were also concerned about noise and odors.

In response to public comments, SPU stated: "Seattle Parks and Recreation (Parks Department) is the City department that has jurisdiction over the development site and its usage. According to the Parks Department, Seward Park is a regional destination park

that draws visitors from both the local area as well as the region. Based on the historical usage of the tennis courts and the parking lot, the Parks Department does not believe that the elimination or a reduction in the development site area is warranted. Regarding landscaping, the Parks Department supports "Crime Prevention through Environmental Design" (aka, CPTED), which is defined as 'the proper design and effective use of the built environment which can lead to a reduction in the fear of crime and incidence of crime, and to an improvement in the quality of life.' Planting of new landscaping on the site will incorporate CPTED principles to discourage criminal activity."

- c. The project complies with land use code development standards for institutions in SMC 23.44.022: few development standards apply as the development occurs primarily underground. The two applicable requirements are section 23.44.022 H. "Noise and Odors" and 23.44.022 I. "Landscaping".

The acoustic modeling for noise levels during operation shows no audible increase to existing noise levels at residences or key sensitive park sites discussed in the EIS, or for park users. The construction permit will have a separate Noise Ordinance review to ensure compliance with the Noise Ordinance during construction.

SMC 23.44.022 I. requires landscaping that: integrates the facility with adjacent areas; reduces the potential for erosion or stormwater runoff; reduces coverage of the site by impervious surfaces; screens parking from adjacent residentially zoned lots or streets, or reduces the appearance of bulk of the facility. In this case, the Parks Department is reviewing the application and has provided specific comments on all facets of the project, including landscaping. No further analysis is necessary. The proposal is to repave the tennis courts and parking lot in generally the existing configuration, which requires compliance with the drainage code.

The proposal meets all applicable development standards for new or expanding institutions in single-family zones.

Related to Environmentally Critical Areas (ECAs), SPU has executed an ECA Exemption pursuant to SMC 25.09.045.

Related to the Comprehensive Plan, the DPD Analysis and Recommendations cites multiple Comprehensive Plan goals and policies that the proposal meets.

- d. According to the environmental analysis performed on this project, there are no significant adverse effects on the environment anticipated to result from the proposal. Meeting the eight conditions specified in the DPD Analysis and Recommendations the project will be compliant with SEPA policies. Existing codes and development regulations applicable to this project will provide additional mitigation.
- e. DPD has recommended approval of the project including: Council approval of the location of a public facility in a single-family zoning district; conditional use approval of the shoreline substantial development permit; approval of the shoreline conditional use permit; and SEPA approval with conditions.

9. The proposal also requires a shoreline substantial development permit because: (1) the value of construction in the City's Shoreline District¹ exceeds \$2,500, and (2) the request to install a CSO tank and related infrastructure occurs in the CR and CP shoreline environments. Normally, DPD reviews a shoreline permit as a Type II land use permit. However, SMC 23.76.036 requires Council approval for Type II Shoreline applications listed in SMC 23.76.006 C.2.g when associated with a Type V request. Section 23.76.006 C.2.g lists both shoreline substantial development permits and shoreline conditional uses.
10. According to SMC 23.60.030, shoreline substantial development permits may be issued when the proposed development is consistent with:
 1. The policies and procedures of Chapter 90.58 RCW;
 2. The regulations of SMC 23.60; and
 3. The provisions of Chapter 173-27 WAC.

Conditions may be attached to the approval of a shoreline permit, to assure consistency of the proposed development with the Seattle Shoreline Master Program and the State's Shoreline Management Act.

11. In the CR environment, SMC 23.60.365 states: "utility service uses for treating and storing stormwater and/or combined sewage are allowed as a shoreline conditional use if they reasonably require a shoreline location to operate, they are the minimum size necessary to meet the purpose; and they mitigate adverse impacts to achieve no net loss of ecological functions." In the CP environment, SMC 23.60.302 permits utility lines as a special use if no reasonable alternative location exists.
12. In making a recommendation to Council, SMC 23.76.050 requires that the DPD Director draft an evaluation of the proposal based on the standards and criteria for the approval sought and consistency with applicable City policies.
13. The DPD Director's written Recommendation analyzes the proposal's compliance with related land use code approval criteria, provides detailed SEPA analysis, including an analysis of construction noise impacts not addressed by existing regulations.
14. The DPD Director recommends that the Council grant concept approval and approve shoreline permits for the project. DPD has recommended eight conditions to address short- and long-term impacts of construction and the new use.

Conclusions

The City Council hereby adopts the following Conclusions:

1. The proposed facility, a utility service use, is a public facility as defined in SMC 23.84A.006.

¹ The Shoreline District extends 200 feet from the Ordinary High Water Mark of Lake Washington as measured on a horizontal plane

2. Utility service uses are public facilities that require Council approval when the use is established in a SF 9600 zone. The Lake Washington shoreline between I-90 and South Fontanelle Place, including the entire shoreline in the North Henderson Basin, is zoned exclusively with single-family zoning districts.
3. The Council has identified twenty-one additional mitigation measures to reduce impacts of construction on the adjacent single-family houses and the park.
4. The Council also acknowledges that SMC 23.76.036 requires Council approval of MUP applications that include both Type II (shoreline permit) and Type V (council concept approval) requests. The Council has considered the shoreline permit requirements in SMC 23.60, DPD's Analysis as detailed on Pages 12-20 of its Analysis and Recommendation, and supporting documents. The Council concludes that the project, as designed, meets 1) the policies and procedures of RCW Chapter 90.58, 2) requirements in SMC 23.60, and 3) the provisions of WAC Chapter 173-27.

Accordingly, the City Council now concludes that requested concept approval and shoreline permits should be granted with conditions.

Decision

The City Council hereby GRANTS SPU's requested concept approval and shoreline permits for the project with the following conditions:

A. CONDITIONS – TYPE V COUNCIL LAND USE DECISION

Prior to construction

1. Review the design to identify whether there are any additional improvements that would: (1) further reduce above-ground features; and (2) reduce impervious surfaces in the design of the proposed facility;
2. Offset any increase in impervious surfaces at the proposed facility with creation of new pervious areas at other locations within Seward Park with the goal of no net increase in impervious surfaces within the park;
3. Provide a 24-hour contact person or persons to address complaints during construction;
4. Work with the abutting property owners to perform pre-construction surveys of structures and side sewers on lots abutting the park to provide a baseline to identify cracks resulting from construction;
5. Work with the abutting property owners to install additional vegetation along property lines to enhance visual screening and delineate the boundary between the Park and lots abutting the park where none currently exists.

During construction

6. In addition to public notice requirements imposed as a SEPA condition, provide public notice through signage near or at the construction site, website information, and e-mail notification to interested parties regarding the construction schedule: (1) identifying the periods of construction during which noise levels are expected to be high because the impact types of equipment identified in SMC 25.08.425 C are planned to be used; and (2) providing at least one month notice of the construction start date;
7. Prepare a plan to stage trucks offsite to the extent feasible while minimizing trips to the site;
8. Schedule the construction of project elements, when feasible, to reduce the number of simultaneous vehicle trips to the site;
9. Limit construction activity on weekends and restrict construction activities using the impact types of equipment identified in SMC 25.08.425 C to weekdays;
10. Schedule construction to avoid overlap with the construction of other projects in the park; when construction overlap cannot be avoided, coordinate project schedules to minimize impacts, where feasible, on the Seward Park neighborhood and park visitors;
11. Work with the Parks Department and special event organizers to coordinate construction hours with the scheduling of large scheduled community events at Seward Park;
12. Work with Seafair to develop a construction schedule that suspends construction activities during significant Seafair events in or near Seward Park;
13. Use construction methods that reduce vibration to or below the levels identified in the FEIS;
14. Specify threshold vibration levels for structures on lots abutting the park in the contract documents;
15. Work with property owners to implement a monitoring program to periodically measure vibration levels and movement on lots abutting the park;
16. Do not use rock blasting;
17. Follow best management practices for controlling fugitive dust;
18. Use feasible noise-reducing measures, such as using sound control devices on equipment, prohibiting equipment with unmuffled exhaust, minimizing idling time of equipment and vehicles, and installing acoustic barriers around stationary sources of construction noise; and
19. Conduct on-site monitoring to ensure compliance with requirements in the City's noise code.

Post Construction

20. Work with the abutting property owners to perform post-construction surveys of those structures and side sewers surveyed under Condition 4, and repair cracks determined by the inspector to reasonably result from construction;

For the life of the project

21. Schedule maintenance activities at low-use times in the park, except in cases of emergency.

B. CONDITIONS – SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT

During Construction

22. Restrict any work waterward of the ordinary high water mark to applicable work windows established by the Washington Department of Fish and Wildlife.
23. Employ appropriate Best Management Practices (BMPs) to prevent any debris or other deleterious material from entering Lake Washington, such as the use of a turbidity curtain and/or debris boom surrounding the project area during in-water and over-water work to contain any debris, suspended sediments, or spills caused by construction activities. Materials to be disposed of shall be contained on site and then discarded at an appropriate upland facility.
24. Immediately remove any debris that enters the water during the proposed work and contain such debris until it can be disposed of at an appropriate upland facility.

For the Life of the Project

25. Apply no pesticides or fertilizers at the project site within 50 feet of a stream, wetland, or shoreline except as authorized by DPD.
26. Prevent the entry of fish into the outfall.
27. Monitor and maintain shoreline revegetation and shoreline enhancement measures included in the application.

C. CONDITIONS – SHORELINE CONDITIONAL USE

None.

D. CONDITIONS – SEPA

Prior to Construction

28. Execute a public outreach plan including a website to provide project and progress updates, obtain email addresses for a list-serve for project updates, and provide project contacts (with

phone numbers) for the public. These contacts should also be mailed to nearby property owners (SPU should define the appropriate area of the mailings).

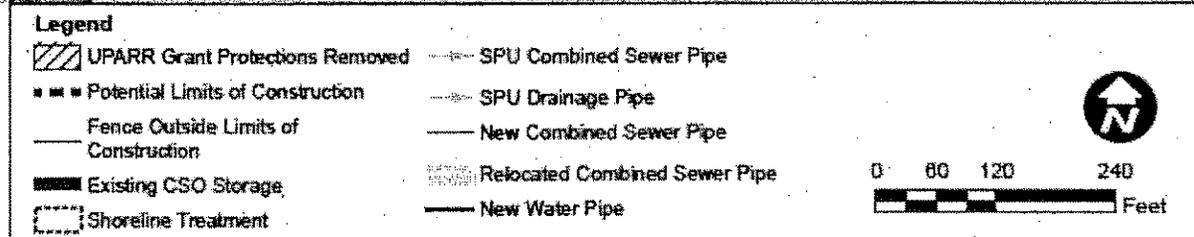
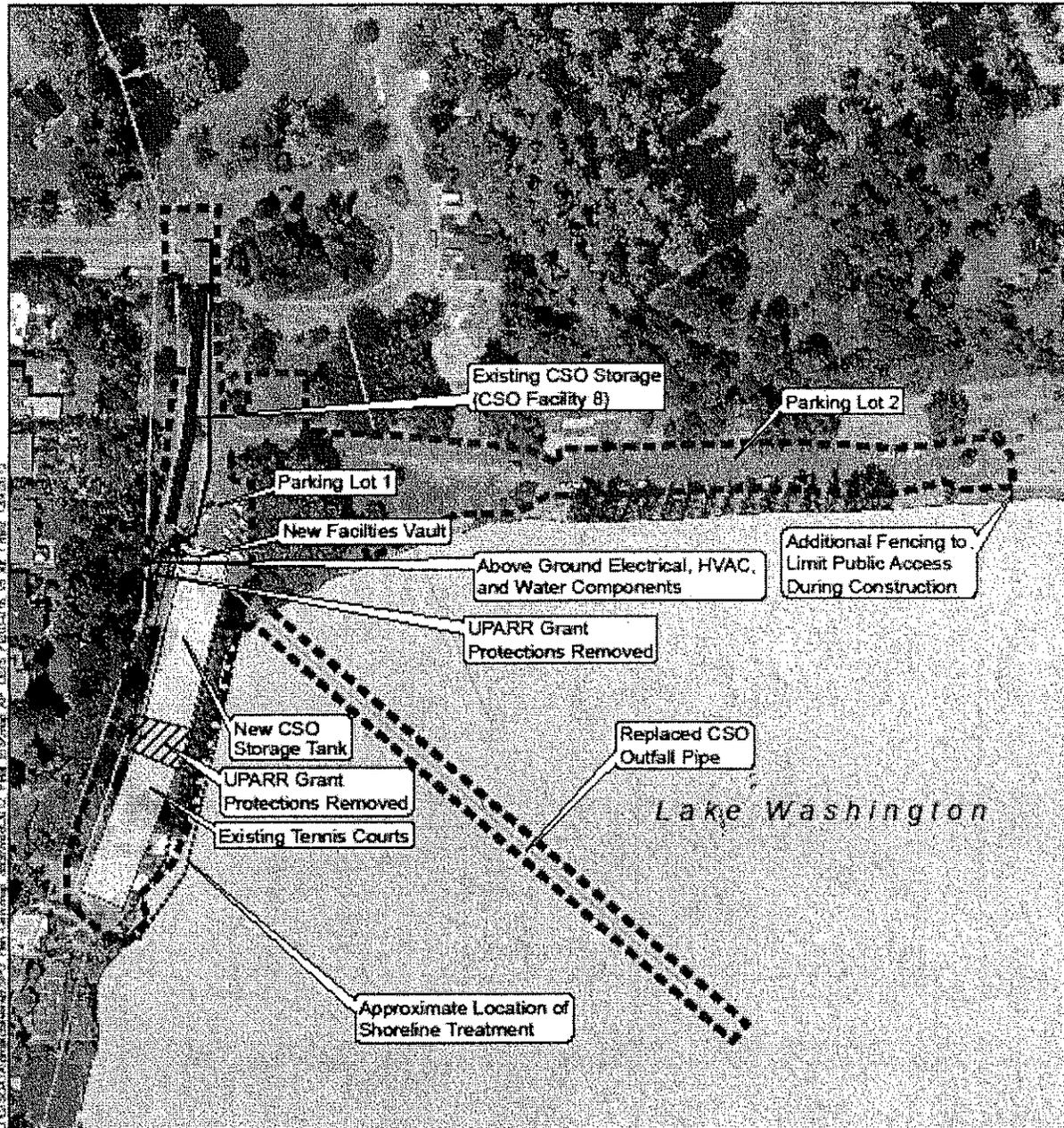
Prior to Issuance of the Master Use Permit

29. The project owner and/or responsible parties shall provide DPD with a statement that the contract documents for their general, excavation, and other subcontractors will include reference to regulations regarding archaeological resources, and that construction crews will be required to comply with those regulations, including the following:

- Archaeological Sites and Resources (RCW 27.53);
- Indian Graves and Records (RCW 27.44);
- Archaeological Site Public Disclosure Exemption (RCW 42.56.300);
- Discovery of Human Remains (RCW 27.44);
- Archaeological Excavation and Removal Permit (WAC 25-48); and
- Abandoned and Historic Cemeteries and Historic Graves (RCW 68.60).

Dated this 2nd day of June, 2014.

City Council President



	HENDERSON BASIN 44 CSO REDUCTION PROJECT FINAL ENVIRONMENTAL IMPACT STATEMENT		TENNIS COURTS ALTERNATIVE MAIN COMPONENTS IN SEWARD PARK	
			JANUARY 2015	FIGURE 3-1

Conversation RE: Council Policy Stance for Adapting to a Hybrid District-elected Council
5/8/14

Objective: Identify Council members' vision of a high-functioning City and Council under the hybrid-district system, using scenarios of maximum and minimum changes in City practice to spur discussion.

Topic	Maximum change (heavy District focus)*	Minimum change (less District focus)
Philosophy	The best practice is to provide services, track information, and make decisions based on interests of the 7 districts, with citywide interests as a co-equal or secondary consideration.	The best practice is to provide services, track information, and make decisions in a more-or-less district-blind manner, with districts addressed primarily through data evaluation and constituent services.
General approach	Change Executive and Council capabilities, organization, and performance targets to deliver services and track information specific to each District.	Maintain current Executive and Council practices but gear-up arrangements for collecting and reporting data by district and responding to district constituents.
Council operations	<ul style="list-style-type: none"> • Assume no increase in the number of CM staff but expect that at least one LA in each office will be devoted to district constituent response. • Consider client management software to be shared (or not) by CMs. • Establish a multi-pronged communications strategy for regular two-way communication with district constituents, such as more meetings in the district, a separate webpage for each district, etc. • Incorporate districts into selection criteria for boards and commissions** • Establish a Council work program item for Geographic Information System (GIS) analysis to support district-oriented evaluation. • Consider additional Council decision-making rules that will help resolve conflicts caused by the district system. • Do not distinguish between at-large and district CMs in committee or leadership assignments. 	<ul style="list-style-type: none"> • Assume no increase in the number of CM staff but assign LA time assuming an increase (25%?) in constituent response. • Consider client management software to be shared (or not) by CMs. • Do not distinguish between at-large and district CMs in committee or leadership assignments.
Executive operations	<ul style="list-style-type: none"> • Assign more staff time (new FTEs?) to answering Council's district-related questions. • Be able to report department services (and dollars) by district in a timely way. 	<ul style="list-style-type: none"> • Assign more staff time to answering Council's district-related questions. • Be able to report department services (and dollars) by district in a timely way.

	<ul style="list-style-type: none"> • Consider client management software to be shared (or not) among Executive departments. • Conduct more outreach/involvement in the districts. 	
Equity guidelines	Establish guidelines for fair distribution of services similar to Metro's guidelines for transit service (# of users, service to low-income communities, routes to key destinations) or set goals such as no more than X% difference between districts in transportation capital spending over a 10 year period.	Deal with district equity issues on a case-by-case basis.
Data	<ul style="list-style-type: none"> • Identify key measures of City services in districts, gather data on those measures, and report progress at least annually. • Set performance targets (unique to each district with input from district residents?) for each key measure of City services. • Request during approval of the 2015-2016 budget that spending by district be shown (as an appendix?) in the proposed 2016 budget. • Have a City Council or Executive-maintained webpage for each district highlighting public meetings in the district, active land use applications, upcoming road projects, etc. 	<ul style="list-style-type: none"> • Add a line for a district number on capital improvement project description sheets in the proposed 2015-16 budget. • Add a line for a district number on fiscal notes and other standard forms. • Have a City Council- or Executive-maintained webpage for each district highlighting public meetings in the district, active land use applications, upcoming road projects, etc.
Changes in City Service Delivery	<ul style="list-style-type: none"> • Redraw neighborhood districts, police precincts, community center geo-regions, etc. to align with district boundaries. • Address district information and goals in the major update of the Comprehensive Plan to be developed in 2015 and delivered to Council in 2016. 	<ul style="list-style-type: none"> • Redraw neighborhood districts to align with district boundaries. • Address district information and goals in the major update of the Comprehensive Plan to be developed in 2015 and delivered to Council in 2016.

* The Auditor's review of cities with a hybrid-district system found no district-organized budgets, departments or Council committees; no pattern of additional CM offices in the districts; and no increase in Legislative Department staff due to district-elected CMS; so those options are not included here.

