

**Phase I Environmental  
Site Assessment**

Sharp Park Wastewater Treatment Plant  
Pacifica, California

This report has been prepared for:

**Barry Swenson Builder**

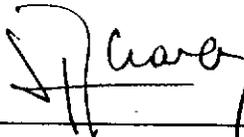
777 North First Street, 5th Floor, San Jose, California 95112

December 3, 2001

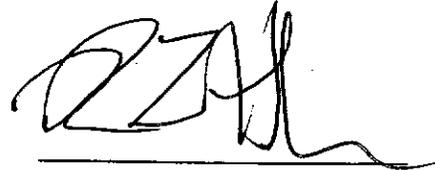
Project No. 568-44



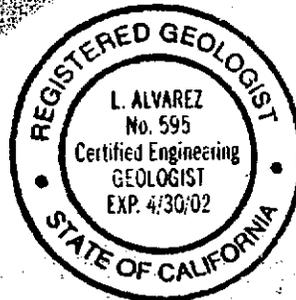
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**PHASE I ENVIRONMENTAL SITE ASSESSMENT  
SHARP PARK WASTEWATER TREATMENT PLANT  
PACIFICA, CALIFORNIA**

**1.0 INTRODUCTION**

**1.1 Purpose**

This Phase I environmental site assessment was performed for Barry Swenson Builder, who we understand is considering the purchase and redevelopment of the City of Pacifica Sharp Park Wastewater Treatment Plant (site), shown on Figures 1 and 2, with a hotel. We understand that all on-site buildings and structures will be demolished to accommodate redevelopment with exception of the administration building, the effluent pump station and chlorination building, and the comminutor and grit building.

The purpose of this study was to strive to document recognized environmental conditions at the site related to current and historic use of hazardous substances and petroleum products. The term "recognized environmental conditions" means the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate a significant release or significant threat of a release into the ground, ground water, or surface water.

**1.2 Scope of Work**

As requested, the scope of work for this study was performed in general accordance with the American Society for Testing and Materials (ASTM) Designation E 1527-00 as outlined in our agreement dated October 8, 2001. The scope of work included the following tasks.

- ▼ Reconnaissance of the site and limited drive-by survey of adjacent properties for readily observable indications of current or historic activities that have or could significantly impact the site.
- ▼ Review of readily available topographic maps and reports to evaluate local hydrogeologic conditions including anticipated ground water depth and flow direction.
- ▼ Review of readily available documents, maps, and aerial photographs, and interviews with knowledgeable persons to evaluate past land uses.
- ▼ Review of a regulatory agency database report to evaluate the potential impact to the site from reported contamination incidents at nearby facilities.

- ▼ Review of available regulatory agency files to obtain information about the use and storage of hazardous materials at the site.
- ▼ Performance of an asbestos survey of the on-site structures to evaluate readily accessible building materials suspect for containing asbestos.

Our scope of services did not include sampling or analysis of air, soil, or ground water. The limitations of this Phase I environmental assessment are presented in Section 6.0; the terms and conditions of our agreement are presented in Appendix A.

## **2.0 SITE RECONNAISSANCE**

### **2.1 Site Location and Ownership**

#### **2.1.1 Site Location and Ownership**

The site is located in a commercial/residential area and is bounded by Beach Boulevard and the Pacific Ocean to the west, Montecito Avenue to the north, Paloma Avenue to the east, and residences to the south. The approximately 2.7-acre site, owned by the City of Pacifica, is located at 2212 Beach Boulevard, assessor's parcel number 016-294-510.

### **2.2 Topographic Features and Hydrogeology**

Based on U.S. Geological Survey (USGS) topographic maps, the site's elevation is approximately 21 feet above mean sea level. Topography in the vicinity of the site slopes gently to the west toward the Pacific Ocean. Even though we have not reviewed any site-specific ground water data, based on our experience in the area the shallow water-bearing zone likely is encountered at depths of approximately 10 to 13 feet. Ground water beneath the site likely flows west toward the Pacific Ocean.

### **2.3 Site Visit**

Our representative, environmental engineer Kurt Soenen, visited the site on November 13, 2001 and was accompanied by Mr. David Davis, Maintenance Operator. Mr. Davis has been an employee of the City of Pacifica, Collection Services Division since 1964. At the time of our site visit, the subject property was developed and previously utilized as a wastewater treatment plant by the City of Pacifica. The plant reportedly has been non-operational since November 2000. Color photographs of the site are presented in Figure 3.

During the site visit, a hazardous materials storage area was observed in the maintenance garage (Figure 2). The maintenance garage reportedly was constructed in the early 1990's. Hazardous materials observed in the garage included seven 55-gallon drums of various grades of industrial oils, eleven 55-gallon drums of waste oil, and numerous other 5-gallon containers that also

reportedly contained waste oil. The various oils reportedly were used to lubricate the generators, pumps, and other on-site equipment. On average, the oil contained within each piece of equipment reportedly was changed annually. The drums of industrial oil were stored on a rack located inside a secondary containment basin. Approximately 150 gallons of oil were contained within the basin. Waste oil containers of less than five gallons were observed in a separate secondary containment basin; however, the 55-gallon drums of waste oil were stored outside of the containment system on the concrete floor. Staining was present in the vicinity of both containment areas, and around the drums not properly being secondarily contained. When the plant was operational, a hazardous materials contractor reportedly was utilized to appropriately dispose of all products. The concrete flooring appeared to be in good condition.

Other hazardous materials at the site were observed in the welding shop, the blower room, sludge control building, and outside the sludge thickening building (Figure 2). In the welding shop, two 55-gallon drums containing industrial resin were observed. The drums appeared to be about half full. The drums reportedly were being temporarily stored in the welding shop and were not associated with any activity at the site. Prior to construction of the maintenance garage, virgin and waste oils were stored in the welding shop (Figure 2). The concrete flooring in the welding shop appeared to be in good condition.

In the blower room, two 3-gallon containers containing "industrial oil" were observed. The oil reportedly was used as a lubricant for the ball bearings on the two blowers. In the sludge control building, two 55-gallon drums of SAE 40 engine oil were observed. The rusting drums appeared to be full. Some leakage was observed on the concrete flooring near the base of the drums. Finally, several 5- and 1-gallon containers of resin, and what appeared to be paint (approximately 30-gallons total), was observed outside the sludge thickening building. The containers were rusted and partially filled with water.

An emergency generator, powered by diesel fuel, reportedly was formerly located in the equipment building (Figure 2). The aboveground fuel piping was formerly connected to a secondarily contained 1,000-gallon aboveground storage tank (AST) located outside the building. During the site visit, our representative observed the generator in the effluent pump station and chlorination building. The generator was connected to the 1,000-gallon AST now located immediately north of the building. Exhaust ducting for the generator was observed at both locations.

During the site visit, five transformers were observed. One of the five was a PG&E transformer while the remaining four were privately owned. The locations of the transformers observed during the site visit are shown on Figure 2.

An aboveground grease holding tank was observed at the site (Figure 2). The tank, reportedly taken off-line in the early 1980's, was used to temporarily store grease collected from the primary settling tanks. Another AST observed at the site was the plastic, 5,000-gallon sodium bisulfite tank (Figure 2). This tank reportedly was empty and was previously used for dechlorination.

Additional observed site features are listed in Table 1.

**Table 1. Additional Readily Observable Site Features**

Site Features		Comments
Heating/Ventilation/Air Conditioning System	<input checked="" type="checkbox"/> Natural Gas <input type="checkbox"/> Fuel Oil <input checked="" type="checkbox"/> Electrical	
Potable Water Supply	<input checked="" type="checkbox"/> Municipal <input type="checkbox"/> On-Site Well	
Sewage Disposal System	<input checked="" type="checkbox"/> POTW <input type="checkbox"/> On-Site Septic	
Transformers	<input checked="" type="checkbox"/> Present <input type="checkbox"/> Not Observed <input checked="" type="checkbox"/> PG&E <input checked="" type="checkbox"/> Privately Owned	PG&E Transformer No. T-1214
Other Features	<input checked="" type="checkbox"/> Aboveground Storage Tanks <input type="checkbox"/> Agricultural Wells <input checked="" type="checkbox"/> Air Emission Control Systems <input type="checkbox"/> Auto Servicing Areas <input checked="" type="checkbox"/> Boilers <input type="checkbox"/> Burning Areas <input type="checkbox"/> Chemical Mixing Areas <input type="checkbox"/> Chemical Storage Areas <input type="checkbox"/> Clean Rooms <input type="checkbox"/> Drainage ditches <input checked="" type="checkbox"/> Elevators <input checked="" type="checkbox"/> Emergency Generators <input checked="" type="checkbox"/> Equipment Maintenance Areas <input type="checkbox"/> Garbage Disposal Areas <input checked="" type="checkbox"/> HazMat Storage Areas <input type="checkbox"/> High Power Transmission Lines <input checked="" type="checkbox"/> Hoods and Ducting <input type="checkbox"/> Hydraulic Lifts <input type="checkbox"/> Petroleum Pipelines <input type="checkbox"/> Petroleum Wells <input type="checkbox"/> Ponds or Streams <input type="checkbox"/> Railroad Lines <input type="checkbox"/> Row crops or orchards <input type="checkbox"/> Stockpiles of Soil or Debris <input type="checkbox"/> Sumps or clarifiers <input checked="" type="checkbox"/> Transformers <input type="checkbox"/> Underground Storage Tanks <input checked="" type="checkbox"/> Vehicle Maintenance Areas <input checked="" type="checkbox"/> Vehicle Wash Areas <input type="checkbox"/> Waste Water Neutralization Systems <input type="checkbox"/> Wells	<p>A gas burner system was used to burn off excess methane (Figure 2).</p> <p>Two boilers were located in the sludge control building and were powered by methane and natural gas (Figure 2).</p> <p>A hydraulic elevator was observed in the administration building (Figure 2)</p> <p>A chemical hood was observed in the former laboratory in the administration building (Figure 2).</p>

Note: An unchecked box does not warrant that these features are not present on-site; it only states that these features were not readily observed during our site visit.

