

August 7, 2020

WDNR-Remediation and Redevelopment Program  
2984 Shawano Avenue  
Green Bay, WI 54313

Attn: Keld Lauridsen  
Hydrogeologist  
Keld.Lauridsen@Wisconsin.gov

Re: NR 716 Site Investigation Work Plan  
**BMO HARRIS BANK BRANCH**  
125 S. Chestnut Avenue  
Green Bay, Wisconsin  
**WDNR BRRTS No. 02-05-585287**  
PSI Project No.: 00542126

Dear Mr. Lauridsen:

PSI has completed a Site Investigation Work Plan for the BMO Harris Bank Branch parcel located at 125 S. Chestnut Avenue, Green Bay, Wisconsin. The plan has been prepared in general accordance with NR 716. An electronic copy has been submitted to the WDNR.

Please contact PSI at (262) 521-2125 with any questions or comments you may have.

Respectfully submitted,

**PROFESSIONAL SERVICE INDUSTRIES, INC.**



Patrick J. Patterson, P.E., P.G.  
Senior Engineer  
Environmental Services



Larry Raether, P.E.  
Department Manager  
Environmental Services

Enclosures

**NR 716 SITE INVESTIGATION WORK PLAN**

**FOR:**

**BMO HARRIS BANK BRANCH  
125 S. Chestnut Avenue, Green Bay  
Brown County, Wisconsin  
WDNR BRRTS No. 02-05-585287**

**PREPARED FOR:**

**BMO Harris Bank N.A.  
Jones Lang LaSalle Americas, Inc.  
1200 E. Warrenville Road, 3B  
Naperville, IL 60563**

**PREPARED BY:**

**PROFESSIONAL SERVICE INDUSTRIES, INC.  
821 Corporate Court  
Waukesha, WI 53189  
Telephone (262) 521-2125**

**PSI PROJECT NO. 00542126**

**August 7, 2020**



A handwritten signature in black ink, appearing to read "Patrick J. Patterson".

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Patrick J. Patterson, P.E., P.G.  
Senior Engineer

A handwritten signature in black ink, appearing to read "Larry Raether".

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Larry Raether, P.E.  
Department Manager

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## 1.0 INTRODUCTION

Professional Service Industries, Inc. (PSI) has prepared this Site Investigation Work Plan (SIWP) for the BMO Harris Bank Branch parcel located in Green Bay, Wisconsin, referred to herein as the "Subject Property." This SIWP has been prepared in general accordance with NR 716. Site information is included under this section.

**Site Name:** BMO Harris Bank Branch

**Site Address:** 125 S. Chestnut Avenue  
Green Bay, Wisconsin 54303

The Subject Property is geographically located in the Northeast  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of Section 36, in Township 24 North, Range 20 East, in the City of Green Bay, Brown County, State of Wisconsin. The location of the BMO Harris Bank Branch parcel is depicted on the attached Site Location Map. The general location of the Subject Property is shown on the Site Features Diagram, included herein.

**WDNR BRRTS No:** 02-05-585287

**WDNR FID No:** NA

**Property Owner:** BMO Harris Bank N.A.

**RP Representative:** June Evans  
Vice President, Senior Manager CRE US Facility Management  
111 W. Monroe Street  
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## 1.1 PROJECT BACKGROUND

The Subject Property consists of three parcels, totaling approximate 0.6-acres. These parcels are zoned as commercial and have addresses of 117 and 125 S. Chestnut Avenue and 412 Howard Street in the City of Green Bay, Wisconsin. A vacant rectangular commercial structure is situated in the northern quarter of the Subject Property and it is understood that a dry cleaner formerly occupied a portion of the building. A small vacant commercial structure is situated in the southern quarter of the Subject Property and was used as a drive-thru bank. Asphalt parking areas are present generally between these buildings. Landscaped areas are located around the southern building and along the property lines.

The surrounding properties are generally occupied by commercial and residential properties and a school building. The Fox River is situated about 700 feet to the east of the Subject Property and flows to the north into Green Bay. The general location of the Subject Property is shown on the Site Location Map in the Appendix. A diagram showing the general site features is also included in the Appendix.

It is understood that during April 2019, Tetra Tech completed a Phase I ESA of the Subject Property. According to their Phase I ESA report, prior to BMO's ownership, multiple small commercial businesses operated on the Property from the 1890s to 1986. These businesses included an automotive repair facility, dry cleaner, bank, and post office. Results of the Phase I ESA identified recognized environmental conditions (RECs) associated with the Property. The RECs consisted of: the historical use of the Subject Property as a dry cleaner over 30 years; the historical use of the Property as a commercial auto shop; the suspected presence of UST based on site reconnaissance; and the potential for soil and groundwater contamination from historic service stations and USTs on adjacent parcels.

During May and June 2019, Stantec Consulting Services Inc. (Stantec) completed a Phase II ESA on behalf of the City of Green Bay. During their Phase II ESA, nine soil borings (B-100 through B-900) were advanced at the Site with temporary groundwater monitoring wells constructed in four of the borings (TW-100, TW-600 TW-700 and TW-800). Eight of these borings were performed in the northeastern portion of the Subject Property, generally around the area of the dry cleaner. The other boring (B-700) was placed in the southeast corner of the Subject Property. In addition, two sub-slab vapor monitoring points were also installed within the Site building at 117 South Chestnut Avenue where the dry cleaner was located. Soil, groundwater and vapor samples were collected and tested for the presence of VOCs, PAHs, and RCRA Metals.