** **Bold** are potential early actions that could be started in 2014.

City Council Parks, Seattle Center, Libraries, and Gender Pay Equity Committee
Seward Park Combined Sewer Overflow (CSO) Project
Frequently Asked Questions (FAQs)
5/15/2014

Other alternatives

Did SPU and Parks consider installing the tank in the meadow location?

Early in the alternatives analysis process, SPU and Parks considered the meadow as a potential feasible location for installation of the underground storage tank in Seward Park. However, Parks and SPU determined that locating the storage tank in the meadow would require placing access structures (e.g., hatches and manholes) and grass-crete for maintenance vehicles in the meadow, which would alter the overall character and usability of the meadow as a soft, versatile green open space. Parks and SPU agreed to remove the meadow from further consideration as the remaining candidates were two paved surfaces (i.e., South Parking Lot and Tennis Courts) under which the storage tank could be installed. This decision was strongly supported by the Friends of Seattle Olmsted Parks. In addition, during the siting process for the Genesee tanks, which occurred at the same time, the community expressed a strong preference for avoiding the addition of hardscape to grassy areas and requested for the tanks to be placed under pavement.

Are there alternative materials (e.g., graphite) that SPU should have considered for the tank?

SPU routinely considers different materials for construction of its water and wastewater facilities. For underground storage tanks, both concrete and steel are routinely used in the industry. The primary determinant for which material is selected is typically cost. For the size of the storage tank being considered in Seward Park, reinforced concrete is the most economically viable material that provides sufficient strength, durability, and reliability. Materials such as graphite are rarely used in the wastewater industry, primarily due to their high cost.

Did SPU consider prefabricating the tank and then laying it in the bottom of Lake Washington?

This alternative was raised to SPU staff during the Draft Environmental Impact Statement (DEIS) public hearing in 2012. SPU researched the potential for the alternative and quickly determined that the alternative would not be allowed by both local and state regulations. The shoreline environment off the southern shore of Seward Park is classified as "Conservancy Preservation," which is the highest possible designation for shoreline protection. The area is considered prime habitat for juvenile endangered Chinook salmon. Laying a tank in the bottom of Lake Washington would negatively impact thousands of square feet of shoreline habitat, and State permitting agencies and Tribes would not approve this alternative, especially since there are viable land-based alternatives (e.g., Tennis Courts and South Parking Lot alternatives).

Public Input

At the DEIS public hearing and the 5/6/14 Council Committee meeting, there were no public stakeholders who showed up in favor of the Tennis Courts alternative. Was there any public support of the Tennis Courts alternative?

SPU and Parks have received public support for the Tennis Courts alternative since 2011. Members of the Friends of Seattle Olmsted Parks (FSOP) have consistently voiced their strong support for the Tennis Courts alternative, compared to the South Parking Lot alternative. The Friends of Seward Park expressed that the tennis court site was the most logical and least impactful to the park in 2011. Many supporters have recently communicated their support for the Tennis Courts alternative in emails to the Seattle City Councilmembers. The Audubon Center, which is the closest facility to the South Parking Lot, continues to support the Tennis Courts alternative via emails and their comments to the Draft EIS. The Seward Park Clay Studio also continues to support the tennis court location as the preferred option. There were DEIS comments from users of the Seward Park playground and nearby neighbors in support of the Tennis Courts alternative. Supporters of the tennis court location prefer to locate the tank under the tennis courts as it will have the least impact on the most park visitors, school groups, youths, and families. Major event users, such as Seafair, have communicated their preference for the Tennis Courts alternative in a letter to the City Councilmembers. SPU also received a strong letter of support for the Tennis Courts Alternative from its Creeks, Drainage, and Wastewater Citizens Advisory Committee (CDWCAC).

Over the past 3 years, SPU and Parks have heard from groups representing broad segments of the population who support the Tennis Courts location due to reduced impacts to this historic community park. The opposition to the Tennis Courts alternative has been primarily from the 10 private property owners who reside in closest proximity to the tennis courts. It is generally the case that members of the public are more likely to attend public hearings to oppose a project alternative than to support one. SPU and Parks have consistently strived to use inclusive outreach and public engagement processes throughout the life of the project to overcome any socio-economic and cultural barriers to providing public input to the City. The documented support for the Tennis Courts alternative, as described in the preceding paragraph, is strong evidence that there are multiple groups, representing thousands of potentially impacted diverse individuals, who are in support of the Tennis Courts alternative.

Evaluation Criteria

What are SPU's and Parks' criteria for recommending the Tennis Courts alternative?

SPU evaluated the two final alternatives (Tennis Courts and South Parking Lot) based on financial, social, and environmental criteria. Financial criteria involved the calculation of short-term and long-term capital and operations and maintenance (O&M) costs for the two alternatives. Social considerations included both short-term and long-term impacts to the

adjacent neighbors, community members and facility operators associated with Seward Park. Environmental criteria were evaluated in the EIS and included consideration of impacts to aesthetics, transportation, cultural resources, geology/land, shoreline use, noise, natural resources, public services, water resources, air, and habitat/wildlife/fish. The evaluation revealed that the two alternatives were somewhat similar in their cost and environmental impacts. The primary difference between the two alternatives was the amount of social impact to the community:

- **Short-Term (Construction) Social Impacts:** Construction of the South Parking Lot alternative would have an effect on the more than 1.1 million annual Seward Park visitors for 2 years through the closure of the main access pathway to the Seward Park loop trail, the park's most frequently visited amenity. Closure of the South Parking Lot would remove close to 20% of the total parking spaces in Seward Park and almost 50% of the lower area parking closest to the Clay Studio, Audubon Center, playground, loop trail, and ADA picnic shelter. The parking lot closure would impact visitors to the Clay Studio and the estimated 21,000 visitors per year to the Audubon Center. In addition, the ADA picnic shelter would be closed and the children's play area would be impacted for the 2-year construction period, affecting thousands of users of those facilities. In contrast, construction of the Tennis Courts alternative would impact far less Seward Park visitors, and the adjacent residences would be most affected by construction noise and vibration for a period of 3-6 months. After 3-6 months, the construction activities at the Tennis Courts site would be far less impacting to the neighbors, based on SPU's experience at the Genesee and Windermere project locations. Closure of the parking lot to the north of the Tennis Courts location, would reduce the total parking at Seward Park by 7%, and the lower area parking by approximately 20%.
- **Long-Term Social Impacts:** The Tennis Courts alternative has no noticeable long-term impacts on the neighbors or on Parks users. This is because the facility is underground and will be invisible to the neighbors without audible sounds and odors, and monthly maintenance of the facility would not require a closure of the tennis courts. In contrast, the South Parking Lot alternative has greater long-term impacts on the users of the Park, because of its location in a centrally used part of Seward Park. Maintenance of the facility would require monthly access and closure of parking spaces in the South Parking Lot, which would regularly displace the thousands of parks users accessing the Seward Park loop trail.

Based on SPU's evaluation of the financial, environmental, and most importantly, social impacts of the two final alternatives (Tennis Courts and South Parking Lot), SPU selected the Tennis Courts alternative as its recommended alternative.

Did SPU and Parks more strongly favor short-term (i.e., construction) or long-term impacts of the alternatives in coming to a recommendation?

SPU and Parks considered both short-term and long-term impacts of the alternatives in its recommendation. As described in the previous question, SPU considered the South Parking Lot alternative to have substantially greater short-term and long-term impacts when compared to the South Parking Lot alternative.

Operations and maintenance impacts

What are the long-term operations and maintenance (O&M) requirements of the tank in either the Tennis Courts or the South Parking Lot?

In either alternative, the tank would fill with a combination of 90% stormwater and 10% sewage approximately 16 times per year, mostly during the wetter months of the year. Both alternatives will require periodic operational closures for maintenance following construction. Regular maintenance of the equipment in the tank will require closures of 4-6 hours approximately 10 times per year after the project is established. During the first two years after construction, the closure rate will be closer to sixteen times per year to make sure the equipment is operating within design parameters. For the Tennis Courts site the closure would be an area between the new tennis courts, and would not require closure of the courts. For the South Parking lot site the closure would be a similar area (2,300 sf) or roughly 10 parking stalls plus the drive aisle. The specific location of the maintenance closure for the south parking is subject to change as design progresses. Approximately once every five years the carbon for the odor control treatment will require replacement. This would shut down either site for approximately 6 hours. Every 25 years, major electrical and mechanical equipment would need to be replaced, which would require longer closures.

Opportunities for improvement at Seward Park

Does the South Parking Lot alternative provide an opportunity for additional improvements in that area of Seward Park?

SPU and Parks do not consider the South Parking Lot alternative an opportunity to improve that area of Seward Park. Rather, it would create both short-term and long-term impediments to recreational enjoyment at Seward Park because of its central location at the entrance to the Seward Park loop trail. Additionally, it would limit the future ability to reconfigure or redesign this central location should park needs change in the future. Parks manages park land long term and it is challenging to anticipate potential drivers for changes at Seward Park in 50 or 75 years. Twenty-four (24) years ago, the South Parking Lot was reduced in size and reconfigured, and it is very possible that additional changes could occur at the South Parking Lot site in the future. SPU and Parks strongly believe that a non-centrally located and lesser used area of the park (i.e., Tennis Courts location) is more preferable for placement of the tank since it maintains the greatest flexibility for future uses in the South Parking Lot.

Short-term impacts to Seward Park

What are the short-term (i.e., construction) impacts to parking, the picnic shelter, playground, and pathway at Seward Park for the South Parking Lot alternative?

The South Parking Lot alternative would require closure of the entire South Parking Lot and its 62 parking spaces (includes 4 ADA accessible parking spaces) for the construction duration of approximately 2-3 years. This represents almost 20% of the total parking at Seward Park, and almost 50% of the "lower area" parking at Seward Park near the entrance to the loop trail, the picnic shelter, the playground, the Audubon Center, and Clay Studio. Removing the South Parking Lot from usage would impact the more than 1.1 million annual Seward Park visitors through the closure of one of the largest and highly used parking lots in the park that serves the day-to-day users of Seward Park and its loop trail, the playground and picnic shelter, the Clay Studio, and the estimated 21,000 visitors per year to the Audubon Center. It is anticipated that the reduction in parking would result in less visitors to Seward Park and higher parking along residential streets in the adjacent neighborhood.

The South Parking Lot alternative would require closure of the adjacent ADA-accessible picnic shelter. (See Picture below.) This ADA-accessible picnic shelter within Seward Park is reserved heavily during the year. The playground would not be closed, although it is immediately adjacent to the large parking lot and would be expected that use would decrease during the construction period due to lack of parking and the close proximity to construction activities. There are two existing pathways to the south and north of the South Parking Lot that lead to the Seward Park Loop trail. The large, flat southern pathway adjacent to the parking lot would be closed during construction for the South Parking Lot alternative and no shoreline access would be provided. The narrow upper path would remain open to allow some non-ADA pedestrian traffic access east to the loop trail. Because of the construction activities in the parking lot and the closure of the southern pathway, it is expected that usage of the loop trail would also drop significantly. Parks maintenance and emergency vehicles would not have access to the loop trail from this area.



What are the short-term impacts to Parks users from the Tennis Courts alternative?

Construction of the Tennis Courts alternative will require complete closure of the two tennis courts in Seward Park for duration of approximately 2-3 years. In addition, there are approximately 23 parking spaces immediately to the north of the tennis courts which would be unavailable during construction. This represents approximately 7% of the total parking at Seward Park, and 18% of the lower area parking in Seward Park. There is also lawn area south and north of the tennis courts that would be unavailable for recreational use during the construction period.

What are the short-term impacts to Seward Park day-to-day users (e.g., visitors, Audubon Center, Clay Studio) and to the surrounding neighborhood from the loss of parking in the South Parking Lot alternative?

The most highly used attraction for day-to-day users of Seward Park is the Seward Park loop trail, which runs along the perimeter of the park adjacent to the water. The primary access point or entrance to the loop trail is through the South Parking Lot. SPU and Parks anticipate that the South Parking Lot alternative would cause a temporary drop in the usage of the Seward Park loop during construction due to lack of parking and the visual impact of a large construction project at the main entrance to the loop trail. The trail can be accessed from the north area near the bathhouse, but parking would be extremely limited. Visitors would have to drive up into the upper loop and find one of the few non-ADA accessible trails that connect down to the shore in order to access the loop trail. ADA access to the loop trail would be especially challenging. Seward Park would not be an inviting place to visit because the construction activities at the entrance would make it difficult to park and access the loop trail.

Visitors to the Audubon Center and the Clay Studio would also be impacted by a significant reduction in available parking spaces immediately adjacent to both facilities at the entrance to Seward Park. As mentioned earlier, closure of the South Parking Lot would reduce the available parking spaces closest to the Audubon Center and Clay Studio by approximately 50%. It is likely that the parking reductions will result in a reduction in visitors and/or students taking classes at the Clay Studio because of the added inconvenience of finding off-site parking to visit the facilities. The Seward Park Clay Studio has been a vital part of Seattle's visual art scene since 1968. Over the years, the Clay Studio has provided a valuable resource to many thousands of people working in clay. They retain over 50% of their students; many of these folks cannot walk very far. Loss of parking near the Clay Studio would create hardships for the elderly and disabled population who take classes at the studio, and impact the Studio's programming, which is dependent on maintaining class sizes. Currently there are about 120 adult students through the week, and about 30 children.

The Seward Park Audubon Center serves over 21,000 people a year, 6,000 of whom are youth from low-income schools coming to the park for a field trip or science workshop. Most of the visitors are from Rainier Beach, Columbia City, Beacon Hill and Seward Park and half identify as people of color. The loss of parking for the South Parking Lot alternative would present a significant challenge for visitors to the Audubon Center and would likely reduce the number of visitors during the construction period.

Lastly, as described earlier, the South Parking Lot alternative would require closure of the adjacent ADA-accessible picnic shelter and would likely impact visitors to the adjacent playground structure.

What are the short-term impacts to large events in Seward Park from the loss of the South Parking Lot during construction?

The South Parking Lot alternative would have a significant effect on events at Seward Park, primarily because of its location at the entrance to the loop trail. The South Parking Lot is frequently shut-down to parking during major events and used for staging activities. Many events (e.g., 5k/10k runs, triathlons, bike rides) funnel participants through the South Parking Lot, since it leads to the loop trail. For example, the finish line of the annual Furry 5K is in the South Parking lot; the event is an important fundraiser for Seattle's Animal Shelter. Many annual smaller events, family gatherings and spontaneous gatherings could be eliminated due to the large construction project in the central area of the park.

Long-term impacts to Seward Park and neighbors

What are the long-term impacts to both Seward Park users and the neighbors from either alternative?

SPU and Parks do not believe that there will be any noticeable long-term impacts of either the Tennis Courts alternative or the South Parking Lot alternative on the neighbors along the west property boundary of the park. In both alternatives, the utility facilities will not be visible to the neighbors and smells and noise will be completely mitigated.

There will be periodic public access closures for routine maintenance at either location. Siting the CSO storage tank in the South Parking Lot does have the potential for greater long-term impacts on Seward Park users, because of the requirement to close down portions of the parking lot for maintenance activities. Also the tank would restrict future changes in the layout or re-design of the park in this area, including softening of the shoreline that is one of the last beaches to need bulkhead removal around the Seward Park peninsula to support endangered juvenile Chinook salmon.

The Tennis Courts alternative would have less long-term impact on Seward Park users as court closure would not be required for monthly maintenance activities. For more significant but infrequent maintenance activities that would occur every 2-5 years, the tennis courts may need to be closed, but closures could be posted, and there are other courts in the vicinity for use.

Does the City have any future long-term plans for the South Parking Lot or the Tennis Courts locations in Seward Park?

The City currently does not have a "Master Plan" for future development and changes to this park. However, over the past 15 years there have been recurring efforts to initiate shoreline restoration projects at Seward Park. Those improvements were superseded by more critical capital needs, but the project is supported by Parks staff, park users, and those who would like to see a better environment for migrating salmon.

Managing the park far into the future will involve adaptive planning as our needs change and a large underground tank in the South Parking Lot would significantly restrict what improvements could be accomplished to accommodate future park use and respond to changing times, such as the parking lot size reduction that has been done in past decades.

Environmental impacts (noise, odor, trees/habitat, etc.)

What is the difference in short-term (construction) vs. long-term noise of the alternatives on the neighbors and Seward Park users?

There is no difference in long-term noise between the South Parking Lot and Tennis Courts alternative on either the Seward Park users or the neighbors. In both situations, the operational noise impacts are indiscernible.

Construction noise impacts are different based on the receptor (picnic shelter vs. neighbors) and the project location. See the following table:

Construction Noise (Technical Memo dated 9/17/2012)		
<i>Affected Group</i>	<i>Tennis Court Site</i>	<i>South Parking Lot Site</i>
Adjacent Homeowners	65 dB to 77 dB	63 dB to 64 dB
Audubon Center	66 dB	70 dB
Playground	67 dB	71 dB
ADA Picnic Shelter	67 dB	76 dB

The change from 60dBA to 75dBA is approximately equivalent to the change from conversational speech to toilet flushing.

Operational Noise (Revised Technical Memo dated 8/26/2013)		
<i>Affected Group</i>	<i>Tennis Court Site</i>	<i>South Parking Lot Site</i>
Adjacent Homeowners	42 dB/ 24 dB	42 dB/ 23 dB
Audubon Center	37 dB/ NA	37 dB/ NA
Playground	37 dB/ NA	37 dB/ NA
ADA Picnic Shelter	37 dB/ NA	37 dB/ NA

Daytime Noise/ Nighttime Noise

SPU is actively working with the neighbors to identify approaches to mitigate the short-term construction noise impact to the neighbors, including replacement of single-pane windows. Based on SPU's experience with the construction of the Windermere and Genesee CSO storage projects, the period of noise impact to the neighbors would be approximately 3-6 months at the beginning of construction, after which the noise impact would be significantly reduced.

What is the difference in impacts on trees and wildlife habitat between the two alternatives?

Both the Tennis Courts alternative and the South Parking Lot alternative require removal of trees to accommodate construction of the underground storage tank. While there are some differences in the trees to be removed at both sites – the total number of trees, the number of exceptional trees, and the preservation value of the trees – altogether, the impacts on trees and wildlife habitat of the two alternatives are similar. In both cases, the trees to be impacted are not considered primary habitat for an endangered species. All trees will be replaced at a minimum of 2-1 ratio. While it is not desirable to remove any trees in Seward Park, most of the trees that are proposed for removal are not native, and all trees will be replaced with native species and shrubs that will help regenerate vegetation and native wildlife species.

Will there be any long-term sewer odors from either alternative on the neighbors and Seward Park users?

SPU plans to construct state of the art odor control for either the Tennis Courts alternative or the South Parking Lot alternative. The tanks will be automatically cleaned after they are emptied, and the air inside the tank will be treated through a carbon unit that operates 24 hours per day, 365 days per year. There will be no long-term sewer odors from either alternative on the neighbors or Seward Park users. This is an improvement from the current condition that has no air treatment in an existing underground sewer pipe next to the tennis courts.

Are there any differences in the stability of the slopes at the Tennis Courts site vs. the South Parking Lot site? Is either site more prone to landslides?

