




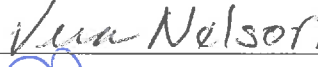
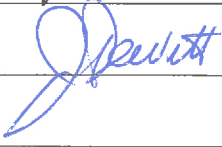


Health Care Services

Alameda County Environmental Health Meeting Sign-In Sheet

Four Seasons Cleaners
13778 Doolittle Avenue, San Leandro, CA
R00003155

Thursday, October 05, 2017
3:00 PM

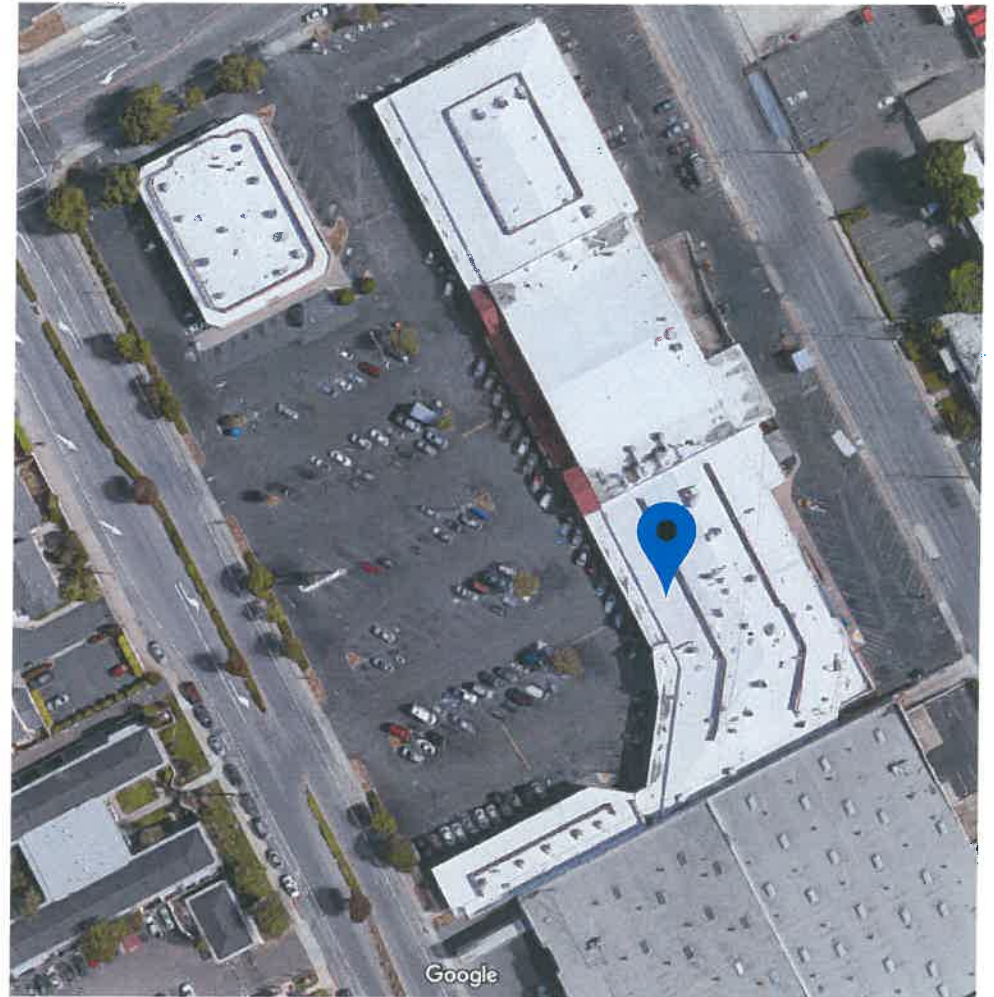
NAME	COMPANY	MAILING ADDRESS	PHONE	Signature	E-MAIL
Dilan Roe	Alameda County	1131 Harbor Bay Pkwy, Suite 250 Alameda, CA 94502	(510) 567-6767	Present 	dilan.roe@acgov.org
Mark Detterman	Alameda County	1131 Harbor Bay Pkwy, Suite 250 Alameda, CA 94502	(510) 567-6876		mark.detterman@acgov.org
ED FIRESTONE	FOR Maring Fire LP	775 WINDA ST. Palo Alto, CA	650 3270297		efirestone@ed.com
Guy Lee	" "				
Julie D'Amort	" "				
Vera Nelson	EKI	577 Airport Blvd Burlingame	(650) 292-9069		vhnelson@eki consult.com
John DeWitt	EKI	" "	650-292-9055		jdelwitt@EKIconsult.com

