



Document Solutions

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

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By Alameda County Environmental Health 2:02 pm, May 01, 2017

Re: ARC Document Solutions (Formerly City Blue Print)
RWQCB Case#01-0210
1700 Jefferson St
Oakland CA, 94612

ARC has directed Applied Water Resources Corporation (AWR) to provide, on our behalf, professional environmental consulting services to the best of their ability. To the best of my knowledge, the information in this report is accurate and all local Agency and/or Regional Water Quality Control Board regulations and guidelines have been followed.

This report was prepared by AWR and ARC has relied on their advice and assistance. I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

Matt Westbrook - Asst. Corp. Controller
Authorized Representative

Attachment: Report



April 28, 2017

Mr. Mark Detterman
Alameda County Department of Environmental Health-LOP
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

RE: Data Gaps Work Plan
1700 Jefferson Street, Oakland, California
Fuel Lake Case No. RO#151

Dear Mr. Detterman:

On behalf of American Reprographic Company, LLC (ARC) and based on Alameda County Environmental Health's (ACEH) December 5, 2016 letter and a meeting with ACEH on April 27, 2017, Applied Water Resources (AWR) has prepared the enclosed Data Gaps Work Plan for 1700 Jefferson Street, Oakland, California.

The objectives of this Work Plan are to address the data gaps identified by ACEH and the 2016 Conceptual Site Model (CSM) including:

- Vapor intrusion risk at the adjacent property with a basement southeast of the Site
- Ground water delineation northwest of the Site on Jefferson St.

Proposed Site Investigation

The work proposed in this plan is a guide to investigation and is subject to change depending on actual field conditions and investigation findings. The scope of work consists of the following tasks and all fieldwork will be performed under the supervision of a California Professional Geologist and in accordance with AWR Standard Operating Procedures as provided in previous reports. All samples will be transported to the laboratory under standard chain-of-custody procedures.

Task 1 - Utility Location, Permitting, and Health and Safety Plan

As described below, investigation activities include drilling and collecting ground water and soil vapor samples. Subsurface investigation permits will be acquired from the appropriate agencies at Alameda County and City of Oakland.

Underground Services Alert (USA) will be notified and the boring locations will be cleared for underground utilities using a private underground utility locator. The proposed drilling locations are contingent upon access limitations (i.e., site features, utilities) and final locations may be moved to the closest accessible location and/or modified by additional information.



As required by the Occupational Health and Safety Administration (OSHA) 29 CFR 1910.120, Hazardous Waste Operations and Emergency Responses, a Site Health and Safety Plan (HSP) will be prepared for use while conducting proposed field sampling activities.

Task 2 – Field Investigation

Soil Vapor Sampling

A soil vapor sample (SV7) was collected at 19.5 ft bgs to evaluate vapor intrusion risk to the ARC building and adjacent buildings with basements. Due to the detection of significant high-level concentrations outside of the range of the TO-15 method, high reporting limits were provided for benzene, toluene, ethylbenzene, and xylenes (BTEX). However total petroleum as gasoline (TPHg) concentrations were estimated and the data presented in the 2016 Site Investigation Report (AWR 2016) indicated there is a potential risk to indoor air on the west side of the commercial building with a basement southeast of the ARC building (1701 San Pablo Ave). It is proposed that SV7 is resampled using TO-17 methodology to prevent high reporting limits for BTEX. It is also proposed that the shallower soil vapor well SV8 is sampled to assess risk to the adjacent commercial building.

Contingent upon the data collected from SV7 and SV8 and after consultation with ACEH, two additional soil vapor points may be installed in the parking lot of 1701 San Pablo Ave depicted in Figure 1 (SV19 and SV20).

A leak test using a helium shroud will be conducted each time a soil vapor sample is collected to evaluate whether ambient air is introduced into the sample during the collection process. Soil vapor will be analyzed for volatile organic compounds (VOCs) and naphthalene by EPA Method TO-17 and for fixed gases and helium by ASTM D1946.

Ground Water Sampling

Based on the predominate ground water flow direction, ACEH requested additional ground water delineation to the northwest of the Site. Figure 1 presents the proposed locations of two borings (D7 and D8) where grab ground water would be collected. The borings will be advanced by a licensed drilling contractor using direct push. Grab ground water samples will be collected using a 1-inch diameter PVC well casing and screen. The PVC will be inserted into the borehole and the rods will be raised approximately 1 foot to allow ground water to enter the PVC. Ground water grab samples will be collected within the casing using dedicated tubing with a check valve, or a peristaltic pump. The ground water samples will be collected into laboratory-supplied containers for the analysis of total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8015/8260.

Contingent upon the data collected from D7 and D8 in relation to water quality goals and after consultation with ACEH, a monitor well may be installed in one or both locations.

Task 3 – Reporting

An Comprehensive Investigation Summary Report will be prepared and submitted presenting the results of this investigation as well as all previous investigations. The report will include:

- Descriptions of the methodologies used to collect and analyze the data;
- Significant deviations from this Work Plan;



- Updated Site Conceptual Model based on the findings, including description of the Site, utility corridors, local geology, and hydrogeology;
- Appropriately scaled base maps showing the boring location and boring logs illustrating soils observed in the field;
- Summary and interpretation of water, soil, and soil vapor analytical results and laboratory data certificates, including an assessment of the extent of chemicals in soil, potential impacts on beneficial uses of ground water, and health risk to humans and the environment;
- Comparison of on-site with off-site conditions;
- Recommended additional actions, if any.

