

April 18, 2022
File No. 25220211.00

Mr. Jeff Ackerman
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711-5367

Subject: Soil Vapor Extraction System Design
Former Highway Cleaners
1509 Elm Street
Boscobel, Wisconsin
BRRTS #02-22-543001

Dear Mr. Ackerman:

SCS Engineers (SCS) has prepared this soil vapor extraction (SVE) system design for the Former Highway Cleaners located at 1509 Elm Street, Boscobel, Wisconsin. The temporary SVE system will build on the successful SVE pilot test completed in 2021 and plan to remediate the impacted soils below the former dry cleaner building. SCS also proposes one additional round of groundwater sampling from the existing wells.

SVE System Design

To address high PCE concentrations that are located at the south end of the existing building, SCS proposes to install a temporary SVE system at the Former Highway Cleaners site located in Boscobel, Wisconsin. The SVE system is scaled to focus on one area, relying on good conductivity in the mostly sandy soil to provide a large capture area. The design will consist of a single SVE vacuum blower, a liquid knockout tank, associated piping, and a control panel. The SVE system would be sourced from an environmental remediation equipment company. The SVE system will be attached to well SVE-2 to extract vapors from the subsurface at the site. The radius of influence identified from that well was determined to be greater than 85 feet during pilot testing. The SVE system will be powered with a new dedicated circuit to be installed.

SCS will obtain samples of the SVE system exhaust gas using summa canisters collected from the discharge piping. Samples will be analyzed for chlorinated volatile organic compounds (CVOCs) by the TO-15 method. Samples will be obtained each of the first 3 days of operation, once per week for the next 3 weeks, and then monthly during operation.

We anticipate that system will operate for approximately 3 months plus a few weeks. After the results of the 3rd monthly sampling event are reviewed, SCS will share those results with the Wisconsin Department of Natural Resources (WDNR) and anticipate a recommendation to turn the system off at that time. The cost estimate includes an estimated 5 months of SVE system rental to account for the setup, planned 3-month operation, and additional time for final sample analysis, data review, and decision with WDNR about system shutoff.



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Limited to no shallow materials should be generated during the installation of the SVE system, and material disposal will likely be limited to any water that accumulates in the knockout tank, which can be taken to the wastewater treatment plant in Richland Center, which is also where we will take the groundwater monitoring purgewater.

Once permission is granted by the WDNR to turn the SVE system off, the SVE system rental unit would be removed from the site and returned to the supplier. The electrical wiring would be removed, the SVE wells abandoned, and the site restored.

The results of the SVE pilot test were used to determine that the expected SVE system discharge will not exceed the Wisconsin Administrative Code NR 445 discharge limits.

Groundwater Sampling

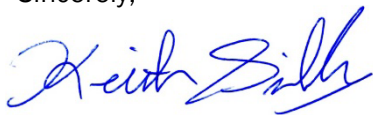
Separately, SCS will measure water levels at each of the 16 existing monitoring wells (12 water table wells and 4 piezometers). One well (MW7) could not be found during our 2021 sampling event and we will look again and sample as possible. SCS will collect a water sample from each well and submit it for laboratory analysis for VOCs. Purgewater will be containerized if previous well results indicate groundwater impacts, and released on-site if no recent impacts were noted. The results of the groundwater sampling will be included in the SVE reporting.

Schedule and Cost

We plan to proceed with this SVE system and operate it during the summer of 2022, pending approvals and equipment availability. Estimated costs for the work are attached, including estimated costs for the SVE system rental, laboratory costs, electrician costs, and ineligible travel costs.

On behalf of Mound City Bank, we request the approval of this system design and cost estimate to allow for construction and operation in the summer of 2022. Please let us know if you have any comments or concerns.