FORMER FOUR SEASONS CLEANERS
13778 Doolittle Drive, San Leandro
RO3155

5 OCTOBER 2017

PRESENTATION OUTLINE

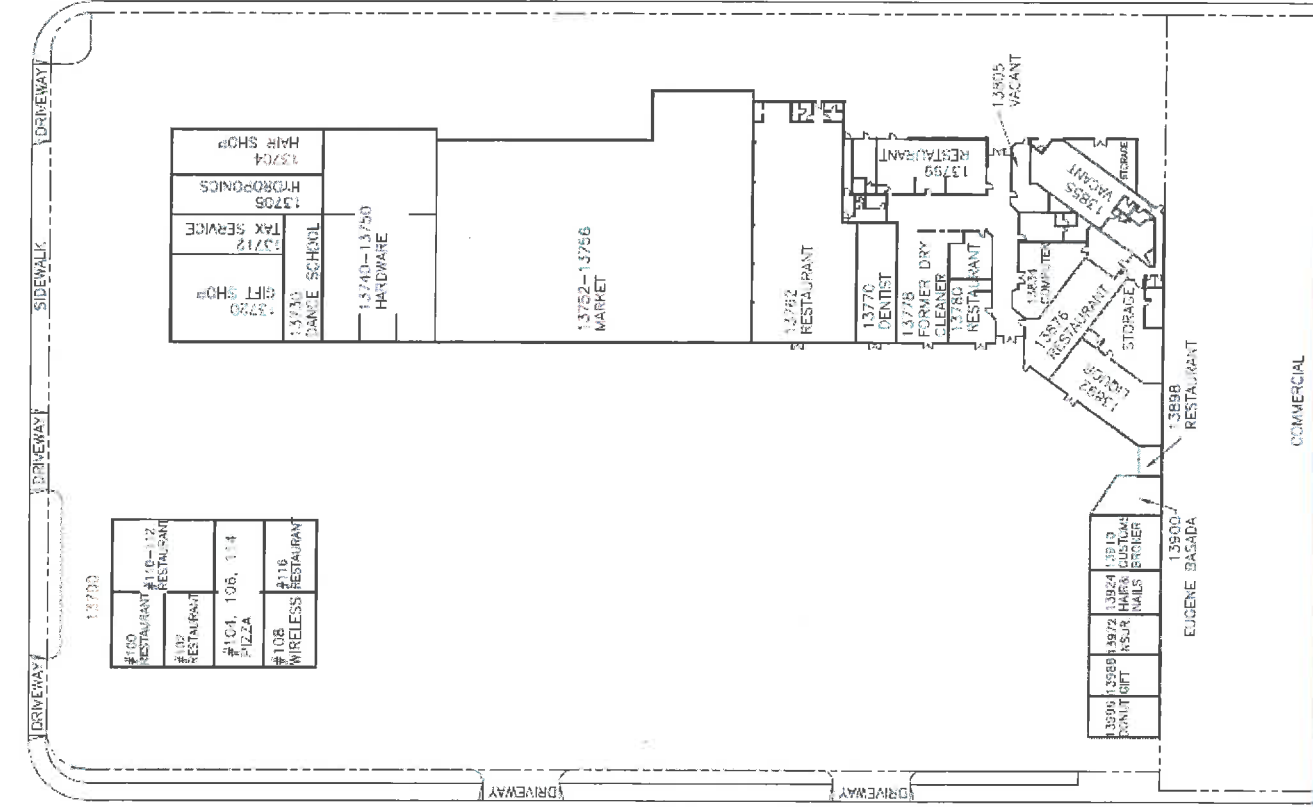
- Work completed to date
- Path forward and schedule for upcoming work
- Current ACDEH requests and response status



WORK COMPLETED TO DATE

- Site layout
- Subslab soil vapor sampling
- Indoor air sampling
- Groundwater sampling
- Soil excavation and soil sampling
- SSD / SVE piping installation

