

State of Wisconsin  
DEPARTMENT OF NATURAL RESOURCES  
Waukesha Service Center  
141 NW Barstow St  
Waukesha WI 53188

Scott Walker, Governor  
Cathy Stepp, Secretary  
Telephone 608-266-2621  
Toll Free 1-888-936-7463  
TTY Access via relay - 711



July 10, 2017

Mr. Bob Rummel  
1802 Maybank Highway  
Charleston, SC 29412

**KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS**

SUBJECT: Final Case Closure with Continuing Obligations  
Quick Cleaners (Former) 530 Franklin, Oconomowoc, WI 53223  
DNR BRRTS Activity #02-68-280310 FID #268169680

Dear Mr. Rummel:

The Department of Natural Resources (DNR) considers the former Quick Cleaners site closed, with continuing obligations. No further investigation or remediation is required at this time. However, you, future property owners, and occupants of the property must comply with the continuing obligations as explained in the conditions of closure in this letter. Please read over this letter closely to ensure that you comply with all conditions and other on-going requirements. Provide this letter and any attachments listed at the end of this letter to anyone who purchases, rents or leases this property from you.

This final closure decision is based on the correspondence and data provided, and is issued under chs. NR 726 and 727, Wis. Adm. Code. The SER Closure Committee reviewed this environmental remediation case for compliance with state laws and standards to maintain consistency in the closure of these cases. A request for remaining actions needed was issued by the DNR, and documentation that the conditions in that letter were met was received on May 16, 2017.

This former drycleaner site has soil, groundwater and indoor air contaminated with chlorinated VOCs. Responses included groundwater monitoring and installation of a double vapor mitigation system. The conditions of closure and continuing obligations required were based on the property being used currently for a storage facility.

Continuing Obligations

The continuing obligations for this site are summarized below. Further details on actions required are found in the section Closure Conditions.

- Groundwater contamination is present at or above ch. NR 140, Wis. Adm. Code enforcement standards.
- Residual soil contamination exists that must be properly managed should it be excavated or removed.
- An engineered cover must be maintained over contaminated soil and the DNR must be notified and approve any changes to this barrier.
- A vapor mitigation system must be operated and maintained, and inspections must be documented.

The DNR fact sheet, "Continuing Obligations for Environmental Protection," RR-819, helps to explain a property owner's responsibility for continuing obligations on their property. The fact sheet may be obtained at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

### GIS Registry

This site will be included on the Bureau for Remediation and Redevelopment Tracking System (BRRTS on the Web) at <http://dnr.wi.gov/topic/Brownfields/clean.html>, to provide public notice of residual contamination and of any continuing obligations. The site can also be viewed on the Remediation and Redevelopment Sites Map (RRSM), a map view, under the Geographic Information System (GIS) Registry layer, at the same web address.

DNR approval prior to well construction or reconstruction is required for all sites shown on the GIS Registry, in accordance with s. NR 812.09 (4) (w), Wis. Adm. Code. This requirement applies to private drinking water wells and high capacity wells. To obtain approval, complete and submit Form 3300-254 to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line at <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>.

All site information is also on file at the Southeast Regional DNR office, at 141 NW Barstow Street, Waukesha, WI 53188. This letter and information that was submitted with your closure request application, can be found as a Portable Document Format (PDF) in BRRTS on the Web.

### Prohibited Activities

Certain activities are prohibited at closed sites because maintenance of a barrier is intended to prevent contact with any remaining contamination. When a barrier is required, the condition of closure requires notification of the DNR before making a change, in order to determine if further action is needed to maintain the protectiveness of the remedy employed. The following activities are prohibited on any portion of the property where an engineered cover or a vapor mitigation system is required, as shown on the **attached map D1 Soil Maintenance Plan Map**, dated October 2016 (revised version submitted February 2017) and **D1.1 Vapor Maintenance Plan Map** dated June 2016 (revised version submitted February 2017), unless prior written approval has been obtained from the DNR:

- removal of the existing barrier or cover;
- replacement with another barrier or cover;
- excavating or grading of the land surface;
- filling on covered or paved areas;
- plowing for agricultural cultivation;
- construction or placement of a building or other structure;
- changing the construction of a building that has a vapor mitigation system in place.
- changing the use or occupancy of the property to a residential exposure setting, which may include certain uses, such as single or multiple family residences, a school, day care, senior center, hospital, or similar residential exposure settings.

### Closure Conditions

Compliance with the requirements of this letter is a responsibility to which you, and any subsequent property owners must adhere. DNR staff will conduct periodic prearranged inspections to ensure that the conditions included in this letter and the attached maintenance plans are met. If these requirements are not followed, the DNR may take enforcement action under s. 292.11, Wis. Stats. to ensure compliance with the specified requirements, limitations or other conditions related to the property.

Please send written notifications in accordance with the following requirements (with FID# and BRRTS# noted) to:



Department of Natural Resources  
Attn: SER Remediation and Redevelopment Program Environmental Program Associate  
2300 N. Dr. ML King Dr., Milwaukee, WI 53212

Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present on this contaminated property as shown on the **attached map** Groundwater Isoconcentration Map, Attachment B.3.b, dated June 2016 (revised version submitted June, 2017). If you intend to construct a new well, or reconstruct an existing well, you'll need prior DNR approval.

Residual Soil Contamination (ch. NR 718, chs. 500 to 536, Wis. Adm. Code or ch. 289, Wis. Stats.)

Soil contamination remains under (and around) the northern portion of the building as indicated on the **attached map** Post Remedial Soil Contamination Map, Attachment B.2.b, dated June 2016 (revised version submitted April 2017). If soil in the specific locations described above is excavated in the future, the property owner or right-of-way holder at the time of excavation must sample and analyze the excavated soil to determine if contamination remains. If sampling confirms that contamination is present, the property owner or right-of-way holder at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. Contaminated soil may be managed in accordance with ch. NR 718, Wis. Adm. Code, with prior DNR approval.

In addition, all current and future owners and occupants of the property and right-of-way holders need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct contact health threat to humans.

Depending on site-specific conditions, construction over contaminated soils or groundwater may result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

Cover or Barrier (s. 292.12 (2) (a), Wis. Stats., s. NR 726.15, s. NR 727.07 Wis. Adm. Code)

The building, asphalt and landscaped cover that exists in the specific location shown on the **attached map** Extent of cap map - Post Remedial Soil Contamination Map, Attachment B.2.b dated June 2016 (revised version submitted April 2017), shall be maintained in compliance with the **attached maintenance plan** in order to minimize the infiltration of water and prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code.

The cover approved for this closure was designed to be protective for a commercial or industrial use setting. Before using the property for residential purposes, you must notify the DNR at least 45 days before taking an action, to determine if additional response actions are warranted.

A request may be made to modify or replace a cover or barrier. Before removing or replacing the cover, you must notify the DNR at least 45 days before taking an action. The replacement or modified cover or barrier must be protective of the revised use of the property, and must be approved in writing by the DNR prior to implementation. A cover or barrier for industrial land uses, or certain types of commercial land uses may not be protective if the use of the property were to change such that a residential exposure would apply. This may include, but is not limited to single or multiple family

residences, a school, day care, senior center, hospital or similar settings. In addition, a cover or barrier for multi-family residential housing use may not be appropriate for use at a single family residence.

The **attached soil maintenance plan and inspection log (DNR form 4400-305)** are to be kept up-to-date and on-site. Inspections shall be conducted twice a year, in accordance with the attached maintenance plan. Submit a copy of the soil cover inspection log twice a year to the DNR, starting six months after the date of this letter.

Vapor Mitigation or Evaluation (s. 292.12 (2), WI Stats., s. NR 726.15, s. NR 727.07, WI Adm. Code) Vapor intrusion is the movement of vapors coming from volatile chemicals in the soil or groundwater, into buildings where people may breathe air contaminated by the vapors. Vapor mitigation systems are used to interrupt the pathway, thereby reducing or preventing vapors from moving into the building.

Vapor Mitigation System: Soil vapor beneath the building contains chlorinated VOCs at levels that would pose a long-term risk to human health, if allowed to migrate into an occupied building on the property. The double vapor mitigation system installed in 2013, must be operated, maintained and inspected in accordance with the **attached** vapor mitigation maintenance plan. System components must be repaired or replaced immediately upon discovery of a malfunction. Twice a year, inspections and any system repairs must be documented in the **attached** vapor mitigation inspection log (DNR form 4400-305). The inspection log shall be kept up-to-date and on-site. Inspections shall be conducted twice a year, in accordance with the attached vapor mitigation maintenance plan. Submit a copy of the vapor mitigation inspection log (in addition to the soil cover log) twice a year to the DNR, starting six months after the date of this letter. Please send the inspection logs (copies) to the DNR notification address provided above.

If a decision is made to no longer use the vapor mitigation system, or to make a change to the vapor mitigation system, the property owner must notify the DNR at least 45 days before shutting the vapor mitigation system off, or before making any other change to the system, and evaluate whether conditions are protective of public health and safety. Additional response actions may be necessary.

The integrity of the building floor that exists on the property, shown on the **attached map D1.1 Vapor Maintenance Plan Map** dated June 2016 (revised version submitted February 2017), must be maintained in compliance with the **attached vapor mitigation maintenance plan**. This will help ensure proper functioning of the vapor mitigation system, limiting vapor intrusion to indoor air spaces.

#### In Closing


Please be aware that the case may be reopened pursuant to s. NR 727.13, Wis. Adm. Code, for any of the following situations:

- if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment,
- if the property owner does not comply with the conditions of closure, with any deed restrictions applied to the property, or with a certificate of completion issued under s. 292.15, Wis. Stats., or
- a property owner fails to maintain or comply with a continuing obligation (imposed under this closure approval letter).

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Jim Delwiche at (262) 574-2145, or at [jim.delwiche@wi.gov](mailto:jim.delwiche@wi.gov).



Sincerely,



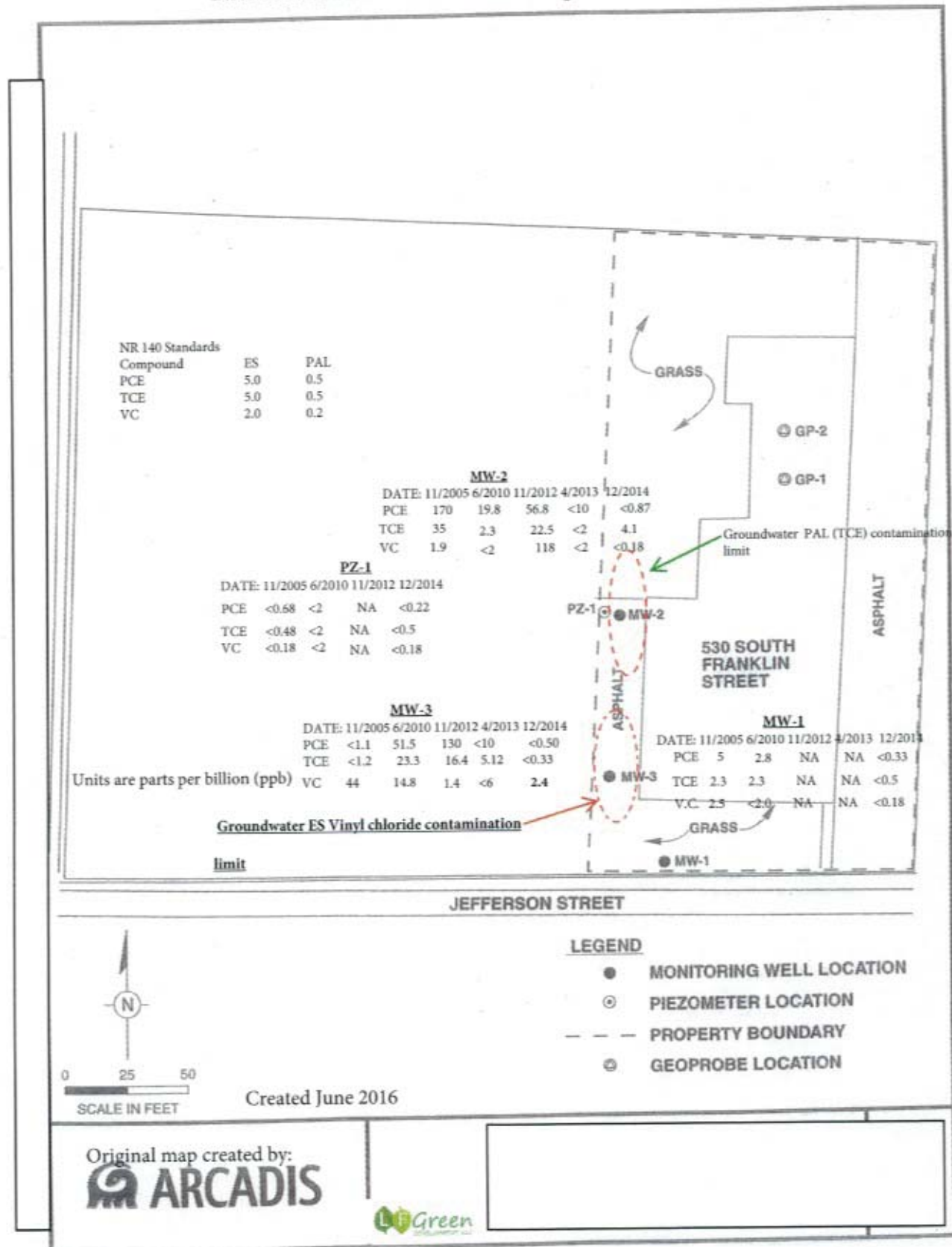
Pamela A. Mylotta  
Team Supervisor, Southeast Region  
Remediation & Redevelopment Program

Attachments:

- Groundwater Isoconcentration Map, Attachment B.3.b, dated June 2016 (revised version submitted June 2017)
- Post Remedial Soil Contamination Map, Attachment B.2.b, dated June 2016 (revised version submitted April 2017)
- Extent of cap map – D1 Location Maps, Attachment D.1 dated October 2016 (revised version submitted April 2017)
- Soil Maintenance plan, Attachment D, dated 9/21/15 (revised version submitted February 2017)
- Inspection logs, DNR Form 4400-305 and Site Location: 530 Franklin Street
- Vapor Mitigation Maintenance plan, with photos of system checkpoints, Attachment D, dated 9/29/15 D1.1 (revised version submitted February 2017)

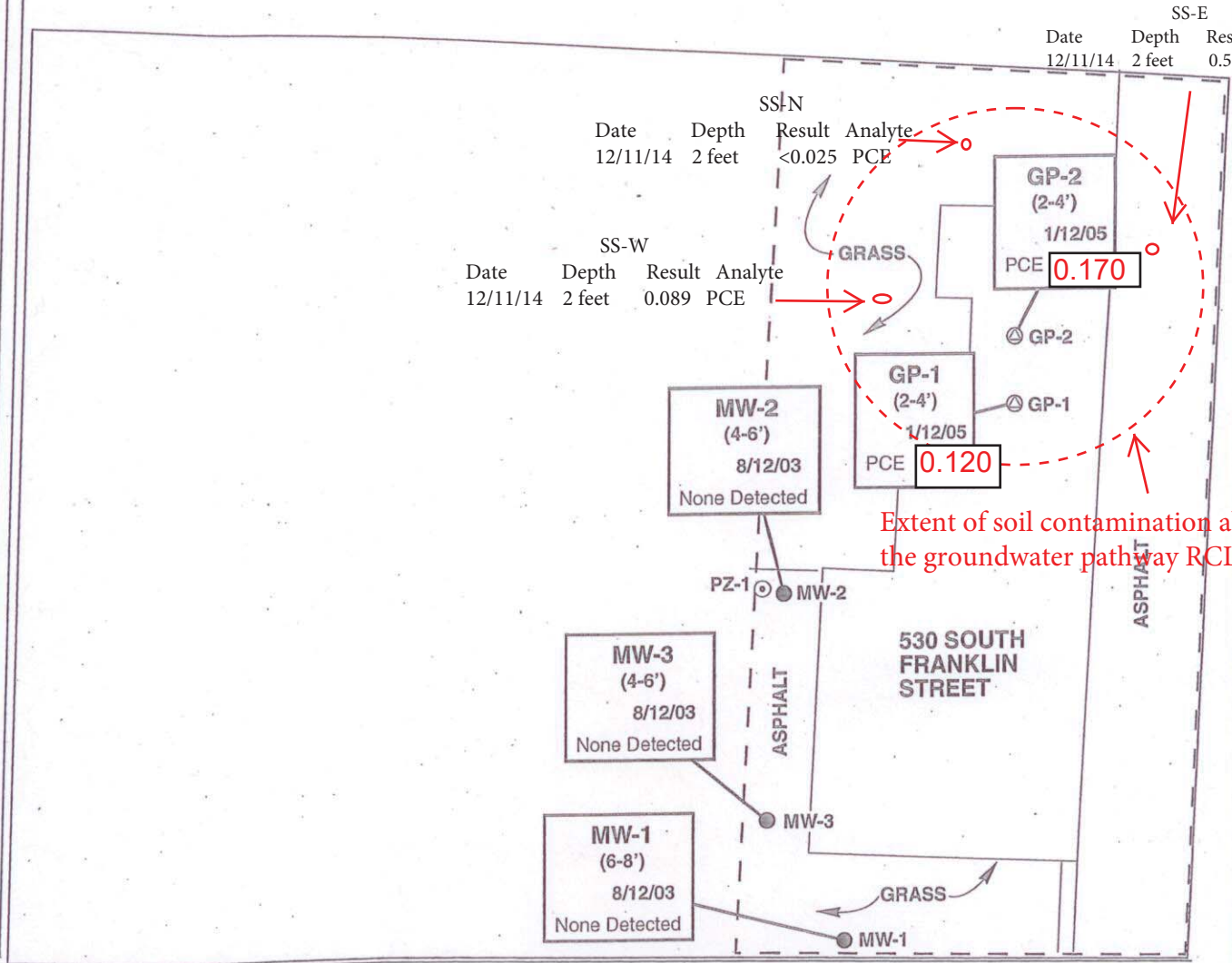
cc: Linda Fellenz – LF Green Development, LLC  
SER Case File

### B.3.b Groundwater Isoconcentration Map





### B.2.b Post Remedial Soil Contamination Map



| Date     | Depth  | Result | Analyte |
|----------|--------|--------|---------|
| 12/11/14 | 2 feet | 0.551  | PCE     |
| 12/11/14 | 2 feet | <0.025 | PCE     |
| 12/11/14 | 2 feet | 0.089  | PCE     |

**MW-2**  
(4-6')  
8/12/03  
None Detected

**GP-2**  
(2-4')  
1/12/05  
PCE **0.170**

**GP-1**  
(2-4')  
1/12/05  
PCE **0.120**

**MW-3**  
(4-6')  
8/12/03  
None Detected

**MW-1**  
(6-8')  
8/12/03  
None Detected

Extent of soil contamination above the groundwater pathway RCLs

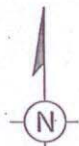
JEFFERSON STREET

**LEGEND**

- MONITORING WELL LOCATION
- ⊙ PIEZOMETER LOCATION
- - - PROPERTY BOUNDARY
- ⊗ GEOPROBE LOCATION



PCE Tetrachloroethene **parts per million (ppm)**



0 25 50  
SCALE IN FEET

Created June 2016

Original map provided by:



# SOIL MAINTENANCE PLAN

September 21, 2015

Property Located at:  
Parcel # OCOC 0560-254  
530 Franklin Street  
Former Quick Cleaners  
Oconomowoc, WI 53235

WDNR BRRTS **-02-68-280310**

## Introduction

This document is the Maintenance Plan for a pavement/building cover at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the existing pavement and building located over the contaminated groundwater plume and impacted soil on the site. The groundwater and soil are contaminated with chlorinated compounds. The location of the building and paved surfaces to be maintained in accordance with this Maintenance Plan is identified in the attached map (Exhibit D.1).

More specific information about this property can be found in the WDNR Southeast Regional Office located at 141 Barstow Ave NW, Waukesha, WI. And on the WDNR BRRTs database.

## Description of Contamination:

Soil and groundwater contamination by chlorinated compounds is located at a depth of 2-4 feet at location identified in the attached Exhibit D.1.

## Description of Pavement/Building Cover to be maintained:

The pavement located on the eastside of the building and parts of the western and south sides of the building and the building itself provides a barrier on the central part of the property.

The building footprint and pavement will serve as the barrier cap to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch. NR 140, Wisconsin Administrative Code. Based on the current and future use of the property, the barrier should function as intended unless disturbed.

## Annual Inspection



The areas identified in this maintenance plan and in the attached Exhibit D1 overlying the contaminated soil will be inspected once a year. The inspection will be performed by the property owner or owner's representative.

A log of the inspections and any repairs will be maintained by the property owner unless instructed to submit the inspection logs to the WDNR in the final closure documents.

The log will include recommendations for necessary repair of any areas where underlying soils are exposed. Once repairs are completed, they will be documented in the inspection log.

### Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling operations or they can include larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment ("PPE"). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored and disposed of by the owner in accordance with applicable local, state and federal law.

In the event the paved surfaces overlying the contaminated soil are removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the WDNR or its successor.

The property owner, in order to maintain the integrity of the paved surfaces will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

### Prohibition of Activities and Notification of WDNR Prior to Actions Affecting a Cover or Cap

The following activities are prohibited on any portion of the property where the barrier cap and building is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources:

- 1) removal of the existing barrier;
- 2) replacement with another barrier;
- 3) excavating or grading of the land surface;
- 4) filling on capped or paved areas;
- 5) plowing for agricultural cultivation;
- 6) construction or placement of a building or other structure.

## Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

### Contact Information

Site Owner and Operator: Bob Rummel  
1802 Maybank Highway  
Charleston, South Carolina 29412

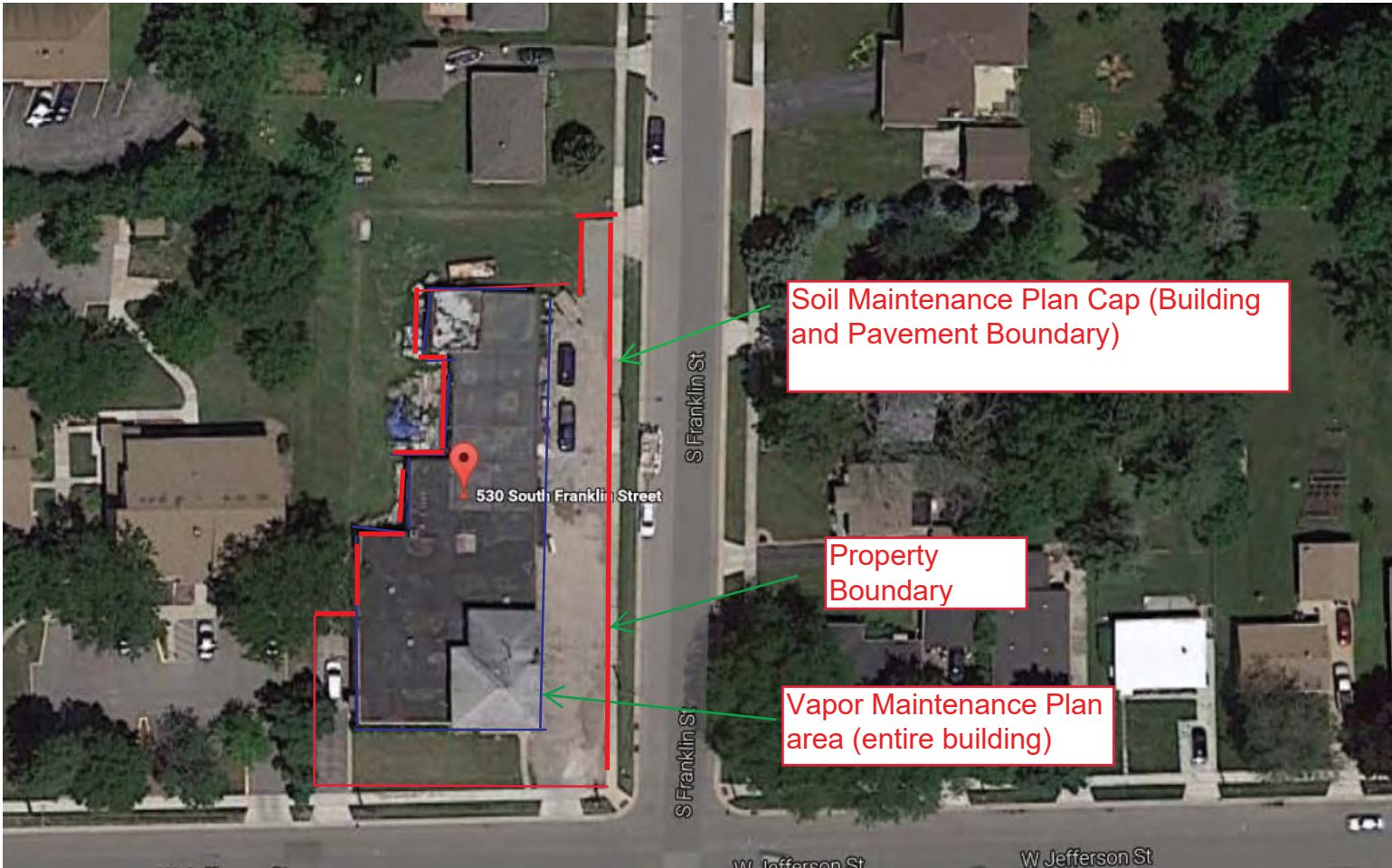
Consultant: LF Green Development, LLC  
5600 W. Brown Deer Road, Suite 120  
Milwaukee, WI 53223  
414-254-4813

WDNR: James C. Delwiche, Hydrogeologist  
Wisconsin Department of Natural Resources  
141 NW Barstow Street, Room 180,  
Waukesha, WI 53188



D1 Soil Maintenance Plan Map

530 S Franklin St

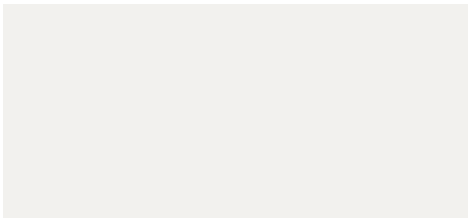


50 ft



Created October 2016 by LF Green Development

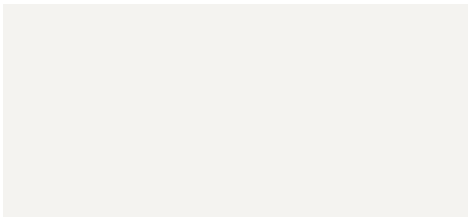
530 Franklin Street  
View of pavement on west side of building facing north



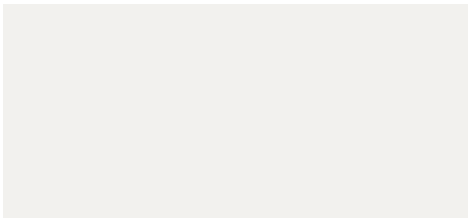


530 Franklin Street  
East side of building showing pavement. Facing South

Subject Building



530 Franklin - North boundary of building. Facing West





**Directions:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

|   |                               |
|---|-------------------------------|
| Activity (Site) Name<br><br>Former Quick Cleaners | BRRTS No.<br><br>02-68-280310 |
|---|-------------------------------|

Inspections are required to be conducted (see closure approval letter):

annually  
 semi-annually  
 other – specify \_\_\_\_\_

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

| Inspection Date | Inspector Name | Item   | Describe the condition of the item that is being inspected | Recommendations for repair or maintenance | Previous recommendations implemented?           | Photographs taken and attached?                 |
|-----------------|----------------|--|--|---|---|---|
|                 |                | <input type="checkbox"/> monitoring well<br><input checked="" type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other: |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |

02-68-280310

Former Quick Cleaners

BRRTS No.

Activity (Site) Name

# Continuing Obligations Inspection and Maintenance Log

Form 4400-305 (2/14)

Page 2 of 2

{Click to Add/Edit Image}

Date added:

Title:

{Click to Add/Edit Image}

Date added:

Title:

# VAPOR MAINTENANCE PLAN

September 21, 2015

Property Located at:  
530 Franklin Street

PParcel Number OCOC 0560-254  
Former Quick Cleaners  
Oconomowoc, WI 53235  
WDNR BRRTS -**02-68-280310**

## Introduction

This document is the Maintenance Plan for a vapor mitigation system at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the active system installed at the site based on the groundwater exceedances present at the site of chlorinated compounds. The area to be covered by the vapor maintenance plan is identified in the attached map (Exhibit D-1.1).

More specific information about this property can be found in the WDNR Southeast Regional Office located at 141 Barstow Ave NW, Waukesha, WI. And on the WDNR BRRTs database.

## Description of Contamination:

Soil and groundwater contamination by chlorinated compounds and lead is located at a depth of 2-4 feet beneath the building.

## Description of Vapor System to be maintained:

The vapor mitigation system is installed within the building and has a dual venting system and 2 fans extracting the sub-slab vapors from the building. The system includes a pipe extending through the concrete foundation (there is no basement) and is then connected to the pressure gauge. The pipe then goes through the exterior wall and is connected to a fan then the piping goes up to the highest spot on the roof.

The components of the two systems are outlined on the attached Exhibit D-1. 2.

The radon (vapor) system will prevent any potential VOC vapors from migrating into the building. Based on the current and future use of the property, the system should function as intended unless disturbed.

## Annual Inspection

The vapor mitigation systems as depicted in Exhibit D-1.2 will be inspected once a year, to verify the fans are working properly and a negative pressure is observed on the pressure gauge within the building. The warranty of the fan is estimated to be 5 years. The inspections will be performed by the property owner or owner's representative to evaluate damage due to increasing age and other factors.

A log of the inspections and any repairs will be maintained by the property owner, unless the final closure requires that the inspection logs be submitted to the WDNR, and is included in the Inspection Log. The log will include recommendations for necessary repairs. Once repairs are completed, they will be documented in the inspection log. A copy of the inspection log will be maintained at the property.

#### Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. The property owner, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

#### Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cover or Cap

The following activities are prohibited on the system as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources:

- 1) Removal of the existing system;

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

#### Contact Information:

Site Owner and Operator: Bob Rummel

1802 Maybank Highway  
Charleston, South Carolina 29412

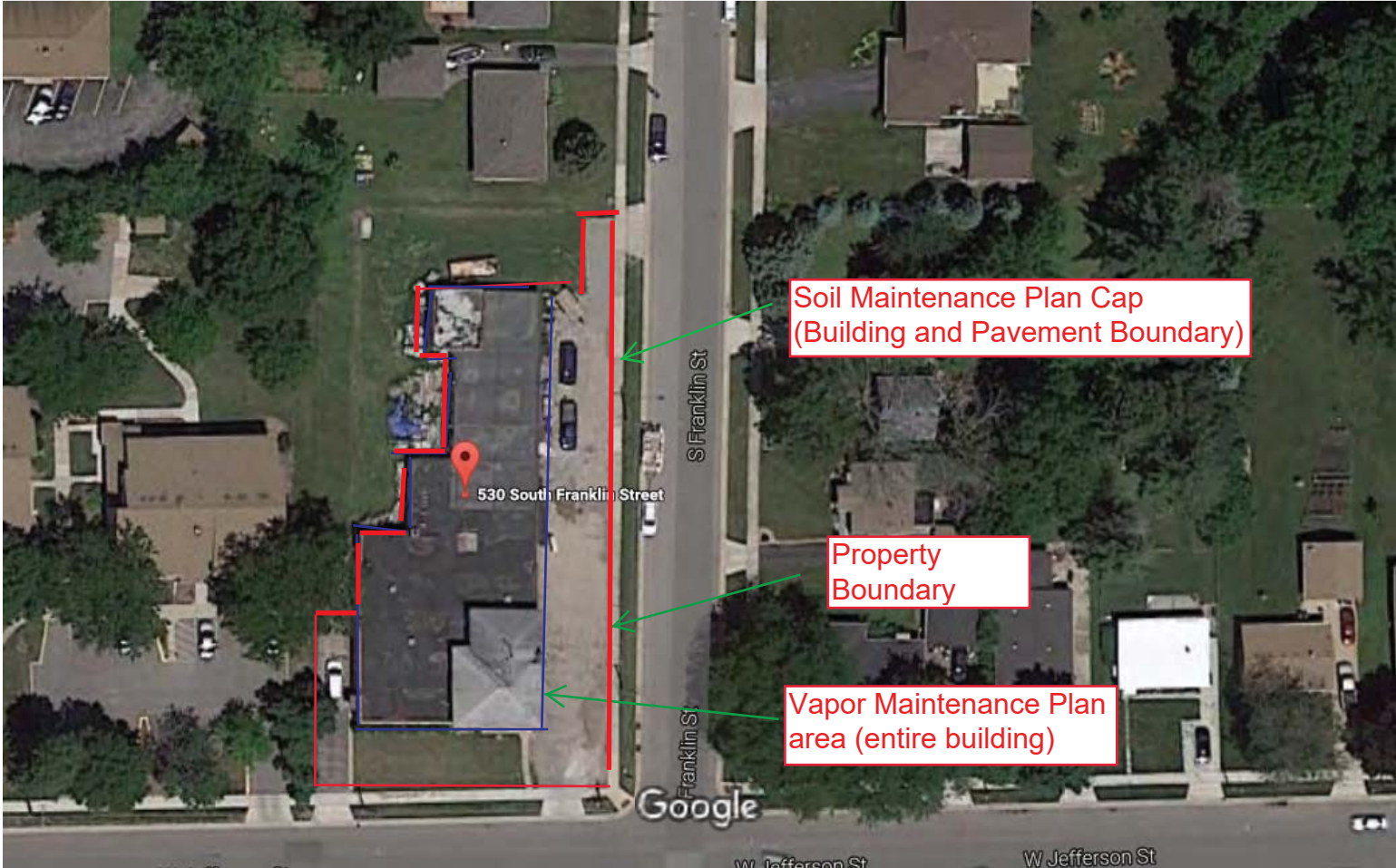
Consultant: LF Green Development, LLC  
5600 W. Brown Deer Road, Suite 120  
Milwaukee, WI 53223

WDNR: James C. Delwiche, Hydrogeologist  
Wisconsin Department of Natural Resources  
141 NW Barstow Street, Room 180,  
Waukesha, WI 53188



D1.1 Vapor Maintenance Plan Map

530 S Franklin St



Soil Maintenance Plan Cap  
(Building and Pavement Boundary)

Property  
Boundary

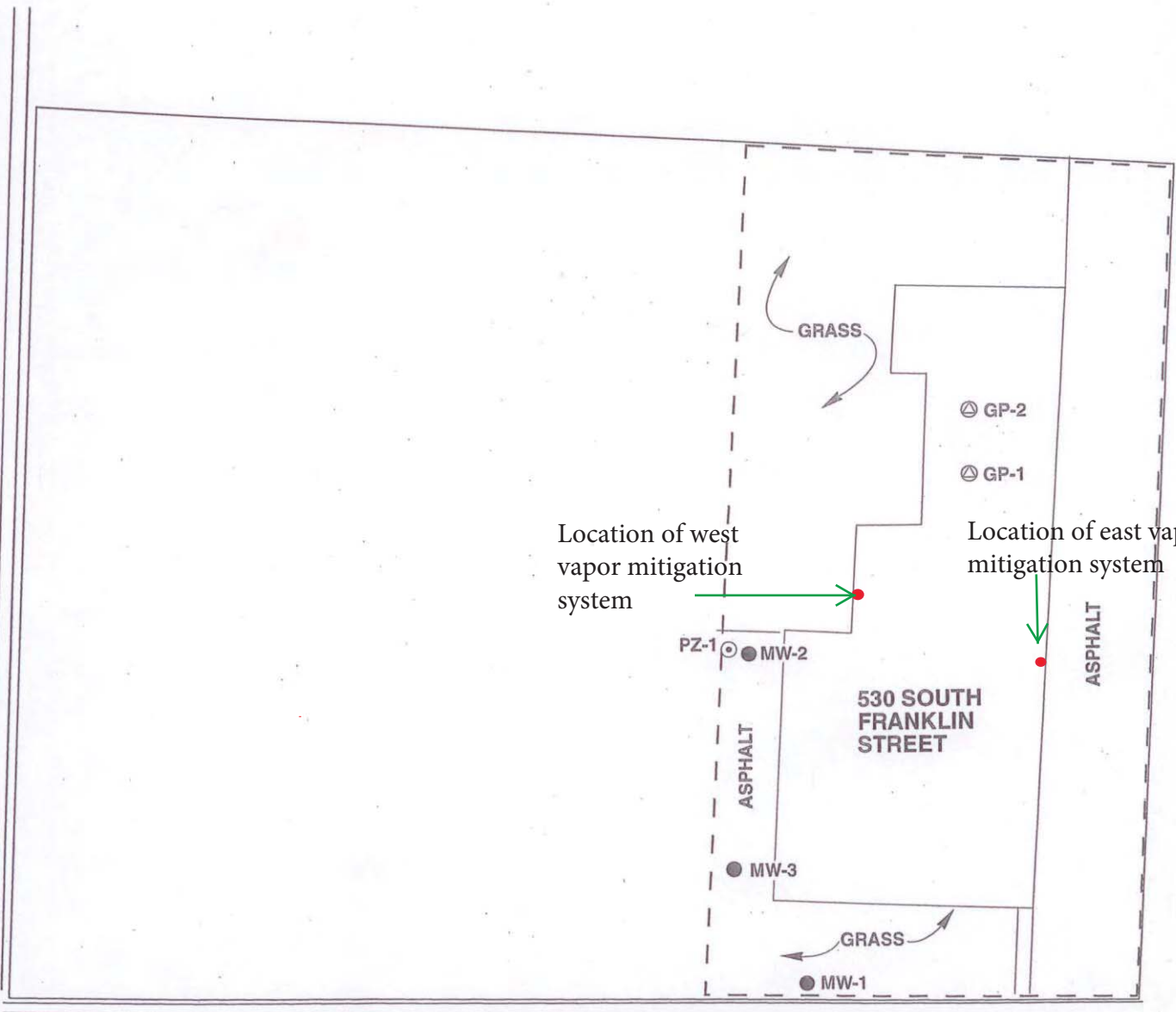
Vapor Maintenance Plan  
area (entire building)

50 ft

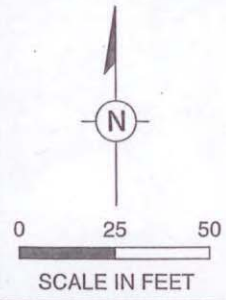


Created October 2016 by LF Green Development

# D-1.2 Vapor Systems Location Map



JEFFERSON STREET

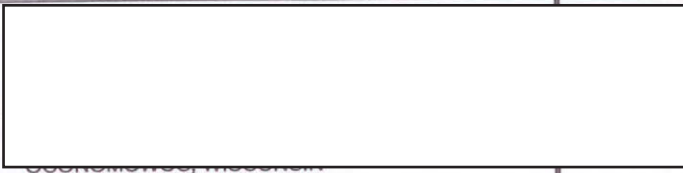


- LEGEND**
- MONITORING WELL LOCATION
  - ⊙ PIEZOMETER LOCATION
  - - - PROPERTY BOUNDARY
  - ⊗ GEOPROBE LOCATION

Created June 2016



original map created by  
**ARCADIS**





System Fan

Vapor system located on the east side of the building.





East vapor extraction system interior piping showing the piping going into the sub slab and venting outside of the building.

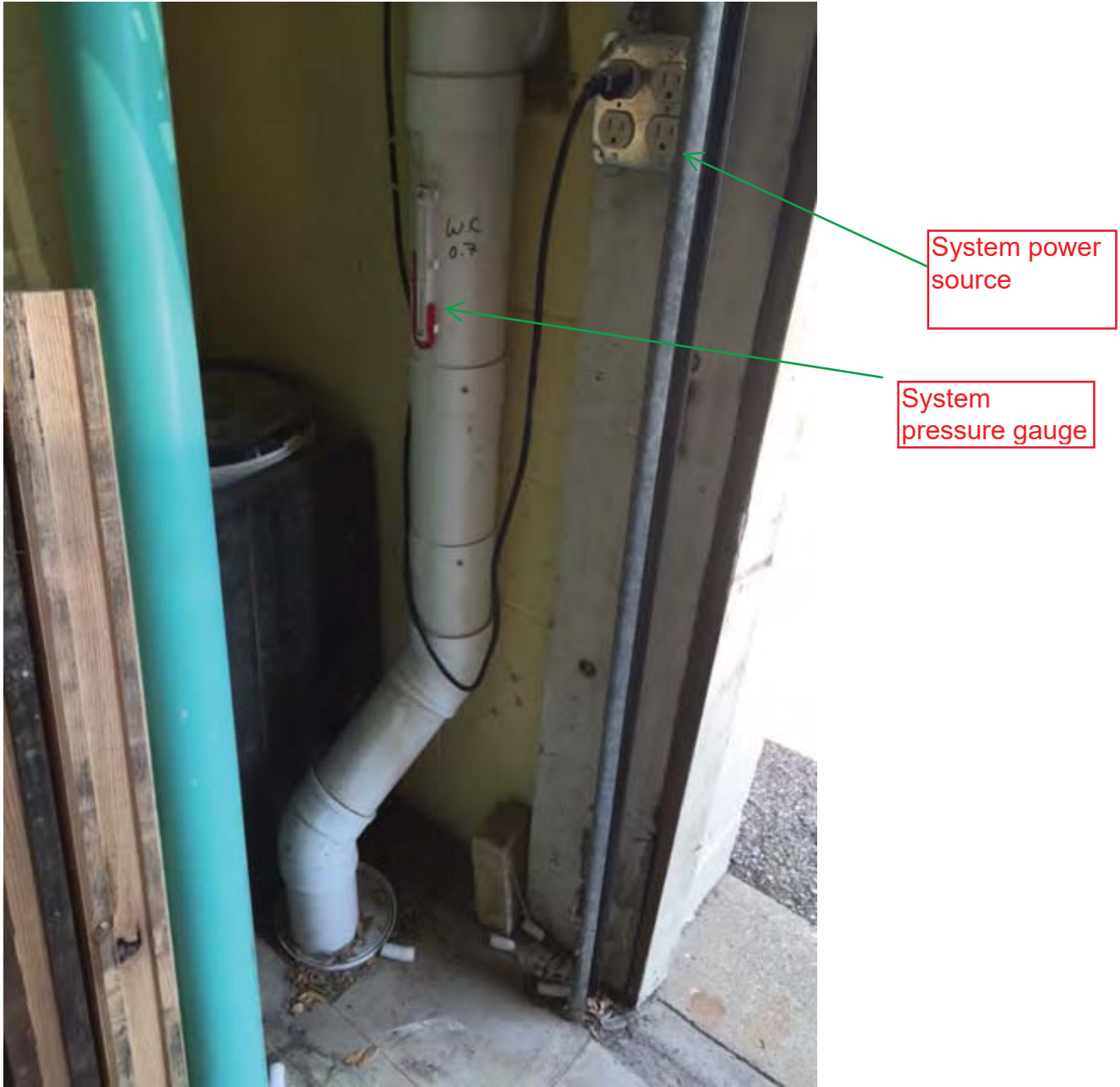




Vapor system located on the east side of the building showing the vent piping going up to the roof line of building.



Vapor system located on the west side of the building showing the vent piping going up to the roof line of building.



Vapor extraction system on the west side of the building. Interior piping showing the piping going into the sub slab and venting outside of the building.





Vapor system located on the west side of the building showing the fan and vent piping going up to the roof line of building.



## How Your System Works

### Always Protecting

Your S.W.A.T. Environmental Radon Mitigation System is designed to run continuously 24/7 to maintain a balance of negative pressure and suction beneath your home.

### Manometer

The pressure gauge on your radon mitigation pipe should be located inline with the piping and be located between the fan and the lowest suction point. This pressure gauge is designed to keep you alert to activity within the mitigation system piping. The pressure gauge uses red dye inside of a "U" shaped clear plastic tube acts on the same physics of a straw in your drink; when the fan is sucking or moving air, the pressure gauge should be higher on one side. If the fan ever stopped running the pressure gauge would "zero out" and be even on both sides.

**\*IF YOUR PRESSURE GAUGE EVER READS ZERO OR BOTH SIDES ARE EVEN, THE FOLLOWING SHOULD BE CHECKED:**

- 1) Check the on/off switch power plug for the Vapor Mitigation System. This is important because of the nature of system installations and designs, power supplies are almost never consistently located in the same locations at every house.
- 2) Go outside and check to see if there is a switch on the fan, if it is in the off position, turn it on.
- 3) Go around your home and check all of your GFCI outlets. There is a strong chance that a GFCI outlet has tripped in a location other than the power supply of the radon system.
- 4) Make sure that the plastic tube to the pressure gauge is plugged into the pipe. If the plastic tube is not fed into the pipe the pressure gauge will not have access to the interior of the tube. (This usually what happens when your gauge is zero and your fan seems to be running.)
- 5) If none of the previous methods causes your fan to turn back on, then please give our office a call and we will further assist you.

## Vapor Mitigation Piping

This component of the mitigation system is nearly maintenance free but there are a few commonly asked questions that you may be thinking of.

- 1) S.W.A.T. Environmental's mitigation systems do not have covers or bends at the tops of the discharge stack. This is because over the years we have found that the amount of force from the air flow coming from inside of the pipe is enough to keep 99% of debris and foreign objects out of the system.
- 2) You may notice that your piping is starting to fade a little. Do not worry this is a natural part of the PVC pipe and plastic. One good way to prevent this is to paint the radon piping. S.W.A.T. offers this service.
- 3) Condensation and moisture. There is a large difference between the temperature under your home and the air inside your home. If you see that there are water droplets on the piping in your basement or in your attic, please continue to monitor this closely. Excessive moisture can do damage to carpet and drywall and should this moisture get excessive, turn your system off and call the S.W.A.T. service department.

### Sump Cover

Here at S.W.A.T. Environmental, we see many types of homes and about 50% of all homes that we install radon mitigation systems in, have sump pumps. Sump pumps are very important to every home, as they help protect it from another threat, water. There are a couple of things to remember about the relationship between your sump pit and your radon mitigation system.

- 1) Your mitigation system does not affect the performance of your sump pump. It is a common concern among customers that the amount of pressure beneath the sump cover can manipulate the functionality of the sump pump. This is not true. Remember that your mitigation fan is strong, but it is not that strong, so if you test your sump pump and it does not work; please remember to call a plumber for assistance.
- 2) The sump cover is clear so you can see through it and it is removable in case you ever have to change the sump pump. The caulking on the seal is sturdy but easy to remove with a putty knife. The material is a flexible thick plastic called Lexan.
- 3) If you have a pedestal sump pump, we highly recommend switching to a Submersible Sump Pump. In order to adequately seal your sump pump, a pedestal sump pump just does not compare to a submersible sump pump. Pedestal sump pumps also pose dangers of having their float get stuck on the clear cover over the sump pump.

4) If you see your sump crock filling up with water please test your sump pump and try to pump the water out of the crock. If the sump does not turn on, please call your plumber.

5) There are virtually no parts of the system that need to be maintained by you but the only part that may need some up keep is your sump cover. Sometimes the cover may shift or water can eat away at the caulking on the seal. Since it is against EPA Radon Mitigation Standards to use a permanent seal on the cover, you will be required to replace caulk should this happen.

### The System Fan

Your mitigation fan is meant to run continuously and should if avoidable, never to be turned off.

Through S.W.A.T. Environmental you have an extended 5 year manufacturer's warranty on the system mitigation fan.

### DISCLAIMER

The content of this User's Manual is based upon ASTM E2121-13 and industry best practices. Please note that while every effort was made to provide accurate information in a concise and understandable format, variations in State or Local regulations or ordinances may impose additional design, operation, measurement, or inspection requirements which lie outside of the general scope of this content.







If you have questions regarding the specific regulations governing mitigation in your State, please contact your State Radon Program. Contact information for State Radon Programs can be found on the EPA Website at: <http://www.epa.gov/radon/whereyoulive.html>



SITE LOCATION: 530 FRANKLIN STREET

OCONOMOWOC, WI

BRRTS: 02-68-280310

| SYSTEM COMPONENT  |   | WHAT DOES IT DO?   | WHAT DO I CHECK?                                     | WHAT SHOULD I SEE?  | WHAT TO FIX?   | ANNUAL INSEPECTION |                 |      |                 |      |                 |
|---|---|--|--|---|--|--------------------|-----------------|------|-----------------|------|-----------------|
| NAME  | PHOTO   |  |  |   |  | DATE               | NOTES           | DATE | NOTES           | DATE | NOTES           |
| Fan - East side of building   |    | Fan creates a vaccum and lowers pressure below foundation.<br><br>The fan also removes soil gases from below foundation for discharge to atmosphere.   | Fan Operation<br><br>Fan Location<br><br>Motor Noise | Fan is on<br><br>Fan mounted outside & secure<br><br>Fan motor is quiet (loud motor may indicate problem)   | Fan may need to be replaced every 15 to 20 years.<br><br>Replacement fan to have similar specifications as original with respect to flow and vacuum.<br><br>ORIGINAL = RP 265 M/N 23033-2  |                    |                 |      |                 |      |                 |
| Fan - west side of the building   |    | Fan creates a vaccum and lowers pressure below foundation.<br><br>The fan also removes soil gases from below foundation for discharge to atmosphere.   | Fan Operation<br><br>Fan Location<br><br>Motor Noise | Fan is on<br><br>Fan mounted outside & secure<br><br>Fan motor is quiet (loud motor may indicate problem)   | Fan may need to be replaced every 15 to 20 years.<br><br>Replacement fan to have similar specifications as original with respect to flow and vacuum.<br><br>ORIGINAL = RP 265 M/N 23033-2  |                    |                 |      |                 |      |                 |
| Suction Drop Point w/Vent Pipe (two systems in building)  |    | <b>Suction Pit:</b> Soil gases are collected in a pit below the foundation, and tight seal prevents soil gas from getting inside home.<br><br><b>Vent Pipe:</b> Pipe conveys the vacuum from the fan, and collects soil gases for discharge to the atmosphere. | Suction Pit Seal<br><br>Vent Pipe Condition          | Seal is air tight around pipe penetration.<br><br>Vent pipe is connected to fan, has not cracked  | Suction pit seal or vent pipe may need to be sealed or replaced if cracks or leaks appear.<br><br>See NOTE below regarding pipe alternations. Have professional test pressures if pipes are modified   |                    |                 |      |                 |      |                 |
| Manometer or Differential Pressure Gauge (one on each vent pipe)                                  |   | Measures differential pressure between vacuum side of vent pipe and indoor space.<br><br>This measurement confirms there is a vacuum being pulled by the fan.  | Liquid Level on Manometer                            | Liquid level in manometer is between 0.1 and 0.03 on the Right-hand side.   | A change in liquid level indicates a change in the vacuum below foundation. This could be caused by failure of fan, blockage of vent pipe, change in water level below building, or other conditions.<br><br>Troubleshoot or hire professional to identify cause and repair if needed. |                    | MANOMETER LEVEL |      | MANOMETER LEVEL |      | MANOMETER LEVEL |
| Outdoor Vent Pipe (one on the west side of the building and one on the east side of the building) |  | Pipe carries soil gas outside and vents them to the atmosphere.  | Vent Pipe Condition<br><br>Vent Pipe Location        | The vent pipe extends above the roof line. The vent pipes should be inspected to verify that they are free of debris, such as snow, ice and leaves. | Vent pipe may require replacement, or clearing to remove ice or debris.<br><br>See NOTE below regarding pipe alternations. Have professional test pressures if pipes are modified.   |                    |                 |      |                 |      |                 |
| Foundation Floor  |  | Foundation is a barrier that minimizes soil gas entry into building, and helps fan to work efficiently.  | Foundation Condition<br><br>Foundation Footprint     |   | Seal cracks or other penetrations as you would to prevent water from entering.<br><br>If building floor plan has changed, contact a professional contractor and/or the DNR to evaluate if modifications to the vapor milligation system are necessary.                                 |                    |                 |      |                 |      |                 |

**Directions:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

|  |                                  |
|--|----------------------------------|
| Activity (Site) Name<br><b>Former Quick Cleaners</b> | BRRTS No.<br><b>02-68-280310</b> |
|--|----------------------------------|


Inspections are required to be conducted (see closure approval letter):

annually  
 semi-annually  
 other – specify \_\_\_\_\_

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

| Inspection Date | Inspector Name | Item   | Describe the condition of the item that is being inspected | Recommendations for repair or maintenance | Previous recommendations implemented?           | Photographs taken and attached?                 |
|-----------------|----------------|--|--|---|---|---|
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input checked="" type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other: |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |

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**SUBMIT AS UNBOUND PACKAGE IN THE ORDER SHOWN**

**Notice:** Pursuant to ch. 292, Wis. Stats., and chs. NR 726 and 746, Wis. Adm. Code, this form is required to be completed for case closure requests. The closure of a case means that the Department of Natural Resources (DNR) has determined that no further response is required at that time based on the information that has been submitted to the DNR. All sections of this form must be completed unless otherwise directed by the Department. Incomplete forms will be considered "administratively incomplete" and processing of the request will stop until required information is provided. Any section of the form not relevant to the case closure request must be fully filled out or explained on a separate page and attached to the relevant section of this form. DNR will consider your request administratively complete when the form and all sections are completed, all attachments are included, and the applicable fees required under ch. NR 749, Wis. Adm. Code, are included, and sent to the proper destinations. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

**Site Information**

|                             |  |                 |                  |
|-----------------------------|--|-----------------|------------------|
| BRRTS No.                   |  | Parcel ID No.   |                  |
| 02-68-280310                |  | OCOC-0560-254   |                  |
| BRRTS Activity (Site) Name  |  | WTM Coordinates |                  |
| QUICK CLEANERS (FORMER)     |  | X 641890        | Y 293608         |
| Street Address              |  | City            | State   ZIP Code |
| 530 Franklin                |  | Oconomowoc      | WI   53066       |
| Responsible Party (RP) Name |  |                 |                  |
| Bob Rummel                  |  |                 |                  |
| Company Name                |  |                 |                  |

|                      |  |                    |       |          |
|----------------------|--|--------------------|-------|----------|
| Street Address       |  | City               | State | ZIP Code |
| 1802 Maybank Highway |  | Charleston         | SC    | 29412    |
| Phone Number         |  | Email              |       |          |
| (843) 768-3413       |  | brummel@kiawah.com |       |          |

Check here if the RP is the owner of the source property.

|                               |  |  |  |
|-------------------------------|--|--|--|
| Environmental Consultant Name |  |  |  |
| Linda Fellenz                 |  |  |  |
| Consulting Firm               |  |  |  |
| LF Green Development, LLC     |  |  |  |

|                                    |  |                                |       |          |
|------------------------------------|--|--------------------------------|-------|----------|
| Street Address                     |  | City                           | State | ZIP Code |
| 5600 W. Brown Deer Road, Suite 120 |  | Milwaukee                      | WI    | 53223    |
| Phone Number                       |  | Email                          |       |          |
| (414) 254-4813                     |  | lfellenz@lfgreendevlopment.com |       |          |

|                     |     |   |                           |                                     |
|---------------------|-----|---|---------------------------|-------------------------------------|
| Acres Ready For Use | 0.3 | Voluntary Party Liability Exemption Site? | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
|---------------------|-----|---|---------------------------|-------------------------------------|

**Fees and Mailing of Closure Request**

*If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.*

1. **Send a copy of page one** of this form and the applicable ch. NR 749, Wis. Adm. Code, fee(s) to the DNR regional Environmental Program Associate at <http://dnr.wi.gov/topic/Brownfields/Contact.html>. Check all fees that apply:

- \$1,050 Closure Fee
  - \$300 Database Fee for Soil
  - \$350 Database Fee for Groundwater or Other Condition (MW Not Abandoned)
- Total Amount of Payment \$ \$1,700.00

2. **Send one paper copy and one e-copy on compact disk of the entire closure package** to the Regional Project Manager assigned to your site. Submit as unbound, separate documents in the order and with the titles prescribed by this form. For electronic document submittal requirements, see <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.



**Site Summary**

*If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.*

**1. General Site Information and Site History**

- A. **Site Location:** Describe the physical location of the site, both generally and specific to its immediate surroundings.  
The site is located on the west side of Franklin Street in Oconomowoc. The site is a former dry cleaners site.
- B. **Prior and current site usage:** Specifically describe the current and historic occupancy and types of use.  
The facility is currently commercial on the first floor with residential units on the 2nd floor. This will also be the future use.
- C. Describe how and when site contamination was discovered.  
The contamination was encountered during a site investigation involving a neighboring (non-adjacent) site
- D. Describe the type(s) and source(s) or suspected source(s) of contamination.  
The contamination is chlorinated solvents from the former dry cleaners that operated at the site.
- E. Other relevant site description information (or enter Not Applicable).  
Not Applicable
- F. List BRRTS activity site name and number for all other BRRTS activities at this property, including closed cases.  
None
- G. List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to this site, and those impacted by contamination from this site.  
There are no impacted sites immediately adjacent to the site
- H. **Current zoning** (e.g. industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).  
Current zoning is MH/MC- Residential Multi Family Housing/Mixed Use Commercial. Community Zoning Map included Attachment G

**2. General Site Conditions**

- A. **Soil/Geology**
- i. Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.  
Silty sand with some gravel to a maximum drilled depth of 16'
  - ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.  
No fill was identified at the site
  - iii. Depth to bedrock, bedrock type, and whether or not it was encountered during the investigation.  
Expected to be > 50 feet to bedrock
  - iv. Describe the nature and locations of current surface cover(s) across the site (e.g. natural vegetation, landscaped areas, gravel, hard surfaces, and buildings).  
The area on the east and south is paved. The west and south portions are greenspace.
- B. **Groundwater**
- i. **Discuss depth to groundwater and piezometric elevations.** Describe and explain depth variations, and whether free product affects measurement or water table elevation. Describe the stratigraphic unit(s) where water table was found or which were measured for piezometric levels.  
Groundwater at the site was encountered at 8-12 feet below ground surface during drilling and monitoring well installation, however elevations were measured at 11-16 feet BGS during well development.
  - ii. Discuss groundwater flow direction(s), shallow and deep. Describe and explain flow variations, including fracture flow if present.  
Groundwater flow is Southwest.

Save...



- iii. Discuss groundwater flow characteristics: hydraulic conductivity, flow rate and permeability, or state why this information was not obtained.  
The site is paved on the east and south parts of the property but is green space on the west and south. The soils around the monitoring wells is silty clay and the hydraulic conductivity is estimated to be 10-6
- iv. Identify and describe locations/distance of potable and/or municipal Wells within 1200 feet of the site.  
The site is within the City of Oconomowoc and is on municipal water. There are no private/municipal wells within 1200 feet of the site.

### 3. Site Investigation Summary

#### A. General

- i. Provide a brief summary of the site investigation history. Reference previous submittals by name and date. Describe site investigation activities undertaken since the last submittal for this project and attach the appropriate documentation in Attachment C, if not previously provided.  
The Site Investigation was completed as part of a real estate transaction and has been undergoing monitoring for several years. A vapor mitigation system was installed on June 6, 2013. A vapor screening, 2 rounds of sampling, has been completed at the adjacent properties 250 Jefferson (south), 233 Jefferson (west), and 522 Franklin (north) in June 2015 - vapor sampling results were below screening levels.
- ii. Identify whether contamination extends beyond the source property boundary, describe the off-site media (e.g., soil, groundwater, etc.) impacted, and the vertical and horizontal extent of off-site impacts.  
No contamination from this site was identified that extends beyond the property boundary. There is a site located southwest of the site that has confirmed contamination and in fact may be a co-mingled plume with this site. There is potential for vapor migration from this site to the neighboring properties. The vapor investigation was completed at 250 Jefferson, 233 Jefferson, and 522 Franklin and the results from the 2 rounds of vapor testing are below the residential screening levels.
- iii. Identify any structural impediments to the completion of site investigation and/or remediation and whether these impediments are on the source property or off the source property. Identify the type and location of any structural impediment (e.g., structure) that also serves as the performance standard barrier for protection of the direct contact or the groundwater pathway.  
No impediments to the investigation were encountered.

#### B. Soil

- i. Describe degree and extent of **soil contamination** at and from this site. Relate this to known or suspected sources and known or potential receptors/migration pathways.  
PCE below the non-industrial direct contact (DC) RCLs of 30.7 ppm and above the groundwater pathway RCLs of 0.0023 ppm was encountered in soils at 2-4 feet below ground surface at the site in test borings taken in December 2014. Previous soil sampling completed at the site beneath the slab inside the building had PCE of 0.17 PPM and 0.12 PPM respectively, above the groundwater pathway RCLs, but below the non-industrial D/C RCLs. The site was a dry-cleaners property in the past, and is the likely source of the PCE contamination.
- ii. Describe the level and types of **soil contaminants** found in the upper four feet of the soil column.  
Soil samples completed during the site investigation within the upper 4 feet of soil column had PCE concentrations below the non-industrial D/C RCL of 30.7 for PCE, however the concentration are above the Groundwater pathway RCLs of 0.0023 ppm.
- iii. Identify the ch. NR 720, Wis. Adm. Code, method used to establish the soil cleanup standards for this site. This includes a soil performance standard established in accordance with s. NR 720.08, a Residual Contaminant Level (RCL) established in accordance with s. NR 720.10 that is protective of groundwater quality, or an RCL established in accordance with s. NR 720.12 that is protective of human health from direct contact with contaminated soil. Identify the land use classification that was used to establish cleanup standards. Provide a copy of the supporting calculations/information in Attachment C.  
This investigation is using the established non-industrial direct contact RCLs for samples collected in the upper four feet of soil column.

#### C. Groundwater

- i. Describe degree and extent of groundwater contamination at or from this site. Relate this to known or suspected sources and known or potential receptors/migration pathways. Specifically address any potential or existing impacts to water supply wells or interception with building foundation drain systems.  
Vinyl chloride contamination at 2.4 ppb is present at the site above the Enforcement Standards (ES) of 0.2 ppb. cis 1,2-dichloroethene contamination at 14.1 ppb is above the Preventive Action Limit (PAL) of 7 ppb. and PCE contamination at 4.1 ppb above the PAL of 0.5 ppb but below the ES of 5.0 ppb. Groundwater migrates south/southwest. Historic sample results indicate the that the impacts are confined to the property.
- ii. Describe the presence of free product at the site, including the thickness, depth, and locations.  
No free product is present at the site.



