



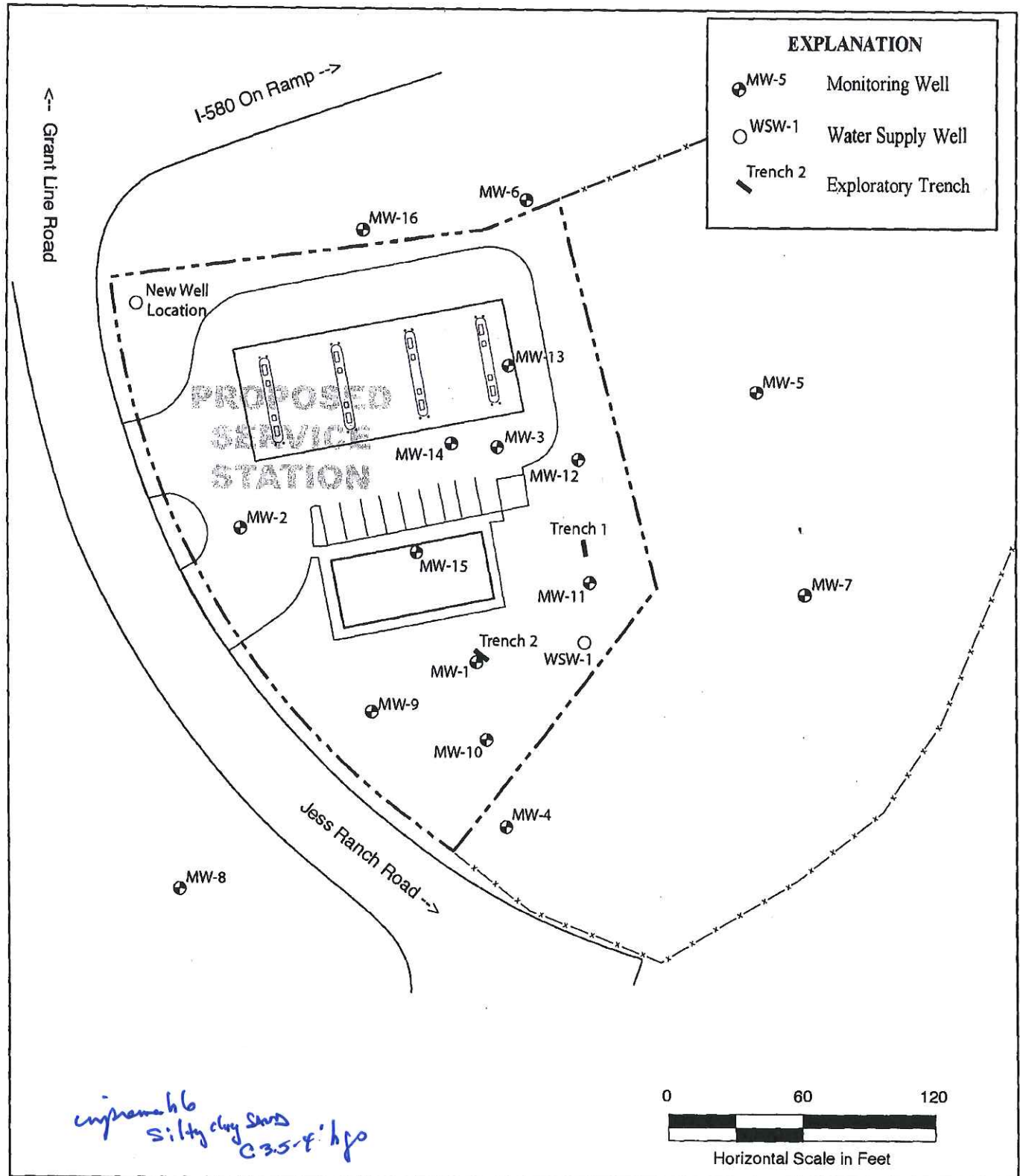
# Health Care Services

## Alameda County Environmental Health Meeting Sign-In Sheet

Chevron #9-7127; RO0000185  
10 Grant Line Rd, Tracy, CA

Tuesday, March 31, 2015  
10:00 AM

NAME	COMPANY	MAILING ADDRESS	PHONE	Signature	E-MAIL
Dilan Roe	Alameda County	1131 Harbor Bay Pkwy, Suite 250 Alameda, CA 94502	(510) 567-6767	<i>Dilan Roe</i>	Dilan.roe@acgov.org
Mark Detterman	Alameda County	1131 Harbor Bay Pkwy, Suite 250 Alameda, CA 94502	(510) 567-6876	<i>Mark Detterman</i>	mark.detterman@acgov.org
<i>H.B. DIEZ</i>	<i>DIEZ ENG &amp; CONST</i>	<i>33233 So Koster Rd</i>		<i>H.B. Diez</i>	<i>gwd applies@MSN.COM</i>
<i>Jadi Singh</i>		<i>TRACY CA</i> <i>821 Corporate Way</i> <i>Fremont 94538</i>	<i>209 482 7789</i> <i>510-449-8588</i>	<i>Jadi Singh</i>	<i>jadi98@yahoo.com</i>
<i>Ardi Onsoni</i>			<i>510-1141-0581</i>	<i>A. Onsoni</i>	<i>dm3asmatirua@yahoo.com</i>
<i>MUTHANA</i>	<i>M. ARCHITECTS INC</i>	<i>2221 OLYMPIC BLVD</i> <i>WALNUT CREEK, CA 94598</i>	<i>925 297-1174</i> <i>x1</i>	<i>Muthana</i>	<i>muthana@m.architect.com</i>
<i>Dr. Watkins</i>	<i>DIEZ ENG</i>	<i>1120 Hough Ave #3</i> <i>OAKLAND CA 94612</i>	<i>510-336-9118</i>	<i>D. Watkins</i>	<i>daiw@sanjoco.com</i>