FAIRWAY DRIVE



DOOLITTLE DRIVE

CATALINA STREET

COMMERCIAL

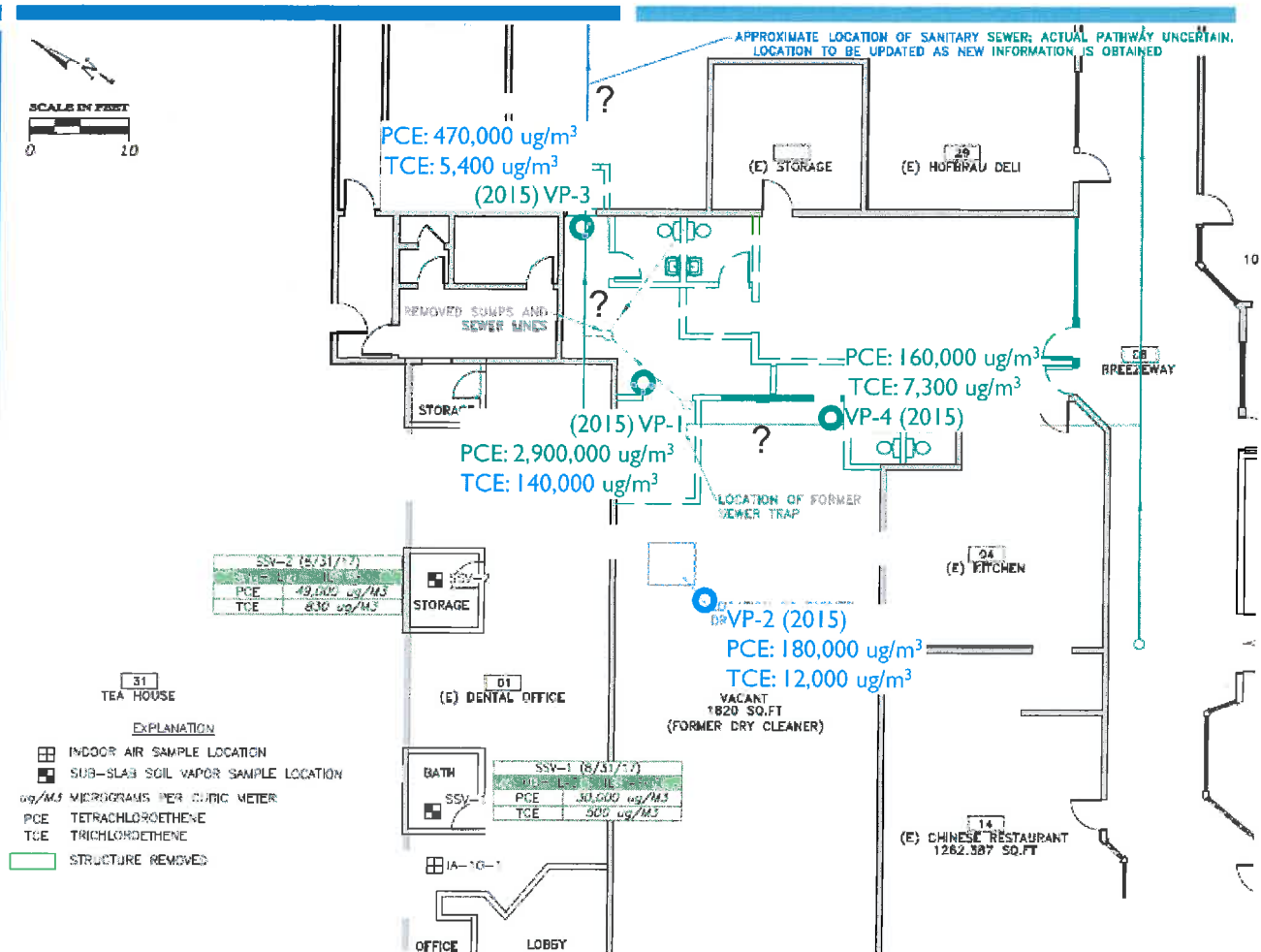
SITE LAYOUT

SUBSLAB SOIL VAPOR DATA

PCE / TCE data, ug/m³

- 2015 subslab location
- 2017 subslab location

Basemap is Fig. 6 from RRM Remedial Progress Report, 9/27/17



INDOOR AIR DATA

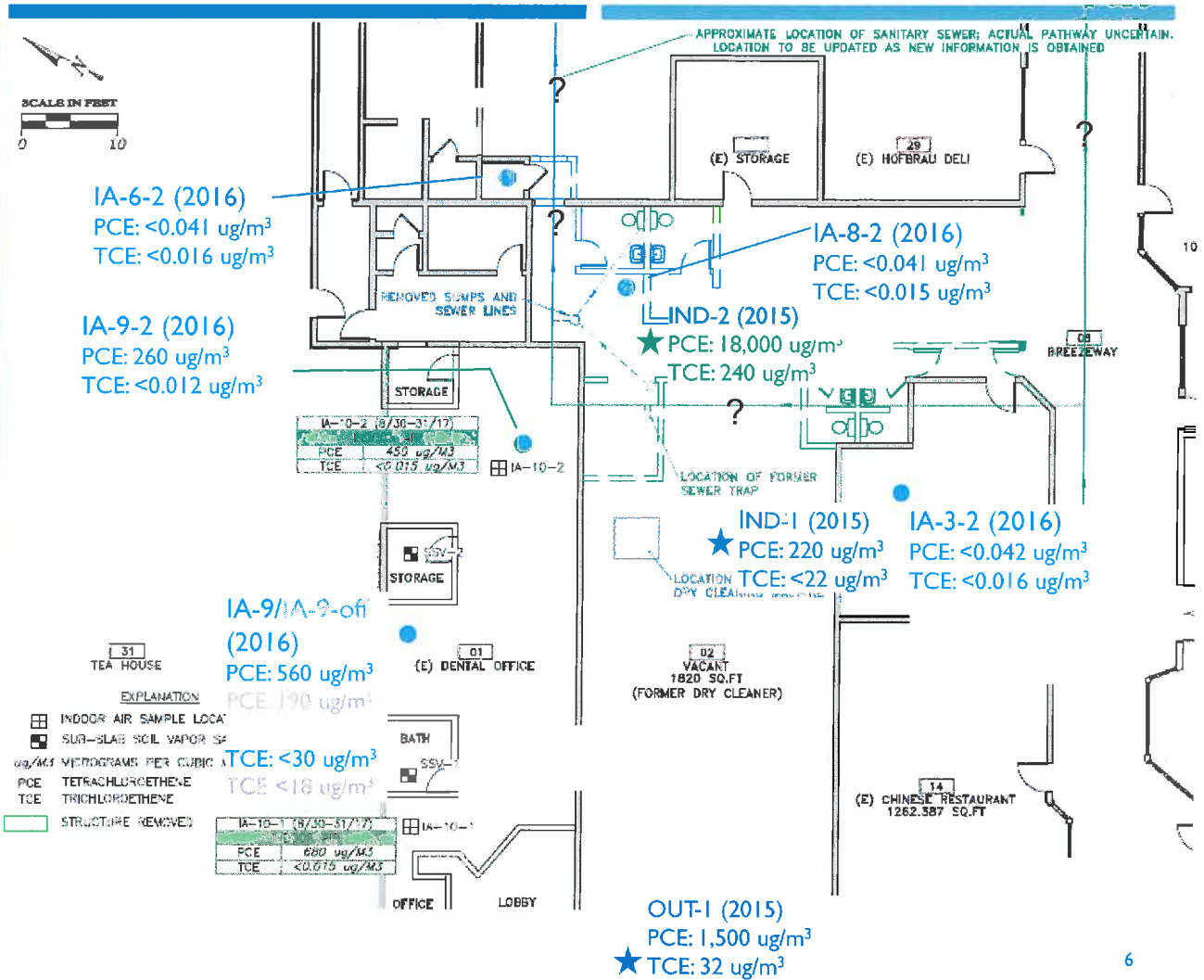
PCE / TCE data, $\mu\text{g}/\text{m}^3$

- ★ 2015 location
- 2016 location
- IA-3 (HVAC on)
- IA-3-off (HVAC off)
- ☒ 2017 location

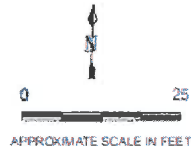
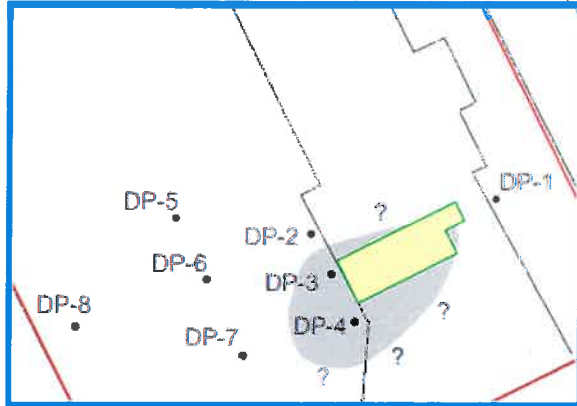
OA (8/30-31/17)	
OUTDOOR AIR SAMPLE	
PCE	0.38J $\mu\text{g}/\text{M}3$
TCE	<0.015 $\mu\text{g}/\text{M}3$

(Collected from parking lot)

