May 10, 2010

Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

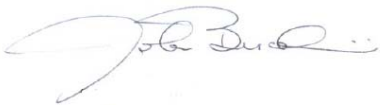
Attention: Barbara Jakub

Subject: Response to October 17, 2008 Letter from ACEH
St. Francis Pie Shop UST Site, 1125 67th Street Oakland, California
ACDEH Site No. RO2602, Global ID: T0600109444

Ladies and Gentlemen:

Attached please find a copy of the *Response to October 17, 2008 Letter from ACEH, 1125 67th Street, Oakland, California*, prepared by Gribi Associates. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Very truly yours,



John Buschini. Jr.
St. Francis Pie Shop, Inc.

GRIBI
ASSOCIATES

May 10, 2010

Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Attention: Barbara Jakub

Subject: Response to October 17, 2008 Letter from ACEH
Former St. Francis Pie Shop UST Site
1125 67th Street Oakland, Ca
ACEH Site No. RO2602

Ladies and Gentlemen:

Gribi Associates is pleased to submit this letter on behalf of St. Francis Pie Shop for the underground storage tank (UST) site located at 1125 67th Street in Oakland, California (see Figure 1). Gribi Associates previously submitted *Remedial Investigation Report and Workplan To Conduct Ozone Injection Pilot Test* (May 10, 2007) and *Revised Workplan to Conducted Ozone Injection Pilot Test* (August 6, 2008) proposing to conduct an ozone injection pilot test at the site. On October 17, 2008, Alameda County Environmental Health (ACEH) issued a letter requesting additional clarification relative to the planned ozone injection pilot test. The goal of this letter is to address each of the specific comments/requests so that the pilot test can be implemented.

Technical Responses

The following numbered responses correspond to the numbered technical comments provided in the October 17, 2008 ACEH letter.

1. **Ozone Sparge Injection Point Spacing and well depths.**
Well spacing: As shown on Figure 2 (and on Figure 9 in the revised workplan), the distance from IW-1 to IW-2 is approximately 30 feet, and the distance between IW-2 and IW-3 is approximately 45 feet. Based on our experience on several ozone injection remediation projects, these proposed distances are reasonable.
Well depths: We generally concur with this comment. Ozone injection well diffusers are normally placed at least five to ten feet below the water table to allow for wider dispersion of upwelling ozone. However, this site has a relatively large amount of clays, with discontinuous sand layers (see Figure 3). Thus, perhaps the best way to decide on diffuser depths is on a well-by-well basis. For each well, we will core to at least 25 feet

using direct-push continuous coring equipment. After logging soils in the boring, we will select a diffuser depth based on the following rules:

Are sands present between 10 and 25 feet bgs?:

- If yes, then set diffuser in first sand layer below 10 feet in depth;
- If no, then set diffuser in most permeable layer below 10 feet.

Another goal will be to vary diffuser depths in the three wells in order to evaluate the optimum diffuser depth for the site.

Map of Piping Layout: The ozone generation unit and piping will be located in the yard area on the east side of the site. The ozone unit is trailer-mounted and mobile, so the exact location of the ozone unit could vary depending on tenant considerations; however, the location of the ozone unit will also be chosen to minimize piping distances (based on our experience, the site remediation area is small enough such that distance from well to treatment unit will not be a significant concern). In order to reduce costs, we will attempt to run piping above ground. Given these considerations, the exact configuration of the pilot test system layout is not fixed; however, Figure 4 shows an approximate remediation system layout.

Revise Cross Section: We have provided a north-south cross section in Figure 3 that includes possible ozone injection diffuser depths for the pilot test, along with other subsurface features.

2. **Preferential Pathway Study.**

Gribi Associates conducted a preferential pathways survey that included: (1) Mapping below-ground utilities utilizing an underground utility surveyor, ForeSite; and (2) Conducting a survey of wells within a 500-foot radius from the project site. *Utility Survey:* Results of below-ground utility mapping are shown on Figure 5. The only below-ground utility within close proximity to the former UST system is a sewer line, which runs north-south along the west side of the site yard. Note that proposed ozone injection wells are not sited close to this buried pipeline; however, two of the three shallow vapor monitoring wells are located close to the buried sewer line. *Well Survey:* The California Department of Water Resources (DWR) provided well records within approximately one-quarter mile from the project site. These records showed numerous groundwater monitoring wells, but no water production wells within the search radius.

