City and County of San Francisco
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH

London Breed, Mayor
Greg Wagner, Director of Health
Stephanie K.J. Cushing, MSPH, CHMM, REHS
Environmental Health Director

14 January 2019

Brad Wiblin
Reservoir Community Partners
600 California Street
San Francisco, CA 94108
Email: bwiblin@bridgehousing

Subject: PHASE II WORK PLAN REQUEST
BALBOA RESERVOIR (11 PHELAN AVENUE/11 FRIDA KAHLO WAY, SF)
EHB-SAM NO. SMED: 1766

Dear Brad Wiblin:

In accordance with the San Francisco Health Code, Article 22A and the Building Code, Section 106A.3.2.4.1, 106A.3.2.4.2 and 106A.3.2.4.4 – Hazardous Substances; the San Francisco Department of Public Health, Environmental Health Branch, Site Assessment and Mitigation (EHB-SAM) has reviewed the following documents:

1. Draft Phase I Environmental Site Assessment Report by SCS Engineers (SCS) 27TH January 2018.

Site Description

SCS Engineers (SCS) has prepared this Phase I Environmental Site Assessment (ESA) Report (Report) for the 17-acre property identified as the Balboa Reservoir in San Francisco, California. The Site has only recently has been listed as Assessor's Parcel Number (APN) 22-3180-005-01. Originally constructed in 1957 by the San Francisco Water Department (now SFPUC), Balboa Reservoir has never been used for its original purpose of water storage. It was converted for use as a parking lot for the adjacent City College of San Francisco (CCSF), until the decision based upon the Balboa Park Station Area Plan (Balboa Park Plan, SFPD, 2008), adopted in 2009 to allow development of certain City properties. The Site was part of a series of land transfers completed in 2011 and 2012 conducted subsequent to the Balboa Park Plan.

The Site is located in the City of San Francisco, San Francisco County, California. The Site consists of slightly more than 17 acres of land, improved with a paved parking area and surrounded by berms on the western, northern and eastern sides. The Site vicinity currently consists of commercial businesses, schools, residences, and public buildings. The Site currently has no public street frontages, although access routes are planned from Ocean Avenue to the south via Brighton Avenue, Lee Avenue, and Phelan Avenue from the east.

Site History

The project site is listed in the Assessor's Office as APN: 22-3180-005-01, with address as 11 Phelan Avenue or 11 Frida Kahlo Way, San Francisco, California, 94108/94112. It has a total size of 17 acres and currently being used as a parking lot.

The Site is constructed as a reservoir with three raised berms on the west, north and east sides of the property. The south berm is non-existent and is only separated by a chain link fence to the adjacent property. The majority of the property has been transformed into a parking lot for CCSF. Several light poles, pay stations and call boxes are located throughout the parking lot. The entire lot is paved with asphalt while the surrounding berms are partially unpaved or concrete lined. Two large water inlets/outlets remain on the lot on the western side of the property, although the structures appear to be inactive, and sealed or covered with steel plates. The eastern berm has three flights of stairs and a series of ramps to give walkable access to the parking lot. Three steel storage containers and two portable toilets are located on the southern side of the property. The only access road to the property is on the northern side and is accessible via Phelan Avenue.

Originally constructed in 1957 by the San Francisco Water Department (now SFPUC), Balboa Reservoir has never been used for its original purpose of water storage. Balboa Reservoir is located across from CCSF's Ocean Avenue Campus, west of Phelan Avenue. Balboa Reservoir is a large basin which was graded to serve as a water reservoir. The configuration of Balboa Reservoir has changed over time. It originally consisted of two reservoirs (north and south) with surrounding berms and a central dividing berm. However, the eastern portion of both reservoirs was later filled, the central berm removed, and a paved parking lot constructed in the bottom of the joined reservoirs. The reservoir is no longer bounded by berms on all four sides. CCSF students currently use the reservoir for parking. There is existing development on all four sides of Balboa Reservoir.

Balboa Reservoir is a water storage facility that has never been used to store water in SFPUC's potable-water distribution system. The reservoir consisted of two basins capable of storing 150 million gallons, but the basins were never filled. The existing, partially enclosed basin could store approximately 95 million gallons if it were completed as a water storage facility. The area around Balboa Reservoir is currently served by a well-developed water distribution network operated by the City Distribution Division that has the capacity to provide potable and fire protection water to Balboa Reservoir.

