

CO-475

Ms. Eva Chu  
Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, 2<sup>nd</sup> floor  
Alameda, California 94502

October 1, 2002  
1705-1B

**RE: Work Plan for Supplemental Soil Quality Evaluation  
1300 Powell Street  
Emeryville, California**

Dear Ms. Eva:

On behalf of Pulte Home Corporation, we are pleased to present this work plan for supplemental soil quality evaluation at 1300 Powell Street in Emeryville. Based on the results of confirmation soil samples from over-excavation activities at the site and previous soil quality data, areas of soil impact appear to be present north of the eastern portion of the existing excavation and under the building. We propose the following scope of work to further define the extent of soil impact in these areas. The purpose of this work is to evaluate whether additional remedial excavation is required in these areas.

#### **Pre-Field Activities**

Prior to beginning work, we will contact Underground Service Alert (USA) to attempt to locate public underground utilities in the area of our exploratory borings. A drilling permit application also will be submitted to the County of Alameda Public Works Agency for their approval.

#### **Soil Quality Evaluation - ~~1300 Powell Street Building~~**

Soil Sampling. To evaluate the presence of residual total petroleum hydrocarbons (TPH) in the diesel and motor oil ranges, our field engineer or scientist will direct a subsurface exploratory program, supervise, log, and sample five to eight

exploratory borings to a depth of approximately 10 feet. The borings will be located on a 12-foot by 12-foot grid east of the area of remaining soil impact (east of confirmation sample SV-38) beneath the building. Based on field observations, borings will be advanced to the east until the apparent area of visible impact has been delineated. The subsurface investigation will be performed using a limited access rig equipped with Direct Push Technology equipment. The borings will be advanced by hydraulically driving a 2-inch-diameter outer casing with an inner split spoon sampler, which contains a clear acetate sample liner. As the tools are advanced, the soil sample will be collected within the inner split spoon sampler. The split spoon sampler will be withdrawn to the surface while the outer casing remains in-place. The new sampler then will be lowered into place and the tools advanced further to collect the next soil sample.

Soil samples for will be collected in acetate liners. The ends of the liners will be covered in aluminum foil or Teflon film, fitted with plastic end caps, taped, and labeled with a unique identification number. The samples then will be placed in a water ice-chilled cooler and transported to a state-certified analytical laboratory with chain of custody documentation. The soils will be logged using the Unified Soil Classification System (ASTM D-2487). Soil vapors from each sample will be monitored with an organic vapor meter (OVM). The soil will be placed in a Ziplock™ bag for several minutes; the bag then will be pierced with the OVM probe in order to record the organic vapor levels present. Based on field observations, three soil samples from each boring with the highest OVM readings will be collected and submitted to the laboratory.

Laboratory Analyses. One soil sample from each boring will be analyzed for TPH as diesel and TPH as motor oil (EPA Test Method 8015). The laboratory analyses will be performed on a 24-hour rush laboratory response.

#### **Soil Quality Evaluation – Northern Excavation Boundary**

Soil Sampling. To evaluate soil quality north of the existing excavation, our field engineer or scientist will direct a

subsurface exploratory program, supervise, and sample ~~live borings~~ exploratory test pits to depths of approximately 8 to 10 feet. The borings will be located on a 25 foot by 25-foot grid north of the northeast portion of the existing excavation.

The subsurface investigation will be conducted using an excavator. The soils sampled from the apparent zone of contamination will be logged using the Unified Soil Classification System (ASTM D-2487). Soil vapors from each sample will be monitored with an organic vapor meter (OVM). The soil will be placed in a Ziplock™ bag for several minutes; the bag then will be pierced with the OVM probe in order to record the organic vapor levels present. One soil sample will be collected from each test pit for laboratory analysis based on field observations.

Laboratory Analyses. Soil samples will be analyzed for TPH as diesel and TPH as motor oil (EPA Test Method 8015). The laboratory analyses will be performed on a rush 24-hour laboratory response.

#### **Sampling Equipment Decontamination**

All sampling equipment will be thoroughly cleaned with an aqueous solution of tri-sodium phosphate and distilled water or steam cleaned. The cleaning procedure will be repeated between each sampling location.

#### **Report**

The results of the supplemental soil quality evaluation will be added to the remedial action completion report for the Site.