Both the Tennis Courts site and South Parking Lot site have similar geotechnical features. Both sites are located between a slope and the shoreline. To address the shoreline, both sites will require de-watering during construction of the groundwater of similar quantities. Both sites will also have to address sub-surface and surface drainage after construction. Both sites are anticipated to have similar quantities of surface and sub-surface drainage that the project will have to convey around the tank.

Both the Tennis Courts site and South Parking Lot site are adjacent to slopes approximately 30-feet to 35-feet high. Portions of both slopes have been mapped as environmentally critical areas with slopes matching or exceeding 40%. Based on subsurface investigations and mapped geology, the slopes are likely comprised of Blakely Formation bedrock, overlain by a thin mantle of soil (comprised of weathered bedrock and topsoil). Blakely Formation bedrock is a sedimentary rock formation that is generally stable. No signs of instability have been observed at the tennis court site. At both the tennis court site and the south parking lot site the storage tanks will be approximately 20 feet to 30 feet away from the base of the slopes.

SPU/Parks responses to concerns of neighbors

What is SPU's and Parks' approach to responding and/or lessening the construction concerns and long-term concerns of the neighbors?

SPU is committed to addressing the construction concerns of the neighbors. A number of concerns have already been raised through discussions with the neighbors, and SPU has made adjustments to its design of the Tennis Court alternative to accommodate the interests of the neighbors. For example, SPU and Parks relocated an exhaust vent away from the neighbors' properties and further into the park to address concerns regarding gas emissions from the tank. In addition, SPU did considerable design work to minimize noises from the tank, thereby making the operational noise from the facility indiscernible during both the daytime and nighttime. In addition, SPU understands that neighbors have concerns about the potential for single-pane windows and side sewers to break during excavation activities. Although SPU does not believe that either side sewers or windows will be damaged during construction, SPU has discussed the

possibility of proactive replacement of the windows and side sewers to address this concern. SPU has also had discussions regarding landscaping improvements and even offering window shades to the neighbors to address other concerns. SPU is confident that the neighbors' construction concerns can be adequately addressed. As mentioned earlier, SPU is also confident that there will be no long-term impacts of the Tennis Courts alternative on the neighbors. The neighbors have expressed a concern about inviting more people into this area of the park, and the best solution for the neighbors is to install a fence along their property line.

Furthermore, the construction of a similar-sized tank near Magnuson Park over the past 18 months has happened in even closer proximity to residences and a daycare center with no negative effects on the neighbors. The construction team worked closely and successfully with all the concerned neighbors before and during construction to mitigate impacts on the neighbor and park users.

Cost and schedule differences between 2 alternatives

What would be the cost impact of changing the recommended alternative from the Tennis Courts to the South Parking Lot?

At the time that the Draft and Final EIS were published in 2012-13, SPU had determined that there was no difference in cost between the Parking Lot and Tennis Courts alternatives. Since then, there has been considerable work done to advance the design of the Tennis Courts alternative to meet the schedule requirements of the City's NPDES permit and federal Consent Decree. As such, changing the recommended alternative from the Tennis Courts to the South Parking Lot would create additional costs for SPU.

At a minimum, the cost of changing to the South Parking Lot alternative would be \$2.6 million, due to the cost of re-starting the design at the new location. In addition, there are long-term concerns that building a tank underneath the South Parking Lot would restrict the possibility of constructing a more natural shoreline at the parking lot site in the future. To address this concern, the tank could be lowered by as much as 10 feet. This would add a cost increase of up to \$10 million to the project.

Therefore, the added cost of changing the recommended alternative to the South Parking Lot site would be between \$2.6 million to \$12.6 million.

What would be the schedule impact of changing the recommended alternative from the Tennis Courts to the South Parking Lot?

Changing the recommended alternative to the South Parking Lot alternative would immediately delay the project by approximately 14 months. As a result, the City would miss its NPDES permit regulatory milestones for submitting 90% Plans and Specifications, Final Plans and Specifications, and Construction Start. By missing these dates the City risks having to pay fines of up to \$10,000 per day. SPU preliminarily believes that it could meet its Consent Decree

deadlines for Construction Completion and Achievement of Controlled Status with several months of float available for project delays. However, there would be added risk of non-compliance with the Consent Decree due to the delay in the project schedule. The Consent Decree deadlines carry daily fines per violation which start at \$3,000 per day and increase to \$5,000 per day after 30 days.

Shoreline Code

Can SPU install a tank in the South Parking Lot and meet the new Shoreline Code requirements for a 25 ft setback for new structures?

SPU would be able to install the tank in the South Parking Lot site and meet the new Shoreline Code requirement for a 25 foot setback for a new structure.



**Legislative Department
Seattle City Council
Memorandum**

Date: May 20, 2014

To: Jean Godden, Chair
Bruce A. Harrell, Vice-Chair
Tom Rasmussen, Member
Parks, Seattle Center, Libraries & Gender Pay Equity Committee
Sally Bagshaw, Chair
Seattle Public Utilities and Neighborhoods Committee

From: Lish Whitson, Council Central Staff

Subject: Henderson North CSO

On May 20, 2014, the Parks, Seattle Center, Libraries, and Gender Pay Equity Committee will discuss two pieces of legislation related to Seattle Public Utilities' (SPU's) Henderson North Combined Sewer Overflow (CSO) project. The Henderson North CSO project consists of installation of an underground storage tank in Seward Park to store excess sewage and stormwater flows from Basin 44 during heavy rains. Along with the CSO tank and associated infrastructure, shoreline and landscape improvements would be made. Once constructed, the project would reduce the number and volume of raw sewage and untreated stormwater overflows to Lake Washington, thereby protecting public health and improving water quality in the lake. The proposed project is needed to bring the basin into compliance with state and federal regulations that limit the number of raw sewage overflows to a long-term average of no more than one per year.

The project involves the construction and installation of a 2.65 million gallon CSO tank at Basin 44 in Seward Park. The proposed CSO tank and related infrastructure would be mostly located beneath existing tennis courts at the southwestern corner of the park. Piping and related infrastructure would be located below the park, in the water, and above grade within the park. The project would extend south to Basin 45 at Martha Washington Park.

Approval of two pieces of legislation is required for the project to move forward. The first is an ordinance (C.B. 118066) that would: 1) partially transfer the jurisdiction of park space to SPU in order to allow for the construction and maintenance of the CSO and 2) supersede the requirements of Initiative 42, which places limits on the sale, transfer or change of park use. The second is a Council Concept Approval of a utility service use, a Type V land use decision (C.F. 313666).

This project is one of a number of Combined Sewer Overflow projects that SPU intends to undertake between now and 2025. The project is proposed in response to a Consent Decree between the City, the State Department of Ecology and the United States Environmental Protection Agency, and the City's National Pollutant Discharge Elimination System (NPDES) permits. The NPDES contains regulatory milestones related to 90% plans, Final Plans and Notice to Proceed (NTP) with potential penalties for non-compliance. The first of the NPDES deadlines, completion of 90% plans for the facility, is October 31, 2014. The Consent Decree requires construction completion of the North Henderson project by December 31, 2018 and controlled status (control of the CSO resulting in no more than one untreated discharge per year) by December 31, 2019, with penalties for non-compliance.

This memo compares the proposed project and the alternative site considered and provides a range of options for Council action.

Background

In the Seward Park area, stormwater from the drainage system and wastewater from the sewage system are fed into the same pipes and sent for treatment to King County's West Point Treatment Plant or South Treatment Plant. During storms, the existing CSO facility detains approximately 50,000 gallons of combined stormwater and wastewater so that downstream facilities are not overburdened. During heavy storm events, the CSO tank is designed to overflow and release combined stormwater and wastewater through a pipe that extends 680 feet into Lake Washington. The current 50,000 gallon tank releases combined stormwater and wastewater into Lake Washington approximately 17 times a year. The Consent Decree requires an average of less than one overflow a year.

SPU and the Parks Department narrowed the options for storage increases to two locations shown in Figure 1: under the tennis courts in the southwest corner of Seward Park, or under the south parking lot, approximately 700 feet east of the Tennis Courts site.

Tennis Courts Site (Figure 2)

The Tennis Courts alternative would site a new 2.65 million gallon tank underneath the Seward Park tennis courts at the southwestern corner of the park at the southern end of Lake Washington Boulevard S. The tennis courts run generally north-south. They are at the base of a hill, adjacent to single-family homes on the hillside to the west and along the shoreline to the east. To the north of the tennis courts are the main entries to Seward Park and Parking Lot 2.

Above-grade mechanical structures would be located adjacent to the northwest corner of the tennis courts. The tennis courts would be rebuilt in a similar location, with a new paved pathway on the water side of the tennis courts. Under this alternative, the shoreline would be reconstructed adjacent to the pathway to provide better fish habitat.

Construction at this site would require closing the courts and the adjacent 28-space parking lot (Parking Lot 1) for up to thirty months. SPU, working with a contractor last fall, identified construction staging requirements that would allow the south parking lot (Parking Lot 2) to remain open during construction.

South Parking Lot Site (Figure 3)

The South Parking Lot site would site a new 2.65 million gallon tank underneath Parking Lot 2 along the southern shoreline of the park. Parking Lot 2 runs generally east-west. It is adjacent to a walking path that rings the Bailey Peninsula, which the park occupies. North of the walking path is a hill that sits in the middle of the peninsula.

Above-grade mechanical structures would be located adjacent to the tank at the South Parking Lot site. The parking lot would be rebuilt in a similar location in a similar configuration. Under this alternative, the shoreline is not required to be reconstructed adjacent to the parking lot to provide better fish habitat.

This option would require closing the parking lot for up to thirty months during construction. The tennis courts and adjacent Parking Lot 1 would be used for construction staging and would be closed for 12 to 18 months.

Under either alternative, after construction is complete, portions of the chosen site would need to be closed for approximately four to six hours a month for inspection. SPU estimates that every five to ten years they would need to close the chosen site of the tanks for longer periods for more intensive equipment maintenance.

SPU and the Parks Department have chosen the Tennis Courts alternative as the proposed site.

Legislation

Council Bill 118066: Partial Transfer of Jurisdiction/I-42

In order to move forward with the proposed site, SPU requires Council approval for the Partial Transfer of Jurisdiction (PTOJ) of the proposed site of the CSO facility from the Parks Department to SPU. They also need approval of that transfer under the terms of Initiative 42, or Council action to supersede I-42. Initiative 42 (codified by Ordinance 118477) requires that "All lands and facilities held now or in the future by The City of Seattle for park and recreation purposes... shall be preserved for such use; and no such land or facility shall be... changed from park use to another usage, unless the City shall first hold a public hearing regarding the necessity of such a transaction and then enact an ordinance finding that the transaction is necessary because there is no reasonable and practical alternative and the City shall at the same time or before receive in exchange land or a facility of equivalent or better size, value, location and usefulness in the vicinity, serving the same community and the same park purposes." However,

according to Ordinance 118477, replacement is not required for a sub-surface or utility easement compatible with park use. Council Bill 118066 would provide approval for the PTOJ and would supersede the requirements of Initiative 42.

Clerk File 313666: Council Concept Approval and Shoreline Approvals

The project also requires a number of land use approvals requested in Clerk File 313666. Seward Park is zoned SF9600, a single-family zone. In single-family zones, utility service uses, such as CSO facilities, require City Council approval. In order for the Council to approve the use, SPU needs to "demonstrate the existence of a public necessity for the public facility use in a single-family zone." The facility also needs to meet the development standards for institutions. The Department of Planning and Development's (DPD's) Director's Report on the application (3015640) states that the facility will meet the development standards for institutions in single-family zones.

At either site, the area two hundred feet landward of the ordinary high water (OHW) mark is in the Conservancy Recreation (CR) shoreline designation. The area waterward of the OHW mark is in the Conservancy Preservation (CP) shoreline designation. Most projects over \$2,500 in value in shoreline districts need a Shoreline Substantial Development Permit (SSDP). The City may grant SSDPs only when the proposal is consistent with the policies and procedures of Chapter 90.58 RCW (the State Shoreline Management Act); the City's shoreline regulations; and the provisions of Chapter 173-27 WAC (State Shoreline Management Permit and Enforcement Procedures). The Council may attach conditions to the approval of a permit as necessary to assure consistency of the proposed development with the Seattle Shoreline Master Program and the Shoreline Management Act.

Utility service uses in the CR district also require a Shoreline Conditional Use permit. Utility service uses are permitted only if:

- a. They reasonably require a shoreline location to operate;
- b. They are the minimum size necessary to meet the purpose; and
- c. They mitigate adverse impacts to achieve no net loss of ecological functions.

In January 2013, the Council adopted Ordinance 124105 updating Seattle's Shoreline regulations in response to State mandates. The new regulations will not go into effect until after the Washington State Department of Ecology completes its review of the amendments. Among other changes, it would increase the required setbacks from the shoreline in the CR designation. If the project were moved to the South Parking Lot, SPU would need to submit a new application to DPD and the project is likely to be subject to these new rules. Currently, the project is vested to the existing shoreline regulations.

Comparison of the two sites

After analysis and review of the two options, SPU has proposed to build the project on the Tennis Courts site because of its lesser impacts on over 1.1 million annual visitors to Seward Park and 21,000 annual users of the Audubon Center. Neighbors of the park have argued that SPU should instead select the South Parking Lot site because it is farther from the ten adjacent single-family homes, and will therefore have fewer impacts on the residences.

Recreation Impacts

The two sites would have similar impacts during construction; however, the Tennis Court site would have fewer impacts on visitors to the park. The Tennis Court site would not require closure of the south parking lot. The South Parking Lot site would require closure of the tennis court parking lot for construction of the outfall and associated piping to and from the existing and proposed facility for a period of 12 to 18 months. The loss of available parking with the South Parking Lot alternative is of significant concern to Parks. The South Parking Lot site would have more noise, light, dust and vibration impacts on park users than the Tennis Court site. After construction, the Tennis Courts alternative would result in the loss of two parking spaces. The South Parking Lot alternative would result in the loss of five parking spaces. Over time, as inspections and maintenance activities are required, the site that is chosen would need to be closed temporarily to allow for that work.

Environmental Impacts

The Henderson Basin 44 CSO Reduction Project Environmental Impact Statement (EIS) reviewed the environmental impacts of building the project and the two alternatives on the following elements of the environment:

- Land and Shoreline Uses
- Noise and Environmental Hazards
- Energy and Natural Resources
- Cultural Resources
- Aesthetics, Light, and Glare
- Habitat, Wildlife and Fish
- Transportation
- Water Resources
- Air Quality, Odor, and Climate Change
- Geology
- Public Services and Utilities
- Environmental Justice
- Recreation

On most of these issues, impacts of building the proposed CSO facility at the two sites were determined to be the same. The sites were identified to be different under the following categories:

Air Quality, Odor and Climate Change

No significant impacts to air quality, odor, or climate change are expected to occur in Seward Park during or after construction. Dust may be generated during construction, and odors could be generated during operation, however differences will not be significant. If there are differences, park users would be more impacted by the South Parking Lot alternative, and residents would be more impacted by the Tennis Courts alternative.

Cultural Resources

The EIS identified Seward Park as eligible for the National Register of Historic Properties. Because the two alternatives would affect different parts of the park, the alternatives have different but comparable impacts on Cultural Resources.

Habitat, Wildlife and Fish

During construction, both alternatives have the potential to disturb upland habitat, but would not have significant adverse impacts on habitat, wildlife or fish. The Tennis Courts alternative would disturb 1.43 acres of upland habitat and remove 43 trees, including two "exceptional trees." The South Parking Lot alternative would disturb 1.36 acres of upland habitat and remove 26 trees, including ten "exceptional trees." These trees represent less than one percent of the trees in Seward Park and would be replaced at a two-for-one ratio, increasing the overall tree canopy in the park. Two bald eagle nests in the park are one-quarter and one-half mile from the sites but closer to the South Parking Lot. Given the distances and character of the area, the sites are effectively the same in relation to these nests.

Vibration and Geology

Both sites are 20 to 30 feet from the toe of hillside slopes approximately 30 to 35 feet high. Portions of both slopes have been mapped as environmentally critical areas with slopes matching or exceeding 40%. Based on subsurface investigations and mapped geology, the slopes are likely comprised of Blakely bedrock, overlain by a thin mantle of soil. No signs of instability have been identified at the Tennis Court site. Both sites will require de-watering during construction.

Similar to other impacts, there may be some vibration during construction under either alternative, with impacts on nearby residences higher under the Tennis Courts alternative, and impacts on park users higher under the South Parking Lot alternative. Based on SPU's experience from both the Genesee and Windermere CSO projects, construction vibration is anticipated to be experienced for only three to six months out of the thirty-month

construction period. With planned vibration reduction measures, vibration is not expected to damage nearby structures.

Noise and Environmental Hazards

The EIS found that there would be noise from construction under both alternatives. Construction noise levels at the nearby residences would reach from 65 to 77 dBA¹ under the Tennis Courts alternative and 63 to 64 dBA under the South Parking Lot alternative. Construction noise levels at the nearby park facilities, including the Audubon Center, playground and ADA picnic shelter would range reach from 70 to 76 dBA under the South Parking Lot alternative, but would only reach 66 or 67 dBA under the Tennis Courts Alternative. Noise levels in the 70s are similar to the noise of a highway from fifty feet away. Noise levels in the sixties are similar to an air conditioner from twenty feet away. While park users and nearby residents likely would notice a moderate increase in noise levels at times, construction noise is not anticipated to exceed 80 dBA, the acceptable limit for construction noise. Based on SPU's experience from both the Genesee and Windermere CSO projects the construction noise is expected to be at these peaks over a three to six month period within the overall construction duration.

The original EIS was appealed to the Hearing Examiner. The Hearing Examiner remanded the SPU Director's adequacy determination on the Final EIS on the sole issue of project-related operational noise. A Revised Final EIS was published in September 2013 to augment the record on the topic of operational noise. That Revised Final EIS found no expected increase to existing daytime noise levels at residences or at key sensitive park sites under either alternative. Two houses might experience an increase of one dBA as a result of the Tennis Courts alternative. Under normal listening conditions, people typically cannot detect increases of 1 to 2 dBA. The highest noise levels would be adjacent to the air intake and exhaust vents in or adjacent to parking lots.

Costs

SPU has completed a significant amount of work in pursuit of a permit for the Tennis Court site. They have analyzed the costs of the South Parking Lot site and determined that shifting to that site would increase total project costs by approximately \$12,600,000. Up to \$3.6 million would result from repeating the design process at a new site. The remainder of the increase in costs would result from the Parks Department's intention to preserve future development opportunities at the South Parking Lot site. One future development alternative would be restoration of the natural shoreline including recreating a natural grade across the site (+/-6'). The Parks department is also considering relocation of the parking lot and adding additional landscaping on the current parking lot site. This would require the CSO tank at the South Parking Lot site to be

¹ dBA stands for decibel A-weighting, in which decibels are adjusted to reflect the frequencies heard by humans.

built deeper in order to allow for future plantings (shrubs and small trees) above the tank. At the South Parking Lot site, the tank could be up to 12 feet deeper than at the Tennis Courts site. SPU estimates that each additional foot of depth will cost approximately one million dollars in site costs.

