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Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED

By Alameda County Environmental Health at 9:56 am, Jan 08, 2015

RE: Water Supply Well Destruction Work Plan
Former Chevron Service Station 97127
Grant Line Road and Interstate 580
Tracy, California
RWQCB # RO0000185

Dear Mr. Detterman:

ARCADIS U.S., Inc. (ARCADIS), at the request of Chevron Environmental Management Company (Chevron), has prepared the enclosed Water Supply Well Destruction Work Plan for Former Chevron Service Station 97127, located at Grant Line Road and Interstate 580 in Tracy, California.

I declare to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct. The enclosed report is submitted pursuant to the requirements of California Water Code Section 13267 (b)(1).

Sincerely,

A handwritten signature in cursive script that reads "Carryl MacLeod".

Carryl MacLeod
Project Manager

Mr. Mark Detterman, P.G., C.E.G.
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject:

Water Supply Well Destruction Work Plan
Former Chevron Service Station No. 97127
Grant Line Road and Interstate 580
Tracy, California
RWQCB # RO0000185

Dear Mr. Detterman:

On behalf of Chevron Environmental Management Company (Chevron), ARCADIS U.S. Inc. (ARCADIS) has prepared this *Water Supply Well Destruction Work Plan* for the former Chevron service station 97127, located at the east side of Grant Line Road, just south of Interstate-580 in a rural area of Tracy, California (the site; Figure 1).

ARCADIS prepared this work plan in response to Alameda County Environmental Health (ACEH) electronic mail (e-mail) dated December 23, 2014. ACEH requested that the onsite water production well be destroyed prior to February 15, 2015. The details of the well destruction are discussed below.

Site Description and Features

The site is a vacant lot located on the east side of Grant Line Road, just south of Interstate-580 in a rural area of Tracy, California (Figure 1). Former service station facilities at the site included fuel underground storage tanks (USTs) (two 10,000-gallon capacity and one 1,000-gallon capacity), one steel used oil UST (1,000-gallon capacity), one heating oil UST (750-gallon capacity), product line piping and pump islands, and station building (Figure 2). The USTs and associated piping were removed during April 1991. The site is currently a vacant lot.

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ENVIRONMENT

Date:
January 7, 2015

Contact:
Tonya R. Russi

Phone:
916.865.3168

Email:
Tonya.Russi@arcadis-us.com

Our ref:
B0047959.0013

Proposed Scope of Work

ARCADIS proposes the destruction of the onsite water supply well, WSW-1, via detonation and grouting. Figure 2 illustrates the well location.

Site Specific Health and Safety Plan

As required by the Occupational Health and Safety Administration (OSHA) Standard "Hazardous Waste Operations and Emergency Response" guidelines (29 Code of Federal Regulations Section 1910.120), and by California Occupational Health and Safety Administration (Cal-OSHA) "Hazardous Waste Operations and Emergency Response" guidelines (California Code of Regulations Title 8, Section 5192), ARCADIS will prepare a site-specific health and safety plan (HASP) prior to commencement of fieldwork. Field staff and contractors will review the HASP before beginning field operations at the site.

Permitting

All applicable permits will be obtained from Zone 7 Agency, prior to commencing field activities.

Underground Utility Locating

Underground Service Alert (USA) will be notified a minimum of 48 hours prior to commencing field activities to identify any public utility alignments that may be in conflict with the proposed boring. In conjunction with the USA notification, a private utility locating company will be utilized for clearing around the water supply well for underground utilities.

Well Destruction Method

Prior to destruction, the pump and piping will be removed from the water supply well and disposed of offsite. Total depth of the well will be measured to verify that the casing is free of obstructions.

ARCADIS proposes that WSW-1 be decommissioned by use of detonation techniques. ARCADIS will subcontract Welenco of Bakersfield, California to complete detonation of the water supply well using an explosive 50 grain detonator cord with 7 150 grain charges set at approximately 62 feet below ground surface (bgs), within

the screen interval of WSW-1. Blast plan may change based on total well depth measured in the field. Subsequently, neat cement grout will be added to the well using a tremie pipe set at the bottom of the well until the casing is completely filled with grout. ARCADIS will subcontract a licensed California Water Well Drilling Contractor to complete the grouting services at WSW-1. Following grouting, the charge will be detonated to perforate the well. Once blasting is complete, the open casing will be backfilled with neat cement grout under guidance from the drilling contractor. Following grouting, the WSW-1 casing will be over-excavated to approximately 5 feet bgs per Zone 7 Agency requirements. The steel well casing will be cut off at approximately 5 feet bgs using a torch extension and removed. Additional grout will be added as needed to construct a mushroom cap. The borehole will be backfilled with native soil to surface.

A four gas meter will be used prior to and during the cutting of the steel well casing to ensure that there is no explosive atmosphere present. The well vault will be removed after the destruction of the water supply well.

The detonation of WSW-1 by explosives will ensure perforation of the casing and force the sealing material (grout) into the surrounding formation. This will create a seal of the entire length of the screened interval for the well location. Welenco will provide a blasting plan for the water supply well.

Investigation Derived Waste

The drilling contractor will dispose of the downhole pump and piping, the steel casing well vault and other waste generated during well destruction activities as construction debris. The over-excavated soil will be used to backfill the boring.

Report

ARCADIS will include a detail of results and findings in a letter report including a summary of field activities.

Schedule

ARCADIS is prepared to initiate field work upon the approval of this work plan by the ACEH.