**SITE PLAN**

10 Grant Line Road at Interstate 580  
Alameda County, California

FIG 1

**DIETZ ENGINEERING AND CONSTRUCTION, INC**

Project Number: 2005.021

Drawn by: GNM

Date: 03/20/15

Trench ID: **Exploratory Trench 1**

Project: 10 Grant Line Road

Project No.: 2005.021

Owner: The Kirpa Investments, LP

Location: 10 Grant Line Road at Interstate 580, Alameda County

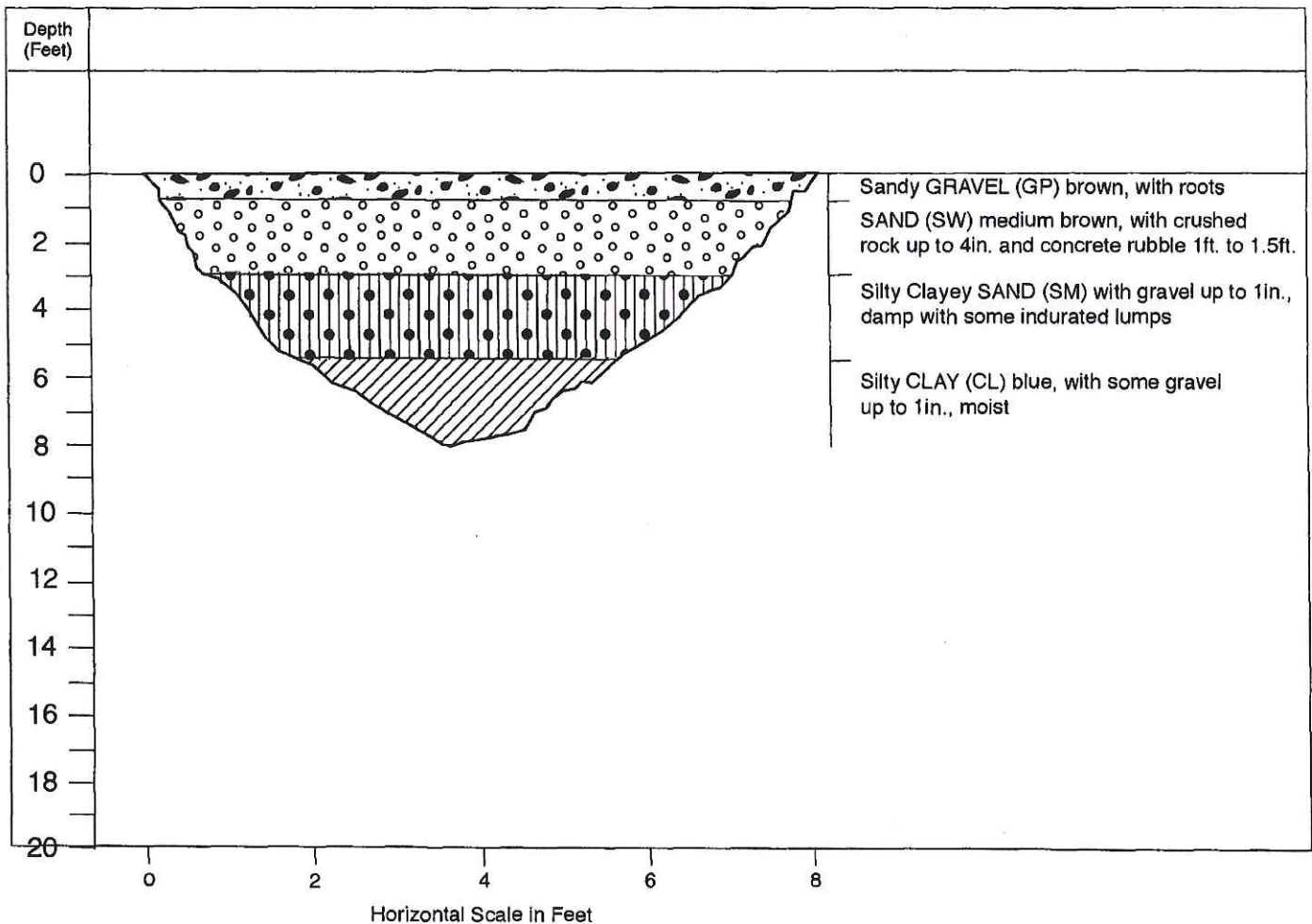
Date Excavated: 2015.03.09

Excavation By: Dietz Engineering and Construction, Inc.

Logged By: Dai Watkins

Equipment Operator: Bernie Dietz

Equipment Used: Case CX50 Excavator



Trench Length at Surface: 8 ft.

Depth to First Water: Not encountered ft.

