Soil and Groundwater Management Plan
2665 The Alameda (Former Unocal Site No. 0715)

Santa Clara, California
Project #194-1347-0002
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PRESENTED TO

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1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) has prepared this Soil and Groundwater Management Plan (SGMP) on behalf of Kapital Alameda, LLC (Kapital) for the property located at 2665 The Alameda (Former Unocal Site No. 0715) in Santa Clara, California (Project). Tetra Tech has prepared this SGMP to be implemented during grading operations in order to address the possibility that previously undiscovered contaminants are encountered. The Project consists of constructing a multi-level student housing complex, ground level retail structures, and an underground parking structure on approximately 0.46 acres of land in Santa Clara County, California (Property; Figure 1).

The purpose of this SGMP is to provide a background of the Property, highlight areas of concern (AOCs) that the grading contractor should be aware of during grading activities, and define procedures for addressing suspected contaminated materials or subsurface anomalies that may be encountered during grading activities. The AOCs are based on the information provided in the January 2023 Conceptual Site Model Update for the Property (Tetra Tech 2023b).

2.0 OBJECTIVES

The objectives of the SGMP are to:

- Identify AOCs where the site grading contractor should be prepared to encounter potential environmental issues, based on the information provided in the January 2023 Conceptual Site Model Update (Tetra Tech 2023b);
- Provide guidance to the site grading contractor when potentially encountering impacted soil and other unidentified subsurface objects not described in previous environmental assessment reports within AOCs;
- Ensure that grading operations within AOCs continue with as few interruptions as possible; and
- Reduce any potential health effects within AOCs associated with exposure to contaminants of concern (COCs).

3.0 PROPERTY DEVELOPMENT ASSUMPTIONS

Kapital Alameda, LLC is currently planning to redevelop the Property for mixed commercial/residential use with preliminary development plans calling for a subterranean parking structure, a commercial space on the first floor and four floors of residential apartments.

The following assumptions have been used to guide development of this SGMP based on Tetra Tech's understanding of current Project plans:

1. The development of the Property will be for residential housing/commercial spaces.
2. Overall responsibility for management of the development will reside with Kapital Alameda, LLC and its contractors.
3. Kapital Alameda, LLC and its contractors will have the responsibility for reviewing and approving any activities at the Property that involve removal of any subgrade utilities, pavement, and/or subsurface/subgrade excavations.

4. The excavations are expected to extend up to 20 feet below ground surface (bgs) to accommodate the subterranean parking lot. The actual depth of the excavations is dependent on a number of factors, including, but not necessarily limited to, the building(s) design and the geotechnical engineer's foundation recommendations.
5. The SGMP is designed so that previously unknown areas of impacted soil, if any, can be addressed in the event one or more Impacted Soil Areas (ISAs) are encountered.

4.0 BACKGROUND

Kapital Alameda, LLC and/or its development partners, intend to develop the Property for a multi-level student housing complex and ground level retail spaces with associated parking structures.

4.1 PROPERTY LOCATION AND DESCRIPTION

The Property is located at 2665 The Alameda and consists of a triangular parcel of fenced, vacant land in the city of Santa Clara. The Property is bordered by The Alameda to the northeast, Park Avenue to the west, and Bellomy Street to the northwest. Adjacent properties of note include various residence halls of Santa Clara University located to the east and northeast of the Property; a preschool and childcare center, Kids on Campus, to the northwest; University Cleaners to the southwest; and Pizza My Heart to the west. The Property consists of a fenced, vacant lot covered with dirt (Tetra Tech 2023b).

The Property is located in Santa Clara Valley, which is predominantly a flat alluvial plain from the Pleistocene and Holocene. The valley is bounded by mountains to the east and west (Diablo Range and Coast Range, respectively) and is located in a major fault zone. This includes a system of northwest-southeast trending right lateral strike slip faults on either side of the valley, as well as a series of thrust faults to the south. Most of the area in the immediate vicinity of the property is underlain by Quaternary (Pleistocene to Recent) alluvial fan deposits, the valley is composed of Jurassic to Cretaceous volcanic and metamorphic rocks from the Franciscan complex. Basement rock here also includes Coast Range ophiolite and continental margin sequences. Surficial deposits in the southwest portion of the valley include Miocene Monterey shale, Pliocene and Pleistocene Santa Clara Formation, and several other Quaternary fluvial and alluvial units (McLaughlin et al. 2002). In the northern portion of the valley, further alluvial fans, levees, and floodplain deposits are observed (Westling and Helley 1989). Previous investigations indicated that soils at and surrounding the Site grade from sand to clay. From 0-22 feet below ground surface (bgs), clays are interbedded with silts and silty sands. From 22-40 feet bgs, silty sands are interbedded with sand. Between 40 and 55 feet bgs, clayey and silty sands are interbedded with clay. Below 55 feet bgs, fine to coarse sand and clayey silts with sand are observed and are interbedded with silty and gravelly clays (Arcadis 2020).