## 2.4 Site Vicinity Drive-By Survey

To evaluate adjacent land use, we performed a limited drive-by survey. The surrounding areas are utilized primarily for residential purposes. The Pacific Ocean borders the site to the west.

## 2.5 Interviews

During our study, we contacted Mr. Ming Chen, City of Pacifica, Collection Services Superintendent for general information regarding past and current site usage. Mr. Chen was asked to complete a questionnaire; Mr. Chen has been the plant supervisor for 30 years. Mr. Chen indicated that the plant was in operation for approximately 30 years and that hazardous materials used there included chlorine, sulfur dioxide, hypochlorite and sodium bisulfite. A copy of the filled out questionnaire is presented in Appendix B.

During our study, we also contacted Mr. James Nusrala, Water Resources Control Engineer at the California Regional Water Quality Control Board, San Francisco Bay Region for general information regarding past violations at the site. Mr. Nusrala is the case worker for the Sharp Park Wastewater Treatment Plant. Aside from effluent discharge violations, Mr. Nusrala reported that he was not aware of any discharges of hazardous materials to the property or related violations as a result of site activities. Key documentation is discussed in Section 4.3.

## 3.0 HISTORICAL REVIEW

### 3.1 Photograph and Map Review

To evaluate the site history, we reviewed:

- ▼ Available stereo-paired aerial photographs (1943, 1956, 1963, 1968, and 1974) from the USGS Library in Menlo Park, California.
- ▼ Available USGS 15-minute and 7.5-minute topographic maps (1956, 1968, 1973, 1980, and 1993).
- ▼ Historic Sanborn fire insurance maps were requested from Sanborn Mapping and Geographic Information Service (Sanborn GIS) in Pelham, New York. However, no Sanborn maps were available.

The following is a summary of our observations.

**1943:** The 1943 photograph showed the site as a vacant lot. Unidentifiable rectangular structures were observed in the southeast corner of the property.

**1956:** The 1956 photograph showed the site developed with a structure, resembling the existing sludge control building. The photo also showed an aboveground tank resembling the existing primary digester tank. The site appeared

mostly unpaved. The remainder of the site appeared similar to the previous photograph.

**1968:** The 1968 photograph showed the site developed with another structure, resembling the existing effluent pump station and chlorination building. The photograph and map also showed another aboveground tank, resembling the existing secondary digester tank. Several unidentifiable rectangular structures were observed in the southeast corner of the lot.

**1974:** The 1974 photograph showed the site developed with structures resembling the existing administration building, equipment building, and primary settling tanks.

### 3.2 Summary of Previous Environmental Reports

To further evaluate the site history, we reviewed and relied upon the information presented in the following reports that were obtained from Mr. Ming Chen, City of Pacifica, Collection Services Superintendent. Key documents are presented in Appendix C.

#### 3.2.1 *Underground Storage Tank Removal Report, City of Pacifica Waste Water Treatment Plant, 2212 Beach Boulevard, Pacifica, May 1994.*

This report, prepared by Touchstone Developments, summarizes the field activities at the site during the removal of one 2,000-gallon single-walled fiberglass UST formerly containing diesel and one 1,000-gallon single-walled fiberglass UST formerly containing diesel. The USTs were in separate excavations.

The USTs were removed on March 23, 1994 under the supervision of the San Mateo County Environmental Health Services Agency (SMCEHSA). Soil samples were collected and analyzed for diesel-range petroleum hydrocarbons (TPH-d), benzene, toluene, ethyl benzene, and xylene (BTEX). Based on the analytical results, TPH-d was detected at 38 ppm in the soil beneath the 1,000-gallon UST. BTEX was not detected in any of the soil samples.

Soil samples were collected from the two stockpiles generated during excavation activities. TPH-d was detected in the soil at 100 ppm from the stockpile generated during the excavation of the 1,000-gallon UST. The report states the stockpiles were used for backfill and compaction for the respective excavations.

#### 3.2.2 *Re-excavation of Former UST, Pacifica Wastewater Treatment Plant, 2212 Beach Boulevard, Pacifica, August 1995.*

This report, completed by Applied Science and Engineering, summarizes field activities at the site during the removal of backfilled material for the 1,000-gallon UST excavation. SMCEHSA requested this material be removed since the level of TPH-d detected in the soil sample collected from the stockpile in March 1994 was 100 ppm. The regulatory criteria established by the SMCEHSA for re-use of stockpiled soil as site backfill was 10 ppm. Re-excavation of the former 1,000-

gallon excavation occurred on June 22, 1995 and the soil material was off-hauled for disposal.

#### 4.0 REGULATORY RECORDS

##### 4.1 City and County Agencies File Review

To obtain information on hazardous materials usage and storage, we reviewed readily available information at the City of Pacifica Building Department (PBD), Planning Department (PPD), Fire Department (PFD), and San Mateo County Environmental Health Services Agency (SMCEHSA) pertaining to the Sharp Park Wastewater Treatment Plant. No files were available at the PBD and PFD. The information made available to us is summarized in Table 2; key documents are included in Appendix D.

**Table 2. Available File Review Information**

Agency	Date	Entity	Remarks
PPD	January 18, 1977	City of Pacifica Wastewater Treatment Plant	Letter to Maecon, Inc. acknowledging receipt of building fee and accompanying building permit to build secondary treatment plant.
SMCEHSA	May 2, 1994	City of Pacifica Wastewater Treatment Plant	Report prepared by Touchstone Developments summarizing the field activities at the site during the removal of one 2,000-gallon single-walled fiberglass UST formerly containing diesel and one 1,000-gallon single-walled fiberglass UST formerly containing diesel (see section 3.2.1).
SMCEHSA	August 11, 1995	City of Pacifica Wastewater Treatment Plant	Report completed by Applied Science and Engineering summarizing field activities at the site during the re-excavation of the backfilled material for the 1,000-gallon UST excavation (see section 3.2.2).
SMCEHSA	October 6, 1995	City of Pacifica Wastewater Treatment Plant	Letter to the City of Pacifica indicating no further action is required at the site (Appendix D).

##### 4.2 Regulatory Agency Database Report

During this study, a regulatory agency database report was obtained and reviewed to help establish whether contamination incidents have been reported within the site vicinity. A list of the database sources reviewed, a detailed description of the sources, and a radius map indicating the location of the reported facilities relative

to the project site are presented in Appendix E. No nearby releases were reported that appeared to be a significant threat to the site. The site was reported as containing hazardous waste and listed as having a cleanup or abatement order (Table 3).

**Table 3. On-Site Reported Hazardous Materials Concerns**

Facility	Map ID No.	Address	Potential Concern
City of Pacifica Wastewater Treatment Plant	A1	2212 Beach Boulevard	Hazardous materials manifested off-site including unspecified oil-containing waste, household waste, off-specification, aged, or surplus organics, and empty containers.
Pacifica Water Treatment Plant	A2	2212 Beach Boulevard	The site was listed as having cleanup or abatement orders concerning the discharge of wastes that are hazardous materials.
City of Pacifica	A3	2212 Beach Boulevard	Site was identified in the following databases: AIRS Facility System, Facility Registry System, National Emissions Trends, National Toxics Inventory, and Permit Compliance System

#### 4.3 California Regional Water Quality Control Board File Review

To further evaluate the site history, we reviewed and relied upon the information obtained from the California Regional Water Quality Control Board. The reports provided to us focused on enforcement and violations associated with discharging waste from the ocean outfall. As the plant is no longer operational, discharge from the ocean outfall has ceased. Key documents are presented in Appendix F.

#### 5.0 ASBESTOS SURVEY

A limited asbestos survey was completed in the equipment building, sludge thickening building, and sludge control building (Appendix G). We understand that these buildings will be demolished to accommodate redevelopment. In the equipment building and sludge thickening building, asbestos-containing materials (ACM) were detected in the tan 12" floor tile mastic. ACMs were also detected in the sample collected from the window putty and transite boiler flue in the sludge control building.

## 6.0 CONCLUSIONS

### 6.1 Historical Summary

The site appeared as a vacant parcel in the 1943 aerial photograph. By 1956, the site was developed with a primary wastewater treatment plant facility. The existing sludge control building and the primary digester tank first appeared in the 1956 aerial photograph. Site information dating back prior to 1943 was unavailable from the sources researched, but based on our experience in this area, site use prior to 1943 was likely undeveloped land.

### 6.2 Chemical Storage and Use

Chemical storage and use by the Sharp Park Wastewater Treatment Plant involved moderate quantities of oils/lubricants, resins, and waste oils. Hazardous materials observed in the maintenance garage and the sludge control building were neither secondarily contained nor properly labeled, and staining was observed on the concrete flooring. Prior to construction of the maintenance garage in the early 1990's, hazardous materials were stored in the welding shop. The concrete flooring in the abovementioned building appeared to be in good condition.