D. Vapor

- i. Describe how the vapor migration pathway was assessed, including locations where vapor or indoor air samples were collected. If the vapor pathway was not assessed, explain reasons why.

The vapor mitigation pathway was not assessed for the source property, however a vapor mitigation system recommended as part of the DERF clean-up and approved by the WDNR was installed at the site on June 6, 2013. The building has no basement. The apartment building located at 233 Jefferson (south of the source property); 250 Jefferson (west of the subject property); and 522 Franklin (north of subject property) were assessed for vapors using indoor air and sub-slab testing. Two rounds of vapor samples were collected at all three properties and all results were below the screening levels.

- ii. Identify the applicable DNR action levels and the land use classification used to establish them. Describe where the DNR action levels were reached or exceeded (e.g., sub slab, indoor air or both).

A vapor mitigation system was installed at the site in 2013

E. Surface Water and Sediment

- i. Identify whether surface water and/or sediment was assessed and describe the impacts found. If this pathway was not assessed, explain why.

No surface impacts were identified. The site is paved or has a building on the east and south part of the property. There is some greenspace on the west and north parts of the property. There are no surface water bodies on or crossing the property.

- ii. Identify any surface water and/or sediment action levels used to assess the impacts for this pathway and how these were derived. Describe where the DNR action levels were reached or exceeded.

No surface water or sediment sampling was completed as part of this investigation.

4. Remedial Actions Implemented and Residual Levels at Closure

- A. General: Provide a brief summary of the remedial action history. List previous remedial action report submittals by name and date. Identify remedial actions undertaken since the last submittal for this project and provide the appropriate documentation in Attachment C.

An interim action was taken at the subject site by installing a vapor mitigation system in June 2013. The interim action was approved by the WDNR prior to installation.

- B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code, other than installing the vapor system, no immediate or interim actions were taken as part of this investigation.

- C. Describe the active remedial actions taken at the site, including: type of remedial system(s) used for each media impacted; the size and location of any excavation or in-situ treatment; the effectiveness of the systems to address the contaminated media and substances; operational history of the systems; and summarize the performance of the active remedial actions. Provide any system performance documentation in Attachment A.7.

A vapor mitigation system was installed at the site, however no other remedial actions have been taken at this site.

- D. Provide a discussion of the nature, degree and extent of residual contamination that will remain at the site or on off-site affected properties after case closure.

PCE below the non-industrial RCLs for direct contact and above the groundwater pathway RCLs at the site in soil samples collected in December 2014 and in samples collected in 2005 beneath the slab inside the building.

- E. Describe the remaining soil contamination within four feet of ground surface (direct contact zone) that attains or exceeds Residual Contaminant Levels established under s. NR 720.12, the ch. NR720, Wis. Adm. Code, for protection of human health from direct contact.

Soil impacts were identified at the site beneath the building at levels of 0.17 ppm and 0.120 ppm PCE. Soil samples collected from borings done outside the building footprint were also below the direct contact RCLs.

- F. Describe the remaining soil contamination in the vadose zone that attains or exceeds the soil standard(s) for the groundwater pathway.

PCE below the non-industrial direct contact (DC) RCLs and above the groundwater pathway RCLs of 0.0023 ppm was encountered in soils at 2-4 feet below ground surface at the site in test borings done in the soils around the building in December 2014 and in soil samples from beneath the slab inside the building (PCE of 0.17 PPM and 0.12 PPM respectively). The samples collected from inside the building and are covered with the foundation concrete.

- G. Describe how the residual contamination will be addressed, including but not limited to details concerning: covers, engineering controls or other barrier features; use of natural attenuation of groundwater; and vapor mitigation systems or measures.

The building, paved parking area, and the greenspace around the building will serve as the soil maintenance cap. There is a double vapor mitigation system within the building (separate system for the north and south part of the building due to size and roof level differences). A maintenance plan has been prepared for the soil maintenance cap and Vapor Mitigation



system.

- H. If using natural attenuation as a groundwater remedy, describe how the data collected supports the conclusion that natural attenuation is effective in reducing contaminant mass and concentration, (e.g. stable or receding groundwater plume).  
Natural attenuation has been known to be effective for CVOC impacts in groundwater over time. Refer to Table A1.
- I. Identify how all exposure pathways were removed and/or adequately addressed by immediate and/or remedial action(s) described above in paragraphs, B, C, D, E and F.  
The vapor pathways have been assessed in the on-site building, by adding an extraction system, and by completing 2 rounds of vapor testing in the building located at 233 Jefferson June, 2015.
- J. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain.  
The vapor extraction system will remain in place following case closure.
- K. Identify the need for a ch. NR 140, Wis. Adm. Code, groundwater Preventive Action Limit (PAL) or Enforcement Standard (ES) exemption, and identify the affected monitoring points and applicable substances.  
Monitoring wells MW-2 and MW-3 have an ES exceedance for CVOC.
- L. If a DNR action level for vapor intrusion was exceeded (for indoor air, sub slab, or both) describe where it was exceeded and how the pathway was addressed.  
A vapor mitigation system was installed at the site in 2013
- M. Describe the surface water and/or sediment contaminant concentrations and areas after remediation. If a DNR action level was exceeded, describe where it was exceeded and how the pathway was addressed.  
No surface water or sediment contamination was identified during this investigation.

**5. Continuing Obligations: Situations where a maintenance plan(s) and inclusion on DNR's GIS Registry are required.**

Directions: Check all that apply to this case closure request:

|      | This scenario Applies to this Case Closure |                                     | Case Closure Scenario:<br>Maintenance Plans and GIS Registry | Maintenance Plan (s) Required in Attachment D | GIS Registry Listing |
|------|--|-------------------------------------|--|---|----------------------|
|      | A. On-Site                                 | B. Off-Site                         |  |   |                      |
| i.   | <input type="checkbox"/>                   | <input type="checkbox"/>            | Engineering Control/Barrier for Direct Contact               | ✓   | ✓                    |
| ii.  | <input checked="" type="checkbox"/>        | <input type="checkbox"/>            | Engineering Control/Barrier for Groundwater Infiltration     | ✓   | ✓                    |
| iii. | <input type="checkbox"/>                   | <input type="checkbox"/>            | Vapor Mitigation - post closure passive system               | ✓   | ✓                    |
| iv.  | <input checked="" type="checkbox"/>        | <input type="checkbox"/>            | Vapor Mitigation - post closure active system                | ✓   | ✓                    |
| v.   | <input type="checkbox"/>                   | <input checked="" type="checkbox"/> | None of the above scenarios apply to this case closure       | NA  | NA                   |

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**6. Continuing Obligations: Situations where inclusion on DNR's GIS Registry is required.**

Directions: Check all that apply to this case closure request:

|      | This scenario Applies to this Case Closure |                                     | Case Closure Scenario:<br>GIS Registry Only  | GIS Registry Listing |
|------|--|-------------------------------------|--|----------------------|
|      | A.<br>On-Site                              | B.<br>Off-Site                      |  |                      |
| i.   | <input checked="" type="checkbox"/>        | <input type="checkbox"/>            | Residual soil contamination exceeds ch. NR 720 generic or site-specific RCLs                             | ✓                    |
| ii.  | <input checked="" type="checkbox"/>        | <input type="checkbox"/>            | Sites with groundwater contamination equal to or greater than the ch. NR 140, enforcement standards (ES) | ✓                    |
| iii. | <input type="checkbox"/>                   | <input type="checkbox"/>            | Monitoring wells: lost, transferred or remaining in use  | ✓                    |
| iv.  | <input type="checkbox"/>                   | <input type="checkbox"/>            | Structural Impediment (not as a performance standard)  | ✓                    |
| v.   | <input type="checkbox"/>                   | <input type="checkbox"/>            | Residual soil contamination remaining at ch. NR 720 Industrial Use levels                                | ✓                    |
| vi.  | <input checked="" type="checkbox"/>        | <input type="checkbox"/>            | Vapor intrusion may be future, post-closure issue if building use or land use changes                    | ✓                    |
| vii. | <input type="checkbox"/>                   | <input checked="" type="checkbox"/> | None of the above scenarios apply to this case closure   | NA                   |

**7. Underground Storage Tanks**

- A. Were any tanks, piping or other associated tank system components removed as part of the investigation or remedial action?  Yes  No
- B. Do any upgraded tanks meeting the requirements of ch. SPS 310, Wis. Adm. Code, exist on the property?  Yes  No
- C. If the answer to question 7b is yes, is the leak detection system currently being monitored?  Yes  No

**Data Tables (Attachment A)**

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

**General directions for Data Tables:**

- Use bold and italics font on information of importance on tables and figures. Use **bold font** for ch. NR 140, Wis. Adm. Code, groundwater enforcement standard (ES) attainments or exceedances, and *italicized font* for ch. NR 140, Wis. Adm. Code, groundwater preventive action limit (PAL) standard attainments or exceedances.
- Do not use shading or highlighting on the analytical tables.
- Include on Data Tables the level of detection for results which are below the detection level (i.e. do not just list as no detect (ND)).
- Include the units on data tables.
- Summaries of all data must include information collected by previous consultants.
- Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15 (3)(c), Wis. Adm. Code, in the format required in s. NR 716.15(4)(e), Wis. Adm. Code.
- Include in Attachment A all of the following tables, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: A.1. Groundwater Analytical Table; A.2. Pre-remedial Soil Analytical Table, etc).
- For required documents, each table (e.g., A.1., A.2., etc.,) should be a separate PDF.

**A. Data Tables**

- A.1. **Groundwater Analytical Table(s):** Table(s) showing the analytical results and collection dates, for all groundwater sampling points e.g. monitoring wells, temporary wells, sumps, extraction wells, any potable wells and any other wells, extraction wells and any potable wells for which samples have been collected.
- A.2. **Pre-remedial Soil Analytical Table(s):** Table(s) showing the soil analytical results and collection dates - prior to conducting the interim and/or remedial action. Indicate if sample was collected above or below the all-time low water table (unsaturated verses saturated).
- A.3. **Post-remedial Soil Analytical Table(s):** Table(s) showing the post-remedial action soil analytical results and collection dates. Indicate if sample was collected above or below the all-time low water table (unsaturated verses saturated).
- A.4. **Pre and Post Remaining Soil Contamination Soil Analytical Table(s):** Table(s) showing only the pre and post remedial action soil analytical results that exceed a Residual Contaminate Level (RCL) or a Site-Specific Residual Level (SSRCL).
- A.5. **Vapor Analytical Table:** Table(s) showing type(s) of samples, sample collection methods, analytical method, sample results, date of sample collection, time period for sample collection, method and results of leak detection, and date, method

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and results of communication testing.

- A.6. **Other Media of Concern (e.g., sediment or surface water):** Table(s) showing type(s) of sample, sample collection method, analytical method, sample results, date of sample collection, time period for sample collection, method and results sampling.
- A.7. **Water Level Elevations:** Table(s) showing all water level elevation measurements and dates from all monitoring wells. If present, free product should be noted on the table.
- A.8. **Other:** This attachment should include: 1) any available tabulated natural attenuation data; 2) data tables pertaining to engineered remedial systems that document operational history, demonstrate system performance and effectiveness, and display emissions data; and (3) any other data tables relevant to case closure not otherwise noted above. If this section is not applicable, please explain the reasons why.

### Maps and Figures (Attachment B)

*If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.*

#### General Directions for all Maps and Figures:

- If any map or figure is not relevant to the case closure request, you must fully explain the reason(s) why and attach that explanation (properly labeled with the map/ figure title) in Attachment B.
- Provide on paper no larger than 11 x 17 inches, unless otherwise directed by the Department. Maps and figures may be submitted in a larger electronic size than 11x17 inches, in a portable document format (pdf) readable by the Adobe Acrobat Reader. However, those larger-size documents must be legible when printed.
- Prepare visual aids, including maps, plans, drawings, fence diagrams, tables and photographs according to the applicable portions of ss. NR 716.15(4), 726.09(2) and 726.11(3), (5) and (6), Wis Adm. Code.
- Do not use shading or highlights on any of the analytical tables.
- Include all sample locations.
- Contour lines should be clearly labeled and defined.
- Include in Attachment B all of the following maps and figures, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: B.1. Location Map; B.2. Detailed Site Map, etc).
- For the electronic copies that are required, each map (e.g., B.1.a., B.2.a, etc.,) should be a separate PDF.

#### B.1. Location Maps

- B.1.a. **Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all impacted and/or adjacent parcels. If groundwater standards are exceeded, include the location of all potable wells, including municipal wells, within 1200 feet of the area of contamination.
- B.1.b. **Detailed Site Map:** A map that shows all relevant features (buildings, roads, current ground surface cover, individual property boundaries for on-site and applicable off-site properties, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) established in accordance with the provisions contained in s. NR 720.10 or s. NR 720.12, Wis. Adm. Code.
- B.1.c. **RR Site Map:** From RR Sites Map ([http://dnrmaps.wi.gov/sl/?Viewer=RR Sites](http://dnrmaps.wi.gov/sl/?Viewer=RR%20Sites)) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

#### B.2. Soil Figures

- B.2.a. **Pre-remedial Soil Contamination:** Figure(s) showing the sample location of all pre-remedial, unsaturated contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeded a Residual Contaminant Level (RCL) established in accordance with the provisions contained in s. NR 720.10 or s. NR 720.12, Wis. Adm. Code.
- B.2.b. **Post-remedial Soil Contamination :** Figure(s) showing the sample location of all post-remedial, unsaturated contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) established in accordance with the provisions contained in s. NR 720.10 or s. NR 720.12, Wis. Adm. Code. A separate contour line should be used to indicate the extent of residual direct contact exceedances.
- B.2.c. **Pre/Post Remaining Soil Contamination:** Figure(s) showing the only location of all pre and post remedial residual soil sample location(s) where unsaturated contaminated soil remains after remediation and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) established in accordance with the provisions contained in s. NR 720.10 or s. NR 720.12, Wis. Adm. Code. A separate contour line should be used to indicate the extent of residual direct contact exceedances.

#### B.3. Groundwater Figures

- B.3.a. **Geologic Cross-Section Figure(s):** One or more cross-section diagrams showing soil types and correlations across the site, water table and piezometric elevations, and locations and elevations of geologic rock units, if encountered.

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If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

When one or more "maintenance plans" are required for a site closure, include in each maintenance plan all required information listed below, and attach the plan(s) in Attachment D. The following "model" maintenance plans can be located at: (1) Maintenance plan for an engineering control or cover: <http://dnr.wi.gov/topic/Brownfields/documents/maintenance-plan.pdf>; and (2) Maintenance plan for vapor intrusion: [http://dnr.wi.gov/topic/Brownfields/documents/appendix5\\_606.pdf](http://dnr.wi.gov/topic/Brownfields/documents/appendix5_606.pdf).

- D.1. **Location map(s)** which show(s): (1) the feature that requires maintenance; (2) the location of the feature(s) that require(s) maintenance - on and off the source property; (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site; (4) the extent and type of residual contamination; and (5) and all property boundaries.
- D.2. **Brief descriptions** of the type, depth and location of residual contamination.
- D.3. **Description of maintenance action(s)** required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required.
- D.4. **Inspection log**, to be maintained on site, or at a location specified in the maintenance plan or approval letter.
- D.5. **Contact information**, including the name, address and phone number of the individual or facility who will be conducting the maintenance.
- D.6. Photographs
  - D.6.a. For site or facilities with a cover or other performance standard, a structural impediment or a vapor mitigation system, include one or more photographs documenting the condition and extent of the feature at the time of the closure request. Pertinent features shall be visible and discernible.
  - D.6.b. Photographs shall be submitted with a title related to the site name and location, and the date on which it was taken.

#### Monitoring Well Information (Attachment E)

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

#### General Directions:

Attach monitoring well construction and development forms (DNR FORM 4400-113 A and B:

[http://dnr.wi.gov/topic/groundwater/documents/forms/4400\\_113\\_1\\_2.pdf](http://dnr.wi.gov/topic/groundwater/documents/forms/4400_113_1_2.pdf)) for all wells that will remain in-use, be transferred to another party or that could not be located. A figure of these wells should be included in Attachment B.3.d.

#### Select One:

- No monitoring wells were required as part of this response action.
- All monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site
- Select One or More:**
  - Not all monitoring wells can be located, despite good faith efforts. Attachment E must include description of efforts made to locate the "lost" wells.
  - One or more wells will be transferred to another owner upon case closure being granted. Attachment E should include documentation identifying the name, address and email for the new owner(s).
  - One or more wells will remain in use at the site after this closure. Attachment E must include documentation as to the reason(s) the well(s) will remain in use.

Save..



**Notifications to Owners of Impacted Properties (Attachment F)**

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

**General Directions:**

- State law requires that the responsible party provide a 30-day, written advance notice (i.e., a letter) to certain persons prior to applying for case closure. This requirement applies if: (1) the person conducting the response action does not own the source property; (2) the contamination has migrated onto another property; and/or (3) one or more monitoring wells will not be abandoned.
- Use of Form 4400-286, Notification of Residual Contamination and Continuing Obligations, is required under ch. NR 725 for notifying property owners and right-of-way holders about residual contamination affecting their properties, and of continuing obligations which may be imposed. This form can be downloaded at <http://dnr.wi.gov/files/PDF/forms/4400/4400-286.pdf>.

Check all that apply to the site-specific circumstances of this case closure:

|    | A.<br>Impacted<br>Source<br>Property and<br>Owner is not<br>Conducting<br>Cleanup | B.<br>Impacted<br>Right of Way      | C.<br>Impacted<br>Off-Site<br>Property<br>Owner | Impacted Property Notification Situations:<br>Ch. NR 726 Appendix A Letter  |
|----|---|-------------------------------------|---|---|
| 1. | <input type="checkbox"/>  | <input type="checkbox"/>            | <input type="checkbox"/>                        | Residual groundwater contamination exceeds Ch. NR 140 Wis. Administrative Code enforcement standards.   |
| 2. | <input type="checkbox"/>  | <input type="checkbox"/>            | <input type="checkbox"/>                        | Residual soil contamination that attains or exceeds standards is present after the remedial action is complete, and must be properly managed should it be excavated or removed. |
| 3. | <input type="checkbox"/>  | <input type="checkbox"/>            | <input type="checkbox"/>                        | An engineered cover or a soil barrier (e.g. pavement) must be maintained over contaminated soil for direct contact or groundwater infiltration concerns.                        |
| 4. | <input type="checkbox"/>  | <input type="checkbox"/>            | <input type="checkbox"/>                        | Industrial land use soil standards were used for the clean-up standard.   |
| 5. | <input type="checkbox"/>  | <input type="checkbox"/>            | <input type="checkbox"/>                        | A vapor mitigation system (or other specific vapor protection) must be operated and maintained.   |
| 6. | <input type="checkbox"/>  | <input type="checkbox"/>            | <input type="checkbox"/>                        | Vapor assessment needed if use changes.   |
| 7. | <input type="checkbox"/>  | <input type="checkbox"/>            | <input type="checkbox"/>                        | Structural impediment.  |
| 8. | <input type="checkbox"/>  | <input type="checkbox"/>            | <input type="checkbox"/>                        | Lost, transferred or open monitoring wells.   |
| 9. | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>             | Not Applicable.   |

If any of the previous boxes in rows 1 thru 8 were checked, include the following as part of Attachment F:

- FORM 4400-246;
- Copy of each letter sent, 30 days or more prior to requesting closure; and
- Proof of receipt for each letter.
- For this site closure, \_\_\_\_\_ (number) property (ies) has/have been impacted, the owners have been notified, and copies of the letters and receipts are included in Attachment F.

**Source Legal Documents (Attachment G)**

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

Include all of the following documents, in this order, in Attachment G:

- G.1. Deeds - Source Property and Other Impacted Properties:** The most recent deed with legal descriptions clearly labeled for (1) the **Source Property** (where the contamination originated) and (2) all **off-source** (off-site) properties where letters were required to be sent per the ch. NR 700, Wis. Adm. Code, rule series (e.g., off-site cover maintenance required, lost monitoring well, off-site cover property impacts to groundwater exceeding the ch. NR 140, Wis. Adm. Code).  
*Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*
- G.2. Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. (Lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).
- G.3. Verification of Zoning:** Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- G.4. Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description(s) accurately describe(s) the correct contaminated property or properties.

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**Signatures and Findings for Closure Determination**

If any section is not relevant to the case closure request, you must fully explain the reasons why and attach that explanation to the relevant section of the form. All information submitted shall be legible. Providing illegible information may result in a submittal being considered incomplete until corrected.

Check the correct box for this case closure request, and have either a professional engineer or a hydrogeologist, as defined in ch. NR 712, Wis. Adm. Code, sign this document.

A response action(s) for this site addresses groundwater contamination (including natural attenuation remedies).

The response action(s) for this site addresses media other than groundwater.

**Engineering Certification**

I \_\_\_\_\_ hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this case closure request has been prepared by me or prepared under my supervision in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this case closure request is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code. Specifically, with respect to compliance with the rules, in my professional opinion a site investigation has been conducted in accordance with ch. NR 716, Wis. Adm. Code, and all necessary remedial actions have been completed in accordance with chs. NR 140, NR 718, NR 720, NR 722, NR 724 and NR 726, Wis. Adm. Codes."

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
P.E. Stamp and Number

**Hydrogeologist Certification**

I Linda Fellenz hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this case closure request is correct and the document was prepared by me or prepared by me or prepared under my supervision and, in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code. Specifically, with respect to compliance with the rules, in my professional opinion a site investigation has been conducted in accordance with ch. NR 716, Wis. Adm. Code, and all necessary remedial actions have been completed in accordance with chs. NR 140, NR 718, NR 720, NR 722, NR 724 and NR 726, Wis. Adm. Codes."

Linda Fellenz  
Printed Name

\_\_\_\_\_  
Hydrogeologist

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

Linda J. Fellenz  
Signature

12/1/16  
Date

\_\_\_\_\_  
Date

**TABLE A1  
GROUNDWATER ANALYTICAL TABLES**

| 530 Franklin                                |                         |                |   |            |               |                     |                        |            |                       |                 |                  |                |
|---|-------------------------|----------------|---|------------|---------------|---------------------|------------------------|------------|-----------------------|-----------------|------------------|----------------|
| Sample #                                    | Water Level<br>(ft bgs) | Date Collected | Acetone   | Chloroform | Chloromethane | 1, 1-dichloroethene | cis 1,2-dichloroethene | Toluene    | trans 1,2-dichloroeth | trichloroethene | tetrchloroethene | vinyl chloride |
| MW-1  | 5.69                    | 9/4/03         | NA  | NA         | NA            | ND                  | <0.5                   | ND         | <0.5                  | <0.25           | <0.5             | <0.25          |
|   | NA                      | 1/11/05        | NA  | NA         | NA            | ND                  | <u>7.6</u>             | ND         | <0.89                 | <u>2.3</u>      | <b>5</b>         | 58 J           |
|   | 6.57                    | 6/23/10        | 6.8   | 0.27       | 0.36          | <2                  | 1.4                    | 0.51       | <2                    | <u>2.3</u>      | <u>2.8</u>       | <2             |
|   | NA                      | 11/6/12        | NA  | NA         | NA            | NA                  | NA                     | NA         | NA                    | NA              | NA               | NA             |
|   | NA                      | 4/4/13         | NA  | NA         | NA            | NA                  | NA                     | NA         | NA                    | NA              | NA               | NA             |
|   | 7.42                    | 12/11/14       | <2.5  | <2.5       | <0.5          | <0.41               | <0.26                  | <0.5       | <0.26                 | <0.33           | <0.5             | <0.18          |
| MW-2  | 5.95                    | 9/4/03         | NA  | NA         | NA            | ND                  | <u>7</u>               | ND         | <0.5                  | <u>0.82</u>     | <u>0.95</u>      | <b>2.3</b>     |
|   | NA                      | 1/11/05        | NA  | NA         | NA            | ND                  | <b>78</b>              | ND         | <0.89                 | <b>35</b>       | <b>170</b>       | <b>1.9</b>     |
|   | 7.45                    | 6/23/10        | <40   | <0.235     | 0.4           | <2                  | 1.8                    | 0.49       | <2                    | <u>2.3</u>      | <b>19.8</b>      | <2             |
|   | 6.35                    | 11/6/12        | <20   | <2         | <3.27         | <u>2.53</u>         | <b>532</b>             | <2         | 5.82                  | <b>22.5</b>     | <b>56.8</b>      | <b>118</b>     |
|   | 6.20                    | 4/4/13         | <40   | <2         | <3.27         | <2                  | <3.27                  | <2         | <2                    | <b>&lt;2</b>    | <10              | <b>&lt;2</b>   |
|   | 6.40                    | 12/11/14       | <2.5  | <2.5       | <0.5          | <0.41               | 6.6                    | <0.5       | <0.26                 | 0.87J           | 4.1              | <0.18          |
| MW-3  | 5.97                    | 9/4/03         | NA  | NA         | NA            | ND                  | <b>130</b>             | ND         | 1.1                   | <u>2</u>        | <u>2.5</u>       | <b>19</b>      |
|   | NA                      | 1/11/05        | NA  | NA         | NA            | ND                  | <b>230</b>             | ND         | <2.2                  | <1.2            | <1.1             | <b>44</b>      |
|   | 6.85                    | 6/23/10        | 5.2   | 0.37       | 0.69          | <2                  | <b>81.7</b>            | 0.66       | 1.1                   | <b>23.3</b>     | <b>51.5</b>      | <b>14.8</b>    |
|   | 6.20                    | 11/6/12        | <40   | <2         | <3.27         | <2                  | <u>16.1</u>            | <2         | <2                    | <b>16.4</b>     | <b>130</b>       | <b>1.4</b>     |
|   | 6.40                    | 4/4/13         | <40   | <2         | <3.27         | <2                  | <3.72                  | <2         | <2                    | <b>5.12</b>     | <10              | <6             |
|   | 6.55                    | 12/11/14       | <0.5  | <2.5       | <0.5          | <0.41               | 14.1                   | <0.5       | <0.26                 | <0.33           | <0.5             | <b>2.4</b>     |
| PZ1   | 5.90                    | 9/4/03         | NA  | NA         | NA            | ND                  | <u>24</u>              | ND         | <0.50                 | <b>28</b>       | <b>13</b>        | <0.25          |
|   | NA                      | 1/11/05        | NA  | NA         | NA            | ND                  | <u>7.9</u>             | ND         | <0.89                 | <0.48           | 0.68 J           | <0.18          |
|   | 6.25                    | 6/23/10        | 5.6   | 0.24       | 0.78          | <2                  | 2.53                   | 1.1        | <2                    | <2              | <2               | <2             |
|   | 6.3                     | 12/11/14       | NA  | <2.5       | <0.5          | <0.41               | 1.2                    | <0.5       | <0.26                 | <0.33           | <0.5             | <0.18          |
| <b>NR 140 Enforcement Standard (ES)</b>     |                         |                | <b>900</b>  | <b>6</b>   | <b>30</b>     | <b>7</b>            | <b>70</b>              | <b>800</b> | <b>100</b>            | <b>5</b>        | <b>5</b>         | <b>0.2</b>     |
| <b>NR 140 Preventive Action Limit (PAL)</b> |                         |                | <b>180</b>  | <b>0.6</b> | <b>3</b>      | <b>0.7</b>          | <b>7</b>               | <b>160</b> | <b>20</b>             | <b>0.5</b>      | <b>0.5</b>       | <b>0.02</b>    |
| VOCs = volatile organic compounds           |                         |                | J = result is between limit of detection and limit of quantification  |            |               |                     |                        |            |                       |                 |                  |                |
| Samples in bold and underline exceed the ES |                         |                | Only samples detected in at least one sample are shown in this table. |            |               |                     |                        |            |                       |                 |                  |                |
| Samples underlined exceed the PAL           |                         |                | NA = not analyzed   |            |               |                     |                        |            |                       |                 |                  |                |

## Table A2: Pre Remedial Soil Contamination

| Analyte           | Non-Industrial RCL D/C | Industrial RCL D/C | Groundwater Pathway | Units | GP-1        | GP-2        | MW-1             | MW-2      | MW-3      | SS-N       | SS-W         | SS-E         |
|-------------------|------------------------|--------------------|---------------------|-------|-------------|-------------|------------------|-----------|-----------|------------|--------------|--------------|
| Sample Depth      |                        |                    |                     |       | 2-4'        | 2-4'        | 6-8'             | 4-6'      | 4-6'      | 2'         | 2'           | 2'           |
| Sample Date       |                        |                    |                     |       | 1/12/2005   | 1/12/2005   | 8/12/2003        | 8/12/2003 | 8/12/2003 | 12/11/2014 | 12/11/2014   | 12/11/2014   |
| Tetrachloroethene | 30.7000                | 153.0000           | 0.0023              | mg/Kg | <b>0.12</b> | <b>0.17</b> | <b>&lt;0.028</b> | <0.035    | <0.032    | <0.025     | <b>0.089</b> | <b>0.551</b> |

Bold are above the Groundwater pathway  
 Italics and Bold are above the Direct Contact

## Table A3: Post Remedial Soil Contamination

| Analyte           | Non-Industrial RCL /DC | Industrial RCL D/C | Groundwater Pathway | Units | GP-1        | GP-2        | MW-1             | MW-2      | MW-3      | SS-N       | SS-W         | SS-E         |
|-------------------|------------------------|--------------------|---------------------|-------|-------------|-------------|------------------|-----------|-----------|------------|--------------|--------------|
| Sample Depth      |                        |                    |                     |       | 2-4'        | 2-4'        | 6-8'             | 4-6'      | 4-6'      | 2'         | 2'           | 2'           |
| Sample Date       |                        |                    |                     |       | 1/12/2005   | 1/12/2005   | 8/12/2003        | 8/12/2003 | 8/12/2003 | 12/11/2014 | 12/11/2014   | 12/11/2014   |
| Tetrachloroethene | 30.7000                | 153.0000           | 0.0023              | mg/Kg | <b>0.12</b> | <b>0.17</b> | <b>&lt;0.028</b> | <0.035    | <0.032    | <0.025     | <b>0.089</b> | <b>0.551</b> |

Bold are above the Groundwater pathway  
 Italics and Bold are above the Direct Contact



## Table A4: Pre and Post Remedial Soil Contamination

| Analyte           | Non-Industrial RCL D/C | Industrial RCL D/C | Groundwater Pathway | Units | GP-1        | GP-2        | MW-1             | MW-2      | MW-3      | SS-N       | SS-W         | SS-E         |
|-------------------|------------------------|--------------------|---------------------|-------|-------------|-------------|------------------|-----------|-----------|------------|--------------|--------------|
| Sample Depth      |                        |                    |                     |       | 2-4'        | 2-4'        | 6-8'             | 4-6'      | 4-6'      | 2'         | 2'           | 2'           |
| Sample Date       |                        |                    |                     |       | 1/12/2005   | 1/12/2005   | 8/12/2003        | 8/12/2003 | 8/12/2003 | 12/11/2014 | 12/11/2014   | 12/11/2014   |
| Tetrachloroethene | 30.7000                | 153.0000           | 0.0023              | mg/Kg | <b>0.12</b> | <b>0.17</b> | <b>&lt;0.028</b> | <0.035    | <0.032    | <0.025     | <b>0.089</b> | <b>0.551</b> |

Bold are above the Groundwater pathway  
 Italics and Bold are above the Direct Contact



## **TABLE A.5**

### **Vapor Analytical Table**

A vapor extraction system was installed at this site in 2013. No vapor samples were collected at the subject site 530 Franklin Street. Two rounds of vapor testing were completed at three neighboring properties.