To the north is Archbishop Riordan High School. Directly west of Balboa Reservoir on the other side of a large berm is the Westwood Park, an historic neighborhood of around 600 homes that was built in the 1920s and 1930s. The neighborhood is characterized by its oval shape and curving streets. Most of the houses in this neighborhood and others bordering Balboa Reservoir are single-family homes. The southern boundary of Balboa Reservoir borders the Ocean Avenue Neighborhood Commercial Transit District. Mixed-use residential-retail developments have been added recently on the land between the southern boundary of Balboa Reservoir and Ocean Avenue. These mixed-use residential developments include the Avalon Bay and Mercy Housing developments. Before May 17, 2012, a berm running east to west divided Balboa Reservoir into two basins, with SFPUC owning the land in the northern basin and CCSF owning the land in the

southern basin. Balboa Reservoir was subsequently reconfigured so that the eastern portion of Balboa Reservoir was capped over and the remaining basin was reoriented north to south. SFPUC transferred ownership of a 6.21-acre parcel in the northeastern corner of Balboa Reservoir to CCSF on May 17, 2012. In exchange, CCSF transferred ownership of a 6.60-acre parcel at the southwestern corner of Balboa Reservoir to SFPUC. The new configuration allowed CCSF to expand its campus, while the western portion of Balboa Reservoir remained suitable for future water storage. As part of the associated transfer agreement, CCSF granted the City a 60-foot access easement running east-west on the northern boundary of the CCSF parcel. This easement allows SFPUC to construct a 60-foot-wide right-of-way to Phelan Avenue. Also in accordance with the agreement, SFPUC granted CCSF a 50-foot access easement running north-south, to be built along the eastern edge of the SFPUC property. The access way, also known as the Lee Avenue Extension, allows for pedestrian and vehicular access. The transfer agreement ultimately calls for CCSF to connect the access way to Lee Avenue.
CCSF and SFPUC have reached several other agreements with respect to easements and encroachments, and two high-pressure underground pipelines maintained by SFPUC that deliver water across San Francisco. The pipelines run east-west through the southern portion of Balboa Reservoir in SFPUC-owned land. In the southwest corner of Balboa Reservoir between the Avalon Bay development and the Ingleside Branch Library, SFPUC owns a narrow parcel that also serves as a rear driveway providing access to Avalon Bay.

Proposed Project Scope

The proposed project is to develop the current surface parking lot into two phases to include approximately 1100 units of affordable and market rate housing and 4 acres of public open space.

Phase I Environmental Site Assessment

According SCS Engineers (SCS) the Phase I Environmental Site Assessment (ESA) Report uncovered some RECs near/adjacent to the project site of which some notable ones are described below:

San Francisco Gasoline Stations, Inc. – 1250 Ocean Avenue San Francisco, California – (approximately 100 feet south of the Site):

The EDR data base search identified this property as containing a former gasoline and oil service station between the 1930s and 1940s. No additional information is provided. The property is now redeveloped with a mixed-use commercial/residential building, and such redevelopment are expected to have addressed as part of the redevelopment process. Therefore, it appears unlikely that a REC exists associated with this property. A City and County of San Francisco Department of Public Health (SFDPH) Remedial Action Completion Certification was issued on February 7, 2003. This document states that three, 6,000-gallon gasoline USTs and one, 550-gallon waste oil UST were removed in November 1983. It also states that groundwater was tested and estimated to flow westerly. 500 yards of impacted soil was also reportedly removed and disposed off-site on October 8, 1997. Dual phase groundwater and soil vapor extraction was also reportedly performed and successfully reduced petroleum hydrocarbon related impacts. The three groundwater monitoring wells were reportedly destroyed on January 31, 2003. It appears likely that some petroleum hydrocarbon related impacts to soil and shallow groundwater may exist at this site.

However, the flow of groundwater under this property has been evaluated as flowing westerly. Therefore, it appears unlikely that this property represents a REC for the Site.

Sunset Garage/Former Service Station – 1298 Ocean Avenue, San Francisco, California – (adjacent and approximately less than 100 feet southwest of the Site):

This site is now occupied by the Ingleside branch of the San Francisco Public Library which reportedly opened in 2009. The previous Sunset Garage appears to be former auto maintenance shop associated with a closed LUST case. The case was reportedly closed on February 7, 2003 and reportedly, involved gasoline leaked from a tank and only soil was affected. No additional information was provided. Based on these details specific to the regulatory case, it appears unlikely that potentially remaining gasoline in soil at this property represents a REC for the Site. In addition, this site is also listed as a former gasoline station dating back to the early 1950s. No additional details are provided.

Residence - 550 Judson Avenue, San Francisco, California – (approximately 450 feet north of the Site.

