CORNERSTONE EARTH GROUP

Date:	July 25, 2022
Project No.:	118-134-1
Prepared For:	Ms. Amy Wang Mr. Nick Towstopiat **DAVID J. POWERS & ASSOCIATES** 1871 The Alameda, Suite 200 San Jose, California 95126
Re:	Environmental Document Review 1020, 1040 and 1050 Terra Bella Avenue, and 1055 San Leandro Avenue Mountain View, California

Dear Ms. Wang and Mr. Towstopiat:

Per your request, Cornerstone Earth Group, Inc. (Cornerstone) is pleased to present this letter summarizing our review of the provided environmental reports for 1020, 1040 and 1050 Terra Bella Avenue, and 1055 San Leandro Avenue in Mountain View, California (Site). This letter was prepared for David J. Powers & Associates (Powers) in accordance with our May 12, 2022, agreement.

Project Background

We understand that Powers is providing California Environmental Quality Act (CEQA) support to redevelop the approximately 5-acre Site. The Site, as shown on Figures 1 and 2, is located at the northwest corner of Terra Bella Avenue and San Rafael Avenue. Assessor Parcel Numbers (APNs) and parcel addresses obtained from the Santa Clara County Assessor's Office are summarized below in Table 1. The Site is designated General Industrial in the City's General Plan and zoned MM (General Industrial) and is currently developed with a public storage facility and a single-family house that has been converted to commercial office space.

Table 1. Site Location and Current Uses

Assessor's Parcel No. (APN)	Reported Address/Location	Current Use
153-15-002	1040 and 1050 Terra Bella Avenue	Public Storage facility
153-15-021	1020 Terra Bella Avenue	Dilapidated uninhabitable single family home
153-15-030	1055 San Leandro Avenue	Public Storage facility

The project Site is owned by two entities: Alta Housing and Public Storage. Alta Housing owns the approximately 0.5-acre southeastern portion of the Site that is consists of a non-habitable single-story residence and a paved area that is used for parking. Public Storage owns the remaining, 4.3-acre majority of the Site, which is developed with 18, single-story buildings that include drive-up storage lockers and a rental office totaling 77,418 square feet.

The project includes a property transfer between the project Site owners, Alta Housing and Public Storage, to develop an updated personal storage facility and affordable, multi-family housing development. The storage facility development by Public Storage would be located

behind the affordable housing development by Alta Housing and adjacent to the freeway, with the storage facility development creating a buffer between the freeway and the future residents.

The project would be split into two phases. Phase 1 of construction includes the demolition of the existing improvements on the southern portion of the Site fronting Terra Bella Avenue. This area would be redeveloped with a six-story (up to 70 feet to the top of roof) residential apartment building with 108, 100 percent affordable units and an above grade parking garage. The residential parking garage would be located on the San Rafael Avenue and Terra Bella Avenue frontage. Providing two levels of parking with a total of 105 parking stalls for the apartment units.

The ground-floor level of the building would include the first level of the parking garage, a bike shop and storage room, a management office, and a lobby and mail room area. Five residential units would also be located on the ground floor of the building facing Terra Bella Avenue. The second floor of the building would include an above grade parking garage and residential units. A courtyard would be provided for residents on the third floor of the building containing landscaping areas, lounge areas, play equipment, and multiple trellises with lights and space heaters. Residential units, as well as a community room with meeting areas and kitchen space, would surround the courtyard and make up the remainder of the third floor. The remaining upper floors of the building would consist of residential units. Phase 1 of construction also includes demolition of approximately 52,610 square feet of existing storage buildings on the western side of the site to construct a six-story, approximately 285,012 square foot storage facility building.

Phase 2 of construction would include the demolition of the remaining storage buildings and the construction of a four-story, approximately 123,952 square foot storage facility. Building 2 of the storage facility would be located in the northeast corner of the Site, directly behind the new residential building.

Documents Reviewed

This letter briefly summarizes selected information obtained from the following reports:

- CRESurveys LTD (CRE). November 2, 2019. *Draft Phase I Environmental Site Assessment, 1055 San Leandro Avenue and 1020 Terra Bella Avenue*[sic[1]]*, Mountain View, California*
- Terraphase Engineering. June 16, 2017. *Phase I Environmental Site Assessment and Limited Phase II Subsurface Investigation, 1020 Terra Bella Avenue, Mountain View, California.*
- Essel Environmental. June 6, 2022. *Report Soil Vapor Survey, Property at 1020 Terra Bella, Mountain View, California 94043.*

For complete details, please refer directly to the original reports.

[1] Although some information in this report pertains to 1020 Terra Bella Avenue, the report focuses on the Public Storage facility located on parcels with addresses of 1040 and 1050 Terra Bella Avenue and 1055 San Leandro Avenue.

Site History and Prior Studies

Based on the information reviewed, the Site historically was used as agricultural land. Although not described in the report by CRE, provided aerial photographs also show what appear to have been former residences and associated outbuilding on the southern portion of the Public Storage facility property (APN 153-15-002). The existing Public Storage facility reportedly was constructed by 1974.

