



**TERRAMAR**  
RETAIL CENTERS

June 18, 2015

**RECEIVED**

By Alameda County Environmental Health 11:34 am, Jun 19, 2015

Mr. Mark Detterman  
Senior Hazardous Materials Specialist, PG, CEG  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502

**RE: ENVIRONMENTAL SITE MANAGEMENT PLAN  
FORMER ROCKRIDGE CLEANERS AND TWO ADJACENT TENANT  
SPACES  
5100 BROADWAY (PORTION OF BUILDING 5)  
OAKLAND, CALIFORNIA**

Dear Mr. Detterman:

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,  
Terramar Retail Centers

Rick Henderson  
Vice President Construction & Design



**ENVIRONMENTAL SITE MANAGEMENT PLAN**

**Former Rockridge Cleaners and Two Adjacent Tenant Spaces**

**5100 Broadway (Portion of Building 5)  
Oakland, California**

**June 18, 2015**

**To: Alameda County Environmental  
Health Department**

Mark Detterman, PG, CEG  
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## **1.0 INTRODUCTION**

This Environmental Site Management Plan (SMP) has been prepared on behalf of the property owner to identify potential site conditions that may be encountered in the vicinity of the former Rockridge Cleaners tenant space at 5100 Broadway (5114 tenant space) during the upcoming planned redevelopment activities. The SMP addresses procedures to be followed by the construction contractor and other Property owner representatives during building demolition (structure and slab), soil grading, trenching, and excavation activities, until soil conditions are adequately understood, and presents field monitoring and reporting protocols.

The SMP is being prepared in the off-chance residual impacted soil is encountered during development activities. Tetra Tech previously completed soil, soil vapor and groundwater sampling in the vicinity of the former dry cleaner in 2001 and 2014. A limited release of tetrachloroethene (PCE) was identified in connection with the former dry cleaner along a short section of sanitary sewer behind the dry cleaner tenant space.

The SMP presents a framework to monitor field conditions, properly manage graded/excavated soil (if impacts are noted), and to collect soil samples for laboratory analysis (if warranted). The SMP will establish working guidelines to protect against nuisance conditions created by potentially impacted soils.

The SMP addresses building demolition and disturbances to soils at the former dry cleaner tenant space and the two adjacent tenant spaces, extending roughly 10-foot front and back of the tenant spaces. The SMP will be in effect until soil conditions are adequately understood after raising the slab, or if unexpected conditions are encountered at a later date within the SMP area. Additionally, the SMP will cover a small utility excavation associated with the installation of a temporary natural gas service, located in the vicinity of the sanitary sewer line, approximately 60 feet northwest of the top of the existing loading dock behind the Safeway store.

## **2.0 BACKGROUND**

### **2.1 Redevelopment Activities**

Terramar Retail Centers is redeveloping the existing approximate 16-acre Rockridge Shopping Center into the Shops at the Ridge. The shopping center is located at the corner of Broadway and Pleasant Valley Avenue (Figure 1). The development calls for demolition of the existing shopping center (Buildings 1 through 6) in two phases. Phase I includes demolition of Building 5 and Building 6, and the construction of new Buildings A, K, C and D (Figure 2). Phase I encompasses primarily the southeast half of the shopping center site (approximately 8 acres). This SMP applies only to the portion of Building 5 specified above, and the temporary natural gas utility excavation. The attached Figure 3 presents the SMP areas that will be assessed.

## 2.2 Property Environmental Conditions

Tetra Tech previously completed soil, soil vapor and groundwater sampling in the vicinity of the former dry cleaner in 2001 and 2014. A limited release of tetrachloroethene (PCE) was identified in connection with the former dry cleaner along a short section of sanitary sewer behind the dry cleaner tenant space. Low concentrations of PCE were detected in soil at three locations (Figure 3) in 2001: SB-11-5' (6.3 micrograms per kilogram,  $\mu\text{g}/\text{Kg}$ ); SB-3-4' (14  $\mu\text{g}/\text{Kg}$ ); and SB-4-3.5' (17  $\mu\text{g}/\text{Kg}$ ). Elevated concentrations of PCE were subsequently detected in soil vapor samples collected in 2014 from two locations between soil borings SB-3 and SB-4: VMP-2 (3,800 micrograms per cubic meter,  $\mu\text{g}/\text{m}^3$ ); and VMP-3 (3,600  $\mu\text{g}/\text{m}^3$ ). The elevated soil vapor concentrations exceeded the commercial Environmental Screening Level (ESL) and California Human Health Screening Level (CHHSL) values for PCE. PCE was not detected in soil (SS-VMP-1-1.5') or soil vapor (SS-VMP-1) in borings completed inside the dry cleaner tenant space in 2014, or in groundwater samples collected in 2001 and 2014 from two borings (SB-2 and SB-1) completed in front of the dry cleaner space (parking stall area). PCE was not detected in soil vapor at VMP-1, also completed in front of the dry cleaner in 2014.