A cease and desist order was issued to the City of Pacifica by the Water Board for unauthorized releases into the Ocean outfall. As the plant is no longer operational, these discharges have ceased.

Based on our observations, there is a low potential that hazardous materials are present in the subsurface of the site. We recommend evaluating the soil and ground water quality at the chemical storage areas in the maintenance garage, welding shop, and sludge control building to provide a further degree of comfort on the environmental condition of the site. We also recommend that all hazardous materials be appropriately disposed prior to the property transfer.

### 6.3 Asbestos

Maintenance personnel or other individuals that may disturb the suspect ACM should be notified of the locations of these materials. NESHAP guidelines require that all potentially friable ACM be removed prior to building demolition or renovation that may disturb the ACM.

### 6.4 Lead-Based Paint

In 1978, the Consumer Product Safety Commission banned the use of lead as an additive in paint. Currently, the U.S. EPA and U.S. Department of Housing and Urban Development are proposing additional lead-based paint regulations. We recommend that a lead survey of the painted surfaces and soil be conducted. If the lead-based paint is still bonded to the building materials, its removal is not required prior to demolition. It will be necessary, however, to follow the requirements

outlined by Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations (CCR) 1532.1 during demolition activities; these requirements will include employing training, employee air monitoring, and dust control. If the lead based paint is peeling, flaking or blistered, it should be removed prior to demolition. It is assumed that such paint will become separated from the building components during demolition activities; thus, it must be managed and disposed as a separate waste stream. Any debris or soil containing lead paint or coating must be disposed at landfills that have acceptance criteria for the waste being disposed.

#### **6.5 Transformer**

Privately owned transformers were observed in the sludge control building, equipment building, and sludge thickening building. Oil containing PCBs may be present. Although no leaks or spills were observed, the fluid inside the transformer may be a hazardous material. We recommend that the manufacturer be contacted to determine if oil containing PCBs is present in the units; we may recommend testing the oil for PCBs.

#### **6.6 Elevator**

The administration building contained an elevator that uses hydraulic fluid, which may contain PCBs. The hydraulic elevator unit should be periodically inspected for leakage and, if a leaking unit is identified, it should be repaired and any fluid or fluid-impacted waste disposed in accordance with applicable regulations. No indication of leakage was observed in the area of elevator operating equipment.

#### **6.7 Hoods and Ducting**

We recommend the removal or cleaning of all interior exhaust hoods and ductwork systems, including fans. Ducts, which support the laboratory, should be removed or cleaned so that old deposits of corrosive residues are eliminated from the exhaust system; crystals or other deposits are visible on the outside of the ductwork. The hood that supported the small laboratory and the exhaust drops into the environmental test area also should be removed or cleaned.

#### **6.8 Urban Runoff Pollution Prevention Program**

The Urban Runoff Pollution Prevention Program, also called the Non-Point Source Program, was developed in accordance with the requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan to reduce water pollution associated with urban storm water runoff. This program was also designed to fulfill the requirements of the Federal Clean Water Act, which mandated that the EPA develop National Pollution Discharge Elimination system (NPDES) Permit application requirements for various storm water discharges, including those from municipal storm drain systems and construction sites. For properties of 5 acres or greater, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction.

## 6.9 Potential Environmental Concerns in the Site Vicinity

Based on the information obtained during this study, no hazardous material incidents have been reported in the site vicinity that would be likely to significantly impact the site. Several facilities in the vicinity, however, were reported as hazardous materials users; if leaks or spills occur at these facilities, contamination could impact the site, depending upon the effectiveness of cleanup efforts.

## 7.0 LIMITATIONS

As with all site assessments, the extent of information obtained is a function of client demands, time limitations, and budgetary constraints. Our conclusions and recommendations regarding the site are based on readily observable site conditions, review of readily available documents, maps, aerial photographs, and data collected and/or reported by others. Due to poor or inadequate address information, the regulatory agency database report listed several sites that may be inaccurately mapped or could not be mapped; leaks or spills from these or other facilities, if nearby, could impact the site. As directed by you, we are relying on information presented in reports provided to us by others. We are not responsible for the accuracy of information or data presented by others.

Because publicly available information cannot affirm that a release or spill of hazardous materials has or has not occurred at the site, there is the possibility of on-site contamination. Our conclusions and recommendations in this site assessment are qualified in that no soil, ground water, or air analyses were performed. Sampling and analysis lead to a more reliable assessment of environmental conditions, conditions that often cannot be noted from typical Phase I activities. Should you desire a greater degree of confidence, these samples should be obtained and analyzed to further evaluate environmental conditions.

This report was prepared for the sole use of Barry Swenson Builder. We make no warranty, expressed or implied, except that our services have been performed in accordance with environmental principles generally accepted at this time and location.

## 8.0 REFERENCES

Applied Science and Engineering Inc., *Re-excavation of Former UST, Pacifica Wastewater Treatment Plant, 2212 Beach Boulevard, Pacifica*, dated August 11, 1995.

Touchstone Developments, *Underground Storage Tank Removal Report, City of Pacifica Waste Water Treatment Plant, 2212 Beach Boulevard, Pacifica*, dated May 2, 1994.



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**SOIL AND GROUNDWATER MANAGEMENT PLAN – FINAL**  
**FORMER SHARP PARK WASTEWATER TREATMENT PLANT**  
**2212 BEACH BOULEVARD**  
**PACIFICA, CALIFORNIA**

**PREPARED FOR:**

**CITY OF PACIFICA**  
**AND**  
**SAN MATEO COUNTY GROUNDWATER PROTECTION PROGRAM**

**AT THE REQUEST OF:**

**LELAND CONSULTING GROUP**

**PREPARED BY:**

**TECHNOLOGY, ENGINEERING & CONSTRUCTION, INC.**  
**APRIL 24, 2012**



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### FIGURES

- Figure 1 – Vicinity Map
- Figure 2 – Site Map
- Figure 3 – Groundwater Elevation Data

### ATTACHMENTS

- Attachment A – Site History
- Attachment B – Proposed Development Plans, Leland Consulting Group
- Attachment C – Health and Safety Plan

## 1.0 INTRODUCTION

This soil and groundwater management plan (SGMP) presents monitoring requirements and procedures to ensure proper monitoring, assessment and management of potentially contaminated soil and/or groundwater and mitigation of confirmed contaminated soil and/or groundwater. This plan establishes the general safety requirements necessary to protect the public, contractor, employees, owner/operator and properties involved in this project.

In general, the majority of the site does not pose a known or suspected risk to human health. Previous investigations at the property have identified two areas that may contain contaminated soil and/or groundwater, although the concentrations and volumes of these contaminants are at levels considered non-hazardous. Based on the proposed construction plans and information collected during site investigations, two potential situations are anticipated during the project that may require various levels of monitoring and possible mitigation to address contaminated and non-contaminated materials. Potential situations include:

1. Encountering suspect soil or groundwater during construction in areas not previously identified as containing contaminated materials. Soils outside of the identified areas can be relocated. However, monitoring of disturbed soil should be conducted to prevent movement of previously unidentified areas of impacted soil; and
2. Encountering impacted soil and/or groundwater at areas known to contain impacted materials.

The monitoring and management of contaminated soil and/or groundwater encountered during either of these situations are discussed separately within this plan.

### 1.1 Background Information

The site is located in the 2200 block of Beach Boulevard and is bordered by Montecito Avenue to the north, Palmetto Avenue to the east and Birch Lane to the south and Beach Boulevard to the west. The Pacific Ocean is located approximately 200 feet west of the site across Beach Boulevard. A former waste water treatment plant was operated at the site by the City of Pacifica until approximately 2000. The site is currently occupied by several buildings, including a city administrative building and pump station, as well as abandoned buildings related to the former waste water treatment plant. These buildings include the former sludge thickening building and a former maintenance garage that was used for hazardous waste material storage. Currently, no known environmental concerns are associated with these structures. Figures 1 and 2 show the site and surrounding vicinity and site features.

As part of waste water treatment plant facility demolition activities, most features associated with the former treatment plant were removed, including a significant volume of soil from the center of the property (up to 10 feet from the original surface grade in some places). As a result, site topography has been changed significantly at various locations. Surface elevations at the site vary from approximately 13 to 20 feet above mean sea level (ft msl). Depth to groundwater varies from 7 to 14 feet below surface grade (ft bsg). A figure showing groundwater levels observed during the November 2008 site investigation are presented on Figure 3. A summary of the site environmental history is included as Attachment A.

### 1.2 Chemicals of Potential Concern

Chemicals of potential concern (COPCs) at the site are related to an unauthorized release of petroleum hydrocarbons from a former underground storage tank (UST) and house-keeping issues at a former hazardous waste storage area (HWSA). The locations of these areas are

shown on Figure 2. COPCs include total petroleum hydrocarbons quantified as diesel (TPHd) and as motor oil (TPHmo). In addition, concentrations of various metals above assumed background levels have been identified, including chromium and cobalt. However, based on historical environmental site investigations at the site, the levels of detected chemicals of potential concern and the depth of these chemicals do not appear to represent a risk to the proposed future use of the site, including residents. Detected concentrations were below or only slightly above the most stringent residential ESLs. Furthermore, and perhaps most importantly, the physical properties of the COPCs are such that vapor intrusion risks are not of concern for future mixed use (commercial and residential) redevelopment of the site. Finally, the soil and/or groundwater possibly containing residual COPCs at levels that exceed ESLs will be either removed from the site during construction activities (as described below) or will be isolated from potential physical contact (dermal, ingestion) using engineered controls including concrete sub-grade parking garages or concrete slab on-grade foundations.