The incremental increase to SPU ratepayers based on the change of location would be approximately 0.2% per year for drainage rates and 0.1% per year for wastewater rates between 2014 and 2017. These increases would be on top of planned drainage rate increases of 8.8% a year and wastewater rate increases of 3.9% a year.

Additional financial implications of moving the preferred site should also be noted. SPU has already spent \$3,600,000 on design and permitting the current site. More importantly, the additional unanticipated capital costs will result in higher debt service, which will push SPU's Debt Service Coverage down to a precariously low level. The Fund's financial policies require 1.8 times coverage. SPU estimates that in 2017, the coverage would be 1.88 and drop to 1.84 by 2019 as a result of the additional debt service required by moving the project to the south parking lot site. Coverage this low could result in a 'Negative Outlook' or downgrade to SPU's bond rating by Moody's and Standard and Poor's. If this occurred, SPU would face higher interest rates on future bond issues in a Fund with very high capital expenditure requirements through 2025.

Timing

SPU has determined that by changing sites, it will not be possible to make National Pollutant Discharge Elimination System (NPDES) regulatory milestones for 90% Plans, Final Plans and Notice to Proceed. By missing these dates, the City could be subject to fines of up to \$10,000/day through the Clean Water Act. However, the City would still be able to meet the Consent Decree deadlines of December 31, 2018 and December 31, 2019. SPU estimates that the project could be completed by mid-2018 at the new site, but would risk non-compliance with the Consent Decree if anything else arose to delay the project. The Consent Decree deadlines carry daily fines per violation which start at \$3,000 a day and increase to \$5,000 a day after 30 days of non-compliance per each violation.

Proposed Mitigation measures

The DPD Director's Report on Clerk File 313666 included a number of recommended conditions to mitigate the proposed project.

Conditions related to the Shoreline Substantial Development Permit:

During Construction

1. Any work water ward of the ordinary high water mark shall be restricted to applicable work windows established by the Washington Department of Fish and Wildlife.

2. Appropriate Best Management Practices (BMPs) shall be employed to prevent any debris or other deleterious material from entering Lake Washington, such as the use of a turbidity curtain and/or debris boom surrounding the project area during in-water and over-water work to contain any debris, suspended sediments, or spills caused by construction activities. Materials to be disposed of shall be contained on site and then discarded at an appropriate upland facility.

3. Any debris that enters the water during the proposed work shall be removed immediately and contained until it can be disposed of at an appropriate upland facility.

For the Life of the Project

4. No pesticides or fertilizers shall be applied within 50 feet of the stream, wetland or shoreline at this project location except as authorized by DPD.

5. The outfall shall be designed to prevent the entry of fish.

6. Shoreline revegetation and shoreline enhancement measures shall be monitored and maintained.

Conditions related to the State Environmental Policy Act

Prior to Commencement of Construction

7. Execute the public outreach plan including: a website to provide project and progress updates, obtain email list-serve for project updates, and provide project contacts (with phone numbers) for the public. These contacts should also be mailed to nearby property owners (SPU should define the appropriate area of the mailings).

Prior to Issuance of the Master Use Permit – Council Land Use Decision

8. The project owner and/or responsible parties shall provide DPD with a statement that the contract documents for their general, excavation, and other subcontractors will include reference to regulations regarding archaeological resources and that construction crews will be required to comply with those regulations, including the following:

- Archaeological Sites and Resources (RCW 27.53)
- Indian Graves and Records (RCW 27.44)
- Archaeological Site Public Disclosure Exemption (RCW 42.56.300)
- Discovery of Human Remains (RCW 27.44)
- Archaeological Excavation and Removal Permit (WAC 25-48)
- Abandoned and Historic Cemeteries and Historic Graves (RCW 68.60)

Options

The Council has a range of options related to these two pieces of legislation.

1. Approve proposed legislation as proposed, direct Central Staff to prepare Findings, Conclusions and Decision
2. Approve with additional mitigation, items identified as potential measures to reduce impacts in the EIS not listed above include:

Prior to construction

- Explore design improvements to further reduce above-ground features;
- Provide a contact person for neighbors to troubleshoot issues during construction;
- Perform pre and post-construction surveys of nearby structures, hillsides and utilities; and
- Install additional vegetation along property lines to screen and muffle construction.

During construction

- Provide advance public notice, signage, and website information, regarding construction activity, particularly the noisiest construction activity;
- Stage trucks offsite to the extent feasible while minimizing trips to the site;
- Schedule the construction of project elements so they do not overlap, when feasible, to reduce the number of vehicle trips at one time;
- Limit construction disturbances to the minimum area needed and the shortest duration possible;
- Schedule construction to avoid or minimize overlap with the construction of other projects in the vicinity;
- Coordinate construction hours with the scheduling of special events;
- Suspend construction during Seafair;
- Use construction methods that reduce vibration;
- Specify threshold vibration levels in the contract documents;
- Implement a monitoring program to measure vibration levels and any movement of nearby existing structures;
- Do not use rock blasting;
- Follow best management practices for controlling fugitive dust;
- Use noise-reducing measures, such as using sound control devices on equipment, prohibiting equipment with unmuffled exhaust, minimizing idling time of equipment and vehicles, and installing acoustic barriers around stationary sources of construction noise; and

- Conduct on-site monitoring to ensure compliance with noise requirements.

After construction

- Schedule maintenance activities at low-use times in the park, except in cases of emergency.

3. Reject Tennis Courts alternative, ask SPU to pursue South Parking Lot site with understanding that the project will be delayed by over year, and costs could increase by approximately \$13 million.

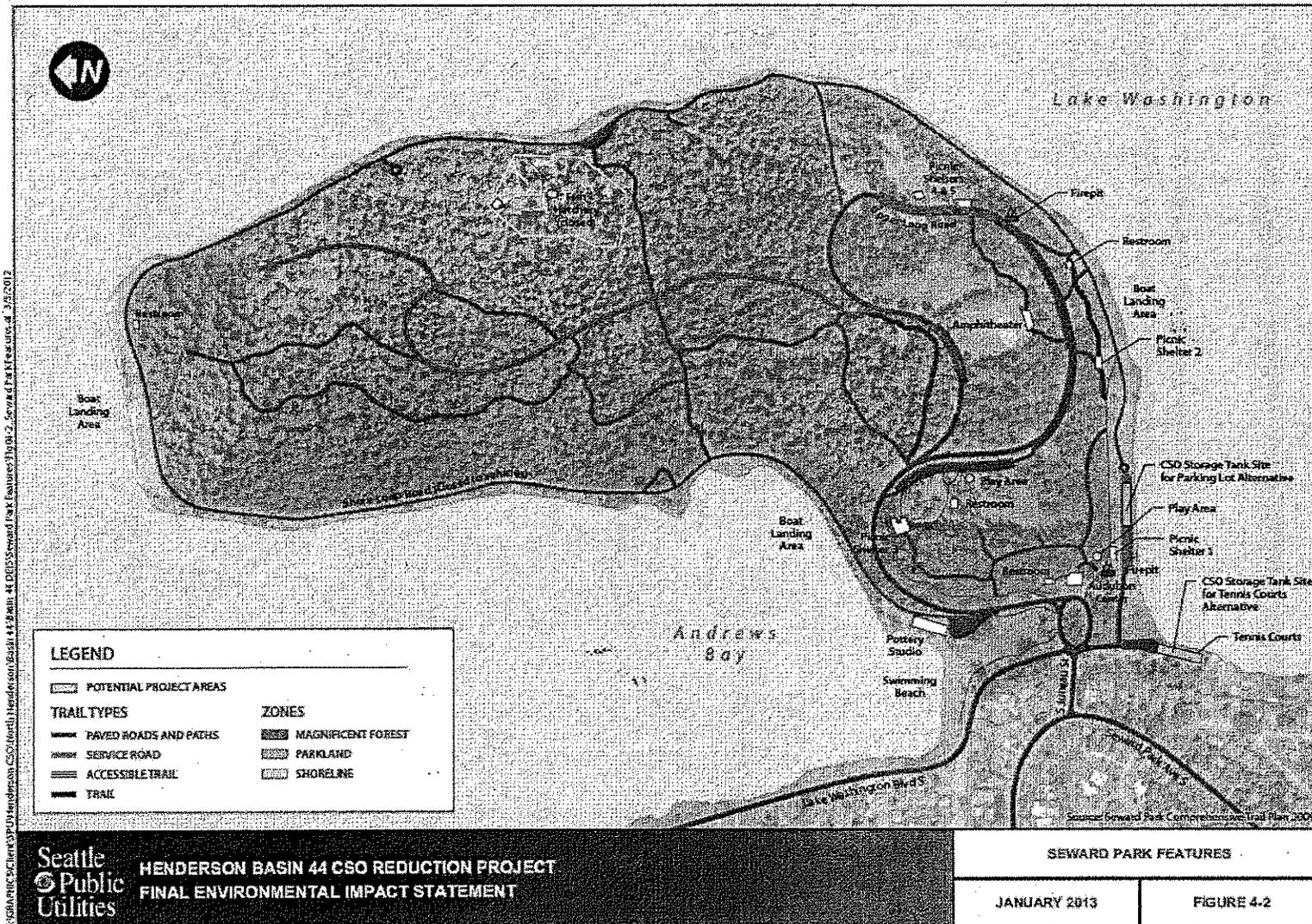


Figure 1: Seward Park and location of Alternatives

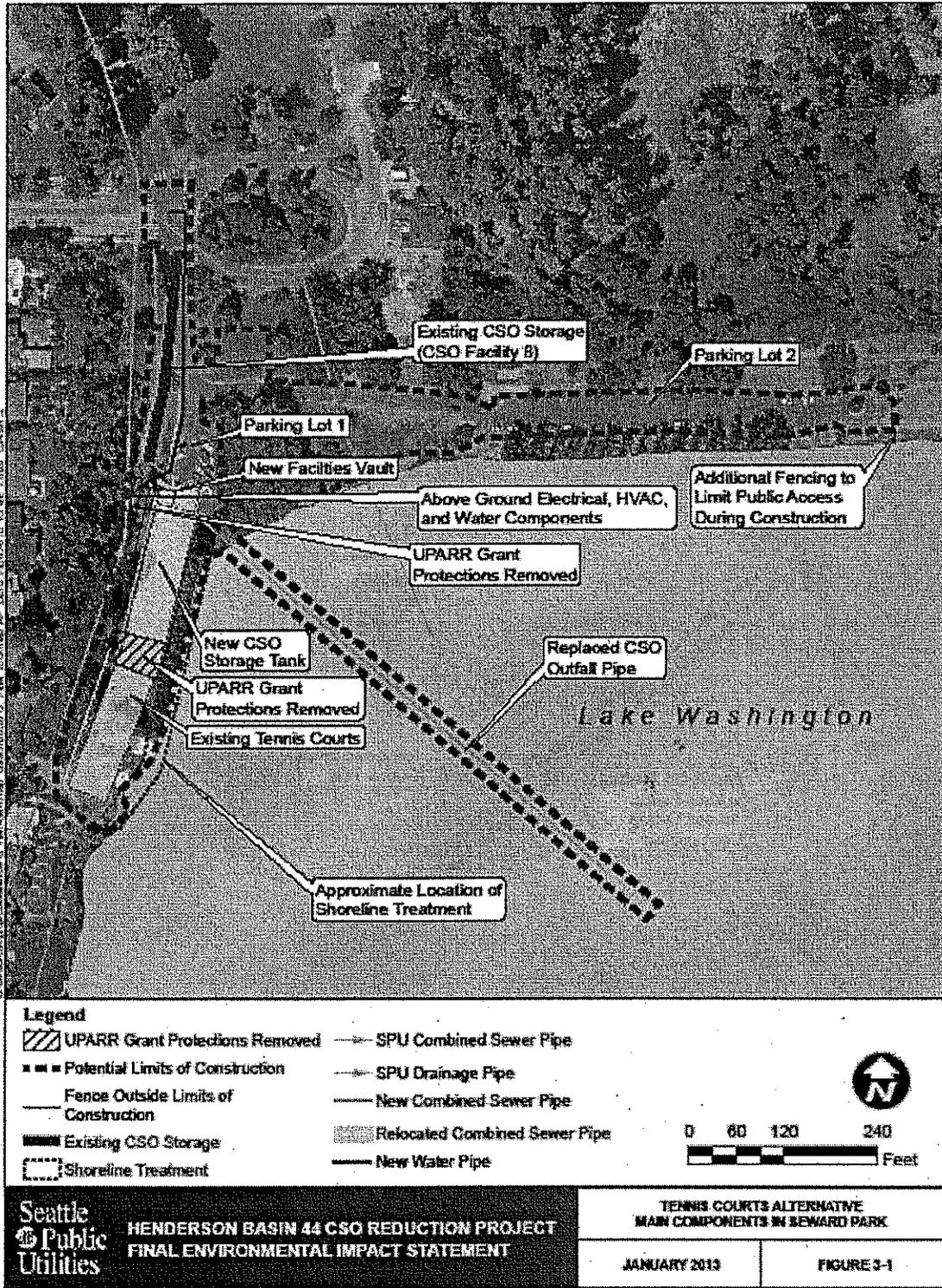


Figure 1: Tennis Court Alternative

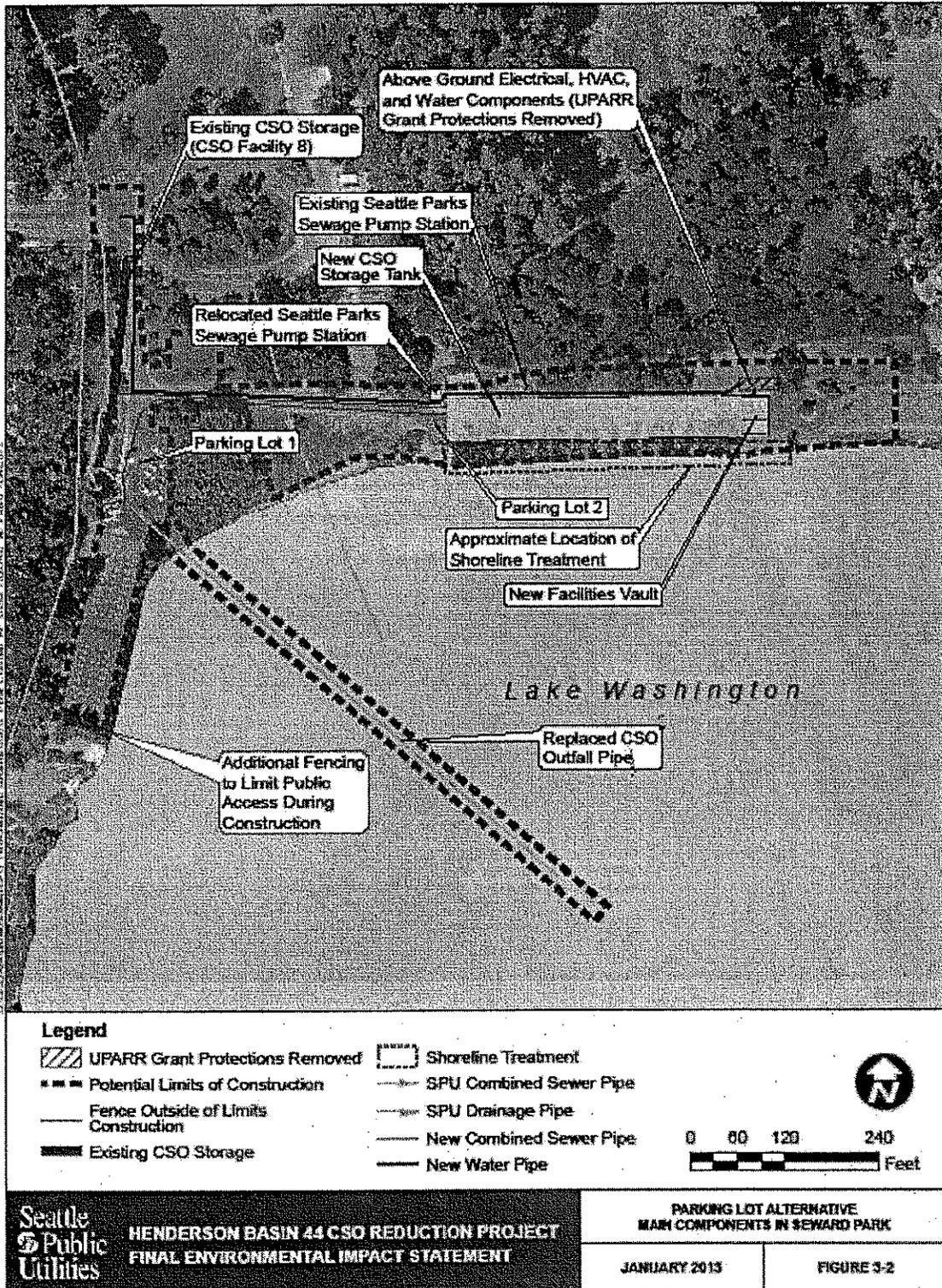


Figure 2: South Parking Lot Alternative



City of Seattle
Edward B. Murray, Mayor

Department of Planning and Development
Diané M. Sugimura, Director

CITY OF SEATTLE
ANALYSIS AND RECOMMENDATION OF THE DIRECTOR OF
THE DEPARTMENT OF PLANNING AND DEVELOPMENT

DPD Application Number: 3015640
Clerk's File Number: 313666
Applicant Name: Alan Lord for Seattle Public Utilities (SPU)
Address of Proposal: 5895 Lake Washington Boulevard S

SUMMARY OF PROPOSED ACTION

Council Land Use Action to allow the replacement and expansion of a city facility in the shoreline environment. Project includes installation of a 2.65 million gallon combined sewer overflow (CSO) underground storage tank, a 680 linear foot CSO outfall (water/sewer pipe) and accessory equipment to store excess stormwater, removing and replacing existing tennis court and parking lot, replacing existing bulkhead with a rockery and grading of 38,000 cu. yds. of material. A "Revised Henderson Basin 44 Combines Sewer Overflow (CSO) Reduction Project" Final Environmental Impact Statement (dated September 5, 2013) and addendum (dated September 30, 2013) have been prepared¹.

The following Land Use approvals are required:

- **Council Concept Approval of a City Facility** — to allow a public facility in Single Family zone Chapter 23.51A.002 + 23.76.064
- **Shoreline Substantial Development Permit (SSDP)** — to allow a public facility and utility lines in the Conservancy Protection (CP) and Conservancy Recreation (CR) environments Chapter 23.60
- **Shoreline Conditional Use** — to allow a utility service use in the CR environment Chapter 23.60²
- **State Environmental Policy Act (SEPA) Chapter 25.05** (substantive conditioning)¹

¹ Final EIS (January 3rd 2013), Revised Final EIS (September 5th 2013) and Addendum (September 30th 2013) at www.seattle.gov/cso/northhenderson. Additional background materials can be viewed on the www.seattle.gov/cso/northhenderson website. They also may be viewed in paper form by arranging a time with Alan Lord, PE, SPU Project Manager, at alan.lord@seattle.gov or (206) 233-1565.

² Project relies on Ordinance #118477.