The attached Figure 3 presents a site map and prior soil boring and vapor monitoring point locations in the vicinity of the former dry cleaner. As a conservative measure, Tetra Tech has proposed to excavate soil and piping along a section of the sanitary sewer line, from behind the former dry cleaner, downstream to the area of boring SB-3 (Figure 3). The purpose of the excavation is to remove the apparent source area for the elevated PCE soil vapor concentrations (although no soil source area has been identified). The excavation will be completed once utilities have been disconnected in the area as part of site redevelopment, and access is possible.

The SMP presents a framework to monitor field conditions, properly manage graded/excavated soil (if impacts are noted), and to collect soil samples for laboratory analysis (if warranted). The SMP will establish working guidelines to protect against nuisance conditions created by potentially impacted soils. Residual soil impact is not expected to be encountered during the slab removal or any shallow grading activities because residual soil impacts were not detected in soil (to 1.5-feet) or soil vapor beneath the slab in 2014. The 2014 borings were completed at the rear of the tenant space, where former dry cleaning equipment would have been located.

As there is some uncertainty as to the specific configuration of the Rockridge Cleaners lease space over time, the SMP will cover the 5114 tenant space and the two adjacent tenant spaces – 5112 Broadway (former First United Services Credit Union) and 5116 Broadway (former North Oakland Village) – and will also focus on the exterior areas to the front and rear of all three tenant spaces. Deliveries of bulk PCE in drums would have likely occurred at the rear, and the rear of the dry cleaner would also have been the likely area for exterior storage of PCE. Dry cleaning equipment would have been located at the rear (northwest end) of the tenant spaces, as customers entered from the front in the southeast.

### 3.0 SITE MANAGEMENT PLAN

Procedures to be followed during disturbance of soils within the SMP areas are described below.

A Tetra Tech staff member or other environmental professional will be on-site to field monitor soil conditions whenever building demolition, slab demolition and/or disturbance of subsurface native soils are being performed in the SMP areas, up until subsurface conditions are understood. The SMP will also apply if unexpected conditions are encountered at a later date during construction. **Note: As construction activities are conducted in phases, with different subcontractors operating at various times, with schedule delays common, it is not practical for Tetra Tech or another environmental profession to be on-site for the duration of the project. Therefore, it is incumbent on Terramar or Swinerton to notify Tetra Tech, or another environmental profession, of pending work in the SMP area(s) or unexpected conditions outside the SMP area(s), so that visiting the site can be arranged, and worker safety maintained.**

Construction contractors working on-site will not be 40-hour HAZWOPER trained, unless working within areas that show evidence of soil impact. If soil impact is suspected, based on elevated field instrument readings (described below) or other field observations, or if laboratory sample results document soil impact, then the contractor, in consultation with the environmental professional, will determine whether 40-hour trained personnel will be used for working in those areas.

#### 3.1 Field Screening Protocol

Soil will be field screened in SMP areas during disturbance of the native soils to assess whether soil impacts are present. Specific approaches to be used for field screening are discussed below.

In general, the field screening protocol will consist of using a hand-help photo-ionization instrument (PID). A Tetra Tech field representative, or other environmental professional, will perform the field screening. Field screening of soil will be performed by placing the PID probe tip near the soil surface, and/or by using the headspace method – a small volume of soil is placed into a plastic bag, the bag is sealed and allowed to equilibrate for approximately 30 seconds, the bag is opened slightly and the PID probe tip is inserted into the bag and a reading is collected. Field screening PID readings will be written in a log book, along with notable field observations, if any.