### 1.3 Scope of Work

Based on plans provided by Leland Consulting Group and the City of Pacifica, proposed re-development activities at the site include construction of residential, commercial and public spaces (including a public library) as well as sub-grade parking areas. The highest potential risk to human health associated with the proposed project is primarily related to construction, including excavation of soils in areas previously identified as containing impacted soil and groundwater. Specifically, these areas include the HWSA and the former waste oil UST. While the majority of construction activities will be completed in areas inferred to be non- or low-risk, excavation for utility trenching and sub-grade construction is anticipated in the former UST and HWSA areas.

Although this document has been prepared to address any unforeseen disturbance of contaminated soil and/or groundwater, it should be noted that the existing grade near the vicinity of the former waste oil UST is currently lower than proposed post-construction grade. The sub-grade parking structure proposed beneath the public library is anticipated to be constructed at a depth at or near the water table and will include provisions for collection of groundwater and precipitation infiltration. However, active groundwater extraction (pumping) will not be required. Areas of impacted groundwater have been encountered at the site, but these areas are down-gradient of the proposed library parking structure and do not pose a risk to construction workers or users of the completed facility.

Slab-on-grade construction is proposed at the HWSA; limited subsurface disturbance of soils will be required in this area. Copies of proposed re-development plans are included as Attachment B.

## 2.0 SOIL AND GROUNDWATER MANAGEMENT

Prior to any construction activities that may result in workers encountering potentially impacted materials (soil and groundwater), workers should be made aware of the potential contaminants at the site, areas previously identified as containing impacted material and procedures for handling any impacted materials identified during operations at the site. The awareness and education training should be conducted by a competent environmental professional (EP - a professional engineer or geologist licensed by the State of California with experience primarily in the environmental field) familiar with the history and conditions of the site and should include:

- Potential contaminants in the specific work areas, particularly those that may pose a threat to worker health, safety and the environment;
- Key indicators of contamination through visual and olfactory observations;
- Awareness of transportation and disposal requirements for contaminated soils;

- Hauling and disposal requirements for contaminated solid waste that may be found onsite, such as previously unidentified underground storage tanks, debris, drums or hazardous materials from demolished buildings; and
- Communication, potential “stop work” scenarios, and work area isolation procedures that may be required when evidence of contamination is discovered in areas where contamination was unexpected.

If evidence of suspect material is encountered during monitoring, workers should immediately contact the environmental manager (EM – designated by construction contractor), who will coordinate with the EP and the SMCGRP, and direct the contractor to 1) complete appropriate action in accordance with the procedures presented below or 2) issue a stop work order if conditions warrant.

## 2.1 Soil

Based on the proposed construction plans for the site, the majority of construction activities are within areas where excavated material is inferred to have a low potential to be contaminated and are therefore considered safe for re-use on site if appropriate for backfill. Because of the uncertainty of the location of some potentially impacted soils, no soil will be removed from the site for offsite re-use. All disturbed soils generated during construction activities should be re-used on site (if not contaminated) or disposed at an appropriate landfill. The closest landfills to the site include:

- Ox Mountain Landfill (Class III, non-hazardous waste)  
12310 Highway 92, Half Moon Bay, CA 94019  
Phone: (650) 726-4718
- Keller Canyon Landfill (Class II, designated waste)  
901 Bailey Road, Pittsburg, CA 94565  
Phone: (925) 458-9800
- Kettleman Hills Facility (Class I, hazardous waste)  
35251 Old Skyline Road, Kettleman City, CA 93239  
Phone: (559) 309-7688

To ensure the proper management, all disturbed soil should be monitored on an ongoing basis by observing visual and olfactory indicators of contamination. Indicators of contamination may include, but are not limited to, the following:

- Unusual odor, color and/or texture that may indicate the presence of contaminants in the soil;
- Staining – typically, stained soils are darker than surrounding soils and may be accompanied by unusual odors.
- Buried debris such as chemical containers, steel drums, tanks, barrels, timbers, boxes or other containers that may have contained or been associated with potentially hazardous materials.
- Materials related to operations of the former waste water treatment plant. Based on materials encountered during site investigations, these materials maybe white or gray in color with a powdery or friable texture.
- Sheen on groundwater infiltrating into excavations. A sheen may be indicative of petroleum hydrocarbon impacts.

If such evidence is encountered, contractors should immediately contact the EM, who will coordinate with the EP and SMCGRP and direct the contractor to further action or stop work.

Following consultation with the EP and SMCGPP, any suspected contaminated soil excavated to that point must be:

- Isolated in a secure and designated area from other non-contaminated soils and other materials present on site;
- Placed on an impervious base and securely covered with protective plastic sheeting (Visqueen or similar);
- Assessed through stockpile sampling and laboratory analysis; and,
- Properly disposed if necessary based on analytical results.

If laboratory analysis determines that the soils are considered a hazardous waste, the waste must be transported under hazardous waste manifest protocol by a competent transportation contractor. Contaminated soil determined to be non-hazardous must also be disposed at an appropriate landfill, but does not require hazardous waste handling procedures for transportation.

After soils have been isolated, the excavation walls may require stabilization to make the area safe for inspection by the EM and the EP. If necessary, analytical samples will be collected to classify the soil appropriately. Based on the classification of the soil and under direction of the EP, the contractor will be required to manage the soil appropriately until there is no further evidence of contamination and submit, in conjunction with the EP, documentation of the following information to the EM and the SMCGPP:

- Date, time and volume of soil moved offsite;
- Name of company providing transportation and landfill receiving waste; and
- Copies of all manifests for waste disposal.

Due to the proximity of the project to the Pacific Ocean (approximately 200 ft west of the site), care should be taken to prevent unanticipated run-off from potentially impacted areas of the site or stockpiled soil. Appropriate storm water and sediment control BMPs must be used at all times to prevent discharge of contaminated materials to the Pacific Ocean. At a minimum, all stockpiled soil must be covered with sturdy, well-secured temporary cover, such as plastic sheeting to prevent rain or wind erosion.

## 2.2 Groundwater

Contractors who excavate or otherwise expose suspected contaminated soils should also assume that underlying groundwater might be present. If groundwater is encountered during construction and requires collection for removal from the site, the EP and EM should be consulted prior to planned collection or discharge. Detected concentrations of COPCs in groundwater are assumed to be at non-hazardous levels (based on previous investigations) but will require analysis prior to discharge or off-site disposal. At a minimum, collected water, if any, will need to be sampled and tested for appropriate COPCs (as described in Section 1.2) prior to discharge or disposal to confirm compliance with any discharge permits and approvals or to determine suitable treatment and disposal options.

If groundwater discharge to the City of Pacifica sanitary sewer is necessary, it will be conveyed through a treatment system (appropriately sized storage tank(s) and carbon canisters) prior to discharge under permit. The number of carbon canisters used will be sufficient to meet discharge permit requirements. Discharge sampling and analyses will also be completed in accordance with discharge permit requirements.

Should concentrations of COPCs in any collected groundwater prevent discharge to the sanitary sewer, extracted groundwater will require off-site disposal. In this case, groundwater will be

containerized in appropriately sized storage tanks and profiled for disposal in accordance with the accepting facility permit requirements. If the groundwater is found to contain hazardous levels of chemicals of concern, it must be transported under hazardous waste manifest protocol by a competent transportation contractor. Contaminated groundwater determined to be non-hazardous must also be disposed at an appropriate facility, but does not require hazardous waste handling procedures for transportation.

### **2.3 Airborne Contamination**

Although no known airborne risks have been identified at the site, efforts will be made to minimize the generation of potential airborne contamination while working in areas known to contain COPCs. The EP will be responsible for evaluating the potential for air quality issues related to suspect contamination encountered. The issues related to worker and public health and safety will be dependent on several factors such as the physical and chemical nature of the suspect contaminant and cannot be predicted until such time as suspect material is encountered. However, based on the known COPCs at the site, air quality issues related to contaminated soil and groundwater are not anticipated for this project. To ensure the safety and health of the public and on-site workers, it would be prudent to implement vapor mitigation to control objectionable odors. At a minimum, the EM must conduct perimeter air monitoring (upwind and downwind) during periods of objectionable odors or to investigate odor related complaints. If perimeter monitoring indicates the presence of an odor issue, vapor mitigation will be implemented (cover stockpiles with plastic sheeting, use clean soil to cover excavation). A log of odor issues will be kept by the EM.