Table A5 for vapor sampling at:  
233 Jefferson Street  
522 Franklin Street  
250 Jefferson Street

Attached

### A.5 Vapor Sampling Results

| Analyte                   | 522 Franklin*   |               |                |                  | 250 Jefferson (Indoor air within crawl space)** |                  |                |                | Residential Indoor Air | Residential Sub-Slab | Large Commercial Building | Small Commercial Building |
|---------------------------|-----------------|---------------|----------------|------------------|---|------------------|----------------|----------------|------------------------|----------------------|---------------------------|---------------------------|
|                           | 2331-Indoor Air | 1649-Sub-slab | 552-3 sub-slab | 522-4 Indoor air | East Can NO 1669                                | West Can NO 2167 | East 250 April | West 250 April |                        |                      |                           |                           |
|                           | DATE SAMPLED    |               |                |                  |   |                  |                |                |                        |                      |                           |                           |
|                           | 2/19/2016       | 2/19/2016     | 4/12/2016      | 4/12/2016        | 2/19/2016                                       | 2/16/2016        | 4/12/2016      | 4/12/2016      | ug/m3                  | ug/m3                | ug/m3                     | ug/m3                     |
| Acetone                   | 35.9            | 76.4          | 15.2           | 7.9              | 8.7   | 8.2              | 9.6            | 12.7           | 32,000.00              | 1,100,000            | 14,000,000.00             | 4,666,662.00              |
| Benzene                   | 1.2             | 6.9           | 0.89J          | 0.37J            | 1.1   | 0.6              | 0.29J          | <0.4           | 3.60                   | 120.00               | 1,600.00                  | 533.00                    |
| 2-butanone (MEK)          | 2.9J            | 7.7           | 2.7J           | <0.51            | <0.34   | <0.34            | 1.1J           | <0.4           | 5,200.00               | 17,000.00            | 2,200,000.00              | 733,333.00                |
| Carbon Disulfide          | <0.17           | 12.0          | 0.24J          | <0.23            | <0.15   | <0.15            | <0.15          | <0.18          | 730.00                 | 24,000.00            | 310,000.00                | 103,333.00                |
| Chloroform                | <0.32           | 8.8           | 0.42J          | <0.43            | 1.0   | <0.28            | <0.28          | <0.34          | 1.20                   | 40.00                | 530.00                    | 176.00                    |
| Chloromethane             | 1.0             | <0.2          | 0.7            | 1.4              | 0.78J   | 0.9              | 0.9            | 0.98           | 94.00                  | 3,100.00             | 39,000.00                 | 190.00                    |
| Cyclohexane               | 2.0             | 9.8           | 1.1            | 1.7              | 47.8  | <0.47            | <0.47          | <0.56          | 6,300.00               | 21,000.00            | NA                        | NA                        |
| 1,2-Dichloroethane        | 1.4             | <0.38         | <0.23          | <0.6             | <0.31   | <0.23            | <1.2           | <1.4           | 210.00                 | 7,000.00             | 29,000.00                 | 22,000.00                 |
| Dichlorodifluoromethane   | 2.4             | 2.1           | 2.1            | <0.69            | 2.4   | 2.3              | <1.3           | <1.5           | 100.00                 | 3,300.00             | 44,000.00                 | 14,666.00                 |
| Ethanol                   | 335.0           | 291.0         | 31.6           | 16.3             | 8.4   | 8.0              | 14.8           | 9.7            | NA                     | NA                   | NA                        | NA                        |
| Ethyl Acetate             | 5.9             | 1.4           | 0.87J          | <0.78            | 0.5   | <0.52            | <0.52          | <0.62          | 73.00                  | 2,400.00             | NA                        | NA                        |
| Ethylbenzene              | <0.71           | 9.7           | 2.1            | <0.95            | <0.63   | <0.63            | <0.63          | <0.75          | 11.00                  | 370.00               | 4,900.00                  | 1,633.00                  |
| 4-ethyltoluene            | 1.8             | 1.4J          | 1.8            | <0.42            | <0.28   | <0.28            | <0.28          | <0.33          | NA                     | NA                   | NA                        | NA                        |
| Methylene Chloride        | <0.91           | <0.99         | 4.8J           | 2.4J             | <0.81   | <0.81            | 1.7J           | 1.9J           | 630.00                 | 21,000.00            | 260,000.00                | 86,666.00                 |
| n-Hexane                  | 1.3             | 17.7          | 2.3            | <0.8             | 1.0J  | <0.53            | <0.53          | 0.64J          | 730.00                 | 24,000.00            | NA                        | NA                        |
| n-heptane                 | 7.8             | 21.8          | 0.95J          | 7.7              | 0.82J   | <0.42            | <0.42          | <0.49          | NS                     | NS                   | NA                        | NA                        |
| 2-hexanone                | <0.69           | <0.75         | <0.61          | <0.92            | <0.61   | <0.61            | <0.61          | <0.73          | 630.00                 | 21,000.00            | NA                        | NA                        |
| 4-methyl-2-pentanone      | <0.36           | <0.4          | <0.32          | <0.49            | <0.32   | <0.32            | <0.32          | <0.38          | 3,100.00               | 100,000.00           | 1,300,000.00              | 433,333.00                |
| Naphthalene               | 0.75J           | 3.0J          | 1.2            | <0.68            | <0.45   | <0.45            | <0.45          | <0.54          | 0.83                   | 28.00                | 360.00                    | 120.00                    |
| 2-propanol                | 26.5            | 52.5          | 1.3J           | 6.4              | 2.1J  | <0.36            | 36.6           | 11.2           | 210.00                 | 7,000.00             | NA                        | NA                        |
| Propylene                 | <0.23           | <0.25         | <0.2           | <0.3             | 1.4   | <0.2             | <0.2           | <0.24          | 3,100.00               | 10,000.00            | 1,300,000.00              | 433,333.00                |
| Styrene                   | 0.95J           | 0.86J         | <0.29          | <0.43            | <0.29   | <0.29            | <0.29          | <0.34          | 1,000.00               | 33,000.00            | 440,000.00                | 146,667.00                |
| Tetrachloroethylene (PCE) | <0.47           | 1.3           | 2.4            | <0.74            | 2.9   | 5.5              | 3.1            | 5.7            | 42.00                  | 1,400.00             | 18,000.00                 | 6,000.00                  |
| Toluene                   | 10.4            | 28.0          | 10.7           | 2.7              | 1.5   | 1.0J             | 0.37J          | 0.97J          | 5,200.00               | 170,000.00           | 2,200,000.00              | 733,333.00                |
| 1,1,1trichloroethane      | <0.41           | <0.45         | <0.37          | <0.55            | <0.37   | <0.37            | <0.37          | <0.44          | 5,200.00               | 170,000.00           | 2,200,000.00              | 733,333.00                |
| Trichloroethylene (TCE)   | <0.46           | <0.51         | <0.41          | <0.62            | <0.41   | <0.41            | <0.41          | <0.49          | 2.10                   | 70.00                | 880.00                    | 293.00                    |
| Trichlorofluoromethane    | 1.7J            | 1.2J          | 1.3J           | 1.9J             | 1.2J  | 1.2J             | 1.0J           | 1.1J           | 730.00                 | 24,000.00            | 310,000.00                | 103,333.00                |
| Trimethylbenzene (1,2,4)  | 3.1             | 3.3           | 10.0           | <0.28            | <0.18   | <0.19            | <0.19          | <0.22          | 7.30                   | 240.00               | 3,100.00                  | 1,033.00                  |
| Trimethylbenzene (1,3,5)  | 1.1J            | 1.4J          | 2.7            | <0.41            | <0.27   | <0.27            | <0.27          | <0.32          | NS                     | NS                   | NA                        | NA                        |
| Vinyl acetate             | 1.9             | <0.6          | 1.5            | <0.74            | <0.49   | <0.49            | <0.49          | <0.58          | 2,100.00               | 70,000.00            | NA                        | NA                        |
| Vinyl Chloride            | <0.33           | <0.36         | <0.29          | <0.44            | <0.29   | <0.29            | <0.29          | <0.35          | 1.70                   | 57.00                | 2,800.00                  | 933.00                    |
| Xylene (mix)              | 1.8J            | 14.6          | 9.8            | <1.8             | <1.2  | <1.2             | <1.2           | <1.4           | 100.00                 | 3,300.00             | 44,000.00                 | 14,666.00                 |
| Xylene (n,m,o separately) | <0.59           | 6.8           | 5.2            | <0.79            | <0.52   | <0.52            | <0.52          | <0.62          | 100.00                 | 3300.0               | 44,000.00                 | 14,666.00                 |

Bold indicates sample exceeds screening levels.

\*522 Franklin is a single family home. 1 indoor and one sub-slab each round

\*\*250 Jefferson is an apartment building with only a crawl space



Table A.5 (Continued) Subslab Vapor Sampling Results

233 Jefferson Street, Oconomowoc WI

| Chemical                               | 233 Jefferson Street   |          |              |          | Residential<br>Screening Levels |
|--|------------------------|----------|--------------|----------|---------------------------------|
|  | VP-1 (ug/m3)           |          | VP-2 (ug/m3) |          |                                 |
|  | Date sampling occurred | 6/2/2015 | 8/1/2015     | 6/2/2015 | 8/1/2015                        |
| Acetone                                | 7.9                    | 7.9      | 144          | 4        | 140000                          |
| Benzene                                | 2.0                    | 1.1      | 2.4          | 0.9      | 120.0                           |
| 2-butanone                             | <0.38                  | 2.6      | 74.6         | 1.9      | 22000.0                         |
| Carbon disulfide                       | 7.1                    | <0.17    | 2.1J         | <0.16    | 40.0                            |
| Chloroform                             | <0.32                  | 1.2      | 2.1J         | 1.7      | 40.0                            |
| Chloromethane                          | 1.7                    | <0.18    | 1.3J         | <0.17    | 3133                            |
| Cyclohexane                            | 1.3                    | 0.75J    | 10.5         | <0.49    | NA                              |
| 1,4-Dichlorobenzene                    | <0.84                  | 2.4      | 11.0         | <0.77    | NA                              |
| Dichlorodifluoromethane                | 4.2                    | 1.6J     | <2.4         | 1.5J     | 3333                            |
| 1,2-Dichloroethylene (cis and mixed)   | 10.0                   | 9.1      | 600.0        | 275.0    | NA                              |
| 1,2-Dichloroethylene (trans)           | <0.65                  | <0.65    | 4.8          | 2.2      | NA                              |
| Ethanol                                | 3.0                    | 1.3J     | 8.7          | 4.5      | NA                              |
| Ethylbenzene                           | 1.2J                   | 10.3     | 4.0J         | 3.4      | 366                             |
| 4-Ethyltoluene                         | <0.32                  | 5.7      | <0.95        | 1.8      | NA                              |
| n-Heptane                              | 2.4                    | <0.47    | 86.1         | <0.43    | NA                              |
| n-Hexane                               | 8.0                    | <0.6     | 13.4         | 0.0      | 130                             |
| Methylene Chloride                     | 34.4                   | <0.91    | 4.7J         | 0.84J    | 21000                           |
| Propylene                              | 3.7                    | <0.23    | <0.68        | <0.21    | 13000                           |
| Styrene                                | 6.1                    | 10.6     | <0.98        | 2.7      | 4400                            |
| Tetrachloroethene (PCE)                | 5.0                    | 49.5     | 122.0        | 362.0    | 1400                            |
| Toluene                                | 7.4                    | 29.6     | 10.8         | 15.9     | 173000                          |
| Trichloroethylene (TCE)                | 1.8                    | 10.5     | 44.2         | 16.5     | 70.0                            |
| Trichlorofluoromethane (Halocarbon 11) | 2.6                    | 1.2J     | <0.67        | 1.2J     | 24300                           |
| 1,1,2-trichlorotrifluoroethane         | <0.51                  | 25.4     | <1.5         | 4.8      | NA                              |
| Trimethylbenzene (1,2,4)               | 1.3J                   | 14.9     | <0.63        | 4.8      | 243.0                           |
| 1,3,5-trimethylbenzene                 | <0.55                  | 3.8      | <0.93        | 1.4J     | NA                              |
| Vinyl Chloride                         | <0.33                  | <0.33    | 13.1         | 1.3      | 57.0                            |
| Xylene (mix)                           | 4.2                    | 42.2     | 20.8         | 14.6     | 3333                            |
| Xylene (n,m,o separately)              | 1.9                    | 15.7     | 15.0         | 8.5      | 3333                            |

This property is an apartment building  
located south of the site across Jefferson  
Street

Table 5 (Continued) Subslab Vapor Sampling Results

233 Jefferson Street, Oconomowoc WI

| Chemical                               | 233 Jefferson Street   |          |              |          | Residential<br>Screening Levels |
|--|------------------------|----------|--------------|----------|---------------------------------|
|  | VP-1 (ug/m3)           |          | VP-2 (ug/m3) |          |                                 |
|  | Date sampling occurred | 6/2/2015 | 8/1/2015     | 6/2/2015 | 8/1/2015                        |
| Acetone                                | 7.9                    | 7.9      | 144          | 4        | 140000                          |
| Benzene                                | 2.0                    | 1.1      | 2.4          | 0.9      | 120.0                           |
| 2-butanone                             | <0.38                  | 2.6      | 74.6         | 1.9      | 22000.0                         |
| Carbon disulfide                       | 7.1                    | <0.17    | 2.1J         | <0.16    | 40.0                            |
| Chloroform                             | <0.32                  | 1.2      | 2.1J         | 1.7      | 40.0                            |
| Chloromethane                          | 1.7                    | <0.18    | 1.3J         | <0.17    | 3133                            |
| Cyclohexane                            | 1.3                    | 0.75J    | 10.5         | <0.49    | NA                              |
| 1,4-Dichlorobenzene                    | <0.84                  | 2.4      | 11.0         | <0.77    | NA                              |
| Dichlorodifluoromethane                | 4.2                    | 1.6J     | <2.4         | 1.5J     | 3333                            |
| 1,2-Dichloroethylene (cis and mixed)   | 10.0                   | 9.1      | 600.0        | 275.0    | NA                              |
| 1,2-Dichloroethylene (trans)           | <0.65                  | <0.65    | 4.8          | 2.2      | NA                              |
| Ethanol                                | 3.0                    | 1.3J     | 8.7          | 4.5      | NA                              |
| Ethylbenzene                           | 1.2J                   | 10.3     | 4.0J         | 3.4      | 366                             |
| 4-Ethyltoluene                         | <0.32                  | 5.7      | <0.95        | 1.8      | NA                              |
| n-Heptane                              | 2.4                    | <0.47    | 86.1         | <0.43    | NA                              |
| n-Hexane                               | 8.0                    | <0.6     | 13.4         | 0.0      | 130                             |
| Methylene Chloride                     | 34.4                   | <0.91    | 4.7J         | 0.84J    | 21000                           |
| Propylene                              | 3.7                    | <0.23    | <0.68        | <0.21    | 13000                           |
| Styrene                                | 6.1                    | 10.6     | <0.98        | 2.7      | 4400                            |
| Tetrachloroethene (PCE)                | 5.0                    | 49.5     | 122.0        | 362.0    | 1400                            |
| Toluene                                | 7.4                    | 29.6     | 10.8         | 15.9     | 173000                          |
| Trichloroethylene (TCE)                | 1.8                    | 10.5     | 44.2         | 16.5     | 70.0                            |
| Trichlorofluoromethane (Halocarbon 11) | 2.6                    | 1.2J     | <0.67        | 1.2J     | 24300                           |
| 1,1,2-trichlorotrifluoroethane         | <0.51                  | 25.4     | <1.5         | 4.8      | NA                              |
| Trimethylbenzene (1,2,4)               | 1.3J                   | 14.9     | <0.63        | 4.8      | 243.0                           |
| 1,3,5-trimethylbenzene                 | <0.55                  | 3.8      | <0.93        | 1.4J     | NA                              |
| Vinyl Chloride                         | <0.33                  | <0.33    | 13.1         | 1.3      | 57.0                            |
| Xylene (mix)                           | 4.2                    | 42.2     | 20.8         | 14.6     | 3333                            |
| Xylene (n,m,o separately)              | 1.9                    | 15.7     | 15.0         | 8.5      | 3333                            |

This property is an apartment building  
located south of the site across Jefferson  
Street



## **TABLE A.6**

### **Other media of concern**

No other Media was investigated for this site.

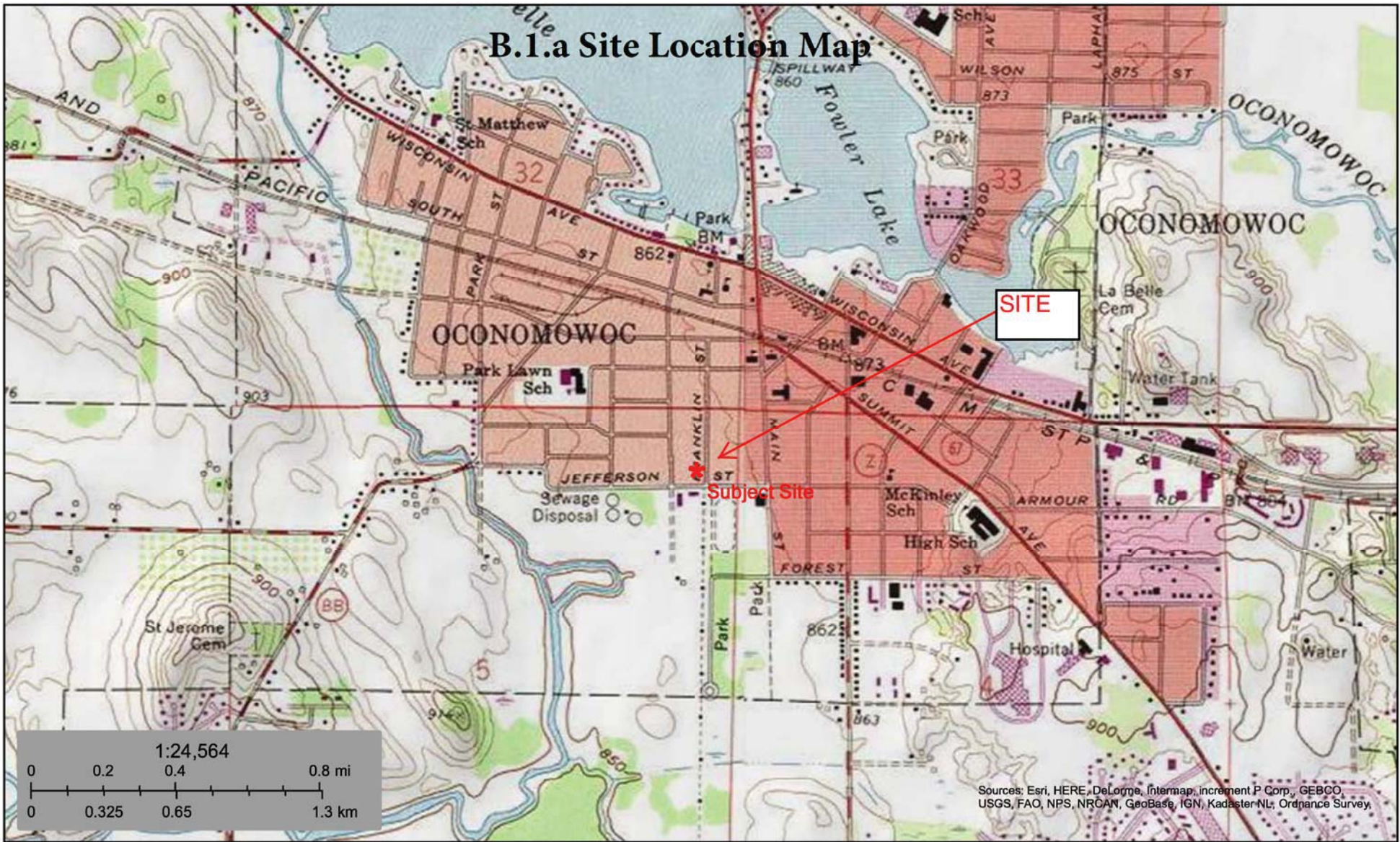
No Table A6 was created.



**TABLE A7  
GROUNDWATER WATER LEVELS**

| 530 Franklin   |                         |                   |            |            |               |                    |                        |         |                       |                 |                  |                |
|--|-------------------------|-------------------|------------|------------|---------------|--------------------|------------------------|---------|-----------------------|-----------------|------------------|----------------|
| Sample #   | Water Level<br>(ft bgs) | Date<br>Collected | Acetone    | Chloroform | Chloromethane | 1,1-dichloroethene | cis 1,2-dichloroethene | Toluene | trans 1,2-dichloroeth | trichloroethene | tetrchloroethene | vinyl chloride |
| MW-1   | 5.69                    | 9/4/2003          | NA         | NA         | NA            | ND                 | <0.5                   | ND      | <0.5                  | <0.25           | <0.5             | <0.25          |
|  | NA                      | 1/11/2005         | NA         | NA         | NA            | ND                 | <u>7.6</u>             | ND      | <0.89                 | <u>2.3</u>      | <b>5</b>         | 58 J           |
|  | 6.57                    | 6/23/2010         | 6.8        | 0.27       | 0.36          | <2                 | 1.4                    | 0.51    | <2                    | <u>2.3</u>      | <u>2.8</u>       | <2             |
|  | NA                      | 11/6/2012         | NA         | NA         | NA            | NA                 | NA                     | NA      | NA                    | NA              | NA               | NA             |
|  | NA                      | 4/4/2013          | NA         | NA         | NA            | NA                 | NA                     | NA      | NA                    | NA              | NA               | NA             |
| MW-2   | 5.95                    | 9/4/2003          | NA         | NA         | NA            | ND                 | 7                      | ND      | <0.5                  | <u>0.82</u>     | <u>0.95</u>      | <b>2.3</b>     |
|  | NA                      | 1/11/2005         | NA         | NA         | NA            | ND                 | <b>78</b>              | ND      | <0.89                 | <b>35</b>       | <b>170</b>       | <b>1.9</b>     |
|  | 7.45                    | 6/23/2010         | <40        | <0.235     | 0.4           | <2                 | 1.8                    | 0.49    | <2                    | <u>2.3</u>      | <b>19.8</b>      | <2             |
|  | 6.35                    | 11/6/2012         | <20        | <2         | <3.27         | <u>2.53</u>        | <b>532</b>             | <2      | 5.82                  | <b>22.5</b>     | <b>56.8</b>      | <b>118</b>     |
|  | 6.20                    | 4/4/2013          | <40        | <2         | <3.27         | <u>&lt;2</u>       | <3.27                  | <2      | <2                    | <u>&lt;2</u>    | <10              | <u>&lt;2</u>   |
| MW-3   | 5.97                    | 9/4/2003          | NA         | NA         | NA            | ND                 | <b>130</b>             | ND      | 1.1                   | <u>2</u>        | <u>2.5</u>       | <b>19</b>      |
|  | NA                      | 1/11/2005         | NA         | NA         | NA            | ND                 | <b>230</b>             | ND      | <2.2                  | <1.2            | <1.1             | <b>44</b>      |
|  | 6.85                    | 6/23/2010         | 5.2        | 0.37       | 0.69          | <2                 | <b>81.7</b>            | 0.66    | 1.1                   | <b>23.3</b>     | <b>51.5</b>      | <b>14.8</b>    |
|  | 6.20                    | 11/6/2012         | <40        | <2         | <3.27         | <2                 | <u>16.1</u>            | <2      | <2                    | <b>16.4</b>     | <b>130</b>       | <b>1.4</b>     |
|  | 6.40                    | 4/4/2013          | <40        | <2         | <3.27         | <2                 | <3.72                  | <2      | <2                    | <b>5.12</b>     | <10              | <6             |
| PZ1  | 5.90                    | 9/4/2003          | NA         | NA         | NA            | ND                 | <u>24</u>              | ND      | <0.50                 | <b>28</b>       | <b>13</b>        | <0.25          |
|  | NA                      | 1/11/2005         | NA         | NA         | NA            | ND                 | <u>7.9</u>             | ND      | <0.89                 | <0.48           | 0.68 J           | <0.18          |
|  | 6.25                    | 6/23/2010         | 5.6        | 0.24       | 0.78          | <2                 | 2.53                   | 1.1     | <2                    | <2              | <2               | <2             |
| <b>NR 140 Enforcement Standard (ES)</b>                                      |                         |                   | <b>900</b> | <b>6</b>   | <b>30</b>     | 7                  | 70                     | 800     | 100                   | 5               | 5                | 0.2            |
| <b>NR 140 Preventive Action Limit (PAL)</b>                                  |                         |                   | <b>180</b> | <b>0.6</b> | <b>3</b>      | 0.7                | 7                      | 160     | 20                    | 0.5             | 0.5              | 0.02           |
| VOCs = volatile organic compounds  |                         |                   |            |            |               |                    |                        |         |                       |                 |                  |                |
| Samples in bold and underline exceed the ES                                  |                         |                   |            |            |               |                    |                        |         |                       |                 |                  |                |
| Samples underlined exceed the PAL  |                         |                   |            |            |               |                    |                        |         |                       |                 |                  |                |
| NA = not analyzed  |                         |                   |            |            |               |                    |                        |         |                       |                 |                  |                |
| ND = no detect   |                         |                   |            |            |               |                    |                        |         |                       |                 |                  |                |
| J = result is between limit of detection and limit of quantification         |                         |                   |            |            |               |                    |                        |         |                       |                 |                  |                |
| <i>Only samples detected in at least one sample are shown in this table.</i> |                         |                   |            |            |               |                    |                        |         |                       |                 |                  |                |

# B.1.a Site Location Map



June 21, 2016

530 Franklin Street Oconomowoc, WI



B.1.b Detailed Site Map

522 Franklin

52 feet

| Date     | Depth  | SS-E Result | Analyte |
|----------|--------|-------------|---------|
| 12/11/14 | 2 feet | 0.551       | PCE     |

| Date     | Depth  | SS-N Result | Analyte |
|----------|--------|-------------|---------|
| 12/11/14 | 2 feet | <0.025      | PCE     |

| Date     | Depth  | SS-W Result | Analyte |
|----------|--------|-------------|---------|
| 12/11/14 | 2 feet | 0.089       | PCE     |

GP-2  
(2-4')  
1/12/05  
PCE 0.17

GP-1  
(2-4')  
1/12/05  
PCE 0.12

MW-2  
(4-6')  
8/12/03  
None Detected

MW-3  
(4-6')  
8/12/03  
None Detected

MW-1  
(6-8')  
8/12/03  
None Detected

250  
Jefferson

74 feet

Extent of soil contamination above the groundwater pathway RCLs

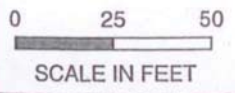
530 SOUTH FRANKLIN STREET

JEFFERSON STREET

LEGEND

- MONITORING WELL LOCATION
- ⊙ PIEZOMETER LOCATION
- - - PROPERTY BOUNDARY
- ⊗ GEOPROBE LOCATION
- PCE Tetrachloroethene (Micrograms per Kilogram: µg/Kg)

114 feet



Original map provided by:  
**ARCADIS**

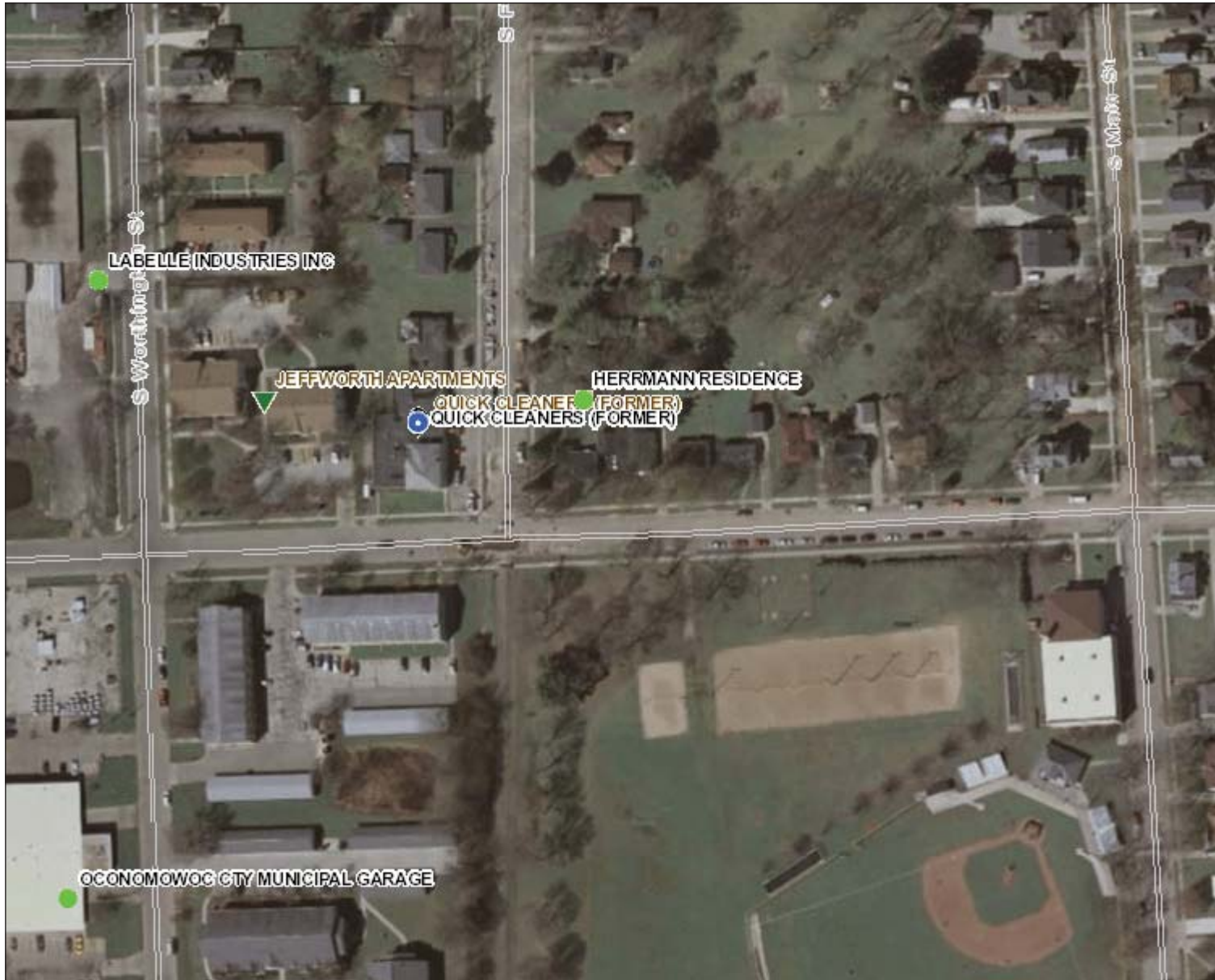
233 Jefferson -  
apartment building





B.1.c

# RR Site Map



## Legend

- Open Site (ongoing cleanup)
- Open Site Boundary
- Closed Site (completed cleanup)
- Closed Site Boundary
- Groundwater Contamination
- Soil Contamination
- Groundwater and Soil Contamination
- Contamination From Another Property
- Dryclean Environmental Response Fund (DERF)
- Green Space Grant (2004-2009)
- Ready for Reuse
- Site Assessment Grant (2001-2009)
- State Funded Response
- Sustainable Urban Development Zone (SUDZ)
- General Liability Clarification Letters
- Superfund NPL
- Voluntary Party Liability Exemption
- Rivers and Streams
- Open Water

## Notes



NAD\_1983\_HARN\_Wisconsin\_TM

© Latitude Geographics Group Ltd.

