A·C·C ENVIRONMENTAL CONSULTANTS
An Employee Owned Company

November 27, 2007

Ms. Beverly Adamo
Livermore Amador Valley Transit Authority
1362 Rutan Drive, Suite 100
Livermore, California 94551

RE: Work Plan - Limited Subsurface Soil Boring Investigation
1362 Rutan Drive,, Livermore, California
ACHCSA SLIC Case RO0002993
ACC Project Number 2052-001.00

Dear Ms. Adamo:

ACC Environmental Consultants, Inc., (ACC) presents this Work Plan (WP) to perform a limited subsurface characterization at Livermore Amador Valley Transit Authority (LAVTA) , 1362 Rutan Drive, Livermore, California (Site). The work described here is designed to address concerns expressed by the Alameda County Health Care Services Agency (ACHCSA) in its September 14, 2007 letter.

INTRODUCTION

Following receipt of the February 9, 2007 *Remote Waste Oil Drain Removal Sampling Report* prepared by Gettler-Ryan Inc. for LAVTA, ACHCSA prepared a letter dated September 14, 2007 summarizing its technical comments and requesting a Work Plan to perform additional subsurface investigation in the vicinity of the remote waste oil drain.

BACKGROUND

The Site is located at 1362 Rutan Drive, Livermore, California (Figure 1). LAVTA vehicles are maintained at this facility. In December 2006, Gettler-Ryan Inc. removed one remote waste oil drain and associated piping (Photographs 1 and 2), removed approximately 1.0 cubic yard of soil, collected four excavation sidewall or bottom soil samples, and collected one 4-point stockpiled soil sample. Soil samples were analyzed for suspect constituents of concern as total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tert amyl methyl ether (TAME), tert-butanol (TBA), 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (1,2-DBA), total oil and

grease (TOG), semi-volatile organic compounds (SVOCs), and five leaking underground fuel tank metals (5 LUFT metals). The stockpile composite soil sample was analyzed for TPHg, TPHd, BTEX, MTBE, DIPE, ETBE, TAME, TBA, 1,2-DCA, 1,2-DBA, TOG, SVOCs, 5 LUFT metals, volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs).

Soil sample analytical results reported relatively minor concentrations of TPHd-range petroleum hydrocarbons and TOG in soil samples EXB-1-5, SW-1-3, and SW-2-2.5. Elevated concentrations of TPHd-range petroleum hydrocarbons and TOG were reported in soil sample SW-3-2.5. No significant TPHg, BTEX, fuel oxygenates as MTBE, DIPE, ETBE, TAME, TBA, scavengers as 1,2-DCA, 1,2-DBA, SVOCs, VOCs, PCBs, or 5 LUFT metals were reported in the sidewall or bottom soil samples or in the stockpiled soil composite sample.

In its September 14, 2007 comment letter, ACHCSA requested: 1) additional information about the suspect waste oil release; 2) additional information about the excavation and disposal of excavated soil; 3) additional data regarding the extent of suspect petroleum hydrocarbon contamination in soil; and 4) additional data regarding the potential that groundwater has been impacted.

ADDITIONAL INFORMATION

The primary release appears to have occurred at the point the plastic flexible piping joined the galvanized piping shown in Photograph 2. This location would be almost immediately above the location of soil sample EXB-1-5 (collected at 5 feet bgs) and next to the location of soil sample SW-3-2.5 (collected at 2.5 feet bgs). As shown in Photographs 1 and 2, the excavation area shown in Figure 2 comprises the small concrete berm area shown in Photograph 1 and the piping and cleanout shown in Photograph 2 which is under the plywood sheet shown in front of the concrete berm area shown in Photograph 1. Based on the location of the former piping cleanout, soil sample SW-1-3 was collected 1.0 foot west of the cleanout, soil sample SW-2-2.5 was collected 1.2 feet south of the cleanout, and soil sample SW-3-2.5 was collected 1.0 foot east of the cleanout.

Based on discussion with onsite personnel, the remote waste oil drain was formerly located within the “excavation area” depicted on Figure 2 and all equipment associated with the former remote waste oil drain was removed. Immediately adjacent to the “excavation area” is a floor drain cleanout piped to a vent line leading up to the ceiling. This vent line appears to be approximately 6 inches below the concrete slab or approximately at the same depth as the plastic flexible piping that joined the galvanized piping and is the source of the waste oil release. Based on observations in the cleanouts, the vent piping is currently sitting in compacted engineered fill that underlies the reinforced concrete slab. Therefore, there is no apparent preferential migration along the vent line, and proposed soil borings B1 and B2 have been located between soil sample SW-3-2.5 and the vent line to further characterize soil in this area. No other utilities or preferential pathways at depth are located in proximity to the “excavation area.”