*Basemap is Fig. 6 from RRM Remedial Progress Report, 9/27/17



GROUNDWATER DATA

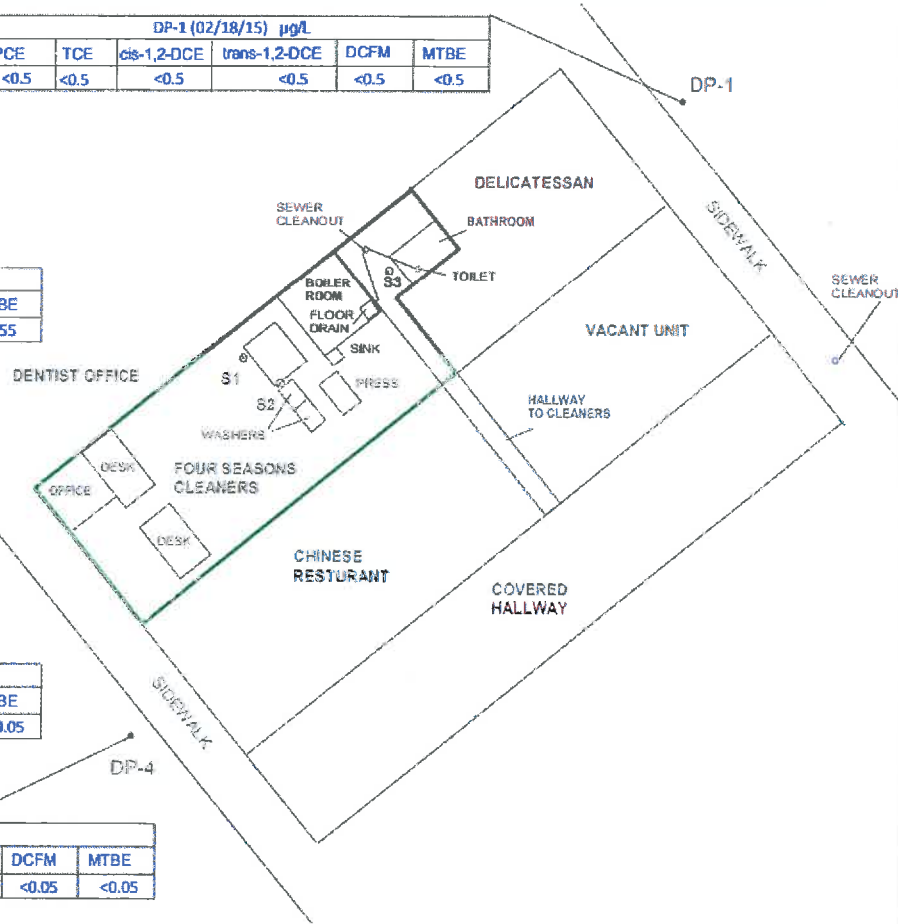


DP-1 (02/18/15) µg/L						
Feet bgs	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	DCFM	MTBE
15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

DP-2 (02/18/15) µg/L						
Feet bgs	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	DCFM	MTBE
15	<0.5	0.69	<0.5	<0.5	6.3	0.55

DP-3 (02/18/15) µg/L						
Feet bgs	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	DCFM	MTBE
14	160	35	6.6	<0.05	<0.05	<0.05

DP-4 (02/18/15) µg/L						
Feet bgs	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	DCFM	MTBE
15	12,000	2,100	610	11	<0.05	<0.05



WellTest, Inc.
 License No. 843074
 P.O. Box 8548
 San Jose, CA 95165
 Phone (408) 287-2175

GENERALIZED SITE MAP - SHOWING PCE, TCE, cis-1,2-DCE, trans-1,2-DCE DCFM & MTBE CONCENTRATIONS IN GROUNDWATER SAMPLES COLLECTED 02/18/15