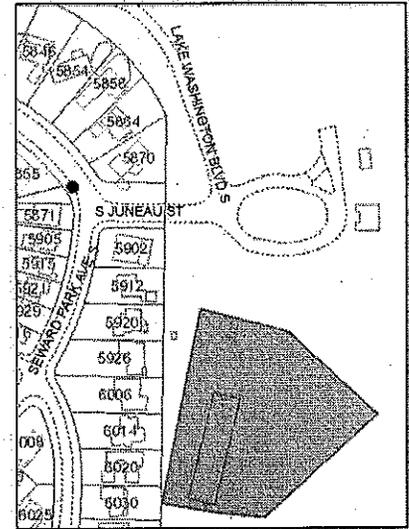
- SEPA DETERMINATION** Exempt DNS MDNS EIS
- DNS with conditions
- DNS with conditions involving non-exempt grading or demolition or involving another agency with jurisdiction. ¹

PROPOSAL and BACKGROUND

Location

The proposed project would be located in Basin 44 in southeast Seattle. Basin 44 is the geographic area that contributes CSOs to Lake Washington via CSO Outfall 44 near Seward Park. The eastern boundary of Basin 44 is Lake Washington. Other Basin 44 boundaries are generally 52nd Avenue South to the west, South Hudson Street to the north, and South Morgan Street to the south. The 375-acre basin includes residential neighborhoods and Seward Park.

Most of the proposed project components would be located in Seward Park with some minor components at a site approximately one mile north of Seward Park near the intersection of Lake Washington Boulevard South and 53rd Avenue South.



Purpose

The proposed project consists of an underground storage tank to store excess sewage and stormwater flows from Basin 44 during heavy rains, associated infrastructure, and shoreline and landscape improvements. Once constructed, the project would reduce the number and volume of raw sewage and untreated stormwater overflows to Lake Washington, which would help protect public health and would improve water quality in the lake. The proposed project also is needed to bring the basin into compliance with state and federal regulations that limit the number of raw sewage overflows to a long-term average of no more than one per year.

What is the Henderson Basin 44 CSO Reduction Project and why is it needed?

Sewers in the project area carry raw sewage away from the neighborhood for treatment at King County's West Point and South treatment plants before discharge to Puget Sound. When it rains, these same sewers also carry untreated stormwater from neighborhood roofs, foundation drains, and some streets. During heavy rains, if the amount of raw sewage and untreated stormwater exceeds the sewer system capacity, the excess flows discharge into Lake Washington. The term for these overflows is "Combined Sewer Overflows," or CSOs, and they are a public health and environmental concern. The goal of the Henderson Basin 44 CSO Reduction Project is to reduce the number and volume of these sewage overflows from the project area. Basin 44 is in southeast Seattle along the western shoreline of Lake Washington.

Seward Park is owned and managed by the Seattle Department of Parks and Recreation and is the site of the Henderson Basin 44 CSO Reduction Project. The proposed project consists of constructing a 2.4 million-gallon (MG) underground storage tank to store excess sewage and stormwater flows in Basin 44 during heavy rain events. After each stormwater event, the contents of the tank will subsequently be pumped into the sewer system for eventual treatment at a King County Treatment Plant. The project also includes additional infrastructure, shoreline, and landscape improvements.

The proposed project would help protect public health, improve water quality in Lake Washington, and comply with regulations by reducing the number of CSO events in Basin 44 to a long-term average of no more than one untreated discharge per year per outfall.

What alternatives were evaluated in the Final EIS?

SPU identified the following alternatives for evaluation in the Final EIS:

- Tennis Courts Alternative - Storage under Seward Park Tennis Courts (the preferred alternative)
- Parking Lot Alternative - Storage under Seward Park Parking Lot
- No Action Alternative

The Tennis Courts and the Parking Lot Alternatives are similar with the main difference being the location of the CSO storage tank and shoreline treatment. The two alternatives consist of the following:

- An underground, 2.4 MG CSO storage tank and associated infrastructure
- Shoreline treatment
- Replacement of an existing CSO outfall pipe
- A transfer of National Park Service (NPS) Urban Park and Recreation Recovery (UPARR) grant protections and upland landscaping enhancements

The first three elements are located in Seward Park. Figure 1-2 of the Revised Final EIS shows these elements for the Tennis Courts Alternative and Figure 1-3 of the Revised Final EIS shows these elements for the Parking Lot Alternative. The fourth element is located in a portion of Lake Washington Boulevard Park approximately one mile north of Seward Park near the intersection of Lake Washington Boulevard S and 53rd Ave S.

More detailed descriptions of the project elements can be reviewed in Section 3.1.1 of the Revised Final EIS. Because the scope of this Revised Final EIS is limited to operational noise, only the project elements that have a bearing on potential operational noise impacts are described in more detail below. Those project elements are the CSO storage tank and certain associated infrastructure, and they are the same as described in the Final EIS unless stated otherwise.

- **New CSO Storage Tank:** A new, underground 2.4 MG CSO storage tank would be built in the southwest corner of Seward Park, next to Lake Washington. The CSO storage tank would be located under the tennis courts and an adjacent parking lot (Parking Lot 1) for the Tennis Courts Alternative, and under a different parking lot (Parking Lot 2) for the Parking Lot Alternative. These two locations are approximately 300 feet apart.

For the Tennis Courts Alternative, the exterior dimensions of the tank would be approximately 390 feet long by 50 feet wide by 30 feet deep. For the Parking Lot Alternative, the exterior dimensions of the tank would be approximately 375 feet long by 50 feet wide by 30 feet deep. The difference in length between the alternatives is due to site conditions that require a slight bend in the tank for the Tennis Courts Alternative.

Access to the tank would be by hatches, which would be located between the two restored tennis courts for the Tennis Courts Alternative and in the parking lot for the Parking Lot Alternative. The size of the access hatches to the tank would range from approximately 2.5 to 3 feet wide by 6 feet long.

The required capacity of the tank was determined based on computer modeling and monitoring data that determined the volume of flows needed to be controlled to limit future CSO events to a long-term average of no more than one untreated discharge per year.

- **New Facilities Vault:** An underground facilities vault attached to the CSO storage tank would contain odor control, mechanical, electrical, and operational control systems. The facilities vault would be attached to the northern end of the CSO storage tank for the Tennis Courts Alternative and to the eastern end of the CSO storage tank for the Parking Lot Alternative. Access to the vault would be by hatches and stairs from ground level in the respective parking lots. The size of the access hatches to the vault would range from approximately 2.5 to 4 feet wide by 14 feet long. The exterior dimensions of the facilities vault would be approximately 35 feet long by 50 feet wide. The depth from ground level to the vault floor would be approximately 10 feet.
- **New Aboveground Features:** An area approximately 50 feet long by 15 feet wide (750 square feet) would contain several aboveground features and would be screened with vegetation. This area would be just west of the facilities vault for the Tennis Courts Alternative and directly north of the facilities vault for the Parking Lot Alternative. The features would include the following, as described in the Final EIS:
 - An electrical cabinet approximately 3 feet long by 1.5 feet wide by 6 feet high.
 - An enclosure containing a reduced pressure backflow assembly associated with the potable water used to flush the tank, approximately 2.5 feet long by 1 foot wide by 1.5 feet high.
- **New Ground Level Features:** In the Final EIS, there were two aboveground air intakes proposed that were each approximately 3 feet long by 3 feet wide by 3 feet high and were located in the aboveground features area discussed above. These aboveground structures were connected to underground ductwork connecting to the underground facilities vault. The design has been modified since the Final EIS so that the two air intakes are combined into one structure that is located in an underground vent. As the air intake vent duct reaches ground level, it is covered by a grate approximately 4 feet long by 4 feet wide that is flush with the ground and screened with vegetation. Additionally, the air intake grate has been moved slightly outside of the aboveground features area.

In the Final EIS, there were two aboveground air exhausts and one aboveground odor control exhaust proposed that were each approximately 3 feet long by 3 feet wide by 3 feet high and were located in the aboveground features area discussed above. These aboveground structures were connected to underground ductwork connecting to the underground facilities vault. The design has been modified since the Final EIS so that these three structures have been combined into one structure that is located in an underground vent. As the vent duct reaches ground level, it is covered by a grate approximately 6 feet long by 4 feet wide that is flush with the ground and screened with vegetation. Additionally, the exhaust grate has been moved slightly outside of the aboveground features area.

Implementation Date

If the project is approved, construction is anticipated to occur from mid-2015 to the end of 2017.

Final Action

The proposed project may not proceed unless the City Council approves the project pursuant to Ordinance 118477 (a.k.a., "Initiative 42"), and before permits and approvals are obtained from government agencies. The Council is expected to hold a public hearing regarding the proposed project, and decide whether to approve it, in early 2014.

Decisions approving or denying permits and approvals are expected to occur in 2014. Construction is anticipated to occur from mid-2015 to the end of 2017.

Utility services uses such as the proposal require Concept Approval from City Council in Single Family zones, which is a Type V Council Land Use Decision. City Council also makes the decisions on the projects associated Type II decisions, which are Shoreline Substantial Development Permit, Shoreline Conditional Use, and SEPA (conditioning only).

The goals of the Henderson Combined Sewer Overflow (CSO) Reduction Project are to improve water quality in Lake Washington, protect the public health, improve the environment by reducing CSOs from the area, and meet State laws and regulations (RCW 90.48.480 and WAC 173-245-020(22)) that limit CSOs to a long-term average of no more than one untreated discharge per year per outfall.

Environmentally Critical Areas

The Environmentally Critical Areas maps for the City show the proposal within the 100-foot "Fish & Wildlife Habitat Area". These maps also identify three other ECAs in the project area: Wetlands, 40% Steep Slopes, and Liquefaction Prone Soils. Further discussion on the ECAs is provided in the SEPA analysis below.

The Shoreline Master Program shoreline environment designation for the tennis courts and parking lot project site is Conservancy Recreation (CR). All upland project features are within the 200-foot shoreline jurisdiction. These features, however, are all located within existing paved areas.

ANALYSIS – COUNCIL LAND USE ACTION

Recommendation criteria to Council are outlined in SMC 23.76.050-A and require the Director to write an evaluation of the proposal based on the standards and criteria for the approval sought and consistency with the applicable City policies. Seattle's Comprehensive Plan identifies policies that speak to various issues addressed by the proposed facility. The proposal is a Type V - Council Land Use Decision for concept approval of a City facility in Single Family 9600 (SF 9600) zone.

Report of the Director

1. *The written recommendations or comments of any affected City departments and other governmental agencies having an interest in the application;*

SPU did conduct public outreach and meetings for the project prior to submitting the application to DPD. From those public meetings, SPU maintains their own email and mailing lists as well as public comments, all which informed the project prior to submittal to DPD.

The MUP plans were referred to the Parks Department for comment.

2. *Responses to written comments submitted by interested citizens;*

Public Comment

The required comment period for this proposal was held from January 9th 2014 to February 7th 2014. The comments are summarized as follows:

Comment 1

It should be denied as it "creates and appreciably aggravates impacts that are incompatible with single family residences." ... location will be less than 160 feet from a number of existing single-family residences. This location, with removal of over 40 trees, the installation of over 7,500 square feet of impervious surface, the introduction of constant gaseous exposure are all incompatible with the adjoining single-family residences. The proposed CSO tank at the tennis court location will also result in extended noise, vibration and light issues during the three year construction period which will cause irreparable harm to the neighboring single-family residences. No amount of landscaping or screening will eliminate these real and significant impacts to the single-family residences once the construction period is completed and the tank is permanently in place.

Comment 2

I strongly oppose and disagree with any decision to locate the CSO Storm Water Runoff Tank project at the "Tennis Court" location. The South Parking Lot is a better location.

My father is 93 years old and lives at home with 24 hour care. With failing memory and health issues, any extra noise or vibration can cause extra unneeded stress and compromise his health. The South Parking Lot is a better location and will be further away from the surrounding homes and the public traffic entering the park. In addition to the issues of noise, vibration, dust, and property value loss, other problems with installation of impervious surface and slope instability will be eliminated or greatly reduced with the South Parking Lot location.

The "Tennis Court" location is a bad option that should be rejected and replaced with the much better South Parking Lot location.

Comment 3

I am writing to express my opposition to this project being placed at the Seward Park tennis courts and I urge you to reconsider this choice. There has been no opposition to putting this project in the south parking lot at Seward Park and there is much opposition to putting it at the tennis court location. With the many upgrades that SPU is promising, I do not understand why you wouldn't want those improvements to be made in the location where the most people would benefit. As a nearby home owner I am very concerned about the project happening at the tennis court site.

I don't understand why we are allowed to make comments if no one is going to give those comments any consideration. The neighborhood has already expressed it's desire to have the CSO project placed in the south parking lot (over and over again) and that request has been scoffed at and/or ignored. I was told by a parks department representative that there was no way that the project would be moved because the city council always rubber stamps every project that they want to do. This is so very disheartening. Having public hearings is a sham if EVERYONE present is against this site location but the project goes ahead anyway.

Please reconsider the choice of this site for the CSO project!

Comment 4

I live at 5925 Seward Park Avenue South in Seattle, which is a single-family residence that would be strongly impacted if the Master Use Permit for Project #3015640 is approved. I am the owner of a small consulting business that I have run out of my home since 2007. In my talks with Seattle Public Utilities (SPU), the noise, vibration, and dust generated by the construction of the 2.6 million gallon CSO tank in the tennis court location would make working from my home impractical. In short, my business would need to relocate for a portion of this 3 year project. Relocation valued in time and money would be a huge hardship for me.

Another of my neighbors works from home and publishes a bi-monthly magazine, and 2 other homes abutting this proposed project location are residence for senior citizens in their very late 80's and early 90's. Imagine how this impact will effect them in regard to noise, dust, vibration, light, long-term noise, and security. In addition, the native trees cut, and wildlife that live there currently, will not be back in their lifetimes.

There is an alternate location for the CSO tank that would have a lesser impact on single-family residences, the neighborhood and my business. Please deny this permit and suggest SPU focus on the South Parking Lot alternative.

These are my comments as a small business owner, as you have already received my comments as a home owner in conjunction with my husband.

Comment 5

We are commenting on the pending review of the Master Use Permit sought for installation of a (CSO) combined sewer overflow underground storage tank at the existing tennis court location in Seward Park. There are several major defects in the process and in the decision-making that has led to the recommendations of the Parks Department and Seattle Public Utilities to locate the CSO at the tennis court location.

- *The law, and common sense, requires the City to select an alternative that least impacts neighbors of the City's property and the environment. See SMC 23.51A.002. There is a perfectly good alternative at the south parking lot that will have dramatically less impact on the neighbors and the environment. Most neighborhood groups, as well as all of the individual sentiments expressed at every single public forum, have been vehemently opposed to the location at the tennis courts. The other neighborhood groups, such as Friends of Seward Park, are neutral on the two site locations. There is not a single public group that favors the tennis court location over the south parking lot location.*
- *The process here has been a sham. The tennis court location was not even an alternative discussed in many, many public forums preceding the final public meeting where it was raised and put forth by the Parks Department as the "selected" site – literally out of left field for those people who had attended all of the other public forums. Parks and SPU have proceeded to do all of their planning at the tennis court site and are not even bothering to present the south parking lot as a realistic alternative, which it most certainly is. Now, the Parks and SPU have made vague claims that the south parking lot is going to cost "millions" more dollars. We have seen no documentation supporting these claims; indeed, all of the documentation completed in the EIS describe the cost of the two sites as equivalent. Parks and SPU should be proceeding with full documentation and study of the south parking lot as an alternative, and present those two alternatives in equivalent detail to the City Council, for a decision on the better site. We are confident the Council will select the south parking lot as the preferred site when taking into consideration its legal obligations and the real facts.*
- *Selection of the tennis court site imposes the risk of multiple, permanent impacts to the park, its users, and its neighbors:*
 - *Placing the tank in this location requires the removal of almost twice as many trees as the south parking lot location. Those trees provide significant wildlife habitat.*
 - *7,500 square feet of impervious roadway will be added to the park under this alternative. This is totally inconsistent with the goals of the CSO and other projects to improve the quality of the water in Lake Washington, and, again, defies common sense.*
 - *The tank will be located at the bottom of a slope that has been recently reforested with native trees and holds a significant amount of water. Moreover, selection of this site means that a concrete wall will be placed at the bottom of a water-filled slope that is one of the primary focal points of drainage for the entire Seward Park neighborhood, causing all of that water to be diverted around the tank. The south parking lot is a much less environmentally sensitive area.*
 - *The noise and odors will be easier to disperse at the south parking lot, and will only have a transient impact on park users passing by, as opposed to a permanent impact 24 hours per day, 7 days per week, 365 days per year, to the neighbors of the park for the next 100 years.*
 - *The tennis court location will likely result in significant damage to the homes abutting the park. Most of the houses adjacent to the tennis court location were built in the 1940's, have over-sized single pane windows and other structural features that will not likely withstand the vibration generated by this project at this location. All of these significant and unnecessary impacts can be completely avoided by placing the tank at the south parking lot. Does the City wish to impose the cost of repairing this damage on its taxpayers?*

- Selection of the south parking lot, in contrast to the tennis court site, also creates opportunity to enhance a highly utilized area of the park, and one that is highly visible – this creates both a great feeling of community and a much easier place for the police department to minimize illicit activities that inevitably take place in large public parks. Some collaborative efforts and creative ideas that neighborhood groups have proposed to the Parks Department – which we believe would greatly benefit park users by deploying capital improvement dollars associated with the CSO project to reconstruct that area include:
 - Redesigning and reconfiguring the parking lot to offer increased parking capacity;
 - Constructing a formal and inviting “staging area” for the numerous races, runs and walks which would potentially increase revenue opportunities and enhance the feeling of community at that site; o Enhancing the running/walking path with native habitat;
 - Reconstructing the bulkhead, which is in need of repair, thereby improving the overall aesthetics of the south parking lot location; and
 - Replacing the pump station under the parking lot, which is near the end of its useful life.

These ideas seem to have been completely dismissed by the Parks Department and SPU.

For all of these reasons, the Master Use Permit should be denied and the Parks Department and SPU should be directed to go back and present a full and detailed plan and budget for the construction of this CSO at the south parking lot to the City Council.

Comment 6

I am writing to encourage you to reject the application for the Master Use Permit for Project 3015640 – or more commonly known as the Seward Park, North Henderson Basin CSO. The application should be rejected because there is a better location available a few hundred feet east.

Reasons to reject:

- *There is a suitable alternative to this location which does not border homes with home-bound elderly, work from home professionals, the retired and stay-at-home parents with young children. It is completely unnecessary to place the tank within 160' of these homes, jeopardizing the homes and livelihoods/lives of these neighbors.*
- *This single family zone where the tank is proposed is in liquefaction prone soils, a wetland and cutting into a steep slope ($\geq 40\%$). Complicating this lakeside location is the "wall" that is going to be built diverting run-off from an entire basin into the lake. Where will this river of water go? Will it affect the single family homes next to it? Will the slope be compromised with the run-off into the underground tank/wall, especially with the removal of over 40 trees? The tank should be located in the "parking lot" location where no homes can be jeopardized.*
- *How will parking and public safety be monitored during construction in this single family zone? Lake Shore Dr. S. is used for overflow parking during all Seward Park events. Currently vehicles park on both sides of the streets (often illegally). When this happens emergency vehicles cannot access my home. How will this be addressed?*
- *The permit sought violates the general purpose of the Land Use Code under SMC 23.02.020 and the specific ordinances under SMC 23.51A.002 dealing with public facilities in a single-family zone. Under SMC 23.51A.002 (E)(4), the establishment of a new sewage treatment plant is strictly prohibited in a single-family zone. The project meets the definition of a "sewage treatment plant" under SMC 23.84A (6) so the permit should be denied.*

Please use common sense and reject this application and place the tank in the least invasive location.

