



City of Seattle

Gregory J. Nickels, Mayor
Department of Planning and Development
D. M. Sugimura, Director

**CITY OF SEATTLE
ANALYSIS AND DECISION OF THE DIRECTOR OF
THE DEPARTMENT OF PLANNING AND DEVELOPMENT**

Application Number: 3005660
Applicant Name: Tara Wong Esteban for Seattle Public Utilities
Address of Proposal: 8800 8th Avenue Southwest

SUMMARY OF PROPOSED ACTION

Land Use Application to replace existing 68 million gallon open-water reservoir with a new 30 million gallon buried concrete reservoir in an environmentally critical area (West Seattle Reservoir). Existing reservoir to be demolished. Project includes 178,000 cubic yards of grading. Determination of non-significance prepared by Seattle Public Utilities.*

*Note: The project description has been revised from the original notice of application.

The following approval is required:

SEPA – To impose conditions – (Chapter 25.05, Seattle Municipal Code.)

SEPA DETERMINATION: Exempt DNS ¹ MDNS EIS

DNS with conditions

DNS involving non exempt grading or demolition or involving another agency with jurisdiction.

¹SEPA Determination of Non-Significance issued by Seattle Public Utilities on May 7, 2007.

BACKGROUND INFORMATION

Site and Vicinity Description

This approximately 902,128 square foot (sq. ft.) site is located in a Single Family 7200 (SF 7200) zone, situated on the southeast corner of Southwest Cloverdale Street and 8th Avenue Southwest. Development on this City of Seattle Public Utilities (SPU) owned site consists of a 68-million-gallon open-water reservoir (West Seattle Reservoir), a treatment (liquid bleach) building, a Federal Aviation Administration (FAA) building, the Highland Pump Station and a reservoir gatehouse which houses the West Seattle Pump Station.

The site is accessed via three (3) locations: the south access gate situated near the intersection of 8th Avenue Southwest and Southwest Henderson Street; and, the north access gates-one (1) entrance is on Southwest Cloverdale Street and the other entrance is on 8th Avenue Southwest. Both 8th Avenue Southwest and Southwest Cloverdale Street are non-arterial paved streets with no curbs, sidewalks or gutters on both sides of the streets.

The topography of the site varies from embankment slopes on the east and northeast side of the reservoir, to gently rolling/flat on the west side of the reservoir, to rolling/hilly on the south and north side of the reservoir. Areas on the site have been identified as Environmentally Critical Area (ECA)-Steep Slope. The applicant has been granted a limited exemption from ECA steep slope development standards for all work associated with this project but ECA review is still required for the construction application.

Surrounding properties to the west, east, north and south of the subject property are also zoned SF 7200. Additional properties west of the subject site are zoned Lowrise 2 (L-2) and Lowrise Duplex Triplex (LDT). Existing developments in vicinity of the subject site are as follows: single family residences to the north; Westcrest Park to the west and south; and, single family residences, a church (Highland Park Church of Nazarene) and apartments to the east.

Proposal

The proposed redevelopment of the site involves the replacement of the existing 68-million-gallon open-water reservoir (West Seattle Reservoir) with a new 30-million-gallon buried concrete reservoir. The new reservoir will be located within the northern portion of the footprint of the existing reservoir. The reservoir is being replaced because of a regulatory requirement by the Washington State Department of Health to cover all open drinking water reservoirs, and to address drinking water security concerns following the events of September 11, 2001.

The buried reservoir will create additional open space for public parks. As directed by Seattle City Council, future open space development over the buried reservoir is the responsibility of the Seattle Department of Parks and Recreation (DOPAR). Therefore, Seattle Parks and Recreation Department would submit its development of this area under a separate application. This proposal applies only to the reservoir burying work, which is the responsibility of Seattle Public Utilities.

The new 30-million-gallon buried reservoir will be constructed in the northern portion of the existing reservoir basin. The plastic hypalon liner will be removed and disposed of. The existing concrete floor, in the north two-thirds of the basin, will be removed and material will be excavated down to firm bearing soil. Excavated soil will either be placed in the south one-third of the basin as fill or reused as backfill around the new reservoir. The concrete on the side slopes will be demolished and may be crushed for use as partial backfill or may be left in place

to help prevent erosion during construction. If the concrete side slopes are left in place during construction, the upper portion of the side slopes and the parapet wall will be removed to about 8' below finished grade and then covered with backfill after the reservoir is constructed. Reservoir access hatches, vents and other appurtenances will be clustered together at several locations near the edge of the buried reservoir. The clustered areas will be paved and fenced. The entire surface area of the new reservoir will be covered with a maximum of 2' of soil and will be planted/seeded with grass. New drain lines, supply lines and outlet pipe lines will be constructed leading into and out of the buried reservoir. The new lines will tie into existing drainage and outlet lines to the northeast of the reservoir and the southeast corner of the existing reservoir.