Trench Width at Surface: 2 ft.

Maximum Depth of Trench: 8 ft.

**NOTES:**

1. Uniform Soil Classifications are from field observations only. No geotechnical engineering laboratory tests were performed.

Trench ID: **Exploratory Trench 2**

Project: 10 Grant Line Road

Project No.: 2005.021

Owner: The Kirpa Investments, LP

Location: 10 Grant Line Road at Interstate 580, Alameda County

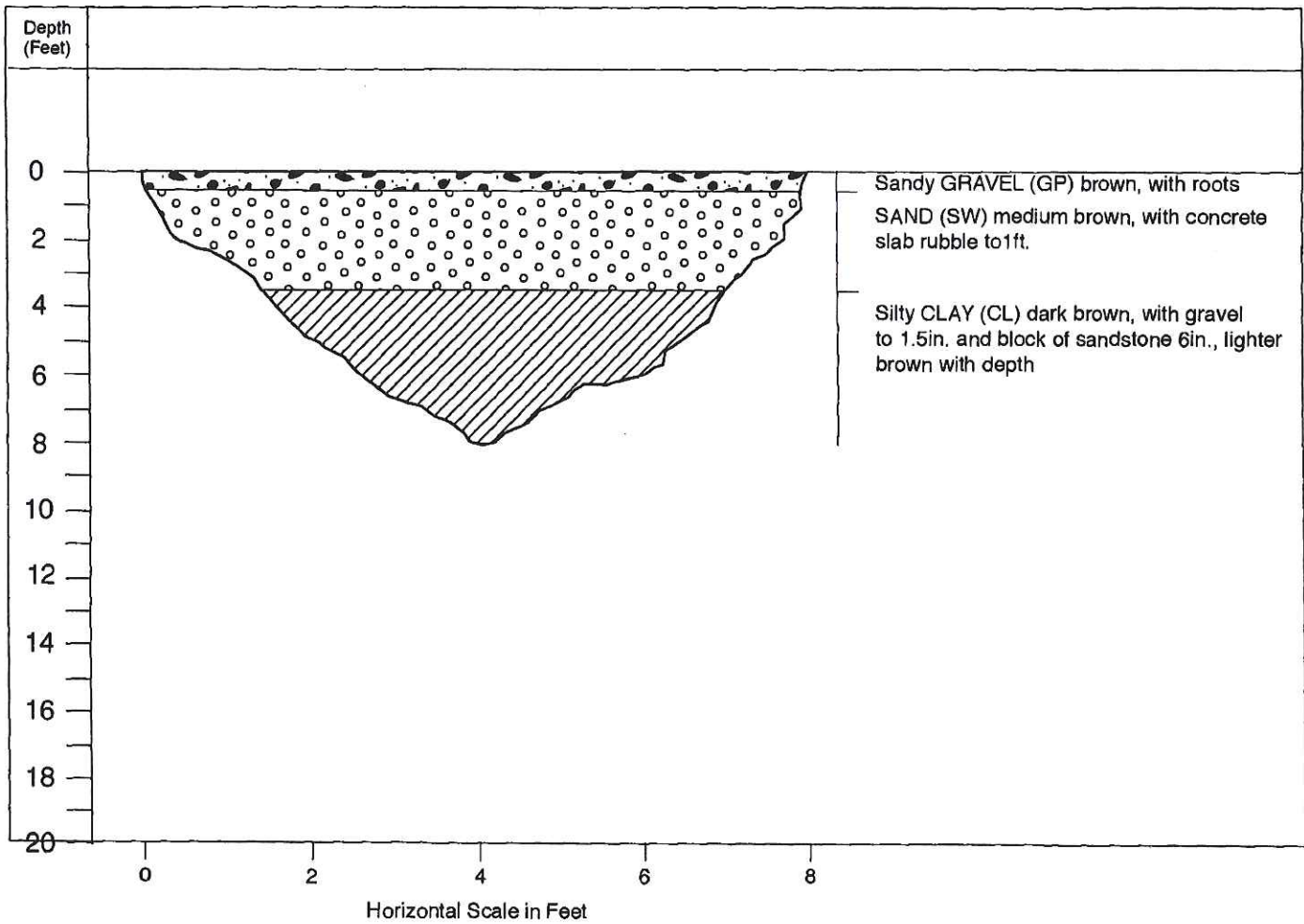
Date Excavated: 2015.03.09

Excavation By: Dietz Engineering and Construction, Inc.

Logged By: Dai Watkins

Equipment Operator: Bernie Dietz

Equipment Used: Case CX50 Excavator



Trench Length at Surface: 8 ft.

Depth to First Water: Not encountered ft.

Trench Width at Surface: 2 ft.

Maximum Depth of Trench: 8 ft.

**NOTES:**

1. Uniform Soil Classifications are from field observations only. No geotechnical engineering laboratory tests were performed.

