

Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health
Sent: Wednesday, February 03, 2016 5:59 PM
To: 'Kyle S. Flory'
Cc: Roe, Dilan, Env. Health; 'Rachel Green'; Morgan Jones
Subject: RE: Anton Evolve - Proposed Additional Grab Groundwater Sample Locations

Kyle,
Thanks.

The initial intent of collecting a grab groundwater sample was to determine if the soil vapor indications of vinyl chloride (VC) contamination had impacted groundwater beneath the site. It has. I note that the RWQCB ESL for VC in non-drinking water (which I presume this to be) is 1.8 ug/l and that 1.6 ug/l is thus very close to the groundwater ESL. I also note that this specific groundwater ESL was defined due to the risk of vapor intrusion from VC in non-drinking water (which ESLs assume to be at least 10 feet below grade on a continuing basis). I counted two additional locations for grab groundwater sampling in the NE and NW directions from SB51 / SV22 location presumably to look for upgradient or lateral concentrations of VC in groundwater, which is reasonable direction from an undefined source. However, the other real concern at the site, and potentially downgradient at the adjacent site, is the risk of vapor intrusion from groundwater if the VC is not defined downgradient. At a minimum it appears reasonable to collect grab groundwater samples in the presumed downgradient direction (SW) and laterally to the SE (from SB51 / SV22) to quickly define the extent of VC to values further below the ESL (generally identified goal for site) due to the near similarity of the detected concentration with the ESL. Other step out bores may also be appropriate depending on the results of these added bore / grab groundwater results.

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PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

From: Kyle S. Flory [<mailto:kflory@pesenv.com>]
Sent: Wednesday, February 03, 2016 3:15 PM
To: Detterman, Mark, Env. Health
Cc: Roe, Dilan, Env. Health; 'Rachel Green'; Morgan Jones
Subject: Anton Evolve - Proposed Additional Grab Groundwater Sample Locations

Hi Mark,

In accordance the request for additional grab groundwater samples in your January 6, 2016 conditional approval letter and with the voice mail message I left on your office telephone earlier, additional grab groundwater samples are proposed to be collected at locations surrounding and downgradient of soil gas location SV22. Attached is a map depicting the locations of the additional proposed grab groundwater sample locations. As noted in my voice mail message, the grab groundwater sample collected at SB51 (immediately adjacent to soil gas sample location SV22) contained vinyl chloride at 1.6 ug/L. Based on previous measured groundwater flow directions, the direction of

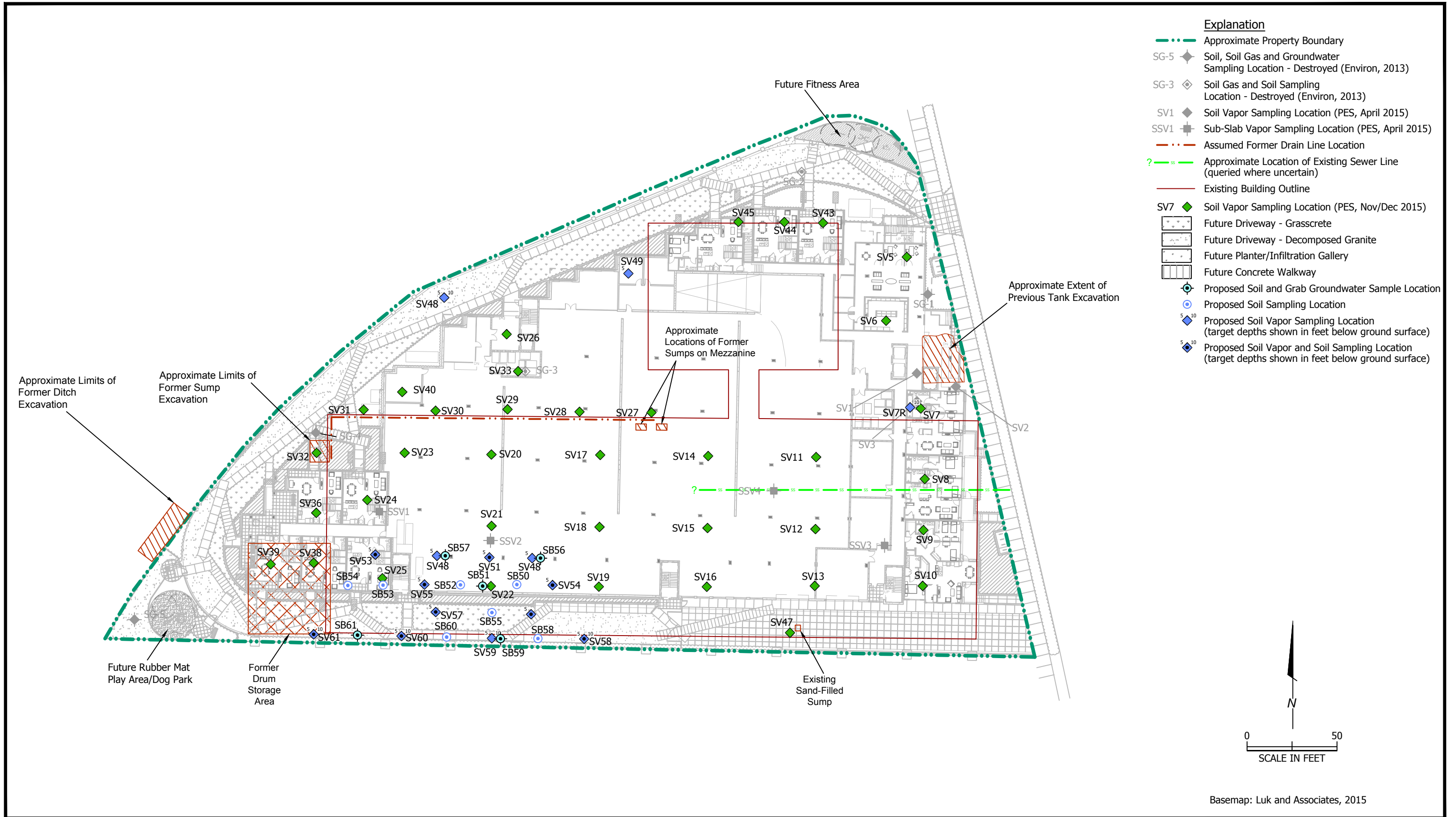
groundwater flow is estimated to be towards the southwest. Please let us know if you have any questions, comments or suggestions.

Please note the work is expected to be completed by the end of the day Thursday February 4, 2016.

Thank you,

Kyle

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Basemap: Luk and Associates, 2015

Site Plan Showing Proposed Soil Vapor, Soil, and Grab Groundwater Sample Locations
 Work Plan for Supplemental Pre-Construction Subsurface Investigation
 6701, 6705, and 6707 Shellmound Street
 Emeryville, California