One of two PID instruments will be used, depending on availability – an Ion Science Phocheck+ PID, or a MiniRae 3000 PID. Spec sheets for each instrument are readily available on-line. Each instrument is state-of-the-art for quantifying total volatile organic compounds (VOCs) in air, and each has features to minimize interference with high relative humidity, which is expected to be encountered during the headspace analysis. Each instrument will have a standard 10.6eV lamp, capable of ionizing VOCs, including

PCE. Each instrument will be field calibrated using isobutylene. A field screening value of 10 part per million by volume (ppmv) above background using the headspace method will be used as an action level to trigger follow-up soil sampling for laboratory analysis. The 10 ppmv screening level will represent a total VOC reading, which would include a variety of VOCs.

Each day field screening is to be performed, a series of background readings will initially be generated using soil from on-site locations away from potential source areas. Those values will be averaged to form a background value for that day. Headspace field readings consistently above 10 ppmv plus background will trigger collection of at least one soil sample for laboratory analysis of VOCs using EPA Method 8260B. Soil samples submitted for laboratory analysis will be analyzed on a rush basis, either 1-day, 2-day or 3-day turn-around time, as circumstances dictate. Laboratory results will be documented and submitted to the Property owner.

The field screening trigger level of 10 ppmv plus background will also be used to determine whether 40-hour HAZWOPER trained construction workers and equipment operators are needed in areas showing potential soil impacts. If field instrument readings of 10 ppmv plus background are consistently recorded in an area, then the Site Superintendent will be notified by the environmental professional, and the Site Superintendent, in consultation with the environmental professional, will determine whether 40-hour trained HAZWOPER personnel will be used for working in those areas. In such a case, only work being performed in that particular area will be suspended until 40-hour HAZWOPER trained personnel are available.

It is noted that soil moisture and other factors, such as equipment exhaust or construction equipment fuel storage, can influence field instrument readings, resulting in false positive results. If readings are unusually high in the absence of other indications of soil impacts, suggesting instrument failure due to excess moisture or other factors, a soil sample will not be collected for laboratory analysis, and a replacement instrument will be obtained.

In the event that field PID readings trigger the need for soil sampling as described above, then the Site Superintendent will be notified and appropriate 40-hour HAZWOPER trained personnel will be used to perform a limited assessment in the area of potential soil impact. One soil sample will be collected for laboratory analysis in the area showing elevated PID readings, as described above. Also at that time the potential VOC-impacted area will be assessed by performing small excavations with the bucket of a backhoe/trackerhoe or equivalent type of equipment to further assess soil conditions and access additional areas for field screening. Additional soil samples may be collected for laboratory analysis to provide more certainty of soil conditions within and near the area of potential impact. Soil samples will be analyzed using a rush turn-around time.

### **3.2 Building Demolition and Slab Removal**

A Tetra Tech staff member, or other environmental professional, will be on-site during building demolition and slab removal in the SMP areas to field screen soil. Soil headspace readings will be measured using soil collected from the newly excavated soil surface. Field screening will be performed until soil conditions are adequately understood.

### **3.3 Site Grading and Trenching/Excavation**

A Tetra Tech staff member, or other environmental professional, will be on-site to field screen soils during grading and/or trenching/excavation activities in the SMP areas. Only minor grading is initially anticipated at the dry cleaner SMP area following building demolition. The bulk of the grading and new utility trenching work will occur when construction of the new building (Building K) begins a later date. [Note: Tetra Tech will be conducting additional soil and soil vapor sampling across the dry cleaner SMP area as soon as possible, in order to more adequately characterize subsurface conditions to 5-feet in depth, which is also the maximum expected depth for redevelopment excavation/trenching in this area. The additional sampling is described in the Tetra Tech Work Plan dated June 12, 2015.]

For the small utility trench excavation for the temporary natural gas connection (Figure 3), Tetra Tech, or other environmental professional, will be on-site to observe soil conditions and collect one soil sample. The excavation is expected to be approximately 10-feet long by 2-feet wide, by 3-feet deep. The small excavation volume (< 3-4 cubic yards) will be segregated, field screened, stockpiled and covered. One discrete soil sample will be collected from the stockpile for VOC analysis using EPA Method 8260B.

Soil from trench excavation will be retrieved after the backhoe bucket places the soil on the ground surface. Trenches and excavations will not be entered. Soil headspace PID readings will be collected throughout each work day and results recorded in the field notebook by Tetra Tech or other environmental professional. If no VOCs are detected in the stockpiled soil, the soil will be graded out on-site as part of redevelopment work.