This is a former LUST site. The regulatory case was reportedly closed on October 3, 1997. This case reportedly involved diesel leaked from a corroded tank and only soil was reportedly affected. Based on these provided details it appears unlikely that potentially remaining diesel in soil at this property represents a REC for the Site.

Open volatile organic compound (VOC) release cases within 1/3 mile (1,600 feet) and hydraulically up gradient, or open/adjacent VOC release cases:

Empirical studies show that natural attenuation is much more prevalent at fuel-impacted sites compared to solvent-impacted sites. In the mid-1990s, Lawrence Livermore National Laboratory (LLNL) conducted a study of fuel-impacted sites in California, finding evidence of natural attenuation that limited plume length at more than 90% of 271 sites examined in detail. The study led to an October 1995 LLNL report to the State Water Board. A 1999 study of approximately 250 solvent plumes nation-wide found much less evidence of natural attenuation ("Historical Case Analysis of Chlorinated Volatile Organic Compound Plumes") by a group that included the U.S. Department of Energy and LLNL. This study concluded that the median solvent plume length was about 1,600 feet (as compared to 130 feet for fuel plumes) and that in general, chlorinated solvent plume length is more sensitive to source strength (i.e., concentration and flow rate) than to natural attenuation. Therefore, the detailed review radius for open groundwater cases has been conservatively established by SCS at 0.30 miles (approximately 1,600 feet). For non-release cases (e.g., permitted facilities), only those facilities that were judged to be immediately adjacent to the Site were interpreted to have the potential to represent a REC.

SFPD – Balboa Park Station – 1 John Young Lane, San Francisco, California – (over 2,000 feet east of the Site).

This is a former LUST site. The regulatory case was reportedly closed on March 17, 1997. It appears unlikely that this property represents a REC for the Site solely based on the distance

between the two properties.

Fire Station 16 – 1000 Ocean Avenue San Francisco, California – (approximately 280 feet southeast of the Site).
This fire station has a reported historic UST and current 3,000 gallon UST. The current UST is reportedly double-walled fiberglass/plastic. No additional details were provided. The lack of additional information supports the likelihood that a fuel release has not occurred, and the likelihood that this property represents a REC for the Site appears low.

South China Auto/Gary's Olympic – 1301 Ocean Avenue, San Francisco, California – (approximately 250 feet south-southwest of the Site).
This is a former LUST site. The regulatory case was reportedly closed on October 3, 1997. This case reportedly involved diesel leaked from a corroded tank and only soil was reportedly affected. Based on provided details and that this property of lower in elevation than the Site and adjacent groundwater has been determined to flow in a westerly direction and away from the Site, it appears unlikely that potentially remaining diesel in soil at this property represents a REC for the Site.

Unocal/Union Oil Service Station– 999 Ocean Avenue, San Francisco, California – (approximately 400 feet southeast of the Site).
This is an active Unocal Fuel Station and is a closed LUST case site due to previously leaked gasoline. The regulatory case was reportedly closed on December 2, 2008. Groundwater was last monitored in 2007 and the flow of groundwater was towards the southeast and away from the Site.
Based on this it appears unlikely that remaining impacts at this property represents a REC for the Site

Unocal Station – 1490 Ocean Avenue, San Francisco, California – (approximately 500 feet west of the Site).
This is a former LUST site. The regulatory case was reportedly closed on July 29, 2013. The flow of groundwater from this property appears to be in a direction away from the Site. Based on this it appears unlikely that remaining impacts at this property represents a REC for the Site

This is an active Unocal Fuel Station and is a closed LUST case site due to previously leaked gasoline. The regulatory case was reportedly closed on December 2, 2008. Groundwater was last monitored in 2007 and the flow of groundwater was towards the southeast and away from the Site. Based on this it appears unlikely that remaining impacts at this property represents a REC for the Site

SCS Engineers (SCS) has cited and mentioned several sites near the project that has some likelihood of being REC for the Site.

Based on EHB-SAM review of the Phase I Environmental Site Assessment Report a Phase II Subsurface Investigation is warranted.

Please submit a Phase II Site Assessment Work Plan via unsecured PDF/Word document to the email below. Should you have any questions please contact me at (415) 252-3892 or joseph.ossai@sfdph.org.

Sincerely,

Joseph Ossai, MSEE, PE, REHS
Senior Environmental Health Inspector

cc: Jeanie Poling, San Francisco Planning Department
Daniel Lowrey, San Francisco Department of Building Inspection
Mark Walls, San Francisco Department of Building Inspection
Jelani Dotson (jdotson@bridgehousing.com)