3. **Groundwater Sampling**

Dissolved Oxygen: As stated in Table 1 of the revised pilot test workplan, field monitoring of dissolved oxygen in groundwater will be conducted prior to system startup and during subsequent field visits (every 3-4 days for first month; weekly thereafter). Field monitoring for ozone and VOC vapors will also be conducted during these site

visits. *EDB and EDC groundwater analysis:* Analysis for EDB and EDC will be added for all subsequent groundwater monitoring events.

4. **Perjury Statement**
Perjury statements will be added to subsequent reports.

Project Schedule

Subject to ACEH and State UST Cleanup Fund approval, the remediation pilot test system installation and startup activities can be completed in approximately eight to ten weeks.

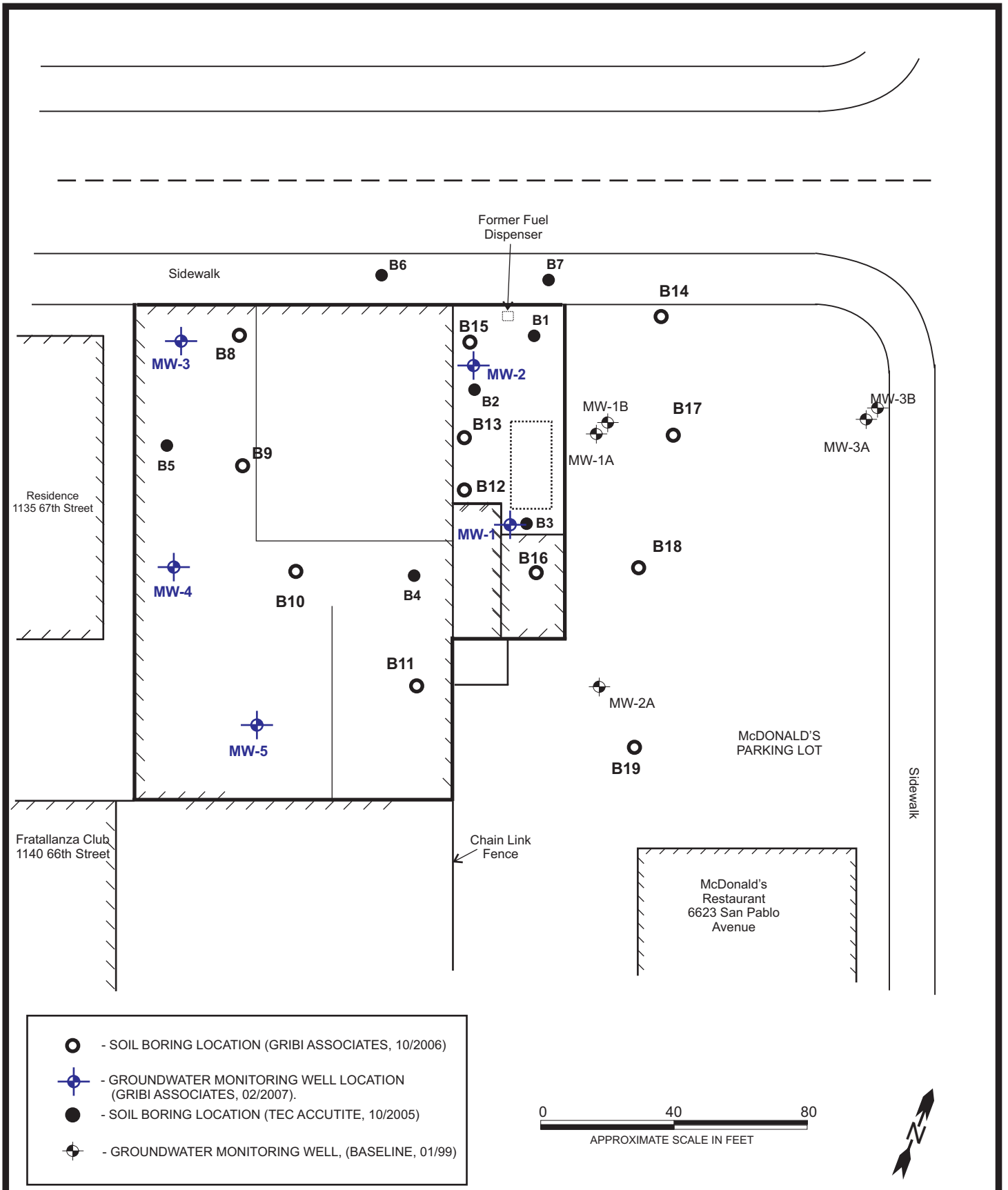
We appreciate this opportunity to provide this report for your review. Please contact us if there are questions or if additional information is required.