Stantec's laboratory analysis of soil samples detected multiple polynuclear aromatic hydrocarbons (PAHs), silver, and tetrachloroethene (PCE) exceeding the NR720 residual contaminant levels (RCLs) for groundwater protection and/or non-industrial direct contact. Stantec indicated that the PAH and silver detections are likely related to historic urban fill since contaminant concentrations generally decrease when native soils are encountered. They indicated that the PCE detections on the Site are likely related to the former drycleaner which historically operated on the Property identified in Tetra Tech's Phase I ESA. Stantec's laboratory analysis of groundwater samples collected from their temporary wells detected multiple RCRA metals and PCE exceeding their respective NR140 Preventive Action Limits (PALs). Multiple PAHs and vinyl chloride were also detected exceeding their respective NR140 Enforcement Standards (ESs). Sub-slab soil vapor analysis was performed on samples collected from the interior vapor points. Tetrachloroethene (PCE) was detected in both samples but below the target for sub-slab air concentrations. No other VOCs were detected above target limits for sub-slab air concentrations. Stantec indicated that the Phase II findings needed to be reported to the WDNR and additional site investigation would be required. The Stantec soil probes/borings are included on the attached Probe



Location Diagram-Stantec. The Stantec test results are included on the attached Stantec soil and water tables.

PSI was retained to perform additional site investigative services and notify the WDNR of the encountered contamination on February 7, 2020. On July 16, 2020, following approval, nine soil probes (SP-1 through SP-9) were placed on the Subject Property to evaluate the soil for the presence of petroleum and chlorinated contamination. Following soil sample collection, six of the borings were converted to groundwater monitoring wells to evaluate the groundwater for the presence of petroleum and chlorinated contamination. Three probes (SP-2, SP-3, and SP-4) and one well (MW-1) were placed in the southeast corner, while the other borings/wells were placed in the area of the former dry cleaner. Based upon the Stantec results, collected soil samples from the borings placed near the former dry cleaner were tested for the presence of VOCs, PAHs and Silver, while the samples collected from the borings placed near the southeast corner were tested for the presence of PAHs and Silver. Due to site conditions of shallow groundwater and previous sample collection depths, these soil samples were generally collected from the upper 5 feet. The PSI soil probes/wells are included on the attached Probe and Well Location Diagram.

No VOCs or Silver were detected above their limit of detection (LOD) in the selected soil samples, except for a laboratory estimated value for Silver that was below NR720 soil quality standards. Several PAHs were detected in the collected soil samples. However, only a few of the detected PAHs were above their NR720 soil quality standards. These compounds consisted of Benzo(a)pyrene, Benzo(b)fluoranthene, and Chrysene and were present in the soil samples collected near the northeastern corner of the northern building (SP-4) and in a soil sample collected in the southeast property corner (SP-3) near Howard Street. These concentrations are included on the attached soil analytical results table.

Following the well installation activities, the wells were developed in accordance with WDNR development procedures and subsequently sampled on July 17, 2020. Collected groundwater samples were tested for the presence of VOCs, PAHs and RCRA Metals.

Only low levels of several PAHs, with the majority indicated as laboratory estimates, were detected within the collected samples with only one estimated concentration slightly above its NR140 groundwater quality standard. Barium was detected in the water samples with two concentrations above its NR140 PAL, but below its NR140 ES. VOCs were detected in the collected groundwater samples. Vinyl Chloride was detected in four of the samples above its NR140 ES. Several other chlorinated VOCs consisting of PCE, Trichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichlorobenzene, and 1,2-Dichloropropane and Benzene were detected above NR140 standards. Several of these levels were indicated to be laboratory estimated values. These concentrations are included on the attached groundwater analytical results table.

Because of the encountered soil contamination in the area of the southeast corner and near the northeast corner of the northern building and the presence of chlorinated compounds in the groundwater, it was recommended that additional investigative activities be performed to further evaluate the degree and extent of the PAH-impacted soils encountered in the northeast and the southeast corners of the Subject Property. It was also recommended that additional investigative activities be performed to further evaluate the degree and extent of the chlorinated-impacted groundwater contamination to the north of the northeast building corner of the northern building, within



the eastern alleyway, and to the south of the southeast building corner of the northern building. Further, due to the type of contamination, a piezometer is recommended to be installed near the southeast corner of the northern building to evaluate the deeper groundwater aquifer for the presence of chlorinated compounds. This SIWP has been prepared for the recommended next phase of investigation. Due to time constraints because of a pending property transaction, a SIWP for the initial wells and probes was not prepared prior to the field activities performed in July 2020.

## **2.0 PHYSIOGRAPHICAL AND GEOLOGICAL SETTING**

### **2.1 LOCATION OF THE SUBJECT PROPERTY**

PSI reviewed the United States Geological Survey (USGS) Green Bay West Quadrangle Map, dated 1992, showing the area of the Subject Property. According to the contour lines on the topographic map, it is located at approximately 590 feet above mean sea level (MSL). The contour lines around the Project Area indicate that the area is generally flat with a slight slope to the east. The nearest water body is the Fox River to the east. The site location is shown on the Site Location Map included in the Appendix.