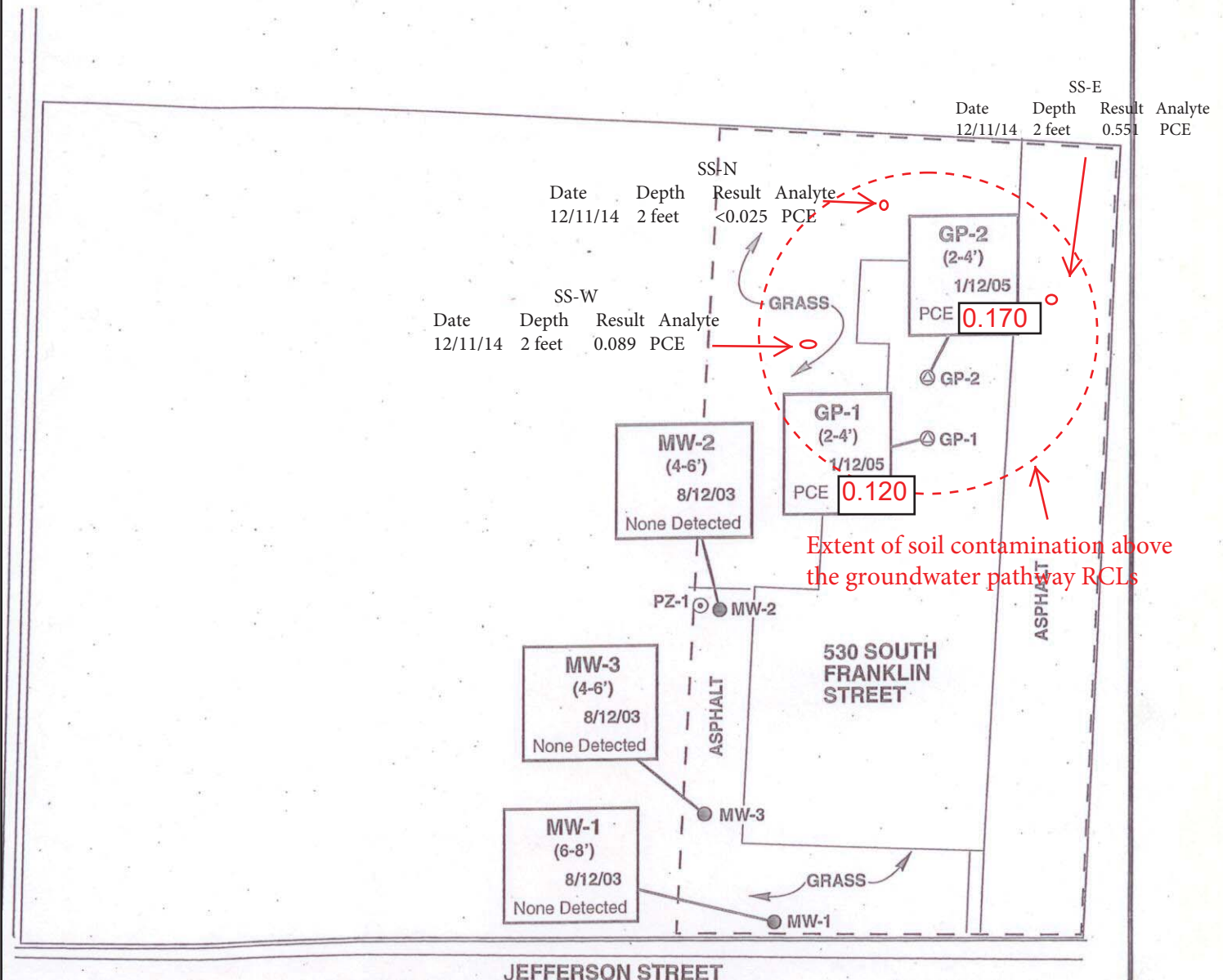
1:2,036



DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/org/legal/>

**Note: Not all sites are mapped.**

### B.2.a Soil Contamination Map



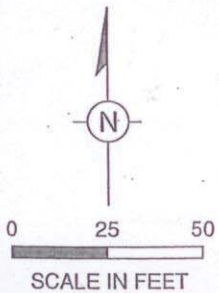
Extent of soil contamination above the groundwater pathway RCLs

JEFFERSON STREET

#### LEGEND

- MONITORING WELL LOCATION
- ⊙ PIEZOMETER LOCATION
- - - PROPERTY BOUNDARY
- ⊗ GEOPROBE LOCATION

PCE Tetrachloroethene **parts per million (ppm)**



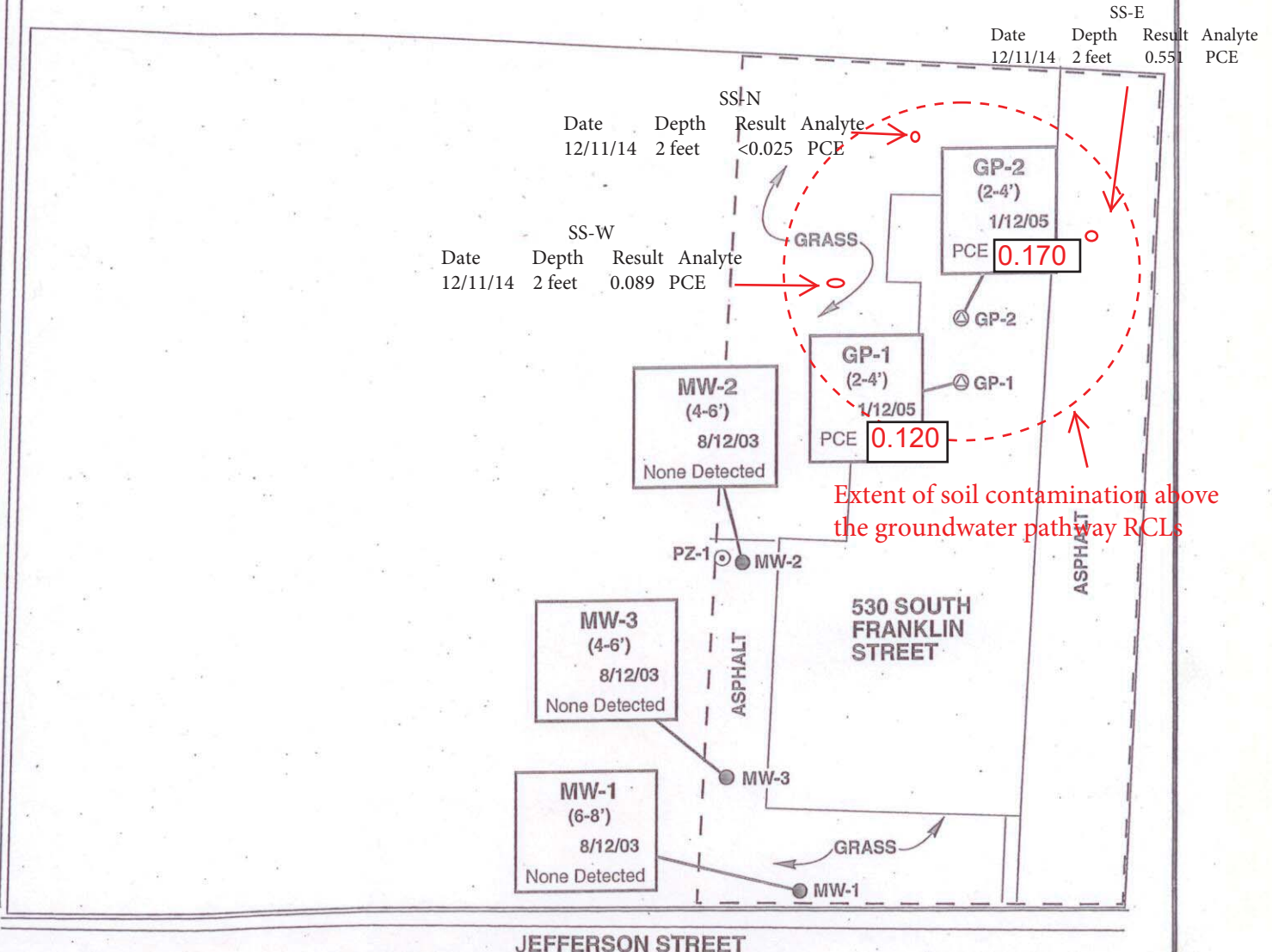
Created June 2016

Original map provided by:





## B.2.b Post Remedial Soil Contamination Map



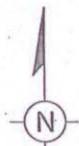
JEFFERSON STREET

### LEGEND

- MONITORING WELL LOCATION
- ⊙ PIEZOMETER LOCATION
- - - PROPERTY BOUNDARY
- ⊗ GEOPROBE LOCATION



PCE Tetrachloroethene parts per million (ppm)



0 25 50  
SCALE IN FEET

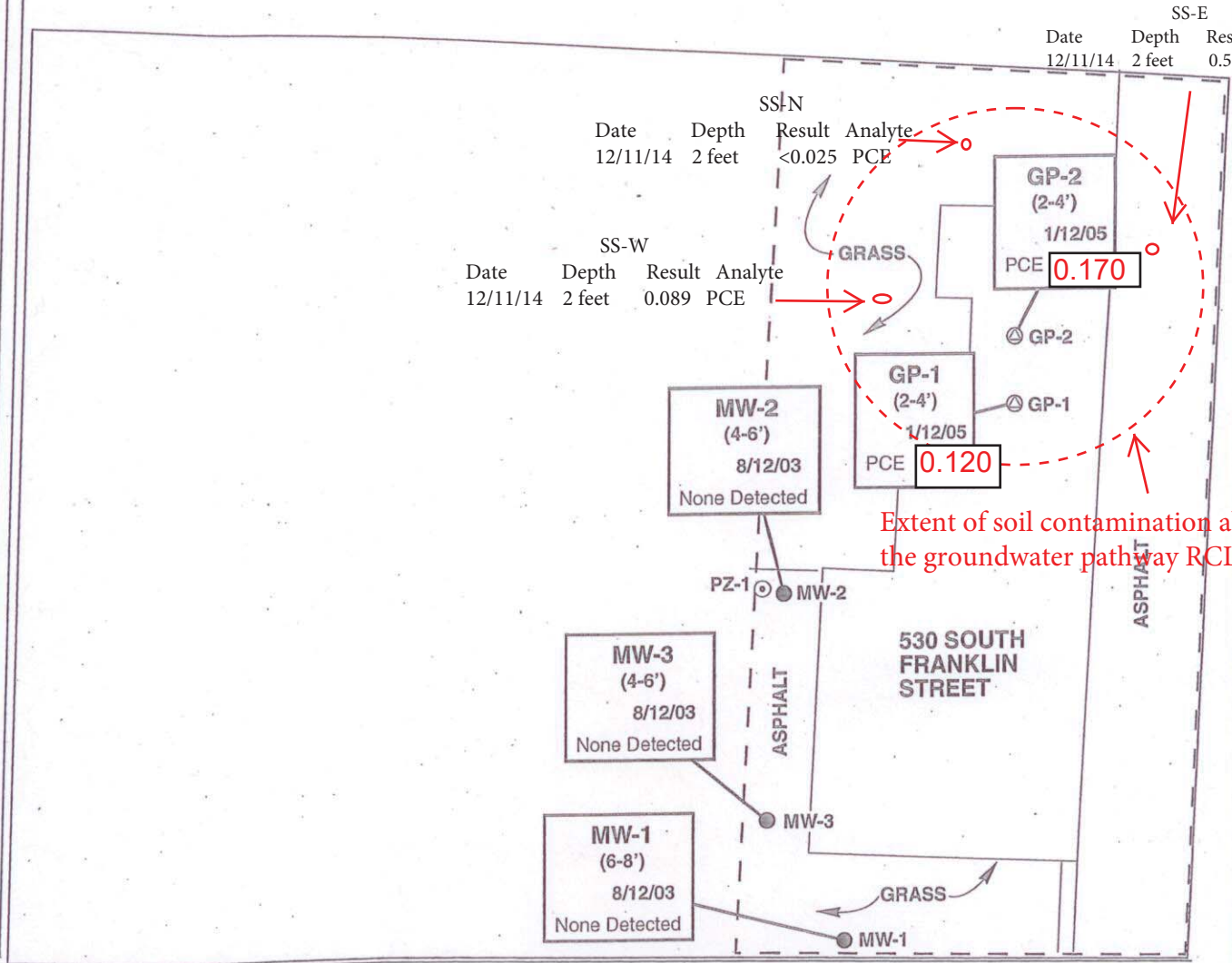
Created June 2016

Original map provided by:





### B.2.c Pre and Post Remedial Soil Contamination Map



| Date     | Depth  | Result | Analyte |
|----------|--------|--------|---------|
| 12/11/14 | 2 feet | 0.551  | PCE     |
| 12/11/14 | 2 feet | <0.025 | PCE     |
| 12/11/14 | 2 feet | 0.089  | PCE     |

**MW-2**  
(4-6')  
8/12/03  
None Detected

**GP-2**  
(2-4')  
1/12/05  
PCE **0.170**

**GP-1**  
(2-4')  
1/12/05  
PCE **0.120**

**MW-3**  
(4-6')  
8/12/03  
None Detected

**MW-1**  
(6-8')  
8/12/03  
None Detected

Extent of soil contamination above the groundwater pathway RCLs

JEFFERSON STREET

530 SOUTH FRANKLIN STREET

**LEGEND**

- MONITORING WELL LOCATION
- ⊙ PIEZOMETER LOCATION
- - - PROPERTY BOUNDARY
- ⊗ GEOPROBE LOCATION

PCE Tetrachloroethene **parts per million (ppm)**

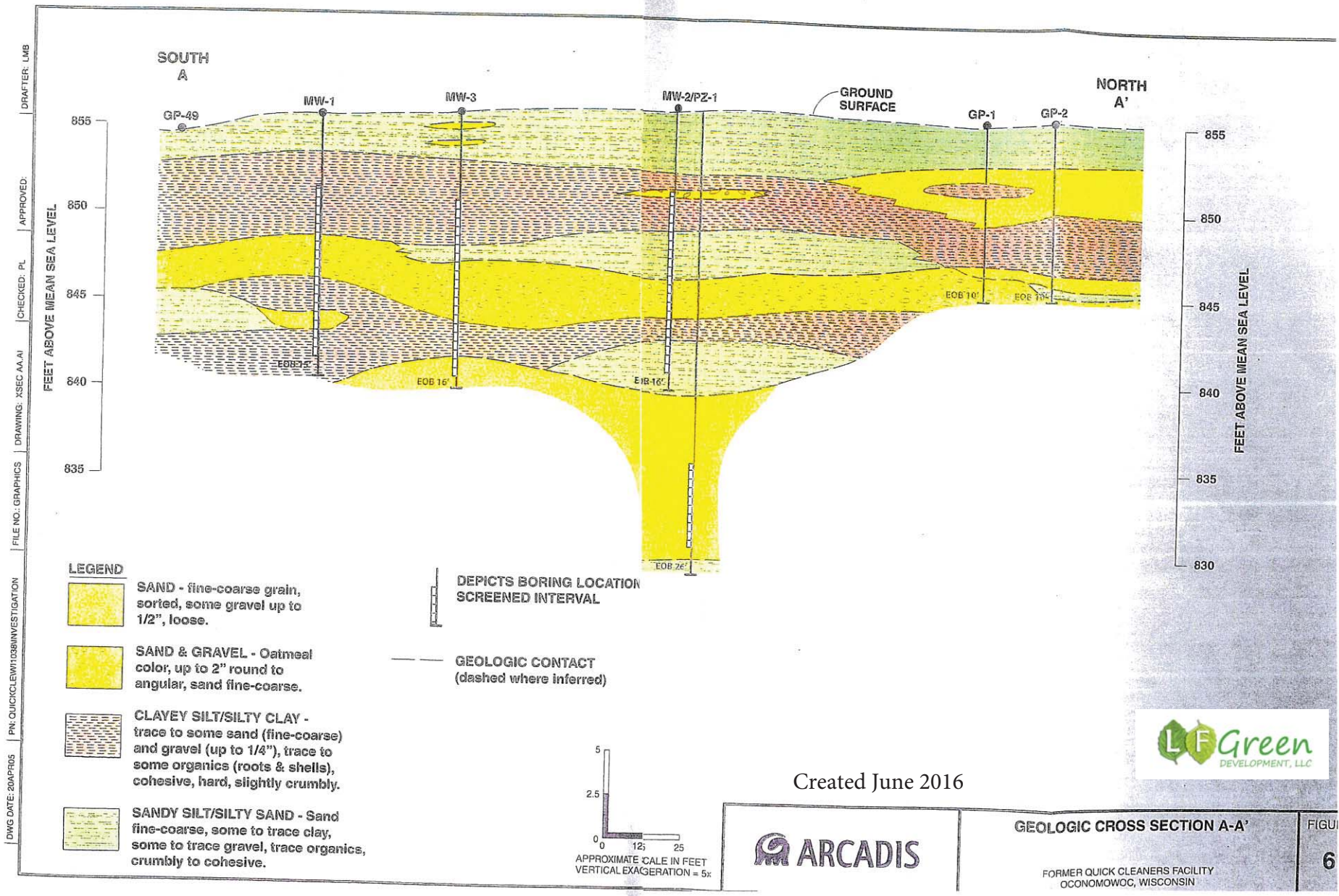


0 25 50  
SCALE IN FEET

Original map created



B.3.a Geologic Cross-Section Figure





### B.3.a.i Cross Section Site Location Map

DRAFTER: LMB

APPROVED:

CHECKED: LS

DRAWING: SOIL ANAL. AI

FILE NO.: GRAPHICS

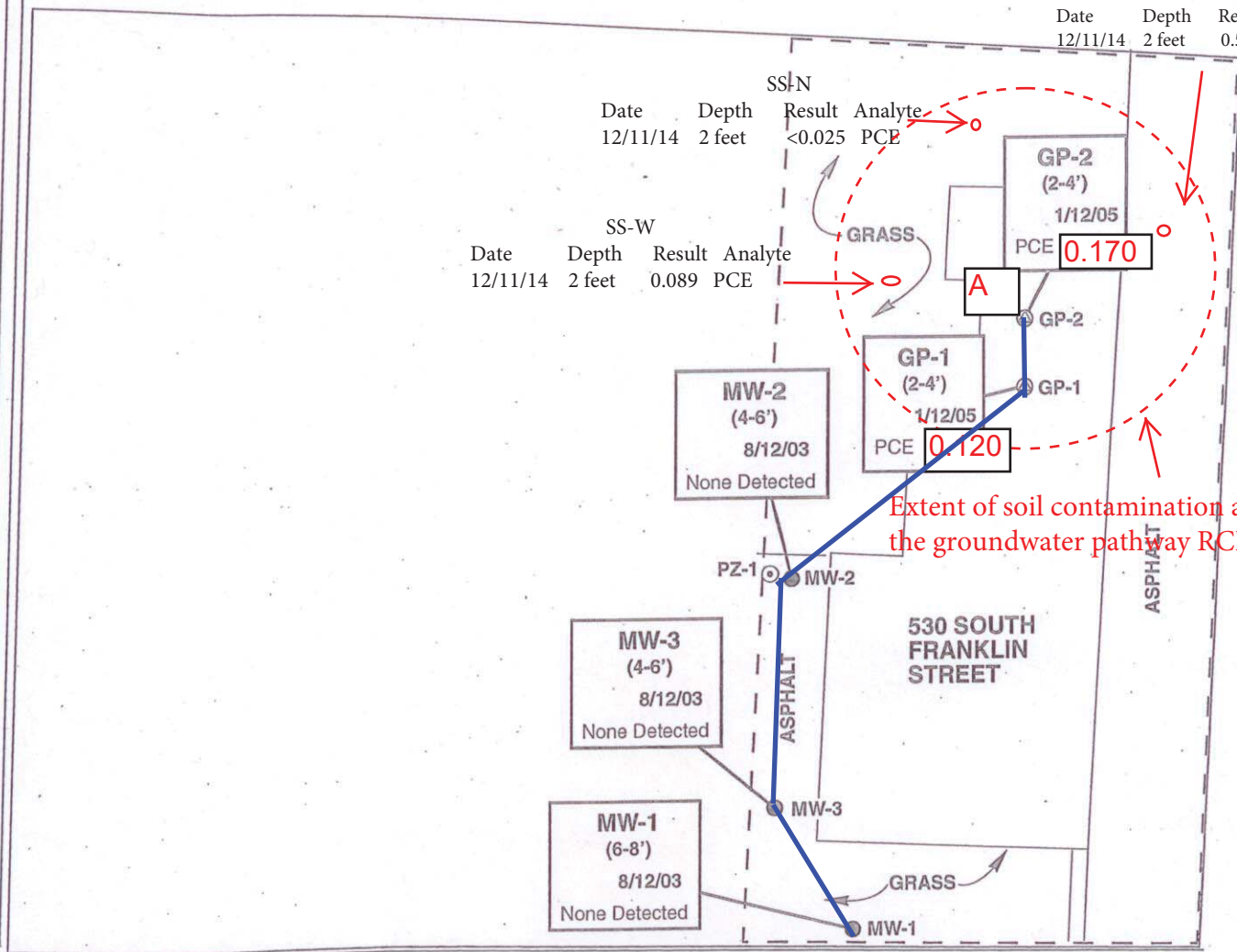
PN: QUICKCLEW11038INVESTIGATION

DWG DATE: 20APR05

| Date     | Depth  | Result | Analyte |
|----------|--------|--------|---------|
| 12/11/14 | 2 feet | 0.551  | PCE     |

| Date     | Depth  | Result | Analyte |
|----------|--------|--------|---------|
| 12/11/14 | 2 feet | <0.025 | PCE     |

| Date     | Depth  | Result | Analyte |
|----------|--------|--------|---------|
| 12/11/14 | 2 feet | 0.089  | PCE     |



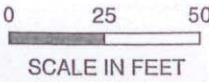
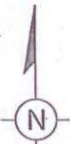
Extent of soil contamination above the groundwater pathway RCLs

JEFFERSON STREET

**LEGEND**

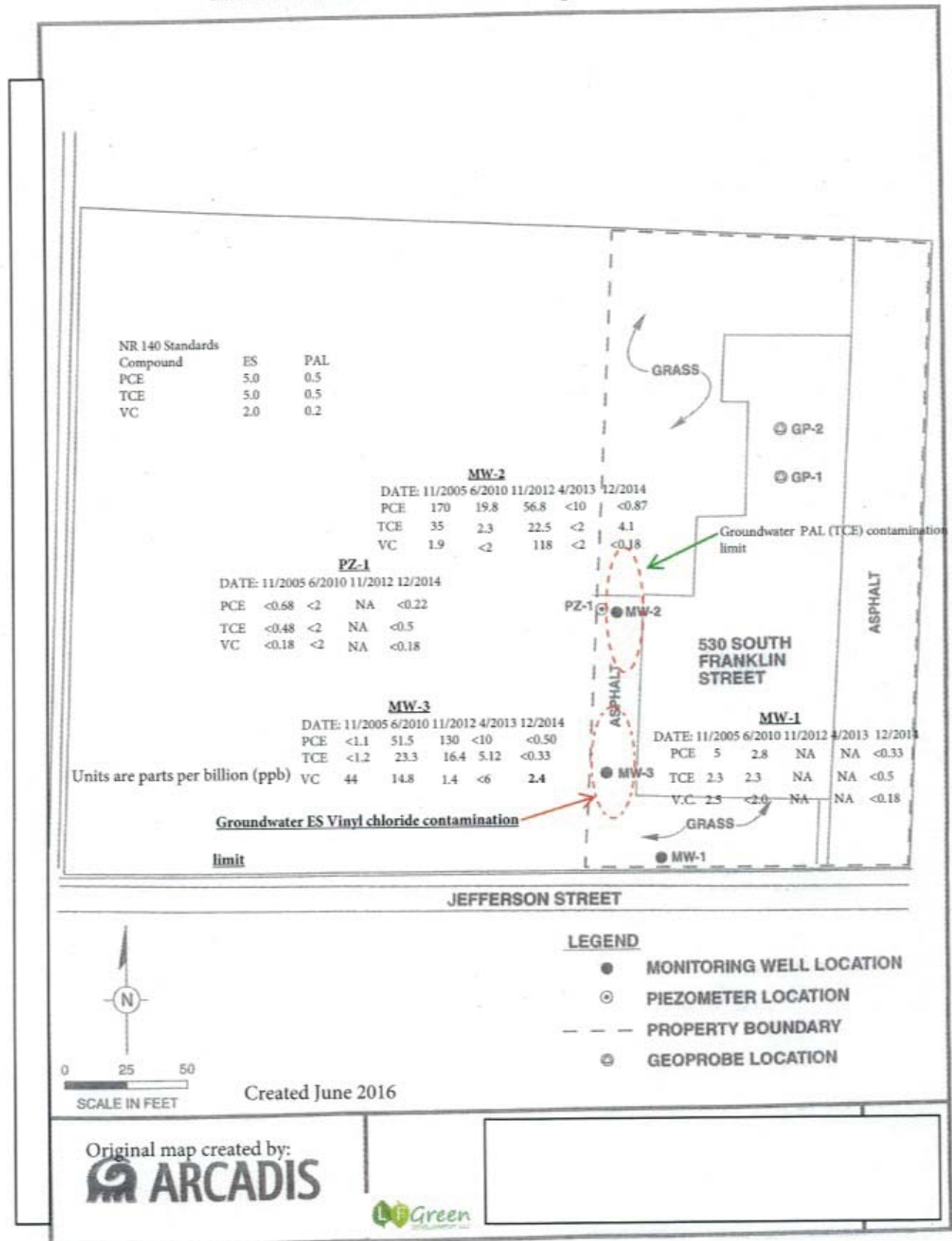
- MONITORING WELL LOCATION
- ⊙ PIEZOMETER LOCATION
- - - PROPERTY BOUNDARY
- ⊗ GEOPROBE LOCATION

PCE Tetrachloroethene **parts per million (ppm)**

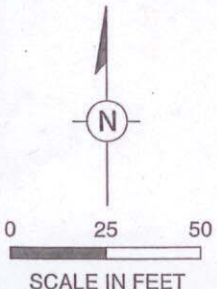
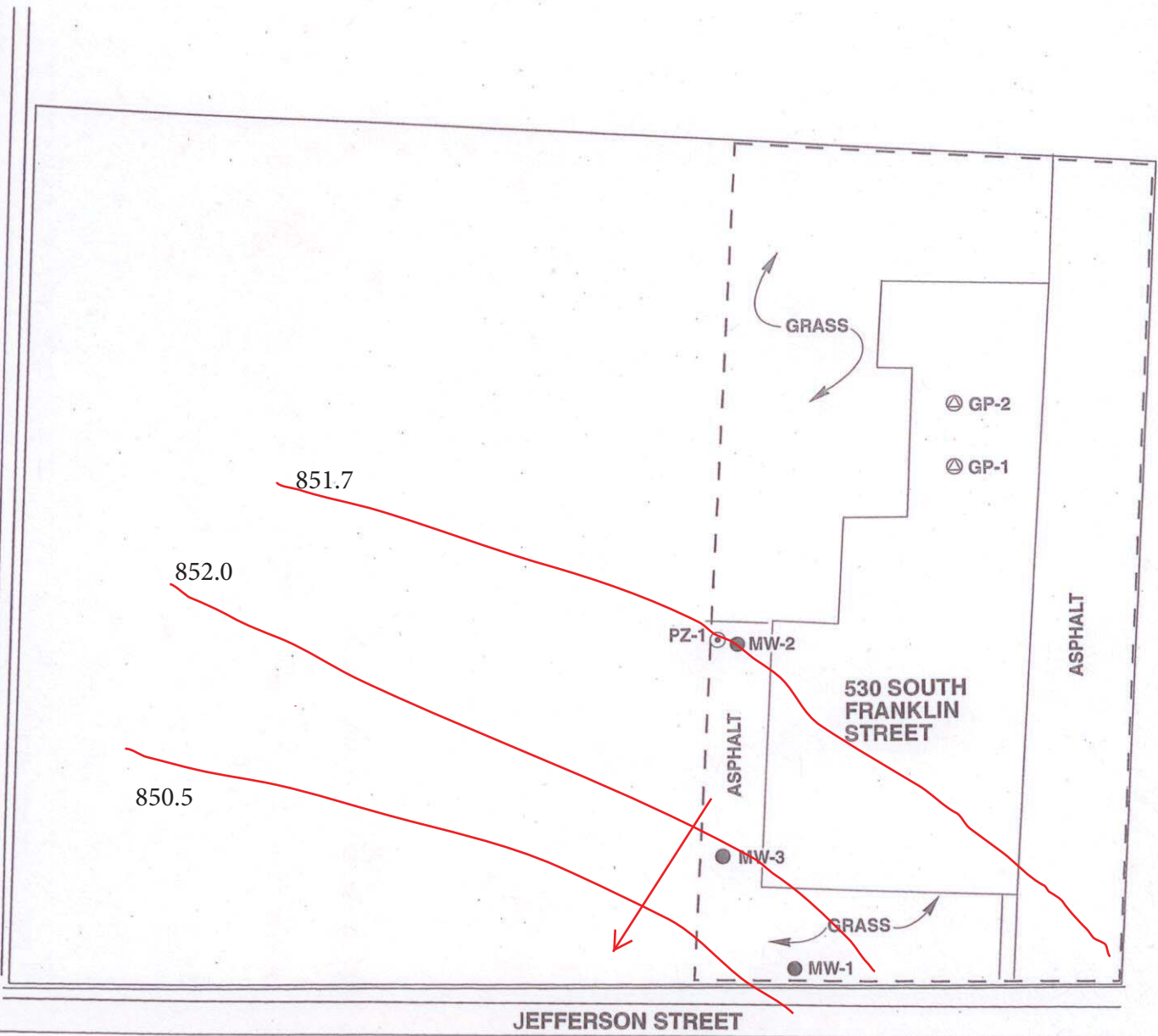




### B.3.b Groundwater Isoconcentration Map



### B.3.c Groundwater Flow Direction Map



- LEGEND**
- MONITORING WELL LOCATION
  - ⊙ PIEZOMETER LOCATION
  - - - PROPERTY BOUNDARY
  - ⊗ GEOPROBE LOCATION

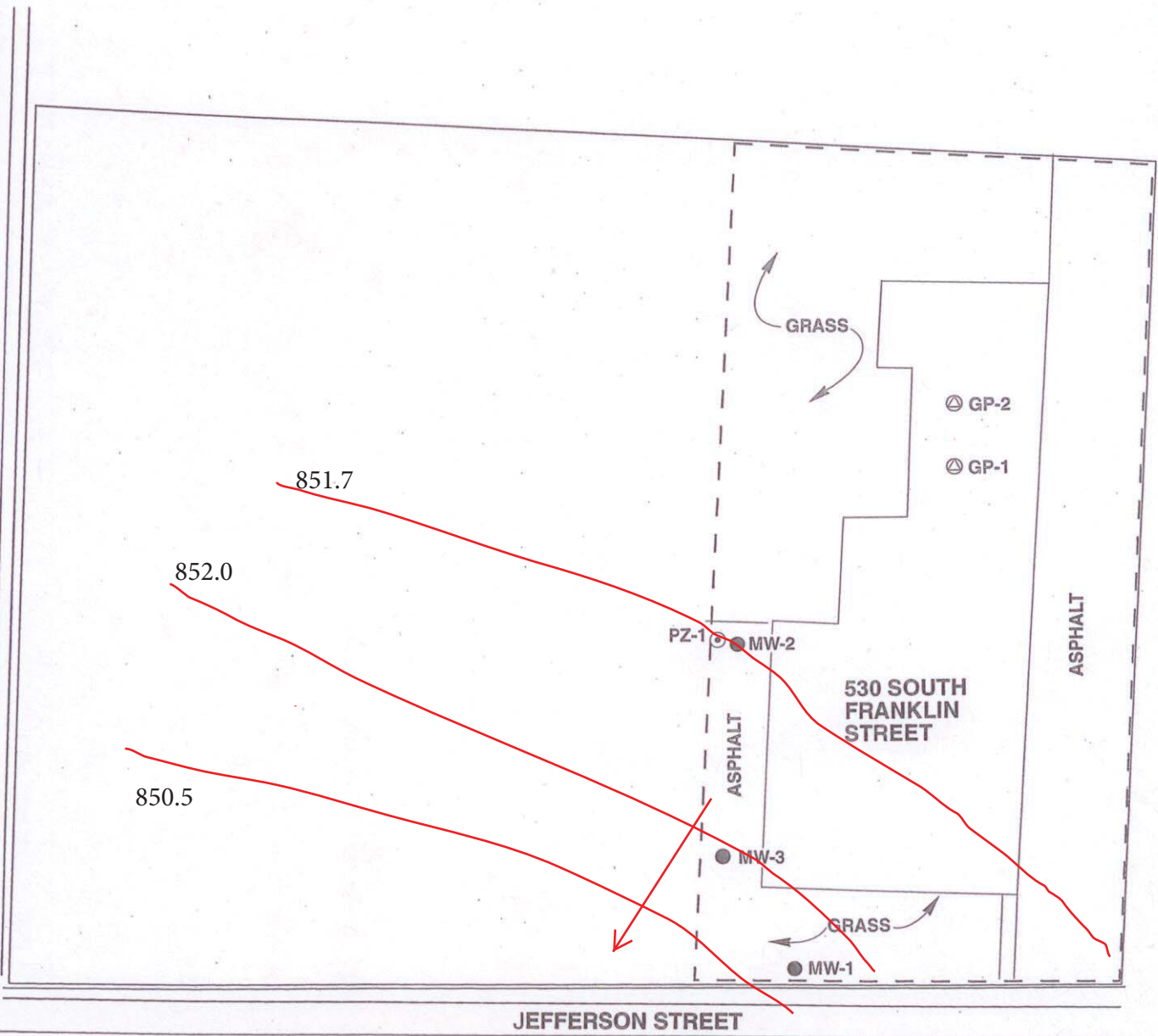
Created June 2016



original map created by  
**ARCADIS**



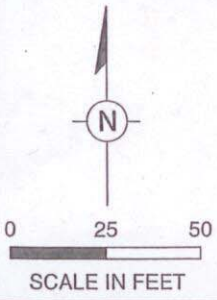
### B.3.d Monitoring Well Locations



JEFFERSON STREET

#### LEGEND

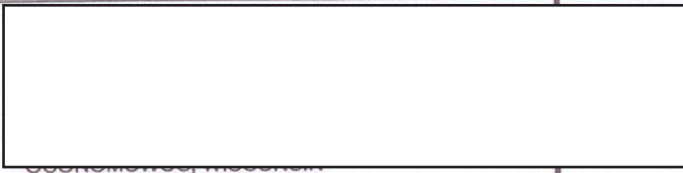
- MONITORING WELL LOCATION
- ⊙ PIEZOMETER LOCATION
- - - PROPERTY BOUNDARY
- ⊗ GEOPROBE LOCATION



Created June 2016



original map created by  
**ARCADIS**







## MAP B.4.a

### VAPOR MITIGATION SYSTEM

A vapor extraction system was installed at 530 Franklin Street in 2013. The system was installed as an interim action and no sub-slab or indoor air vapor samples were collected. This was done with approval by the WDNR and prior to new regulations about sampling were in place.