If you have any questions or comments regarding the content of this work plan, please contact Tonya Russi by telephone at 916.865.3168 or by e-mail at Tonya.Russi@arcadis-us.com

Sincerely,

ARCADIS U.S., Inc.

Tonya Russi

Tonya R. Russi
Senior Scientist

DS

David W. Lay, P.G., C.P.G.
Principal Geologist



Enclosures:

Figure 1 Site Location Map
Figure 2 Site Plan

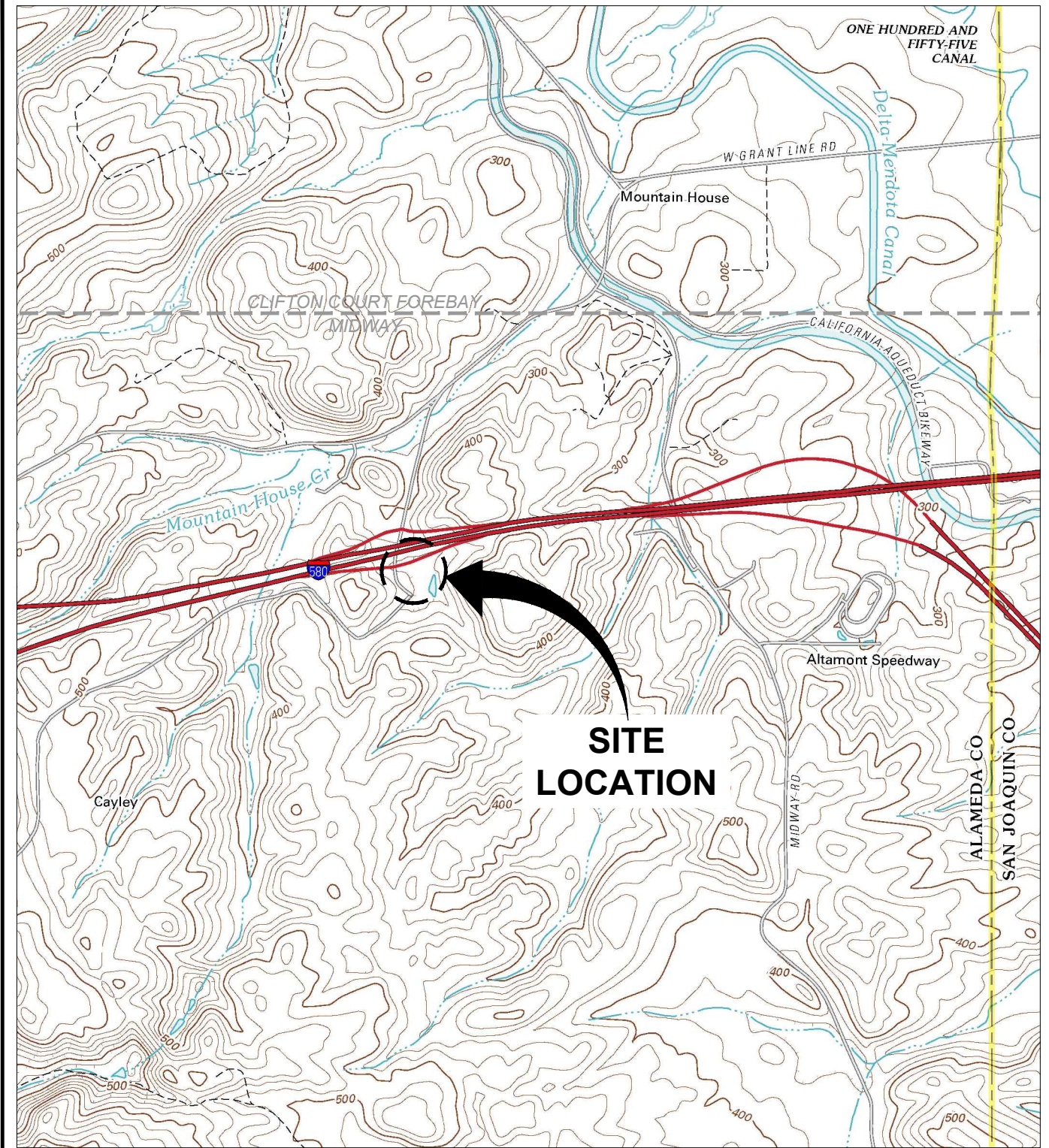
Copies:

Ms. Carryl MacLeod, Chevron Environmental Management Company
Mr. Ardavan Onori, DM Livermore, Inc.
Mr. Wyman Hong, Zone 7 Water Agency



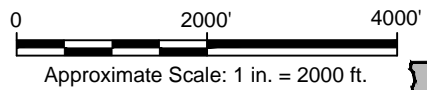
Figures

CITY: SAN RAFAEL, CA (PETALUMA) DIV/GROUP: ENVCAD DB: J. HARRIS
 C:\Users\jharris\Desktop\ENVCAD\80047959\000\02\01\24\DWG\7959\NO1.dwg LAYOUT: 1 SAVED: 1/10/2014 1:51 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/26/2014 11:01 AM BY: HARRIS, JESSICA



SITE LOCATION

REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., MIDWAY AND CLIFTON COURT FOREBAY, CALIFORNIA, 2012.



CHEVRON SITE ID 97127
 GRANT LINE ROAD AND INTERSTATE 580
 TRACY, CALIFORNIA

SITE LOCATION MAP



FIGURE
1