### **2.2 PHYSICAL CHARACTERISTICS OF THE SUBJECT PROPERTY**

#### ***Quaternary Deposits & Geomorphology***

Based on PSI's review of the "Soil Survey of Brown County, Wisconsin" publication by the United States Department of Agriculture (USDA) Soil Conservation Service (issued June 1972), the area around the Subject Property is indicated to be within a "Fill Land", which is along the Fox River. This soil series consists of variable soils that are classified as somewhat excessively and well drained soil. The underlying natural soils are anticipated to be The Manawa Silty Clay Loam soils, which is somewhat poorly drained soils.

#### ***Hydrogeology***

The hydraulic conductivity of the fill land is highly variable. The estimated hydraulic conductivity within the underlying Manawa Silty Clay Loam series within this area of Wisconsin is generally a moderately low permeable material ( $\leq 1 \times 10^{-6}$  cm/sec). This is consistent with the subsurface soils encountered within the completed soil probes placed on the Subject Property, which were variable thicknesses of the fill material overlying the native clayey soils to the maximum depths explored. Based upon previous field collected data, the groundwater flow direction is to the northeast towards the Fox River and Green Bay (Lake Michigan).

#### ***Surface Drainage***

Surface drainage is to the east towards the Fox River. The surface water drainage at the Subject Property lies within the Lake Michigan Watershed.

#### ***Potential Migration Pathways***

The soil contamination detected in isolated areas of the Subject Property does not appear to be an issue regarding potential migration pathways since the detected PAH compounds are relatively immobile and generally utilities are not present in the area of the soil contamination. Chlorinated-impacted groundwater contamination was detected in several samples collected from the wells placed in the northern portion of the Subject Property. It is anticipated that a potential migration pathway is present



in the eastern property boundary of the Subject Property and potentially consist of a stormwater utility line present in the eastern alley roadway.

### ***Soil Conditions***

The surface material at probe locations generally consisted of about 3 inches of asphalt overlying granular base course fill material or about 6 inches of topsoil fill material. The underlying fill material consisted of silty sand to sandy silt and silty clay to sandy clay to depths of about 4 to 7 feet below grade.

The underlying natural soils encountered beneath the fill material consisted generally of reddish-brown silty clay with variable sand seams to the termination depths of about 5 to 15 feet below grade. Solvent-like and petroleum-like odors were observed within soil samples collected from several of the Stantec probes/borings at depths between about 2 to about 8 feet below grade. No petroleum odors were observed within the soil samples collected from the remaining Stantec probes/borings or the soil samples collected from the PSI probes/borings.

### ***Shallow Groundwater Conditions***

On August 3, 2020, groundwater levels were measured within the monitoring wells at depths of about 3.8 to 9.8 feet below the ground surface. Based upon the groundwater levels and surrounding surface features, the regional shallow groundwater flow direction is easterly/southeasterly towards the Fox River. No obvious odors or petroleum sheen were observed in the samples collected from the wells.

## **3.0 SAMPLING AND ANALYSIS STRATEGY**

### **3.1 SCOPE OF WORK**

The general proposed scope of work will consist of the following activities: the placement of four additional soil borings around SP-3; the placement of four additional soil borings around SP9; the collection of soil samples from these borings and laboratory analysis of selected soil samples for the presence of PAHs; the installation of groundwater wells to the north of MW-6, to the south of MW-3 and to the southeast of MW-4; the installation of a piezometer in the vicinity of MW-3; the collection of water samples from the three new wells and piezometer; laboratory analysis of water samples for the presence of chlorinated solvent contaminants; and data analysis and interpretation. Following data evaluation, and if favorable test results are received, a Site Investigation Report will be prepared.

1. Four 5-foot borings will be placed around SP-3 and three 5-foot borings and one 10-foot boring will be placed around SP-9. Soil samples will be continuously collected to the maximum depth explored. Representative samples will be obtained from the borings with a split-spoon sampler that will be decontaminated between sampling with Alconox and clean rinse water. Companion soil samples will be collected for laboratory analysis.
2. The collected soil samples will be field screened with a PID to monitor for the presence of volatile organic vapors.
3. Excess soil will be placed into drums for future disposal.





4. One selected soil sample will be collected from the borings and will be submitted to a laboratory to test for the presence of PAHs (EPA 8270). It is anticipated that these soil samples will be collected between 1 foot to 10 feet below grade.
5. Following the soil sampling activities and boring procedures, three additional NR141-compliant groundwater monitoring wells will be installed to a depth of about 13 to 15 feet below grade to further evaluate the presence of chlorinated VOCs. These wells will be installed with 4" hollow stem augers. The groundwater monitoring wells will be installed in general accordance with WDNR procedures set forth in Chapter NR141. The well construction will consist of a 10-foot section of 2-inch diameter, Schedule 40 PVC screen with 0.010 inch factory cut slots and 2-inch diameter Schedule 40 PVC flush threaded riser pipe extending to about 6 inches below the ground surface. A steel protective flush mount cover will be placed over the top of each PVC riser pipe. Clean sand backfill will be utilized as a filter medium around the screened PVC to a level about two feet above the top of the screened section. The sand backfill will be placed into the annular space between the auger and PVC during progressive withdrawal of the auger. Bentonite chips will fill the annular space above the sand filter. The cover will be concreted in the surrounding pavement.
6. The new wells will be developed in accordance with WDNR requirements and samples collected from these wells along with the other five existing wells will be tested for the presence of VOCs (EPA 8260). Development water will be placed into drums for future disposal.
7. If contaminants are detected within the submitted soil and/or groundwater samples above WDNR quality standards, additional sampling activities may be required. It is anticipated that at least three additional groundwater sampling events will be required to be performed. Additional site investigation activities may be necessary based upon collected field data and analytical test results.
8. PSI will prepare an SIR/RAOR following the completion of the appropriate number of groundwater sampling events. If the subsequent field and analytical test results are favorable, the completed SIR/RAOR will be submitted to the WDNR for their review.