Since the building has two roof levels, two separate systems were installed at the site and both of the extraction systems have been hard wired directly into the on-site electrical box.

There is no basement and no sump crock in the building. There is no elevator in the building. Photos showing the system and Figure B4 show the location of the system components.

The building is a commercial use and has 2-3 commercial tenants. The planned future use is also for commercial tenants. There was no residential use at the time of this investigation.

### VAPOR SCREENING INVESTIGATION

A vapor investigation was completed on the adjacent property located at 233 Jefferson Street.

We used Colvin Cox Vapor Pins for our testing. The number of sampling points was determined by the size of the building and the land use. Two sampling points were installed in the building located adjacent to the south of the Quick cleaners building.

The methods for the vapor intrusion are as follows:

- Equipment used included:
  - Hammer drill to drill 1 ½” hole for vapor pin;
  - Smaller drill for 5/8” hole;
  - Wet/dry vacuum;
  - Assorted tubing for sample collection;
  - Wrenches to attach canister and vapor pins;
  - Vapor pin assembly
  - Vacuum meter;
  - PPE (eyewear, gloves, etc.)
- Determine vapor pin location;
- Drill the 1 ½” hole 1 3/4 “ deep;
- Vacuum drill cuttings from hole;
- Drill only deep enough for the vapor pin to fit in with flush mounting in floor;
- Using guide, drill the 5/8 hole through the slab;
- Insert the vapor pin with the cap n the pin to prevent any vapors from escaping through the pin;



\*The vapor pin has a Teflon seal around the pin to seal it as it is installed. Once you have it in place it is tested by filling the hole with water to make sure no water migrates into the subslab, this verifies the seal is good.

- The canister is prepared by noting the canister number, starting pressure, time and date, and other information on the chain of custody provided with the canister by the lab;
- The tubing assembly is attached to the canister and a vacuum gauge is used to make sure the assembly holds pressure;
- Then the canister is attached to the vapor pin and the vacuum gauge is again used to verify the pressure is maintained;
- The canister is then opened and the time is noted;
- The canisters were allowed to remain open approximately 30 minutes and then closed;
- The time was again noted,
- The pressure was recorded on the chain of custody;
- The tubing was removed and the cap was placed on the vapor pin for future use if needed and a flush mount steel cap was placed on the entire set-up.
- The canisters were sent to the lab for analysis under chain of custody procedures.

Tables of results are attached.

B.4.a is attached.



#### MAP B.4.a

A vapor extraction system was installed at this site in 2013.

A vapor investigation was completed at adjacent buildings located at 233 and 250 Jefferson and at a residence located at 522 Franklin Street.

We used Colvin Cox Vapor Pins for our testing. The number of sampling points was determined by the size of the building and the land use.

- Two sampling points were installed in the basement at 233 Jefferson
- Two samples were collected in the crawl space at 250 Jefferson
- One sub-slab and one indoor air sample was collected in the basement at 522 Franklin.
- For all three properties, 2 rounds of sampling was completed.

The methods for the vapor intrusion are as follows:

- Equipment used included:
  - Hammer drill to drill 1 ½” hole for vapor pin;
  - Smaller drill for 5/8” hole;
  - Wet/dry vacuum;
  - Assorted tubing for sample collection;
  - Wrenches to attach canister and vapor pins;
  - Vapor pin assembly
  - Vacuum meter;
  - PPE (eyewear, gloves, etc.)
- Determine vapor pin location;
- Drill the 1 ½” hole 1 ¾ “ deep;
- Vacuum drill cuttings from hole;
- Drill only deep enough for the vapor pin to fit in with flush mounting in floor;
- Using guide, drill the 5/8 hole through the slab;
- Insert the vapor pin with the cap n the pin to prevent any vapors from escaping through the pin;

\*The vapor pin has a Teflon seal around the pin to seal it as it is installed. Once you have it in place it is tested by filling the hole with water to make sure no water migrates into the subslab, this verifies the seal is good.

- The canister is prepared by noting the canister number, starting pressure, time and date, and other information on the chain of custody provided with the canister by the lab;
- The tubing assembly is attached to the canister and a vacuum gauge is used to make sure the assembly holds pressure;
- Then the canister is attached to the vapor pin and the vacuum gauge is again used to verify the pressure is maintained;





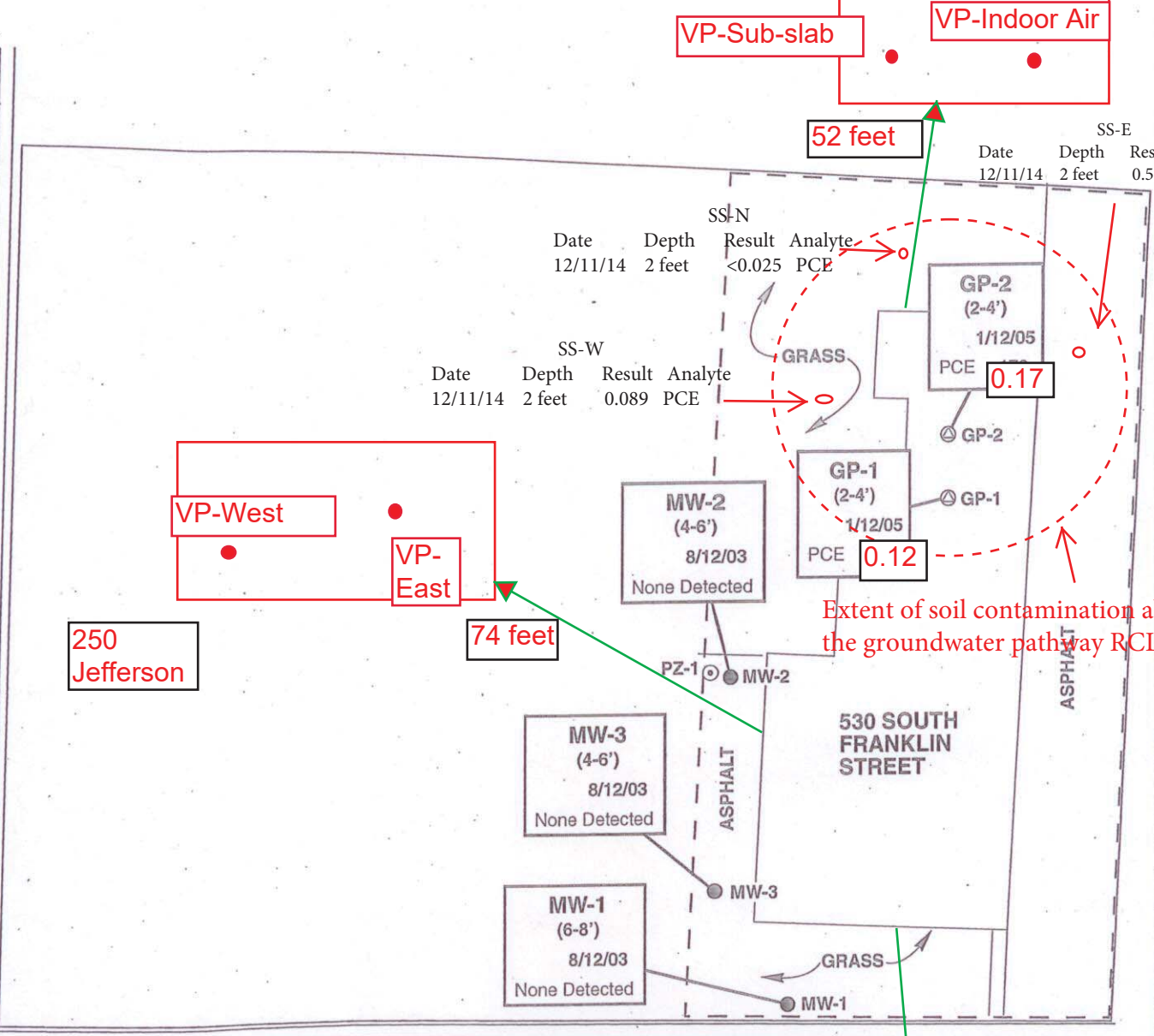
- The canister is then opened and the time is noted;
- The canisters were allowed to remain open approximately 30 minutes and then closed;
- The time was again noted,
- The pressure was recorded on the chain of custody;
- The tubing was removed and the cap was placed on the vapor pin for future use if needed and a flush mount steel cap was placed on the entire set-up.
- The canisters were sent to the lab for analysis under chain of custody procedures.

Tables of results are attached.

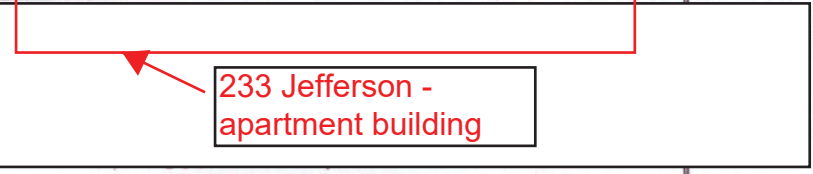
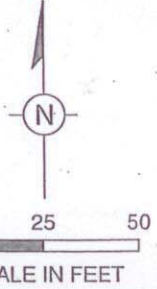
B.4.a is attached.

DRAFTER: LMB  
 APPROVED:  
 CHECKED: LS  
 DRAWING: SOIL\_ANAL\_A1  
 FILE NO.: GRAPHICS  
 PN: QUICKCLEW1038INVESTIGATION  
 DWG DATE: 20APR05

B.4.a Vapor Sample Location Map



- LEGEND**
- MONITORING WELL LOCATION
  - ⊙ PIEZOMETER LOCATION
  - - - PROPERTY BOUNDARY
  - ⊗ GEOPROBE LOCATION
  - Tetrachloroethene (Micrograms per Kilogram: µg/Kg)



B.4.a.1  
Vapor Testing Sample Locations  
233 Jefferson Street, Oconomowoc, WI

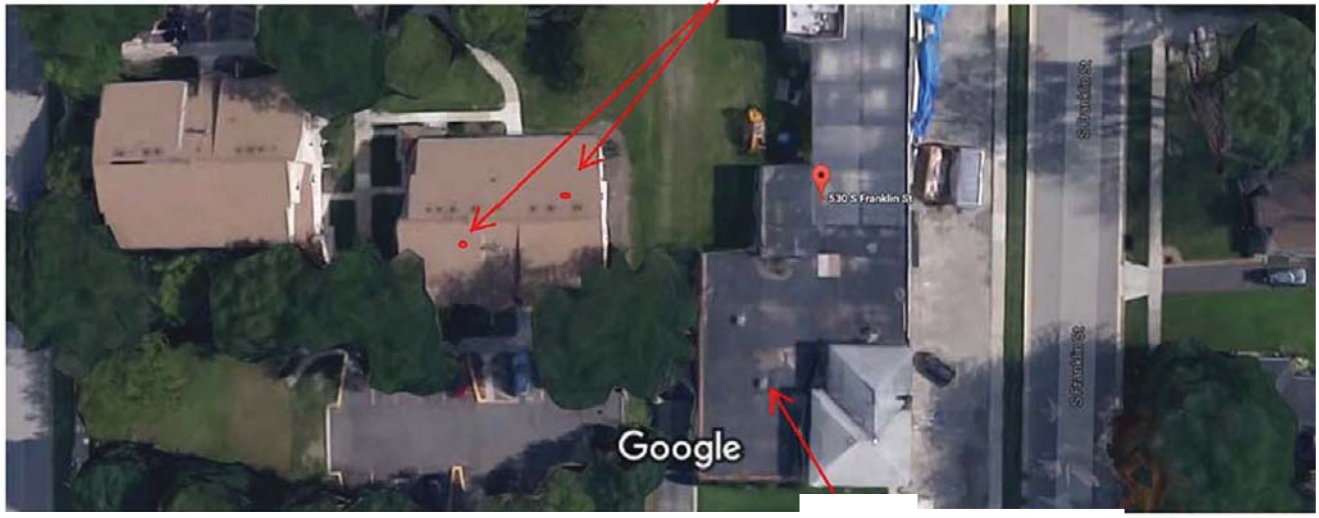


Vapor sub-slab  
samples - 233  
Jefferson Street



B.4.a.2 Vapor Sample Locations 250 Jefferson Street

Indoor air in crawlspace.



250 Jefferson Street

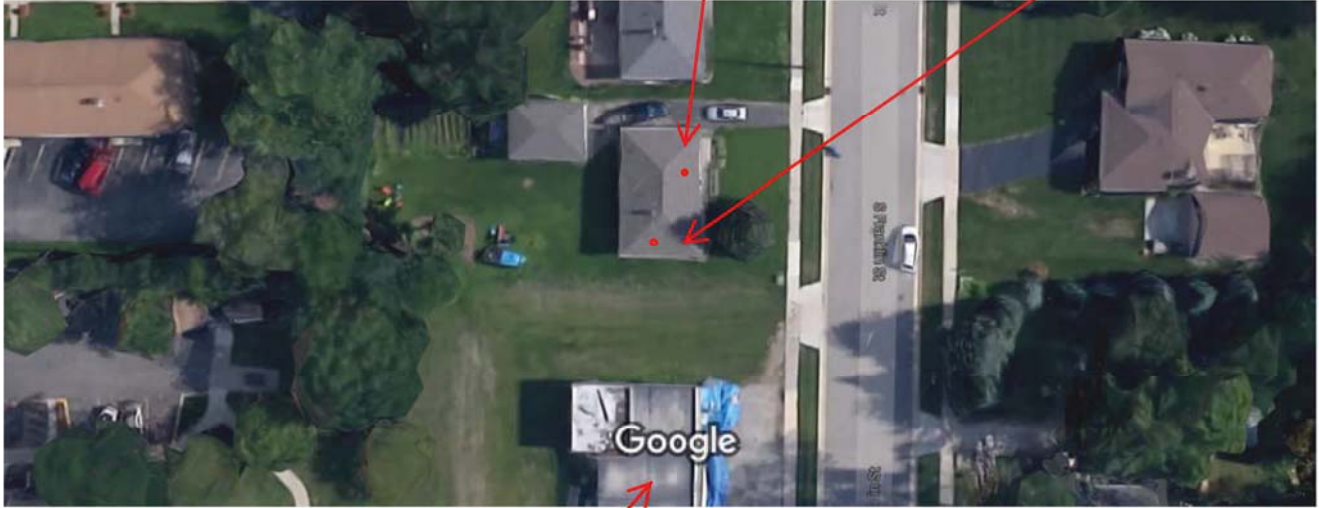
Former Quick Cleaners  
530 Franklin

Google Maps

522 S Franklin St

Indoor Air  
Sample -  
basement

Sub-slab sample



Imagery ©2016 Google, Map data ©2016 Google 20 ft

Google Maps

Former Quick Cleaners -  
530 Franklin



## **MAP C.1**

### **Site Investigation documentation**

The Environmental Site Investigation was previously submitted.





## C.2

### **Investigative Waste**

Soil was collected using a backhoe provided by the person occupying the property. The heavy grass cover was removed and a sample was collected using a shovel. All of the soil collected was used in sampling and the sod was replaced over the sample location.

Geoprobe (GP) and Monitoring Well (MW) samples were collected in 2005 and 2003 respectively. The investigation information was previously submitted.



### **C.3**

#### **NR 720.10 Analysis**

No SSRCLs were calculated for this site.

# VAPOR MAINTENANCE PLAN

September 21, 2015

Property Located at:  
530 Franklin Street

PParcel Number OCOC 0560-254  
Former Quick Cleaners  
Oconomowoc, WI 53235  
WDNR BRRTS **-02-68-280310**

## Introduction

This document is the Maintenance Plan for a vapor mitigation system at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the active system installed at the site based on the groundwater exceedances present at the site of chlorinated compounds. The area to be covered by the vapor maintenance plan is identified in the attached map (Exhibit D-1.1).

More specific information about this property can be found in the WDNR Southeast Regional Office located at 141 Barstow Ave NW, Waukesha, WI. And on the WDNR BRRTs database.

## Description of Contamination:

Soil and groundwater contamination by chlorinated compounds and lead is located at a depth of 2-4 feet beneath the building.

## Description of Vapor System to be maintained:

The vapor mitigation system is installed within the building and has a dual venting system and 2 fans extracting the sub-slab vapors from the building. The system includes a pipe extending through the concrete foundation (there is no basement) and is then connected to the pressure gauge. The pipe then goes through the exterior wall and is connected to a fan then the piping goes up to the highest spot on the roof.

The components of the two systems are outlined on the attached Exhibit D-1. 2.

The radon (vapor) system will prevent any potential VOC vapors from migrating into the building. Based on the current and future use of the property, the system should function as intended unless disturbed.

## Annual Inspection



The vapor mitigation systems as depicted in Exhibit D-1.2 will be inspected once a year, to verify the fans are working properly and a negative pressure is observed on the pressure gauge within the building. The warranty of the fan is estimated to be 5 years. The inspections will be performed by the property owner or owner's representative to evaluate damage due to increasing age and other factors.

A log of the inspections and any repairs will be maintained by the property owner, unless the final closure requires that the inspection logs be submitted to the WDNR, and is included in the Inspection Log. The log will include recommendations for necessary repairs. Once repairs are completed, they will be documented in the inspection log. A copy of the inspection log will be maintained at the property.

#### Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. The property owner, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

#### Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cover or Cap

The following activities are prohibited on the system as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources:

- 1) Removal of the existing system;

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

#### Contact Information:

Site Owner and Operator: Bob Rummel

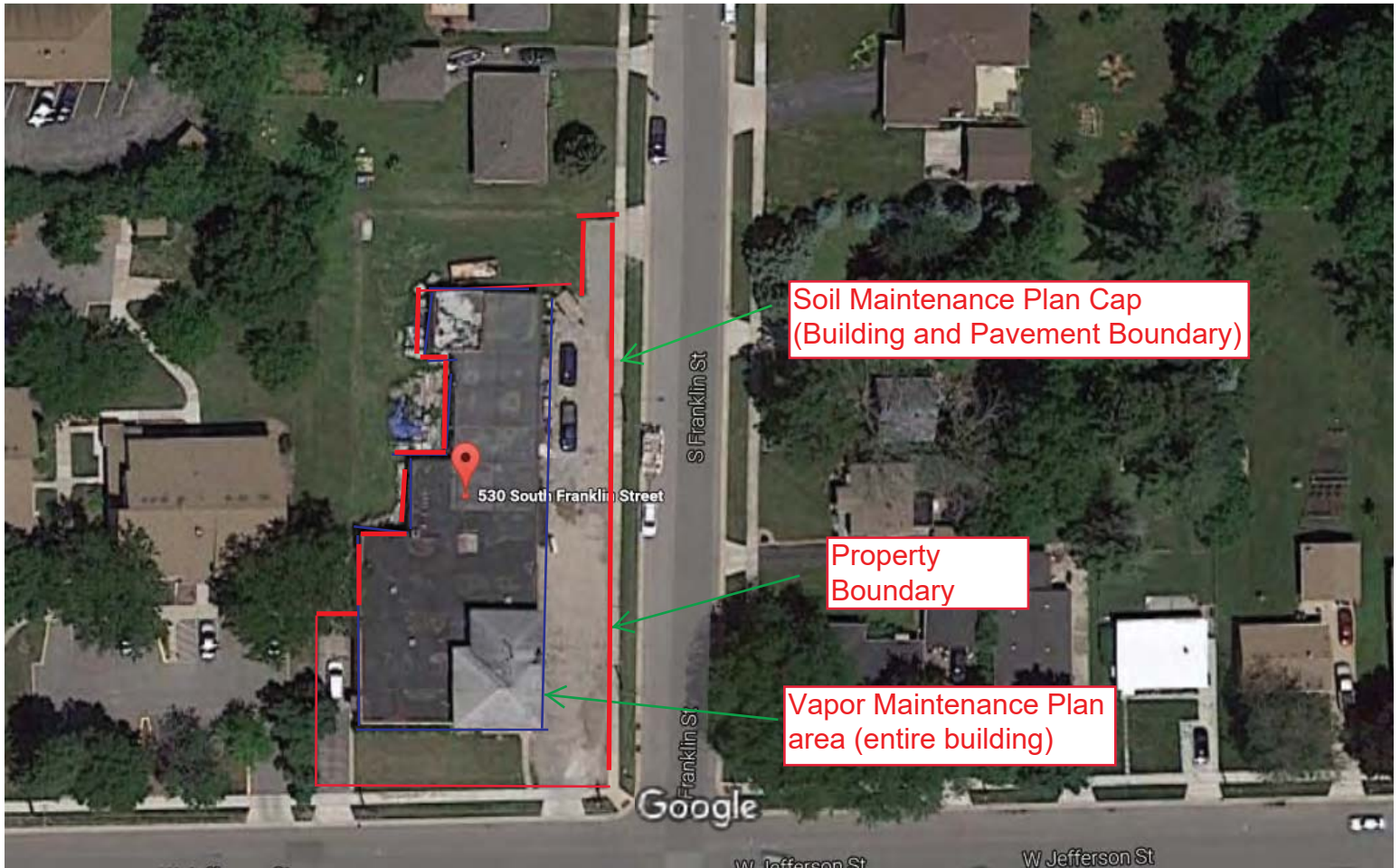
1802 Maybank Highway  
Charleston, South Carolina 29412

Consultant: LF Green Development, LLC  
5600 W. Brown Deer Road, Suite 120  
Milwaukee, WI 53223

WDNR: James C. Delwiche, Hydrogeologist  
Wisconsin Department of Natural Resources  
141 NW Barstow Street, Room 180,  
Waukesha, WI 53188

# D1.1 Vapor Maintenance Plan Map

## 530 S Franklin St

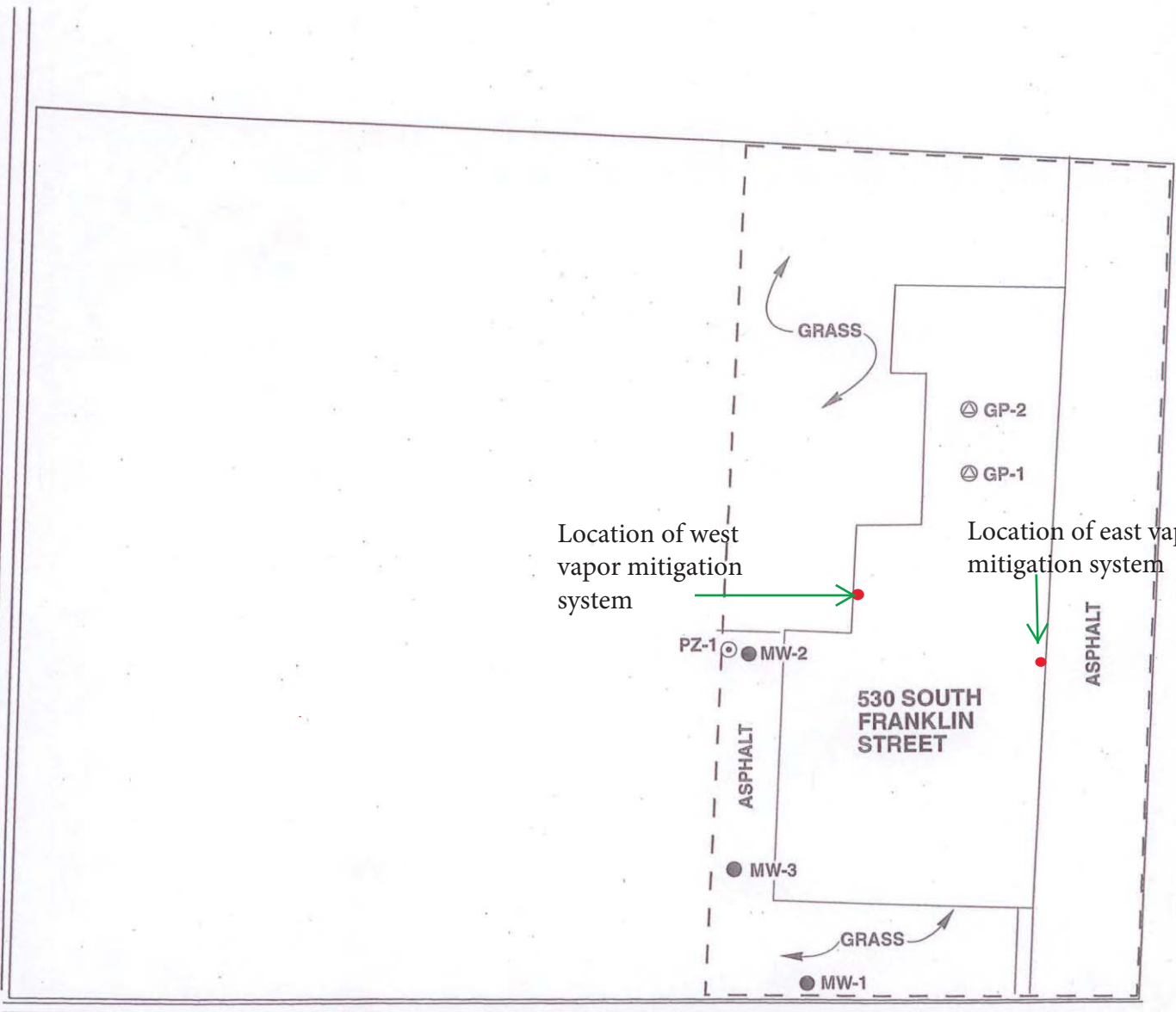


50 ft

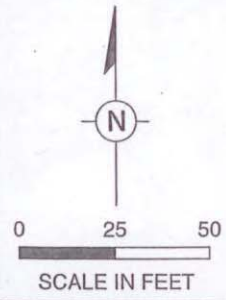


Created October 2016 by LF Green Development

# D-1.2 Vapor Systems Location Map



JEFFERSON STREET

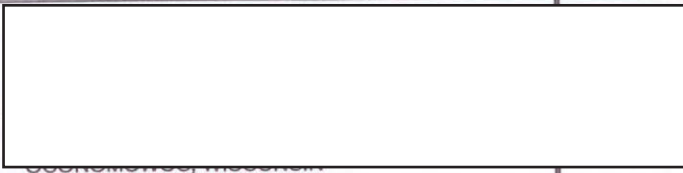


- LEGEND**
- MONITORING WELL LOCATION
  - ⊙ PIEZOMETER LOCATION
  - - - PROPERTY BOUNDARY
  - ⊕ GEOPROBE LOCATION

Created June 2016



original map created by  
**ARCADIS**







System Pan

Vapor system located on the east side of the building.



System Pressure  
Gauge

East vapor extraction system interior piping showing the piping going into the sub slab and venting outside of the building.



