


April 22, 2005

Mr. Amir Gholami  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

*Razis*  
  
ENVIRONMENTAL ENGINEERING, INC  
2680 Bishop Drive • Suite 203 • San Ramon, CA 94583  
TEL (925) 244-6600 • FAX (925) 244-6601

**Subject: Replacement of Monitoring Well MW-4 at 3609 International Boulevard, Oakland, California**

Dear Mr. Gholami,

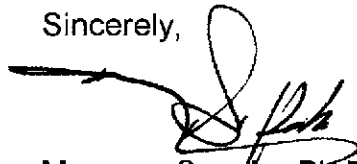
This letter is being submitted by SOMA Environmental Engineering, Inc. (SOMA) to document the procedures used to decommission and reconstruct monitoring well MW-4 at the above referenced site. Figure 1 illustrates a map of the site. In a letter dated May 27, 2004, SOMA requested approval from Alameda County to reconstruct MW-4. Alameda County approved our request in a letter dated March 23, 2005. To commence field activities, on March 31, 2005, SOMA obtained the necessary permits from Alameda County Public Works Agency.

On April 11, 2005, Woodward Drilling (Woodward) of Rio Vista, California, under the supervision of a SOMA field geologist, decommissioned and reconstructed MW-4. To insure complete destruction of the well, Woodward centered drilling rods on the exposed well casing and drilled out the well to an approximate depth of 27 feet bgs. Woodward then emplaced a two-inch diameter PVC casing with a screen interval from 7 to 27 feet bgs and slotted 0.02" casing. After emplacing a sand filter pack of 2/12 sand to approximately one-foot above the top of the screen, Woodward emplaced hydrated bentonite to approximately one-foot above the top of the sand pack. After allowing the bentonite to fully hydrate, the replacement well was grouted to approximately one-foot bgs with Portland I/II cement. The well construction diagram is attached as Figure 2.

On April 15, 2005, Woodward developed MW-4R. Woodward personnel surged MW-4R with a 2-inch diameter surge block to consolidate the sand pack, and then alternated the pumping with surging. During the pumping procedure, groundwater quality parameters of pH, temperature and electrical conductivity were periodically measured to verify groundwater stabilization.

Thank you for your time in review this matter. Please do not hesitate to call me at (925) 244-6600, if you have any questions or comments.