### **3.0 SAFETY AND PROTECTIVE PROCEDURES:**

In the event that contaminated materials are encountered during construction activities, the following health and safety procedures must be completed:

1. Contractors will notify Underground Service Alert of Northern California at least 48 hours before the scheduled excavation to locate underground utilities.
2. Ensure compliance with BAAQMD 8-40-401 Regulation 8, Rule 40. If soil is found to meet the criteria of Rule 40, personnel will notify Bay Area Air Quality Management District 5 days prior to the scheduled excavation.
3. An on-site safety meeting should be conducted daily. A copy of a site-specific health and safety plan is included as Attachment C.
4. An exclusion zone will be established and well marked and monitoring will be performed at the site for the presence of non-OSHA trained personnel on-site. All visitors shall sign in; if non-OSHA trained visitors or personnel are on-site the Health and Safety Coordinator will ask the individual/s to exit the exclusion zone.
5. No smoking, drinking or eating will be allowed in work areas.
6. The site will be fenced and guarded after work.
7. Post a warning sign (Prop 65 sign) at the perimeter of the job site (Warning: This facility contains substances known to the State of California to be either carcinogenic or reproductively harmful).
8. All personnel handling potentially hazardous waste will have taken the 40-hour Hazardous Waste Operations and Emergency Response training and, as required by OSHA 29 CFR 1910.120 and have current refresher training and will wear, at a minimum,

half-mask air purifying cartridge respirators (organic cartridge with dust pre-filter) when significant petroleum hydrocarbon odor is observed or suspect materials are encountered.

9. Should floating free-product be encountered during excavation activities, personnel required to work in the area will wear neoprene rubber gloves, chemical goggles, protective clothing, chemical resistant safety boots and a cartridge respirator.
10. Should any emergency arise, work shall be halted and the following regulatory agencies will be notified:
  - (1) Fire Department (911)
  - (2) Regional Water Quality Control Board, SF Bay Region (510) 622-2300
  - (3) San Mateo County Environmental Health Services (650) 372-6200

**In the event of an emergency, dial 911. If injured person(s) cannot be removed from the site due to severe injuries, do not attempt to transport from site; wait for trained emergency responders to arrive.**

If an injury is considered non-life threatening but requires treatment beyond basic first aid, personnel should be taken to the nearest hospital. The nearest hospital to the site is:

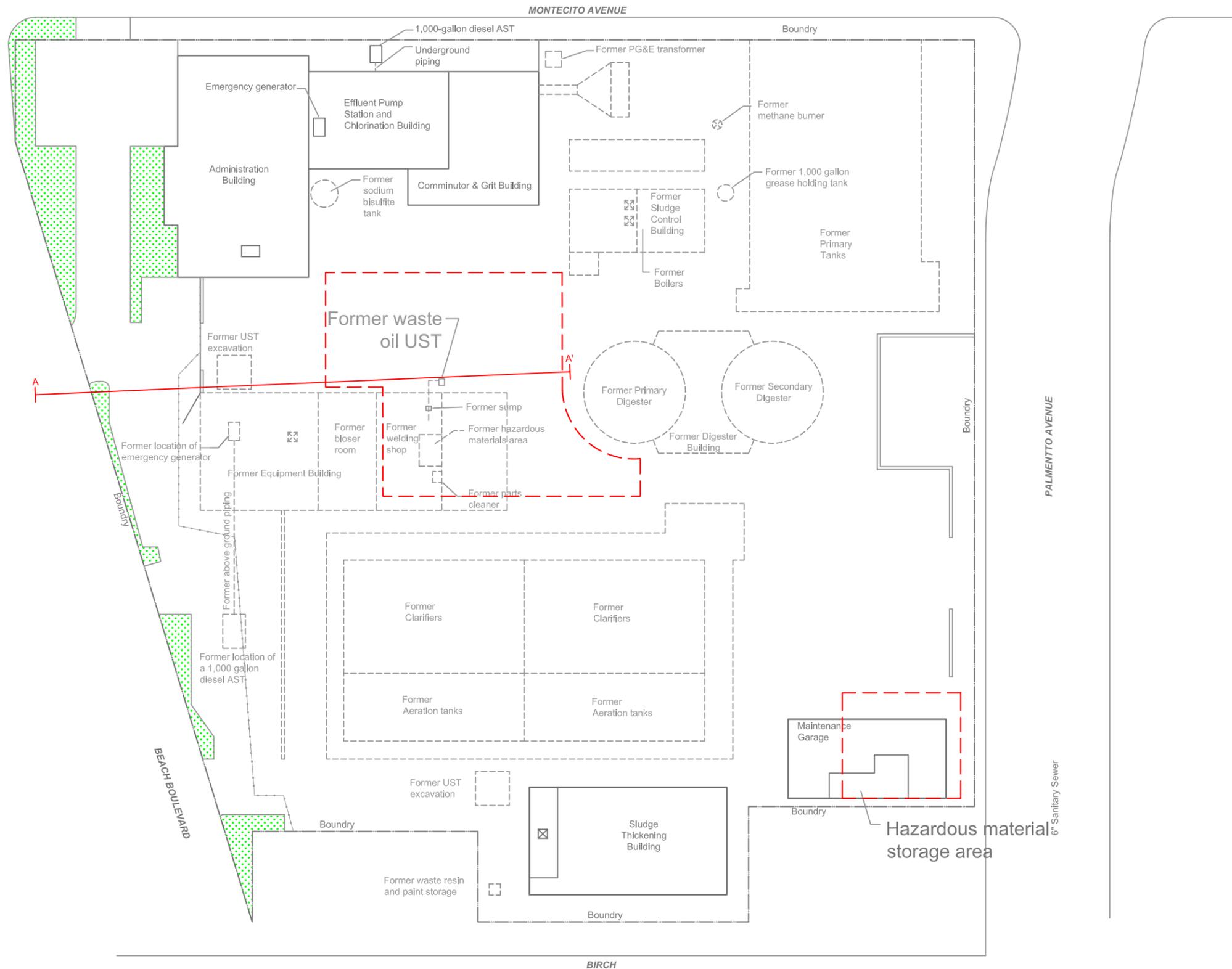
**Seton Medical Center  
1900 Sullivan Ave.  
Daly City, CA**

**(650) 301-5788  
5.5 mi / 11 min. from subject site**

## FIGURES



S:\1 Environmental - Dep\Active Sites\City of Pacifica\2212 Beach Blvd\FIGURES\2012 02 SOILS MGMT.dwg, F(2), 3/30/2012 8:28:01 AM, lchm



**Legend**

- Area of potentially impacted soil and/or groundwater
- Former site structures
- A A' Cross-Section line

**Former Sharp Park Waste Water Treatment Plant**  
 2212 Beach Boulevard  
 Pacifica, California

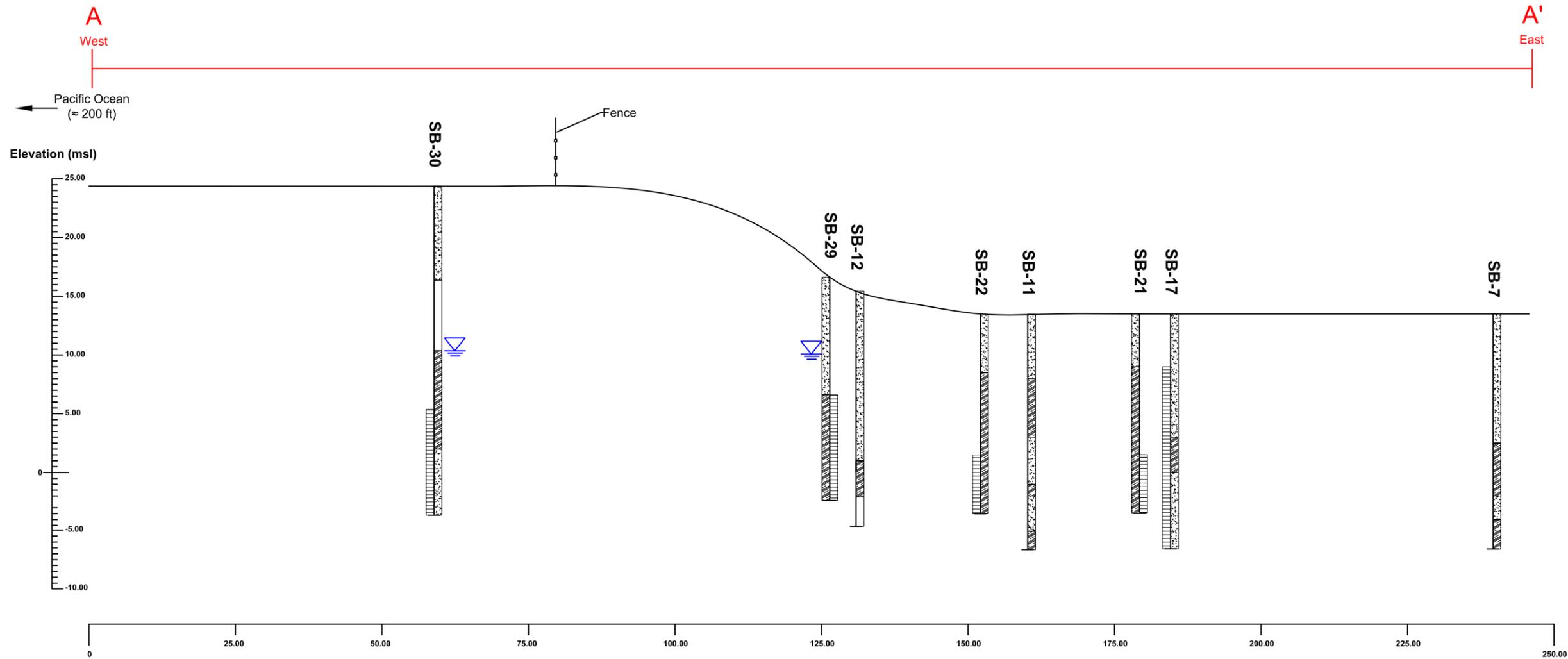
**FIGURE 2**

**Site Map**

Revision:	
Date:	03/30/12
Drafted By:	LC



262 Michelle Court  
 So. San Francisco, CA 94080  
 Main: (650) 616-1200  
 Fax: (650) 616-1244



**LEGEND**

-  No recovery
-  Sand units
-  Clay units
-  Screen interval, temporary well
-  Static water level (11/25/2008)

-  Soil Boring
- SB-21, SB-22, SB-29 & SB-30 by TEC Accutite
- SB-7, SB-11 & SB-12 by Lowney Associates
- SB-17 by GEI

Scale = As Noted Above



262 Michelle Court  
So. San Francisco, CA 94080  
Main: (650) 616-1200  
Fax: (650) 616-1244

Revision:  
Date: 03/30/12  
Drafted By: LC

**Former Sharp Park Waste Water Treatment Plant**

2212 Beach Boulevard  
Pacifica, California

**FIGURE 3**  
**Cross-Section A-A'**

# **ATTACHMENT A**

## **SITE HISTORY**

**December 2001, Phase I Environmental Site Assessment:** Lowney Associates performed a Phase I environmental site assessment and recommended evaluating the soil and groundwater quality at the chemical storage area in the maintenance garage and welding shop (former chemical storage area) to assess the environmental conditions of the site.