Gettler-Ryan Inc. collected soil samples on December 18, 2006 and likely removed the former remote waste soil drain and excavated the reported one cubic yard of soil the previous week of December 11, 2006. No equipment was reinstalled and the excavation was restored with engineered fill and covered with concrete (Photographs 3 and 4).

ACC understands the LAVTA disposed of the stockpiled soil. Proof of disposal can be submitted under separate cover.

SCOPE OF WORK

To further characterize subsurface soil conditions in the vicinity of soil sample SW-3-2.5, ACC proposes the following scope of work:

- Advance four to five exploratory soil borings to total depths of approximately 12 feet bgs to log encountered soils and collect representative soil samples as estimated in Table 1;

- Collect a minimum of eight representative soil samples from soil borings B1 through B4 (and optional soil boring B5), and collect a grab groundwater sample from soil borings B4 if groundwater is encountered less than 24 feet bgs;

- Submit each soil and grab groundwater sample for analysis of total extractable petroleum hydrocarbons as diesel and motor oil (TEPH) by EPA Method 8015; and

- Prepare a summary report of findings for submission to the ACHCSA.

RATIONALE FOR THE PROPOSED SCOPE OF WORK

The data summarized in the February 9, 2007 Gettler-Ryan letter report indicated elevated TPH concentrations in one sidewall sample but provided limited additional data to help ACHCSA evaluate the degree and extent of the identified waste oil release at the former remote waste oil drain. While the former remote waste oil drain was removed, no information was provided regarding its features or how the excavation was restored.

The proposed scope of work is designed to obtain the requested subsurface Site assessment data requested by ACHCSA in a cost-effective fashion. Four to five continuously cored Geoprobe® soil borings will be advanced at select locations adjacent to the former remote waste oil drain to log and collect additional sample soils and one soil boring will be advanced to first encountered groundwater to obtain a grab water sample or to a maximum depth of 24 feet bgs.

ACC proposes to advance two exploratory borings at select locations adjacent to soil sample SW-3-2.5 and one soil boring adjacent to the building wall north of soil sample EXB-1-5. Two soil samples will be collected in each soil boring and the six soil samples will be analyzed for total extractable petroleum hydrocarbons (TEPH) as diesel and motor oil by EPA Method 8015. Encountered soils will be logged and screened with a ppbRAE photoionization detector

calibrated to measure volatile constituents in air in parts per billion. PID readings may be used to prioritize soil samples for analysis or soil samples may be analyzed from depths deemed to optimize the quality of subsurface characterization data. Soils will be specifically logged to assess potential petroleum hydrocarbon migration potential and identify any field indications of impact such as petroleum hydrocarbon odor, soil discoloration, or elevated PID reading.

ACC believes that the estimated scope of work and number of soil samples will provide sufficient data to adequately characterize soil adjacent to soil sample SW-3-2.5 and address ACHCSA concerns (Figure 2). As summarized in Table 1, soil borings B1 and B2 will be advanced in proximity of soil sample SW-3-2.5 and. Soil boring B3 will be an approximate 2.5 feet "step out" soil boring from soil sample SW-3-2.5. Soil boring B4 will be located immediately north of the former remote waste oil drain and the "excavation area." Soil boring B5 will be located in proximity to any initial soil borings that exhibit field indications of waste oil impact such as characteristic odor, apparent soil staining, or elevated PID reading. Since ACC utilizes a ppbRAE PID calibrated in parts per billion, soil can be effectively screened with the PID to help prioritize samples and identify suspect waste oil impact in the field. All soil samples will be analyzed for TEPH as diesel and motor oil as the suspect constituents of concern.

Additional soil samples will be collected and held by the laboratory in the event additional analyses is warranted based on the initial reported analytical results in shallow soil samples. Soil boring locations will be finalized following utility clearance from Underground Service Alert (USA) but may be changed in the field based on subsurface observations, physical limitations, or proximity to known or suspect utilities. The ultimate goal of this work will be to obtain a finding of No Further Action from the ACHCSA regarding the waste oil release at the former remote waste oil drain.