Public Comment Response

Seattle Parks & Recreation (Parks Department) is the City department that has jurisdiction over the development site area and its usage. According to the Parks Department, Seward Park is a regional destination park that draws visitors from both the local area as well as the region. Based on the historical usage of the tennis courts and parking lot, the Parks Department does not believe that elimination or a reduction in the development site area is warranted. Regarding landscaping, the Parks Department supports "Crime Prevention through Environmental Design" (aka, CPTED), which is defined as "the proper design and effective use of the built environment which can lead to a reduction in the fear of crime and incidence of crime, and to an improvement in the quality of life." Planting of new landscaping on the site will incorporate CPTED principles to discourage criminal activity.

3. *An evaluation of the proposal based on the standards and criteria for the approval sought and consistency with applicable City policies;*

The following is a summary of those standards and their evaluation based on City Policies:

- Analysis under applicable development standards (SMC 23.44.008-.016 + .022)
- Analysis of the proposal based on Shoreline Policies (SMC 23.60).
- Analysis under Seattle's ECA Code (SMC 25.09).
- Analysis under Seattle's Comprehensive Plan.

Evaluation of Development Standards

Per SMC 23.51A.002-B, the proposal is subject to the requirements of 23.44.022 for Institutions as well as the development standards for uses permitted outright found in SMCs 23.44.008-.016.

Relocation of the existing outfall (utility line) falls below the major expansion threshold level, it is a minor expansion. Minor expansions may be permitted to uses in public facilities allowed in subsections 23.51A.002.A and B according to the provisions of Chapter 23.76, Procedures for Master Use Permits and Council Land Use Decisions, for a Type I Master Use Permit when the development standards of the zone in which the public facility is located are met. SMC 23.51A.002C.2.

A succinct analysis of 23.44.022 is appropriate, but most of the requirements and standards do not apply due to the structure's proposed underground location. The two requirements that are applicable, section H. Noise and Odors and section I. Landscaping are analyzed below.

The only feature of the development that would fall under the Noise and Odors provisions are the odor control equipment, fans, fan silencer, pumps, and exhaust and intake air vents and grates.

The acoustic modeling for noise levels shows that the highest noise level at park transition areas is for the Tennis Courts Alternative and for the Parking Lot Alternative. These are the locations of the air intake and exhaust vents in or adjacent to parking lots. This result meets the Daytime Design Criterion for Transitory Park Users, which is to ensure that the model-predicted noise levels that would be experienced by transitory park users (people who are transitioning from parking their cars to other park areas) in the immediate vicinity of the exhaust intake/exhaust vents are roughly equivalent to or lower than the strictest noise limit in the code (55 dBA during the day). Also as noted earlier, this design criterion, which is less restrictive than the Daytime Design Criterion for Residences and Park Users, is appropriate because park users do not expect noise levels to be quiet for transitory areas such as in or near parking lots, compared to areas where park users engage in active or passive park activities.

The acoustic modeling for noise levels shows no expected increase to existing daytime noise levels at residences, key sensitive park sites discussed in the EIS (i.e., tennis courts, Picnic Shelter 1, play area, and Audubon Center), as well as for park users participating in active and passive activities elsewhere in the park. This is true for both the Tennis Courts Alternative and the Parking Lot Alternative. This result meets the Daytime Design Criterion for Residences and Park Users, which is a modeled noise increase of no more than 5 dBA over the existing daytime noise levels documented.

The construction permit will have a Noise Ordinance review to ensure compliance with the Noise Ordinance.

The Landscaping provision requires integration with the adjacent areas; reduction for the potential for erosion or stormwater runoff, reduce the coverage of the site by impervious surfaces, screening from adjacent residentially zoned lots or streets or to reduce the appearance of bulk of the institution. In this case the Parks Department is reviewing the application and has provided specific comment on all facets of the project including landscaping, no further analysis is necessary. The proposal is to repave the tennis courts and parking lot in generally the existing configuration which requires compliance with the drainage code.

The following is analysis of the underlying single family zoned development standards that also apply to the project.

D. General Provisions

1. New or expanding institutions in single-family zones shall meet the development standards for uses permitted outright in Sections 23.44.008 through 23.44.016 unless modified elsewhere in this subsection or in a Major Institution master plan.

The proposal meets all development standards of SMC 23.44.008-.016. Yard (setback) standards do not apply to the proposal as no portion of the proposal will project above existing grade and existing grade will be restored after the facility is constructed. The proposal and its components meet the definition of "underground," as defined in 23.84A.040 – "U." The application plans show the relationship of the tank and associated structures with the property lines and the required yards.

Environmentally Critical Areas

The development site contains the following mapped ECAs: Fish & Wildlife Habitat Area, Wetlands, 40% Steep Slope and Liquefaction Prone Solis. Seattle Public Utilities has executed an ECA Exemption pursuant to SMC 25.09.045. The signed ECA exemption is located in the application information with DPD.

DPD determined during plan review that the Steep Slope mapped qualifies for the criteria established in SMC 25.09.180-B.2.b; the Steep Slopes were created by previous legal grading associated with the park's development.

Comprehensive Plan

Related to the proposal's function as a utility and City Council's required public involvement, the project meets Comprehensive Plan Goals UG1, UG2, UG3, UG4, UG5 and policies U3, U4, U7, U9, U12, U14, U16, U17 and U19 (maintenance of utilities, reliability, and improvements to deficiencies in utility service, correcting combined sewer overflows, work with community on siting, consider opportunities for incorporating open space).

4. *All environmental documentation, including any checklist, EIS or DNS; and*

DPD's recommendation on the Concept approval for the location of the City facility, SEPA conditioning analysis and recommendation; Henderson Basin 44 CSO Reduction Project, Revised Final Environmental Impact Statement, September 2013; Henderson Basin 44 CSO Reduction Project, Final Environmental Impact Statement, January 2013; Wetland Determination; Traffic Analysis Technical Memorandum; Phase I Environmental Site Assessment; Seward Park Tree Inventory; Cultural Resources Report; Construction Noise Assessment Technical Memorandum; Operational Noise Assessment Technical Memorandum; and the associated plans are part of this report and will be transmitted to Council.

5. *The Director's recommendation to approve, approve with conditions, or deny a proposal.*

The facility proposal is consistent with the City's applicable land use policies, in that it "strives to correct instances of combined sewer overflows by prioritizing remedial action according to the frequency and volume of the overflow and the sensitivity of locations where the overflows occur."³

RECOMMENDED DECISION – COUNCIL CONCEPT APPROVAL

DPD's recommendation is to **approve** the proposal with conditions as analyzed under applicable SEPA and Shoreline policies and codes.

ANALYSIS - SHORELINE SUBSTANTIAL DEVELOPMENT

SMC 23.60.030 of the Seattle Municipal Code provides criteria for review of a Shoreline Substantial development permit and reads:

A substantial development permit shall be issued only when the development proposed is consistent with:

- A. The policies and procedures of Chapter 90.58 RCW;*
- B. The regulations of this Chapter; and*
- C. The provisions of Chapter 173-27 WAC*

Conditions may be attached to the approval of a permit as necessary to assure consistency of the proposed development with the Seattle Shoreline Master Program and Shoreline Management Act (See recommended conditions 1-4 below).

³ City of Seattle Comprehensive Plan Policy U14 – Utilities 6.5

A. The Policies and Procedures of Chapter 90.58 RCW

Chapter 90.58 RCW is known as the Shoreline Management Act of 1971. It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses. This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary incidental rights. Permitted uses in the shorelines shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water.

The Shoreline Management Act provides definitions and concepts, and gives primary responsibility for initiating and administering the regulatory program of the Act to local governments. The Department of Ecology is to primarily act in a supportive and review capacity, with primary emphasis on insuring compliance with the policy and provisions of the Act. As a result of this Act, the City of Seattle adopted a shoreline master program, codified in the Seattle Municipal Code at Chapter 23.60. Development on the shorelines of the state is not to be undertaken unless it is consistent with the policies and provisions of the Act, and with the local master program. The Act sets out procedures, such as public notice and appeal requirements, and penalties for violating its provisions. As the following analysis will demonstrate, the subject proposal is consistent with the procedures outlined in RCW 90.58.

B. The Regulation of Chapter 23.60

Chapter 23.60 of the Seattle Municipal Code is known as the "Seattle Shoreline Master Program." In evaluating requests for substantial development permits, the Director must determine that a proposed use meets the approval criteria set forth in SSMP 23.60.030. Development standards of the shoreline environment and underlying zone must be considered, and a determination made as to any special requirements (*shoreline conditional use*, shoreline variance, or shoreline special use permit) or conditioning that is necessary to protect and enhance the shorelines area (SSMP 23.60.064). In order to obtain a shoreline substantial development permit, the applicant must show that the proposal is consistent with the shoreline policies established in SSMP 23.60.004, and meet development standards for all shoreline environments established in SMC 23.60.152 as well as the criteria and development standards for the shoreline environment in which the site is located, any applicable special approval criteria and the development standards for specific uses.

Each of these elements is evaluated below in the order they are listed in the Shoreline Master Program. The shoreline designations for the area of work are Conservancy Preservation (CP) and Conservancy Recreation (CR) (SMC 23.60.220 + 23.60.360-.400).

SMC 23.60.004 – Shoreline goals and policies

The Shoreline Goals and Policies which are part of the Seattle Comprehensive Plan's Land Use Element and the purpose and location criteria for each shoreline environment designation contained in SMC 23.60.220 must be considered in making all discretionary decisions in the shoreline district. The purpose of the CP and CR environments are stated in SMC 23.60.220-C.2 and C.3:

Conservancy Preservation (CP) and Conservancy Recreation (CR) Environments

a. Purpose.

The purpose of the CP Environment is to preserve, protect, restore, or enhance certain areas which are particularly biologically or geologically fragile and to encourage the enjoyment of those areas by the public. Protection of such areas is in the public interest.

The purpose of the CR shoreline environment is to protect areas for environmentally related purposes, such as public and private parks, aquaculture areas, residential piers, underwater recreational sites, fishing grounds, and migratory fish routes. While the natural environment is not maintained in a pure state, the activities to be carried on provided minimal adverse impact. The intent of the CR environment is to use the natural ecological system for production of food, for recreation, and to provide access by the public for recreational use of the shorelines. Maximum effort to preserve, enhance or restore the existing natural ecological, biological, or hydrological conditions shall be made in designing, developing, operating and maintaining recreational facilities.

b. [CP] Locational Criteria. Dry or submerged lands owned by a public agency and possessing particularly fragile biological, geological or other natural resources which warrant preservation or restoration;

b. [CR] Locational Criteria.

- (1) Dry or submerged lands generally owned by a public agency and developed as a park, where the shoreline possesses biological, geological or other natural resources that can be maintained by limiting development,*
- (2) Residentially zoned submerged lands in private or public ownership located adjacent to dry lands designated Urban Residential where the shoreline possesses biological, geological or other natural resources that can be maintained by limiting development;*

Tree Removal A total of 43 trees, including two "exceptional trees" would be removed in Seward Park for the Tennis Courts Alternative (see Figure 7-1) and 26 trees, including ten "exceptional trees," for the Parking Lot Alternative (see Figure 7-2). A summary of the tree removal is shown in Table 7-2 and the specific trees are documented in Appendix D. The majority of the trees removed for the Tennis Courts Alternative would be a stand of Lombardy poplars along the water's edge. The majority of the trees removed for the Parking Lot Alternative would be a stand of White poplars along the water's edge. Tree removal primarily affects non-native trees, many of which are approaching the end of their normal life expectancy. Removal of the trees would diminish the tree canopy, which would reduce shade, perches, and nesting sites for wildlife, and wildlife may be expected to use habitats adjacent to the Tennis Courts Alternative more than the areas adjacent to the Parking Lot Alternative since this area has been planted with many native species and because there is less human activity in this area. Approximately 0.3 acres of canopy would be removed for the Tennis Courts Alternative and 0.2 acres for the Parking Lot Alternative. Tree removal would affect less than 1 percent of the approximate 167 acres of tree canopy in Seward Park. No trees would be removed in the UPARR replacement area. *Pages 7-12 and 7-13, Final Environmental Impact Statement.*

Tennis Courts The row of poplar trees next to the tennis courts would be removed as part of the construction of the CSO storage tank. Removal of the trees would provide expansive views of south Lake Washington and Mount Rainier. Some tennis players may notice a lack of shade while playing tennis due to the removal of shade-providing trees. Additional vegetation improvements to the slope and area to the south of the tennis courts would help restore the native forest with native trees, shrubs, and groundcover. Replacement of vegetation would be in accordance with the Seward Park Vegetation Management Plan. The improvements to the tennis court area would help reconnect the area south of the tennis courts to the rest of the broader tennis court area. *Page 4-15, Final Environmental Impact Statement.*

Parking Lot 2 Area The row of poplar trees near the parking lot would be removed as part of construction of the CSO storage tank, which would provide expansive views of south Lake Washington and Mount Rainier. A mix of native deciduous trees, low shrubs, and groundcover would be planted between Parking Lot 2 and the existing path to the north (Figure 3-8). Shrubs and groundcover also would be provided to screen the aboveground features. The addition of low shrubs and groundcover between the parking lot and pedestrian path would be in keeping with the natural character of the park and Olmsted design principles. *Page 4-26, Final Environmental Impact Statement.*

38,000 cubic yards of grading (cut and fill) is proposed for all work associated with construction. The project includes a re-vegetation plan, which includes the landscaped around the tennis courts and parking lot.

The project would reduce untreated combined sewer overflows into Lake Washington. Goals of the CSO reduction are improved shoreline ecosystem as it relates to water and shoreline quality, habitat for juvenile salmonids and other wildlife.

In summary, the proposal is consistent with the shoreline environment.

SMC 23.60.064 - Procedures for Obtaining Shoreline Substantial Development Permits

This application has followed the procedural requirements for a Master Use Permit as specified in subsection A. SMC 23.60.064 also provides authority for conditioning of shoreline substantial development permits as necessary to carry out the spirit and purpose of and assure compliance with the Seattle Shoreline Code, Chapter 23.60, and with RCW 90.58.020 (State policy and legislative findings).

Per SMC 23.60.064-C, in evaluating whether a development which requires a substantial development permit, conditional use permit, variance permit or special use authorization meets the applicable criteria, the Director shall determine that:

- 1. The proposed use is not prohibited in the CR environment and underlying zone in which it would be located:*

CR Environment

The existing Park use is a permitted use per SMC 23.60.360-A under the definition of "Shoreline recreation" (SMC 23.60.936-S). The Park use will remain and the site restored to its current form upon completion of the proposal.

The proposed CSO facility is considered a "Utility services use" per SMCs 23.60.940 and 23.84A.040. Utility service uses (CSO facility) are permitted by Shoreline Conditional Use pursuant to SMC 23.60.365-D⁴. Utility services uses are not prohibited in the underlying Single Family zone, but require Council Concept approval (Type V Council Land Use Decision) per SMC 23.51A.002-B and SMC 23.76.062 - .064.

2. *The development meets the general development standards and any applicable specific development standards set forth in Subchapter III, the development standards for the shoreline environment in which it is located, and any applicable development standards of the underlying zoning, except where a variance from a specific standard has been applied for:*

The conformance of the project with the general Shoreline development standards and development standards in the shoreline environments in which the project is located is discussed below.

The proposal conforms to the Single Family zoning development standards; see the analysis located above in the Director's Report section titled "Evaluation of development Standards."

ANALYSIS - SHORELINE CONDITIONAL USE

The project requires a Shoreline Conditional Use approval per SMC 23.60.365-D. The criteria for Shoreline Conditional Uses are based the criteria in WAC 173-27-160:

The purpose of a conditional use permit is to provide a system within the master program which allows flexibility in the application of use regulations in a manner consistent with the policies of RCW 90.58.020. In authorizing a conditional use, special conditions may be attached to the permit by local government or the department to prevent undesirable effects of the proposed use and/or to assure consistency of the project with the act and the local master program.

- (1) *Uses which are classified or set forth in the applicable master program as conditional uses may be authorized provided that the applicant demonstrates all of the following:*

- (a) *That the proposed use is consistent with the policies of RCW 90.58.020 and the master program;*

The goals of the Henderson Basin 44 Combined Sewer Overflow (CSO) Reduction Project are to improve water quality in Lake Washington, protect the public health, improve the environment by reducing Combined Sewer Overflows from the Genesee Area, and meet State laws and regulations (RCW 90.48.480 and WAC 173-245-020(22)) that limit CSOs to a long-term average of no more than one untreated discharge per year per outfall.

The proposal is compliant with RCW 90.58.020 as the main goal for the installation of the tank is to reduce combined sewer system overflows into Lake Washington thereby increasing water quality and reducing pollutants in shoreline environment. Reduction of CSO occurrences serve both state and local interests for the health of our surrounding waters and shorelines. The proposal will not alter the shoreline as it currently existing and is proposed within the boundaries of the existing tennis courts and paved parking lot that provides public access to the Park and Lake Washington. The impervious surface area will not be expanded — replacement of pavement areas will be required to comply with the current drainage code.

⁴ Project relies on Ordinance #118477

The existing public access to the site which is very good will not be reduced; the tennis court area, parking lot and access will be restored upon completion of the facility. The proposal's underground location will allow the existing public access and recreational opportunities for the public to continue for years to come.

(b) That the proposed use will not interfere with the normal public use of public shorelines;

The finished proposal will not affect normal public use of public shorelines; during construction some access may be limited due to construction activities.

(c) That the proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and shoreline master program;

Considering the facilities below grade proposed location, the tank will be compatible with surrounding uses as it is unmanned and its existence will be screened from surrounding uses, mostly Single Family residences. The future land use anticipated by the comprehensive plan for the area is single family residential areas and city owned open space.

This proposal is compatible with Single Family uses and open spaces based on its below grade design which will allow the park to remain in its current function and usability.

SPU will conduct scheduled maintenance quarterly and after large storm events. The odor control system will remain in operation during the performance of quarterly maintenance. The odor control system will be shut down for the maintenance of the odor control system itself. Maintenance of the odor control system will include replacement of the system filters and replacement of the carbon media.

- Replacement of the system filters (annually, 2-4 hours in duration)
- Replacement of the carbon media (every 5 to 25 years, 4-6 hours in duration)

Maintenance of the odor control system will occur during dry weather when the storage tank is empty and foul air will be allowed to remain in the storage tank or sewer pipes. During this time, minimal odors are expected to be present immediately around the odor control facility.