FOUR SEASONS CLEANERS
 13778 DOOLITTLE DRIVE
 SAN LEANDRO, CALIFORNIA

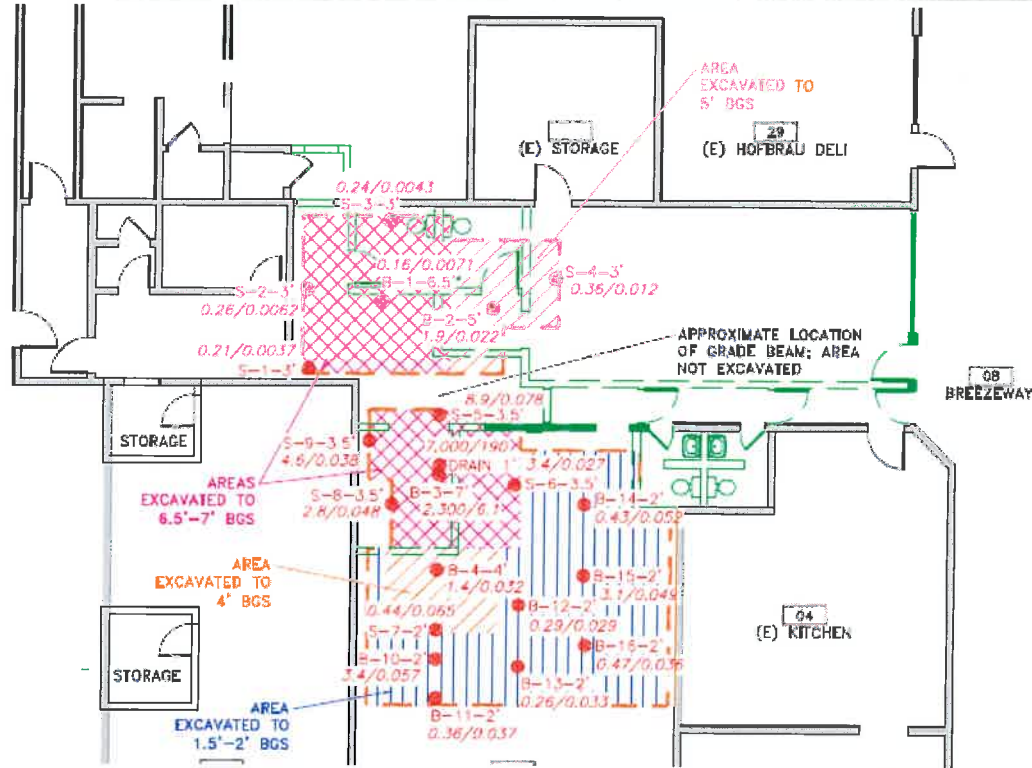
FIGURE 7





EXPLANATION

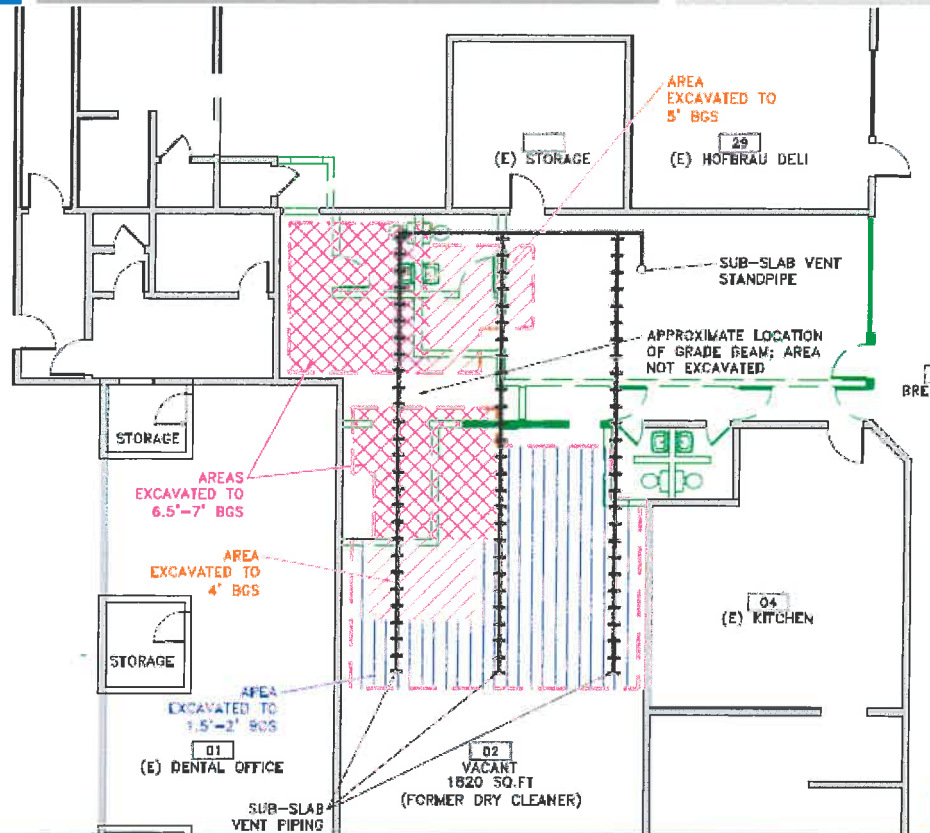
- 0.36/0.012 PCE/TCE CONCENTRATION IN SOIL IN MILLIGRAMS PER KILOGRAM (mg/kg)
- PCE TETRACHLOROETHENE
- TCE TRICHLOROETHENE
- EXCAVATION SOIL SAMPLE LOCATION
- ▭ STRUCTURE REMOVED



SOIL EXCAVATION – AUGUST 2017

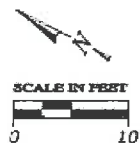
From RRM Remedial Progress Report (9/27/17)



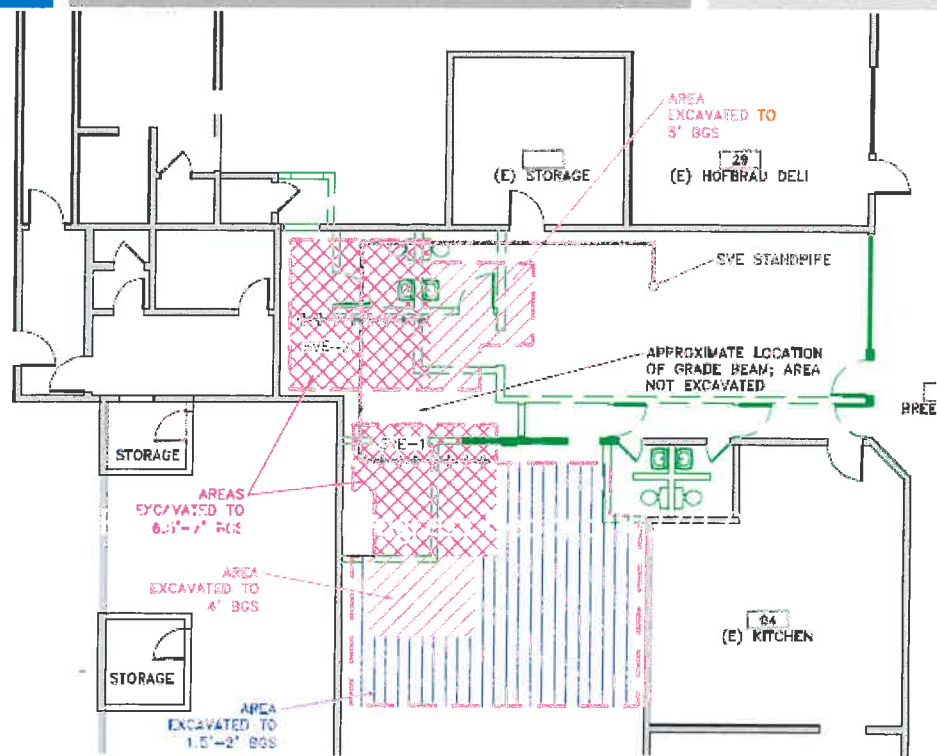


SSD PIPING

From RRM Remedial Progress Report (9/27/17)