Very truly yours,

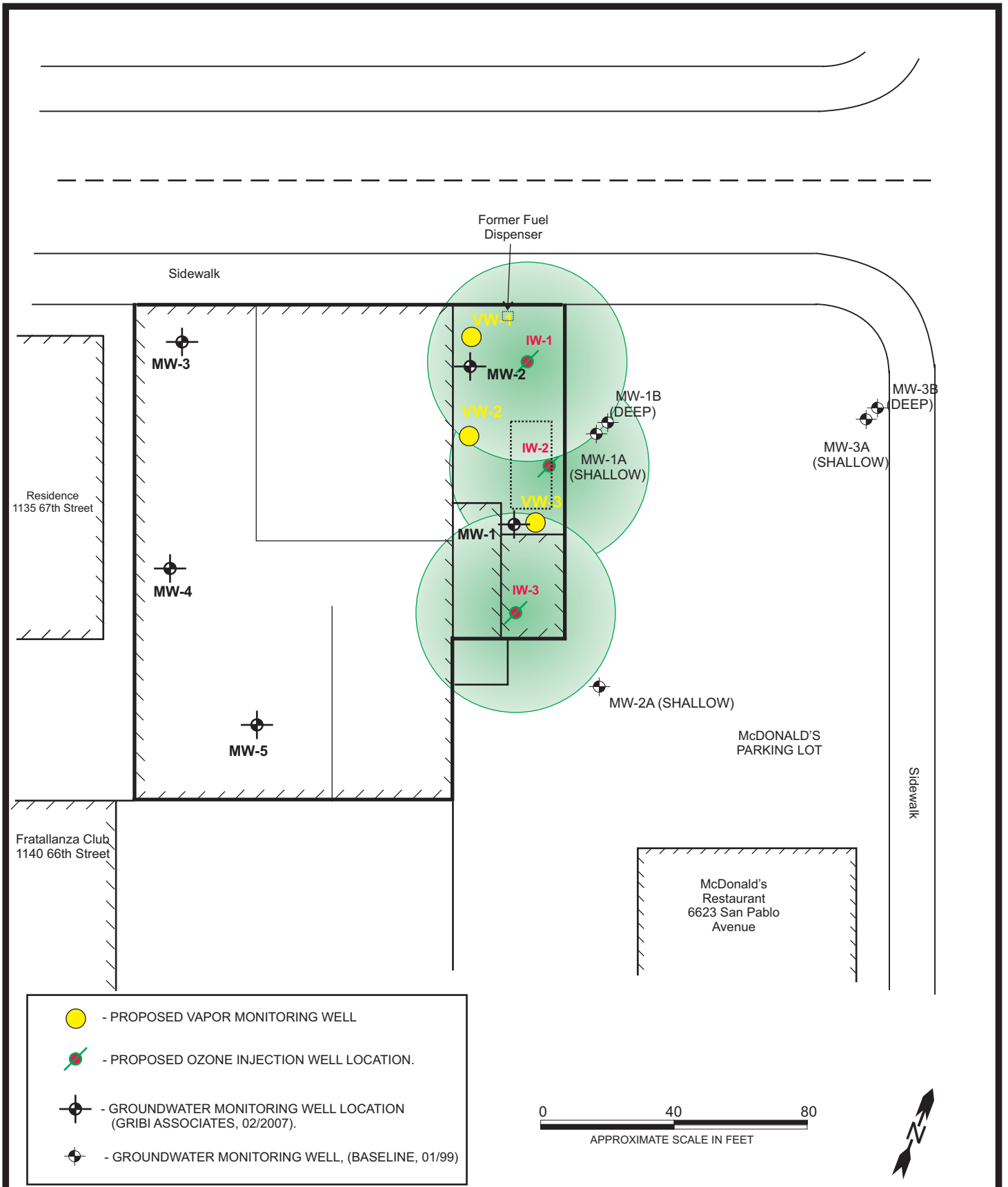
James E. Gribi
Professional Geologist
California No. 5843

Enclosure
cc: Mr. John Buschini, Jr.