There are no surface water bodies identified within a 0.5-mile radius of the Site. The nearest surface water feature is the Guadalupe River, located approximately 1.5 miles to the east of the Site. A well survey conducted in 2012 identified all water supply wells within a 0.5-mile radius of the Site. The results of the survey pointed to two municipal wells: one municipal well was installed approximately 1,800 feet west-northwest (downgradient) of the site to a depth of approximately 840 feet bgs and was screened from approximately 490 to 515 feet bgs, 540 to 700 feet bgs, and 730 to 820 feet bgs. A second municipal well was installed approximately 2,330 feet northeast (cross-gradient) of the Site to a depth of approximately 890 ft bgs and was screened from approximately 300 to 380 feet bgs, 430 to

485 feet bgs, 590 to 800 feet bgs, and 755 to 870 feet bgs (Stantec 2012a). During the last groundwater monitoring event, conducted in December 2022, groundwater at the Site was encountered at an elevation of approximately 57.36 to 62.35 feet above mean sea level or approximately 15 to 30 feet bgs. The groundwater flow direction is to the north-northwest at an apparent gradient of 0.019 feet/foot (Tetra Tech 2023a).

4.2 PROPERTY HISTORY AND CURRENT STATUS

Historical aerial photographs from 1931, 1965, 1980, and 1987 indicate the Property was used primarily for commercial structures (Tetra Tech 2022). In the 1931 aerial photograph, a structure can be seen on the subject property. Streets and lot spaces in the vicinity of the subject property are similar configuration as today. By 1965, the Property appears to involve additional structures. West of the Property, newly developed facilities associated with the University can be seen. The 1993 aerial photograph shows the Property without any structures, containing only what appears to be a dirt lot. Much of the structures and areas to the west of the Property remain unchanged from 1965. The 1993 to 2020 aerial photographs show the Property similar to the current condition.

4.3 SUMMARY OF RELEVANT REPORTS AND INVESTIGATIONS

Second Semi-Annual 2022 Groundwater Monitoring Report, 2665 The Alameda (Former Unocal Site No. 0715) Santa Clara, California, (Tetra Tech 2023a)

Tetra Tech submitted this Semi-Annual Groundwater Monitoring Report (GWM) on January 20, 2023 for Kapital Alameda, LLC. The report identified the following:

- Groundwater elevations have shown an increasing trend since September 2021.
- Groundwater elevations ranging from 57.36 feet above mean sea level (U-22S) to 62.35 feet above mean sea level (U-1).
- No sheen or measurable light non-aqueous phase liquid were observed in any well during this event.
- Among other volatile organic compounds detected, benzene was detected in thirteen of the twenty-four groundwater monitoring wells sampled and analyzed, with detected concentrations ranging from 3.5 µg/L at U-19 to 10,000 µg/L at U-1.
- The highest concentrations of TPH were present beneath the Site at well UV-1 within the shallow zone; wells U-13, U-15, and U-18 within the middle zone; and U-1 within the deep zone.

Conceptual Site Model, 2665 The Alameda (Former Unocal Site No. 0715) Santa Clara, California, (Tetra Tech 2023b)

Tetra Tech submitted this Conceptual Site Model (CSM) on January 31, 2023 for Kapital Alameda, LLC. The CSM identified the following:

- Soil borings advanced in 2010 and 2012 vertically defined petroleum hydrocarbon impacts. The results indicated most of the petroleum hydrocarbon impacts in soil were present on-site between approximately 10 and 40 feet bgs in the area of the former USTs and associated piping and dispensers.
- Soil impacts at the Site have largely been remediated through soil excavation and SVE.
- Groundwater impacts exceeding the LTCP groundwater-specific criteria are present on the Site.