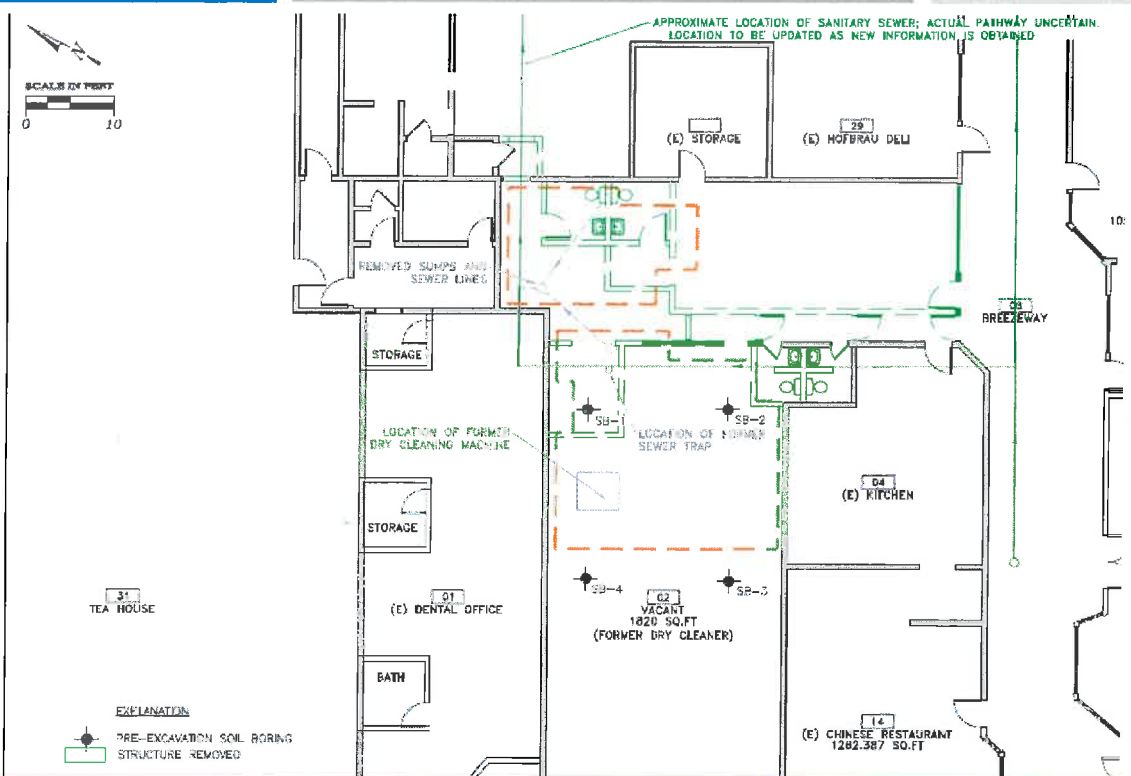
- EXPLANATION**
- HORIZONTAL SVE WELL
 - STRUCTURE REMOVED



SVE SYSTEM

From RRM Remedial Progress Report (9/27/17)





Pre-Excavation Soil Boring Locations

Additional Post Excavation Soil Borings/Groundwater Sampling Completed (Data Pending)

From RRM Remedial Progress Report (9/27/17)



PATH FORWARD

TASK 1: ADDRESS INDOOR AIR CONCENTRATIONS AT 13770 (DENTIST)

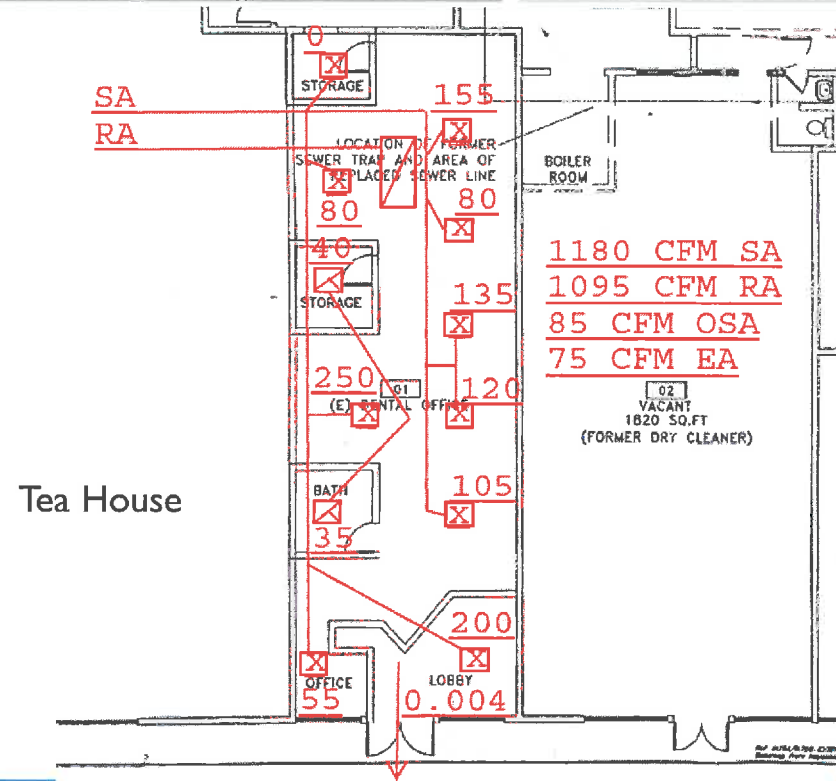
- Tenant Notifications and Fact Sheets – submitted to ACDEH 09/29/17
- Interim Mitigation of PCE concentrations in Indoor Air in 13770 (Dentist)
 - Adjust/modify HVAC at 13770 and run continuously/more frequently
 - Identify and seal penetrations at 13770
 - Evaluate other potential means to reduce indoor air PCE concentrations (e.g., increase outdoor air inflows, add air filters)
 - Resample indoor air at 13770

PATH FORWARD

TASK 1: ADDRESS INDOOR AIR PCE CONCENTRATIONS AT 13770 (DENTIST)

- Design/Permit/Install Sub-slab Depressurization (“SSD”) System
 - Initiate permit application process with BAAQMD
 - Pilot test for blower sizing, including sub-slab vapor pins for radius of influence
 - Design SSD system
 - Submit Workplan to ACDEH for SSD Design/Implementation
 - Install SSD system
 - Resample Indoor Air at various locations in center
 - Submit Implementation Report to ACDEH