**February 2002, Subsurface Investigation:** Lowney Associates conducted a subsurface investigation at the site and advanced two (2) borings, SB-4 and SB-5. Sludge deposits were identified between the approximate depths of 9.5 fbg to 15 fbg. Elevated concentrations of lead, zinc, copper, and silver (detected at 150 ppm, 770 ppm, 340 ppm, and 9.5 ppm, respectively) were detected in a sludge deposit sample collected at 10 fbg from boring SB-5.

**May 2002, Subsurface Investigation:** Lowney Associates advanced seven (7) borings (SB-6 to SB-12) to an approximate depth of 20 fbg. The extent of the sludge deposits, previously encountered at locations SB-4 and SB-5, were noted to be less than anticipated and appeared to be limited to an area east of boring SB-11. Lowney Associates recommended removal of a waste oil tank, associated piping and impacted soil near the tank prior to site redevelopment.

**February 2003, Tank Removal:** Lowney Associates submitted the laboratory results for samples collected on February 10, 2003 during the waste oil tank removal. Sample SS-1 was collected from the bottom of the excavated pit at a depth of approximately 9 fbg, and sample SP-1 was collected from the stockpile of excavated materials. Total petroleum hydrocarbons as oil & grease (TPHo) was detected at a concentration of 90 mg/Kg from sample SS-1, and 1,500 mg/Kg from stockpile sample SP-1. TPH as diesel (TPHd) was detected at a concentration of 19 mg/Kg from sample SS-1, and 1,000 mg/Kg from stockpile sample SP-1. TPH as motor oil (TPHmo) was detected at a concentration of 91 mg/Kg from sample SS-1, and 6,500 mg/Kg from stockpile sample SP-1. TPH as gasoline (TPHg), methyl tert-butyl ether (MTBE), benzene, toluene, ethylbenzene, and xylene (BTEX), were not detected above the laboratory reporting limits. Non-detectable to insignificant concentrations of volatile organics (VOCs) were reported. Non-detectable to insignificant concentrations of semi-volatile organics (SVOCs) were reported in sample SS-1. SVOCs were detected in stockpile sample SP-1 which contained the following compounds above the most stringent Environmental Screening Level (ESLs): 1,4-dichlorobenzene, 4-chloroaniline, benzo(a)anthracene, benzo(k)fluoranthene, and benzo(a)pyrene, at concentrations ranging from 0.34 mg/Kg to 2.3 mg/Kg.

Lead, nickel, and zinc were detected at concentrations less than the ESLs. Cadmium was detected at a maximum concentration of 2.3 mg/Kg, slightly above the ESL (1.7 mg/Kg). Chromium was detected at a maximum concentration of 61 mg/Kg, slightly above the ESL (58 mg/Kg). Please refer to the laboratory report provided by Lowney Associates, dated August 21, 2003, for details regarding these test results.

**November 2003, Subsurface Investigation:** In November 2003, Green Environment Inc. (GEI) implemented the workplan prepared by Lowney Associates and advanced eight (8) soil borings (SB-13 through SB-20) to assess the soil and groundwater conditions beneath the site. The investigation indicated that the lateral extent of hydrocarbon affected soil and groundwater had been adequately assessed; the sludge encountered in SB-5 did not appear to contain hazardous levels of lead and mercury, and the metal concentrations reported in the groundwater sample collected from Lowney Associates boring SB-5 were not representative of the dissolved metal concentrations in groundwater.

**November to December 2006, Subsurface Investigation:** TEC Accutite implemented the workplan prepared by GEI and advanced twelve (12) soil borings (SB-2A through SB-2D and SB-21 through SB-28). Mercury was not detected in soil. Mercury was detected at concentrations from 1.1 µg/L to 1.2 µg/L in groundwater samples collected from borings SB-21 and SB-22.

**October 2007, Mercury Degradation Summary:** In response concerns from the San Mateo County Health Services Agency (SMCHSA), TEC Accutite prepared a summary of mercury data available for the site. Future mercury concentrations were modeled to determine if mercury



levels on site pose a risk to the environment. TEC Accutite concluded that data was insufficient to conclusively evaluate risk and a site investigation was proposed.

**July 2008, Site Investigation Workplan:** TEC Accutite prepared a site investigation workplan proposing five (5) soil borings to identify true groundwater flow direction and collect groundwater samples for mercury analysis using "Clean Hands/Dirty Hands" technique. This sampling method, was used to ensure that the results obtained accurately reflect the concentrations in the water being tested and are not biased by introduction of mercury into the samples from other sources.

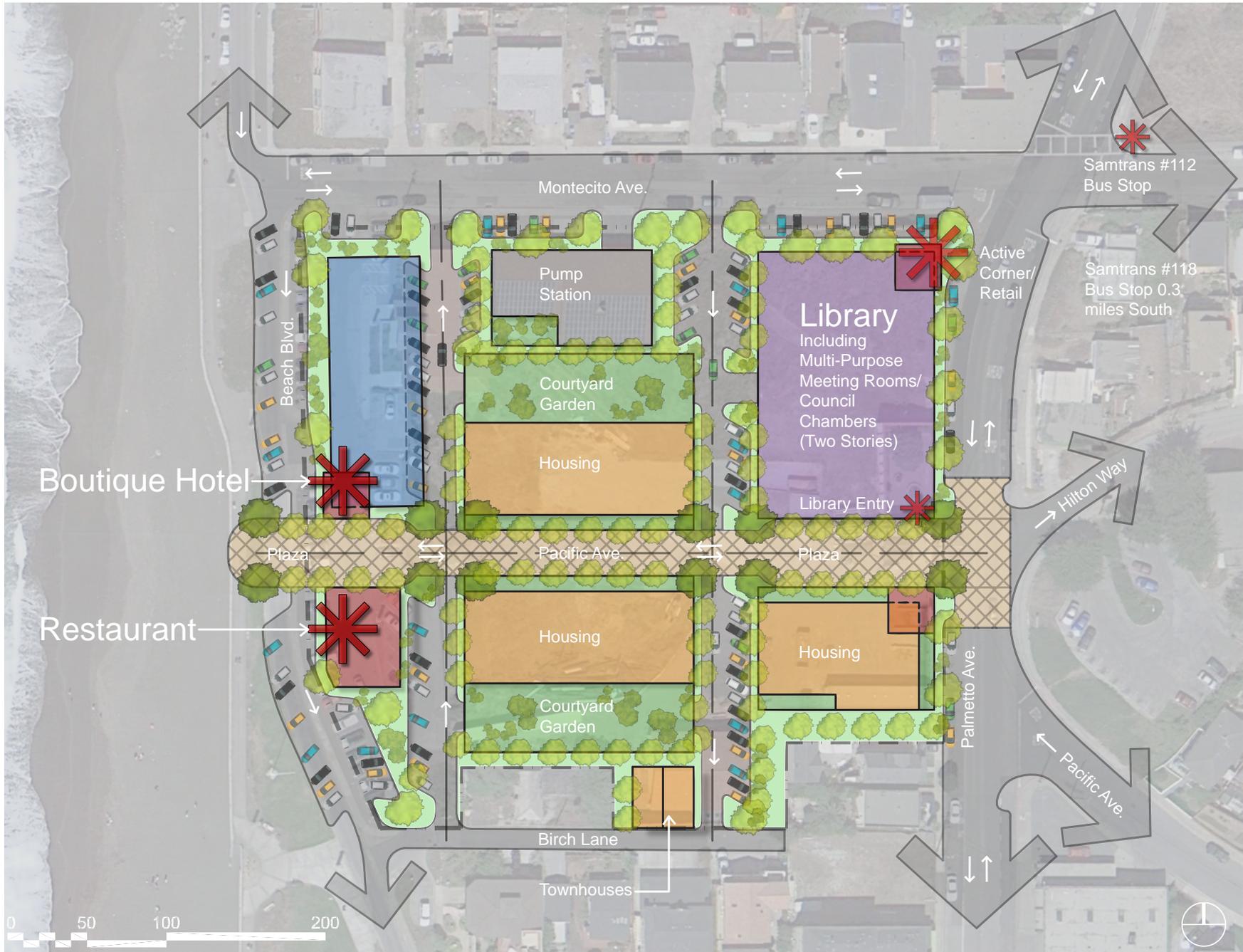
**September 2008, Workplan Approval:** This workplan was approved with comments by the SMCHSA in a regulatory letter dated September 10, 2008.