# DIETZ ENGINEERING AND CONSTRUCTION, INC.

SERVING AGRICULTURE AND INDUSTRY

CA Lic. #638281

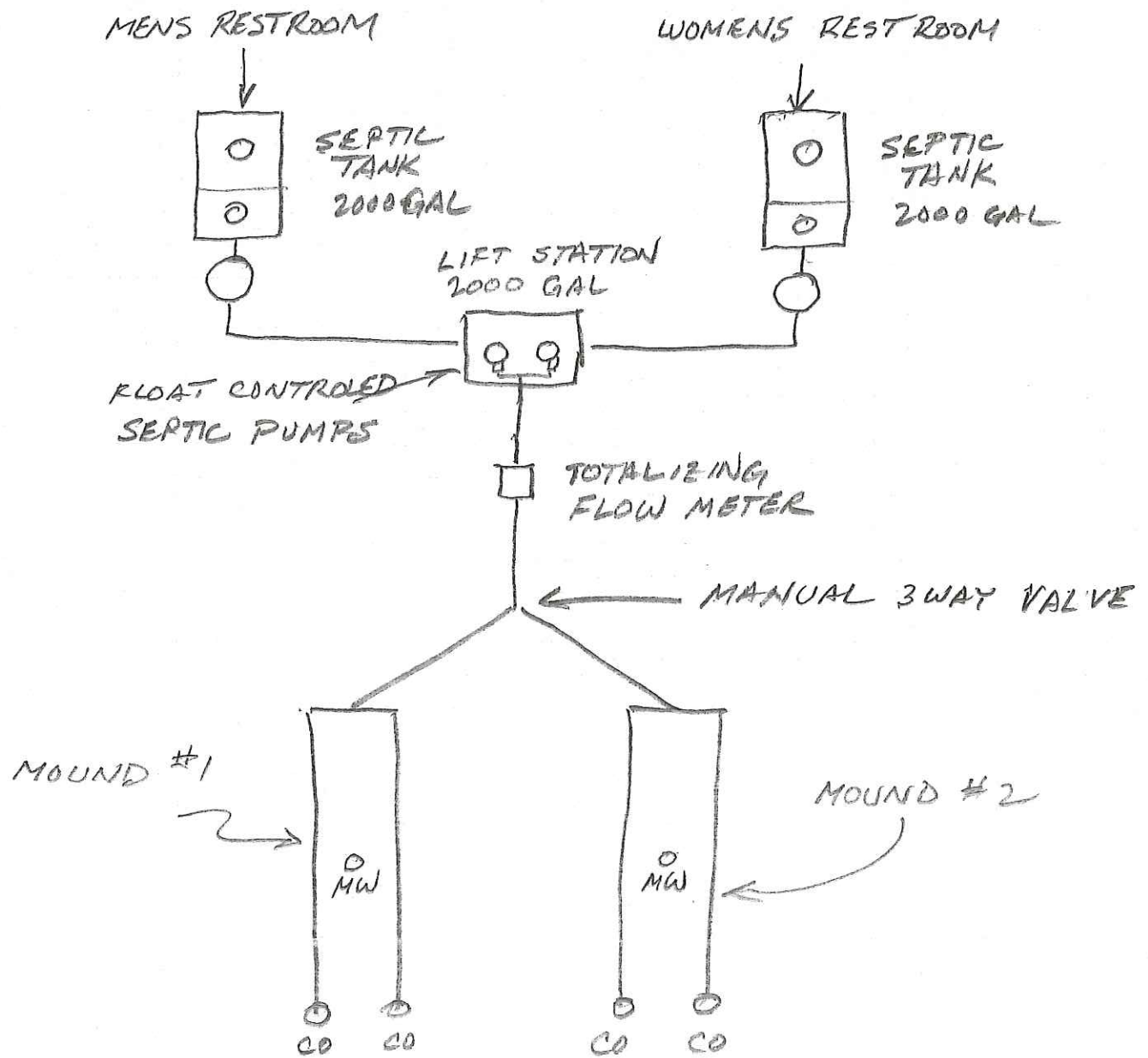
## 10 Grant Line Road Septic System Design Parameters

- Daily System Flow 600 – 1000 gpm. (Actual number to be determined). *hydroponics*
- 1 day surge capacity in lift station
- Septic tank effluent to be filtered and metered  
*+ Screened* *concrete not fiberglass*
- Lift station pump HP to be determined by pressure drop  
*- 2 pumps for redundancy / backup*
- Mound system to be used for effluent disposal due to shallow permeable soil on site
- Gravel width to be 10 feet *3/4"* ; workable ; no fines ; double washed
- Length depends on daily system flow (150 ft. – 250 ft.) at 4 gal/ft.