(d) That the proposed use will cause no significant adverse effects to the shoreline environment in which it is to be located; and

Considering the nature of the use and its intended goals the proposed use won't cause significant adverse effects to the shoreline, but rather should accomplish the opposite by reducing untreated pollutants in the shoreline environment.

(e) That the public interest suffers no substantial detrimental effect.

The proposal will not have substantial detrimental effects to the public interest but rather positive effects by untreated reducing pollutants and maintaining the park use for the foreseeable future.

(2) In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

Sewers in the project area carry raw sewage away from the neighborhood for treatment at King County's West Point and South treatment plants before discharge to Puget Sound. When it rains,

these same sewers also carry untreated stormwater from neighborhood roofs, foundation drains, and some streets. During heavy rains, if the amount of raw sewage and untreated stormwater exceeds the sewer system capacity, the excess flows discharge into Lake Washington. The term for these overflows is "Combined Sewer Overflows," or CSOs, and they are a public health and environmental concern. The goal of the Henderson Basin 44 CSO Reduction Project is to reduce the number and volume of these sewage overflows from the project area. Basin 44 is in southeast Seattle along the western shoreline of Lake Washington.

Seward Park is owned and managed by the Seattle Department of Parks and Recreation (Seattle Parks) and is the site of the Henderson Basin 44 CSO Reduction Project. The proposed project consists of building a 2.4-million-gallon (MG) underground storage tank to store excess sewage and stormwater flows in Basin 44 during heavy rain events. The project also includes additional infrastructure, shoreline, and landscape improvements.

The proposed project would help protect public health, improve water quality in Lake Washington, and comply with regulations by reducing the number of CSO events in Basin 44 to a long-term average of no more than one untreated discharge per year per outfall.

There are no other installations that require conditional use similar to the proposal of which DPD is aware.

(3) Other uses which are not classified or set forth in the applicable master program may be authorized as conditional uses provided the applicant can demonstrate consistency with the requirements of this section and the requirements for conditional uses contained in the master program.

Not applicable.

(4) Uses which are specifically prohibited by the master program may not be authorized pursuant to either subsection (1) or (2) of this section.

Not applicable.

SMC 23.60.152 - Development Standards for all Environments

These general standards apply to all uses in the shoreline environment. They require that design and construction of all uses be conducted in an environmentally sound manner, consistent with the Shoreline Management Program and with best management practices for the specific use or activity. These general standards of the SMP state, in part, that all shoreline development and uses shall:

- Protect the quality and quantity of surface and ground water on and adjacent to the lot and shall adhere to the guidelines, policies, standards and regulations of applicable water quality management programs and regulatory agencies. Best management practices such as paving and berming of drum storage areas, fugitive dust controls and other good housekeeping measures to prevent contamination of land or water shall be required.*
- Not release oil, chemicals or other hazardous materials onto or into the water.*

- *Be located, designed, constructed, and managed to avoid disturbance, minimize adverse impacts and protect fish and wildlife habitat conservation areas, including but not limited to, spawning, nesting, rearing and habitat areas, commercial and recreational shellfish areas, kelp and eel grass beds, and migratory routes. Where avoidance of adverse impacts is not practicable, project mitigation measures relating the type, quantity and extent of mitigation to the protection of species and habitat functions may be approved by the Director in consultation with state resource management agencies and federally recognized tribes;*
- *Be located, designed, constructed and managed to minimize interference with, or adverse impacts to, beneficial natural shoreline processes such as water circulation, littoral drift, sand movement, erosion and accretion;*
- *Be located, designed, constructed, and managed in a manner that minimizes adverse impacts on surrounding land and water uses and is compatible with the affected area; and*
- *Be located, constructed, and operated so as not to be a hazard to public health and safety.*

The proposal, as designed and conditioned below, would not adversely affect the quality and quantity of surface and ground water on and adjacent to the site on a long-term basis. No planned discharge of solid wastes would occur. No intentional release of oil, chemicals, or other hazardous materials shall occur. Erosion would not result from the development. Impacts to fish and wildlife and shoreline processes are minimized. Long-term impacts to surrounding land and water uses are also minimized. Some vegetation will be cleared with this proposal, but a re-vegetation plan part of the project. No hazard to public safety or health is proposed by this development. Navigation channels will not be affected. The proposal would not affect existing shoreline stabilization. No submerged public right-of-way or view corridors would be significantly affected. The conditions noted at the end of this report, which are based on the criteria of SSMP 23.60.152, ensure that the project conforms to the goals and regulations of the Seattle Shoreline Master Program. The public interest suffers no substantial detrimental effect from the proposal.

SMC 23.60.390-400 Development Standards for the CR Environment

The proposal meets all development standards relating to, natural beach protection, height, lot coverage, view corridors, and public access.

C. The Provisions of Chapter 173-27 WAC

WAC 173-27 establishes basic rules for the permit system to be adopted by local governments, pursuant to the language of RCW 90.58. It provides the framework for permits to be administered by local governments, including time requirements of permits, revisions to permits, notice of application, formats for permits, and provisions for review by the state's Department of Ecology (DOE). Since DOE has approved the Seattle Shoreline Master Program, any project consistent with the criteria and procedures of SMC 23.60 is also consistent with WAC 173-14 and RCW 90.58.

CONCLUSION

Development requiring a Shoreline Substantial Development Permit can only be approved if it conforms to the policies and procedures of the WAC, RCW and with the regulations of SMC 23.60, Seattle Shoreline Master Program. The specific standards for development in the shoreline environment will be met by the proposed development.

Pursuant to the Director's authority under Seattle's Shoreline Master Program to ensure that development proposals are consistent with the policies and procedures, and conform to specific development standards of the underlying zone, and having established that the proposed use and development are consistent with the Seattle Shoreline Program, with the recommended conditions below the proposal is recommended for approval. Further DPD finds that the criteria found in WAC 173-27-160 are satisfied in order to allow the proposed Utility service use and the proposed development as a Shoreline Conditional Use.

RECOMMENDED DECISION – SHORELINE CONDITIONAL USE

DPD recommends the Shoreline Conditional Use Permit be GRANTED by City Council.

RECOMMENDED DECISION - SSDP

DPD recommends the Shoreline Substantial Development Permit be CONDITIONALLY GRANTED by City Council.

ANALYSIS - SEPA

Environmental review resulting in a Threshold Determination is required pursuant to the Seattle State Environmental Policy Act (SEPA); WAC 197-11, and Seattle's SEPA Ordinance (Seattle Municipal Code Chapter 25.05).

Seattle Public Utilities prepared a Final EIS (January 3rd 2013) and Revised Final EIS (September 5th 2013) for this proposal.

Disclosure of the potential impacts from this project is made in the submittal materials by the applicant. DPD has analyzed the environmental documents, reviewed the project plans and the supporting information in the file. As indicated in the information, this action may result in some adverse impacts to the environment. However, due to their temporary nature and limited effects, the impacts are not expected to be significant with conditioning. A discussion of these impacts, short and long term, is warranted.

Short - Term Impacts

Construction Impacts

Construction activities (grading, shoring, tank/vault construction, pipe installation, asphalt/concrete breaking paving, landscaping and associated electrical work) for project could result in the following adverse impacts: construction dust, emissions from construction machinery and vehicles, increased particulate levels, increased noise levels, occasional disruption of adjacent vehicular and pedestrian traffic, and a small increase in traffic and parking impacts due to construction workers' vehicles. Several construction related impacts are mitigated by existing City codes and ordinances applicable to the project, such as: Noise Ordinance; Street Use Ordinance; Grading and Drainage Code; Noise Ordinance; Environmentally Critical Areas Ordinance; Tree Protection Ordinance, Land Use Code and Building Code. Following is an analysis of the applicable SEPA policies.

The Street Use Ordinance includes regulations that mitigate dust, mud, and circulation. Temporary closure of sidewalks and/or traffic lane(s) is adequately controlled with a street use permit through the Seattle Department of Transportation.

Construction activities including construction worker commutes, truck trips, the operation of construction equipment and machinery, and the manufacture of the construction materials themselves result in increases in carbon dioxide and other greenhouse gas emissions which adversely impact air quality and contribute to climate change and global warming. While these impacts are adverse, they are not expected to be significant.

SPU will maintain a website for the project to inform the public of progress and specific construction phases. The website will provide contacts for surrounding residents to communicate with the contractor during the construction process. Contacts and phone numbers will also be distributed to nearby property owners. Conditioning is warranted (recommended SEPA condition #5) to ensure the public outreach plan is in place prior to the commencement of construction.

Construction Vehicles and Grading

Construction is expected to temporarily add particulates to the air and will result in a slight increase in auto-generated air contaminants from construction worker vehicles; however, this increase is not anticipated to be significant. Federal auto emission controls are the primary means of mitigating air quality impacts from motor vehicles as stated in the Air Quality Policy (SMC 25.05.675).

Existing City code (SMC 11.62) requires truck activities to use arterial streets to every extent possible. City code (SMC 11.74) provides that material hauled in trucks not be spilled during transport. The City requires that a minimum of one foot of "freeboard" (area from level of material to the top of the truck container) be provided in loaded uncovered trucks, which minimizes the amount of spilled material and dust from the truck bed en route to or from a site.

An impact not always mitigated in other city code requirements is dirt/dust created by excavation materials onto the adjacent streets system and surrounding residences. Considering the proposed 8,350 cu. yds. of grading and its proximity to single family homes and the right-of-way, SEPA conditioning is warranted to mitigate impacts of particulates in the air and street system. During grading activities repeated wetting of the soils during grading activities and in uncovered trucks to keep dirt and dust impacts to a minimum is required (recommended SEPA condition #9). Also to mitigate constructions vehicles transfer particulates into the street system, the contractor shall make provisions to wash vehicle tires, wheels and exteriors leaving the site (recommended SEPA condition #10).

Construction Noise

Noise associated with excavation could adversely affect surrounding uses in the area, which include residential uses.

SPU stated in SEPA checklist that "Noise from construction operations at either project may occur between the hours of 7 a.m. and 7 p.m. on weekdays and between 9 a.m. and 7 p.m. on weekends and legal holidays. Nighttime work is not currently anticipated."

After review of the SEPA checklist and noise assessment report and due to the proximity of the project site to residential uses, DPD finds the limitations of the Noise Ordinance to be inadequate to mitigate the potential noise impacts to surrounding residential uses. Pursuant to the SEPA Overview Policy (SMC 25.05.665) and the SEPA Construction Impacts Policy (SMC 25.05.675 B), mitigation is warranted. SPU submitted a noise assessment analysis for the project outlining code requirements, anticipated impacts and proposed mitigation measures.

Noise Ordinance General Limits

General Construction

Monday – Friday 7:00 a.m. until 10:00 p.m. Saturdays, Sundays and Holidays 9:00 a.m. until 10:00 p.m.

High Impact Work

Monday – Friday 8:00 a.m. until 5:00 p.m. Saturdays, Sundays and Holidays 9:00 a.m. until 5:00 p.m.

In order to mitigate the noise impacts during construction, SPU and/or responsible party(s) shall limit the hours of construction to the hours allowed by the noise ordinance (SMC 25.08) except no work shall occur on non-holiday weekdays or Saturdays past 6:00 pm and no work is permitted on Sundays.

Further, SPU has cited the following self-mitigating specifications to reduce noise impacts.

- Ensure the adequacy of sound-control devices that are at least as effective as those on the original equipment. No equipment would have un-muffled exhaust.
- Minimize idling time of equipment and vehicle operation.
- Conduct noise monitoring to ensure compliance with the SMC if noise complaints are received during construction.
- Maintain as much of the existing vegetation around the site as possible to provide a vegetative buffer and visual screen to those residences nearest the site.

As necessary, SPU will implement appropriate additional noise measures, possibly including changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary sources of construction noise.

Long - Term Impacts

The following long-term or use-related impacts, slight increase in demand on public services and utilities; and increased energy consumption are not considered adverse; furthermore, other City Departments will review in detail the service requirements needed to meet the project impacts/demand.

Environmentally Critical Areas

The development site contains the following mapped ECAs: Fish & Wildlife Habitat Area, Liquefaction Prone Soils, Wetlands, and 40% Steep Slope.

DPD determined during plan review that the Steep Slope mapped qualifies for the criteria established in SMC 25.09.180-B.2.b; the Steep Slopes were created by previous legal grading associated with the park's development. Also, the work is proposed outside of the wetland buffer and is determined to be exempt per SMC 25.09.045-F and Seattle Public Utilities has executed an ECA Exemption pursuant to SMC 25.09.045. The signed ECA exemption is located in the application information with DPD.

Environmental Health

The goals of the proposed Project are to improve water quality in Lake Washington, protect the public health, improve the environment by reducing CSOs from the Henderson Basin 44 area, and meet State laws and regulations (RCW 90.48.480 and WAC 173-245-020(22)) that limit CSOs to a long-term average of no more than one untreated discharge per year per outfall .

Operational Noise

The original operational noise assessment for the project was conducted in 2012, based on planning-level (conceptual) design assumptions available at that time. Since the publication of the Final EIS in January 2013, the project design has advanced. While the overall project is at an approximate 30 percent complete level, the elements of the design that generate noise are further advanced. The odor control equipment, fans, fan silencer, pumps, and intake and exhaust air vents and grates have been sized and located. These design elements, and the noise they are expected to generate, are not expected to change as the overall project design is finalized. The operational noise assessment documented in this chapter of the Revised Final EIS is based on the increased level of design, and replaces the previous operational noise discussion from Chapter 13 of the January 2013 Final EIS in its entirety.

The sections below briefly describe noise characteristics, existing noise conditions, the City's noise regulations, noise design criteria established for the project, an assessment of operational noise impacts, and mitigation. The information in this section is based on a revised technical memorandum regarding operational noise (HDR 2013).

What are the characteristics of noise?

Sound (or noise) is vibration that travels through the air as waves of pressure fluctuations. Sounds are expressed in various units, depending on the purpose. The industry-preferred unit for environmental noise analysis is dBA (A-weighted decibel), which is a logarithmic scale that conveys how humans perceive noise. Most sounds consist of a broad range of frequencies. The human ear does not hear all frequencies equally; very low and very high frequencies are de-emphasized by the human ear. This scale puts more weight on the range of frequencies where the average human ear is most sensitive, and less weight on those frequencies we do not hear as well. Typical A-weighted noise levels for various types of sound sources are listed in Table 2-1, (see the Revised Final EIS, September 5th 2013).

Under normal listening conditions, people typically cannot detect increases of 1 to 2 dBA, some people can detect increases of 3 dBA, and most people can detect increases at 5 dBA. People generally perceive a 10 dBA increase as a doubling of loudness. (California Department of Transportation 2009.)

Noise levels are affected by various factors, including distance from the noise source; topographic features and structural barriers that absorb, reflect, or scatter sound waves; and atmospheric conditions such as wind speed and direction, humidity levels, and temperatures. As a result, the existing noise environment can be highly variable depending on local conditions.

Some noises have tonal characteristics, where noise emissions in particular frequency ranges are more prominent than others. These are called prominent discrete tones and are distinctly audible because the tone stands out from the background noise. Some of these tones are desirable (e.g., back-up beepers); however, others are not desirable. Identifying the presence of prominent discrete tones is based on a time-averaged sound pressure level measured in 1/3 octave bands. If the sound level in any frequency band is a certain number of decibels higher than is adjacent frequency bands, then a prominent discrete tone is present. The number of decibels difference varies by frequency band as follows: [ISO 1996-2:2007(E)]

- Low frequency 1/3 octave bands (25 Hz to 125 Hz): 15 dBA level difference
- Middle frequency 1/3 octave bands (160 Hz to 400 Hz): 8 dBA level difference
- High frequency 1/3 octave bands (500 Hz to 10,000 Hz): 5 dBA level difference

What are the existing conditions for noise in the project area?

To characterize existing noise conditions, outdoor noise levels were measured at ten locations near the Tennis Courts Alternative and the Parking Lot Alternative sites in Seward Park. Daytime noise levels were measured at nine monitoring locations between 10:00 a.m. and 1:00 p.m. on Wednesday June 15, 2011 (10-minute measurements at each location). Nighttime noise levels were measured at one monitoring location in Seward Park between 2:00 a.m. and 4:00 a.m. on Thursday May 2, 2013. Monitoring locations are listed in Table 2-2 and shown in Figure 2-1 of the Revised Final EIS, September 5th 2013.

Table 2-2 of the Revised Final EIS (September 5th 2013) summarizes the average noise levels detected during monitoring at each site. Existing noise levels within Seward Park are relatively low because of low vehicular traffic volumes in the park and the absence of other major noise sources, such as industrial facilities. Measured noise levels at residential locations outside of the park are somewhat higher due to occasional pass-by traffic on Lake Washington Boulevard South, Seward Park Avenue South, and Lakeshore Drive South.

The measured daytime noise levels at Seward Park are considered representative of the noise in the park because they were measured in the middle of the day during the week in late spring /early summer. While noise levels may be higher during the weekend and peak of summer, modeling the impacts using the measured daytime noise levels is a more conservative approach because it predicts greater noise increases than would be predicted using higher background noise levels.

The measured nighttime noise level at the Seward Park location is assumed representative of nighttime noise levels at nearby residences, property lines, and elsewhere throughout the study area. This assumption is appropriate because the nighttime monitored noise level (23 dBA) was measured between 2:00 a.m. and 4:00 a.m. and there is no reason to believe it would be any quieter at other times of the day or night or at the nearby residences or elsewhere in the study area.

What are the noise regulations in the project area?

The Seattle Municipal Code (SMC 25.08) establishes limits on the levels and durations of noise crossing property boundaries. Allowable maximum sound levels depend on the land use zoning designation of the noise source and the zoning designation of the receiving property. The SMC noise limits are shown in Table 2-3 of the Revised Final EIS, September 5th 2013. It is important to note that the sounds created by motor vehicles, such as traffic on Lake Washington Boulevard South or Seward Park Avenue South and other roads near the alternative sites, are exempt from the noise limits specified in Table 2-3 of the Revised Final EIS, September 5th 2013 (SMC 25.08.480).

Applying the noise code to residential receptors in the project area (i.e., the adjacent homes) is straightforward. Because both the noise source and the receiving property are zoned residential and the noise would cross a residential property boundary, the noise limits are 55 dBA during the day and 45 dBA at night.

However, applying the noise code to receptors in the park is not a straightforward matter. This is because the noise would not cross a property boundary. The noise source and the receptor(s) would both be located in the park. This creates ambiguity in applying the noise code in this case.

What noise-related design criteria were used for the project?

For this project, SPU has analyzed differences between existing noise levels and modeled project-related operational noise levels, and has set project design criteria as described below. These design criteria are specific to the circumstances of this project, such as the Seward Park location, the buried facility design, the proximity to adjoining residential properties, the proximity to park users, the existing noise levels, and other details, and should not be construed to apply to any other CSO reduction, SPU, or City project.

- Daytime Design Criterion for Residences and Park Users: This design criterion applies to nearby residences, park users at key sensitive park sites discussed in the EIS (i.e., tennis courts, Picnic Shelter 1, play area, and Audubon Center), as well as park users participating in active and passive park activities elsewhere in the park. This design criterion is a modeled noise increase of no more than 5 dBA over the existing daytime noise levels documented in Table 2-4 and Table 2-5 (see Section 2.5) of the Revised Final EIS, September 5th 2013.