Sincerely,



Keith R. Gilkey, PE
Senior Design Engineer
SCS Engineers



Tony Kollasch
Project Manager
SCS Engineers

KRG/AJR_REO/TJK/RT

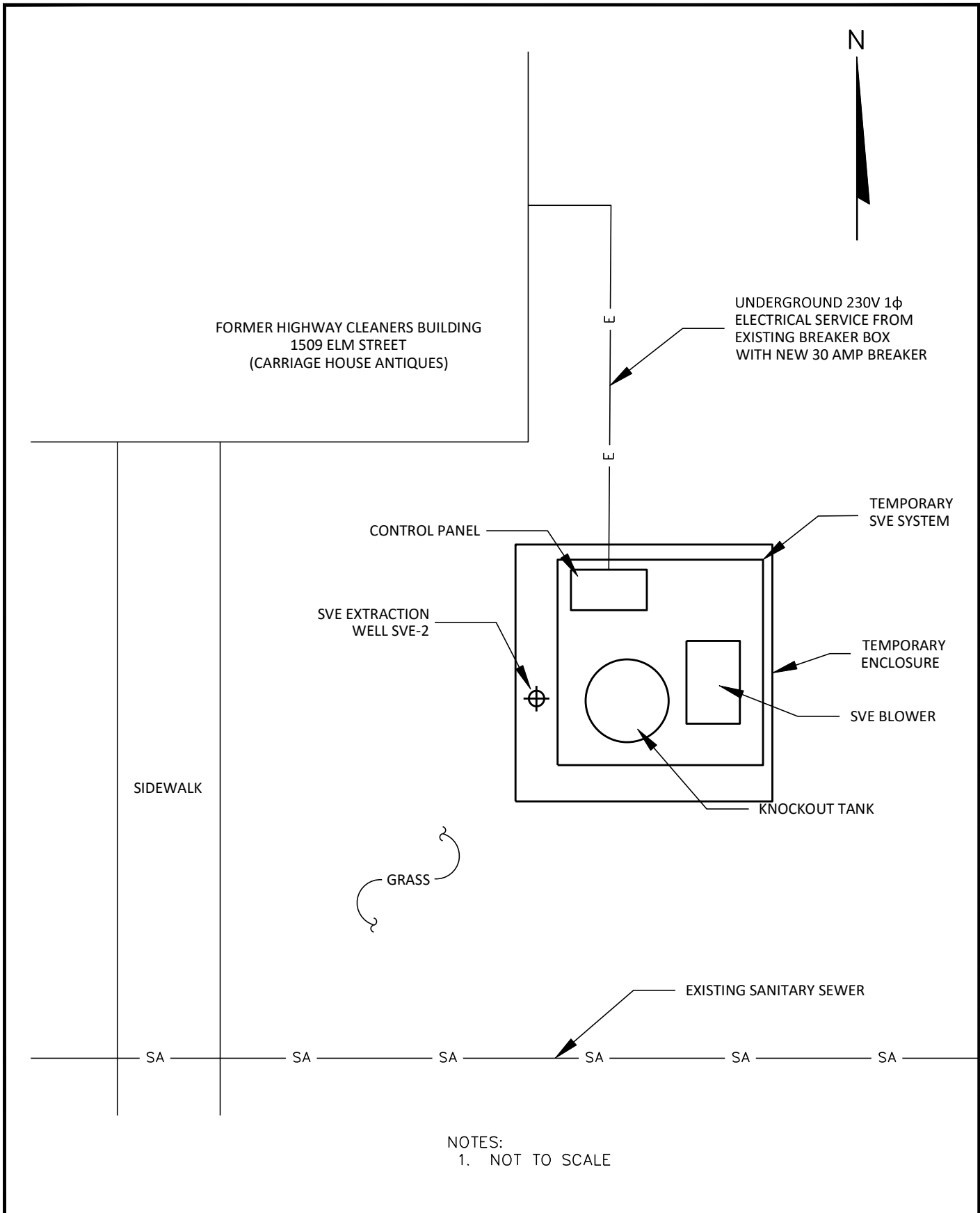
cc: Jeff Miesen, Mound City Bank

Encl. Figure 1 – Proposed Temporary SVE System Plan View
Figure 2 – Proposed Temporary SVE System Cross Section
Figure 3 – Photograph of Proposed Temporary SVE System
Attachment A – Cost Estimate for SVE System, Groundwater Sampling