*Have 250' now; NOT a sand*

*- other options*

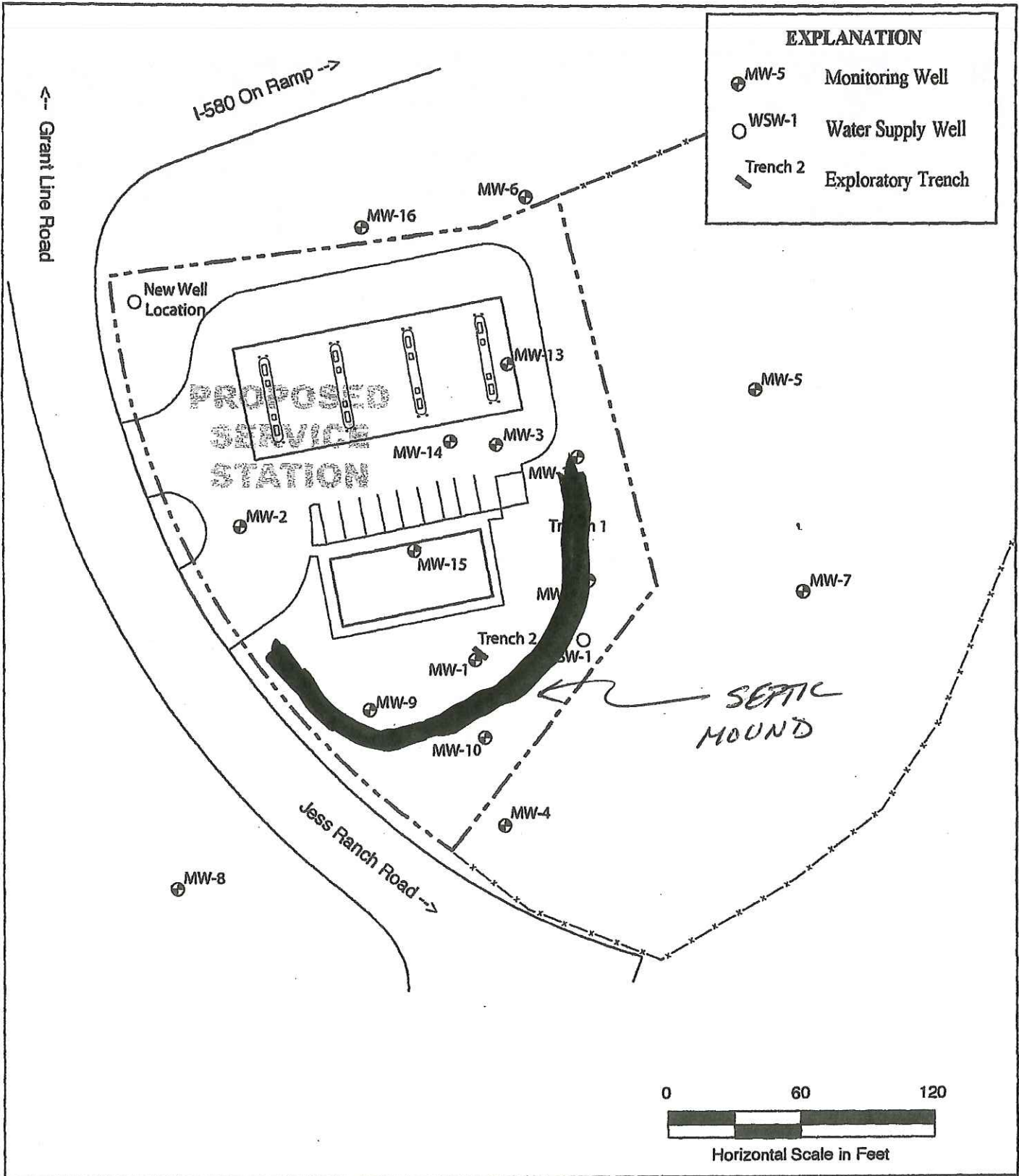
- downsize station
- max flow vol. helps make
- extend to N/along E. side



