SOMA
ENVIRONMENTAL ENGINEERING, INC.
6620 Owens Drive, Suite A ◦ Pleasanton, CA 94588
TEL (925)734-6400 ◦ FAX (925)734-6401

October 28, 2010

Paresh C. Khatri
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: Addendum to Request for Expedited Completion of Remedial Excavation at 6501 Shattuck Avenue, Oakland, CA

Dear Mr. Khatri:

SOMA Environmental Engineering, Inc. (SOMA) submits this addendum to our letter dated October 20, 2010, which requested expediting completion of remedial excavation activities at 6501 Shattuck Avenue in Oakland. This addendum was prepared on request from Alameda County Environmental Health Services, and addresses the projected soil volumes to be removed and outlines the proposed areas to be targeted during this limited hot spot removal. Figure 1 illustrates the extent of the existing open soil excavation at the site.

Due to the presence of residual soil contamination inside the excavation pit (at levels exceeding the Environmental Screening Levels), as evidenced by October 2009 and July 2010 sampling, SOMA recommended implementing an interim removal action while the excavation pit is still open. SOMA reviewed historical soil data to delineate areas of gross contamination; data are summarized in Tables 1 and 2, attached hereto. Figure 2 shows a contour map of TPH-g concentrations in soil inside the open excavation pit. As shown in this figure and attached tables, residual TPH-g and TPH-d contamination still remains in the vicinity of samples SB-2 and EX-1-W-W (west of the former UST cluster), and EX-3-N-W, EX-3-E-W, and EX-3-S-W (north, east and south of the former tank located adjacent to the southern property boundary). EX-3-S-W is a sidewall sample collected at the southerly property boundary; therefore, no excavation outside of the property boundary (in the sidewalk area) is proposed at this time. However, the remaining samples are sidewall and bottom excavation samples,

located inside the property boundary, and further excavation should be conducted to remove the residual contamination.

Therefore, SOMA recommends a hot spot removal limited to the two areas of the site exhibiting gross residual petroleum hydrocarbon contamination: west of former UST cluster, and east and north of former UST located adjacent to the southern property boundary. However, it should be noted, that since the vertical and horizontal extent of soil contamination has not been fully delineated at this time, and this excavation will target only the known gross contamination, some residual soil contamination would remain in place even after the implementation of these additional excavation activities.

The proposed hot spot removal areas are shown in Figure 3. SOMA proposes utilizing a mobile laboratory to conduct confirmation sampling as excavation progresses, to aid in delineating the extent of remaining contamination. Collected samples at minimum will be analyzed for TPH-g and TPH-d, utilizing EPA methods described in our letter dated October 20, 2010. The proposed methodology to be utilized during the collection of confirmation samples was outlined in our letter dated October 20, 2010. Although the exact vertical extent of residual contamination is unknown at this time, based on the most recent sampling and utilizing the assumption that residual soil contamination does not extend beyond 2-3 feet below site USTs, SOMA estimated the projected soil volumes to be excavated and disposed of off-site. Furthermore, it should be noted that some grading of the excavated area had occurred following the sampling event of October 1, 2009; therefore, it is likely that some top soils located inside the excavation pit in the areas of proposed removal are not impacted by petroleum hydrocarbons. SOMA will segregate these relatively clean soils, to be used as backfill, before uncovering areas in need of excavation. Depth of additional excavation will vary and is projected to extend approximately 5-7 feet below the bottom of current excavation. SOMA will utilize photoionization detector readings, results of confirmation sampling and visual observations to determine which soils do not need to be disposed at an off-site disposal facility.

The projected excavation volumes for the two areas are summarized below:

	ft^2	**ft^3**	**m^3**	**yard ^{3}**	**kg**	**ton**
AREA 1 (SB-2 location)	330	2310	64.68	85.47	119658	119.658
AREA 2 (adjacent to SB-3)	130	845	23.66	31.265	43771	43.771
Total:	-	-	-	**116.735**	**163429**	**163.429**

If you have any questions or comments concerning the above activities, please do not hesitate to call me at (925) 734-6400.

Sincerely,

Mansour Sepehr, PhD, PE
Principal

cc: Mr. Athan Magganas

Attachments:

Table 1: *Soil sampling data during UST removal activities (10/1/2009)*
Table 2: *Confirmation soil sampling (7/21/2010)*
Figure 1: *Site map showing locations of sampling locations, former USTs, and open excavation pit*
Figure 2: *TPH-g concentrations in soil (12 to 14 feet bgs)*
Figure 3: *Site map showing locations of proposed hot spot removal*

PERJURY STATEMENT

Site Location: 6501 Shattuck Avenue, Oakland, California

"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".