Vent  
Piping

System Can

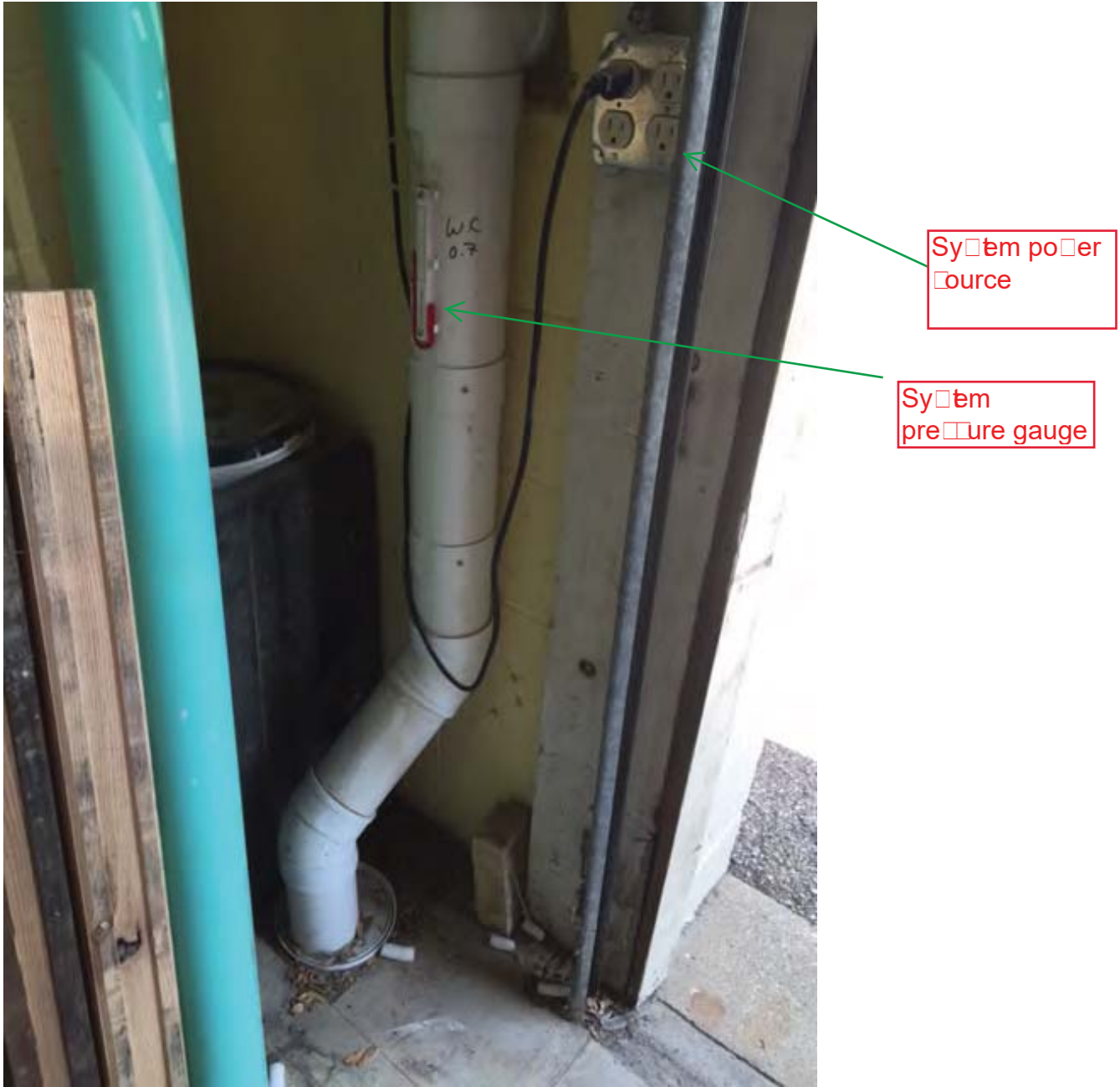
Vapor system located on the east side of the building showing the vent piping going up to the roof line of building.





Vent piping

Vapor system located on the west side of the building showing the vent piping going up to the roof line of building.



Vapor extraction system on the west side of the building. Interior piping showing the piping going into the sub slab and venting outside of the building.



Vapor system located on the west side of the building showing the fan and vent piping going up to the roof line of building.



## How Your System Works

### Always Protecting

Your S.W.A.T. Environmental Radon Mitigation System is designed to run continuously 24/7 to maintain a balance of negative pressure and suction beneath your home.

### Manometer

The pressure gauge on your radon mitigation pipe should be located inline with the piping and be located between the fan and the lowest suction point. This pressure gauge is designed to keep you alert to activity within the mitigation system piping. The pressure gauge uses red dye inside of a "U" shaped clear plastic tube acts on the same physics of a straw in your drink; when the fan is sucking or moving air, the pressure gauge should be higher on one side. If the fan ever stopped running the pressure gauge would "zero out" and be even on both sides.

**\*IF YOUR PRESSURE GAUGE EVER READS ZERO OR BOTH SIDES ARE EVEN, THE FOLLOWING SHOULD BE CHECKED:**

- 1) Check the on/off switch power plug for the Vapor Mitigation System. This is important because of the nature of system installations and designs, power supplies are almost never consistently located in the same locations at every house.
- 2) Go outside and check to see if there is a switch on the fan, if it is in the off position, turn it on.
- 3) Go around your home and check all of your GFCI outlets. There is a strong chance that a GFCI outlet has tripped in a location other than the power supply of the radon system.
- 4) Make sure that the plastic tube to the pressure gauge is plugged into the pipe. If the plastic tube is not fed into the pipe the pressure gauge will not have access to the interior of the tube. (This usually what happens when your gauge is zero and your fan seems to be running.)
- 5) If none of the previous methods causes your fan to turn back on, then please give our office a call and we will further assist you.

## Vapor Mitigation Piping

This component of the mitigation system is nearly maintenance free but there are a few commonly asked questions that you may be thinking of.

- 1) S.W.A.T. Environmental's mitigation systems do not have covers or bends at the tops of the discharge stack. This is because over the years we have found that the amount of force from the air flow coming from inside of the pipe is enough to keep 99% of debris and foreign objects out of the system.
- 2) You may notice that your piping is starting to fade a little. Do not worry this is a natural part of the PVC pipe and plastic. One good way to prevent this is to paint the radon piping. S.W.A.T. offers this service.
- 3) Condensation and moisture. There is a large difference between the temperature under your home and the air inside your home. If you see that there are water droplets on the piping in your basement or in your attic, please continue to monitor this closely. Excessive moisture can do damage to carpet and drywall and should this moisture get excessive, turn your system off and call the S.W.A.T. service department.

### Sump Cover

Here at S.W.A.T. Environmental, we see many types of homes and about 50% of all homes that we install radon mitigation systems in, have sump pumps. Sump pumps are very important to every home, as they help protect it from another threat, water. There are a couple of things to remember about the relationship between your sump pit and your radon mitigation system.

- 1) Your mitigation system does not affect the performance of your sump pump. It is a common concern among customers that the amount of pressure beneath the sump cover can manipulate the functionality of the sump pump. This is not true. Remember that your mitigation fan is strong, but it is not that strong, so if you test your sump pump and it does not work; please remember to call a plumber for assistance.
- 2) The sump cover is clear so you can see through it and it is removable in case you ever have to change the sump pump. The caulking on the seal is sturdy but easy to remove with a putty knife. The material is a flexible thick plastic called Lexan.
- 3) If you have a pedestal sump pump, we highly recommend switching to a Submersible Sump Pump. In order to adequately seal your sump pump, a pedestal sump pump just does not compare to a submersible sump pump. Pedestal sump pumps also pose dangers of having their float get stuck on the clear cover over the sump pump.

4) If you see your sump crock filling up with water please test your sump pump and try to pump the water out of the crock. If the sump does not turn on, please call your plumber.

5) There are virtually no parts of the system that need to be maintained by you but the only part that may need some up keep is your sump cover. Sometimes the cover may shift or water can eat away at the caulking on the seal. Since it is against EPA Radon Mitigation Standards to use a permanent seal on the cover, you will be required to replace caulk should this happen.

### The System Fan

Your mitigation fan is meant to run continuously and should if avoidable, never to be turned off.

Through S.W.A.T. Environmental you have an extended 5 year manufacturer's warranty on the system mitigation fan.

### DISCLAIMER

The content of this User's Manual is based upon ASTM E2121-13 and industry best practices. Please note that while every effort was made to provide accurate information in a concise and understandable format, variations in State or Local regulations or ordinances may impose additional design, operation, measurement, or inspection requirements which lie outside of the general scope of this content.

If you have questions regarding the specific regulations governing mitigation in your State, please contact your State Radon Program. Contact information for State Radon Programs can be found on the EPA Website at: <http://www.epa.gov/radon/whereyoulive.html>





## **C.5**

### **Decommissioning of Remedial Systems**

No remedial system was installed at the site.



**C.6**

**Photos**

No photos were taken at the site.

# SOIL MAINTENANCE PLAN

September 21, 2015

Property Located at:  
Parcel # OCOC 0560-254  
530 Franklin Street  
Former Quick Cleaners  
Oconomowoc, WI 53235

WDNR BRRTS **-02-68-280310**

## Introduction

This document is the Maintenance Plan for a pavement/building cover at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the existing pavement and building located over the contaminated groundwater plume and impacted soil on the site. The groundwater and soil are contaminated with chlorinated compounds. The location of the building and paved surfaces to be maintained in accordance with this Maintenance Plan is identified in the attached map (Exhibit D.1).

More specific information about this property can be found in the WDNR Southeast Regional Office located at 141 Barstow Ave NW, Waukesha, WI. And on the WDNR BRRTs database.

## Description of Contamination:

Soil and groundwater contamination by chlorinated compounds is located at a depth of 2-4 feet at location identified in the attached Exhibit D.1.

## Description of Pavement/Building Cover to be maintained:

The pavement located on the eastside of the building and parts of the western and south sides of the building and the building itself provides a barrier on the central part of the property.

The building footprint and pavement will serve as the barrier cap to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch. NR 140, Wisconsin Administrative Code. Based on the current and future use of the property, the barrier should function as intended unless disturbed.

## Annual Inspection



The areas identified in this maintenance plan and in the attached Exhibit D1 overlying the contaminated soil will be inspected once a year. The inspection will be performed by the property owner or owner's representative.

A log of the inspections and any repairs will be maintained by the property owner unless instructed to submit the inspection logs to the WDNR in the final closure documents.

The log will include recommendations for necessary repair of any areas where underlying soils are exposed. Once repairs are completed, they will be documented in the inspection log.

### Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling operations or they can include larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment ("PPE"). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored and disposed of by the owner in accordance with applicable local, state and federal law.

In the event the paved surfaces overlying the contaminated soil are removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the WDNR or its successor.

The property owner, in order to maintain the integrity of the paved surfaces will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

### Prohibition of Activities and Notification of WDNR Prior to Actions Affecting a Cover or Cap

The following activities are prohibited on any portion of the property where the barrier cap and building is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources:

- 1) removal of the existing barrier;
- 2) replacement with another barrier;
- 3) excavating or grading of the land surface;
- 4) filling on capped or paved areas;
- 5) plowing for agricultural cultivation;
- 6) construction or placement of a building or other structure.

## Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

### Contact Information

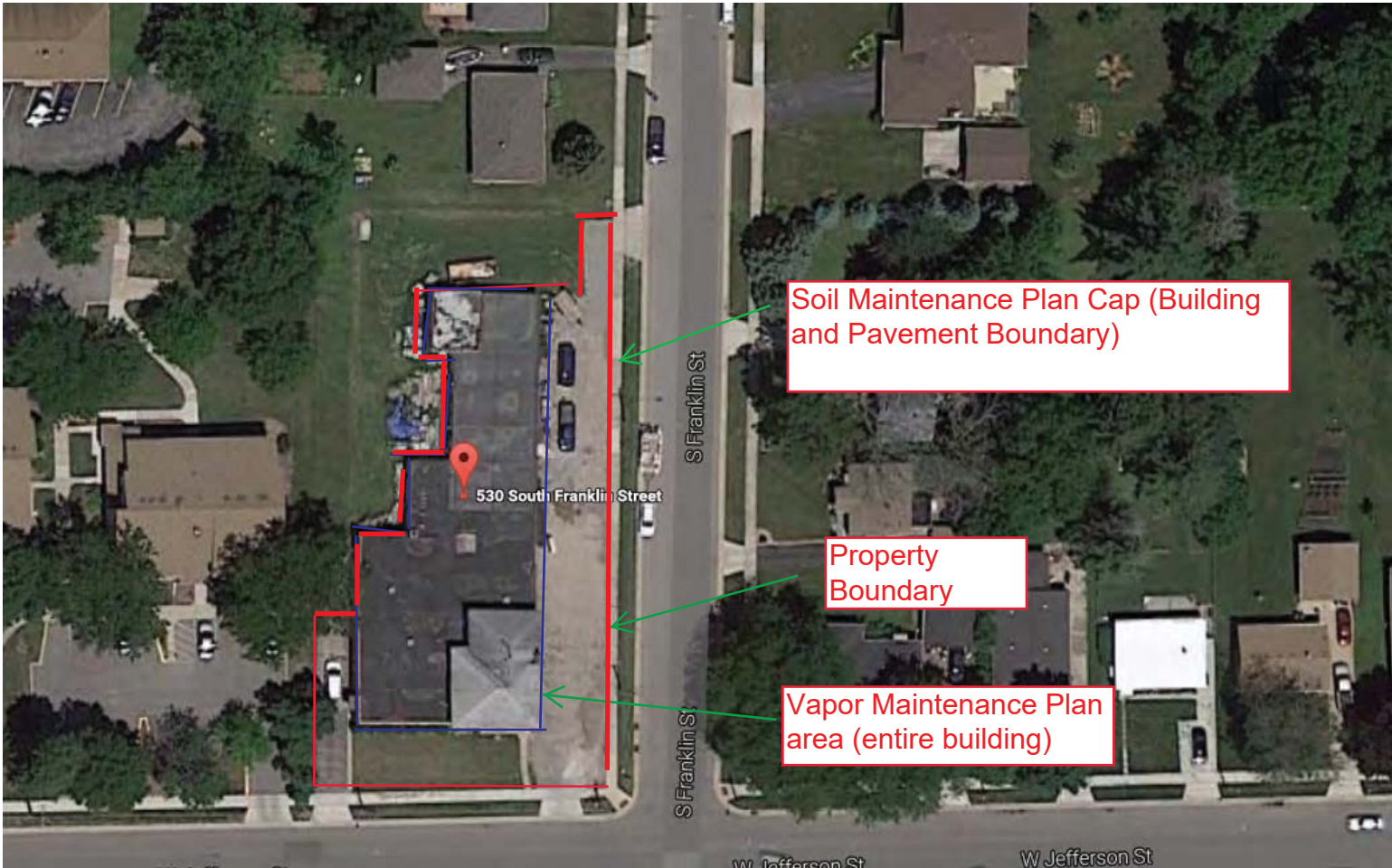
Site Owner and Operator: Bob Rummel  
1802 Maybank Highway  
Charleston, South Carolina 29412

Consultant: LF Green Development, LLC  
5600 W. Brown Deer Road, Suite 120  
Milwaukee, WI 53223  
414-254-4813

WDNR: James C. Delwiche, Hydrogeologist  
Wisconsin Department of Natural Resources  
141 NW Barstow Street, Room 180,  
Waukesha, WI 53188

D1 Soil Maintenance Plan Map

530 S Franklin St



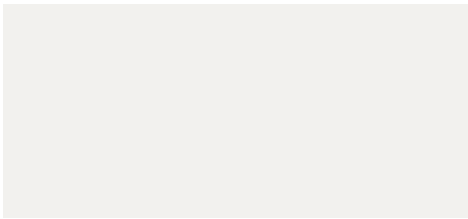
50 ft



Created October 2016 by LF Green Development

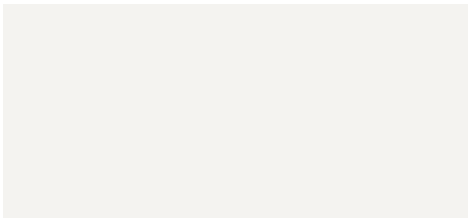


530 Franklin Street  
View of pavement on west side of building facing north

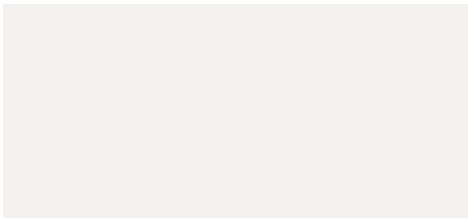


530 Franklin Street  
East side of building showing pavement. Facing South

Subject Building



530 Franklin - North boundary of building. Facing West





**Directions:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

|   |                               |
|---|-------------------------------|
| Activity (Site) Name<br><br>Former Quick Cleaners | BRRTS No.<br><br>02-68-280310 |
|---|-------------------------------|

Inspections are required to be conducted (see closure approval letter):

annually  
 semi-annually  
 other – specify \_\_\_\_\_

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

| Inspection Date | Inspector Name | Item   | Describe the condition of the item that is being inspected | Recommendations for repair or maintenance | Previous recommendations implemented?           | Photographs taken and attached?                 |
|-----------------|----------------|--|--|---|---|---|
|                 |                | <input type="checkbox"/> monitoring well<br><input checked="" type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other: |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |

02-68-280310

Former Quick Cleaners

BRRTS No.

Activity (Site) Name

# Continuing Obligations Inspection and Maintenance Log

Form 4400-305 (2/14)

Page 2 of 2

{Click to Add/Edit Image}

Date added:

Title:

{Click to Add/Edit Image}

Date added:

Title:

# VAPOR MAINTENANCE PLAN

September 21, 2015

Property Located at:  
530 Franklin Street

PParcel Number OCOC 0560-254  
Former Quick Cleaners  
Oconomowoc, WI 53235  
WDNR BRRTS -**02-68-280310**

## Introduction

This document is the Maintenance Plan for a vapor mitigation system at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the active system installed at the site based on the groundwater exceedances present at the site of chlorinated compounds. The area to be covered by the vapor maintenance plan is identified in the attached map (Exhibit D-1.1).

More specific information about this property can be found in the WDNR Southeast Regional Office located at 141 Barstow Ave NW, Waukesha, WI. And on the WDNR BRRTs database.

## Description of Contamination:

Soil and groundwater contamination by chlorinated compounds and lead is located at a depth of 2-4 feet beneath the building.

## Description of Vapor System to be maintained:

The vapor mitigation system is installed within the building and has a dual venting system and 2 fans extracting the sub-slab vapors from the building. The system includes a pipe extending through the concrete foundation (there is no basement) and is then connected to the pressure gauge. The pipe then goes through the exterior wall and is connected to a fan then the piping goes up to the highest spot on the roof.

The components of the two systems are outlined on the attached Exhibit D-1. 2.

The radon (vapor) system will prevent any potential VOC vapors from migrating into the building. Based on the current and future use of the property, the system should function as intended unless disturbed.

## Annual Inspection



The vapor mitigation systems as depicted in Exhibit D-1.2 will be inspected once a year, to verify the fans are working properly and a negative pressure is observed on the pressure gauge within the building. The warranty of the fan is estimated to be 5 years. The inspections will be performed by the property owner or owner's representative to evaluate damage due to increasing age and other factors.

A log of the inspections and any repairs will be maintained by the property owner, unless the final closure requires that the inspection logs be submitted to the WDNR, and is included in the Inspection Log. The log will include recommendations for necessary repairs. Once repairs are completed, they will be documented in the inspection log. A copy of the inspection log will be maintained at the property.

#### Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. The property owner, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

#### Prohibition of Activities and Notification of DNR Prior to Actions Affecting a Cover or Cap

The following activities are prohibited on the system as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources:

1) Removal of the existing system;

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

#### Contact Information:

Site Owner and Operator: Bob Rummel

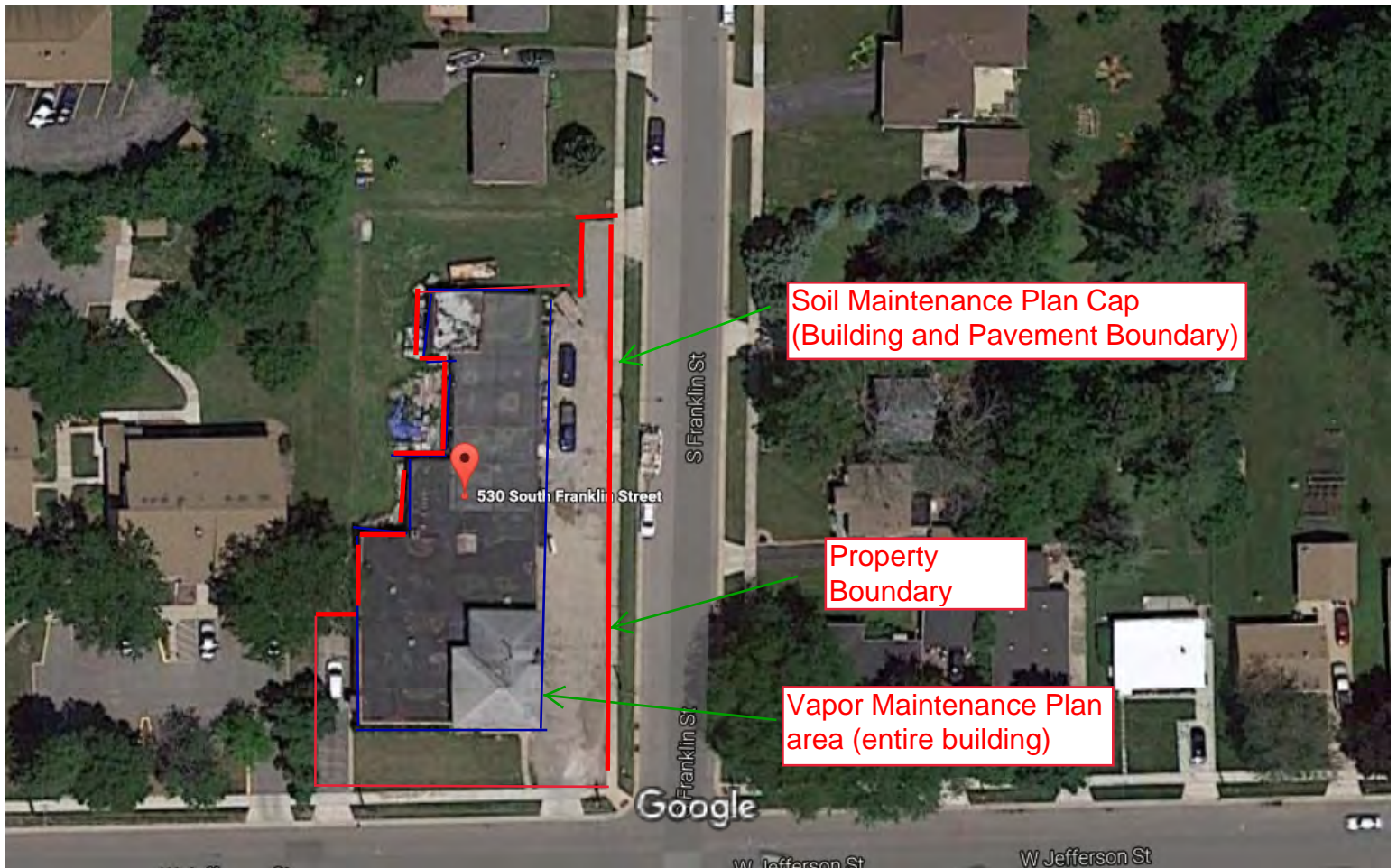
1802 Maybank Highway  
Charleston, South Carolina 29412

Consultant: LF Green Development, LLC  
5600 W. Brown Deer Road, Suite 120  
Milwaukee, WI 53223

WDNR: James C. Delwiche, Hydrogeologist  
Wisconsin Department of Natural Resources  
141 NW Barstow Street, Room 180,  
Waukesha, WI 53188

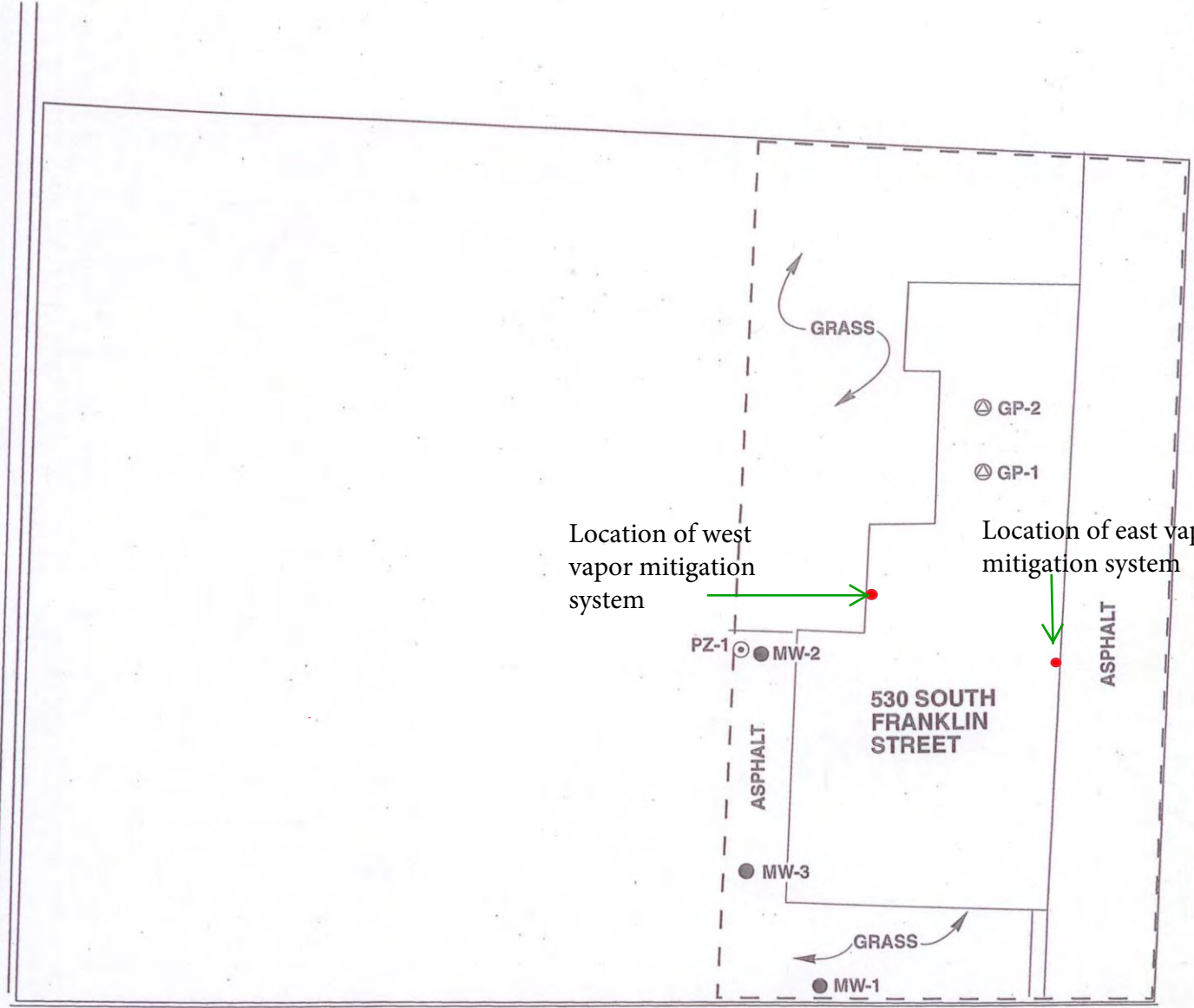
# D1.1 Vapor Maintenance Plan Map

## 530 S Franklin St



Created October 2016 by LF Green Development

# D-1.2 Vapor Systems Location Map



JEFFERSON STREET



0 25 50

SCALE IN FEET

### LEGEND

- MONITORING WELL LOCATION
- ⊙ PIEZOMETER LOCATION
- - - PROPERTY BOUNDARY
- ⊕ GEOPROBE LOCATION

Created June 2016



original map created by







System Fan

Vapor system located on the east side of the building.



East vapor extraction system interior piping showing the piping going into the sub slab and venting outside of the building.



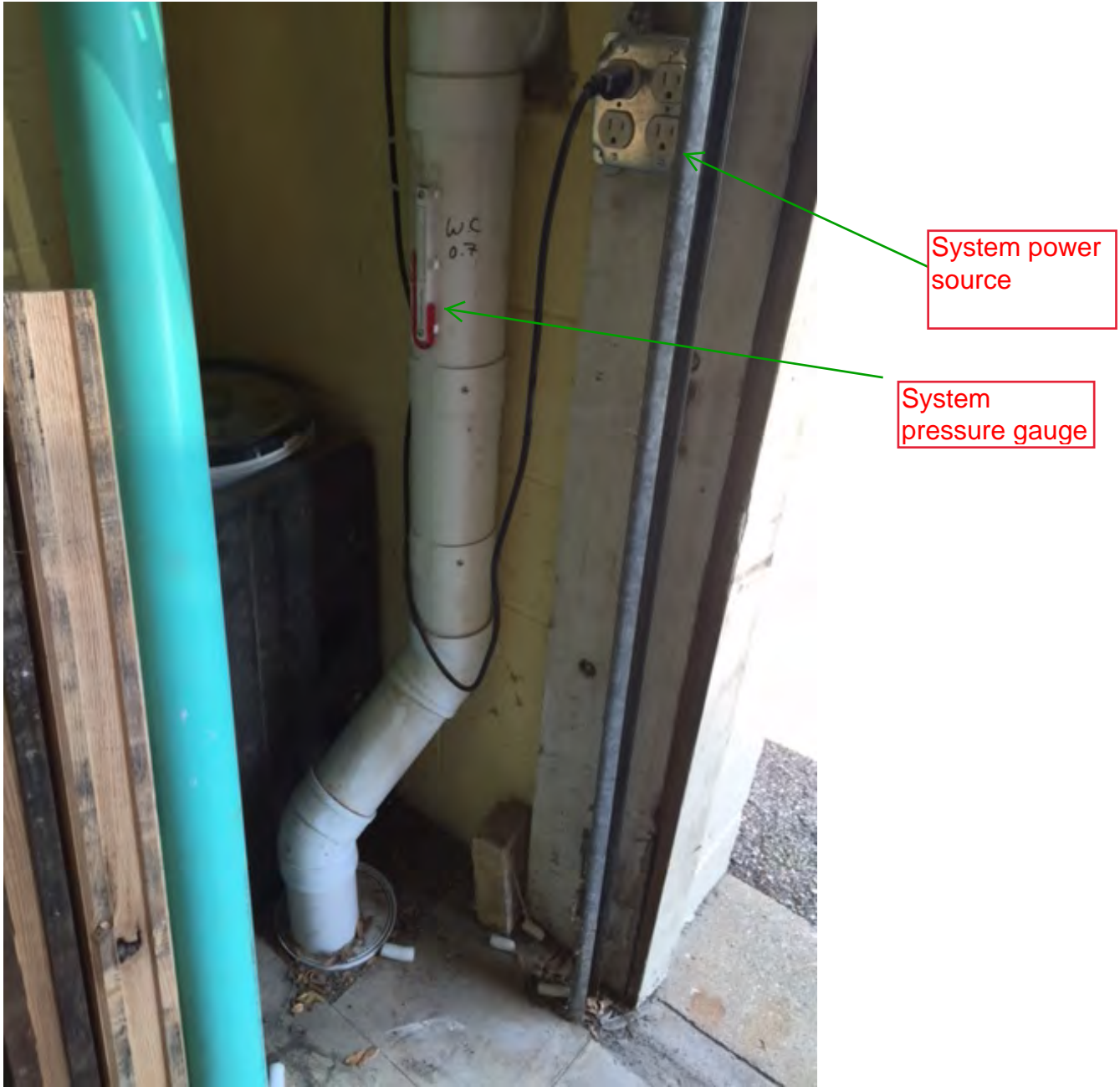
Vapor system located on the east side of the building showing the vent piping going up to the roof line of building.