CO - CLEAN OUT  
 MW - MONITORING WELL

10 GRANTLINE RD  
 SEPTIC SCHEMATIC

SCALE - NONE  
 3/2015



**SITE PLAN**  
 10 Grant Line Road at Interstate 580  
 Alameda County, California

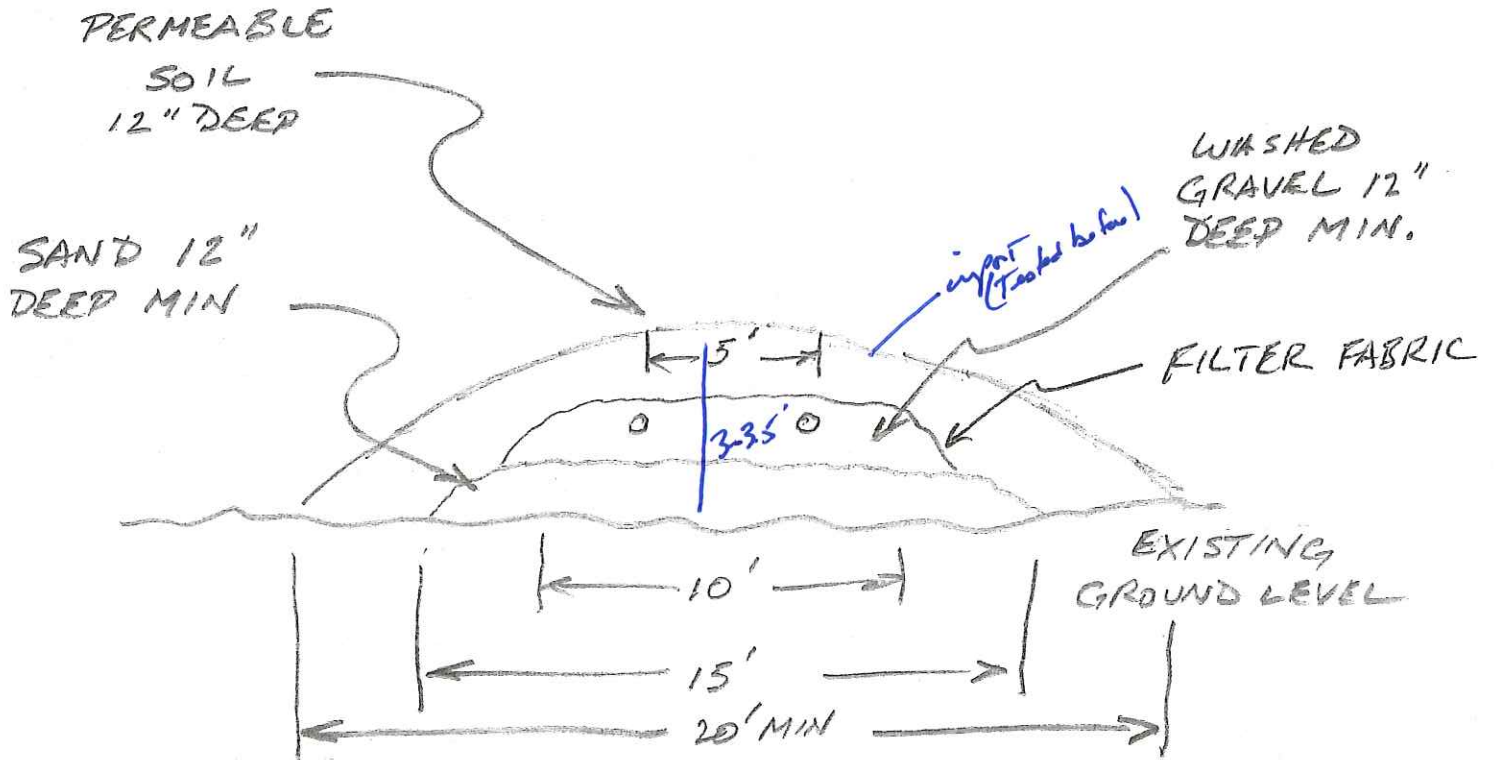
FIG 1

**DIETZ ENGINEERING AND CONSTRUCTION, INC**

Project Number: 2005.021

Drawn by: GNM

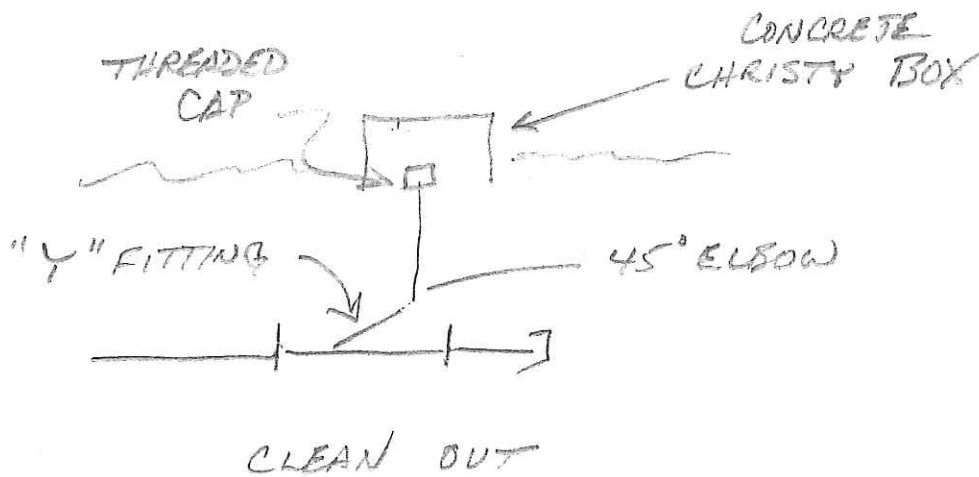
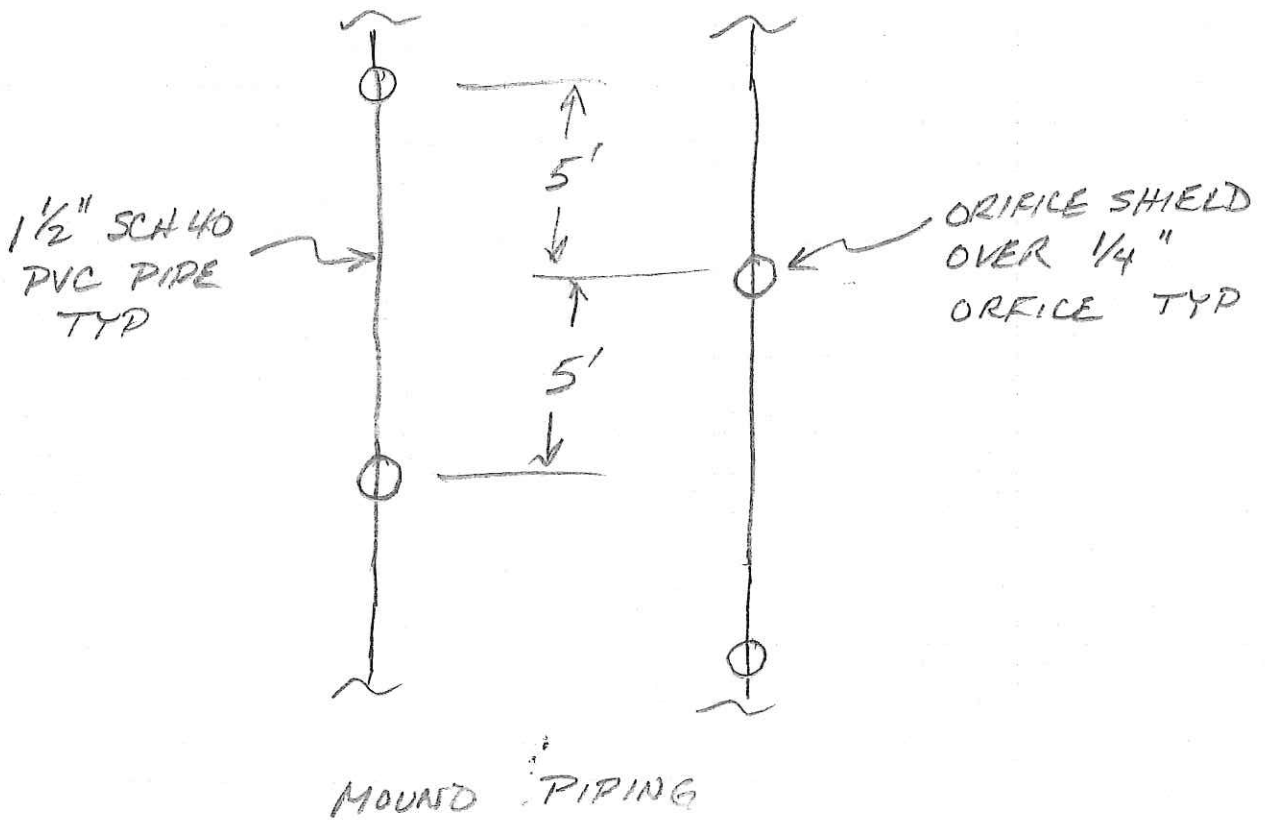
Date: 03/20/15