We hope this Work Plan meets your needs. Please call me at 510-671-2085 with your comments.

Regards,

Applied Water Resources



Steven Michelson
Principal Geologist



Distribution List

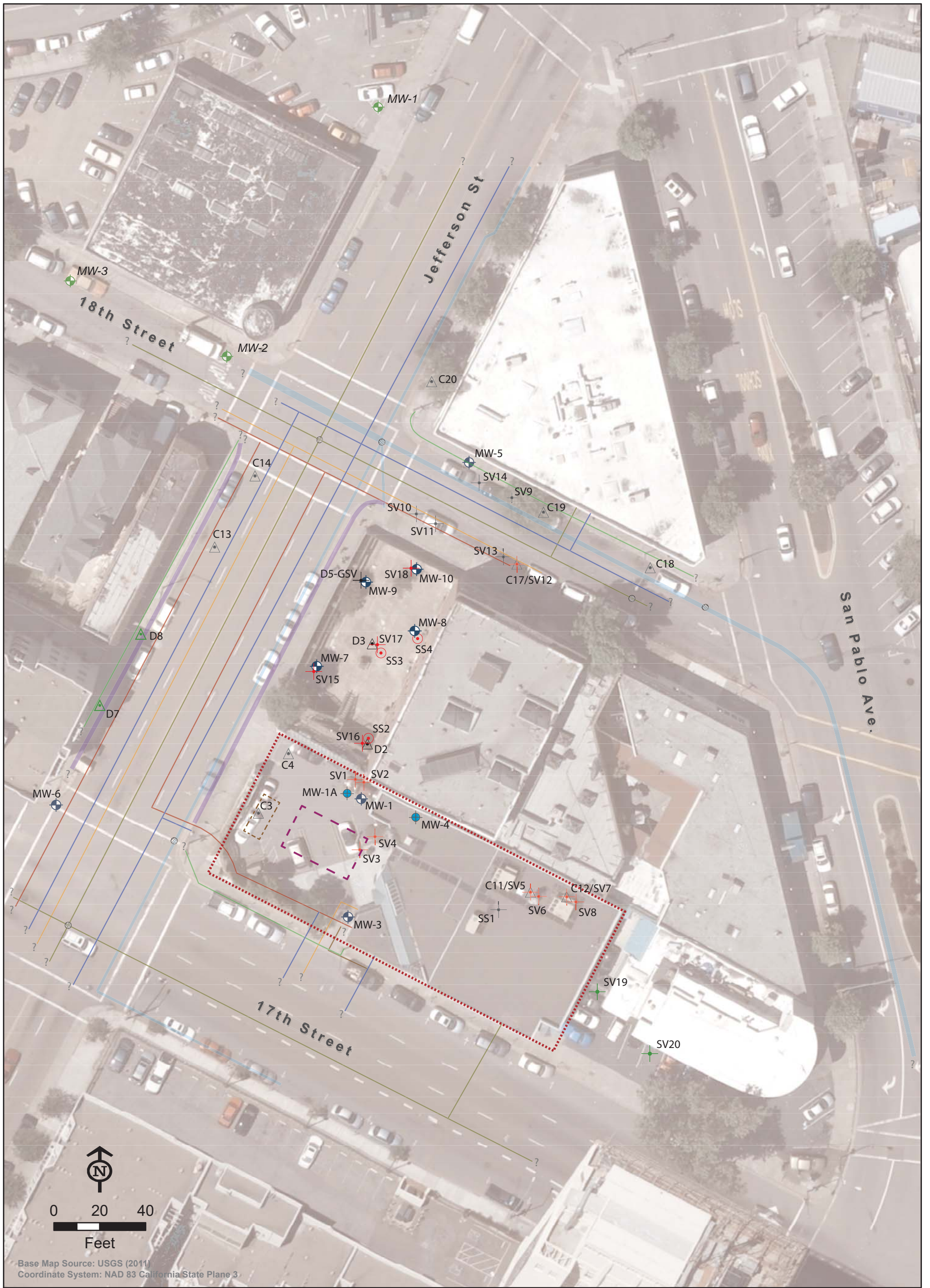
Matthew Westbrook
Jeffery Grimes
ARC Document Solutions
1981 N. Broadway, Suite 385
Walnut Creek CA 94596

Attachments:

Figure

FIGURE





Base Map Source: USGS (2011)
 Coordinate System: NAD 83 California State Plane 3

Figure 1
Proposed Sampling Locations
 1700 Jefferson Street, Oakland, CA



Proposed Temporary Soil Vapor Point*	Soil Vapor - Permanent	Tank Removal Excavation Area (approx)	Utilities
Proposed Grab Ground Water	Soil Vapor - Temporary	Property Boundary	Sanitary Sewer
Monitor Well		Former Dispenser Island (approx)	Water
Monitor Well - 612 18th St		Manhole	Gas
Extraction Well	* Contingent upon data collected	Cross Section Line	Electrical
Grab Groundwater			AT&T
			Street Lighting
			Storm Drain
			Old Storm Drain (Filled)