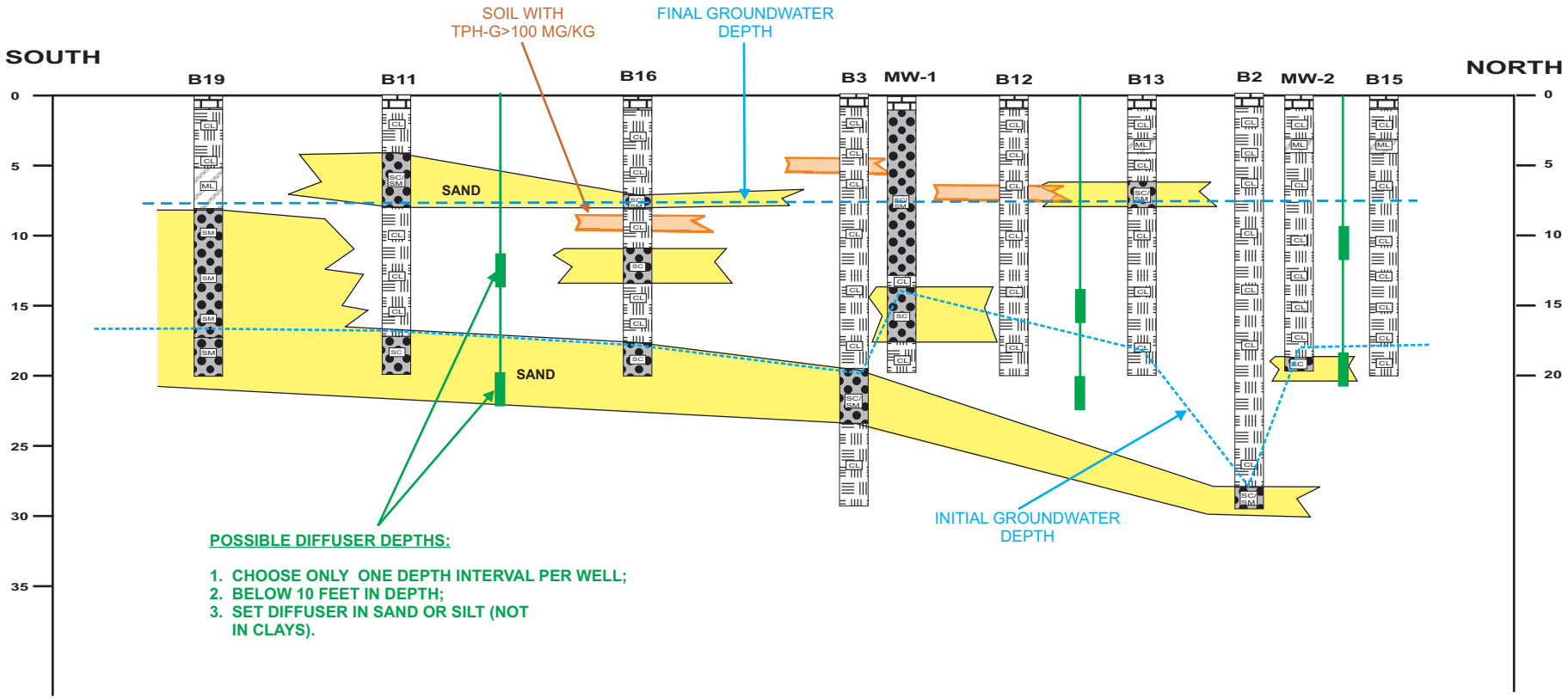
FIGURES



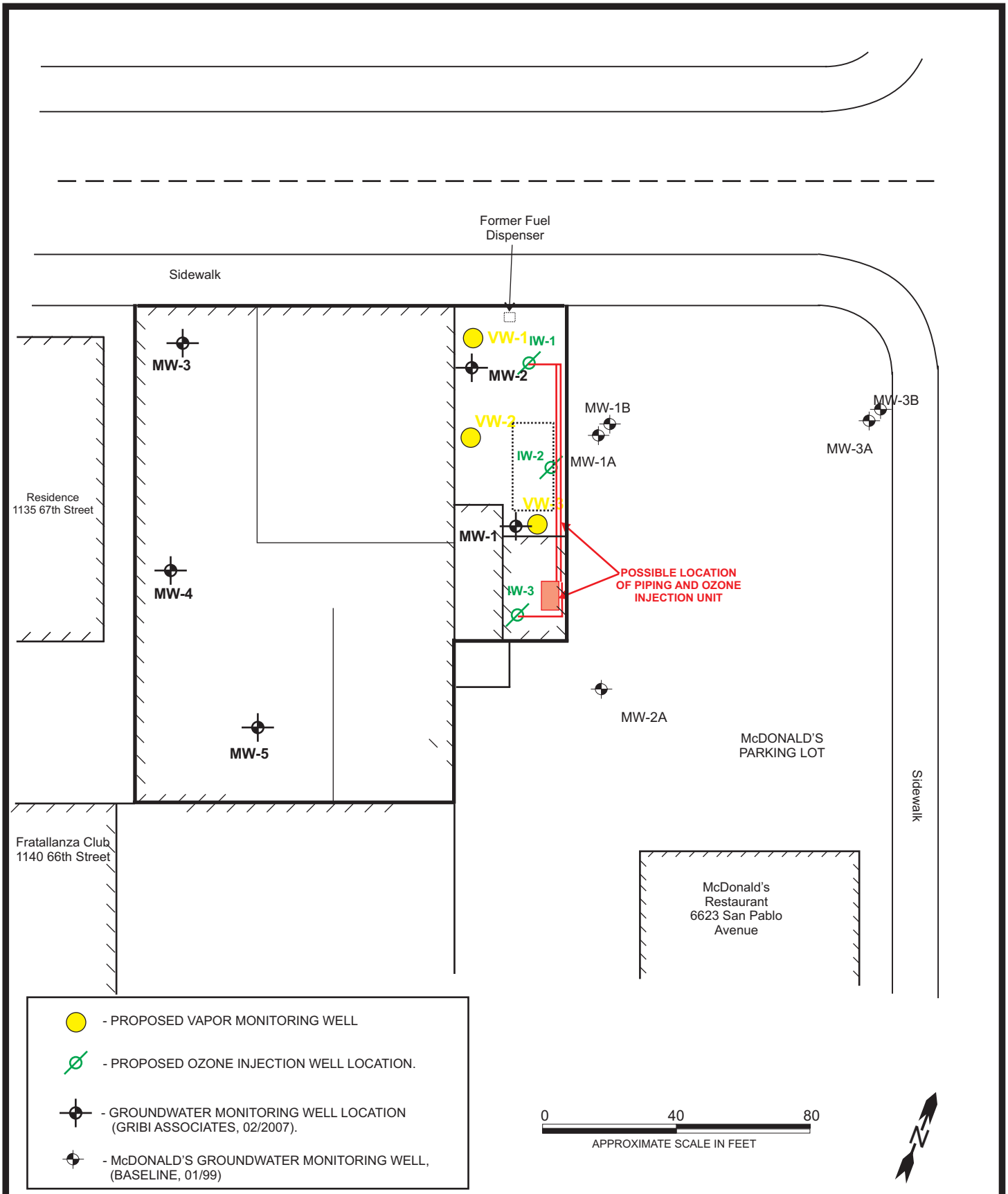
DESIGNED BY:	CHECKED BY: JEG	**SITE PLAN**	DATE: 05/10/2010 FIGURE: **1**
DRAWN BY: JEG	SCALE:		
PROJECT NO: 320-01-01		ST. FRANCIS PIE SHOP UST SITE 1125 67TH STREET OAKLAND, CALIFORNIA	GRIBI