The remaining concrete floor, in the south one-third of the existing reservoir, will be punctured or broken up in order to make it permeable and to allow natural percolation of precipitation into the ground below the existing reservoir bottom. Concrete rubble will be left in place. The concrete side slopes will be demolished to at least 8' below finished grade and the rubble will be spread out over the floor. Native and imported soil will cover the concrete rubble. The south third of the basin will be partially filled to provide a 2% slope down to the existing fence to the east and south. The entire re-graded basin area will also be planted/seeded with grass.

Internal modifications to the existing treatment building are proposed. This proposal does not include alterations to the existing FAA building, the underground Highland Pump Station and the reservoir gatehouse which houses the West Seattle Pump Station.

Upon completion of the buried reservoir, most of the existing fencing will be removed to allow for the open space to be developed by DOPAR.

Public Comments

The required public comment period ended on June 7, 2007. DPD received no written comments regarding this proposal.

ANALYSIS – SEPA

Environmental impacts have been analyzed in environmental documents prepared by Seattle Public Utilities. These include a SEPA Checklist dated March 28, 2007 and a Determination of Non-Significance issued by Seattle Public Utilities dated May 7, 2007.

Seattle Municipal Code (SMC) Section 25.05.660 provides that proposals can be conditioned or denied in order to mitigate environmental impacts. All conditions must be related to impacts identified in the environmental documents, based on adopted policies, and must be reasonable and capable of being accomplished. This proposal is reviewed under that substantive SEPA authority.

The Department is reviewing the environmental impacts of the proposal in order to impose further conditions if necessary. Disclosure of the potential impacts from this proposal was made in the environmental documents listed above. This information, supplemental information provided by the applicant and the experience of this agency with review of similar proposals form the basis of this analysis and conditioning.

Short-term Impacts

The following temporary demolition and construction activities on this site could result in the following adverse impacts: construction dust and storm water runoff, erosion, emissions from construction machinery and vehicles, increased particulate levels, increased noise levels, occasional disruption of adjacent vehicular and pedestrian traffic, and an increase in traffic and parking impacts due to construction related vehicles. Several construction-related impacts are mitigated by existing City codes and ordinances applicable to the project such as: the Noise Ordinance, the Stormwater Grading and Drainage Control Code, the Street Use Ordinance, and the Building Code. The following is an analysis of construction-related noise, earth, grading, historic preservation, streets and parking impacts.

Noise

The site is located one (1) block east from an arterial, 9th Avenue Southwest, which is a north-south roadway. Residential properties are situated west and north of the project site. Vehicular noise, human voices from nearby residential properties, and nearby facilities (Westcrest Park, Highland Park Elementary School and Highland Park, etc) are sited as existing noise sources.

Short-term noise and vibration from construction equipment and construction activity (e.g., backhoes, trucks, concrete mixers, generators, pneumatic hand tools, engine noise, back-up alarms, etc.); demolition of the existing reservoir; grinding concrete for use as backfill; and, construction vehicles entering and exiting the site would occur as a result of construction and construction-related traffic. Compliance with the Noise Ordinance (SMC 25.08) is required and will limit construction noise, registering 55 dB(A) or more at the receiving property line or a distance of 50 feet from the equipment, to the hours between 7:00 a.m. and 10:00 p.m. on weekdays, and between 9:00 a.m. and 10:00 p.m. on weekends and holidays. This level can be further reduced by 10 dB(A) between the hours of 10:00 p.m. and 7:00 a.m. during the weekdays, and between 10:00 p.m. and 9:00 a.m. on weekends where the receiving property lies within a residential district of the City (25.08.420). The use of impact construction equipment such as jackhammers, pile drivers and other loud noise emitters are restricted further in accordance with SMC 25.08.425.

To mitigate noise impacts resulting from demolition of the existing reservoir and construction of the buried reservoir, the SEPA checklists notes the following mitigating element of the proposal:

- Construction equipment will be muffled in accordance with the applicable laws. SMC 25.08, which prescribes limits to noise and construction activities, will be enforced during construction. Construction noise would normally be limited to the daytime hours in accordance with City noise regulations. Rarely, work could extend into evening hours or the weekend to respond to emergency, urgent or otherwise unscheduled needs.

Although compliance with the Noise Ordinance is required, due to the proximity of the project site to nearby residential uses, additional measures to mitigate the anticipated noise impacts may be necessary. The SEPA Policies at SMC 25.05.675.B and 25.05.665 allow the Director to require additional mitigating measures to further address adverse noise impacts during construction. Pursuant to these policies, it is the Department's conclusion that limiting hours of construction beyond the requirements of the Noise Ordinance may be necessary on this site.