**November 2008, Mercury Investigation:** The 2008 mercury investigation results show that dissolved mercury concentrations in the groundwater at the site average 0.67 nanograms per liter (ng/L), meeting San Francisco Regional Board's chronic aquatic life water methyl mercury criterion of 3 ng/L. Historical analytical results reporting higher concentrations of mercury likely represent contaminated sampling equipment and/or mercury associated with suspended particulates.

**March 9, 2010:** No Further Action letter issued by SMCGPP for the site.

**ATTACHMENT B**

**PROPOSED DEVELOPMENT PLANS,  
LELAND CONSULTING GROUP**



BEACH BOULEVARD PROPERTY DEVELOPMENT STRATEGY - SITE PLAN - ALTERNATIVE 2

Pacifica, CA  
March, 2012

110900



**MYHRE · GROUP**

architecture | interior design | planning

800 SW 2nd Avenue Suite 500 Portland, Oregon 97204  
p 503.236.6000 f 503.236.7500 www.myhregroup.com

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BEACH BOULEVARD PROPERTY DEVELOPMENT STRATEGY - SITE PLAN - ALTERNATIVE 2

Pacifica, CA  
March, 2012

110900



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architecture | interior design | planning

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BEACH BOULEVARD PROPERTY DEVELOPMENT STRATEGY - PARKING PLAN - ALTERNATIVE 2

Pacifica, CA  
March, 2012

110900



MYHRE · GROUP

architecture | interior design | planning

800 SW 2nd Avenue Suite 500 Portland, Oregon 97204  
p 503.236.6000 f 503.236.7500 www.myhregroup.com

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**ATTACHMENT C**

**HEALTH AND SAFETY PLAN**

## **HEALTH and SAFETY PLAN**

### **2212 Beach Boulevard Pacifica, CA**

This site specific Health and Safety Plan for the City of Pacifica (property owner) establishes the general safety requirements necessary to protect the public, contractor, employees, owner/operator and properties involved in this project. **ALWAYS BE ALERT TO CHANGING CONDITIONS.**

#### **SCOPE OF WORK COVERED BY THIS DOCUMENT:**

Excavating, stockpiling and removing potentially impacted soil at the referenced site. Stockpile and/or excavate soil impacted with petroleum hydrocarbons (diesel- and motor oil-range) and various metals, if encountered. All potentially impacted soil should be handled as described in the Soil and Groundwater Management Plan. If necessary, waste profiling will be completed and stockpiled soil will transferred into trucks for offsite removal.

**Known Exposures**                      No exposures expected.

**Possible Exposures**                Soil and groundwater possibly containing petroleum hydrocarbons and metals.

**Known Physical Hazards**        None

**Possible Physical Hazards**      Working around heavy equipment; working near an open excavation; pinch points; falls, slips, and trips; biological – insect and animal bites.

#### **ONSITE ORGANIZATION AND COORDINATION:**

The following personnel are designated to fulfill the stated job functions on site:

<b>TITLE</b>	<b>NAME</b>	<b>JOB FUNCTION</b>
Project Manager		
Health and Safety Coordinator / Foreman		
Field Geologists/Engineers		
State Agency Representative		
Local Agency Representative		
Subcontractor(s)		
Subcontractor(s)		
Subcontractor(s)		

Personnel involved with excavating, moving or loading potentially impacted materials will have completed the 40 hour Hazardous Waste Operations and Emergency Response Class, as required by OSHA 29 CFR 1910.120.

The Health and Safety Coordinator will be on site during all work to verify adherence with the Site Health and Safety Plan. The Health and Safety Coordinator will also coordinate all work with Local and State Health and Safety Representative(s), as needed.

### **SAFETY AND PROTECTIVE PROCEDURES:**

1. Underground Service Alert of Northern California (USA) will be contacted at least 48 hours before the scheduled activities to identify the location of underground utilities. A copy of the USA ticket and a list of affected underground utility owners or their representatives with contact information will be provided with this work plan.
2. The Project Manager or the Field Foreman will fill out an on-site Job Site Safety Meeting Report, on a weekly basis and an Inspection Checklist and Correction Form, on a daily basis. (Sample copies attached).
3. The Health and Safety Coordinator will monitor the site during all work for the presence of potentially impacted materials.
4. All personnel involved with hazardous waste operations will be properly trained in use of Personal Protective Equipment (PPE).
5. When necessary, the Health and Safety Coordinator (HSC) will mark the Exclusion Zone (contaminated area) by identifying boundaries by use of temporary fencing, cones & caution tape for a safe perimeter and monitor the site for the presence of any non-OSHA trained personnel onsite. All visitors are required and shall sign-in; if non-OSHA trained visitors or personnel are on-site the HSC will ask the individual(s) to exit the exclusion zone.
6. **NO SMOKING, DRINKING OR EATING WILL BE ALLOWED IN WORK AREAS.**

### **ENGINEERING CONTROLS:**

1. Stay upwind of possible contamination
2. Cover or containerize contaminated soil and groundwater
3. Only properly trained drilling company employees will operate drilling equipment.

### **HAZARDOUS COMMUNICATION PROCEDURES:**

(Horn blast, siren, etc) is the emergency signal to indicate that all personnel should leave the excavation area / exclusion zone.

The following standard hand signals will be used in case of failure of radio communications:

<b>Hand Gripping Throat</b>	<b>=</b>	<b>Out of Air, Can't Breathe</b>
<b>Grip Partner's Wrist or Both Hands Around Waist</b>	<b>=</b>	<b>Leave Area Immediately</b>
<b>Hands on Top of Head</b>	<b>=</b>	<b>Need Assistance</b>
<b>Thumbs Up</b>	<b>=</b>	<b>Yes, I Understand</b>
<b>Thumbs Down</b>	<b>=</b>	<b>No, Negative</b>

## PERSONAL PROTECTIVE EQUIPMENT:

LEVEL A		LEVEL C	
LEVEL B		LEVEL D	No Respiratory Protection Minimal Skin Protection

Based on evaluation of potential hazards at this site, the following levels of Personal Protection have been designated for the applicable work areas and/or tasks.

- If needed (type of mask) air purifying cartridge respirators with (type of filter) are appropriate for use with the involved substances and concentrations, when significant detector readings are recorded, or if a significant gasoline odor is detected.
- If free-phase petroleum hydrocarbons are encountered, inner and outer chemical-resistant gloves would be required. Area should be monitored for explosive vapors, and the use of any electrical equipment will be prohibited (unless explosion proof).

The Health and Safety Coordinator, a competent individual, will have determined that all criteria for using all types of protection have been met and is directly responsible to the Project Manager for safety recommendations on site.

## LIST OF EMERGENCY PHONE NUMBERS:

In an emergency, all work will be halted and the appropriate agencies / facilities will be contacted

AGENCY / FACILITY	PHONE	CONTACT
FIRE	911	
PROJECT MANAGER		
COUNTY HEALTH DEPARTMENT		
POLICE	911	

## EMERGENCY MEDICAL CARE:

In the event of an emergency, the Field Supervisor will contact 911 when person(s) is/are injured severely and cannot be removed from site. If condition of injured personnel is such as he/she could be driven to nearest hospital, they will go to:

Seton Medical Center at 1900 Sullivan Avenue, Daly City, CA, (650) 301-5788. It is 5.5 (miles) and approximately (11) minutes from this location. **See Attachment B for Map and Driving Directions.**

If employee is transported for emergency treatment, complete the following:

\_\_\_\_\_ (Name of Person) was contacted at \_\_\_\_\_  
(date/time) and notified of the situation, the potential hazards, and the substances involved.

*It is imperative if any work related injuries occur that the Worker's Compensation Coordinator at the office is notified within one (1) day of injury and OSHA is notified with eight (8) hours of a work related death.*

**First aid equipment** is available on site, at the following locations: Jobsite trucks, construction trailer and 1. \_\_\_\_\_ and 2. \_\_\_\_\_.