Athan Magganas
2550 Appian Way, Suite 201
Pinole, California 94564
Responsible Party

Manager BRUCE LLC

Table 1
Soil sampling data during UST removal activities (10/1/2009)
6501 Shattuck Ave, Oakland, CA

Sample ID	Soil Sample Depth (feet bgs)	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	MtBE 8260B (mg/kg)	Lead 6010 (mg/kg)	Zinc 6010 (mg/kg)
T-1	15	8.2	2.6	NA	<0.5	<0.5	<0.5	0.013	<5	6.5	66
T-2	13	**420**	**270**	NA	**0.16**	<0.1	<0.1	0.72	<1	14	220
T-3	13	**100**	58	NA	<0.1	<0.1	0.24	1.4	<1	14	99
T-4	13	1.8	2.5	NA	<0.5	<0.5	0.02	0.09	<5	7	63
T-5	6	8	11	44	<0.5	<0.5	<0.5	0.02	<5	12	45
T-6	14	**280**	**230**	NA	**0.45**	1.9	**2.7**	**15**	<2.5	95	290
EX-1-E-W	13	**93**	76	NA	<0.1	0.18	<0.1	0.15	<1	8.7	21
EX-1-N-W	10	8.2	3.5	NA	<0.5	0.0099	<0.5	0.035	<5	9.9	31
EX-1-S-W	12	**490**	**170**	NA	**0.54**	0.12	**3.6**	1.6	<1	8.9	58
EX-1-W-W	13	**1700**	**1800**	NA	<0.25	<0.25	1.9	**5.9**	<2.5	92	580
EX-3-E-W	13	**2100**	**680**	NA	**2.7**	**3**	15	**60**	<5	**4200**	**3900**
EX-3-N-W	13	**180**	48	NA	**0.71**	**5.9**	**2.7**	**17**	<1	**320**	480
EX-3-S-W	12	**2900**	**780**	NA	**5**	**27**	**36**	**200**	<5	**240**	560
EX-3-W-W	12	**95**	41	NA	**0.42**	<0.1	0.11	0.28	<1	10	25
ESL Drinking Water		83	83	370	0.044	2.9	2.3	2.3	0.023	200	600
ESL Non-Drinking Water		180	180	2500	0.27	9.3	4.7	11	8.4	750	600

Sample ID	Tank ID	Date	Sample Location	Sample Depth	Sample Direction	Sampling Method
T-1	Tank #1	10/1/2009	Beneath Tank #1	15 feet bgs	Vertical	backhoe bucket
T-2	Tank #2	10/1/2009	Beneath Tank #2	13 feet bgs	Vertical	backhoe bucket
T-3	Tank #3	10/1/2009	Beneath Tank #3	13 feet bgs	Vertical	backhoe bucket
T-4	Tank #4	10/1/2009	Beneath Tank #4	13 feet bgs	Vertical	backhoe bucket
T-5	Tank #5	10/1/2009	Beneath Tank #5	6 feet bgs	Vertical	backhoe bucket
T-6	Tank #6	10/1/2009	Beneath Tank #6	14 feet bgs	Vertical	backhoe bucket
EX-1-E-W	Tank #2	10/1/2009	East sidewall	13 feet bgs	Horizontal	NA
EX-1-N-W	Tank #4	10/1/2009	West sidewall	10 feet bgs	Horizontal	NA
EX-1-S-W	Tank #1	10/1/2009	South sidewall	12 feet bgs	Horizontal	NA
EX-1-W-W	Tank #2	10/1/2009	West sidewall	13 feet bgs	Horizontal	NA
EX-3-E-W	Tank #6	10/1/2009	East sidewall	13 feet bgs	Horizontal	NA
EX-3-N-W	Tank #6	10/1/2009	North sidewall	13 feet bgs	Horizontal	NA
EX-3-S-W	Tank #6	10/1/2009	South sidewall	12 feet bgs	Horizontal	NA
EX-3-W-W	Tank #6	10/1/2009	West sidewall	12 feet bgs	Horizontal	NA

Table 1
Soil sampling data during UST removal activities (10/1/2009)
6501 Shattuck Ave, Oakland, CA

Sample ID	Soil Sample Depth (feet bgs)	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	MtBE 8260B (mg/kg)	Lead 6010 (mg/kg)	Zinc 6010 (mg/kg)

Notes:

ESL: California Regional Water Quality Control Board, Environmental Screening Levels, Interim Final November 2007, Revised May 2008

< : below Laboratory Detection Limits

Y: Sample exhibits chromatographic pattern which does not resemble standard

NA: Not Analyzed

Areas likely to be targeted for excavation

Table 2
Confirmation soil sampling (7/21/2010)
6501 Shattuck Ave, Oakland, CA

Sample ID	Soil Sample Depth (feet bgs)	Depth to Water (feet bgs)	Date	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	MtBE 8260B (mg/kg)	Lead 6010 (mg/kg)
SB-1@2.5ft	9	10	7/21/2010	23Y	20	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25	7.9
SB-2@3ft	9	10	7/21/2010	**510Y**	50	<5.0	<0.5	<0.5	0.65	<0.5	<0.5	5.7
SB-3@1.5ft	8.5	8.5	7/21/2010	3.2Y	24	48	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	58
ESL Drinking Water (Residential)				83	83	370	0.044	2.9	2.3	2.3	0.023	200
ESL Non-Drinking Water (Commercial)				180	180	2500	0.27	9.3	4.7	11	8.4	750

Notes:

ESL: California Regional Water Quality Control Board, Environmental Screening Levels, Interim Final November 2007, Revised May 2008

< : below Laboratory Detection Limits

Y: Sample exhibits chromatographic pattern which does not resemble standard

Note: Depth to groundwater is tentative, since some locations had slower water recovery rates, and does not represent the actual stabilized groundwater elevation across the site

