

February 26, 2018

BRRTS: 02-13-415322

Ms. Cynthia Koepke, P.G.
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Madison, Wisconsin 53711

**Re: Proposed Work and Schedule
2401 University Avenue
Miller's Liquor Property
Madison, Wisconsin**

Dear Ms. Koepke:

Seymour Environmental Services, Inc. (Seymour) is pleased to present our plan to proceed with the environmental work at the Miller's Liquor property. Only groundwater sampling has been conducted at the site since the vapor sampling in 2014. We are planning to try to complete the following scope of work by the end of the year. We have broken out the different tasks below and have noted those items that already have approved budgets. Once we have had a chance to discuss our approach we will submit a budget request for the appropriate items before proceeding. We have tried to give a rough idea of the schedule in each section based on being able to get subcontractors on the schedule within a few weeks.

The most recent groundwater sampling was performed in June of 2016. At that time the PCE level in the water-table aquifer was ~300 ug/l north of the building (MW-2 and MW-3) and ~ 5 ug/l in the well located to the south (MW-1). Much lower PCE levels were present deeper within the unconsolidated aquifer; the sample from the piezometer (PZ-3) contained PCE at 3.6 ug/l. The data is shown on Figure 1.

1) Off-site Vapor Sampling at 2302, 2308 and 2355 University Avenue

As you are aware we have been unable to obtain permission to complete the sub-slab vapor sampling at these properties in the past. The owner tentatively agreed to allow access at one time but then declined when we attempted to schedule the work. We have prepared a new access request letter and access agreements using the updated WDNR templates. These have been mailed to the property owner with a requested response date of April 1, 2018. As soon as we receive a response from the owner of these properties we will contact you. If the owner approves the access we will submit a work plan for the installation and sampling of the sub-slab vapors at the three properties. We will begin scheduling the installation of the probes immediately upon receipt of an access agreement.

The costs to conduct this off-site vapor sampling were included in a previous budget request.

2) Installation of the Vapor Mitigation at Miller's Liquor

Because of the high dry cleaning level identified in the soil at the site our plan has been to install a mitigation system at the building. We have visited the site with the contractors and identified locations for the system pickup points, piping and blower. Because of the existing mechanical systems in the building (primarily refrigeration) we determined that installation would be a little more problematic than is typical. Because of this we submitted a memo to Jeff Ackerman at the WDNR in November 2017

explaining that we anticipated the actual cost of the mitigation system would exceed the DERF approved budget. We will attempt to collect soil samples beneath the building during installation of the system.

Currently, David Miller is using part of the building for storage and needs some time to clear the area for our contractor to work. We will install a vapor mitigation system at the subject property by April 2018.

3) Initial Assessment of the Lateral Extent of Groundwater Contamination

We propose to install an array of direct push sampling points to the north of the site. Sampling locations will be placed along the south side of the Campus Drive ROW, the bike path located to the north of Campus Drive. The initial sampling will focus on the area bounded by Highland Avenue (west) and Walnut Street (east). At each location the sampler will be advanced approximately 7 feet below saturated soils so that a groundwater sample is comparable to a water-table monitoring well can be collected. The boring will then be advanced deeper within the unconsolidated materials. Generally, we anticipate collecting the water –table sample at a depth of ~25-30 feet and the deeper sample at 40 feet or deeper if possible. Data from the area indicates that bedrock should be 45 to 65 feet below grade. Groundwater samples will be analyzed for VOCs. We will also attempt to collect soil samples west of the building and behind the building, although access for equipment in those areas was an issue during earlier investigation. Figure 2 shows the locations for the proposed groundwater boring locations.

Field work will be scheduled upon budget approval. We anticipate completing the direct push groundwater sampling within a month of the budget approval. When analytical data is available a short letter update will be submitted to WDNR.

The costs to conduct the additional groundwater assessment have not been requested and will be included in the next DERF budget request.