Very truly yours,

**Lowney Associates**

Mark J. Arniola, R.G., R.E.A.  
Senior Project Geologist

PML:MJA

Copies: Addressee (1)

Pulte Home Corporation (1)

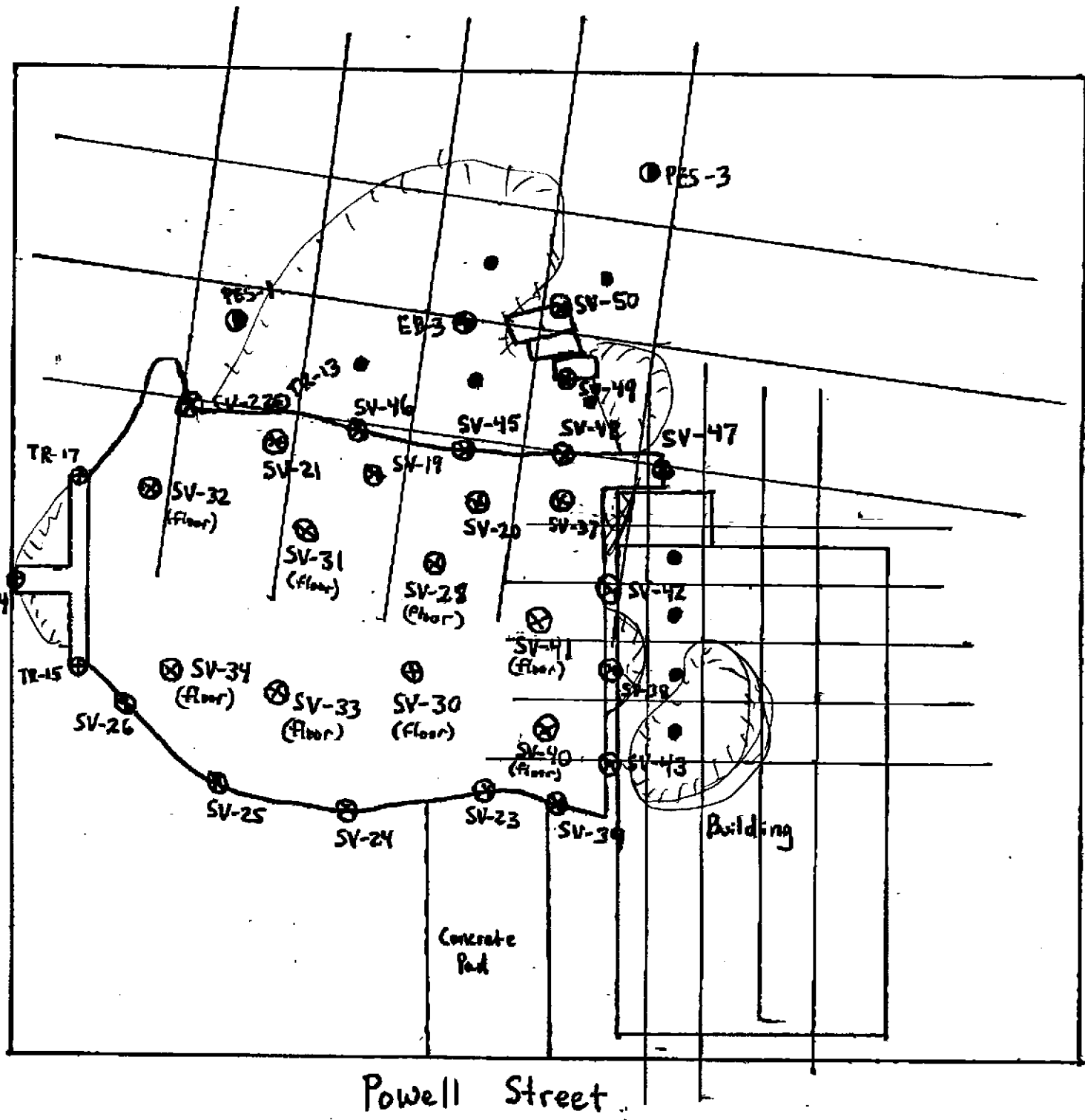
Attn: Mr. Mike Kim

Attachments: Figure 1. Sketch Map

OK, 1424-9C Supplemental Soil Sampling WP 100102.DOC  
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Scale in Feet  
0 30  
TR-4



Explanation  
 Proposed soil  
 Sample location

Powell Street

Doyle Avenue

Concrete Pad

Building