The 1020 Terra Bella Avenue parcel (APN 153-15-021) currently is occupied by a single-family house that has been converted to commercial office space; a structure that was likely a detached garage that has been converted for office and storage uses; and a 125 square foot shed used for storage (Terraphase, 2017). These structures reportedly were constructed by the early 1960s. Prior commercial occupants of the 1020 Terra Bella Avenue parcel include Blossom Towing and Storage Yard (1986), Varsity Towing (1987-1991) and Saviano Company Inc. (paving contractors, tennis court construction, tennis court supplies and topsoil)(1993-2015).

A soil and groundwater investigation to assess impacts from historical uses was conducted at the 1020 Terra Bella Avenue parcel in 2001 by Environmental/Engineering Consultants (E_2C). Soil and groundwater samples were collected from four borings and analyzed for volatile organic compounds (VOCs), petroleum hydrocarbons and five selected metals. Total petroleum hydrocarbons as diesel (TPHd) was detected in each of the grab groundwater samples at concentrations that ranged from 130 µg/L to 850 µg/L. For comparison, the Water Board's Environmental Screening Level (ESL[2]) for TPHd in groundwater is 200 µg/L. E_2C stated that the greatest TPHd concentration was detected in an up-gradient boring suggesting that the Site is not a source of the detected TPHd in groundwater. None of the other analyte concentrations detected in soil or groundwater exceeded their respective ESLs. Based on their findings, E_2C did not recommend any further action.

Terraphase (2017) reported that petroleum hydrocarbon and chlorinated solvent releases from several nearby properties have been documented up-gradient and cross-gradient of the Site and have the potential to impact the Site via groundwater migration and potentially cause a vapor intrusion concern[3].

Terraphase also concluded that there is a potential for agricultural chemicals to be present in shallow soil at the Site resulting from prior agricultural activities, along with the potential for lead to be present in shallow soil resulting from the possible use of lead-based paint on structures. The possible presence of asbestos containing building materials and septic tanks also was noted.

To further evaluate conditions at the 1020 Terra Bella Avenue parcel, Terraphase collected soil, soil vapor and grab groundwater samples in 2017. In addition, a survey was conducted to locate a suspected septic tank.

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[2] Environmental Screening Levels (ESLs) established by the Water Board (January 2019) are used to screen sites for potential human health concerns where releases of chemicals have occurred. These screening levels are risk-based concentrations derived from standardized equations combining exposure information assumptions with toxicity data. Under most circumstances, the presence of a chemical at concentrations below the corresponding screening level can be assumed not to pose a significant health risk.

[3] Vapor intrusion is the movement of chemical vapors from contaminated groundwater or soil into a nearby building. Vapors primarily enter through openings in the building foundation, such as cracks in the concrete slab and gaps around utility lines. It is also possible for vapors to pass through concrete, which is naturally porous. Once inside the structure, vapors may be inhaled by occupants posing potential health risks.

Shallow soil samples were collected from four borings at 1020 Terra Bella Avenue and analyzed for VOCs, petroleum hydrocarbons and metals. None of the detected VOCs or petroleum hydrocarbon concentrations exceeded their respective residential ESLs, and the detected metal concentrations appear typical of natural background concentrations.

Soil vapor samples were collected from two locations at 1020 Terra Bella Avenue and analyzed for VOCs. Benzene was detected at concentrations of 20 and 31 µg/m^3, which exceed the current residential ESL of 3.2 µg/m^3. Ethylbenzene was detected in one of the two samples at 40 µg/m^3; the residential ESL for ethylbenzene in soil vapor is 37 µg/m^3. Naphthalene was detected in one of the two samples at 45 µg/m^3; the residential ESL for naphthalene in soil vapor is 2.8 µg/m^3. Other detected VOCs concentrations in soil vapor did not exceed their respective residential ESLs.

Groundwater samples were collected from two locations at 1020 Terra Bella Avenue and analyzed for VOCs. Three VOCs were detected at low concentrations, slightly above the laboratory reporting limits. None of the detected concentrations exceeded established ESLs.

A ground penetrating radar and magnetometer survey at 1020 Terra Bella Avenue revealed an anomaly approximately 10 feet long by 6 feet wide that indicated material different than the surrounding soil. The anomaly was identified as a possible location of a septic tank or former septic tank.

In May 2022, Essel sampled soil vapor from six probes located at 1020 Terra Bella Avenue. Several VOCs were detected. Benzene, ethylbenzene, xylenes, 1,3-butadiene, chloroform, ethylene dibromide and vinyl chloride were detected in one or more of the six vapor samples collected at concentrations greater than residential screening levels.

Conclusions and Recommendations

Based on the information obtained during this study, Cornerstone concludes and recommends the following:

- The Site historically was used for agricultural purposes. Pesticides may have been applied to crops in the normal course of farming operations. Residual pesticide concentrations may remain in on-Site soil. If elevated concentrations of agricultural chemicals are present, mitigation or soil management measures may be required during construction/earthwork activities. Terraphase (2017) similarly noted the potential for agricultural chemicals to be present in shallow soil at the Site; however, subsequent soil sampling did not include analyses for organochlorine pesticides.