### **3.4 Unexpected Below Grade Features**

If unexpected below grade features are encountered during demolition work in the SMP areas, such as suspected soil impact, unusual piping, or other objects that could have been associated with the former dry cleaner, the Site Superintendent and the environmental professional shall be notified. If impacted soil is suspected, the Site Superintendent will direct the equipment operator(s) to stop work if not 40-hour HAZWOPER trained. One or more 40-hour HAZWOPER trained workers will be brought to the work area to resume work. The environmental professional will observe soil conditions and field screen soil. Suspected impacted soil, once excavated, will be segregated, placed on plastic sheeting, sampled for VOCs and possibly other analyses as suggested by the observations, and covered with plastic sheeting.

### **3.5 Unexpected Conditions Outside the SMP Areas**

If unexpected below grade features or potentially impacted soils are observed during site redevelopment activities outside of the prescribed SMP areas, work should be stopped in that area and the Site Superintendent notified. Terramar will then make arrangements for Tetra Tech, or another environmental profession, to evaluate the area for potential inclusion into the SMP.

### **3.6 Perimeter Air Monitoring**

A formal work area perimeter air monitoring program is not proposed for this site because impacted soil is not expected to be encountered, subsurface work within the SMP areas will be generally shallow (trenching only for the temporary natural gas line at this point), and because the SMP areas do not cover the entire site, but rather only a small portion of the site. Perimeter air monitoring typically involves collecting air samples at fixed locations using pumps with cartridges. Water spray will be sufficient for suppressing fugitive dust emissions in the SMP areas.

## **4.0 PROJECT CONTACTS**

Project contacts are as follows:

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**Alameda County Environmental Health Dept.**

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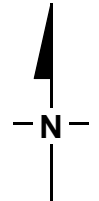
**5.0 RECORD KEEPING AND REPORTING**


Tetra Tech will record field observations and field screening results in a bound field notebook. Photographs of field activities will be taken. Tetra Tech will prepare brief technical summary documents as needed, typically in memo format, to quickly transmit field screening and soil sample results (if any) and other information during the course of the field screening. The technical summary document(s) will be prepared if evidence of soil impact is encountered; in such a case the summary documents will be submitted to the Property owner, Site Superintendent, and the ACEHD.

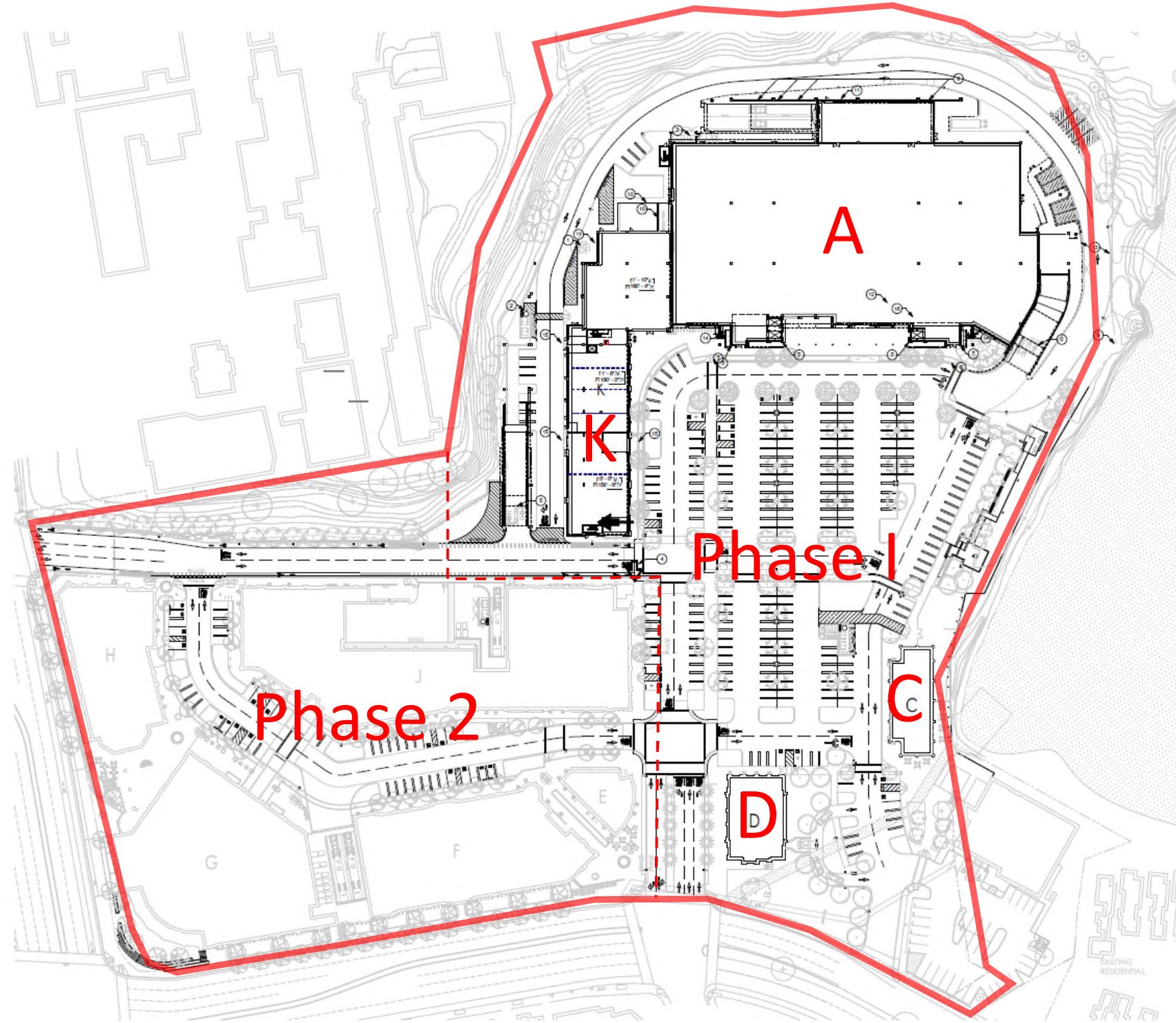
A brief summary report will be prepared at the conclusion of the SMP project. The report will be submitted to the Property owner and the ACEHD. The report will describe the field monitoring performed and will transmit copies of laboratory analytical data sheets and chain of custody forms, if any. All field instrument readings will be provided. Copies of daily field notes will be included as an attachment. A photographic log will also be included. The report will document discovery and disposal of impacted soil, if any.