Soil
The maximum benzene concentration following soil remediation activities in shallow soils was 0.084 mg/kg between 0 and 5 feet bgs at boring location U-12 and 2.6 mg/kg between 5 and 10 feet bgs at boring location U-13. The maximum ethylbenzene concentration detected in shallow soils was 1.8 mg/kg between 0 and 5 feet bgs at boring location X-1 (soil removed) and 6.3 mg/kg between 5 and 10 feet bgs at boring location U-13. The maximum naphthalene concentration detected in shallow soils was 0.52 mg/kg from 0 to 5 feet bgs at boring location X-1 (soil removed) and below laboratory detection limits for soils between 5 and 10 feet bgs. (Tetra Tech 2023b)

Groundwater
Groundwater below the Property is present at 13 feet bgs. Historically, depth to water has fluctuated between 7 and 25 feet bgs. Groundwater sampled from shallow-screened wells had a maximum benzene concentration of 89 µg/L (UV-1) and the maximum MTBE concentration was 12 µg/L (UV-1). Within the mid-screened wells, the maximum benzene concentration at the Property was 380 µg/L (U-13) and the maximum MTBE concentration was 67 µg/L (U-13). Within the deep-screened wells, the maximum benzene concentration at the Property was 10,000 µg/L (U-1), and the maximum MTBE concentration was 14 µg/L (U-4). (Tetra Tech 2023b).

Based on the analytical results presented above, the shallow soils within the sampling area may represent an AOC and precautions and procedures will be necessary during grading or construction activities. Based on the information from groundwater monitoring and the excavation planned to be on the order of 20 feet below ground surface, it is likely that contact with groundwater will be made; dependent on the fluctuating groundwater elevations. Based on the CSM and most recent semi-annual groundwater monitoring event, groundwater has been most recently found from approximately 13 to 18 feet below ground surface.

5.0 AREAS OF CONCERN

The investigative activities discussed in the previous section of this SGMP have been determined to have sufficiently evaluated the Property for areas of potential soil impacts. No amount of investigation is sufficient to completely preclude the potential presence of undiscovered contamination. As such, it is possible for the grading contractor to discover such “pockets” of contaminated soil that may not have been discovered during previous subsurface investigations or property assessments. The grading contractor shall observe for potentially impacted soils and subsurface anomalies, which includes but is not limited to:

- Discolored soil;
- Odors;
- Elevated readings on field monitoring equipment, such as a Photo-ionization Detector (PID);
- Drums;
- Underground Storage Tanks (USTs);
- Clarifiers;
- Dry wells;
- Wells or piping associated with previous remediation efforts;
- Piping or other materials related to the previous site operations; and
- Impacted groundwater.

Tetra Tech has identified the following AOCs based the findings of the January 2023 CSM for the Property where potential soil and groundwater impacts are more likely to be encountered based on historical activities within the AOC or in the immediate vicinity of the AOC.

2665 The Alameda

The northwest portion of the Property contained former USTs which historically released petroleum products, impacting soil and groundwater. Based on the historical monitoring data and history of petroleum product releases, it is assumed that the northern portion of the Site will contain the most impacted soils and groundwater.

Soil

Previous investigation results indicated most of the petroleum hydrocarbon impacts in soil were present on-site between approximately 10 and 40 feet bgs in the area of the former USTs and associated piping and dispensers. Soil impacts at the Property have largely been remediated through soil excavation and SVE. Known petroleum impacts outside the former USTs and associated piping and dispensers in soil are limited to soil within the smear zone of impacted groundwater and the fluctuating groundwater table. The groundwater table has been as high as 7 feet bgs and as low as 25 feet bgs.

Groundwater

Shallow groundwater impacts are primarily down gradient of former USTs and associated piping and dispensers on the northwestern portion of the property. In general, contaminant concentrations have fluctuated with changes in groundwater elevations but have generally decreased, including in the downgradient monitoring wells. Groundwater encountered during the excavation activities may be impacted with petroleum hydrocarbons throughout the excavation area, however the majority of the impacts are anticipated to be in the northwest of the excavation area.

If potentially impacted soils, groundwater, or other subsurface anomalies are discovered, the grading contractor should immediately cease soil disturbing activities in the vicinity of the suspect soil or subsurface anomaly and notify the Construction/Environmental Manager to allow the Construction/Environmental Manager staff to take corrective actions such as inspect the materials of concern, collect samples for laboratory analysis (if necessary), and notify the proper regulatory agency (if necessary).