- In 1978, the Consumer Product Safety Commission banned lead-containing paints and coatings sold for consumer use. Some lead-containing products, such as industrial coatings, however, are still allowed. Based on the age of the existing buildings, lead-containing paint may be present. If demolition is planned, the removal of lead-containing paint is not required if it is bonded to the building materials. However, if the lead-containing paint is flaking, peeling, or blistering, it should be removed prior to demolition. In either case, applicable OSHA regulations must be followed; these include requirements for worker training, air monitoring and dust control, among others. Any

debris or soil containing lead must be disposed appropriately.

- Additionally, soil adjacent to structures that are painted with lead-containing paint can become impacted with lead as a result of the weathering and/or peeling of painted surfaces. Soil near wood framed structures also can be impacted by pesticides historically used to control termites. No information was reported documenting the use of lead-based paint or termite control pesticides on-Site; however, if used, residual pesticide and lead concentrations may remain in on-Site soil. Lead and/or pesticides often are identified in soil near old residences, such as those currently and historically located on-Site (*i.e.*, on APN 153-15-002 and 153-15-021). Terraphase (2017) similarly noted the potential for lead in soil resulting from lead paint; however, the subsequent soil sampling did not include the collection of soil samples adjacent to structures.

- During Site redevelopment activities, several thousand cubic yards of excess soil are planned for off-Site disposal. Prior to grading activities, Site soils should be appropriately sampled and tested for compounds of concern as required by the facility accepting soils planned for off-haul. This testing should include lead, arsenic and organochlorine pesticides. For the residential area of development, areas specified for public or occupant use, such as a park or common areas where users may be exposed to the native soils, should also be sampled and tested for lead, arsenic and organochlorine pesticides to evaluate potential threat to human health.

- Analyses of soil vapor samples collected in 2017 and 2022 from the 1020 Terra Bella Avenue detected VOCs at concentrations exceeding current residential ESLs. TPHd also was detected in groundwater samples collected from the 1020 Terra Bella Avenue in 2001 at concentrations above the current residential ESL. No groundwater or soil vapor samples have been collected from the other Site parcels. Elevated VOC concentrations have been reported in groundwater on properties to the west and southwest of the Site (see Figure 3). The nearby property at 1090 Terra Bella Avenue previously was occupied by Jasco Chemical Company and is listed as a closed case on the leaking underground storage tank (LUST) database. No files pertaining to the Jasco Chemical Company facility are available within the Water Board's Geotracker database (http://geotracker.waterboards.ca.gov); however, a significant chemical fire in 1965 was reported at the facility[4].

  Based on these findings, Cornerstone recommends vapor intrusion mitigation measures for the proposed residential structure. We also recommend that soil vapor sampling be conducted at the proposed storage facility in areas of human occupancy, such as offices, lobbies and the manager's residence, to evaluate if vapor intrusion mitigation measures are warranted for these proposed structures. The soil vapor sampling should be conducted in general conformance with DTSC's July 2015 advisory titled *Active Soil Gas Investigations*. The need for vapor intrusion mitigation measures will be dependent on the concentrations of VOCs detected and the proposed building design. Prior to redevelopment of the Site, a report assessing the potential for vapor intrusion should be prepared by an Environmental Professional. The assessment should be conducted in general conformance with current regulatory guidance[5]. If it is determined that mitigation measures are warranted, the proposed occupied spaces should be designed with appropriate structural and engineering features to reduce risk of vapor intrusion into buildings.

[4] https://www.mv-voice.com/news/2011/08/26/for-some-a-1965-fire-still-burns

- We recommend that future investigations and subsequent mitigation measures be completed under oversight from an appropriate regulatory agency (*e.g.*, DTSC, Water Board or County Department of Environmental Health).

- Based on the previously detected TPHd in groundwater at the Site, VOCs in soil vapor, and the potential presence of pesticides and lead in soil, we recommend preparing a Site Management Plan (SMP) and Health and Safety Plan (HSP) for the proposed demolition and development activities. The purpose of these documents will be to establish appropriate management practices for handling impacted soil, soil vapor and groundwater that may be encountered during construction activities. These documents should also be reviewed and approved by the selected oversight agency.

- The location of the potential septic tank identified by Terraphase in 2017 should be investigated to establish if a tank is present. If a septic tank is identified at this location or if septic tanks are found at other locations during redevelopment activities, they should be properly abandoned in accordance with applicable regulations.

Limitations

Cornerstone performed this investigation to support David J. Powers & Associates in the evaluation of the referenced Site. Conclusions presented in this letter are based on limited, readily available information. This letter, an instrument of professional service, was prepared for the sole use of David J. Powers & Associates and may not be reproduced or distributed without written authorization from Cornerstone. It is valid for 180 days. Cornerstone makes no warranty, expressed or implied, except that our services have been performed in accordance with the environmental principles generally accepted at this time and location.

We thank you for this opportunity to work with you on this important project. Should you have any questions, please contact us at your convenience.

Sincerely,

Cornerstone Earth Group, Inc.

Ron L. Helm, C.E.G.
Senior Principal Geologist