Areas likely to be targeted for excavation

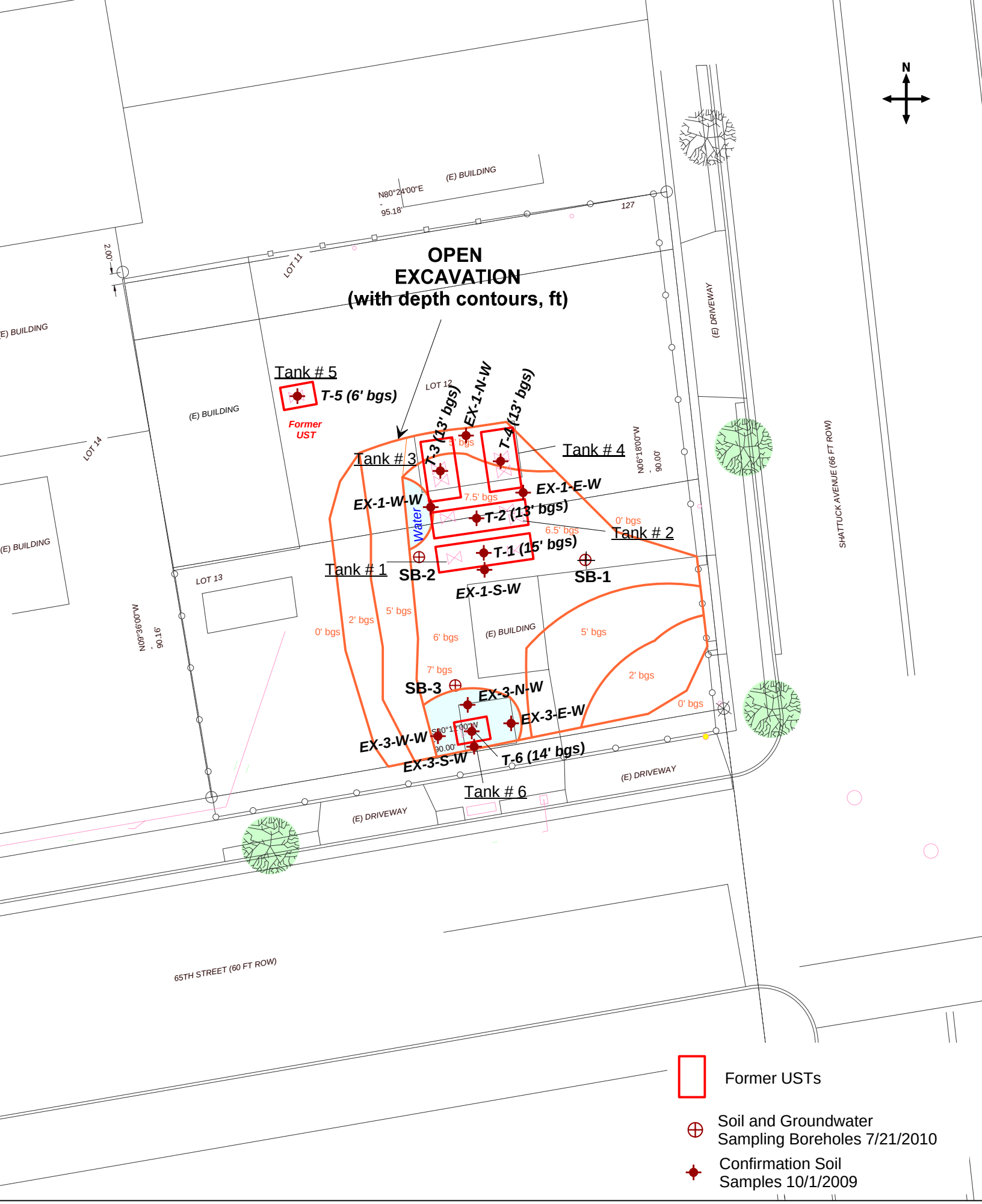

Figure 1: Site Map showing locations of sampling locations, former USTs, and open excavation pit

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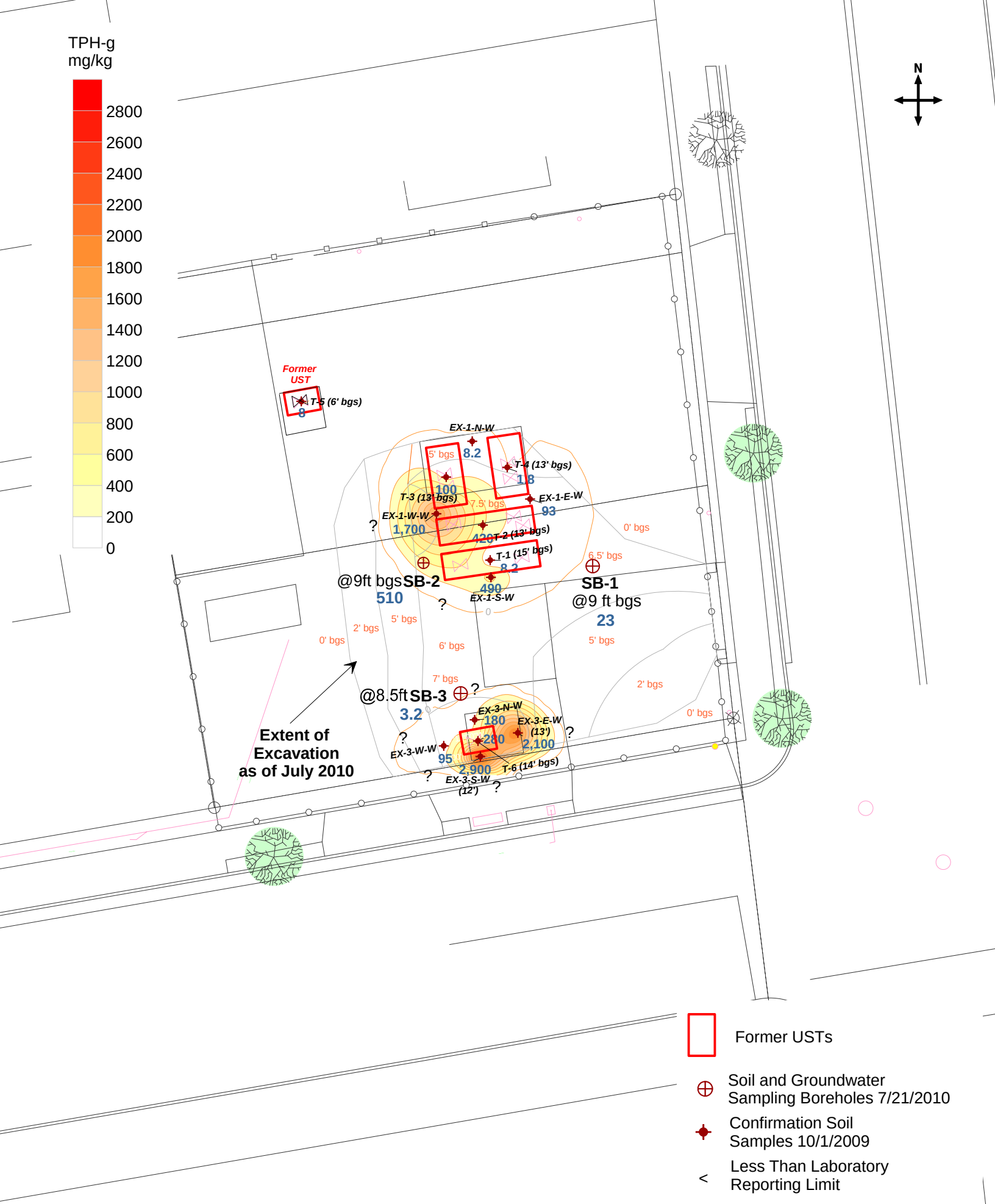