6.0 SOIL SCREENING AND SAMPLING PROTOCOL

In the event that potentially impacted soil is encountered during grading activities within AOCs, an assessment should be made to determine whether work can continue in the area where the potentially impacted soil was found and the contractor shall contact the Construction/Environmental Manager immediately to ensure that the soil can be adequately evaluated and assessed. Qualified and trained personnel will conduct field sampling activities that are to occur at the Property. The Construction/Environmental Manager is responsible for ensuring field staff practice proper sampling techniques, appropriately document field activities, and submit samples to certified laboratories for analysis. The Construction/Environmental Manager is also responsible for interpretation of laboratory

results used to develop recommendations pertaining to the fate of excavated soil. The Construction/Environmental Manager will be responsible for characterizing the soil and assessing its suitability for reuse on-site. Additional sampling and analyses may be necessary to determine appropriate disposal protocol for contaminated soil.

7.0 SITE GRADING AND MONITORING PROTOCOL

The most recent version of the grading plan should be provided by the general contractor to the grading contractor. Prior to commencement of site grading/construction activities, a kick-off meeting should be held between the Construction/Environmental Manager, the site grading contractor, the general contractor, Kapital Alameda, and other applicable parties to discuss grading and monitoring requirements as they pertain to this SGMP.

Implementation of this SGMP requires on-site monitoring during grading activities. This is primarily because there are known soil impacts present at the Property as presented in the CSM (Tetra Tech 2023b). If potential additional soil impacts are discovered during grading activities, the Construction/Environmental Manager will be required to assess the potentially impacted material and potentially screen and/or sample such materials. The following sections describe the protocol that shall be followed should impacted soils or other potentially contaminated debris be encountered at the Property during grading activities. There will be contractor prepared site-specific Health and Safety Plans to establish health and safety protocols for personnel working at the Property.

7.1 MONITORING ACTIVITIES

Soil monitoring during grading activities when impacted soils or other potentially contaminated debris are encountered is expected to include the following:

- Visual and olfactory monitoring is to be performed by the contractor's representative, who is to be experienced with grading activities and excavations that have impacted soil. The monitoring is to include:
  - Looking for subsurface anomalies (i.e., drums and tanks).
  - Looking for discolored soil.
  - Noting whether chemical or petroleum odors are detected.
- Upon encountering atypical debris (i.e., drums and tanks) and/or discolored and odorous soil, the contractor shall notify the Construction/Environmental Manager to evaluate the condition.
- The Construction/Environmental Manager may also periodically monitor for impacts during grading activities using a PID or other field instruments. The frequency of monitoring by the Construction/Environmental Manager is to be mutually agreed upon by the Property Owner and the Construction/Environmental Manager.
- Documentation of monitoring activities is to include the following items:
  - When the monitoring was performed, by whom, and where. It is recommended that this be accomplished by the daily completion of field monitoring forms by the contractor and the Construction/Environmental Manager (when the latter is present).

- Monitoring documentation including field instrument calibration information (date, calibration method, personnel who performed the calibration), dates, times, locations, wind conditions, and field instrument readings.

7.2 FUGITIVE DUST MANAGEMENT AND MONITORING

Construction activities performed at the Property are subject to Bay Area Air Quality Management District (BAAQMD) Regulations 1 and 6, requirements pertinent to fugitive dust control. Dust control activities are to utilize the best available control measures. The method of dust control that is typically employed during soil disturbance activities is the application of water or other wetting or dust suppression compound. It is expected that dust and other excavation equipment-related emissions will meet BAAQMD guidance in effect at the time the grading activities take place.

7.3 ENCOUNTERING SUBSURFACE ANOMALIES

In the event that atypical debris (i.e., drums and tanks) and/or discolored and odorous soil are encountered, excavation and grading activities in the area the material is discovered should cease immediately and the Construction/Environmental Manager should be informed of the discovery. In a timely manner, the Construction/Environmental Manager staff will decide what screening measures should be taken, and if it is necessary to collect samples to submit for laboratory analysis to ensure adequate characterization. The following information will be documented for each sample collected:

- Sample identification number
- Sample location and description
- Site sketch showing sample location and measured distances
- Sampler's name(s)
- Date and time of sample collection
- Designation of sample as composite or grab
- Type of sample (i.e., matrix)
- Type of preservation
- Type of sampling equipment used
- Field observations and details important to analysis or integrity of samples (e.g., heavy rains, odors, colors, etc.)
- Instrument readings (e.g., photoionization detector [PID], etc.)
- Chain-of-custody form numbers and chain-of-custody seal numbers
- Transport arrangements (courier delivery, lab pickup, etc.)

