



August 26, 2020

Mr. Pablo Almagro
CH Acquisitions 2, LLC
2200 Biscayne Boulevard
Miami, Florida 33137

Subject: Opinion of Probable Cost
1979 and 1985 Mission Street,
San Francisco, California
AEI Project No. 425780

Dear Mr. Almagro:

AEI Consultants (AEI) has prepared this Opinion of Probable Cost (OPC) to address the known subsurface impacts at 1979 and 1985 Mission Street, San Francisco, California ("the Site"). AEI understands that the client is in the process of purchasing the Site which is planned to be redeveloped at a future date. A brief Site background, our current understanding of the environmental impacts to the Site, and our estimated scope and cost to address the issues are presented below.

Background

AEI is currently in the process of preparing a draft *Phase I Environmental Site Assessment* (Phase I ESA) for the Site. Preliminary findings of the draft Phase I ESA have not identified recognized environmental conditions (RECs) that were not previously outlined in historical reports. Therefore, this OPC has been prepared based on information provided to AEI as outlined in the PSI prepared documents:

- January 11, 2013 *Phase I ESA*
- January 21, 2012 *Subsurface Investigation Report*
- June 20, 2013 *Soil Mitigation Plan*
- July 31, 2014 *Health and Safety Plan*

Based on a review of these reports, multiple dry cleaning facilities and retail gasoline stations have historically been present in the vicinity of the Site, and the commercial building along 16th Street included a dry cleaning business from 1944 through 1966. In 2013, three soil vapor samples were collected in the vicinity of the former dry cleaner to assess vapor conditions, which reported tetrachloroethylene (PCE) at concentrations up to 130 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). These concentrations were not reported above the environmental screening levels (ESLs) at that time of the report; however, since

then, ESLs have decreased and the concentrations do now exceed the residential and commercial/industrial ESL values for PCE of 15 and 67 $\mu\text{g}/\text{m}^3$, respectively.

The Site has been determined to be underlain by imported fill to a depth of 10 feet bgs. A limited assessment (three borings) completed in 2013, indicated that elevated concentrations of lead, observed at a maximum concentration of 840 milligrams per kilogram (mg/kg), were present. In addition, leaching test in this boring identified lead at a concentration of 5.8 micrograms per liter ($\mu\text{g}/\text{L}$) that classifies the soil in this area as "California hazardous waste," if it were to be excavated and disposed. Elevated concentrations of VOCs, PNAs, and TPH were not reported in the soil or groundwater samples collected. Groundwater was indicated to be present at a depth of approximately 7 feet below ground surface (bgs) during the sampling event.

The Site location, historical use, and elevated lead concentrations in soil indicate that the Site is subject to Article 22A of the San Francisco Health Code (Maher Ordinance). In accordance with the Maher ordinance, redevelopment activities involving the excavation of 50 cubic yards or more require submittal of site history information to the San Francisco Department of Environmental Health (DEH). Therefore, the requirements of Article 22A should be considered during development planning.

Opinion of Probable Cost

AEI has prepared this OPC to address known residual environmental concerns present at the Site. This OPC includes costs for the potential for additional investigation activities to address residual chemicals in soil, groundwater, soil gas, agency interaction, and implementation of potential remediation and/or mitigation measures. Based on the information provided in the background section, the bulk of the remedial efforts would be implemented during redevelopment under Maher. The identified potential scope of work is presented below and intended to outline Maher related costs. These costs are considered to be a delta from normal construction redevelopment costs.

Maher Related Characterization Activities

The additional Maher related characterization activities are intended to further characterize the lead impacted soil and obtain the additional analysis needed for the DEH and landfill disposal. Initially a work plan will be prepared for DEH review and comment followed by implementation. AEI anticipates two days onsite to collect soil and groundwater samples. AEI understands that the planned redevelopment would excavated one story below surface, which would remove a majority of the vadose zone soil, and additional soil vapor sampling is not anticipated to be required. Based on this work, a Site Management Plan (SMP) would be prepared to outline a path forward during construction.

Waste disposal

The bulk of additional costs associated with redevelopment are likely to be through soil disposal of the identified fill material. For this OCP, AEI has estimated approximately 57,000 square feet for the Site with the partial basement covering 12,000 square feet. It is assumed that the partial basement will not need additional soil to be removed, so the total amount of excavation area would be approximately 45,000 square feet to a depth of approximately 12 feet bgs (1 story deep), or roughly 20,000 cubic yards of soil. Assuming a multiplier of 1.4 (to convert cubic yards to tons), AEI is estimating a total of 28,000 tons of soil will be removed and require off-site disposal.

The additional characterization activities will further assess hazardous versus non-hazardous disposal requirements. For this OCP, AEI assumes 50% of the upper 4 feet of soil (50% of 1/3 of the total tonnage) will be California hazardous and the remainder of the soil will be non-hazardous. Therefore, 5,000 tons of the 28,000 tons of soil are anticipated to be classified as California hazardous, and require special disposal considerations. The remaining soil is assumed to be classified as acceptable to a class II landfill.

AEI has assumed a baseline construction value of \$25/ton for trucking and disposal of "clean" soil. For the purposes of this OPC, the delta value of \$225/ton for Class I California hazardous waste and \$40/ton for Class II non-hazardous material has been used for the cost estimate. Therefore, the following additional costs are assumed:

- 5,000 tons @ \$225/ton for California hazardous soil (\$1,125,000)
- 23,000 tons @\$25/ton for class II non-hazardous soil (\$575,000)

Construction Oversight –

AEI anticipates periodic Site inspections throughout the construction project for compliance with the SMP. The inspections are intended to verify that the SMP is being implemented properly and to document the process for the DEH final report. AEI anticipates that minimal sampling would be required based on the above discussed off-hauling activities and has included (3) ½ day visits and limited consulting in this task. AEI assumes that best management practices for the building construction, including waterproofing, will sufficiently address the previously identified soil vapor concerns and has not included costs for additional vapor intrusion mitigation measures, if required by the DEH. Groundwater is assumed to be "clean" based on the previous two samples and additional environmental costs associated with dewatering are not anticipated and excluded from this OCP.

Agency Interaction and Report Preparation

AEI anticipates the following reports will be required and has allotted the below budget for the preparation of these reports and DEH interaction:

- Additional Characterization Activities
- Site Management Plan
- Site Management Plan Implementation Report

The following table presents our estimated costs for each of the above described tasks.

Task	Estimated Cost
Additional Maher Related Characterization Activities	\$30,000
Waste Disposal	\$1,700,000
Construction Oversight	\$5,000
Agency Interaction and Report Preparation	\$20,000
Total OPC	\$1,755,000

This OPC is based on only the above described information, reasonable assumptions of the total extent of the impacts, experience working on similar matters, and approximations of remedial performance of the original work performed. Outcomes other than those presented may ultimately occur, requiring additional investigative and/or remedial activities at higher or lower costs than those included herein. AEI provides no guarantee or warranty that the costs outlined will not be significantly higher or lower. Please be advised, if conditions are discovered beyond those anticipated based on the historical review of data made available to AEI at this time, additional costs could be incurred.

AEI appreciates the opportunity to support this important project. If you have any questions or comments, please do not hesitate to contact Dan Peltz at (216) 868-5120, or the undersigned.

Sincerely,



Jeremy Smith
Senior Project Manager

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Vice President

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