Therefore, as a condition of approval, the proponent will be required normally to limit the hours of demolition activity not conducted entirely within an enclosed structure to non-holiday weekdays between 7:30 a.m. and 6:00 p.m. (Work would not be permitted on the following holidays: New Years Day, Martin Luther King Jr.'s Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day following Thanksgiving Day, and Christmas Day).

Earth

The ECA Ordinance and Directors Rule (DR) 33-2006 require submission of a soils report to evaluate the site conditions and provide recommendations for safe construction in areas with steep slopes, liquefaction zones, and/or a history of unstable soil conditions. Pursuant to this requirement the applicant submitted a Geotechnical Report prepared by Nils W. Lindwall, P.E. (SPU Materials Laboratory) dated May 2006. The report evaluates the soil and site conditions and provides recommendations for erosion and drainage controls, slope stability, grading, earthwork, pipeline design, and foundation construction.

The construction plans, including shoring of excavations as needed and erosion control techniques will be reviewed by the DPD Geo-technical Engineer and Building Plans Examiner who will require any additional soils-related information, recommendations, declarations, covenants and bonds as necessary to assure safe grading and excavation. Additional information required showing conformance with the Environmentally Critical Areas Ordinance will be required prior to issuance of building permits. This project constitutes a "large project" under the terms of the Stormwater, Grading and Drainage Control Code (SGDCC) (SMC 22.802.015 D). As such, there are many additional requirements for erosion control including a provision for implementation of best management practices and a requirement for incorporation of an engineered erosion control plan which will be reviewed jointly by the DPD building plans examiner and geo-technical engineer prior to issuance of the permit. The SGDCC provides extensive conditioning authority and prescriptive construction methodology to assure safe construction techniques are used; therefore, no additional conditioning is warranted pursuant to SEPA policies.

Grading

Excavation to construct the new buried reservoir and the import of fill to achieve the proposed grade will be necessary. The maximum amount of grading proposed will consist of 178,000 cubic yards of material. Some of the soil removed will not be reused on the site and will need to be disposed off-site by trucks.

To mitigate erosion resulting from grading activities associated with the removal of the existing reservoir and construction of the buried reservoir, the SEPA checklists notes the following mitigating element of the proposal:

- The contractor will be required to prepare and follow a temporary erosion and sedimentation control (TESC) plan in accordance to SMC 22.800. The TESC plan will need to be approved by the City prior to the beginning of any grading or excavation work.

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 minimize the amount of spilled material and dust from the truck bed en-route to or from a site. No further conditioning of the grading/excavation element of the project is warranted pursuant to SEPA policies.

Historic Preservation

Section 25.05.675 H of the SEPA code describes the City's policies for protecting historical sites. *"It is the City's policy to maintain and preserve significant historic sites and structures and to provide opportunity for analysis of archeological sites.....For projects involving structures or sites which are not yet designated as historical landmarks but which appear to meet the criteria for designation, the decisionmaker or any interested person may refer the site or structure to the Landmarks Preservation Board for consideration.....On sites with potential archaeological significance, the decisionmaker may require an assessment of the archaeological potential of the site."*

SEPA provides authority to mitigate impacts to historic buildings (SMC 25.05.675 H 2.c). In this instance, the existing reservoir is not designated as a historical landmark. However, because this proposal involves the demolition of a structure which is more than 50 years old, SPU hired Susan Boyle of BOLA Architecture and Planning to prepare a Landmarks Nomination Report. SPU submitted a Landmarks Nomination application to the Department of Neighborhoods (DON) Landmark Preservation Board in January 2007. At the February 21, 2007 meeting of the City's Landmarks Preservation Board, the Board voted to deny the designation of the West Seattle Reservoir based on the finding that this property does not meet any of the designation standards of SMC 25.12.350.

Streets, Construction Traffic and Parking

The proposal includes on-site excavation/grading. The Street Use Ordinance includes regulations which mitigate dust, mud and circulation. Any temporary closure of the sidewalk and/or traffic lane(s) is controlled with a street use permit through the Seattle Department of Transportation (SDOT.) It is the City's policy to minimize or prevent adverse traffic impacts which would undermine the stability, safety, and/or character of a neighborhood or surrounding areas (25.05.675 R).

