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By Alameda County Environmental Health at 9:33 am, May 06, 2013

Date:	May 3, 2013
Prepared For:	Mr. Karel Detterman **Alameda County Environmental Health** 1131 Harbor Bay Parkway Alameda, CA 94502
Re:	1551 Buena Vista Avenue Alameda, California RO #3101

Dear Ms. Detterman:

We are pleased to submit the attached Request for Case Closure, dated May 2, 2013 prepared by Cornerstone Earth Group. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report is true and correct to the best of my knowledge.

If you have any questions or need anything else, please contact us at your convenience.

Sincerely,

Trident Buena Vista Avenue, LLC

Brad Lacour
Principal

Copies: Addressee (1 by email)

CORNERSTONE EARTH GROUP

Date:	May 2, 2013
Project No.:	557-1-3
Prepared For:	Ms. Karel Detterman **ALAMEDA COUNTY HEALTH AGENCY** DEPARTMENT OF ENVIRONMENTAL HEALTH 1131 Harbor Bay Parkway Alameda, California 94502
Re:	Request for Case Closure 1551 Buena Vista Avenue Alameda, California RO3101

Dear Ms. Detterman:

On behalf of Trident Partners (Trident), we are pleased to present this request for case closure for 1551 Buena Vista Avenue in Alameda, California.

Planned Development
Trident has obtained approval from the City of Alameda for a tentative map (Ruggeri-Jensen-Azar, December 5, 2012) to develop up to 89 single-family homes on-Site. Appurtenant streets, parking, utilities, landscaping and other improvements necessary for site development are also planned. In addition, the northerly extension of Clement Avenue is also planned along the north side of the Site (off-Site).

Regulatory Status
Alameda County Health Agency, Department of Environmental Health (County Health) provided oversight and case closure for a former diesel underground storage tank (UST) removed in 1994 from the northeast property boundary, in an area that will be occupied by the future extension of Clement Street (Figure 2) (RO618). In 2004, the adjacent parcel to the east received case closure from County Health (RO2502) in preparation for residential development. The 2004 closure included the Park Parcel and the Clement Street extension adjacent to the north of the Site. Because of the change in land use to residential and public park, the 2004 closure also included the former diesel UST previously closed in 1994.

Because of the currently planned residential development of the Site, County Health opened a new case (RO3101) in 2012 to review results of prior investigations and results of a limited soil removal performed in December 2012. The Conceptual Site Model/Data Gap Evaluation discussed below has been prepared to assist County Health in their Case Closure approval of the Site.

Conceptual Site Model/Data Gap Evaluation
Numerous investigations have been performed on-Site from 1993 through 2012; a list of references is presented in Attachment A. Key findings of these investigations are summarized

in Table 1, attached. Approximate locations of exploratory borings and samples from prior investigations are shown on Figure 2, and selected analytical results for soil and ground water are summarized on Figures 3 through 6.

Previously identified data gaps include the following: 1) potential agricultural chemicals in soil associated with prior agricultural use; 2) undocumented fill soil; 3) soil quality along former on-site railroad spurs; 4) soil and ground water quality along a Pennzoil pipeline alignment, and 5) soil and ground water quality at the former diesel UST along the northeast property boundary, which received case closure from County Health in 1994 and 2004 as noted above.

Based on our review of previous on-Site investigations by others, results of the investigation performed by Cornerstone (2012), and verification sample results following the limited soil removal performed in December 2012 (Cornerstone, 2013), the previously identified data gaps have been addressed and the Site conditions appear acceptable for residential redevelopment. A Site Management Plan (SMP) will be prepared that presents protocol in the event that suspect conditions are encountered during earthwork and construction activities. The SMP will include County Health notification requirements in the event significant suspect conditions are encountered.

In addition, the existing on-Site ground water monitoring well MW-103, which was installed as part of a prior due diligence investigation, will be destroyed in accordance with regulatory agency requirements.

Request for Case Closure

Based on the information reviewed, we request case closure from County Health for residential development of the Site.

Sincerely,

Cornerstone Earth Group, Inc.

Peter M. Langtry, P.G., C.E.G.
Principal Geologist

Copies: Addressee (1 by email)

Attachments: Table 1 - Conceptual Site Model/Data Gap Evaluation
Figure 1 – Vicinity Map
Figure 2 – Site Plan
Figure 3 – Summary of Lead and Arsenic Analytical Results in Soil
Figure 4 – Summary of TPH and Benzene Analytical Results in Soil
Figure 5 – Summary of Pesticide and PCB Analytical Results in Soil
Figure 6 – Summary of TPH and Benzene Analytical Results in Ground Water
Attachment A – List of References

CORNERSTONE EARTH GROUP

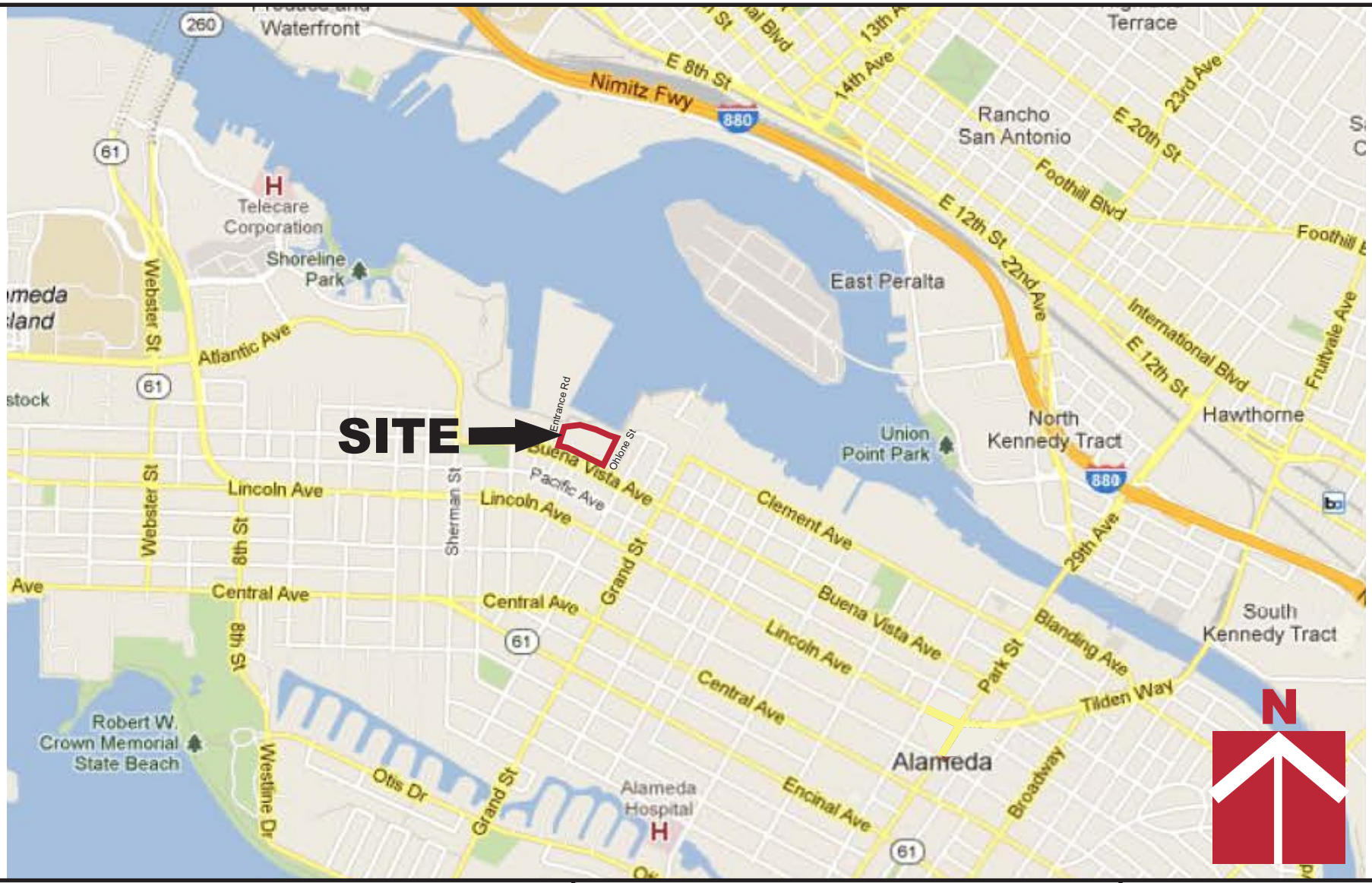
Table 1.
1551 Buena Vista Avenue, Alameda
Initial Site Conceptual Model

Potential Data Gap	Findings	Discussion	Additional Work Recommended
Site History	The site was occupied by two dwellings during the late 1800s. Row crops and what appear to be a farm house and associated outbuildings are shown to have occupied the Site on a 1939 aerial photograph. The current on-Site building was constructed by the late 1940s and was used as a canned-goods warehouse, initially by Stokely Foods, Inc. and subsequently by Del Monte. Since approximately 1993, the on-Site building has been occupied by Chipman Moving and Storage. Chipman uses the building for storage and office purposes. A Corn Products Company (CPC) International tank farm that consisted of more than 50 above-ground storage tanks (ASTs) historically extended partially onto the northeastern portion of the Site. The ASTs appear to have been constructed during the 1950s and 1960s and removed during the late 1990s or early 2000s. The tank farm reportedly was used to store animal fats, various food related oils and syrup.	Other than the former diesel underground storage tank (UST) discussed below, no significant quantities of hazardous materials appear to have been used at the site.	Additional evaluation of site history does not appear required.
Former and Existing Railroad Spurs	Borings B-6, B-7 and B-8 drilled in 1993 by Blymer along railroad spur area on north portion of the Site. Laboratory analyses of soil samples collected from a depth of approximately 1 foot detected TPH diesel ranging from 8.1 ppm to 130 ppm (unrestricted/residential ESL = 83 ppm). No TPH gasoline or BTEX detected. Total Recoverable Petroleum Hydrocarbons (TRPH) were detected at concentrations ranging from 18 ppm to 260 ppm (residential ESL = 500 ppm). Arsenic and cadmium were not detected in the soil samples. Lead (residential CHHSL = 80 ppm) and chromium (residential CHHSL = 100,000) were detected at maximum concentrations of 49 ppm and 25 ppm, respectively. Borings S-4 and S-5 drilled in 1998 by ICES along spur on south side of warehouse. Laboratory analyses of soil samples reportedly collected from a depth of approximately 1 foot detected lead at 380 ppm and 450 ppm and TPH motor oil at 240 ppm and 350 ppm. Other metals detected appeared consistent with background levels. TPH diesel was not detected. The former property owner reported that the soil along the south railroad spur was removed for off-Site disposal. In 2011, 5 soil samples were collected by Adanta from depth of approximately 1 foot from the railroad spur along the south side of the Site. The samples were analyzed for arsenic and lead. Concentrations of arsenic detected reportedly ranged from 1.7 ppm to 2.9 ppm (residential ESL = 11 ppm) and concentrations of lead detected reportedly ranged from 7.8 ppm to 39 ppm. In 2012, Cornerstone Earth Group advanced 9 exploratory borings (EB-4 through EB-12) in the former and existing railroad spur areas, including 3 borings along the south railroad spur. Railroad ballast was not observed in the exploratory borings. Laboratory analyses of soil samples detected metals concentrations that appeared consistent with published background levels. TPH diesel was detected in 8 of 13 soil samples analyzed at a maximum of 15 ppm (residential ESL = 83 ppm). TPH motor oil was detected in 1 of 13 soil samples analyzed at 62 ppm (residential ESL = 500 ppm). No organochlorine pesticides, PCBs, or VOCs were detected in the soil samples.	Analytical results of soil samples collected from the south side of the warehouse in 2011 and 2012 appear to support former property owner's report that the soil along the south railroad spur has been removed for off-Site disposal. One soil sample collected from boring B-7 in 1993 exceeded the residential ESL for TPH diesel (130 ppm detected; ESL = 83 ppm). TPH diesel was not detected exceeding ESL in more recent soil samples collected. Based on analytical results, soil in the on-Site railroad spurs at the locations sampled does not appear significantly impacted.	Preparation and implementation of a soil management plan (SMP) that presents protocol for evaluation, handling and appropriate disposal of suspect soil, if encountered during construction/grading. The SMP should include protocol for segregation, evaluation and disposal of railroad ballast, if encountered during grading.
Former Diesel UST	Three borings drilled by Fugro in September 1993 adjacent to former tank (borings TA-1, TA-2, TA-3). Laboratory analyses of soil samples collected from boring TA-1, located on south side of the tank, did not detect TPH diesel, TPH gasoline or BTEX. Laboratory analyses of soil samples collected from approximately 5 feet from borings TA-2 and TA-3 reportedly detected 300 ppm and 1,100 ppm TPH diesel. No benzene was detected. Laboratory analyses of a ground water grab sample collected from boring TA-2 reportedly detected TPH diesel at 15,000 ppb and TPH gasoline at 970 ppb. Toluene, ethylbenzene and xylenes were detected in ground water at up to 3.3, 3.7 and 26 ppb, respectively. Benzene was not detected in the ground water sample. UST removed April 4, 1994. Removal report by SEMCO. No holes were reported in tank. Soil samples reportedly collected from each end of tank pit at 6 feet depth (at ponded water interface). Laboratory analyses detected 38 ppm TPH diesel at south end and 160 ppm TPH diesel on north end. No benzene or ethylbenzene detected. Up to 0.011 ppm toluene and 0.094 ppm xylene detected. Laboratory analysis of pit water detected 26,000 ppb TPH diesel, 3 ppb toluene, 0.6 ppb ethylbenzene, 3 ppb xylene. Benzene not detected. Geomatrix, 1995. Boring P-15 located on north side of former diesel UST. Laboratory analysis of soil sample collected from depth of 7 ½ feet reportedly detected 20 ppm TPH diesel. No BTEX detected. Laboratory analysis of ground water grab sample detected 100 ppb TPH diesel. No BTEX or PNAs (including naphthalene – detection limit of 200 ppb) detected. Cornerstone Earth Group advanced exploratory boring GW-1 in the area of the former diesel UST. Ground water was not encountered in the boring. Laboratory analyses of soil samples collected from depths of approximately 6 and 11 feet did not detect TPH gasoline, BTEX or other VOCs. TPH diesel was detected in the 11 foot deep sample at 4.5 ppm.	Diesel impacted soil detected prior to and during UST removal appears to have been limited in extent and has likely decreased in concentrations due to natural attenuation. No benzene detected in soil or ground water, and former UST located in future street area, so former UST does not appear to be a significant vapor intrusion concern.	Preparation and implementation of a SMP that presents protocol in the event suspect soil is encountered in the former diesel UST area.

CORNERSTONE EARTH GROUP

Table 1.
1551 Buena Vista Avenue, Alameda
Initial Site Conceptual Model

Potential Data Gap	Findings	Discussion	Additional Work Recommended
Undocumented Fill	During 2012 investigation by Cornerstone Earth Group, fill consisting of sandy clay with gravel was observed to approximate depths of 2 ½ to 4 feet in all exploratory borings except EB-3, EB-10, EB-11 and EB-12. Apparent native silty sand to clay was observed beneath the fill or from the ground surface in the exploratory borings to the maximum depth explored of approximately 15 feet. Laboratory analyses of soil samples collected from the exploratory borings did not detect VOCs, TPH gasoline, organochlorine pesticides, or PCBs. TPH diesel was detected up to 15 ppm. TPH motor oil was detected in 1 soil sample at 62 ppm. Laboratory analyses detected several polynuclear aromatic hydrocarbons (PAHs) at concentrations below residential ESLs and the residential CHHSL for benzo[a]pyrene (CHHSLs have not been established for the other PAHs detected).	Based on analytical results, the fill appears acceptable for use on-Site.	Preparation and implementation of SMP.
Prior Agricultural Use	Laboratory analyses of soil samples collected in July 2012 (Cornerstone Earth Group) from the upper approximately 1 foot of native soil did not detect organochlorine pesticides. Metals detected appeared consistent with published background levels with the exception of 110 ppm lead detected in boring EB-1 at a depth of approximately3 to 3 ½ feet. Removal of soil at boring EB-1 is discussed below.	Based on laboratory analyses of soil samples, soil does not appear to have been significantly impacted by prior agricultural use.	No additional evaluation of prior agricultural use is recommended
Former Pennzoil Pipeline	In 1999, six exploratory borings (SB-7 to SB-12) were advanced to a depth of approximately 4 ½ feet reportedly near the Penzoil pipeline alignment (ICES). Laboratory analyses of soil samples collected from depths of approximately 2 and 4 ½ feet reportedly did not detect benzene, toluene, ethylbenzene, or MTBE. Xylene was detected in 2 of 12 samples at concentrations of 0.12 ppm and 0.19 ppm. TPH gasoline was detected in 1 of 12 samples at 1.1 ppm, TPH diesel was detected in 3 of 12 samples at 2 ppm to 57 ppm, and TPH motor oil was detected in 3 of 12 samples at 18 ppm to 91 ppm. Ground water grab samples were collected from two of the borings (SB-7 and SB-12, labeled by ICES as GW-3 and GW-4, respectively). Laboratory analyses of the two ground water grab samples did not detect TPH gasoline, TPH diesel, TPH motor oil, BTEX or MTBE. Exploratory borings EB-4, EB-6, EB-8 and EB-9 advanced by Cornerstone Earth Group in July 2012 were in the general area of the Pennzoil pipeline alignment. No TPH gasoline, TPH motor oil or VOCs were detected. TPH diesel was detected up to 3.1 ppm.	Based on the analytical results, the Pennzoil pipeline does not appear to have significantly impacted soil quality.	SMP should include protocol in the event the pipeline and/or pockets of impacted soil are encountered during construction.
EB-1 limited soil removal	Laboratory analyses detected 110 ppm lead in the soil sample collected from boring EB-1 at a depth of approximately 3 to 3 ½ feet. This sample was collected from the upper approximately ½ foot of silty clay native soil beneath approximately 3 feet of fill (sandy clay with gravel). Laboratory analysis of a sample of the fill (approximate depth of 2 ½ to 3 feet) detected lead 37 ppm, which appeared consistent with published background levels. Approximately 21 cubic yards of soil were excavated from the area of EB-1 during December 2012. Laboratory analyses of final verification soil samples did not detect lead above the residential CHHSL. Laboratory analyses of sample "Composite-1" did not detect OCPs, semi-VOCs, VOCs, or TPHmo; 1.1 ppm TPHd was detected in the composite sample. In addition, lead was detected at 110 ppm. Other CAM 17 metals were either not detected or were detected at concentrations that appear consistent to published background levels. The excavated soil was removed for disposal as a non-hazardous waste.	The soil over-excavation was successful in removing soil exceeding residential screening levels from the location of boring EB-1.	No further evaluation of soil quality or soil removal at the location of prior boring EB-1 is recommended.



CORNERSTONE EARTH GROUP

Vicinity Map

Marina Cove
Buena Vista Avenue
Alameda, CA

Project Number	557-1-1
Figure Number	Figure 1
Date	June 2012
Drawn By	RRN

Fortmann Marina

P-17

P-16

Approximate location of former diesel UST

P-15

#2 North wall

TA-2

TA-3

#1 South wall

TA-1

GW-1

EB-7

B-7

EB-6

B-6

SB-7/ GW-3

SB-8

SB-9

EB-4

EB-8

B-8

SB-10

EB-5

Clement Street extension

EB-9

SB-11

SB-12/ GW-4

MW-103

EB-1

EB-2

EB-3

S-4

B-12

EB-11

EB-10

S-5

A-5

A-4

A-3

A-2

A-1

SITE

1551 Buena Vista Avenue

Buena Vista Ave

Entrance Rd

Clement Avenue

Ohlone St

Residential (formerly Weyerhaeuser)

Residential

Vacant Warehouse (formerly Del Monte)

FORTMAN BASIN LIMITED PARTNERSHIP

ENCINAL REAL ESTATE INC.

ALLEN

HO

LUNG/LEPINE

KAMI/LEE

FARIA

KONG/WONG

DIMALANTA

WONG/HUANG

YIN

YOUNG/WONG

HUI

STREET A

STREET B

STANTON STREET

COURT E

BCDC SHORELINE BAND LINE

BUENA VISTA AVENUE

Legend

- Approximate location of exploratory boring (EB)
- Approximate location of former and existing railroad spurs
- Approximate location of prior boring (ICES, 1999)
- Approximate location of prior boring (Blymer, 1993)
- Approximate location of prior boring (ICES, 1998)
- Approximate location of prior boring (Adante, 2011)
- Approximate location of prior boring (Geomatrix, 1995)
- Approximate location of prior boring (Fugro, 1993)
- Approximate location of prior boring (Bureau Veritas, 2011)
- Approximate location of UST removal confirmation sample (SEMCO, 1994)

N

0 80 160

APPROXIMATE SCALE (FEET)

Base by Google Earth, dated 10/29/2011
Overlay by Ruggeri-Jensen-Azar, "Tentative Map - Lotting Plan", dated 12/5/2012

Project Number 557-1-4

Figure Number Figure 2

Drawn By RRN

Date June 2012

Site Plan

Marina Cove
1551 Buena Vista Avenue
Alameda, CA

CORNERSTONE EARTH GROUP

Residential Soil CHHSL [1]

Lead 80

[1] California Human Health Screening Level (CHHSL)

BOLD Concentration exceeds CHHSL

Fortmann Marina

EB-7	7/24/2012	
Depth (ft)	Lead	Arsenic
2 to 2½	12	4.2
4 to 4½	3.5	<3.8

B-7	1993	
Depth (ft)	Lead	Arsenic
1	25	<5.0

EB-8	7/24/2012	
Depth (ft)	Lead	Arsenic
3 to 3½	20	7.2

B-8	1993	
Depth (ft)	Lead	Arsenic
1	24	<5.0

EB-9	7/24/2012	
Depth (ft)	Lead	Arsenic
4 to 4½	6.5	<3.9

EB-6	7/24/2012	
Depth (ft)	Lead	Arsenic
3 to 3½	18	<3.9

B-6	1993	
Depth (ft)	Lead	Arsenic
1	23	<5.0

EB-4	7/24/2012	
Depth (ft)	Lead	Arsenic
2 to 2½	8.5	5.6
3 to 3½	22	<3.9

EB-5	7/24/2012	
Depth (ft)	Lead	Arsenic
3½ to 4	26	<3.7

EB-3	7/24/2012	
Depth (ft)	Lead	Arsenic
1½ to 2	28	<3.7

EB-1	7/24/2012	
Depth (ft)	Lead	Arsenic
2½ to 3	37	<3.7
3 to 3½	**110**	<3.9

Over-excavated December 2012

EB-2	7/24/2012	
Depth (ft)	Lead	Arsenic
1½ to 2	6.8	<3.9
3 to 3½	30	<3.8

A-3	2011	
Depth (ft)	Lead	Arsenic
1	17	2.0

A-5	2011	
Depth (ft)	Lead	Arsenic
1	7.8	2.1

EB-11	7/24/2012	
Depth (ft)	Lead	Arsenic
2½ to 3	11	<3.7

A-2	2011	
Depth (ft)	Lead	Arsenic
1	4.5	1.7

EB-12	7/24/2012	
Depth (ft)	Lead	Arsenic
1½ to 2	5.9	<3.7

EB-10	7/24/2012	
Depth (ft)	Lead	Arsenic
2½ to 3	72	<3.7

A-4	2011	
Depth (ft)	Lead	Arsenic
1	2.9	1.4

A-1	2011	
Depth (ft)	Lead	Arsenic
1	39	2.9

S-5	1998	
Depth (ft)	Lead	Arsenic
1	**450**	NA

Former property owner reported soil removed

S-4	1998	
Depth (ft)	Lead	Arsenic
1	**380**	NA

Former property owner reported soil removed

Approximate location of former diesel UST

#1 South wall

#2 North wall

SITE
1551 Buena Vista Avenue

Residential
(formerly Weyerhaeuser)

Residential

Vacant Warehouse
(formerly Del Monte)

Clement Street extension

Entrail Rd

Buena Vista Ave

Ohlone St

Legend

- Approximate location of exploratory boring (EB)
- Approximate location of former and existing railroad spurs
- Approximate location of prior boring (ICES, 1999)
- Approximate location of prior boring (Blymer, 1993)
- Approximate location of prior boring (ICES, 1998)
- Approximate location of prior boring (Adante, 2011)
- Approximate location of prior boring (Geomatrix, 1995)
- Approximate location of prior boring (Fugro, 1993)
- Approximate location of prior boring (Bureau Veritas, 2011)
- Approximate location of UST removal confirmation sample (SEMCO, 1994)

N

0 80 160

APPROXIMATE SCALE (FEET)

Base by Google Earth, dated 10/29/2011
Overlay by Ruggeri-Jensen-Azar, "Tentative Map - Lotting Plan", dated 12/5/2012

Project Number 557-1-4

Figure Number Figure 3

Drawn By RRN

Date June 2012

Summary of Lead and Arsenic Analytical Results in Soil

Marina Cove
1551 Buena Vista Avenue
Alameda, CA

CORNERSTONE EARTH GROUP

Residential Soil ESL [1]

TPH Gasoline	83
TPH Diesel	83
TPH Motor Oil	500
Benzene	---

Concentrations measured in mg/kg

[1] Environmental Screening Level (ESL), California Regional Water Quality Control Board - San Francisco Bay Region, 2013

--- Not Analyzed

BOLD Concentration exceeds ESL

Fortmann Marina

P-17				2/3/1995
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
5.5	---	<10.0	---	<0.02

P-16				2/3/1995
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
4	---	<10.0	---	<0.02

P-15				2/3/1995
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
7.5	---	20	---	<0.02

#2 North Wall				4/5/1994
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
6	---	**160**	---	<0.005

TA-2				9/30/1993
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
5.5	4	**300**	---	<0.005

TA-3				9/30/1993
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
5	<10.0	**1,100**	---	<0.05

#1 South Wall				4/5/1994
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
6	---	38	---	<0.005

TA-1				9/30/1993
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
5.5	<1.0	<5.0	---	<0.005

EB-7				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2 to 2½	<0.30	15	62	<0.0061
4 to 4½	---	1.1	<50	---

B-7				7/28/1993
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
1	<1.0	**130**	---	<0.005

B-6				7/28/1993
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
1	<1.0	14	---	<0.005

EB-8				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
3 to 3½	---	3.1	<49	---

GW-1				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
6 to 6½	<0.19	<0.99	<49	<0.0038
11 to 11½	<0.26	4.5	<49	<0.0052

EB-9				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
4 to 4½	<0.34	<0.99	<50	<0.0069

SB-10				3/12/1999
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2	<0.5	2	18	<0.005
4½	<0.5	<1.0	<10.0	<0.005

EB-4				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2 to 2½	<0.26	1.3	<50	<0.0051
3 to 3½	---	1.2	<50	---

SB-9				3/12/1999
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2	<0.5	57	91	<0.005
4½	<0.5	<1.0	<10.0	<0.005

SB-7				3/12/1999
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2	<0.5	<1.0	<10.0	<0.005
4½	<0.5	<1.0	<10.0	<0.005

SB-12				3/12/1999
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2	<0.5	<1.0	<10.0	<0.005
4½	<0.5	<1.0	<10.0	<0.005

SB-11				3/12/1999
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2	<0.5	9	31	<0.005
4½	<0.5	<1.0	<10.0	<0.005

B-8				7/28/1993
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
1	<1.0	8.1	---	<0.005

SB-8				3/12/1999
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2	1.1	<1.0	<10.0	<0.005
4½	<0.5	<1.0	<10.0	<0.005

EB-6				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
3 to 3½	---	1.1	<49	---

EB-5				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
3½ to 4	---	<0.99	<50	---

EB-1				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2½ to 3	<0.32	<1	<50	<0.0065
3 to 3½	---	<1	<50	---

EB-2				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
1½ to 2	<0.29	<1	<50	<0.0058
3 to 3½	---	<0.99	<49	---

EB-3				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
1½ to 2	---	3.3	<50	---

EB-11				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2½ to 3	---	<0.99	<49	---

EB-12				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
1½ to 2	---	<0.98	<50	---

EB-10				7/24/2012
Depth (ft)	TPHg	TPHd	TPHmo	Benzene
2½ to 3	---	2.5	<50	---

Approximate location of former diesel UST

#2 North wall

#1 South wall

Clement Street extension

SITE

1551 Buena Vista Avenue

Buena Vista Ave

BUENA VISTA AVENUE

Residential

Vacant Warehouse (formerly Del Monte)

Residential (formerly Weyerhaeuser)

P-17, P-16, P-15, TA-2, TA-3, TA-1, GW-1, B-7, B-6, EB-6, SB-7/GW-3, SB-8, SB-9, EB-8, B-8, SB-10, EB-4, EB-5, SB-12/GW-4, MW-103, SB-11, EB-9, EB-1, EB-2, EB-3, EB-11, EB-12, EB-10, S-5, A-5, A-4, A-3, A-2, A-1, S-4

Legend

- Approximate location of exploratory boring (EB)
- Approximate location of former and existing railroad spurs
- Approximate location of prior boring (ICES, 1999)
- Approximate location of prior boring (Blymer, 1993)
- Approximate location of prior boring (ICES, 1998)
- Approximate location of prior boring (Adante, 2011)
- Approximate location of prior boring (Geomatrix, 1995)
- Approximate location of prior boring (Fugro, 1993)
- Approximate location of prior boring (Bureau Veritas, 2011)
- Approximate location of UST removal confirmation sample (SEMCO, 1994)

N

0 80 160

APPROXIMATE SCALE (FEET)

Base by Google Earth, dated 10/29/2011
Overlay by Ruggeri-Jensen-Azar, "Tentative Map - Lotting Plan", dated 12/5/2012

Project Number 557-1-4

Figure Number Figure 4

Drawn By RRN

Date June 2012

Summary of TPH and Benzene Analytical Results in Soil

Marina Cove
1551 Buena Vista Avenue
Alameda, CA

CORNERSTONE EARTH GROUP

Fortmann Marina

Approximate location of former diesel UST

#2 North wall

#1 South wall

Clement Street extension

Entrance Rd

Ohlone St

Residential (formerly Weyerhaeuser)

Residential

Vacant Warehouse (formerly Del Monte)

Buena Vista Ave

SITE
1551 Buena Vista Avenue

EB-7	7/24/2012	
Depth (ft)	Pesticides	PCBs
2 to 2½	ND	<0.049
4 to 4½	ND	<0.050

EB-6	7/24/2012	
Depth (ft)	Pesticides	PCBs
3 to 3½	ND	<0.050

EB-8	7/24/2012	
Depth (ft)	Pesticides	PCBs
3 to 3½	ND	<0.049

EB-9	7/24/2012	
Depth (ft)	Pesticides	PCBs
4 to 4½	ND	<0.049

EB-4	7/24/2012	
Depth (ft)	Pesticides	PCBs
2 to 2½	ND	<0.049
3 to 3½	ND	<0.050

EB-5	7/24/2012	
Depth (ft)	Pesticides	PCBs
3½ to 4	ND	<0.050

EB-1	7/24/2012	
Depth (ft)	Pesticides	PCBs
2½ to 3	ND	<0.049
3 to 3½	ND	<0.050

EB-3	7/24/2012	
Depth (ft)	Pesticides	PCBs
1½ to 2	ND	<0.050

EB-2	7/24/2012	
Depth (ft)	Pesticides	PCBs
1½ to 2	ND	<0.049
3 to 3½	ND	<0.049

EB-11	7/24/2012	
Depth (ft)	Pesticides	PCBs
2½ to 3	ND	<0.049

EB-12	7/24/2012	
Depth (ft)	Pesticides	PCBs
1½ to 2	ND	<0.049

EB-10	7/24/2012	
Depth (ft)	Pesticides	PCBs
2½ to 3	ND	<0.048

Legend

- Approximate location of exploratory boring (EB)
- Approximate location of former and existing railroad spurs
- Approximate location of prior boring (ICES, 1999)
- Approximate location of prior boring (Blymer, 1993)
- Approximate location of prior boring (ICES, 1998)
- Approximate location of prior boring (Adante, 2011)
- Approximate location of prior boring (Geomatrix, 1995)
- Approximate location of prior boring (Fugro, 1993)
- Approximate location of prior boring (Bureau Veritas, 2011)
- Approximate location of UST removal confirmation sample (SEMCO, 1994)

N

0 80 160
APPROXIMATE SCALE (FEET)

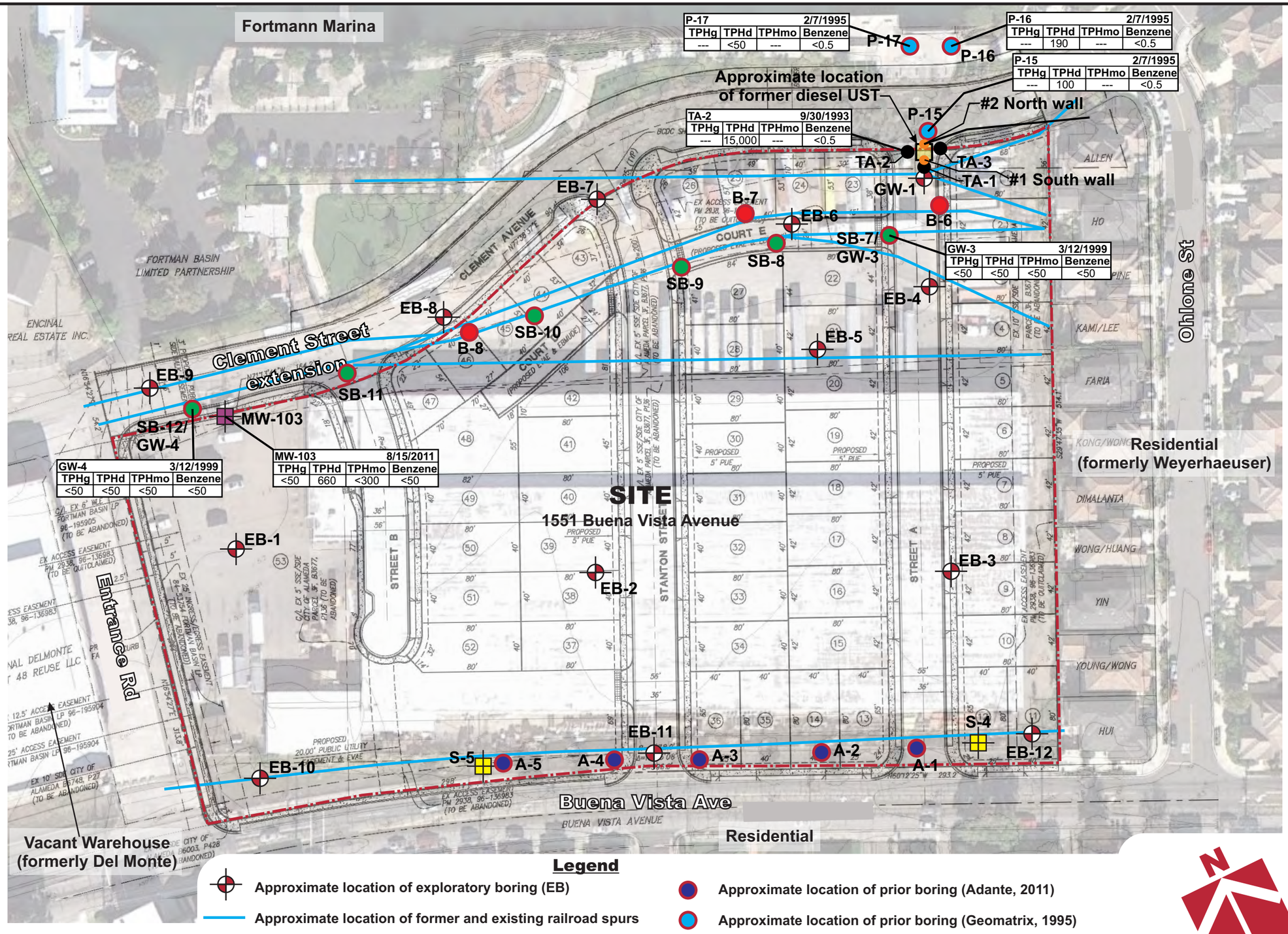
Base by Google Earth, dated 10/29/2011
Overlay by Ruggeri-Jensen-Azar, "Tentative Map - Lotting Plan", dated 12/5/2012

Project Number 557-1-4
Figure Number Figure 5
Drawn By RRN
Date June 2012

Summary of Pesticides and PCBs Analytical Results in Soil

Marina Cove
1551 Buena Vista Avenue
Alameda, CA

CORNERSTONE EARTH GROUP



Legend

- Approximate location of exploratory boring (EB)
- Approximate location of former and existing railroad spurs
- Approximate location of prior boring (ICES, 1999)
- Approximate location of prior boring (Blymer, 1993)
- Approximate location of prior boring (ICES, 1998)
- Approximate location of prior boring (Adante, 2011)
- Approximate location of prior boring (Geomatrix, 1995)
- Approximate location of prior boring (Fugro, 1993)
- Approximate location of prior boring (Bureau Veritas, 2011)
- Approximate location of UST removal confirmation sample (SEMCO, 1994)

N

0 80 160

APPROXIMATE SCALE (FEET)

Base by Google Earth, dated 10/29/2011
Overlay by Ruggeri-Jensen-Azar, "Tentative Map - Lotting Plan", dated 12/5/2012

Project Number 557-1-4

Figure Number Figure 6

Drawn By RRN

Date June 2012

Summary of TPH and Benzene Analytical Results in Ground Water

Marina Cove
1551 Buena Vista Avenue
Alameda, CA

CORNERSTONE EARTH GROUP

CORNERSTONE
EARTH GROUP

1259 Oakmead Parkway | Sunnyvale, CA 94085
T 408 245 4600 | F 408 245 4620

2737 North Main Street, Suite 10 | Walnut Creek, CA 94597
T 925 988 9500 | F 925 988 9501

www.cornerstoneearth.com

CORNERSTONE EARTH GROUP

ATTACHMENT A – LIST OF REFERENCES

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