TABLE 1 – PROPOSED SAMPLE DEPTHS & ANALYSES

Soil Boring	Sample Depths (bgs)	Matrix	Constituent Analysis	Comments
B1	3.5-4.0 7.5-8.0 11.5-12.0	Soil Soil Soil	TEPH TEPH Hold	Located next to highest reported waste oil result
B2	3.5-4.0 7.5-8.0 11.5-12.0	Soil Soil Soil	TEPH TEPH Hold	Located next to highest reported waste oil result
B3	3.5-4.0 7.5-8.0 11.5-12.0	Soil Soil Soil	TEPH TEPH Hold	Located approximately 2.5 feet from highest reported waste oil result
B4	3.5-4.0 7.5-8.0 11.5-12.0 21-24	Soil Soil Soil Water	TEPH TEPH Hold TEPH	Located west of the former remote waste oil drain Sample GW if encountered
B5 (Optional)	3.5-4.0 7.5-8.0 11.5-12.0	Soil Soil Soil	Hold Hold Hold	Locate soil boring in proximity to any soil boring exhibiting field indications of waste oil impact

DRILLING PROGRAM

A drilling permit will be obtained from the Zone 7 Water Agency prior to fieldwork. The proposed soil boring locations are illustrated on Figure 2. All soil borings will be clearly marked and outlined in white paint. Underground Service Alert will be notified at least 2 business days prior to fieldwork and a site-specific Health and Safety Plan will be available onsite during all field work activities.

Exploratory soil borings will be advanced using a truck-mounted hydraulically driven Geoprobe® sampling tool equipped with 2.0-inch inside diameter clear acetate liners. Drilling will be performed under the direction of a Professional Geologist, and the subsurface materials in the borings will be identified and logged according to the Unified Soil Classification System. The sampling probe and rods will be pre-cleaned prior to use and between sample drives by washing them with a trisodium phosphate and potable water solution and two potable water rinses. The work will be conducted in one day and soil cuttings will be containerized onsite.

If significant soil impacts are noted in a soil boring, such as strong petroleum odor, soil staining, or elevated PID reading, ACC may additionally collect additional soil samples in that soil boring. The grab groundwater sample will be collected by continuously coring to 20 feet bgs, installing temporary 1-inch-diameter PVC slotted well casing, and collecting a grab sample of groundwater that enters the temporary well casing. The grab groundwater sample will then be collected using disposable polyethylene tubing equipped with a check valve or bailed with a polyethylene bailer inserted into the temporary well casing. The grab groundwater samples will be placed in approved,

laboratory-supplied sample vials without headspace, sealed, and stored in a pre-chilled, insulated container pending transport to a state-certified analytical laboratory. Every effort will be made to minimize disturbance of the groundwater samples prior to placement in the sample containers and maintaining the samples at the four degrees Celsius prior to analysis.

The soil samples will be submitted to a state-certified analytical laboratory following standard chain of custody procedures for analysis. ACC is requesting 5 day turnaround time for analytical results in the event additional analysis of held soil samples is warranted. Initial soil sample analytical results will be forwarded to ACHCSA in the event it requests additional analyses in deeper soil samples. Following drilling and sample collection, the soil boring will be abandoned with neat cement to just below the surface (3 to 6 inches). The soil boring will then be completed with quick-set concrete to grade to match the surrounding concrete material.

REPORT PREPARATION

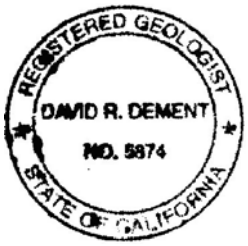
A technical report discussing fieldwork, observations and findings, soil boring logs, analytical results, conclusions, and recommendations will be prepared for submission to the ACHCSA. In addition, any other information requested in the September 14, 2007 letter obtained in the interim will be incorporated into the report of findings. Assuming the Work Plan is approved by January 2, 2008, ACC can perform the soil borings in January 2007 and anticipates that the report will be submitted on or before February 29, 2008.

HEALTH AND SAFETY PLAN

A site-specific health and safety plan which encompasses the proposed work at the Site and complies with the requirements of 29 CFR Part 1910.120 will be prepared and present during field activities.

If you have any questions concerning this work plan, please call me at (510) 638-8400, ext. 109 or email me at ddement@accenv.com.