### **3.2 QUALITY ASSURANCE/QUALITY CONTROL MEASURES**

All equipment decontamination, sample collection, sample custody records, and analysis will be performed in general accordance with methods prescribed by the United States EPA and the WDNR.

The soil sampling device and tools will be cleaned with an Alconox and potable water wash and rinsed with potable water between each sample interval. A decontaminated split spoon sampler will be used to collect the samples. Groundwater samples will be collected with disposal bailers. The soil and groundwater samples from the borings and wells will be handled with disposable Nitrile gloves during initial collection, and when placed into laboratory jars. These procedures will be performed to reduce the potential for cross-contamination between sample locations.

Because of previous analytical test results, the selected soil and groundwater samples will be submitted to an analytical laboratory to test for the presence of PAHs (EPA 8270) and VOCs (EPA 8260), respectively. The selected soil and groundwater samples will be placed within clean laboratory provided jars that are appropriately preserved. The samples will be placed on ice, chain of custody procedures initiated, and they will be submitted to a WDNR-licensed laboratory.



## 4.0 GENERAL

### 4.1 SCHEDULE

It is anticipated that the initial field activities will be performed in August/September 2020, following WDNR approval. Assuming no significant delays in the project and the analytical test results are favorable, work of this nature can usually be completed within one to two months. If warranted, quarterly groundwater sampling will then proceed. We anticipate that at least 3 rounds of quarterly sampling will be performed prior to case closure submittal.

### 4.2 UTILITIES

The subcontractor will contact Diggers Hotline for public utility clearance prior to the start of probing activities. This service does not mark the locations of privately-owned utilities, including lateral water and sewer lines; therefore, PSI will also subcontract a locating firm for marking private utilities.

### 4.3 RESPONSIBILITIES & PROJECT COORDINATION

The client is responsible for obtaining access to the Subject Property for PSI and their subcontractors to perform the work.

### 4.4 SUBMITTAL CERTIFICATION

"I, Patrick J. Patterson, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



8/7/2020

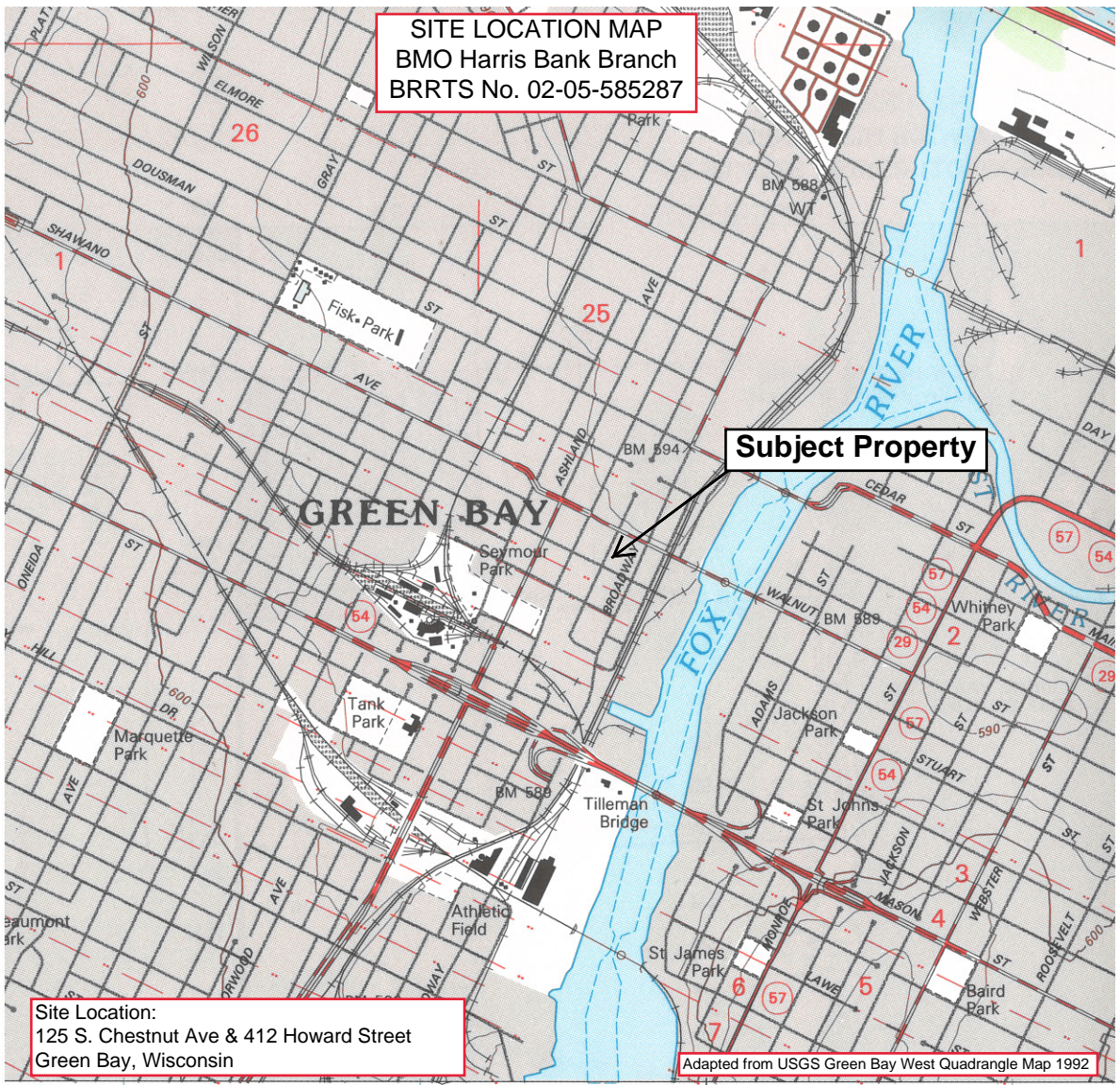
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Signature and Title