Sincerely,

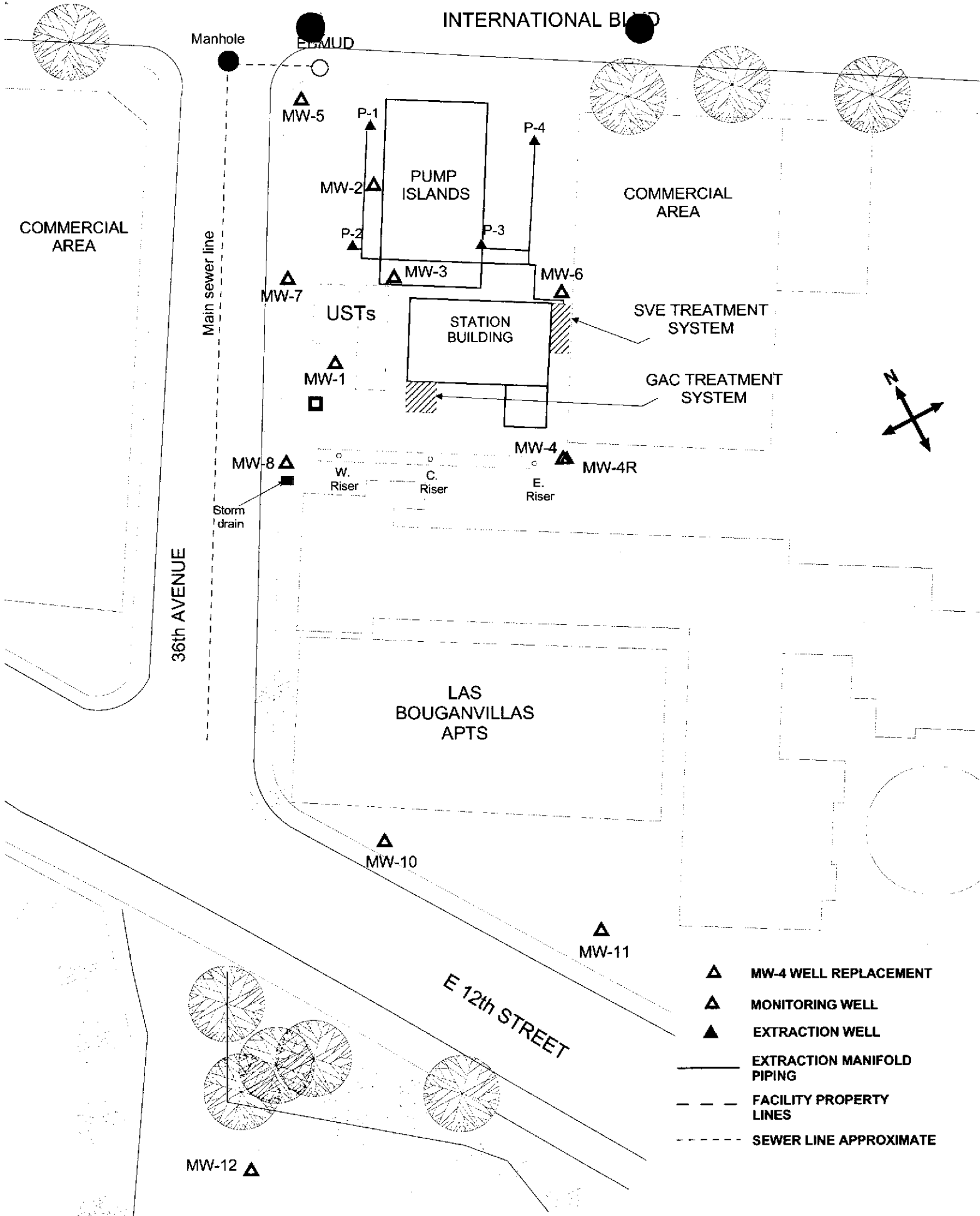


Mansour Sepenr, Ph.D., P.E.  
Principal Hydrogeologist

Attachments

cc: Mr. Abolghassem Razi, 46 Montecito Road, San Rafael CA 94901





approximate scale in feet

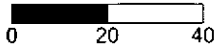
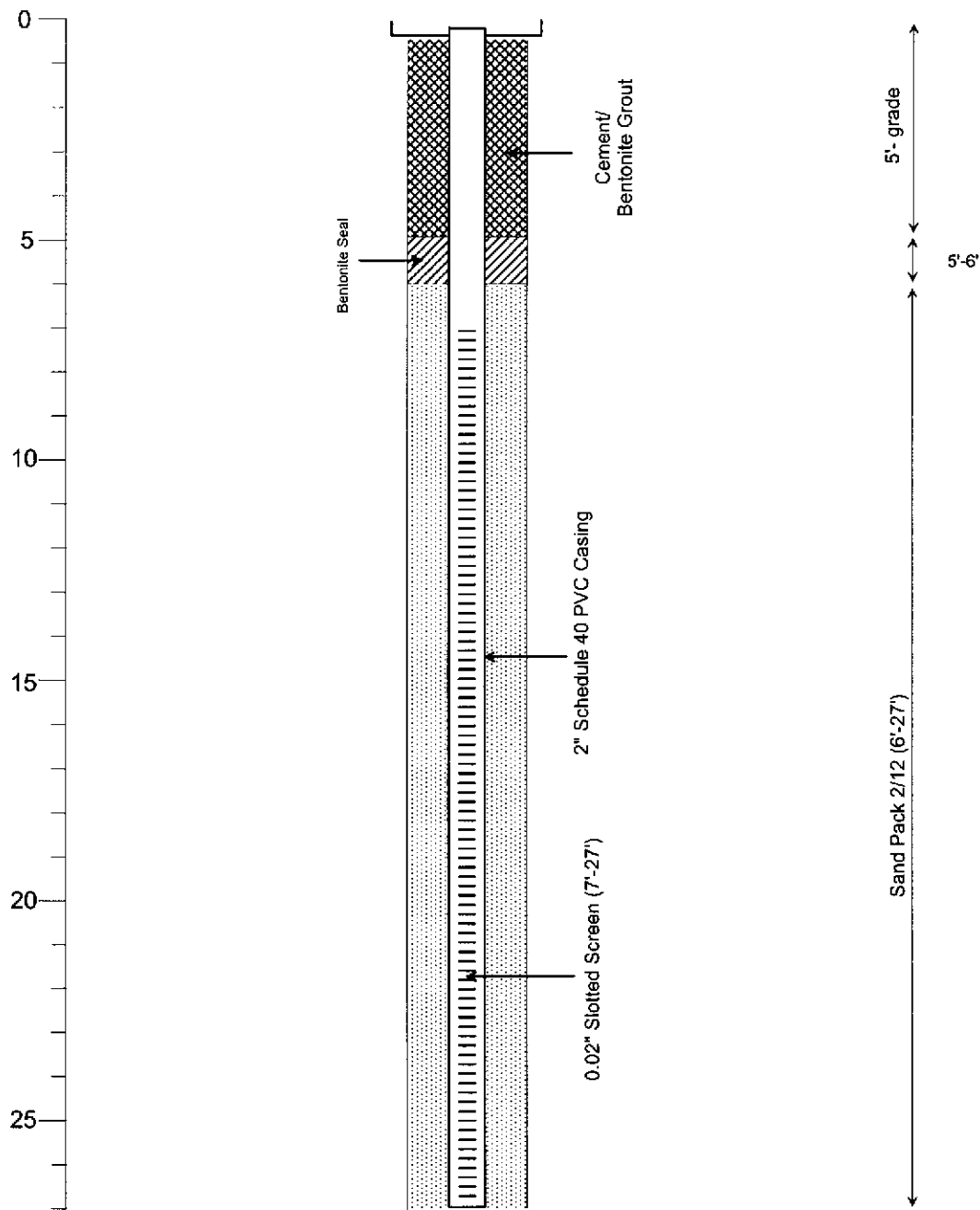


Figure 1: Site map showing location of groundwater monitoring wells, French drain, SVE system, GAC system, and MW-4 well replacement.



# MW-4R



Total Depth 27' bgs

Figure 2: Well Construction Diagram (MW-4R)