Based on the findings of the assessment, the material will be properly characterized for disposal or reuse as fill material at the Property. The Construction/Environmental Manager will inform the grading contractor of the requirements for segregation of soil stockpiles for disposal, and whether soil meets the cleanup criteria for reuse as fill material at the Property; it is the responsibility of the site grading supervisor to relay to other site grading staff information provided to him/her by the Construction/Environmental Manager, locate proper stockpiling locations for the differently characterized soil, and direct all earth-moving activities .

7.4 EXCAVATION AREA REQUIREMENTS

Open excavations created during grading activities with subsurface anomalies will be demarcated using barricades and caution tape during periods of inactivity and at the end of each workday to prevent trip and fall risks. Excavations where VOC-contaminated soil surfaces are exposed during prolonged periods of inactivity (longer than 12 hours), trench bottoms and sidewalls should be covered with heavy duty plastic sheeting in order to minimize emissions of contaminants to the atmosphere.

7.5 SOIL HANDLING

If contaminated soils or suspected contaminated soil are encountered, the soils shall be handled by a contractor certified to handle and/or transport such materials. If suspected contaminated soils are encountered during excavation and/or grading activities, the Construction/Environmental Manager should be notified immediately. Soil suspected to be impacted will be screened in the field by the Construction/Environmental Manager using field observations and an organic vapor meter.

Depending on the extent of the suspected contaminated soil, the soil may be handled in one of the following methods:

- Excavate and stockpile very near to the location of where the contaminated or suspected contaminated soil was found
- Leave in place until material can be direct loaded for offsite disposal

Regardless of the method, the suspect materials will be inspected and potentially sampled for analysis by a certified laboratory. Based on the laboratory results, recommendations will be provided regarding the fate of the potentially contaminated material (i.e., disposed of as non-hazardous, hazardous, or reused at the Property).

A site-specific HASP will be prepared and will outline proper protocols pertaining to handling of soils suspected to be contaminated and should be used by on-site field management to ensure worker safety when these types of soils are encountered. The HASP will also provide on-site staff with the health and safety measures that must be adhered to when stockpiling suspected contaminated soil in designated staging areas including covering with continuous plastic sheeting and secured with sandbags. The Construction/Environmental Manager will provide input with respect to segregation of the different levels of contaminated soil to be stockpiled on plastic sheeting. If laboratory analysis results yield a determination that soil is unsuitable for reuse, arrangements must be made to transport the contaminated soils to the appropriate disposal facility within 30 days of origination.

- During handling of impacted soil, construction dust control best available control measures are to be employed to control fugitive dust. These should include, but not necessarily be limited to, standard construction-related dust control measures and vapor control measures, if needed, consistent with BAAQMD Regulation 6 per Section 7.2.
- During any activity involving impacted soil, the requirements of the SWPPP are to be followed to control storm water run-off, if any, particularly in the areas of impacted soil.

7.6 REQUIREMENTS FOR STOCKPILING

Contaminated soils, debris, suspect materials, and unknown structures that are excavated may be direct loaded onto trucks for offsite disposal under pre-existing waste manifest documentation or may be temporarily stockpiled until waste profiling and off-site transport of the materials can occur. Temporarily stockpiling the materials allows for grading activities to continue uninterrupted in the areas when such materials are initially encountered. The staging areas will coincide with the proposed laydown areas. The responsibility of transporting materials from the impacted area to the staging area will rest with the grading contractor. Staging areas may be modified, should site conditions require and allow for it; however, the Construction/Environmental Manager should be notified of any changes to the proposed staging area.

Contaminated soil must be covered during transportation to minimize impacts to air quality and prevent spills. Trucks will adhere to any plans prepared by the Construction Contractor, including following designating trucking routes, truck loading operations, and procedures for transportation of contaminated soil to licensed disposal facilities and waste manifest documentation procedures. In order to ensure wastes are tracked from their point of generation to ultimate disposal location, a state-approved manifest system will be implemented which shall comply with all provisions of appropriate transportation and disposal regulations. All waste manifest forms prepared in connection with disposal of soil from the Property will list Kapital Alameda, LLC as the waste generator and must be signed by an authorized representative of Kapital Alameda, LLC.