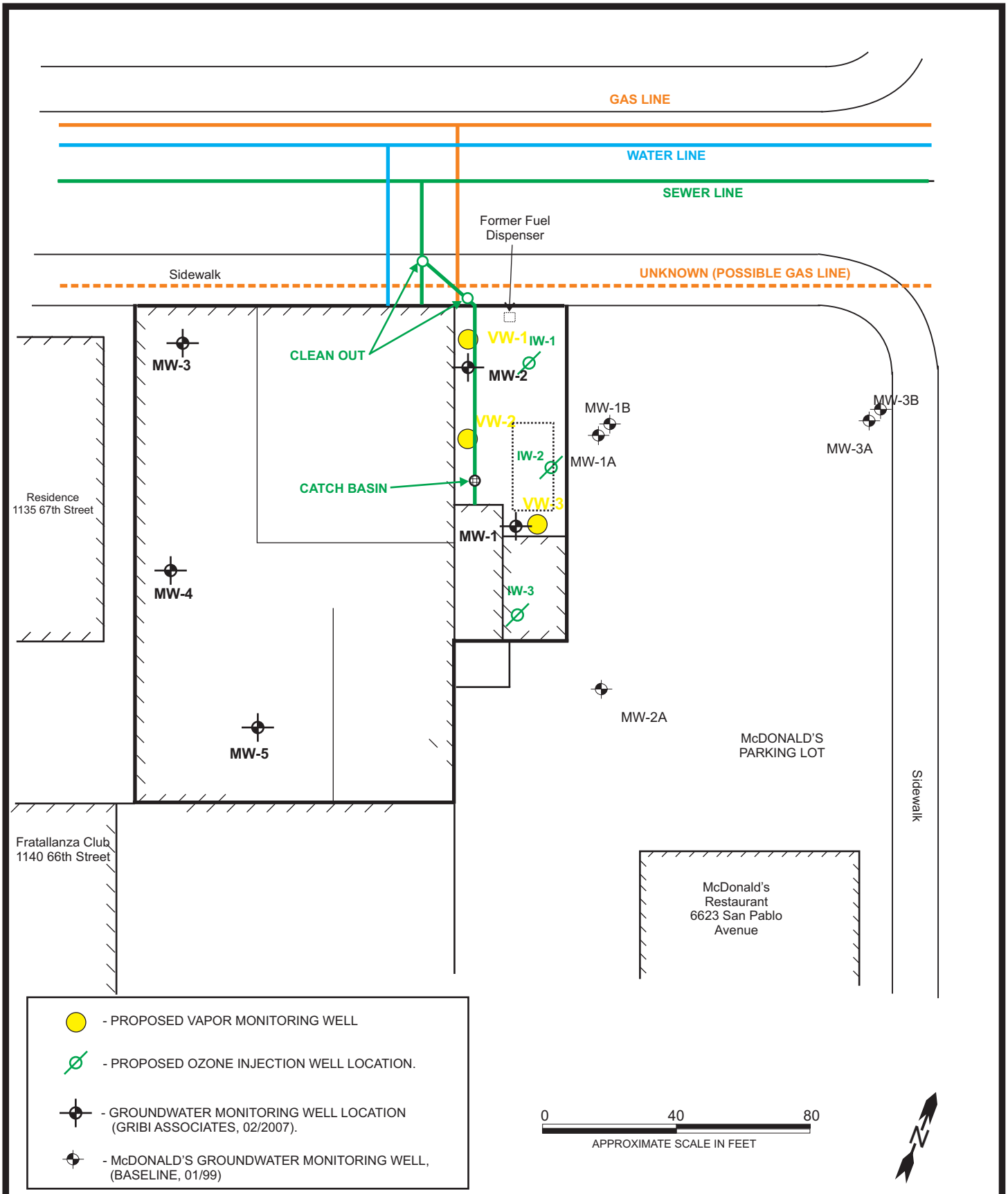
DESIGNED BY:	CHECKED BY: JEG	**PROPOSED PILOT TEST WELL LOCATIONS**	DATE: 05/10/2010 / FIGURE: **2**
DRAWN BY: JEG	SCALE:		
PROJECT NO: 320-01-01		ST. FRANCIS PIE SHOP UST SITE 1125 67TH STREET OAKLAND, CALIFORNIA	GRIBI



DESIGNED BY:	CHECKED BY:	**CROSS SECTION SHOWING POSSIBLE DIFFUSER DEPTHS**	DATE: 05/10/2010
DRAWN BY: JEG	SCALE:		FIGURE: 3
PROJECT NUMBER: 320-01-01		ST. FRANCIS PIE SHOP UST SITE OAKLAND, CALIFORNIA	GRIBI



DESIGNED BY:	CHECKED BY: JEG	**PROPOSED OZONE INJECTION SYSTEM LAYOUT**	DATE: 05/10/2010
DRAWN BY: JEG	SCALE:		FIGURE: **4**
PROJECT NO: 320-01-01		ST. FRANCIS PIE SHOP UST SITE 1125 67TH STREET OAKLAND, CALIFORNIA	GRIBI



DESIGNED BY:	CHECKED BY: JEG	**UTILITIES SURVEY RESULTS**	DATE: 05/10/2010 FIGURE: **5**
DRAWN BY: JEG	SCALE:		
PROJECT NO: 320-01-01		ST. FRANCIS PIE SHOP UST SITE 1125 67TH STREET OAKLAND, CALIFORNIA	GRIBI