4) Determine the Vertical Extent of Groundwater Contamination

Vertical groundwater profiling will be conducted at a location approximately 250 feet northeast of the subject parcel on the University Heights Apartments property or in the right-of-way north of the property (2308 Univ. Ave.). Drilling will be conducted using mud rotary methods. Groundwater samples will be collected from the open borehole at 10 foot intervals beginning at ~45 feet below grade, which is the elevation of the screen in the existing piezometer and at the expected top of the bedrock. This depth may be altered slightly after we have had a chance to conduct the Geoprobe™ investigation if we are able to determine the depth to bedrock. When analytical data is available a short letter update will be submitted to WDNR. The report will include a discussion of the sampling results and recommendations for placement of permanent groundwater monitoring wells.

We anticipate completing this activity ~2 months after we receive budget approval and after we receive the results of the Geoprobe™ results.

The costs for this activity have not been requested and will be included in the next DERF budget request.

5) Install Monitoring Well Network

Based on the results of the direct push sampling and groundwater profiling we plan to install a network of monitoring wells. Three monitoring wells will be installed where vertical profiling was conducted. At this location the wells will be installed so that the screens intersect the water table, the peak contaminant horizon, and below the contamination. Water table monitoring wells will be installed near the margins of the groundwater contamination identified during the direct push sampling. Additionally, wells will be

installed along the apparent axis of groundwater flow. The depth of the screens in the “axial” flow wells will be determined based on data collected during the Geoprobe™ and profiling work.

The costs for this activity will be included in a future DERF budget request since the number, locations and depths of the required wells has not yet been determined.

6) Determine Additional Buildings that may Require Vapor Assessment

Groundwater quality data collected during the supplemental assessment will be used to evaluate whether vapor intrusion assessment may be needed at additional properties in the vicinity. The determination will be made based on the criteria outlined in RR-800 such as the distance from soils containing CVOCs, and location of the property relative to CVOC contamination in the water table aquifer. In addition the usage and construction of the buildings will be determined as needed.

The costs for this activity as well as resampling vapor at adjacent sites will be included a future DERF budget request once we have identified the need for additional vapor assessment.

7) Conduct Supplemental Source Area Soil Sampling

No soil sampling has been conducted beneath the former dry cleaner building. We will attempt to collect soil samples from the source area inside the building during the installation of the mitigation system at the Miller’s Liquor store. Further, we will try to collect soil samples outside of the building during the Geoprobe™ investigation.

The costs for this will be in the next DERF budget request.

8) Prepare a Source Area Interim Remediation Plan

Information gathered to date indicates that some heavily contaminated soil remains at the site which is likely an ongoing source for the groundwater plume. This was seen in the sample collected along the sewer lateral during construction at the site. We are looking into various interim remedial options to reduce the contamination at the subject property including soil venting/sparging, enhanced anaerobic dechlorination, direct chemical oxidation, and enhanced chemical sorption.

We will work on the interim action plan at the same time we are conducting further investigation and expect to have a plan by mid-summer. Once we have a general plan and idea of costs we will submit a budget request for the interim action.