10 GRANT LINE RD  
 MOUND ELEVATION

SCALE - NONE  
 3/2015





10 GRANT LINE RD  
DETAILS

SCALE - NONE  
3/2015



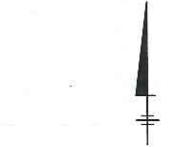
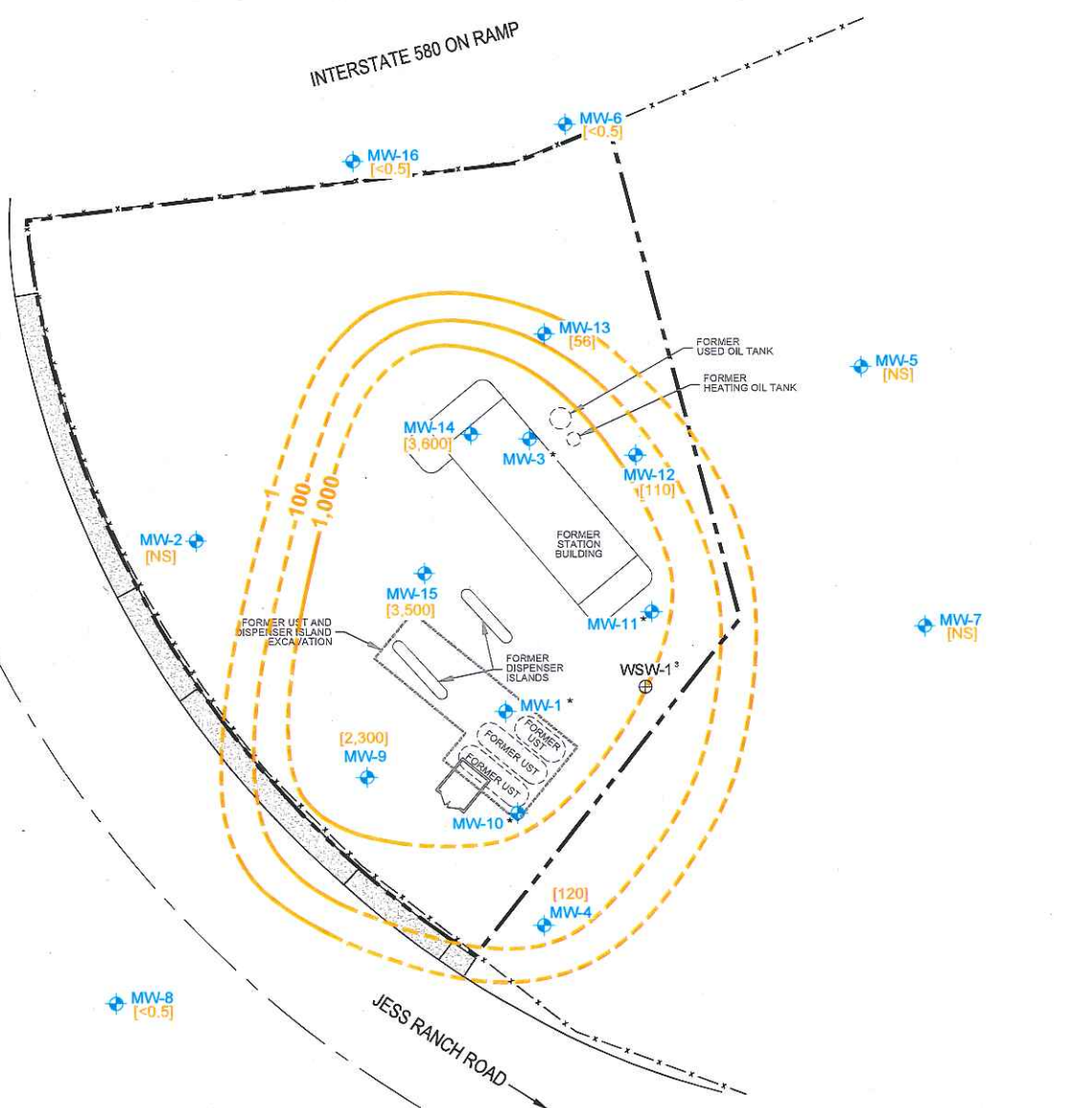