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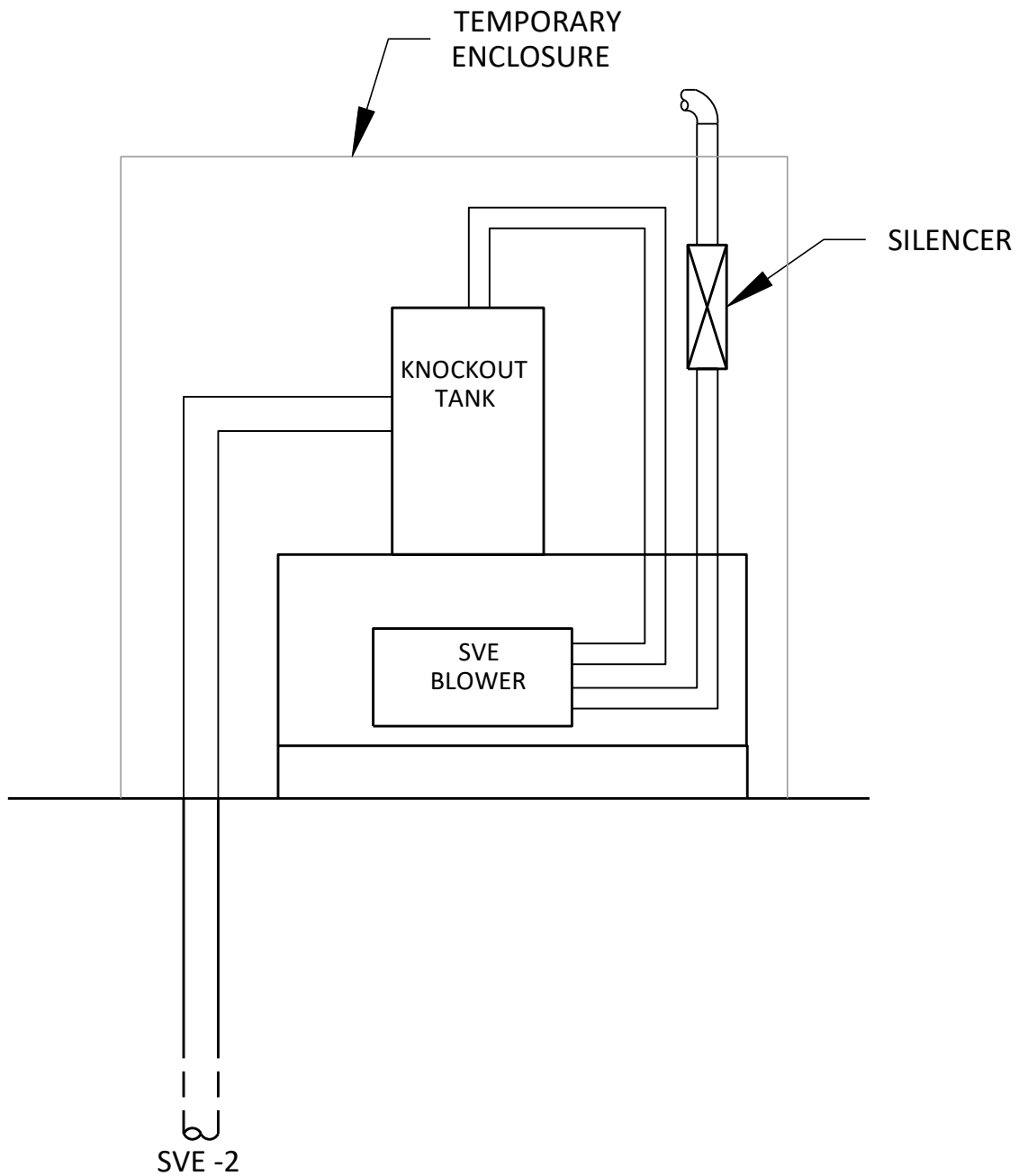
Figures

- 1 Proposed Temporary SVE System Plan View
- 2 Proposed Temporary SVE System Cross Section
- 3 Photograph of Proposed Temporary SVE System