Although not anticipated, the Construction/Environmental Manager shall be notified of any soil that is brought onto the Property as import fill for backfilling purposes. Prior to being transported to the Property, potential import fill material will be adequately documented (includes listing the source location of the soil) and profiled (may include sampling and analysis if deemed appropriate), so as to prevent the introduction of contaminated fill material to the Property.

- Impacted soil is to be segregated from non-impacted soil in separate stockpile(s). To the extent feasible, stockpiled soil is to be placed on an impermeable membrane/sheeting (such as visqueen-type sheeting or bermed, intact pavement/floor slab) of sufficient thickness that it will not be penetrated by earth moving equipment.
- Access restrictions for pedestrian and vehicular traffic are to be placed with the appropriate signage around impacted soil stockpile(s). Run-off control measures are to be implemented consistent with Federal, State, and local regulations. These can include covering the stockpile(s) and placing a suitable impermeable sheeting-covered berm or sandbags around the base of the stockpile(s).
- The impacted soil stockpile(s) is (are) to be covered and secured or otherwise appropriately protected from the elements when not actively in use.
- Any excavation and handling activities that involve the impacted soil are to be performed by personnel in accordance with a HASP, including provisions for medical monitoring and medical clearance.
- The Construction/Environmental Manager will determine when impacted soil is sufficiently excavated and removed in accordance with this SGMP.
- The location and dimensions of the excavation will be documented by the Construction/Environmental Manager:

- in field notes,
- with a “to scale” field drawing that is linked to a permanent suitable landmark/benchmark outside of the impacted soil excavation (that will remain after the completion of development), and
- with photographs that include a date/time stamp.

7.7 PROTOCOL AND PROCEDURES FOR ENCOUNTERING DEBRIS AND MISCELLANEOUS UNIDENTIFIED ANOMOLIES

The procedures for assessing suspected contaminated materials and unidentified anomalies within AOCs can be used as a guidance for dealing with suspect materials encountered during over-excavation activities outside of the AOCs. When atypical debris and/or soil with non-native or odorous characteristics are discovered during over-excavation activities, it is recommended that such discoveries be communicated to the Construction/Environmental Manager immediately to ensure proper sampling and analysis can be conducted and unnecessary delays can be prevented. Section 9.0 of this SGMP outlines the appropriate notification procedures. At the discretion of the Construction/Environmental Manager staff, encountered materials shall be field screened and if necessary, samples collected and submitted to a certified laboratory for analysis.

7.8 IMPACTED SOIL DISPOSAL PROCEDURES

The following is a list of procedures to follow for disposing impacted soils:

- The Construction/Environmental Manager is expected to select an appropriate licensed disposal facility.
- Impacted soil is to be transported by a hauler licensed to transport the impacted soil and using the appropriate manifest documentation.
- Following removal of the impacted soil stockpile(s), the area beneath the impacted soil stockpile(s) is to be free of all impacted soil. This may require the over-excavation of the area where the impacted soil was stockpiled (e.g., if an impermeable membrane/sheeting was not placed beneath the impacted soil stockpile[s]). It may also involve the collection and analysis of confirmation soil samples for the COCs in underlying soil.
- Copies of all disposal facility manifests, signed by the disposal facility, are to be obtained by the Construction/Environmental Manager.
- Resumption of grading activities shall be based on the approval of the Construction/Environmental Contractor.

7.9 GROUNDWATER DEWATERING PPROCEDURES

Water that seeps into the excavation will be collected in sumps and pumped from the trench to maintain a condition dry enough to allow for proper construction. In order to conform with California Regional Water Quality Control Board – San Francisco Bay Region, National Discharge Pollution Elimination System (NPDES) requirements, the groundwater will likely need to be placed in large steel storage tanks (Baker Tanks) in order for sediments to settle out of suspension before discharging and/or loaded into tanker trucks for off-site disposal. The groundwater will also be sampled for potential contaminants and treated if appropriate as described later in this plan.