Date



**SITE LOCATION MAP**  
**BMO Harris Bank Branch**  
**BRRTS No. 02-05-585287**



**Site Location:**  
 125 S. Chestnut Ave & 412 Howard Street  
 Green Bay, Wisconsin

Adapted from USGS Green Bay West Quadrangle Map 1992

2' 30" R 20 E R 21 E 42000mE  
 INTERIOR - GEOLOGICAL SURVEY, RESTON, VIRGINIA - 1996

**ROAD CLASSIFICATION**

- Primary highway hard surface .....
- Secondary highway hard surface .....
- Light-duty road, hard or improved surface .....
- Unimproved road .....
- Interstate Route
- U.S. Route
- State Route

**QUADRANGLE LOCATION**

|   |          |   |                     |
|---|----------|---|---------------------|
| 1 | 2        | 3 | 1 Pulaski           |
| 4 | <b>5</b> | 5 | 2 Suamico           |
| 6 | 7        | 8 | 3 Little Tail Point |
|   |          |   | 4 Oneida North      |
|   |          |   | 5 Green Bay East    |
|   |          |   | 6 Oneida South      |
|   |          |   | 7 De Pere           |
|   |          |   | 8 Bellevue          |

**GREEN BAY WEST,**  
 44088-E1-TF-024

**1992**

**WISCONSIN 53706**

WEST

ADJOINING 7.5' QUADRANGLE NAMES

DMA 3373 II SE-SERIES V861





# SITE FEATURES DIAGRAM

PSI Project No. 00542126



### Legend

- Open Site
- Closed Site
- Continuing Obligations Apply
- Facility-wide Site

### Site Addresses & Property IDs:

117 & 125 S. Chestnut Avenue  
 (3-100 & 3-101)  
 412 Howard Street (3-325)



NAD\_1983\_HARN\_Wisconsin\_TM

1: 990



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Note: Not all sites are mapped.

**BMO Harris Bank**  
**117 & 125 S. Chestnut Avenue**  
**412 Howard Street**  
**Green Bay, Wisconsin**



# PROBE LOCATION DIAGRAM-STANTEC

PSI Project No. 00542126



### Legend

- Open Site
- Closed Site
- Continuing Obligations Apply
- Facility-wide Site
- : Approximate Probe Location-Stantec



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1: 990



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Note: Not all sites are mapped.

**BMO Harris Bank**  
**117 & 125 S. Chestnut Avenue**  
**412 Howard Street**  
**Green Bay, Wisconsin**





# PROBE & WELL LOCATION DIAGRAM-PSI

PSI Project #00542126



### LEGEND

- Former Probe Location (Stantec)
- Soil Probe/Well Location (PSI)
- Soil Probe Location (PSI)



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Note: Not all sites are mapped.

**BMO Harris Bank**  
**117 & 125 S. Chestnut Avenue**  
**412 Howard Street**  
**Green Bay, Wisconsin**



# PROBE & WELL LOCATION DIAGRAM-PSI

## PSI Project #00542126



### LEGEND

- Former Probe Location (Stantec)
- Soil Probe/Well Location (PSI)
- Soil Probe Location (PSI)
- Proposed Probe Location (PSI)
- Proposed Well Location
- Proposed Piezometer Location

0.0                      0                      0.02                      0.0 Miles

NAD\_1983\_HARN\_Wisconsin\_TM

1: 990



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Note: Not all sites are mapped.