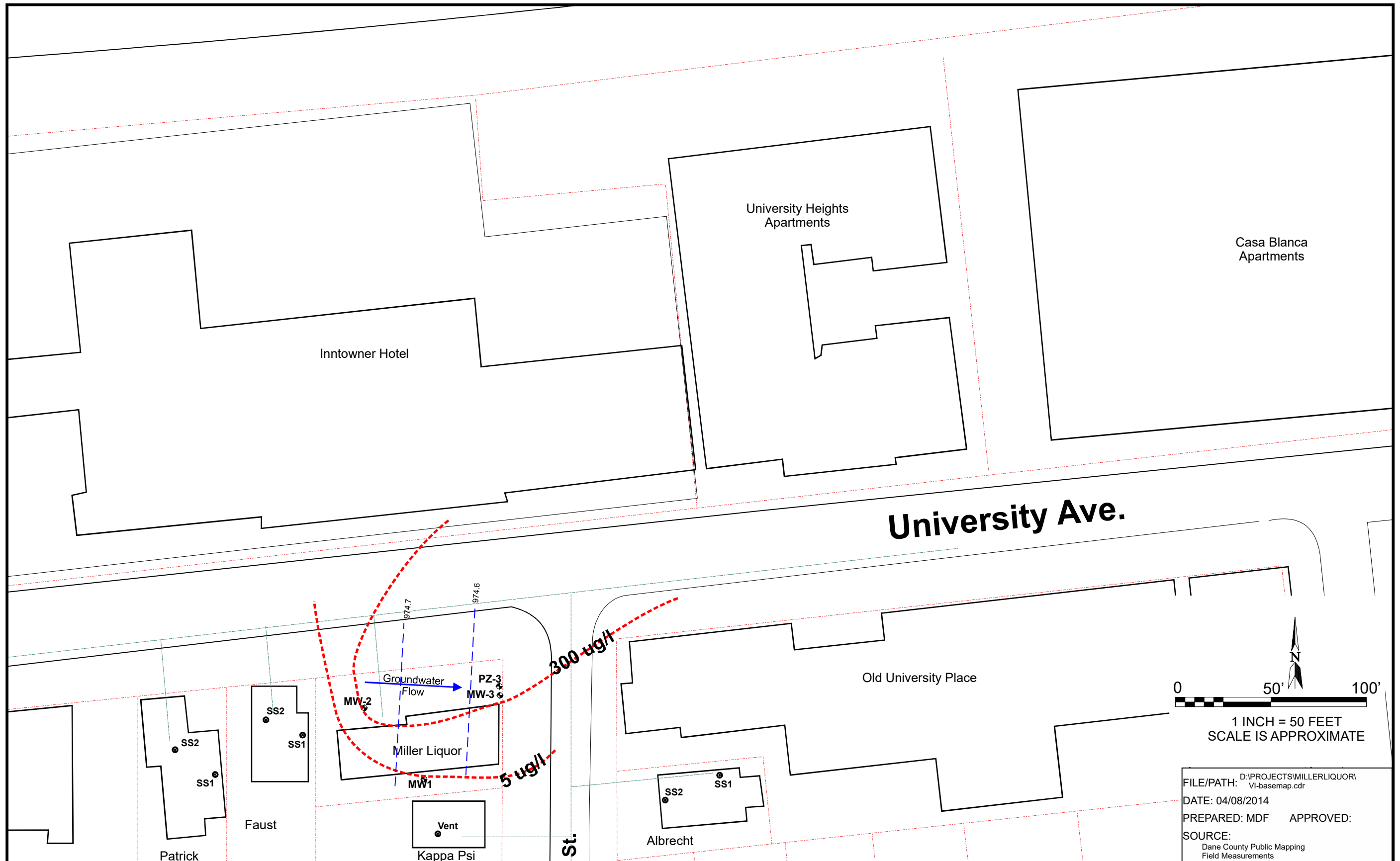
Sincerely,
Seymour Environmental Services, Inc.