Dewatering System

The dewatering system for excavation work will include the placement of submersible sumps at alternating edges of the excavation approximately every 50 feet lineally along the trench. A sump will also be installed at each permanent pump station. The sumps will be placed inside of slotted pipe that is encased in ¾-inch gravel in order to protect the pumps and filter sediment. The slotted pipe sections will be attached to 10-inch- or 12-inch-diameter pipe casings. The casings will be constantly adjusted so that the sumps are lowered and maintained at an approximate depth of 2 feet below the bottom of the excavation at all times. The collected water is pumped to a header pipe and then to water tanks for settling/treatment prior to treatment and discharge.

Treatment of Groundwater

If discharge of groundwater to the sanitary sewer is necessary, other than potential removal of suspended solids, treatment of groundwater may not be required. If treatment is required, aboveground treatment of the extracted groundwater, such as by gravity sedimentation, will be performed prior to discharge. Additional treatment of metals, petroleum hydrocarbons, and/or VOCs may be required based on permit conditions, dewatering rates, and concentrations of target analytes encountered during the dewatering. When elevated metals, petroleum hydrocarbons, or VOCs are encountered, activated carbon adsorption using granular activated carbon (GAC) vessels will be performed prior to discharge.

8.0 CONSTRUCTION BEST MANAGEMENT PRACTICES

Construction Best Management Practices are management practices, operating procedures, or schedules of activities to control, reduce, or prevent discharge of pollutants from construction activities. It should be noted that there may be overlapping and/or additional Best Management Practices (BMPs) specified in the SWPPP and Dust Control Plan pertaining to the Project. The following BMPs are typical, and may be amended or otherwise revised by those plans, the Construction/Environmental Manager, and/or Kapital Alameda:

General

- Material or products will be stored in manufacturer's original containers.
- Storage areas will be neat and orderly to facilitate inspection.
- Check all equipment for leaks and repair leaking equipment promptly.
- Perform major maintenance, repairs, and washing of equipment away from the excavation.
- Designate a completely contained area away from storm drains for refueling and/or maintenance work that must be performed at the Property.
- Clean up all spills and leaks using dry methods (absorbent materials/rags).
- Dry sweep dirt from paved surfaces for general cleanup.
- Train employees to perform and apply these BMPs.

Concrete Breakout

- Avoid creating excess dust when breaking concrete. Prevent dust from entering waterways.
- Protect storm drains using earth dikes, straw bales, sandbags, absorbent socks, or other control measures to divert or trap and filter runoff.
- Shovel or vacuum saw-cut slurry and remove from the Property.

- Remove contaminated broken pavement from the Property promptly. Do not allow rainfall or runoff to contact contaminated broken concrete.

Excavation

- Schedule excavation work for dry weather periods when possible.
- Protect storm drains using earth dikes, straw bales, sandbags, absorbent socks, or other control measures to divert or trap and filter runoff.
- Avoid over-application by water trucks for dust control.
- Install temporary barriers around stockpile perimeters to prevent contact with storm water when required. Temporary barriers can be berms, dikes, silt fence, straw bales, or sandbag barriers. During the rainy season, cover inactive soil stockpiles or protect them with soil stabilization.
- Open trenches/excavations shall be inspected daily for readily observable indications of possible cave-ins, hazardous atmosphere or other hazardous conditions.
- Stockpiles of soil shall not be stored within 2 feet of a trench/excavation.
- If readily observable conditions are noted that could result in cave-in, hazardous atmosphere or other hazardous condition, exposed workers shall be removed from the area until the necessary precautions have been taken to address the concern.
- Where oxygen deficiency (atmospheres containing less than 19.5 percent oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, the atmosphere shall be tested before workers enter the work area.
- Adequate precautions shall be taken to prevent exposures to atmospheres containing less than 19.5 percent oxygen and or hazardous atmospheres, including proper respiratory protection or ventilation.

Track-out Prevention

Decontamination procedures shall be established and implemented by the Contractor to reduce the potential for construction equipment and vehicles to release soil, sand, gravel, aggregate, etc. onto public roadways or other off-site transfer.

- All truck tires shall be cleaned prior to leaving the project site.
- At a minimum, gravel will be placed at all project site access points by the Contractor and excess soil will be removed from construction equipment using dry methods (e.g., brushing or scraping)
- Decontamination rinse will be captured and stored in Department of Transportation (DOT) approved containers for subsequent testing and off-site disposal.