**BMO Harris Bank**  
**117-125 S. Chestnut Avenue &**  
**412 Howard Street**  
**Green Bay, Wisconsin**

**Table 2a Soil Sample RCRA Metals Laboratory Results, BMO Properties, Green Bay, Wisconsin**

| Sample   |               |             |                          |                | Laboratory Result (mg/kg) |              |            |          |              |         |          |        |
|--|---------------|-------------|--------------------------|----------------|---------------------------|--------------|------------|----------|--------------|---------|----------|--------|
| Boring Number                                    | Sample Number | Depth (fbg) | Soil Description         | Date Collected | RCRA Metals               |              |            |          |              |         |          |        |
|  |               |             |                          |                | Arsenic (total)           | Barium       | Cadmium    | Chromium | Lead (total) | Mercury | Selenium | Silver |
| WDNR RCL for Protection from Direct Contact Risk |               |             |                          | Non-Industrial | 8* [0.677]                | 15,300       | 71.1       | NE       | 400          | 3.13    | 391      | 391    |
|  |               |             |                          | Industrial     | 8* [3.00]                 | 100,000      | 985        | NE       | 800          | 3.13    | 5,840    | 5,840  |
| WDNR RCL for Protection of Groundwater           |               |             |                          |                | 8* [0.584]                | 344* [164.8] | 1* [0.752] | 360,000  | 52* [27]     | 0.208   | 0.52     | 0.849  |
| Background Threshold Value (BTV)                 |               |             |                          |                | 8                         | 364          | 1          | 44       | 52           | NE      | NE       | NE     |
| B100   | B1 [2-4]      | 2-4         | Sandy Silt               | 5/28/2019      | 1.7                       | 38           | 0.20 J     | 8.4      | 32           | 0.037   | < 0.65   | 1.5    |
| B200   | B2 [4-6]      | 4-6         | Silty Clay               | 5/28/2019      | 3.3                       | 96           | 0.16 J     | 32       | 8.8          | 0.019 J | < 0.72   | 4.8    |
| B500   | B5 [2-4]      | 2-4         | Silty Clay w/ Black Fill | 5/28/2019      | 3.7                       | 100          | 0.15 J     | 29       | 9.0          | 0.024   | 0.75 J   | 4.7    |
| B700   | B7 [0-2]      | 0-2         | Sand w/ Gravel           | 5/28/2019      | 5.3                       | 25           | 0.22       | 11       | 28           | 0.080   | < 0.59   | 1.2    |
| B800   | B8 [2-4]      | 2-4         | Sand w/ Gravel           | 5/28/2019      | 2.7                       | 69           | 0.14 J     | 24       | 5.3          | 0.021   | < 0.71   | 3.6    |

**Key:**

- RCRA = Resource Conservation and Recovery Act
- <x = compound not detected to a detection limit of x
- XXX = exceeds WDNR Non-Industrial RCL for direct contact risk
- XXX = exceeds WDNR Industrial RCL for direct contact risk
- XXX = exceeds WDNR RCL for protection of groundwater
- mg/kg = milligram per kilogram
- NE = not established by WAC (Wis. Adm. Code) or WDNR Soil RCL Summary Table
- "J" = analyte detected between the limit of detection and limit of quantification
- RCL = residual contaminant level
- fbg = feet below ground

**Notes:** WDNR soil RCL Summary table (December 2018) used to establish RCLs for groundwater protection and direct contact.  
 For the purpose of this evaluation under ch. NR 700, background threshold values are being considered as representative of background conditions.  
 However, constituent concentrations less than background threshold values may represent a potential health risk if concentrations are greater than health-based standards.



Table 2b Soil Sample Polynuclear Aromatic Hydrocarbon Laboratory Results, BMO Properties, Green Bay, Wisconsin

| Boring Number                                    | Sample Number | Depth (ft) | Soil Description         | Date Collected | FAH Compound Laboratory Result (µg/kg) |                |            |                    |                |                      |                      |                |                  |           |                       |              |            |                        |                      |                      |             |              |            |
|--|---------------|------------|--------------------------|----------------|--|----------------|------------|--------------------|----------------|----------------------|----------------------|----------------|------------------|-----------|-----------------------|--------------|------------|------------------------|----------------------|----------------------|-------------|--------------|------------|
|  |               |            |                          |                | Acenaphthene                           | Acenaphthylene | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(e)pyrene | Benzo(i)perylene | Chrysene  | Dibenz(a,h)anthracene | Fluoranthene | Fluorene   | Indeno(1,2,3-cd)pyrene | 1-Methyl naphthalene | 2-Methyl naphthalene | Naphthalene | Phenanthrene | Pyrene     |
| WDNR RCL for Protection from Direct Contact Risk |               |            |                          |                | Non-Industrial                         | 3,590,000      | NE         | 17,900,000         | 1,140          | 115                  | 1,150                | NE             | 11,500           | 115,000   | 115                   | 2,290,000    | 2,390,000  | 1,150                  | 17,600               | 239,000              | 5,520       | NE           | 1,790,000  |
|  |               |            |                          |                | Industrial                             | 45,200,000     | NE         | 100,000,000        | 20,800         | 2,110                | 21,100               | NE             | 211,000          | 2,110,000 | 2,110                 | 30,100,000   | 30,100,000 | 21,100                 | 72,700               | 3,010,000            | 24,100      | NE           | 22,600,000 |
| WDNR RCL for Protection of Groundwater           |               |            |                          |                | NE                                     | NE             | 196,900    | NE                 | 470            | 475                  | NE                   | NE             | 144              | NE        | 88,877                | 14,829       | NE         | NE                     | NE                   | 658                  | NE          | 54,545       |            |
| B100   | B1 (2-4)      | 2-4        | Sandy Sil                | 5/28/2019      | 1.40                                   | 15 J           | 350        | 1,300              | 1,400          | 2,200                | 620                  | 750            | 1,300            | 170       | 2,500                 | 120          | 570        | 61 J                   | 60 J                 | 66                   | 1,400       | 2,300        |            |
| B200   | B2 (4-6)      | 4-6        | Silty Clay               | 5/28/2019      | < 7.4                                  | < 5.4          | < 6.9      | < 5.5              | < 7.9          | < 8.9                | < 13                 | < 8.9          | < 11             | < 7.9     | < 7.6                 | < 5.8        | < 11       | < 10                   | < 7.6                | 28 J                 | < 5.7       | < 8.2        |            |
| B500   | B5 (2-4)      | 2-4        | Silty Clay w/ Black Fill | 5/28/2019      | < 7.1                                  | < 5.2          | < 6.6      | 9.1 J              | 16 J           | 16 J                 | < 13                 | < 12           | < 11             | < 7.6     | 13 J                  | < 5.6        | < 10       | < 9.7                  | < 7.3                | < 6.1                | < 5.5       | 16 J         |            |
| B700   | B7 (0-2)      | 0-2        | Sand w/ Gravel           | 5/28/2019      | 36 J                                   | 8.8 J          | 120        | 480                | 470            | 770                  | 300                  | 300            | 560              | 80        | 1,400                 | 41           | 260        | 10 J                   | 12 J                 | 9.0 J                | 770         | 1,100        |            |
| B800   | B8 (2-4)      | 2-4        | Sand w/ Gravel           | 5/28/2019      | < 7.4                                  | < 5.4          | < 6.9      | < 5.5              | 9.7 J          | < 8.9                | < 13                 | < 12           | < 11             | < 8.0     | < 7.6                 | < 5.8        | < 11       | < 10                   | < 7.6                | < 6.3                | < 5.7       | < 8.2        |            |