CITY: SAN RAFAEL, CA (RETAIL/MA) D:\WORK\PROJECTS\ENV\CALD\_09\_11\HARRIS\_E\_MURBAN\_1\_HARRIS  
 C:\Users\jmharris\Documents\2014\20141219\20141219155503.dwg LAYOUT: 13 DATED: 2/20/2016 2:31 PM ACADVER: 18 IS (LAST TECH) PAPERSETUP: SETUP1 PLOTTBY: JESSICA  
 XREFS: IMAGES: PROJECTNAME: 4/19/2016

GRANT LINE ROAD

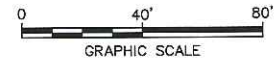
INTERSTATE 580 ON RAMP

JESS RANCH ROAD



- LEGEND**
- PROPERTY BOUNDARY
  - - - FENCE
  - MW-1 ◆ MONITORING WELL LOCATION
  - WSW-1 ⊕ WATER SUPPLY WELL (LIVESTOCK)
  - [BENZ] BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
  - 1,000 - - - BENZENE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
  - [NS] NOT SAMPLED DURING FOURTH QUARTER 2014
  - < NOT DETECTED ABOVE LABORATORY METHOD DETECTION LIMIT
  - \* SEPARATE PHASE HYDROCARBONS (SPH) PRESENT IN WELL

- NOTES:**
1. MONITORING WELL AND SOIL BORING LOCATIONS BASED ON SURVEY DATA PROVIDED BY MJIR CONSULTING, INC. EXCEL FILE 4285-02 GEO\_XY.XLS. SOIL BORING SB-8 NOT SURVEYED, LOCATION IS APPROXIMATE.
  2. MAP MODIFIED FROM CONESTOGA-ROVERS & ASSOCIATES (CRA) FIGURE ENTITLED "FIGURE 2 CONCENTRATION MAP" DATED FEBRUARY 21, 2012, DRAWING FILE xsite.dwg. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
  3. WATER SUPPLY WELL (WSW-1) NOT USED TO CONTOUR.



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

**BENZENE ISOCONCENTRATION MAP  
 DECEMBER 19, 2014**

**ARCADIS**

FIGURE  
**13**



*do both @ same time*

## 5. Recommended Remedial Alternatives

Based on the evaluation of remedial alternatives presented in Section 5 above, the following remedial alternatives are proposed:

- Use of DPE is proposed for mitigation of the concern of hydrocarbons leaching to groundwater from residual LNAPL sources in vadose zone soils and will allow removal of soil vapors in the vadose zone and petroleum-impacted groundwater. It is contingent upon water yield data from a proposed pilot test. If high water yields are observed during pilot testing then it would be unfeasible to implement this technology and a second alternative may be AS/SVE

Based on the results of the comparative analysis presented above, DPE has the highest reasonable probability to achieve remedial objectives; however, prior to the preparation of a corrective action plan (CAP) ARCADIS recommends the following:

- Conducting a DPE pilot study to evaluate if it is feasible at the site. There is no sanitary sewer or utility connections available at the site. The pilot study will be used to determine water yields.
- The installation of one extraction well screened between 25 to 45 feet bgs located between MW-1 and MW-10. The extraction well will be completed with 4-inch outer diameter casing and a sump. The location of this proposed well location is presented on Figure 3.
- Installation of one observation well approximately 15 feet east of the proposed extraction well.
- Collect continuous soil samples from the pilot boring for the intermediate extraction well for VOC screening using a photo-ionization detector (PID) and laboratory analyses to conduct vertical delineation of the smear zone
- The conductance of a DPE pilot test consisting of two stages:
  - 24 hour pump-only test: Water yield and formation behavior will be evaluated during this test. The second stage of the test will be assessed based on allowable potential treated wastewater disposal volumes per discussion with ACEHD.
  - DPE pilot test: Following the 24 hour pump test, while the well remains dewatered, a vacuum will be applied. The DPE pilot test will run continuously for approximately 48 to 72 hours. If drawdown and mass removal rate remain steady for 48 hours, the test can be stopped.
- The collection of one round of geochemical analysis during the next groundwater monitoring and sampling event to evaluate MNA parameters. Geochemical



**Feasibility Study /  
Corrective Action  
Plan**

Grant Line Road and  
Interstate 580  
Tracy, California

parameters include the analysis of DO, nitrate (NO<sub>3</sub>-), Fe<sup>2+</sup>, sulfate (SO<sub>4</sub><sup>2-</sup>) and ORP.

If the recommendations presented within this FS/CAP are approved by ACEHD, ARCADIS will prepare a work plan detailing the methodology of the DPE pilot study and installation of one extraction well and one observation well and the DPE pilot test.