This design criterion was selected because existing background noise levels are relatively low and, as discussed earlier, a change of 3 dBA is barely perceptible and a change of 5 dBA is the threshold at which most people perceive a change. Note that if higher background noise levels (such as the noise levels that might occur during peak summer usage) were used for model input, the model-predicted noise increase would be smaller.

- Daytime Design Criterion for Transitory Park Users: This design criterion applies to park users who are not engaged in active or passive park activities, but rather are in transition from parking lots to areas in the park where they would engage in active or passive park activities. This design criterion is to ensure that the model-predicted noise levels that would be experienced by transitory park users (people who are transitioning from parking their cars to other park areas) in the immediate vicinity of the intake/exhaust vents are roughly equivalent to or lower than the strictest noise limit in the code (55 dBA during the day).
- This design criterion was developed to address noise levels at the air intake and exhaust vents, which are located in or near parking lots. It is less restrictive than the first design criterion described above, is appropriate because park users do not expect noise levels to be quiet for transitory areas such as in or near parking lots, compared to areas where park users engage in active or passive park activities. Park users understand that parking lots and their vicinity are relatively noisy locations with noises such as the starting of vehicle engines, the opening and closing of vehicle doors, and vehicles entering and exiting the parking lots. Additionally, park users are not recreating in these transition areas; they are simply passing through them to reach areas used for recreation. A higher level of increase over existing noise levels in these locations (as compared with the level of increase over existing noise set in the design criteria for residences and non-transitory park users) does not pose a concern in these circumstances. It should also be noted that the level of increase over existing noise levels will fall off as one moves away from the immediate vicinity of the intake/exhaust vents. The selected design criterion is an appropriate method of addressing the foregoing factors related to noise experienced in the immediate vicinity of the intake/exhaust vents.
- Nighttime Design Criterion for Residences: This design criterion applies to the residential property lines adjacent to the park at night. The park is closed at night, so this criterion does not apply for park users. This design criterion is a modeled noise increase of no more than 5 dBA over the existing nighttime noise levels documented in Table 2-4 and Table 2-5 (see Section 2.5) of the Revised Final EIS, September 5th 2013.

This design criterion was selected because the existing background noise level is very low (23 dBA is considered quieter than a soft whisper, as shown in Table 2-1 of the Revised Final EIS, September 5th 2013) and, as discussed earlier, a change of 3 dBA is barely perceptible and a change of 5 dBA is the threshold at which most people perceive a change.

- Design Criterion for Tones: This design criterion is that no audible prominent discrete tones would be present. As described earlier, prominent discrete tones are discrete frequency sounds that stand out from other sounds and have the potential to cause annoyance. This design criterion translates into the following thresholds, which vary depending on the frequency band:
 - Low frequency 1/3 octave bands (25 Hz to 125 Hz): The sound level would be less than 15 dBA higher than the adjacent frequency bands.
 - Middle frequency 1/3 octave bands (160 Hz to 400 Hz): The sound level would be less than 8 dBA higher than the adjacent frequency bands.

- High frequency 1/3 octave bands (500 Hz to 10,000 Hz): The sound level would be less than 5 dBA higher than the adjacent frequency bands.

How would the project affect noise after construction is complete?

Direct Impacts

The proposed facility, and its associated noise sources, would be located underground. However, noise would be introduced into the environment through the air intake and exhaust ducts that are part of the ventilation system.

Noise-generating sources from the project would include the following for either the Tennis Courts or the Parking Lot Alternative:

- Fans: Four fans would be located in the facilities vault. One fan is associated with the odor control system and three fans are for the heating, ventilation, and air conditioning system. These noise sources are generally characterized as a steady continuous sound. The fans would operate 24 hours a day, 7 days a week. These four fans are the primary noise-generating sources.
- Tipping Buckets: After a storage event, the storage tank would be flushed with clean water that is spilled from tipping buckets at both ends of the storage tank, one at a time. This noise source is characterized as an intermittent sound. The tipping buckets would only be used when a storage event occurs, which is anticipated to be approximately 16 times per year. Noise would be generated when the tipping buckets tip and spill the water. Most of the acoustic energy associated with the tipping buckets would be contained by the heavy, sealed hatches to the concrete storage tank.
- Pumps: The facility would include ten pumps as detailed below. Generally pumps are characterized as steady, intermittent sound sources in that they generate sound on an intermittent basis, and each time they generate approximately equal levels of acoustic energy per pump. Most of the acoustic energy associated with the pumps would be contained within the facility vault or the storage tank.
 - There would be three drain pumps in the center of the storage tank. These would only be used after a storage event occurs, which is anticipated to occur an average of 16 times per year.
 - There would be two pumps in the facilities vault that would provide water supply to the tipping buckets. These would only be used after a storage event occurs, which is anticipated to occur an average of 16 times per year.
 - There would be one pump in the facilities vault associated with water supply to hose bibs. This would be used periodically during maintenance. The most frequent regular maintenance activities are anticipated to occur quarterly.
 - There would be four sump pumps in the facilities vault. These would be used in the event of groundwater seeping into the vault.
- Maintenance Activities: Maintenance activities would generate some noise; however, those activities would be infrequent and occur during daytime hours. The most frequent regular maintenance activities are anticipated to occur quarterly.

The fans were determined to be the primary contributor to project-generated noise on a day-to-day basis. The fans are a continuous noise source with an airborne sound-path through the underground ductwork and the intake and exhaust vents. These sources were the primary consideration in the quantitative prediction of sound levels.

The tipping buckets and pumps are intermittent sounds that largely would be contained within the enclosed facility vault and storage tank. However, in the case where a small amount of sound energy from tipping buckets or pumps exits the facility vault or storage tank, it would be reduced in level and would be intermittent and infrequent. These effects would have a negligible effect on the overall sound exposure to receptors (residences or park users). For this reason, as well as a lack of specific measured noise emission data for this equipment, these noise sources were evaluated qualitatively and not included in the quantitative prediction of sound levels.

The tipping buckets and pumps are intermittent sounds that largely would be contained within the enclosed facility vault and storage tank. However, in the case where a small amount of sound energy from tipping buckets or pumps exits the facility vault or storage tank, it would be reduced in level and would be intermittent and infrequent. These effects would have a negligible effect on the overall sound exposure to receptors (residences or park users). For this reason, as well as a lack of specific measured noise emission data for this equipment, these noise sources were evaluated qualitatively and not included in the quantitative prediction of sound levels.

Noise was taken into account when designing the facility and the following strategies were incorporated into the facility design to minimize noise levels:

- **Fan Selection:** Fan models were selected to minimize noise.
- **Fan Operation:** The odor control fan would have a variable frequency drive motor to allow running the fan at reduced speeds during nighttime hours to reduce noise. It is anticipated that the fan would run at approximately 50 percent speed during the nighttime. The fan would run at 100 percent speed during daytime hours when temperatures rise (higher temperatures can contribute to increased odor).
- **Fan Silencer:** A dissipative silencer would be located downstream of the odor control fan, the fan with the greatest noise emission levels.
- **Duct Layout:** The duct layout would provide sound attenuation due to lengths of straight duct runs and duct turns.
- **Exhaust Plenum Design:** The dimensions of the exhaust plenum were engineered to reduce sound at low frequencies.
- **Exhaust Plenum Location:** The location of the exhaust plenum was selected to reduce noise by considering environmental features. For example, the location of the exhaust plenum for the Tennis Courts Alternative is at the base of the small hill, which would provide a measure of shielding between the outlet and the residential receptors. The plenum for the Parking Lot Alternative was located as far as practical from potential receptors, taking advantage of sound attenuation over distances.
- **Hatches:** Facilities vault access hatches were designed to be relatively thick and to have seals at the perimeters to contain the noise within the vault.

The analysis of noise generated by the facility was multi-pronged and included an evaluation of predicted noise levels generated by operation of the facility, a separate analysis related to tones, and an assessment of how maintenance activities would impact noise.

The evaluation of predicted noise levels generated by operation of the facility was conducted using two acoustical models. The first model, the Trane Acoustical Program, calculates the sound pressure levels at the outlets of the intake and exhaust vents. The model takes into account the facility design, including the fan noise levels, size and length of duct runs, and other design elements. The second model, calculates outdoor sound pressure levels at locations beyond the footprint of the proposed facility. The model takes into account the elevation at the noise sources, the location of nearby homes and park facilities, property lines, and the slope of the nearby terrain. As noted in Chapter 1, this assessment is based on the current design level of project facilities.

The noise level analysis results are shown in Table 2-4 for the Tennis Courts Alternative and in Table 2-5 for the Parking Lot Alternative (see the Revised Final EIS, September 5th 2013). For each residential and park receptor, the tables show the modeled existing noise level, the model-predicted noise level from the proposed project, the model-predicted total noise level, and the model-predicted increase over the existing noise level.

Note that the model-predicted total noise level is not the arithmetic sum of the existing noise level and the model-predicted project-generated noise, and consequently the existing noise level is not always impacted by a project-generated noise. The logarithmic nature of the decibel scale means the existing noise level and the project-generated noise level cannot be simply added. Because of the way decibel levels are combined, the existing noise level is unaffected if the project-generated noise level is lower than the existing noise level by at least 10 dBA.

The model-predicted daytime and nighttime project-generated noise levels are shown in Figure 2-2 and Figure 2-3 for the Tennis Courts Alternative and in Figure 2-4 and Figure 2-5 for the Parking Lot Alternative. The figures show the locations of the project noise sources, the locations of the noise receptors, and the model-predicted project-generated noise contours.

The separate tone analysis was conducted to determine if prominent discrete tones would be present. The method to identify the presence of prominent discrete tones requires noise data in 1/3 octave bands. Unfortunately, noise emission data for mechanical equipment are provided by manufacturers in whole-octave frequency bands, rather than in 1/3 octave bands. However, the data did allow for analysis as to where in the frequency band a prominent discrete noise would occur, if one were generated by the equipment. The noise reduction design elements discussed earlier (e.g., the fan silencer) are effective at reducing sounds in the frequency of concern. Therefore, while it is uncertain whether the fans would produce prominent discrete tones, if they were generated, the noise controls incorporated into the facility design are expected to reduce any potential discrete tones to below audible levels, therefore meeting the design criteria of no audible prominent discrete tones.

The assessment of how maintenance activities would impact noise included a review of the type, frequency, and location of the maintenance activities. Maintenance activities would generate some noise, but those activities would be infrequent (quarterly at the most frequent) and would occur during daytime hours.

The conclusions from the noise analysis are as follows:

- The acoustic modeling for noise levels shows no expected increase to existing daytime noise levels at residences, key sensitive park sites discussed in the EIS (i.e., tennis courts, Picnic Shelter 1, play area, and Audubon Center), as well as for park users participating in active and passive activities elsewhere in the park. This is true for both the Tennis Courts Alternative and the Parking Lot Alternative. This result meets the Daytime Design Criterion for Residences and Park Users, which is a modeled noise increase of no more than 5 dBA over the existing daytime noise levels documented in Table 2-4 and Table 2-5 (*see the Revised Final EIS, September 5th 2013*).
- The acoustic modeling for noise levels shows that the highest noise level at park transition areas is 54 dBA for the Tennis Courts Alternative and 51 dBA for the Parking Lot Alternative. These are the locations of the air intake and exhaust vents in or adjacent to parking lots. This result meets the Daytime Design Criterion for Transitory Park Users, which is to ensure that the model-predicted noise levels that would be experienced by transitory park users (people who are transitioning from parking their cars to other park areas) in the immediate vicinity of the exhaust intake/exhaust vents are roughly equivalent to or lower than the strictest noise limit in the code (55 dBA during the day). Also as noted earlier, this design criterion, which is less restrictive than the Daytime Design Criterion for Residences and Park Users, is appropriate because park users do not expect noise levels to be quiet for transitory areas such as in or near parking lots, compared to areas where park users engage in active or passive park activities.

The acoustic modeling for noise levels shows no expected increase to existing nighttime noise levels at the residential property lines, except at one receptor for the Tennis Courts Alternative. Receptor 3 is anticipated to experience an increase of 1 dBA at the property line, which as described earlier would not be perceptible, resulting in a total expected noise level of 24 dBA. This result meets the Nighttime Design Criterion for Residences, which is a modeled noise increase of no more than 5 dBA over the existing nighttime noise levels documented in Table 2-4 & Table 2-5 (*see the Revised Final EIS, September 5th 2013*).

- The tonal analysis concluded that while it is uncertain whether the facility would produce prominent discrete tones, if they were generated the noise controls incorporated into the facility design are expected to reduce any potential discrete tones to below audible levels, therefore meeting the design criteria of no audible prominent discrete tones.
- The facility fans were determined to be the primary contributor to project-generated noise on a day-to-day basis, and the primary consideration in the quantitative prediction of sound levels. The tipping buckets and pumps are intermittent sounds that would be largely contained within the enclosed facility vault and storage tank. However, in the case where a small amount of sound energy from tipping buckets or pumps exits the facility vault or storage tank, it would be reduced in level and would be intermittent and infrequent. These effects would have a negligible effect on the overall sound exposure to receptors (residences or park users).
- The maintenance analysis concluded that maintenance activities would generate some noise, but those activities would be infrequent (quarterly at the most frequent) and would occur during daytime hours.

Indirect Impacts

No indirect impacts of operational noise were identified for the Tennis Courts Alternative or the Parking Lot Alternative.

What measures would reduce or eliminate potential impacts from operational noise?

SPU has incorporated project design features that noise modeling shows would avoid significant operational noise impacts. While the current design level for the overall project is considered a 30 percent design level, the design elements that affect noise are further advanced in design and are not anticipated to change as the overall project design moves toward final design. The odor control equipment, fans, fan silencer, pumps, and exhaust and intake air vents and grates have been sized and located. These design elements and their expected noise emission levels are not expected to change as the overall project design is finalized; therefore, SPU is not planning to re-run the noise modeling software at final design. In the unlikely event that the design changes and noise levels are anticipated to raise above the design criteria, SPU has committed to refining the design elements to ensure that the project meets the design criteria. Such design refinements may include one or a combination of the following measures:

- Re-designing ductwork, or refining or altering the location or design of the exhaust vents.
- Replacing planned equipment (e.g., fan type, fan silencer, pumps) with alternative models that would provide further noise reduction. This measure includes consideration of any new equipment types that may be developed and available at the time of final design.
- Revising the operation of the fans or speed of the variable frequency drives.

Would the project's operation have any significant unavoidable adverse impacts on noise?

Based on the analysis documented in the Revised Final EIS, no significant unavoidable adverse impacts from operational noise are anticipated.

The finished project will be within noise levels of The Noise Ordinance. The construction and mechanical permits will receive noise reviews for compliance.

Plants and Animals

Existing vegetation at the parking lot consists of mowed grass and a large Deodar cedar tree. Along the perimeter of the site other trees are present including Black locust, European mountain ash, and flowering cherry. The majority of the site is paved. All of the existing vegetation is regularly maintained as part of the park. The parking strip areas along 49th Avenue South construction area are vegetated with mowed grass.

There is mowed grass between the street and the sidewalks on both sides of 49th Avenue South.

Three trees are planned to be removed as a result of the project. The proposal is exempt from SMC 25.11 (Tree Protection Ordinance) per SMC 25.11.030-D.

No mitigation is necessary or required.

Historic and Cultural Preservation

HDR Engineering, Inc., contracted with Historical Research Associates, Inc. (HRA), to conduct a cultural resource inventory for the Henderson Basin 44 Combined Sewer Overflow (CSO) Reduction Project (the Project). The Project is one of several projects proposed by Seattle Public Utilities (SPU) to reduce CSOs in the Henderson Basin.

As a result, HRA conducted a pedestrian survey of all exposed areas and excavated 25 shovel probes. No cultural materials were identified during shovel probe testing for each alternative. Since paved areas of Alternatives 1 and 2 have likely been disturbed due to construction, and no cultural resources were identified during shovel probe testing, monitoring is not recommended.

Even though the shovel probes don't show indication of places or objects, conditioning is required per City of Seattle Director's Rule 2-98 to require that any city or contracted employee should be made aware of what cultural resources might be encountered pursuant to Director's Rule 2-98 as well as if resources of potential archaeological significance are encountered during construction or excavation (recommended SEPA conditions #s 6, 15 and 16).

RECOMMENDATION - SEPA CONDITIONING SUMMARY

In conclusion, adverse effects on the environment resulting from the proposal are anticipated to be non-significant. Meeting the conditions stated below and analyzed above, the project will be compliant with SEPA policies.

Existing codes and development regulations applicable to this proposed project will provide sufficient mitigation and with analyzed and recommended conditioning the project will be compliant with SEPA policies.

This analysis was done after review by the responsible official on behalf of the lead agency of the Final EIS, Revised Final EIS and Addendum; and other information on file with the responsible department. This constitutes DPD's substantive SEPA conditioning and recommendation to City Council.

RECOMMENDED CONDITIONS – TYPE V COUNCIL LAND USE DECISION

None.

RECOMMENDED CONDITIONS – SSDP

During Construction

1. Any work water ward of ordinary high water shall be restricted to applicable work windows established by Washington Department of Fish and Wildlife.
2. Appropriate Best Management Practices (BMPs) shall be employed to prevent any debris or other deleterious material from entering Lake Washington, such as the use of a turbidity curtain and/or debris boom surrounding the project area during in-water and over-water work to contain any debris, suspended sediments, or spills caused by construction activities. Materials to be disposed of shall be contained on site and then discarded at an appropriate upland facility.
3. Any debris that enters the water during the proposed work shall be removed immediately and contained until it can be disposed of at an appropriate upland facility.

For Life of the Project

4. No pesticides or fertilizers shall be applied within 50 feet of the stream, wetland or shoreline at this project location except as authorized by DPD.
5. The outfall shall be designed to prevent the entry of fish.

6. Shoreline revegetation and shoreline enhancements measures shall be monitored and maintained.

RECOMMENDED CONDITIONS – SHORELINE CONDITIONAL USE

None.

RECOMMENDED CONDITIONS – SEPA

Prior to Commencement of Construction

7. Execute the public outreach plan including: a website to provide project and progress updates, obtain email list-serve for project updates, and provide project contacts (with phone numbers) for the public. These contacts should also be mailed to nearby property owners (SPU should define the appropriate area of the mailings).

Prior to Issuance of the Master Use Permit – Council Land Use Decision

8. The project owner and/or responsible parties shall provide DPD with a statement that the contract documents for their general, excavation, and other subcontractors will include reference to regulations regarding archaeological resources and that construction crews will be required to comply with those regulations, including the following:
 - Archaeological Sites and Resources (RCW 27.53)
 - Indian Graves and Records (RCW 27.44)
 - Archaeological Site Public Disclosure Exemption (RCW 42.56.300)
 - Discovery of Human Remains (RCW 27.44)
 - Archaeological Excavation and Removal Permit (WAC 25-48)
 - Abandoned and Historic Cemeteries and Historic Graves (RCW 68.60)

Signature: _____ (signature on file) ..Date: April 3, 2014

Colin R. Vasquez, Senior Land Use Planner
Department of Planning and Development

CV:drm