Sincerely,



David DeMent, RG, REA II
Division Manager / Senior Geologist

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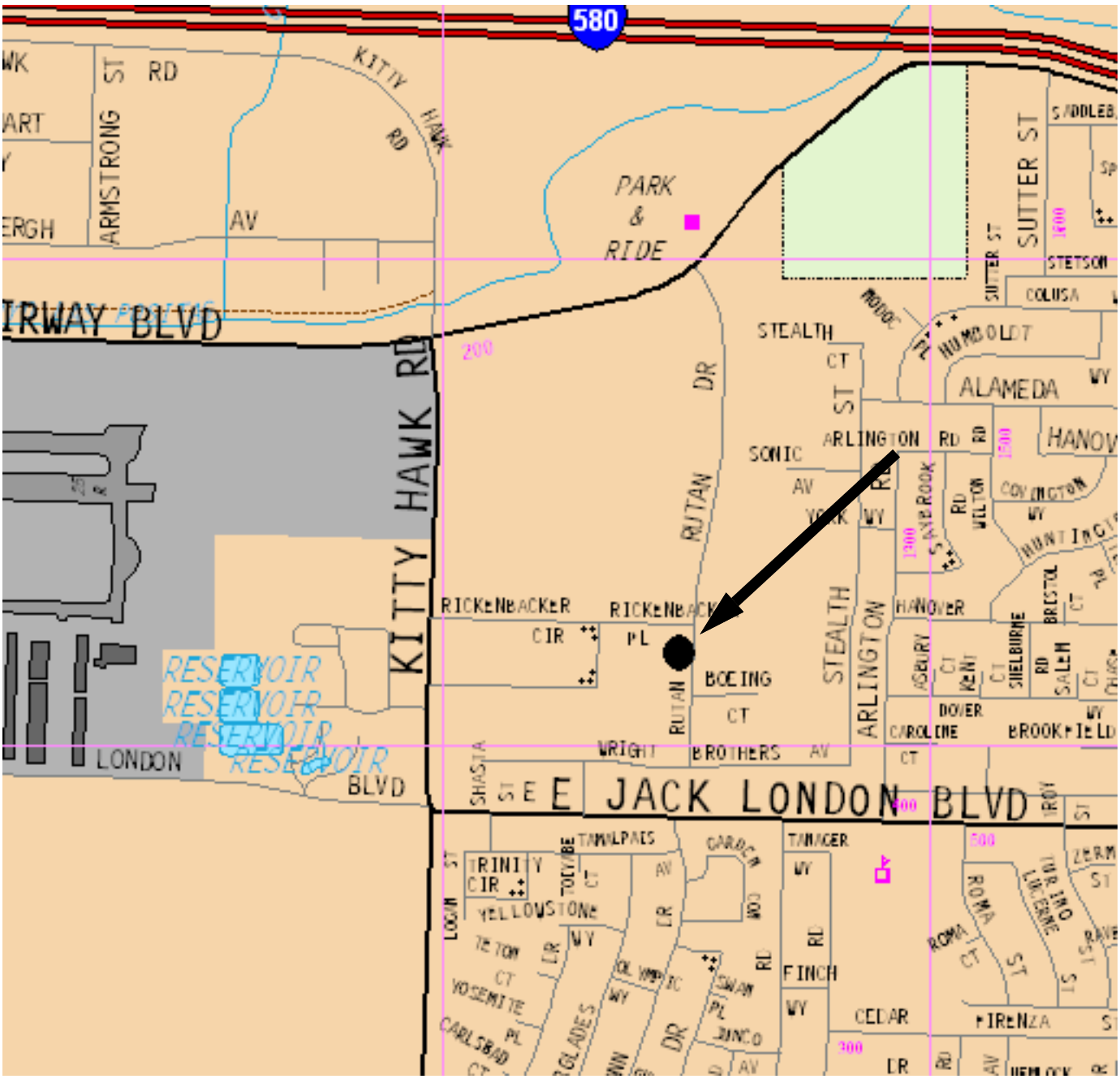

Source: The Thomas Guide, Bay Area Metro

Title: ***Location Map***
1362 Rutan Drive
Livermore, California

Figure Number: 1	Scale: None
Project Number: 2052-001.00	Drawn By: KRB
	Date: 11/26/07

A·C·C ENVIRONMENTAL CONSULTANTS
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404