Pollution Prevention and Control

It is the Contractor's responsibility to ensure that no accidental release of hazardous substances is made to previously non-impacted soil and the environment (including surface water), surrounding the ISAs where remedial activities will be performed. The following are BMPs for storage activities:

- The Contractor's storage and equipment yard/area is to be a designated area on-site.
- The designated equipment yard is to be a minimum of 50 feet from the limits of all ISA excavations.
- It is recommended that all equipment maintenance be performed off-site. If on-site equipment maintenance takes place, it is to be performed in the designated equipment yard.
- In case of accidental discharge of maintenance-related liquids or fuel, they and any impacted soil are to be removed and stored in 55-gallon drums or other suitable container at the designated hazardous substances storage area. All listed wastes and hazardous wastes, are to be labeled, sealed, manifested, and hauled by an appropriate transporter to a treatment, storage, and disposal facility in accordance with all applicable regulations for disposal of hazardous waste.
- All hazardous materials (such as diesel fuel, gasoline, oil, grease, and other petroleum or chemical products) and hazardous wastes (collectively, hazardous substances) are to be stored in a designated hazardous substances storage area either within the designated equipment yard or at another location selected by the Contractor. All hazardous substance storage is to be consistent with BMPs and all applicable regulations, including labeling and signage in a lined, embanked area with a containment capacity that is 110 percent of the total quantity of all stored hazardous substances.

Refueling Operations

- It is recommended that all heavy equipment, trucks, and any other vehicles used on-site be refueled at an off-site fueling station.
- If on-site refueling is to take place, it is to occur only in the designated equipment yard, which is to be a minimum of 50 feet from all known ISAs. The following safety measures are recommended for refueling operations:
    - Flammable liquids may be drawn from, or transferred into, vessels, containers, or ASTs only through a closed piping system from approved safety cans by means of a device drawing from tank top or by gravity or pump through an approved hose and nozzle with a self-closing nozzle without a latch-open device.
    - In case of accidental discharge of fuel, it and any impacted soil is to be removed and stored in 55-gallon drums or another suitable container at the designated hazardous substances storage area. Hazardous wastes (including listed wastes) are to be labeled, sealed, manifested, and hauled away by an appropriate transporter to a treatment, storage, and disposal facility in accordance with all applicable regulations for disposal of hazardous waste.

9.0 NOTIFICATION PROCEDURES/CONTACT INFORMATION

The Construction/Environmental Manager will be present on-site during the removal of impacted soil and will be responsible for observing soil conditions and Contractor's activities. As part of this process, daily field reports documenting site activities will be completed and made available for inspection by authorized oversight personnel for the duration of the project. The Construction/Environmental Manager will complete daily field reports for each day that they are on-site. Entries will be complete and accurate enough to permit reconstruction of the Construction/Environmental Manager's field activities. Each page will be dated, and the time of entry noted.

If contaminated soils or suspect materials/contamination is identified by on-site personnel, the following notification procedure shall be followed:

1. The grading contractor shall notify the Construction/Environmental Manager immediately; and
2. The Construction/Environmental Manager evaluates issue and notifies appropriate personnel, including Property Owner; Property Owner and/or the Construction/Environmental Manager notify other contacts, as appropriate (see below).

Construction/Environmental Manager	Tetra Tech, Inc. 1999 Harrison Street, Suite 500 Oakland, CA 94612 Attn: Carl Lenker Tel: (626) 818-1661 Email: carl.lenker@tetratech.com
Property Owner	Kapital Alameda, LLC 1999 S. Bascom Ave., Suite 250 Campbell, CA 95008 Attn: Anjuli Habbas Tel: (408) 892-9945 Email: anjuli@kapitalp.com
General Contractor	TBD
Demolition Contractor	TBD
Grading Contractor	TBD
Geotechnical Engineer	Tetra Tech, Inc. 21700 Copley Drive, Suite #200 Diamond Bar, CA 91765 Attn: Michael Spira Tel: (714) 863-6513 Email: michael.spira@tetratech.com
Santa Clara Fire Department	Fire Station No. 1 / Fire Administration 777 Benton Street Santa Clara, CA 95050 Phone: 408-615-4900 Fax: 408-246-8652
Bay Area AQMD	The Bay Area AQMD 375 Beale Street, Suite 600 San Francisco, CA 94105 (415) 749-5000

10.0 REFERENCES

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Figures

Appendix A—Preliminary Development Plan