Key:

- xx = compound not detected to a detection limit of x
- XXX = exceeds WDNR Non-Industrial RCL for direct contact risk
- XXX = exceeds WDNR Industrial RCL for direct contact risk
- XXX = exceeds WDNR RCL for protection of groundwater
- µg/kg = milligram per kilogram
- NE = not established by WAC (Wis. Adm. Code) or WDNR Soil RCL Summary Table
- J = analyte detected between the limit of detection and limit of quantification
- RCL = residual contaminant level
- ftg = feet below ground

Notes: WDNR soil RCL Summary table (December 2018) used to establish RCLs for groundwater protection and direct contact.

Table 2c Soil Sample Volatile Organic Compound Laboratory Results, BMO Properties, Green Bay, Wisconsin

| Sample                                 |               |             |                                   |                  |                | Relevant and Significant Volatile Organic Compound Laboratory Result (µg/kg) |                         |         |              |                  |                                |                    |                |                 |             |                    |                  |                         |         |               |         |
|--|---------------|-------------|-----------------------------------|------------------|----------------|--|-------------------------|---------|--------------|------------------|--------------------------------|--------------------|----------------|-----------------|-------------|--------------------|------------------|-------------------------|---------|---------------|---------|
| Boring Number                          | Sample Number | Depth (fbg) | Description                       | FID Response (w) | Date Collected | 1,2,4-Trimethyl benzene  | 1,3,5-Trimethyl benzene | Benzene | Ethylbenzene | Isopropylbenzene | Methyl tert-butyl ether (MTBE) | Methylene chloride | n-Butylbenzene | n-Propylbenzene | Naphthalene | p-Isopropyltoluene | sec-Butylbenzene | Tetrachloroethene (PCE) | Toluene | Total Xylenes |         |
| WDNR NR 720 Direct Contact RCL         |               |             |                                   |                  | Non-Industrial | 219,000  | 182,000                 | 1,600   | 8,020        | NE               | 63,800                         | 61,800             | 108,000        | NE              | 5,520       | 162,000            | 145,000          | 33,000                  | 818,000 | 260,000       |         |
| WDNR NR 720 Groundwater Protection RCL |               |             |                                   |                  | Industrial     | 219,000  | 182,000                 | 7,070   | 35,400       | NE               | 282,000                        | 1,150,000          | 108,000        | NE              | 24,100      | 162,000            | 145,000          | 145,000                 | 145,000 | 818,000       | 260,000 |
|  |               |             |                                   |                  |                | 1378.7 combined  |                         | 5.1     | 1,570        | NE               | 27                             | 2.6                | NE             | NE              | 658.2       | NE                 | NE               | 4.5                     | 1,107.2 | 3,960         |         |
| B100                                   | B1 (2-4)      | 2-4         | Sandy Silt                        | 1.8              | 5/28/2019      | 41 J   | < 25                    | < 9.5   | < 12         | < 25             | < 26                           | < 110              | < 25           | < 27            | 32 J        | < 24               | < 26             | 220                     | 11 J    | 25 J          |         |
| B200                                   | B2 (4-6)      | 4-6         | Silty Clay                        | 197.4            | 5/28/2019      | < 27   | < 29                    | < 11    | < 14         | 160              | < 30                           | < 120              | 740            | 330             | 28 J        | < 28               | 830              | < 28                    | < 11    | < 17          |         |
| B300                                   | B3 (2-4)      | 2-4         | Silty Clay                        | 16.4             | 5/28/2019      | < 26   | < 27                    | < 11    | < 13         | < 28             | < 28                           | < 120              | < 28           | < 30            | < 24        | < 26               | < 29             | 56 J                    | < 11    | < 16          |         |
| B400                                   | B4 (2-4)      | 2-4         | Silty Sand w/ Trace Gravel & Slag | 2.2              | 5/28/2019      | < 23   | < 25                    | < 9.4   | < 12         | < 25             | < 25                           | < 110              | < 25           | < 27            | < 22        | < 23               | < 26             | 110                     | < 9.5   | < 14          |         |
| B500                                   | B5 (2-4)      | 2-4         | Silty Clay w/ Black Fill          | 300+             | 5/28/2019      | 300  | < 27                    | < 10    | < 13         | < 27             | < 28                           | < 110              | < 27           | < 29            | < 24        | 300                | 200              | < 26                    | < 10    | < 15          |         |
| B600                                   | B6 (2-4)      | 2-4         | Silty Clay                        | 4.5              | 5/28/2019      | < 27   | < 29                    | < 11    | < 14         | < 29             | < 30                           | < 120              | < 29           | < 31            | < 25        | < 28               | < 30             | < 28                    | < 11    | < 17          |         |
| B700                                   | B7 (0-2)      | 0-2         | Sand w/ Gravel                    | 26.7             | 5/28/2019      | < 22   | < 24                    | < 9.1   | < 11         | < 24             | < 25                           | < 100              | < 24           | < 26            | < 21        | < 23               | < 25             | < 23                    | < 9.2   | < 14          |         |
| B800                                   | B8 (2-4)      | 2-4         | Sand w/ Gravel                    | 158              | 5/28/2019      | < 28   | < 30                    | < 12    | < 14         | < 30             | < 31                           | < 130              | < 31           | < 33            | < 26        | < 29               | < 31             | < 29                    | < 12    | < 17          |         |
| B900                                   | B9 (6-8)      | 6-8         | Silty Clay                        | 300+             | 6/5/2019       | < 29   | < 30                    | < 12    | < 15         | < 31             | < 32                           | < 130              | < 31           | < 33            | < 27        | < 29               | < 32             | < 30                    | < 12    | < 18          |         |