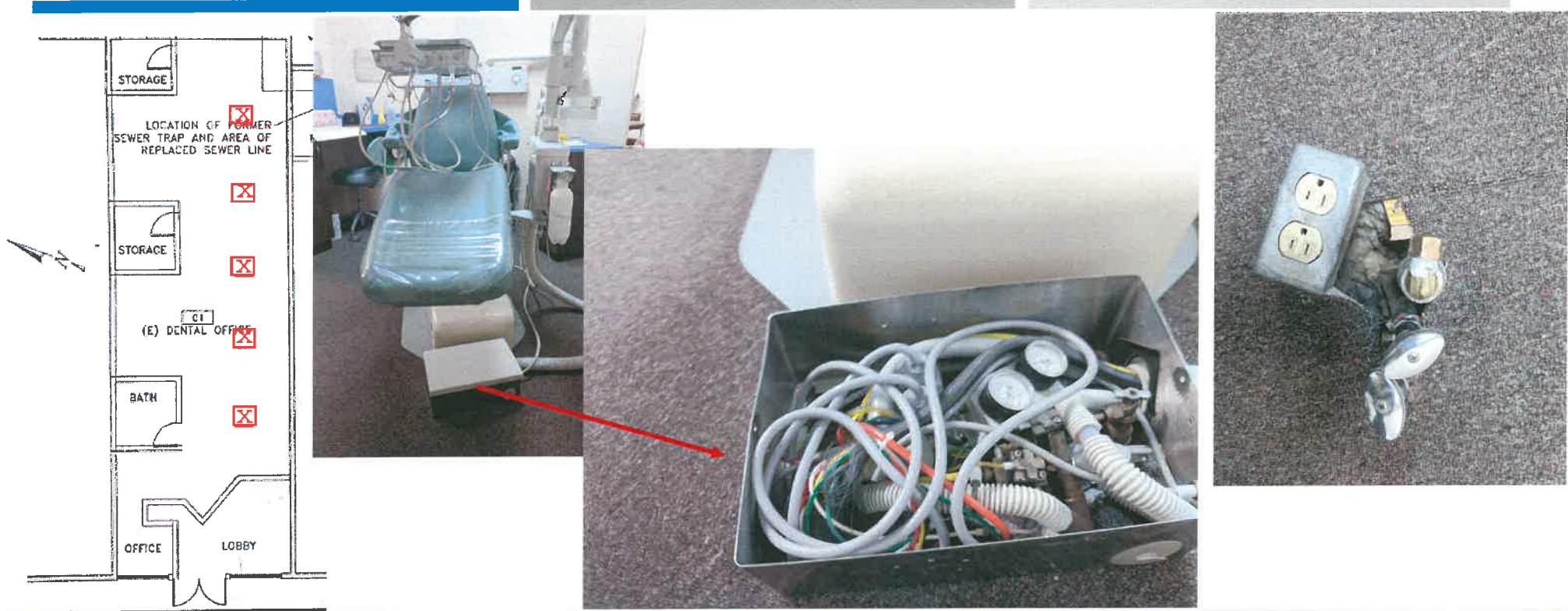
SA = Supply Air
 RA = Return Air
 OSA = Outside Air
 EA = Exhaust Air