SPU indicates the project would primarily generate traffic during the construction period, which may last for up to twenty-four (24) months (500 working days). SPU estimates there will be a few weeks of very intense construction traffic while other days will have minimal traffic. It is anticipated that future contractors will use the entrances at the northwest corner of the subject site. Construction flaggers may be used (as needed) at 9th Avenue Southwest to assist vehicles approaching and leaving the site. If primary access entering and exiting the site is via Southwest Cloverdale Street, street parking may be disrupted during construction. Additionally, limiting street parking along one (1) side of Southwest Cloverdale Street may be necessary during work hours in order to accommodate construction traffic for large concrete pours and material deliveries.

The checklist notes the following mitigating elements of the proposal:

- SPU will work with the Seattle Department of Transportation to choose a haul route with the least impact on the community. The contractor will be required to submit a parking and traffic control plan for approval by the City, which will be in force during construction. SPU may require that all contractor vehicles (including employee's private cars) park within the fenced construction area to minimize off-site parking impacts.

Construction activities may result in obstacles to pedestrians. Similarly, traffic lanes and on-street parking may be affected by construction staging, deliveries, etc. Adverse impacts are not adequately mitigated by existing City codes nor has SPU specifically identified the City agency responsible for receiving and enforcing the approved parking and traffic control plan. Thus, additional mitigation is warranted pursuant to the Construction Impacts Policy (SMC 25.05.675 B). A construction-phase transportation plan addressing street and sidewalk closures, construction employee parking, as well as truck routes and hours of truck traffic will be required to mitigate identified impacts.

Long-Term Impacts

Long-term or use-related impacts anticipated from the proposal include: increased surface water runoff due to greater site coverage by impervious surfaces; and increased ambient noise associated with increased human activity.

Several adopted City codes and/or ordinances provide mitigation for some of the identified impacts. Specifically these are: The Stormwater, Grading and Drainage Control Code which requires on site collection of stormwater with provisions for controlled tightline release to an approved outlet and may require additional design elements to prevent isolated flooding; and the Land Use Code which controls site coverage, setbacks, building height and use and contains other development and use regulations to assure compatible development. Compliance with these applicable codes and ordinances is adequate to achieve sufficient mitigation of most long-term impacts.

DECISION - SEPA

The environmental checklist, Master Use Permit plans submitted on the project; and responses to requests for information all comprise Department of Planning and Development's (DPD) record. Pursuant to SMC 25.05.600.D.1, DPD relies on the environmental documents and technical reports prepared by the Seattle Public Utilities in their role as lead agency. DPD has determined that the DNS issued and utilized for the environmental analysis of the *West Seattle Reservoir* and permitted herein, is adequate. The SEPA conditions listed below are imposed based on Master Use Permit (MUP) plans as well as on all environmental documentation submitted to date.

CONDITIONS - SEPA

Prior to the issuance of the Building Permit

1. In order to address construction related transportation and parking impacts, SPU shall submit to DPD bid document language that requires future contractors to submit a Construction Transportation Management Plan (CTMP) reviewed and approved by SPU

and Seattle Department of Transportation (SDOT). A construction transportation plan for workers and truck deliveries/routes shall be prepared to minimize disruption to traffic flow on adjacent streets and roadways. This plan shall include a requirement that truck trips be scheduled to avoid peak periods of 7:00-9:00 am and 4:00-6:00 pm, Monday through Friday. The plan shall consider the need for special signage, flaggers, haul route definitions, street cleaning; construction-worker parking; identification of potential street and/or sidewalk closures; coordination with Metro transit relative to construction activity that could affect transit service proximate to the project site; vehicle and pedestrian circulation and safety. The CTMP bid document language must be shown on the approved construction drawings.

During Construction

The following condition(s) to be enforced during construction shall be posted at the site in a location on the property line that is visible and accessible to the public and to construction personnel from the street right-of-way. If more than one street abuts the site, conditions shall be posted at each street. The conditions will be affixed to placards prepared by DPD. The placards will be issued along with the building permit set of plans. The placards shall be laminated with clear plastic or other waterproofing material and shall remain posted on-site for the duration of the construction.

2. The proponent will be required to limit the hours of construction activity not conducted entirely within an enclosed structure to non-holiday weekdays between 7:00 a.m. and 6:00 p.m. (Work would not be permitted on the following holidays: New Years Day, Martin Luther King Jr.'s Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day following Thanksgiving Day and Christmas Day.)
3. SPU must submit the approved Construction Transportation Management Plan (CTMP) to the DPD Land Use Planner (Tamara Garrett) prior to the start of work. The contractor conducting the work must provide evidence of this document during the on-site pre-construction conference with DPD's Site Inspector and/or Building Inspector and comply with the provisions set forth by the approved CTMP.

Signature: _____ (signature on file) Date: December 20, 2007
Tamara Garrett, Land Use Planner
Department of Planning and Development

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