NOTES:
1. NOT TO SCALE

CLIENT	MOUND CITY BANK 25 EAST PINE STREET PLATTEVILLE, WISCONSIN	SITE	FORMER HIGHWAY CLEANERS 1509 ELM STREET BOSCOBEL, WISCONSIN	PROPOSED TEMPORARY SVE SYSTEM PLAN VIEW	
	PROJECT NO. 25220211.01		DRAWN BY: KRG	ENGINEER	SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830
DRAWN: 01/31/2022	CHECKED BY: TJK	1 of 3			
REVISED:	APPROVED BY: TJK 4/18/2022				



NOTES:
1. NOT TO SCALE

CLIENT	MOUND CITY BANK 25 EAST PINE STREET PLATTEVILLE, WISCONSIN	SITE	FORMER HIGHWAY CLEANERS 1509 ELM STREET BOSCOBEL, WISCONSIN	PROPOSED TEMPORARY SVE SYSTEM CROSS SECTION	
	PROJECT NO. 25220211.01		DRAWN BY: KRG	ENGINEER	 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830
DRAWN: 01/31/2022	CHECKED BY: TJK	2 of 3			
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CLIENT	MOUND CITY BANK 25 EAST PINE STREET PLATTEVILLE, WISCONSIN	SITE	FORMER HIGHWAY CLEANERS 1509 ELM STREET BOSCOBEL, WISCONSIN	ENGINEER	PHOTOGRAPH OF PROPOSED TEMPORARY SVE SYSTEM	FIGURE
	PROJECT NO. 25220211.01		DRAWN BY: KRG		SCS ENGINEERS	
	DRAWN: 01/31/2022		CHECKED BY: TJK		2830 DAIRY DRIVE MADISON, WI 53718-6751	
	REVISED:		APPROVED BY: TJK 4/18/2022		PHONE: (608) 224-2830	

Attachment A

Cost Estimate for SVE System, Groundwater Sampling

Cost Estimate - SCS Engineers
Mound City Bank - Boscobell, WI SVE System
SCS File No. 25220211.01

<<Enter Staff Last Name>>	Project Director Huber \$212	Project Manager Kollasch \$143	Senior Project Professional Gilkey \$133	Senior Project Manager Oelkers \$173	Associate Staff Professional Ostien,K \$111	Administrative Assistant Radunzel \$76	Associate Staff Professional Watson,A \$111	Total Hours	Subtotal	Exp	Subs	Total	Task Total Rounded to \$10
Task 1 – SVE System													
Budget / Scope Preparation	0.5	4	4			4		12.5	\$1,514			\$1,514	
SVE System Rental (5 months)		4	6					10	\$1,370		\$10,515	\$11,885	
System Permitting		8	12					20	\$2,740			\$2,740	
System Installation	1	2	12	12				27	\$4,170	\$1,000		\$5,170	
Electrician subcontractor		1	4					5	\$675		\$2,500	\$3,175	
System Operation		4	16		16			36	\$4,476	\$500	\$1,880	\$6,856	
System Breakdown		1	4		4			9	\$1,119		\$500	\$1,619	
Knockout Water handling		1	2		2			5	\$631	\$250		\$881	
								0	\$0			\$0	
Subtotal	1.5	25	60	12	22	4	0	124.5	\$16,695	\$1,750	\$15,395	\$33,840	\$33,840
Task 2 –													
Groundwater Sampling		2					20	22	\$2,506		\$1,040	\$3,546	
Administration, correspondence		6	4					10	\$1,390			\$1,390	
Data Analysis and Reporting	2	12	16		4	4	4	42	\$5,460			\$5,460	
Travel Costs (ineligible)			56				8	64	\$8,336	\$1,665		\$10,001	
								0	\$0			\$0	
Subtotal	2	20	76	0	4	4	32	138	\$17,692	\$1,665	\$1,040	\$20,397	\$20,400
Total	3.5	45	136	12	26	8	32	262.5	\$34,387	\$3,415	\$16,435	\$54,237	\$54,240

\$54,237 \$54,240