Robyn Seymour, P.G.
Hydrogeologist

Enc.
Figures (2)
Schedule

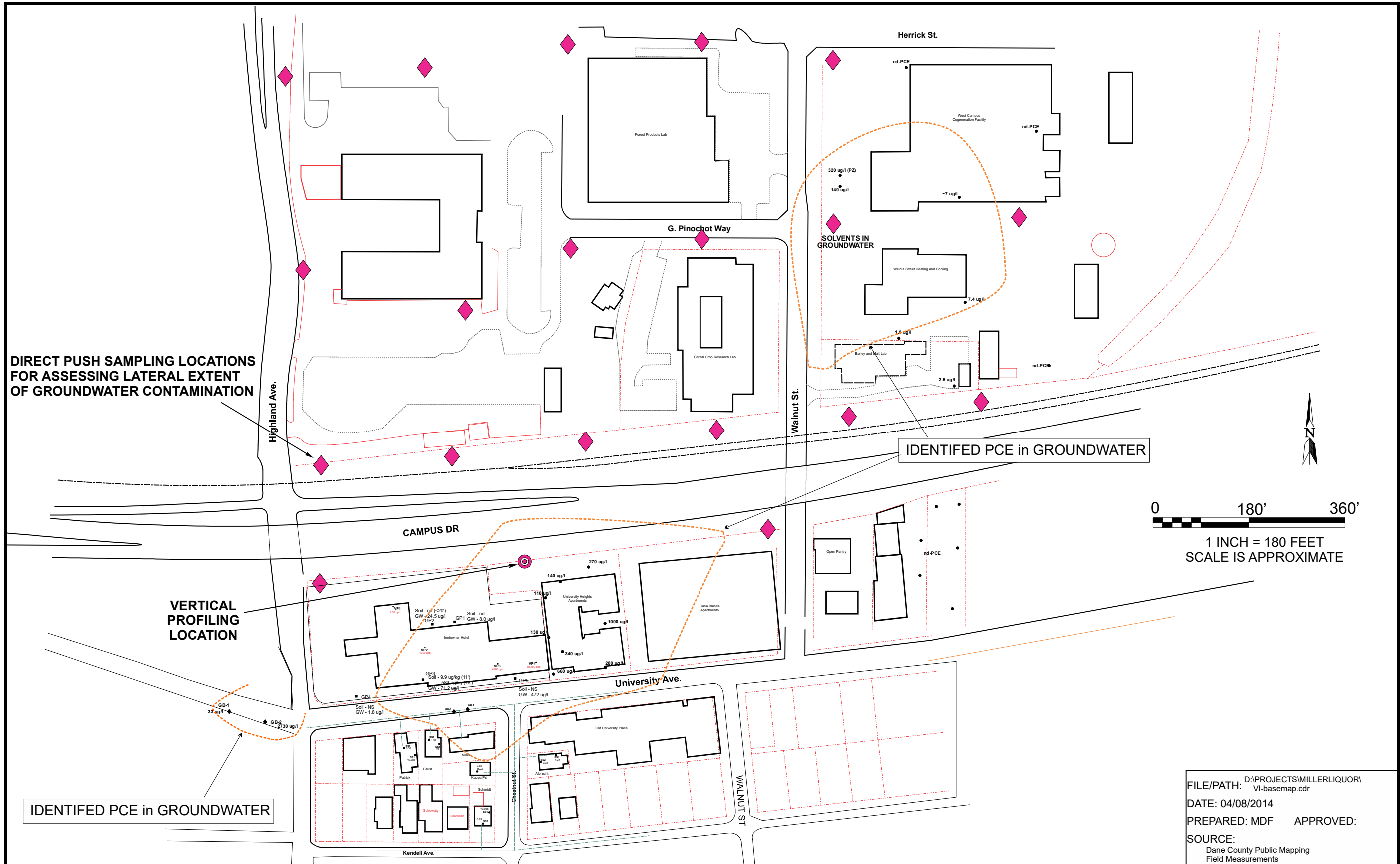
cc: Steve Miller, Bonnie Miller-Miller’s Liquor



SEYMOUR
ENVIRONMENTAL
SERVICES, INC.

GROUNDWATER MONITORING DATA (2016)
Miller's Liquor
2401 University Avenue
Madison, Wisconsin

FIGURE
1



SEYMOUR
ENVIRONMENTAL
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ESTIMATED DRILLING LOCATIONS
Miller's Liquor
2401 University Avenue
Madison, Wisconsin

FIGURE

2

PROPOSED SCHEDULE
Miller's Liquor DERF Project

	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Off-Site Vapor Sampling	access	sampling	report						
Mitigation System Installation	installation								
Initial Groundwater Extent Sampling	budget request	field work/sampling	report						
Groundwater Profiling	budget request	field work/sampling	report						
Monitoring Well Network Installation				budget request	field work/sampling	report			
Evaluation of Additional Vapor Sites				budget request	field work/sampling	report			
Sub-slab Sampling at old locations				budget request	access	sampling	report		
Source Area Soil Sampling	budget request	sampling	report						
Interim Action Plan	working on plan and budget								