Suite 13770 HVAC Information

EKI 3 October 2017





Suite 13770 Floor Penetrations

EKI 3 October 2017



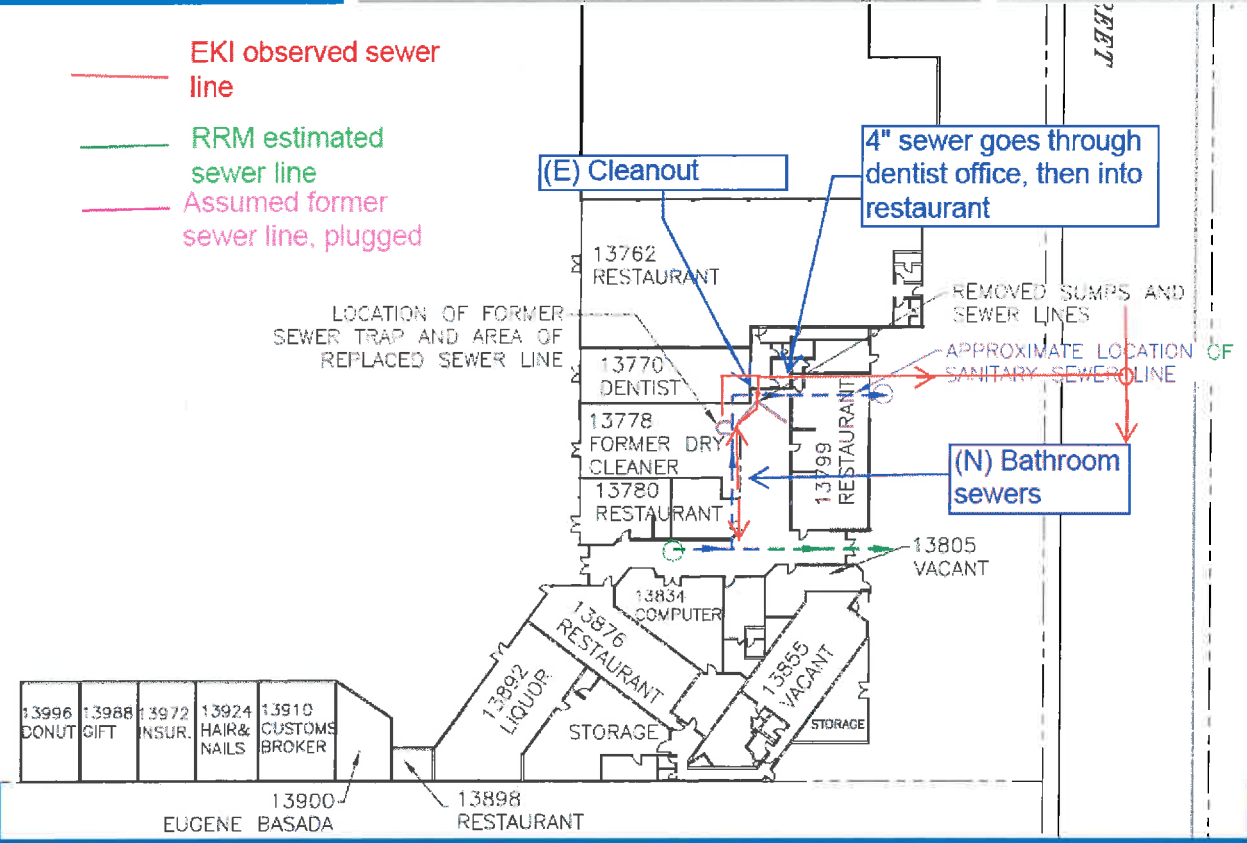
PATH FORWARD

TASK 2: ASSESS AND REPORT TO ACDEH RE: SUBSLAB AND INDOOR AIR IN OTHER ONSITE SUITES

- Prepare/submit on-site utility maps (especially on-site sewer trace) and additional information regarding dry cleaner
- Prepare/submit information regarding all HVAC systems on-site
- Prepare/submit/implement workplan for
 - sub-slab sampling throughout building
 - indoor air sampling throughout building
 - FROG or similar survey, if appropriate
- Submit final report on above including recommendations for further mitigation if appropriate



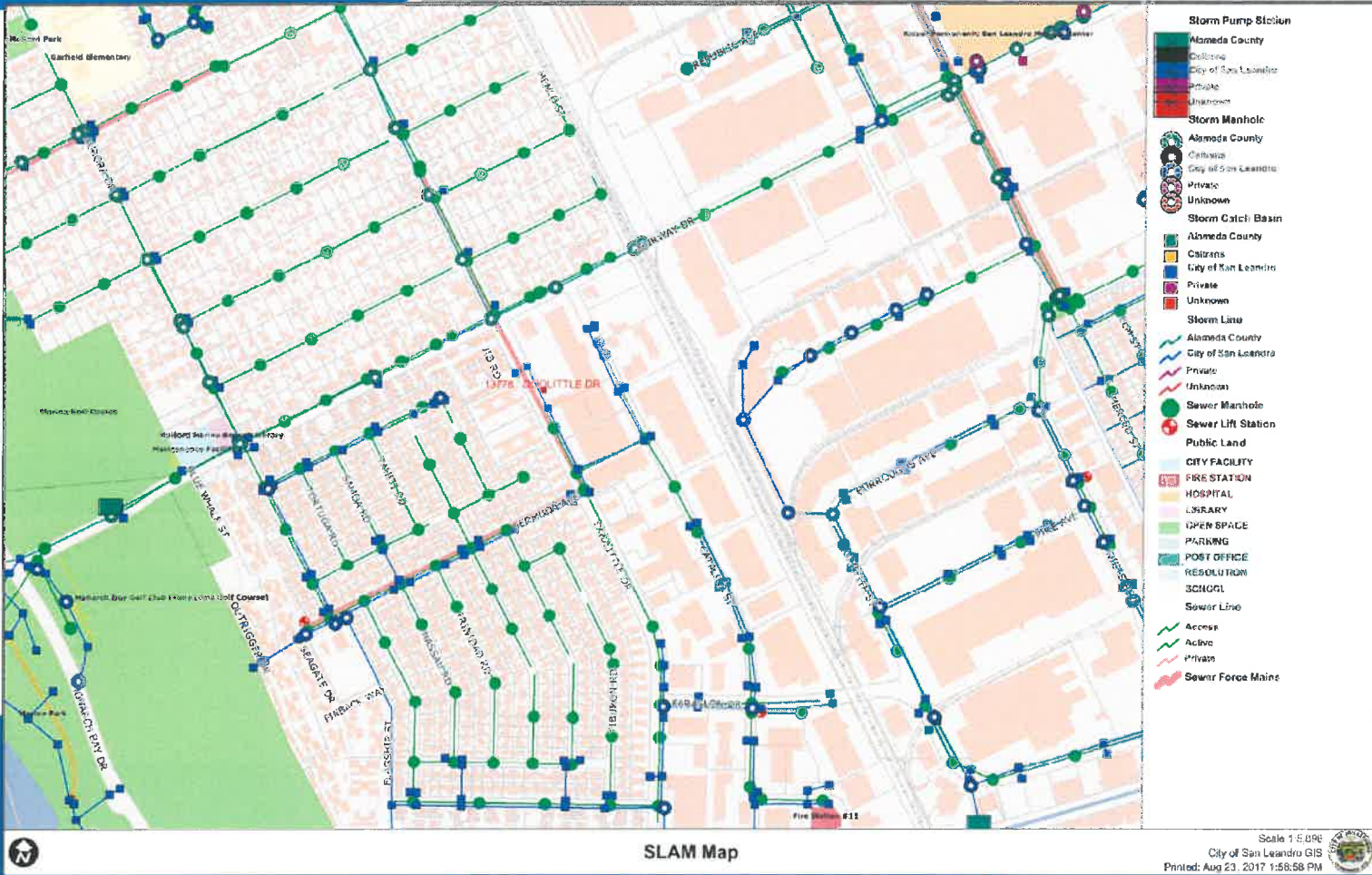
- EKI observed sewer line
- RRM estimated sewer line
- Assumed former sewer line, plugged



Updated Utility Survey Results EKI 4 October 2017



eki



PATH FORWARD

TASK 3: ASSESS POTENTIAL FOR OFF-SITE VOC VAPOR MIGRATION

- Prepare on-site/off-site utility maps
- Prepare/submit/implement workplan for:
 - Passive soil gas sampling along on-site sanitary line from dry cleaner
 - Passive soil gas sampling in parking lot
- Submit Results to ACDEH including recommendation for off-site soil gas survey if appropriate

PATH FORWARD

TASK 4: DEVELOP SITE CONCEPTUAL MODEL

- Synthesize available data
- Evaluate pending ACDEH requests for development of site conceptual model
- Identify potential exposure pathways/risks
- Identify appropriate site screening levels
- Identify data gaps
- Propose further soil/groundwater/soil gas investigations if appropriate

PATH FORWARD

TASK 5. PREPARE REMEDIAL ACTION PLAN

- Submit draft to ACDEH
- Submit for public comment
- Implement RAP
- Site Closure / NFA