Figure 2: TPH-g Concentrations in Soil (12 to 14 feet bgs)

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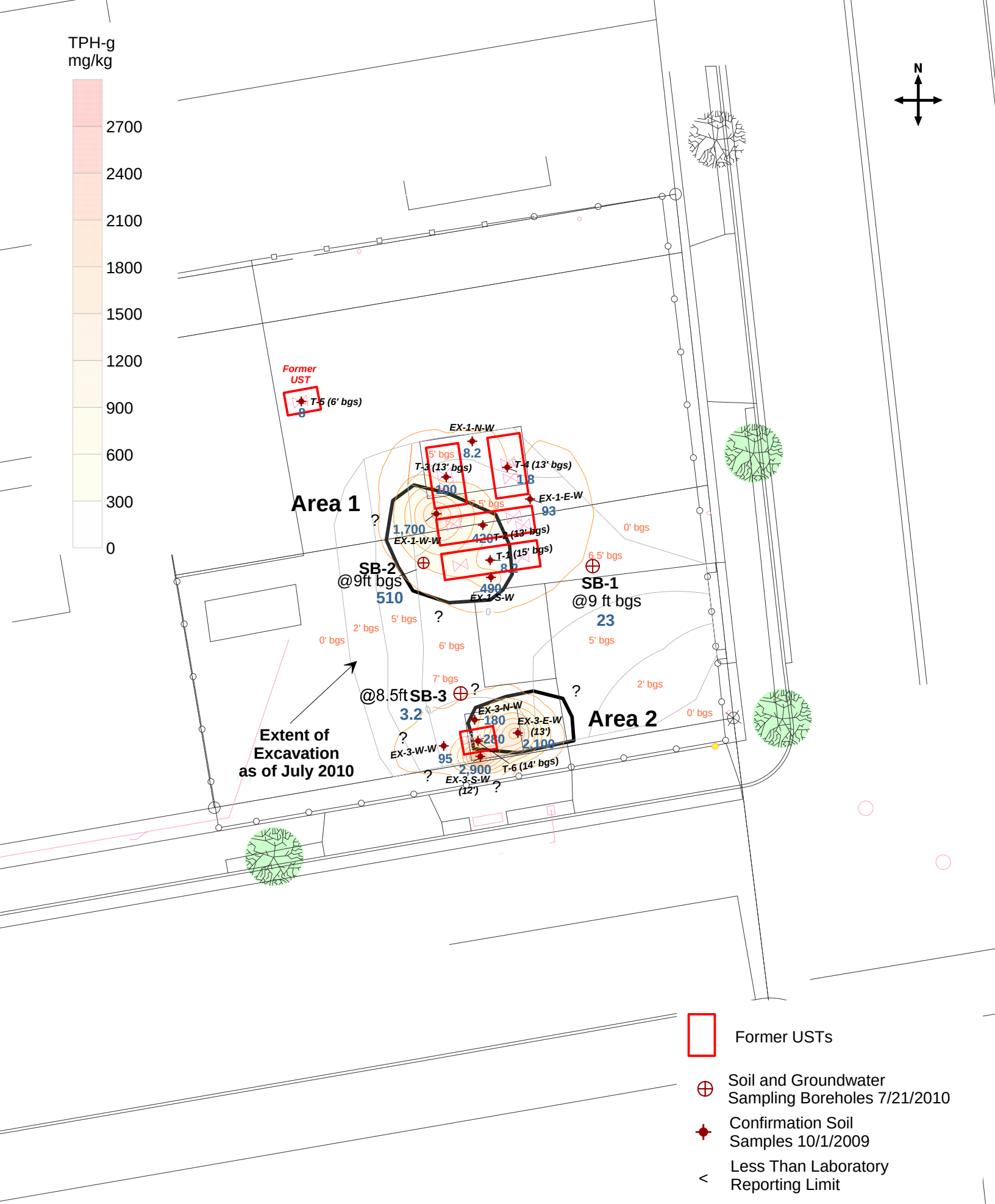

Figure 3: Site Map showing locations of proposed hot spot removal

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