Westwood Station Development

Monitoring Wells and Groundwater Quality Sampling Requirements for the Dedham-Westwood Water District

Monitoring wells shall be placed around the existing DWWD well and Zone II to provide adequate coverage within the aquifer to monitor groundwater quality. Monitoring wells MW-1, MW-2, and MW-3 shall be placed at locations shown in Figure 1 prepared by Tetra Tech Rizzo. Monitoring wells MW-4 and MW-5 shall be placed at locations and as noted below. Monitoring wells shall be constructed of 2-inch PVC with appropriate bentonite and cement grout seals. All monitoring wells shall be installed with locking covers and protective covers that will be finished flush to grade. Monitoring wells MW-1, MW-2, MW-3 and MW-4 shall be constructed with a 10-foot slotted screen set at midpoint of the aquifers saturated thickness. MW-5 shall be a shallow monitoring well with a 10-foot screen interval placed acres the water table interface. At monitoring wells MW-1, MW-2 and MW-3, a second shallow well will be installed with a 10-foot screen interval across the water table. The proposed monitoring well locations and construction requirements are shown in Table 1.

Table 1: Monitoring Well Construction Specification

Well No.	Location	<u>Description</u>
1.633 7.4	N 1	
MW-1	Northwest of	Well couplet, deep well screened at aquifer midpoint,
	DWWD parcel	shallow well, screened across water table
MW-2	Southwest of	Well couplet, deep well screened at aquifer midpoint,
	DWWD parcel	shallow well, screened across water table
MW-3	East of DWWD	Well couplet, deep well screened at aquifer midpoint,
	parcel	shallow well, screened across water table
MW-4	Near Hotels	Deep well only, screened at aquifer midpoint
MW-5	East corner of large	Shallow well, screened across water table
	infiltration area	

All monitoring wells shall be sampled quarterly during the first year and bi-annually thereafter. Bi-annual sampling events will occur in March-April and again in September-November. Sampling methods and laboratory analysis shall be consistent with all state and federal sampling requirements adopted at the time of the sampling event. Sample analysis, wells, sampling frequency and current methods are specified in Table 2.

Table 2: Groundwater Sampling Requirements

Well No.	Year 1 Frequency & Methods	Year 2 Frequency & Methods
MW-1 MW-2 MW-3 MW-4 MW-5	Quarterly 1,3,4; Bi-annually 2 Quarterly 1,3,4; Bi-annually 2 Quarterly 1,3,4; Bi-annually 2 Quarterly 1,3,4; Bi-annually 2 Quarterly 1,4	Bi-annually 1,2,3,4 Bi-annually 1,2,3,4 Bi-annually 1,2,3,4 Bi-annually 1,2,3,4

Sampling methodologies are as follows:

- 1) Volatile Organics (VOCs) ZPA Method 8260B or most recent requirement
- 2) Synthetic Volatile Organics (SVOCs) ZPA Method 8270C or most recent requirement
- 3) Metals (RCRA 8) ICP Method or most recent requirement
- 4) VPH/EPH MADEP method 1.0 or most recent requirement

O:\DWWD MA\Developer Review\Westwood Station\Monitor well locs.doc