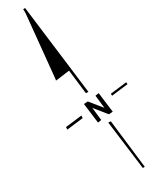
SOURCE: Google Earth Pro, April 5, 2014.



TITLE:		<b>Site Map - Existing Rockridge Shopping Center</b>	
LOCATION:		<b>5100 Broadway Oakland, California</b>	
 <b>TETRA TECH</b>	CHECKED:	TC	<b>FIGURE:</b>  <b>1</b>
	DRAFTED:	KDH	
	FILE:	117-7429001.	
	DATE:	05-19-15	



SOURCE: JRDV Architects, Drawing AS111, May 30, 2014.



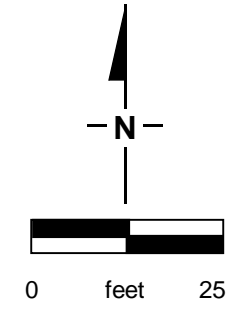
TITLE: <b>Redevelopment Plan - Proposed Shops at the Ridge</b>		
LOCATION: <b>5100 Broadway Oakland, California</b>		
 <b>TETRA TECH</b>	CHECKED: TC	FIGURE: <b>2</b>
	DRAFTED: KDH	
	FILE: 117-7429001.	
	DATE: 05-19-15	



SOURCE: Google Earth Pro, April 5, 2014.

- Soil Boring – 2001 (GeoTrans)
- Soil Boring – 2014 (Tetra Tech – formerly GeoTrans)
- + Soil Vapor Monitoring Point - 2014 (Tetra Tech)
- + Sub-Slab Vapor Monitoring Point – 2014 (Tetra Tech)

- - - Sanitary Sewer – approx. 7' bgs
- - - Storm Drain
- - - Water Line
- - - Natural Gas Line
- S Sanitary Sewer Man Hole
- T Existing Transformer
- X Removed Transformer
- - - Chain Link Storage Enclosure



<b>TITLE: SMP Boundaries - Former Rockridge Cleaners</b>			
<b>LOCATION: 5114 Broadway Oakland, California</b>			
<b>TETRA TECH</b>	CHECKED:	TC	<b>FIGURE: 3</b>
	DRAFTED:	KDH	
	FILE:	117-7429001.	
	DATE:	05-19-15	