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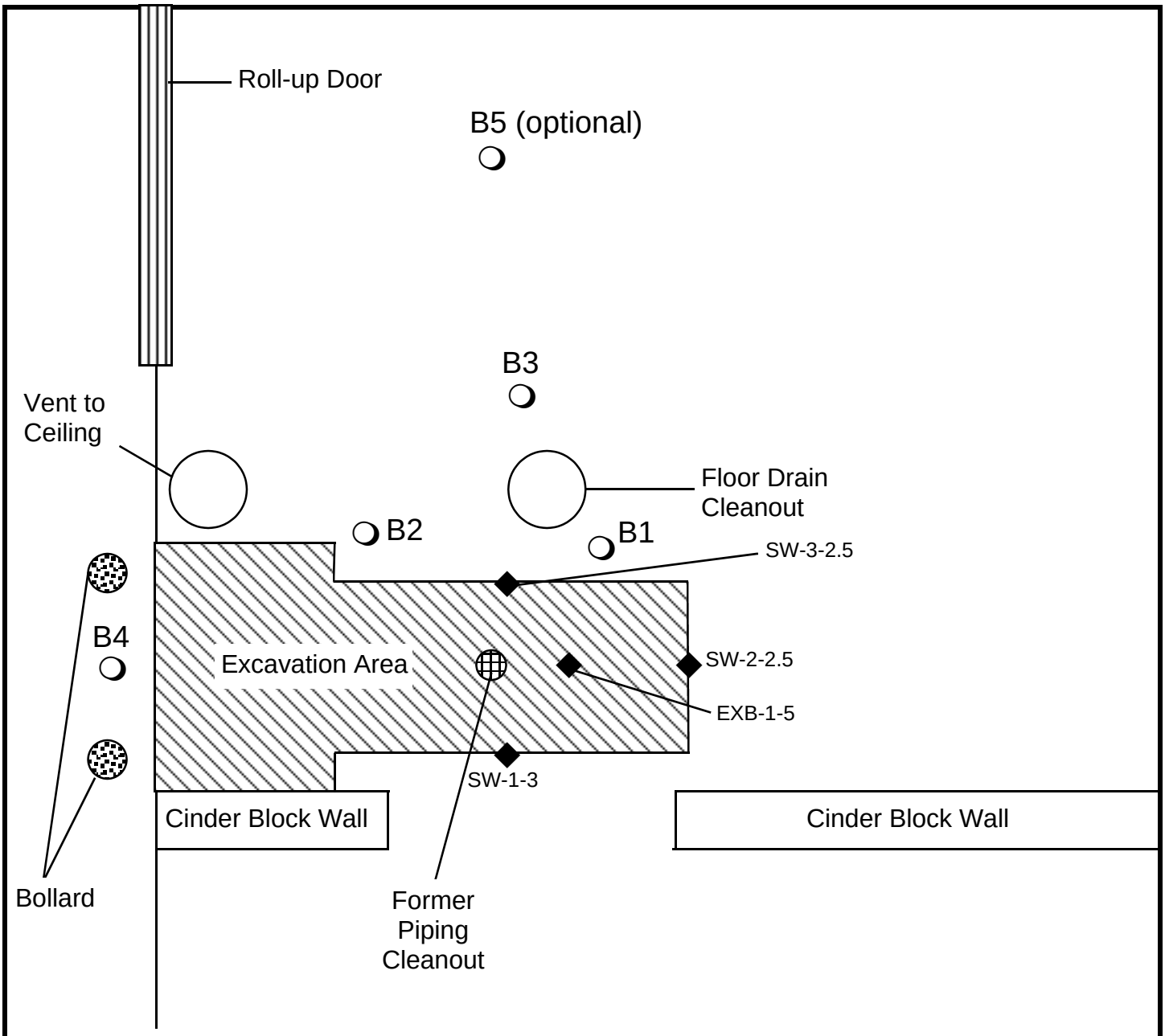

LEGEND

SW-1-3 ◆ Gettler-Ryan Soil Sampling Location

B1 ❍ Proposed Soil Boring Location

0' 1' 2' 3'

Source: Gettler-Ryan, Inc. map dated 01/11/07

Title: ***Site Plan***
1362 Rutan Drive
Livermore, California

Figure Number: 2	Scale: 1" = 2'
Project Number: 2052-001.00	Drawn By: KRB
	Date: 11/26/07

A·C·C ENVIRONMENTAL CONSULTANTS
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404

N E S W

Photograph 1: Original Remote Waste Oil Drain

Photograph 2: Piping Cleanout to Remote Waste Oil Drain

Project: LAVTA Facility 1362 Rutan Drive, Livermore, California	Project Number: 2052-001.00 Date of Photos: Unknown	A·C·C ENVIRONMENTAL CONSULTANTS

Photograph 3: Restored Former Remote Waste Oil Drain Area Looking West

Photograph 4: Restored Former Waste Oil Drain Looking North

Project: LAVTA Facility 1362 Rutan Drive, Livermore, California	Project Number: 2052-001.00 Date of Photos: 10/29/07	A·C·C ENVIRONMENTAL CONSULTANTS