**EMERGENCY MEDICAL INFORMATION FOR SUBSTANCES PRESENT ON SITE:**

SUBSTANCE	EXPOSURE SYMPTOMS	FIRST AID INSTRUCTIONS
<p><b>DIESEL FUEL NUMBER 2 / MOTOR OIL</b></p>	<p>Exposure to vapor or mist may cause eye irritation.</p>	<p>Flush eyes immediately with fresh water for at least 15 minutes while holding eyelids open. Remove contacts, if worn. Thermal burns require immediate medical attention.</p>
	<p>Repeated or prolonged exposure may cause defatting, redness, itching, inflammation, cracking and possibly secondary infection. Repeated or massive skin contact may cause poisoning. High pressure skin injections may not appear serious, within hours tissue may become swollen, discolored and extremely painful.</p>	<p>Remove contaminated clothing immediately. Wash area of contact with soap and water. High pressure skin injections and thermal burns require immediate medical attention.</p>
	<p>Inhalation may cause respiratory tract irritation and pneumonitis. May cause Central Nervous System effects excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death.</p>	<p>Move person to fresh air. If not breathing clear airway and administer CPR. If breathing difficulty occurs, administer oxygen, continue to monitor closely. Seek medical attention.</p>
	<p>Ingestion may cause central nervous system effects, such as, excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death. Gastrointestinal effects as irritation, nausea, vomiting and diarrhea.</p>	<p>DO NOT INDUCE VOMITING. If spontaneous vomiting occurs, monitor for breathing difficulty. Seek immediate medical attention</p>
<p><b>Lead</b></p>	<p>Exposure to particulate aerosol may cause eye irritation.</p>	<p>Flush eyes immediately with fresh water for at least 15 minutes while holding eyelids open. Remove contacts, if worn.</p>
	<p>Acute exposure may cause abdominal pain, weakness, muscle pain, nausea, vomiting, constipation, in extreme cases: coma, seizures, and death. Chronic exposure may cause hypertension, impaired hemoglobin synthesis, damage to reproductive system. Teratogenic. Can impair fertility in men and cause spontaneous miscarriage.</p>	<p>Move person to fresh air. If breathing difficulty occurs, administer oxygen, continue to monitor closely. DO NOT INDUCE VOMITING. If spontaneous vomiting occurs, monitor for breathing difficulty. Seek medical attention.</p>
	<p>Exposure limits: 0.03 mg/m3 (OSHA action level); 0.05 mg/m3 (PEL)</p>	
<p><b>Chromium</b></p>	<p>Exposure to particulate aerosol may cause eye irritation.</p>	<p>Flush eyes immediately with fresh water for at least 15 minutes while holding eyelids open. Remove contacts, if worn.</p>
	<p>Inhalation can cause shortness of breath, coughing, wheezing, perforation of the nasal septum, gastrointestinal and neurological effects, pneumonia, asthma; carcinogenic</p>	
	<p>Ingestion can cause abdominal pain, vomiting, and hemorrhaging. Negatively affects liver, kidneys, GI and immune systems.</p>	
	<p>Dermal exposure can cause skin burns, dermatitis, ulceration</p>	
	<p>Exposure limits: 0.0025 mg/m3 (OSHA action level); 0.005 mg/m3 (PEL)</p>	

<b>Mercury</b>	Exposure to particulate aerosol may cause eye irritation.	Flush eyes immediately with fresh water for at least 15 minutes while holding eyelids open. Remove contacts, if worn.
	Inhalation can cause tremors, emotional changes, weakness, twitching, headaches, disturbances in sensation, impaired cognitive function	
	Ingested methylmercury is teratogenic; other symptoms include: impaired peripheral vision; disturbances in sensation; lack of coordination; impaired speech, hearing, walking; muscle weakness	
	Exposure limits: 0.05 mg/m3 (PEL)	

## ***SAFETY MEETING REPORT***

Department:

Date:

Jobsite:

Time:

am/pm

---

Employees in attendance:

Any Accidents? YES/NO (please circle one) If yes, please provide details:

Review of any accidents that have occurred since last meeting:

Unsafe acts and/or conditions resulting from inspection:

Review of any unsafe acts and/or conditions from last meeting:

Safety Topics Discussed:

Employee/Subcontractor: Suggestions, Recommendations, Remarks:

Jobsite Foreman: Suggestions, Recommendations, Remarks:



## **INSPECTION CHECKLIST AND CORRECTION FORM**

Daily:

General Area or Job Safety Class:

(OVEREXCAVATIONS & LOADING)

Date Prepared

Preparer

Safe Work Condition, Safe Work Practices or Personal Protective Equipment

1. Cal/OSHA permit on site (if required)
2. Underground utilities marked by U.S.A.
3. Exclusion area established
4. Safety switches identified and working properly
5. Employees wearing proper protection
5a. Hard Hats
5b. Safety Shoes
5c. Respirators available
6. Fire extinguishers within 25 feet of excavation
7. First aid kits on site
8. All vehicles, equipment, and power tools in safe operating order
9. Potable water available
10. Emergency medical services available

Is Equipment Locked Out / Tagged Out (LOTO): YES / NO

Method of LOTO:

Corrective Action Needed or Taken? YES / NO If yes, state action taken:

Person responsible for correction: \_\_\_\_\_

Correction Action Completed / Due: \_\_\_\_\_  
Date Time

Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

***VISITORS LOG***

**2212 Beach Boulevard  
Pacifica, CA**

<b>NAME</b>	<b>COMPANY</b>	<b>DATE</b>

COMMENTS:

**Attachment A**  
**USA Ticket and Utility Contact Numbers**

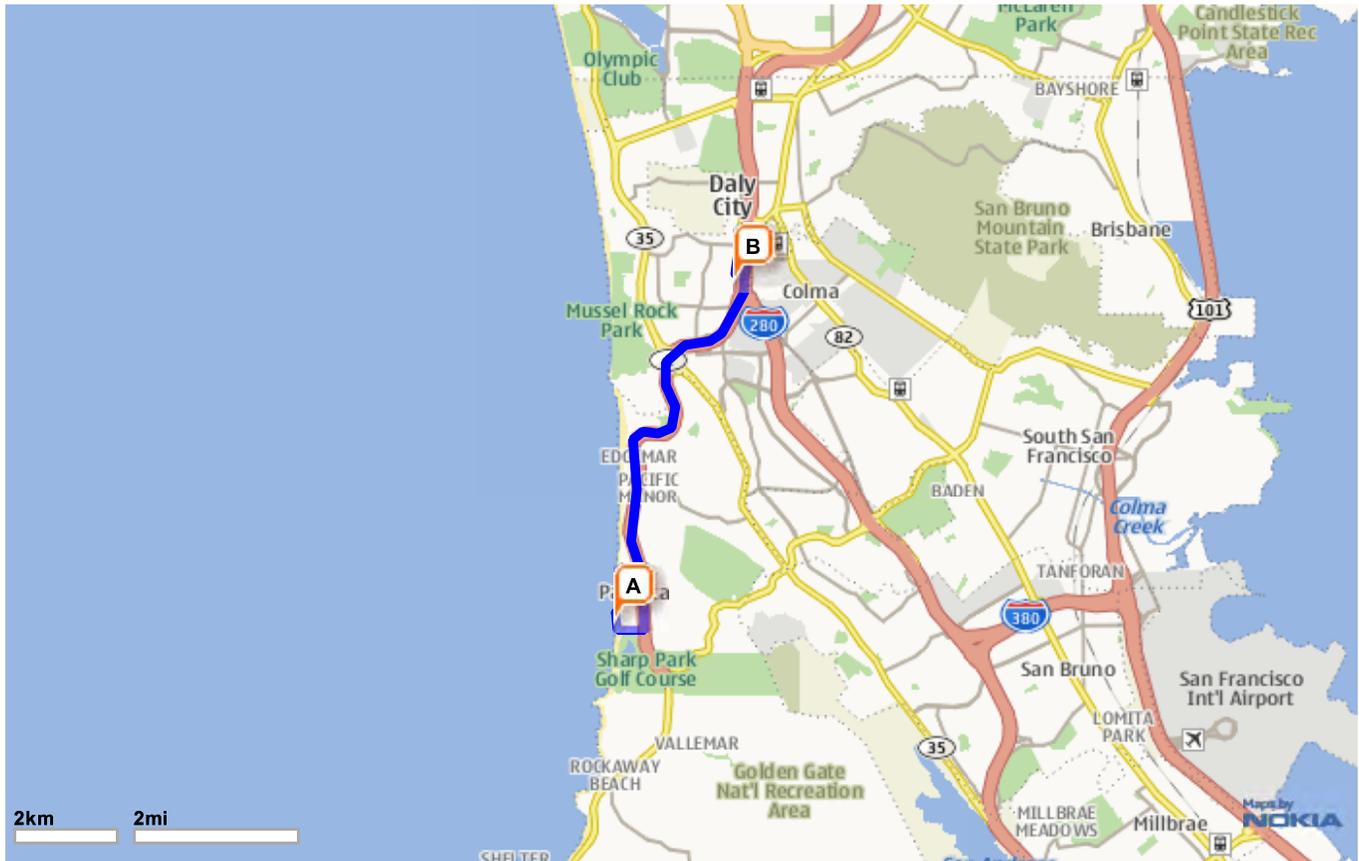
**Replace with USA Ticket**

**Attachment B**  
**Hospital Directions and Map**



## Driving directions to 1900 Sullivan Ave, Daly City, CA 94015-2200

Distance: 5.51 miles — Time: 11 mins



A 2212 Beach Blvd, Pacifica, CA 94044-2786

1. Head toward Birch Ln on Beach Blvd. Go for 0.2 mi.
2. Turn **L** onto Clarendon Rd. Go for 0.3 mi.
3. Turn **L** onto Oceana Blvd. Go for 0.5 mi.
4. Take **L** ramp onto Cabrillo Hwy, Coast Hwy (CA-1 N) toward San Francisco. Go for 3.7 mi.
5. Take the D Street/Gov't Center exit. Go for 0.3 mi.
6. Bear **L** onto Junipero Serra Blvd. Go for 0.1 mi.

7. Turn <b>L</b> onto <b>Eastmoor Ave.</b>	Go for 0.1 mi.
8. Bear <b>L</b> onto <b>Sullivan Ave.</b>	Go for 0.3 mi.
9. Your destination on <b>Sullivan Ave</b> is on the <b>right</b> . <b>The trip takes 5.5 mi and 11 mins.</b>	
<b>B 1900 Sullivan Ave, Daly City, CA 94015-2200</b>	

When using any driving directions or map, its a good idea to double check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning