Equity Enterprises
Real Estate Services and Development

RECEIVED
By Alameda County Environmental Health 10:03 am, Oct 19, 2017

October 17, 2017

Ms. Dilan Roe
Chief-Land Water Division
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Subject: Soil and Groundwater Investigation Report Addendum
Main Street Property
927 Main Street
Pleasanton, California 94566
ACDEH Fuel Leak Case No. RO0003199
GeoTracker Global ID No. T10000008158

Dear Ms. Dilan:
Equity Enterprises is pleased to present the enclosed report addendum, prepared by Environmental Risk Assessors, presenting the findings of investigations at 927 Main Street in Pleasanton, California. This report is submitted pursuant to discussions with Alameda County Environmental Health's representative on October 12, 2017.

I have read and acknowledge the content, recommendations, and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the State Water Resource Control Board's GeoTracker website.

Please feel free to call me at 925-484-3636 if you have any questions.

Sincerely,

Brad Hirst
Equity Enterprises

(925)484-3636 brad@equityenterprises.net
4460 BLACK AVE. • SUITE L • PLEASANTON, CA 94566

Environmental Risk Assessors

October 16, 2017

Mr. Bradley A. Hirst
Equity Enterprises
4460 Black Avenue, Suite L
Pleasanton, California 94566

SUBJECT: Soil and Groundwater Investigation Report Addendum
Main Street Property
927 Main Street
Pleasanton, California 94566
ERA Project No. 01-2016-1300-001

Dear Mr. Hirst,

Environmental Risk Assessors (ERA) is pleased to present this Soil and Groundwater Investigation (SWI) Report Addendum for the above-referenced property (the Site). This addendum to the report titled *Soil and Groundwater Investigation Report, Main Street Property, 927 Main Street, Pleasanton, California 94566 (the "SWI Report")*, dated June 26, 2017 provides additional evaluation to support the request for case closure. The work was performed under the limitations and exceptions noted in the SWI Report. The following identification numbers have been assigned to the Site: Alameda County Environmental Health Fuel Leak Case No. RO0003199; and California Environmental Protection Agency State Water Resources Control Board GeoTracker Global ID No. T10000008158.

It has been a pleasure working with you on this project. Please do not hesitate to contact me at (916) 677-9897 and via email at litafreeman@gmail.com if you have any questions or comments regarding this assessment.

Sincerely,
Environmental Risk Assessors

Lita D. Freeman

Lita D. Freeman, PG
Professional Geologist

* All information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a California Professional Geologist of Environmental Risk Assessors. A professional geologist's certification of conditions comprises a declaration of his or her professional judgment. It does not constitute a warranty or guarantee, expressed or implied, nor does it relieve any other party of its responsibility to abide by contract documents, applicable codes, standards, regulations, and ordinances.

1420 East Roseville Parkway
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Tel 916-677-9897
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Environmental Risk Assessors

October 16, 2017

Mr. Bradley A. Hirst
Equity Enterprises
4460 Black Avenue, Suite L
Pleasanton, California 94566

SUBJECT: Addendum to Soil and Groundwater Investigation Report
927 Main Street, Pleasanton, California 94566
ERA Project No. 01-2016-1300-001

Dear Mr. Hirst,

Environmental Risk Assessors (ERA) is pleased to present to Equity Enterprises this Soil and Groundwater Investigation Report Addendum (SGWI Addendum) for the above referenced property (the "Site"; Figure 1). This addendum to the report titled *Soil and Groundwater Investigation Report, Main Street Property, 927 Main Street, Pleasanton, California 94566*, dated June 26, 2017 (ERA 2017) provides additional evaluation to support the request for case closure.

Site Description and Background

The Site, addressed 927 Main Street in Pleasanton, Alameda County, California, consists of one approximately 8,115-square-foot parcel. The Site is currently developed with a commercial building (Figure 2) occupied by two restaurants, Subway Sandwiches and Hanadi Sushi.

The Site was formerly occupied by a building that was used as an auto repair facility from at least the late 1930s until the late 1960s. A gas and oil facility was present at the southeastern corner of the building from the late 1930s or early 1940s to the early 1950s. A small rectangular building with an attached canopy formerly located on the south adjacent property extended onto the southern portion of the Site. To evaluate impacts to the subsurface from past site operations, ERA conducted site investigations. ERA's investigations indicated that a gasoline plume is present beneath the Site and appears limited to the area immediately southeast of the on-site building and the eastern portion of the on-site building. The findings of these investigations were presented in reports issued by ERA in 2015, 2016, and 2017 (ERA 2015, ERA 2016, and ERA 2017).

Outstanding Issues

Mr. Hirst of Equity Enterprises and Lita Freeman of ERA met with Ms. Dilan Roe of Alameda County Environmental Health (ACEH) on October 12, 2017 to discuss site investigation findings. Two outstanding issues were identified:

- Vapor Intrusion Risk to Indoor Air of the On-Site Building; and
- Groundwater Plume Delineation to the Northeast-East.

These issues are discussed below.

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Issue 1 – Vapor Intrusion to Indoor Air of the On-Site Building

An indoor air sample (sample 927-IA) and an ambient air sample (sample 1-AA) were collected from inside and immediately east of, respectively, the on-site building on May 10, 2017, by ERA personnel. The ambient air sample was collected in the area of boring SB-5 which was advanced on August 5, 2016, to collect soil samples. Analysis of indoor air sample 927-IA and ambient air sample 1-AA revealed naphthalene at concentrations of 0.11 micrograms per cubic meter (µg/m^3) and 0.064 µg/m^3, respectively. ERA identified two lines of evidence indicating that the likely source of naphthalene reported in the indoor air sample is ambient air and not vapor intrusion, as discussed below.

a. Under the *Vapor Intrusion to Indoor Air* exposure scenario, the California State Water Resources Control Board (SWRCB) *Low-Threat Underground Storage Tank Case Closure Policy* (SWRCB 2012a) describes conditions which, if met, ensures that exposure to petroleum vapors migrating upward from the subsurface into indoor air will not pose unacceptable health risks. One condition is the presence of a bioattenuation zone providing a separation of at least 30 feet vertically between the Light Non-Aqueous Phase Liquid (LNAPL) in groundwater and the foundation of an existing building because bioattenuation processes will help mitigate potential human exposures to vapors as they migrate upward toward the ground surface. During ERA's site investigations, fine-grained soil (silts, silty clays, etc.) were generally encountered from below the asphalt and baserock surface layer/landscaping soil layer to the maximum depth explored of up to 42 feet below ground surface (bgs) and groundwater was encountered at depths of approximately 34 to 38.5 feet bgs. Soil samples were collected from boring SB-5 at depths of 4- to 4.5-feet bgs (SB-5-4.5) and 7.5- to 8-feet bgs (SB-5-8). Petroluem hydrocarbons, including naphthalene and benzene, were not reported in samples SB-5-4.5 and SB-5-8 at concentrations at or above their respective laboratory reporting limit (0.005 milligrams per kilogram [mg/kg] for both naphthalene and benzene). Based on the presence of generally fine-grained soil beneath the Site, depth to groundwater of more than 30 feet, and lack of petroleum hydrocarbons in the shallow soil samples from boring SB-5, a bioattenuation zone with conditions that support biodegradation of petroleum hydrocarbon vapors is present beneath the on-site building.

b. Review of the Environmental Screening Levels (ESLs) established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB, 2016, Rev. 3) indicates that the naphthalene ESL is 1,600 micrograms per liter (µg/L) for Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3) for deep groundwater and commercial/industrial land use with fine to coarse scenario soil. Naphthalene was reported in groundwater samples collected from on-site borings SB-2 and SB-5 at concentrations of 5.3 µg/L and 19 µg/L, respectively, during ERA's investigations. Naphthalene would not likely pose a vapor intrusion risk at the Site based on its' low concentrations (as compared to its' ESL) in groundwater at these two on-site locations.

Although naphthalene was reported at a slightly higher concentration in the indoor air sample as compared to the ambient air sample, the source is likely ambient air. Naphthalene would not likely pose a vapor intrusion risk at the on-site building based on the presence of a bioattenuation zone and the low concentrations of naphthalene reported in groundwater (significatly below the vapor intrusion ESL).

Issue 2 – Groundwater Plume Delineation to the Northeast-East

Borings were advanced to groundwater on and near the Site to delineate the petroleum hydrocarbon plume. The plume has been delineated to the north by boring SB-6, to the south by borings SB-7 and SB-8, and to the west by boring SB-9. The plume has not been delineated to the northeast-east because Main Street is situated approximately 6 feet east of boring SB-5 with two former gasoline service stations (former Unocal Service Station at 992 Main Street and former Mobil Service Station at 1024 Main Street) farther east across Main Street. Depth-to-water measurements collected by ETIC Engineering, Inc. at the Mobil service station formerly located to the Site's northeast across Main Street (ETIC 2009) indicated that local groundwater flow direction was inferred to be to the east-northeast in 2009; historically, local groundwater flow direction was generally northward.

ERA performed a sensitive receptor survey in 2016 as directed by ACEH to identify water-supply wells in the site vicinity (ERA 2016). The nearest well reported in a northeast-east direction (down-gradient) from the Site was identified as well 3S-1E-16-L11 (16L11 on Figure 3). This well, an abandoned water-supply well, was located approximately 1,875 feet north-northeast of the Site which is beyond the distance that total petroleum hydrocarbons (TPH) quantified as gasoline (TPHg) would be likely to migrate as noted in the *Technical Justification for Groundwater Media-Specific Criteria* ("Technical Memo"; SWRCB 2012b). Figure 3 presents the average length (248 feet), 90th percentile length (413 feet), and maximum length (855 feet) for a TPHg plume with a plume limit concentration of 100 µg/L (SWRCB 2012b).

The TPHg plume beneath the Site would be unlikely to impact the water-supply well identified in a northeast-east direction from the Site based on the three plume characteristics scenarios in the Technical Memo (SWRCB 2012b). The maximum possible plume length of 855 feet would be approximately one-half the distance to the identified down-gradient water-supply well.

Conclusion

Based on the available data, vapor intrusion to the on-site building and impacts to the identified down-gradient well do not appear to present a concern. Therefore, ERA requests that ACEH consider the Site to be eligible for closure with no further action required.

Closing

We have enjoyed working with you on this important project. If you have questions regarding this addendum, please contact the undersigned via telephone at (916) 677-9897 or via email at litafreeman@gmail.com.

Sincerely,

Environmental Risk Assessors

Lita D. Freeman

Lita D. Freeman, PG
Professional Geologist

REFERENCES

Environmental Risk Assessors. 2015. *Limited Phase II Environmental Site Assessment Report. Main Street Property, 927 Main Street, Pleasanton, California 94566.* November 27.

_____. 2016. *Soil and Groundwater Investigation Report. Main Street Property, 927 Main Street, Pleasanton, California 94566. October 10.*

_____. 2017. *Soil and Groundwater Investigation Report. Main Street Property, 927 Main Street, Pleasanton, California 94566. June 26.*

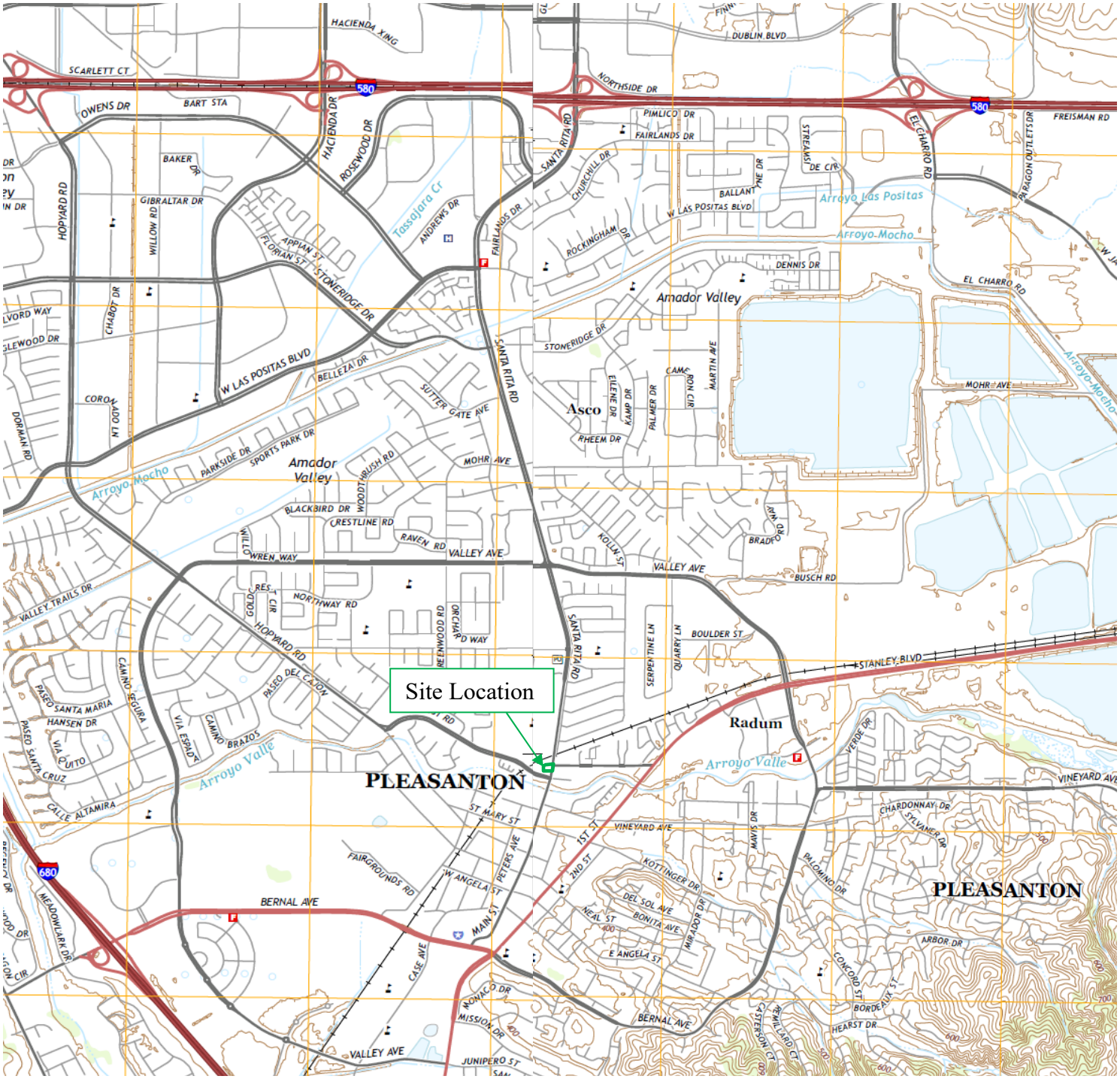
California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). 2016. *Environmental Screening Levels, Tier 1 ESLs.* February. Rev. 3.

California State Water Resources Control Board (SWRCB). 2012a. *Low-Threat Underground Storage Tank Case Closure Policy*. August 17.

_____. 2012b. *Technical Justification for Groundwater Media-Specific Criteria. April 24.*

ETIC Engineering, Inc. (ETIC). 2009. *Report of Groundwater Monitoring, Third Quarter 2009, Former Mobil Station 04H6J, 1024 Main Street, Pleasanton, California.* September 9.

FIGURES



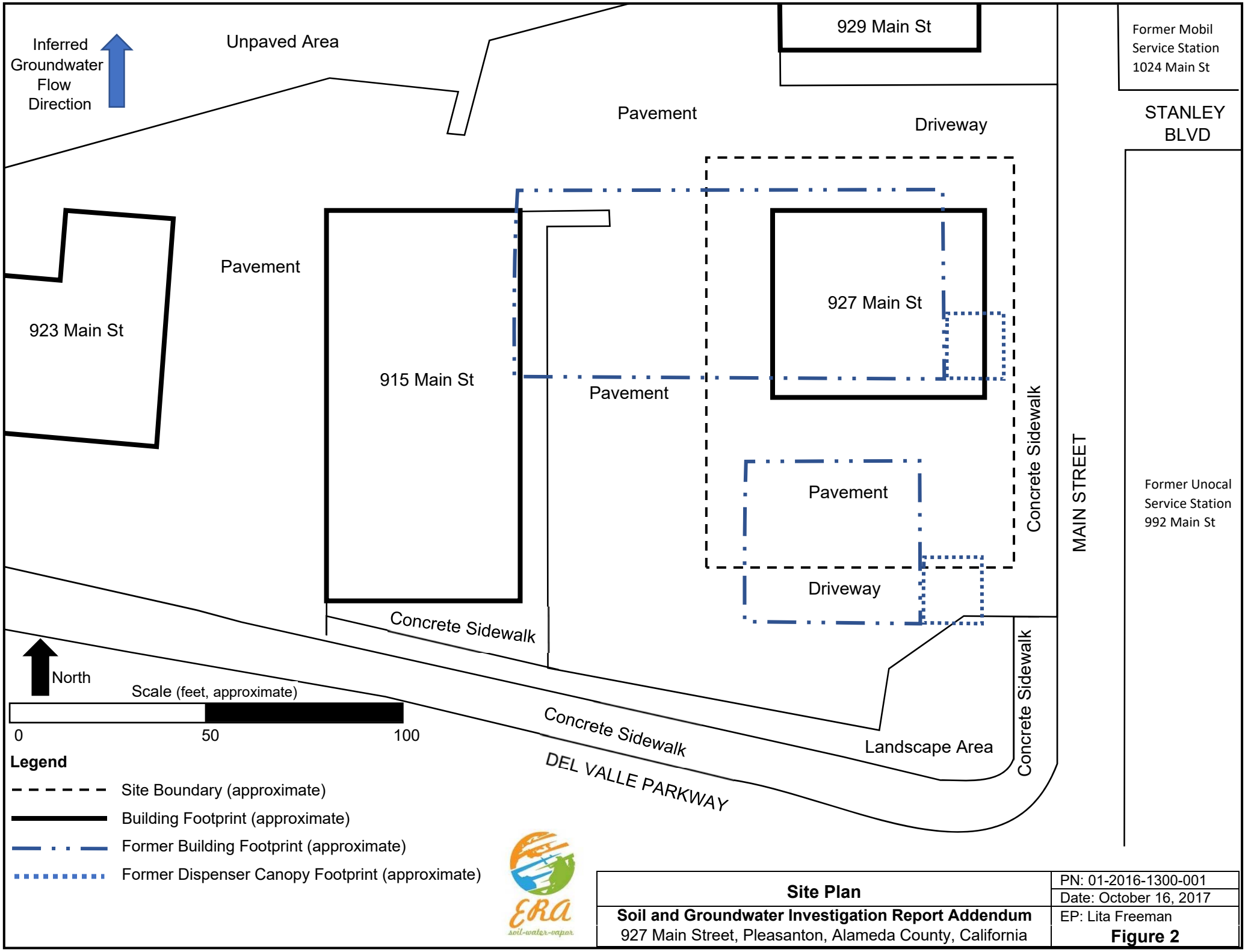
USGS Dublin and Livermore, California Quadrangle Topographic Maps, 2015

Legend
Site (boundaries approximate)

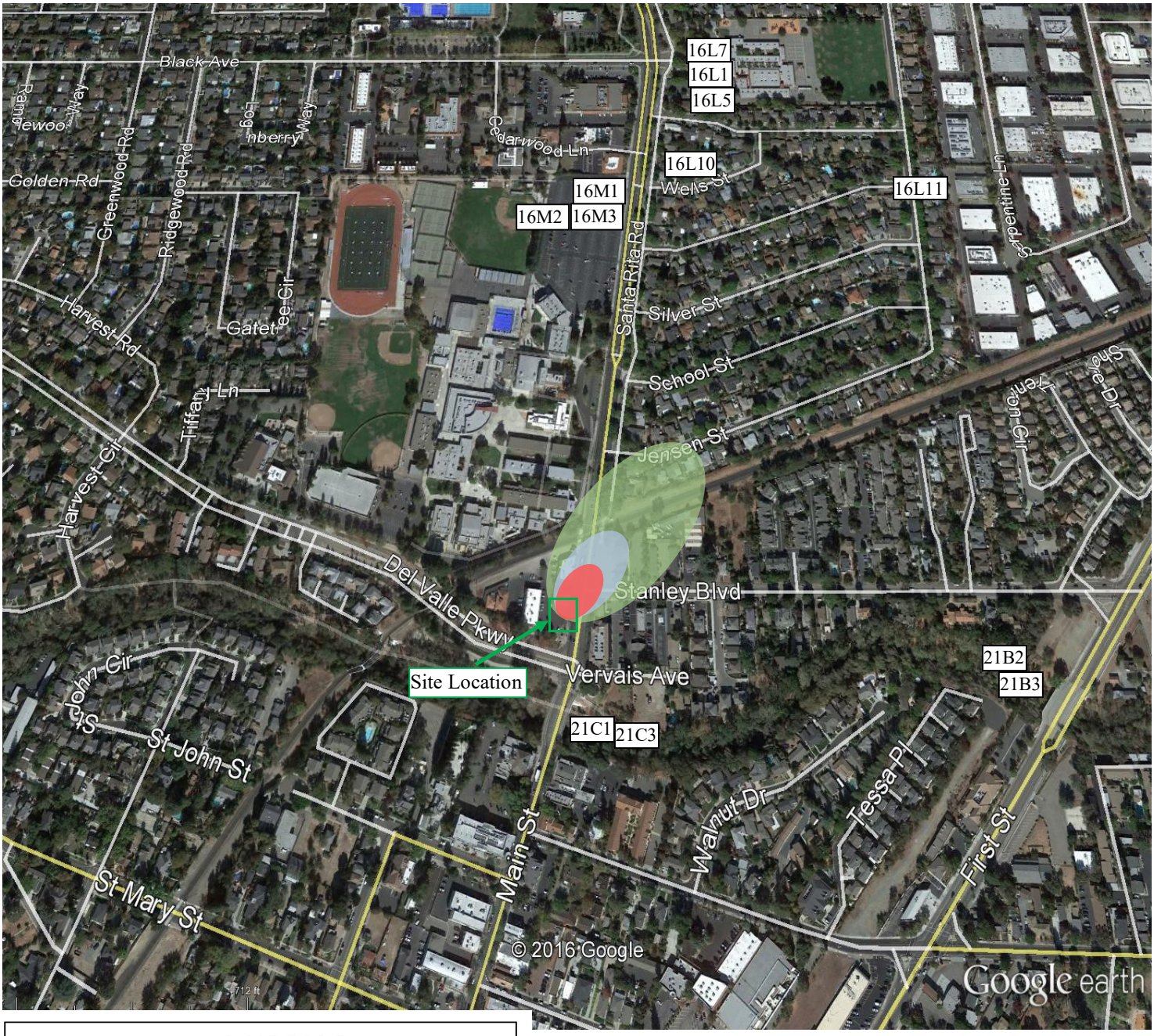
Scale
feet (approximate)
0 2000 4000

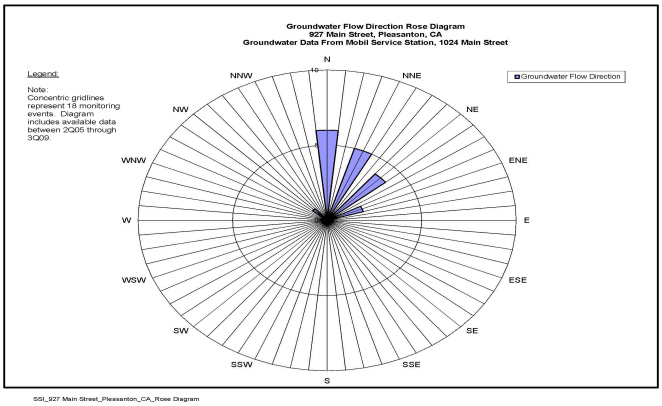
North

ERA soil-water-vapor	**Site Location Map**	PN: 01-2016-1300-001
		Date: October 16, 2017
	Soil and Groundwater Investigation Report Addendum 927 Main Street, Pleasanton, Alameda County, California	EP: Lita Freeman
		Figure 1



Site Plan	PN: 01-2016-1300-001
	Date: October 16, 2017
Soil and Groundwater Investigation Report Addendum	EP: Lita Freeman
927 Main Street, Pleasanton, Alameda County, California	**Figure 2**





Legend

16L11 Well Identification

Average Plume Length (100 µg/L)

90th Percentile Plume Length (100 µg/L)

Maximum Plume Length (100 µg/L)

µg/L micrograms per liter

TPHg Total Petroleum Hydrocarbons as gasoline

Scale (feet, approximate)

0 1,000 2,000

North

ERA soil-water-vapor	**Potential TPHg Plume Lengths**	PN: 01-2016-1300-001
		Date: October 16, 2017
	Soil and Groundwater Investigation Report Addendum	EP: Lita Freeman
	927 Main Street, Pleasanton, Alameda County, California	**Figure 3**