Vent piping

Vapor system located on the west side of the building showing the vent piping going up to the roof line of building.



System power source

System pressure gauge

Vapor extraction system on the west side of the building. Interior piping showing the piping going into the sub slab and venting outside of the building.





Vapor system located on the west side of the building showing the fan and vent piping going up to the roof line of building.



## How Your System Works

### Always Protecting

Your S.W.A.T. Environmental Radon Mitigation System is designed to run continuously 24/7 to maintain a balance of negative pressure and suction beneath your home.

### Manometer

The pressure gauge on your radon mitigation pipe should be located inline with the piping and be located between the fan and the lowest suction point. This pressure gauge is designed to keep you alert to activity within the mitigation system piping. The pressure gauge uses red dye inside of a "U" shaped clear plastic tube acts on the same physics of a straw in your drink; when the fan is sucking or moving air, the pressure gauge should be higher on one side. If the fan ever stopped running the pressure gauge would "zero out" and be even on both sides.

**\*IF YOUR PRESSURE GAUGE EVER READS ZERO OR BOTH SIDES ARE EVEN, THE FOLLOWING SHOULD BE CHECKED:**

- 1) Check the on/off switch power plug for the Vapor Mitigation System. This is important because of the nature of system installations and designs, power supplies are almost never consistently located in the same locations at every house.
- 2) Go outside and check to see if there is a switch on the fan, if it is in the off position, turn it on.
- 3) Go around your home and check all of your GFCI outlets. There is a strong chance that a GFCI outlet has tripped in a location other than the power supply of the radon system.
- 4) Make sure that the plastic tube to the pressure gauge is plugged into the pipe. If the plastic tube is not fed into the pipe the pressure gauge will not have access to the interior of the tube. (This usually what happens when your gauge is zero and your fan seems to be running.)
- 5) If none of the previous methods causes your fan to turn back on, then please give our office a call and we will further assist you.

## Vapor Mitigation Piping

This component of the mitigation system is nearly maintenance free but there are a few commonly asked questions that you may be thinking of.

- 1) S.W.A.T. Environmental's mitigation systems do not have covers or bends at the tops of the discharge stack. This is because over the years we have found that the amount of force from the air flow coming from inside of the pipe is enough to keep 99% of debris and foreign objects out of the system.
- 2) You may notice that your piping is starting to fade a little. Do not worry this is a natural part of the PVC pipe and plastic. One good way to prevent this is to paint the radon piping. S.W.A.T. offers this service.
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### Sump Cover

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- 1) Your mitigation system does not affect the performance of your sump pump. It is a common concern among customers that the amount of pressure beneath the sump cover can manipulate the functionality of the sump pump. This is not true. Remember that your mitigation fan is strong, but it is not that strong, so if you test your sump pump and it does not work; please remember to call a plumber for assistance.
- 2) The sump cover is clear so you can see through it and it is removable in case you ever have to change the sump pump. The caulking on the seal is sturdy but easy to remove with a putty knife. The material is a flexible thick plastic called Lexan.
- 3) If you have a pedestal sump pump, we highly recommend switching to a Submersible Sump Pump. In order to adequately seal your sump pump, a pedestal sump pump just does not compare to a submersible sump pump. Pedestal sump pumps also pose dangers of having their float get stuck on the clear cover over the sump pump.

4) If you see your sump crock filling up with water please test your sump pump and try to pump the water out of the crock. If the sump does not turn on, please call your plumber.

5) There are virtually no parts of the system that need to be maintained by you but the only part that may need some up keep is your sump cover. Sometimes the cover may shift or water can eat away at the caulking on the seal. Since it is against EPA Radon Mitigation Standards to use a permanent seal on the cover, you will be required to replace caulk should this happen.

### The System Fan

Your mitigation fan is meant to run continuously and should if avoidable, never to be turned off.

Through S.W.A.T. Environmental you have an extended 5 year manufacturer's warranty on the system mitigation fan.







### DISCLAIMER

The content of this User's Manual is based upon ASTM E2121-13 and industry best practices. Please note that while every effort was made to provide accurate information in a concise and understandable format, variations in State or Local regulations or ordinances may impose additional design, operation, measurement, or inspection requirements which lie outside of the general scope of this content.

If you have questions regarding the specific regulations governing mitigation in your State, please contact your State Radon Program. Contact information for State Radon Programs can be found on the EPA Website at: <http://www.epa.gov/radon/whereyoulive.html>



SITE LOCATION: 530 FRANKLIN STREET  
 OCONOMOWOC, WI  
 BRRTS: 02-68-280310

| SYSTEM COMPONENT  |   | WHAT DOES IT DO?   | WHAT DO I CHECK?                                     | WHAT SHOULD I SEE?  | WHAT TO FIX?   | ANNUAL INSEPECTION |                 |      |                 |      |                 |
|---|---|--|--|---|--|--------------------|-----------------|------|-----------------|------|-----------------|
| NAME  | PHOTO   |  |  |   |  | DATE               | NOTES           | DATE | NOTES           | DATE | NOTES           |
| Fan - East side of building   |    | Fan creates a vacuum and lowers pressure below foundation.<br><br>The fan also removes soil gases from below foundation for discharge to atmosphere.   | Fan Operation<br><br>Fan Location<br><br>Motor Noise | Fan is on<br><br>Fan mounted outside & secure<br><br>Fan motor is quiet (loud motor may indicate problem)   | Fan may need to be replaced every 15 to 20 years.<br><br>Replacement fan to have similar specifications as original with respect to flow and vacuum.<br><br><b>ORIGINAL = RP 265 M/N 23033-2</b>   |                    |                 |      |                 |      |                 |
| Fan - west side of the building   |    | Fan creates a vacuum and lowers pressure below foundation.<br><br>The fan also removes soil gases from below foundation for discharge to atmosphere.   | Fan Operation<br><br>Fan Location<br><br>Motor Noise | Fan is on<br><br>Fan mounted outside & secure<br><br>Fan motor is quiet (loud motor may indicate problem)   | Fan may need to be replaced every 15 to 20 years.<br><br>Replacement fan to have similar specifications as original with respect to flow and vacuum.<br><br><b>ORIGINAL = RP 265 M/N 23033-2</b>   |                    |                 |      |                 |      |                 |
| Suction Drop Point w/Vent Pipe (two systems in building)  |    | <b>Suction Pit:</b> Soil gases are collected in a pit below the foundation, and tight seal prevents soil gas from getting inside home.<br><br><b>Vent Pipe:</b> Pipe conveys the vacuum from the fan, and collects soil gases for discharge to the atmosphere. | Suction Pit Seal<br><br>Vent Pipe Condition          | Seal is air tight around pipe penetration.<br><br>Vent pipe is connected to fan, has not cracked  | Suction pit seal or vent pipe may need to be sealed or replaced if cracks or leaks appear.<br><br>See <b>NOTE</b> below regarding pipe alternations. Have professional test pressures if pipes are modified  |                    |                 |      |                 |      |                 |
| Manometer or Differential Pressure Gauge (one on each vent pipe)                                  |   | Measures differential pressure between vacuum side of vent pipe and indoor space.<br><br>This measurement confrims there is a vacuum being pulled by the fan.  | Liquid Level on Manometer                            | Liquid level in manometer is between 0.1 and 0.03 on the Right-hand side.   | A change in liquid level indicates a change in the vacuum below foundation. This could be caused by failure of fan, blockage of vent pipe, change in water level below building, or other conditions.<br><br>Troubleshoot or hire professional to identify cause and repair if needed. |                    | MANOMETER LEVEL |      | MANOMETER LEVEL |      | MANOMETER LEVEL |
| Outdoor Vent Pipe (one on the west side of the building and one on the east side of the building) |  | Pipe carries soil gas outside and vents them to the atmosphere.  | Vent Pipe Condition<br><br>Vent Pipe Location        | The vent pipe extends above the roof line. The vent pipes should be inspected to verify that they are free of debris, such as snow, ice and leaves. | Vent pipe may require replacement, or cleaning to remove ice or debris.<br><br>See <b>NOTE</b> below regarding pipe alternations. Have professional test pressures if pipes are modified.  |                    |                 |      |                 |      |                 |
| Foundation Floor  |  | Foundation is a barrier that minimizes soil gas entry into building, and helps fan to work efficiently.  | Foundation Condition<br><br>Foundation Footprint     |   | Seal cracks or other penetrations as you would to prevent water from entering.<br><br>If building floor plan has changed, contact a professional contractor and/or the DNR to evaluate if modifications to the vapor mitigation system are necessary.                                  |                    |                 |      |                 |      |                 |

**Directions:** In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

|  |                                  |
|--|----------------------------------|
| Activity (Site) Name<br><b>Former Quick Cleaners</b> | BRRTS No.<br><b>02-68-280310</b> |
|--|----------------------------------|

Inspections are required to be conducted (see closure approval letter):

annually  
 semi-annually  
 other – specify \_\_\_\_\_

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

| Inspection Date | Inspector Name | Item   | Describe the condition of the item that is being inspected | Recommendations for repair or maintenance | Previous recommendations implemented?           | Photographs taken and attached?                 |
|-----------------|----------------|--|--|---|---|---|
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input checked="" type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other: |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
|                 |                | <input type="checkbox"/> monitoring well<br><input type="checkbox"/> cover/barrier<br><input type="checkbox"/> vapor mitigation system<br><input type="checkbox"/> other:            |  |   | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |

{Click to Add/Edit Image}

Date added:

Title:

{Click to Add/Edit Image}

Date added:

Title:





## **ATTACHMENT E**

### **Monitoring Well Information**

Monitoring well located on the property are located and will be abandoned after site closure.



**ATTACHMENT F**

**Notifications to Owners of Impacted**

**Properties**

This section does not apply.

STATE BAR OF WISCONSIN FORM 1 - 1982  
WARRANTY DEED

DOCUMENT NO.

This Deed, made between HARRY W. RUMMEL,  
a married person

and ROBERT H. RUMMEL, a single person  
Grantor,

Witnesseth, That the said Grantor, for a valuable consideration \_\_\_\_\_, Grantee,

conveys to Grantee the following described real estate in Waukesha  
County, State of Wisconsin:

THIS SPACE RESERVED FOR RECORDING DATA

NAME AND RETURN ADDRESS

Mr. Robert H. Rummel  
c/o Kiawah Island R.E. Co.  
1 Sanctuary Beach Dr.  
John's Island, S.C. 29455

OCOC 0560 254  
PARCEL IDENTIFICATION NUMBER

SEE ATTACHED LEGAL DESCRIPTION

This is not homestead property.  
(~~is~~) (is not)

Together with all and singular the hereditaments and appurtenances thereunto belonging;

And Grantor

warrants that the title is good, indefeasible in fee simple and free and clear of encumbrances except easements and  
restrictions of record and municipal zoning ordinances.

and will warrant and defend the same.

Dated this 27th day of May, 2005, 19

*Harry W. Rummel*  
Harry W. Rummel

\_\_\_\_\_  
(SEAL)

\_\_\_\_\_  
(SEAL)

\* \_\_\_\_\_

\* \_\_\_\_\_  
(SEAL)

\_\_\_\_\_  
(SEAL)

\_\_\_\_\_  
(SEAL)

\* \_\_\_\_\_

\* \_\_\_\_\_

AUTHENTICATION

Signature(s) \_\_\_\_\_

authenticated this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not, \_\_\_\_\_  
authorized by §706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY \_\_\_\_\_

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

State of Wisconsin,

WAUKESHA County, } ss.

Personally came before me this 27th day of  
May, 2005, ~~19~~, the above named  
Harry W. Rummel

to me known to be the person \_\_\_\_\_ who executed the foregoing  
instrument and acknowledge the same.

*Sandra L. Hinrichs*

\* Sandra L. Hinrichs  
Notary Public, Waukesha County, Wis.

My commission is ~~permanent~~. (If not, state expiration date:  
expires 8/19/07, ~~19~~ )

\* Names of persons signing in any capacity should be typed or printed below their signatures.



**EXHIBIT A**

LOT 1 OF CERTIFIED SURVEY MAP NO. 3351, RECORDED JULY 27, 1978, IN VOLUME 25 OF CERTIFIED SURVEY MAPS, ON PAGE 193, AS DOCUMENT NO. 1058465; BEING A PART OF LOT 46 ON WORTHINGTON'S 2<sup>ND</sup> ADDITION TO THE CITY OF OCONOMOWOC, WAUKESHA COUNTY, WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS:

THE ABOVE PREMISES WAS FORMERLY DESCRIBED AS FOLLOWS:

ALL THAT PART OF LOT 46 IN WORTHINGTON'S 2<sup>ND</sup> ADDITION TO THE CITY OF OCONOMOWOC, WAUKESHA COUNTY, WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF LOT 46; THENCE NORTH 89° 39' 00" EAST, ON THE SOUTH LINE OF SAID LOT, 201.94 FEET TO THE PLACE OF BEGINNING; THENCE CONTINUING NORTH 89° 39' EAST, 127.00 FEET TO THE WEST LINE OF FRANKLIN STREET; THENCE NORTH 1° 55' EAST ON SAID LINE 249.93 FEET; THENCE NORTH 87° 55' WEST, 126.90 FEET; THENCE SOUTH 1° 55' WEST, 255.32 FEET TO THE PLACE OF BEGINNING.

# PLAT OF SURVEY

BEING ALL OF LOT 1 OF C.S.M. NO. 3351, LOCATED IN THE NE 1/4 OF SECTION 5, T.7N., R.17E., CITY OF OCONOMOWOC, WAUKESHA COUNTY, WI.

**SURVEYOR**

MARK A. POWERS, RLS 1701  
LAKE COUNTRY ENGINEERING, INC.  
W359 N5920 BROWN ST., SUITE 102  
OCONOMOWOC, WI. 53066  
(262)589-9331

**SURVEY FOR**

ROBERT RUMMEL  
530 FRANKLIN STREET  
OCONOMOWOC, WI. 53066

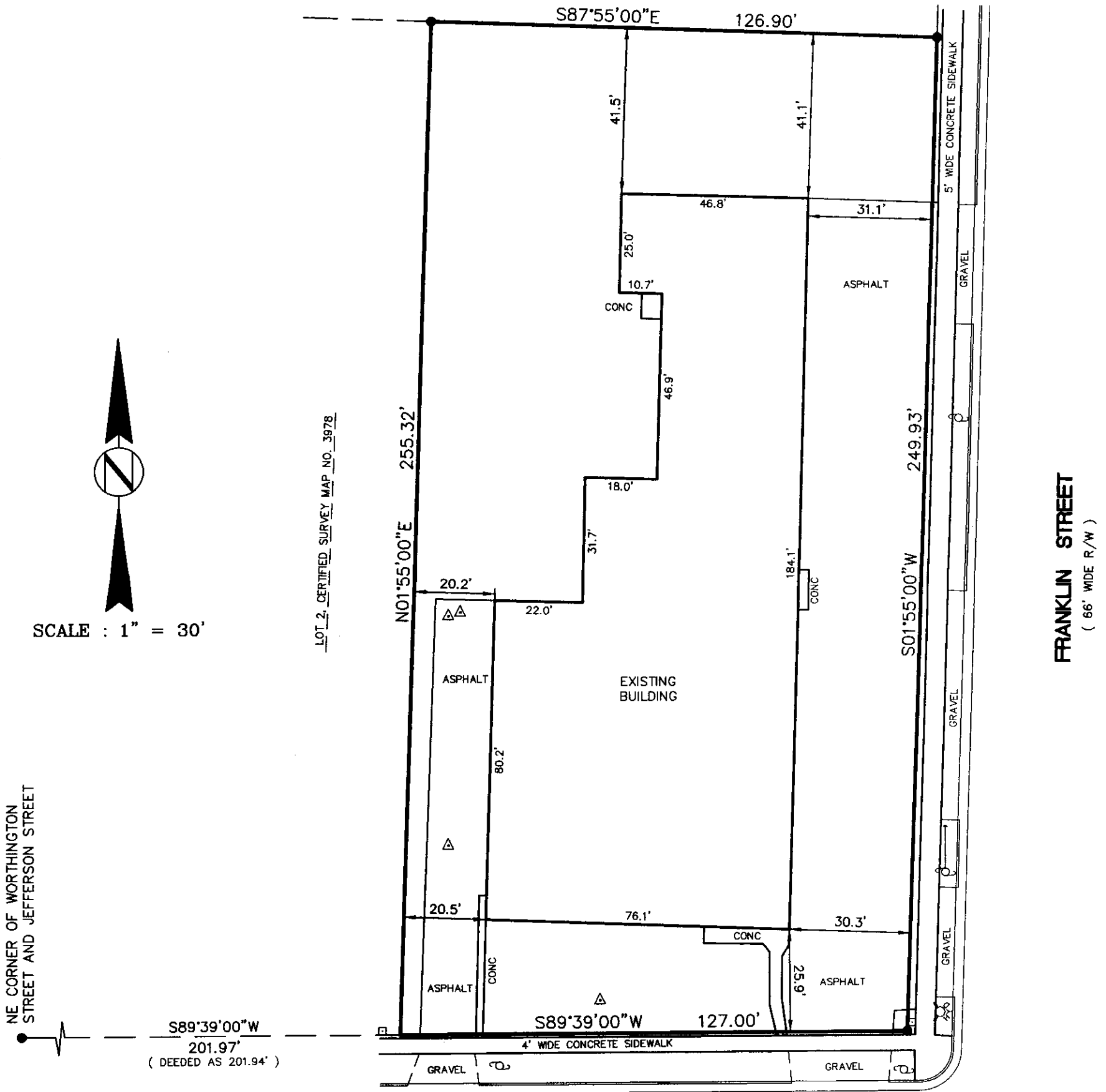
**LEGEND**

- - 1" DIA. IRON PIPE FOUND
- ⊕ - UTILITY POLE
- - UTILITY BOX
- △ - MONITORING WELL



WCP50062527

PART OF LOT 45, WORTHINGTON'S 2nd ADDITION



NE CORNER OF WORTHINGTON STREET AND JEFFERSON STREET

LOT 2, CERTIFIED SURVEY MAP NO. 3978

FRANKLIN STREET  
( 66' WIDE R/W )

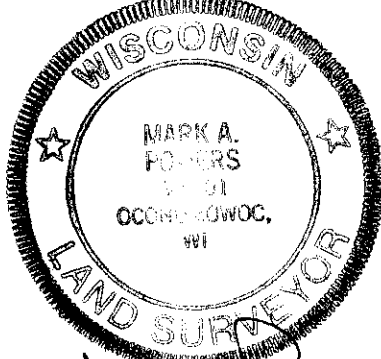
JEFFERSON STREET  
( 66' WIDE R/W )

- GENERAL NOTES :
- 1 ) TOTAL AREA OF LANDS SURVEYED = 32,058 SQ. FT.
  - 2 ) THE MISSING LOT CORNER IRON WAS NOT RESET PER THE CLIENT'S REQUEST. SIGNED WAIVER ON FILE PER AE 7.01(2) OF ADMINISTRATIVE CODE.

**SURVEYOR'S CERTIFICATE:**

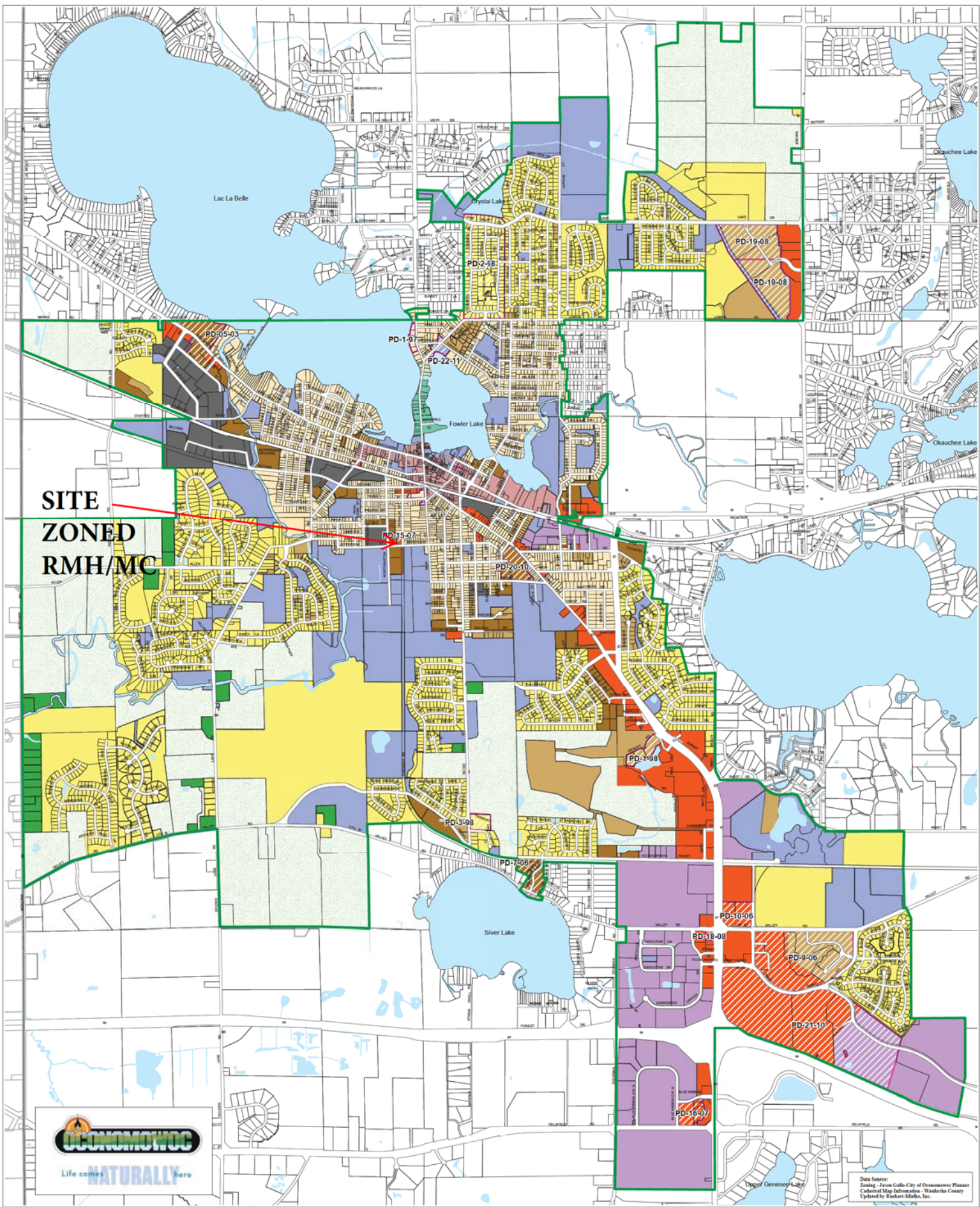
I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THAT THE ABOVE MAP IS A TRUE REPRESENTATION THEREOF AND SHOWS THE SIZE AND LOCATION OF THE PROPERTY, ITS EXTERIOR BOUNDARIES, THE LOCATION OF ALL VISIBLE STRUCTURES AND DIMENSIONS OF ALL PRINCIPAL BUILDINGS THEREON, BOUNDARY FENCES, APPARENT EASEMENTS, ROADWAYS, AND VISIBLE ENCROACHMENTS, IF ANY.

THIS SURVEY IS MADE FOR THE USE OF THE PRESENT OWNERS OF THE PROPERTY, AND ALSO THOSE WHO PURCHASE, MORTGAGE, OR GUARANTEE THE TITLE THERETO WITHIN ONE (1) YEAR FROM DATE HEREOF.



*Mark A. Powers*  
July 8, 2005





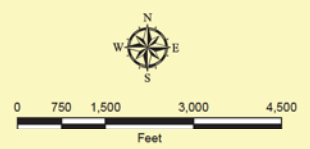
**SITE  
ZONED  
RMH/MC**



Data Source:  
Zoning - Jason Gallo City of Oconomowoc Planner  
Cadastral Map Information - Wisniska County  
Updated by Rubert-Milika, Inc.

**City of Oconomowoc  
Zoning July 22, 2014**

| Legend |                                    |  |                                  |
|--------|------------------------------------|--|----------------------------------|
|        | Zoning Overlays                    |  | IRS - Isthmus Residential Single |
|        | SR - Suburban Residential          |  | BP - Business Park               |
|        | TR - Traditional Residential       |  | I - Industrial                   |
|        | RML - Multi-Unit (Low) Residential |  | RR - Rural Residential           |
|        | RMH Multi-Unit (High) Residential  |  | GC - General Commercial          |
|        |                                    |  | IP - Institutional Public        |
|        |                                    |  | UR - Urban Reserve               |
|        |                                    |  | MC - Mixed-Use Commercial        |



## SUBCHAPTER 17-1: ESTABLISHMENT OF ZONING DISTRICTS

### **Section 17.101 Purpose**

The area located within the corporate limits of the City, being the jurisdiction of this Chapter, is hereby divided into zoning districts of such number and community character as are necessary to achieve compatibility of land uses within each district, to implement the officially adopted City Comprehensive Plan, and to achieve the purposes of this Chapter.

### **Section 17.102 Zoning Districts Established**

In order to carry out the purposes and provisions of this Ordinance, the following zoning districts are hereby established:

| <b>Zoning District</b>        | <b>Map Symbol</b> |
|-------------------------------|-------------------|
| Rural Residential             | RR                |
| Suburban Residential          | SR                |
| Traditional Residential       | TR                |
| Multi-Unit (Low) Residential  | RML               |
| Multi-Unit (High) Residential | RMH               |
| Isthmus Residential Multi     | IRM               |
| Isthmus Residential Single    | IRS               |
|                               |                   |
| General Commercial            | GC                |
| Mixed-Use Commercial          | MC                |
|                               |                   |
| Business Park                 | BP                |
| Industrial                    | I                 |
|                               |                   |
| Urban Reserve                 | UR                |
| Institutional / Public        | IP                |

### **Section 17.103 Incorporation of Zoning District Map**

The location and boundaries of the zoning districts are hereby established as shown on the map entitled "Official Zoning Map" on file in the office of the Zoning Administrator. The Official Zoning Map, together with all information shown thereon and all amendments thereto, shall be as much as part of this Ordinance as if fully set forth and described herein.

(1) Location of District Boundaries: The following rules shall apply with respect to the boundaries of the zoning districts as shown on the zoning district maps.

- (a) A boundary shown as following a street, alley or railroad shall be construed as following the centerline of such feature.



- (b) A boundary line shown as following a lot line, section line, survey or other property line, or municipal boundary shall be construed as following such line or boundary.
- (c) When any highway or public ground acquired or held for highway purposes is discontinued, the land where the highway or public ground is located shall belong to the owner or owners of the adjoining lands and shall be construed to be the same zoning district as the lots. If the highway or public ground is located between the lands of different owners, it shall be attached to the lots to which it originally belonged if that can be ascertained. If the lots to which the land originally belonged cannot be ascertained, the land shall be equally divided between the owners of the lands on each side of the highway or public ground.
- (d) Where any uncertainty exists as to the exact location of zoning district boundary lines, the Zoning Board of Appeals, upon written application, shall determine the location of such boundary lines.

#### **Section 17.104 Residential Districts**

- (1) General purposes of all residential zoning districts: The residential zoning districts are intended to:
  - (a) Provide appropriately located areas for residential development that are consistent with the Comprehensive Plan and with standards for public health, safety, and general welfare;
  - (b) Ensure adequate light, air, and privacy for all dwelling units with respect to density;
  - (c) Minimize traffic congestion and overloading of public services and utilities;
  - (d) Protect residential neighborhoods from incompatible uses that create excessive noise, illumination, unsightliness, odor, and smoke; and
  - (e) Create a mixture of residential uses and preserve edges and transitions between districts.
- (2) Rural Residential (RR): The RR zone is intended for development of housing at a target density of 1.0 dwelling units per gross acre. Detached single-family housing will be the predominant housing type in this zone.
- (3) Suburban Residential (SR): The SR zone is intended for development of housing at a target density of 3.0 dwelling units per gross acre. Detached single-family housing will be the predominant housing type in this zone.
- (4) Traditional Residential (TR): The TR zone is intended for development of housing at a target density of 6.0 dwelling units per gross acre. Detached single-family housing will be the predominant housing type in this zone.
- (5) Multi-Unit (Low) Residential (RML): The RML zone is intended for development of housing at a target density of 8.0 dwelling units per gross acre. Small lot single-family housing, duplexes, attached dwellings and multi-dwelling residences will be permitted housing types, subject to the density limitations of the zone

- (6) Multi-Unit (High) Residential (RMH): The RMH zone is intended for development at a target density of 12.0 dwelling units per gross acre. Multi-unit residential buildings will be the predominant housing type in this zone. RMH zoning is generally applied near heavily traveled roadways and adjacent to commercial districts.
- (7) Isthmus Residential Multi (IRM): The IRM zone is intended for development at a target density of 10.0 dwelling units per gross acre. The IRM zone is applied in the isthmus between Fowler Lake and Lac la Belle.
- (8) Isthmus Residential Single (IRS): The IRS zone is intended for development at a target density of 5.0 dwelling units per gross acre. IRS zone is applied in the isthmus between Fowler and Lac la Belle, and north of the North Lake Road bridge.

### **Section 17.105 Non-Residential and Other Districts**

- (1) General purposes of all non-residential and other districts: The non-residential and other zoning districts are intended to:
  - (a) Provide appropriately located areas consistent with the Comprehensive Plan for retail, service, office, and industrial uses;
  - (b) Strengthen the City's economic base and provide employment opportunities close to home for residents of the City and surrounding communities;
  - (c) Provide parks, open space, and other public facilities that serve the needs of the community; and
  - (d) Minimize any negative impact of nonresidential development on adjacent residential districts.
- (2) General Commercial (GC): The GC zone is established to provide for shopping, service and office facilities adjacent to heavily traveled roadways. This district is intended to meet the convenience shopping and service needs of City residents and attract people from surrounding communities.
- (3) Mixed-Use Commercial (MC): The MC zone is established to promote a concentration of mixed uses including retail, service, office, and residential uses. The location, mix and configuration of land uses are designed to encourage convenient alternatives to the automobile, safe and attractive streetscape, and a more livable community.
- (4) Business Park (BP): The BP zone is intended for a broad range of office, light industrial uses and other complimentary uses that promote high quality new development. The purpose of this district is to permit a variety of uses that will provide professional employment within the City while at the same time providing personal and professional services to the employees working within this zoning district.
- (5) Industrial (I): The I zone is intended for industrial uses that are generally not compatible with residential development because of their operational characteristics. This district is also intended for uses that may require outdoor areas to conduct business activities or for product storage or display. The purpose of this district is to permit the normal operations of any industry that can meet and maintain compliance with established State and Federal performance standards.



Robert Rummel  
1802 Maybank Highway  
Charleston, SC, 2912

Legal Description Confirmation  
Former Quick Cleaners

I, Robert Rummel, Owner of Former Quick Cleaners, 530 Franklin, state that I believe the legal description on the deed which is attached, for Tax Key 45-, are correct and correspond to the contaminated property referenced in the GIS closure request documents.

A handwritten signature in purple ink, appearing to read 'Rummel', written over a horizontal line.

Robert Rummel