Key:

- <x = compound not detected to a detection limit of x
- xxx = exceeds WDNR Non-Industrial RCL for direct contact risk
- xxx = exceeds WDNR Industrial RCL for direct contact risk
- xxx = exceeds WDNR RCL for protection of groundwater
- µg/kg = microgram per kilogram
- RCL = residual contaminant level
- fbg = feet below ground

Notes: WDNR soil RCL Summary Table (December 2018) used to establish RCLs for groundwater protection and direct contact.

Table 2d Soil Sample Polychlorinated Biphenyls Laboratory Results, BMO Properties, Green Bay, Wisconsin

| Borehole Number                     | Sample Number | Date      | Depth (ftg) | Soil Description         | PID Response (iui) | Relevant and Significant Polychlorinated Biphenyl Laboratory Result (mg/kg) |                |                |                |                |                |                |            |
|-------------------------------------|---------------|-----------|-------------|--------------------------|--------------------|---|----------------|----------------|----------------|----------------|----------------|----------------|------------|
|                                     |               |           |             |                          |                    | Aroclor - 1014  | Aroclor - 1221 | Aroclor - 1232 | Aroclor - 1242 | Aroclor - 1248 | Aroclor - 1254 | Aroclor - 1260 | Total PCBs |
| WDNR Direct Contact RCL             |               |           |             |                          | Non-Industrial     | 4,110   | 213            | 190            | 235            | 236            | 239            | 243            | 234        |
|                                     |               |           |             |                          | Industrial         | 28,000  | 883            | 792            | 972            | 975            | 988            | 1,000          | 967        |
| WDNR RCL for Groundwater Protection |               |           |             |                          |                    | NE  | NE             | NE             | NE             | NE             | NE             | NE             | 9.4        |
| B200                                | B2 (4-6)      | 5/28/2019 | 4-6         | Silty Clay               | 197.4              | < 7.3   | < 9.1          | < 9.0          | < 6.8          | < 8.1          | < 4.5          | < 10           | < 54.8     |
| B500                                | B5 (2-4)      | 5/28/2019 | 2-4         | Silty Clay w/ Black Fill | 300+               | < 6.7   | < 8.4          | < 8.3          | < 6.3          | < 7.5          | < 4.1          | < 9.3          | < 50.6     |

- Key:
- <x = compound not detected to a detection limit of x
  - XXX = exceeds WDNR Non-Industrial RCL for direct contact risk
  - XXX = exceeds WDNR Industrial RCL for direct contact risk
  - XXX = exceeds WDNR RCL for protection of groundwater
  - RCL = residual contaminant level
  - mg/kg = milligram per kilogram
  - NE = not established by Wisconsin Administrative Code (Wis. Adm. Code) or WDNR Soil RCL Summary Table
  - "J" = analyte detected between limit of detection and limit of quantification
  - PID = photoionization detector
  - iui = Instruments Units of Isobutylene
  - ftg = feet below grade

Notes: WDNR soil RCL Summary table (December 2018) used to establish RCLs for groundwater protection and direct contact.

**Table 3a Groundwater Sample RCRA Metals Laboratory Results, BMO Properties, Green Bay, Wisconsin**

| Well Number                    | Date Collected | Laboratory Results (µg/L) |        |         |           |        |         |           |        |
|--------------------------------|----------------|---------------------------|--------|---------|-----------|--------|---------|-----------|--------|
|                                |                | RCRA Metals               |        |         |           |        |         |           |        |
|                                |                | Arsenic                   | Barium | Cadmium | Chromium  | Lead   | Mercury | Selenium  | Silver |
| NR 140 Preventive Action Limit |                | 1                         | 400    | 0.5     | 10        | 1.5    | 0.2     | 10        | 10     |
| NR 140 Enforcement Standard    |                | 10                        | 2000   | 5       | 100       | 15     | 2       | 50        | 50     |
| TW100                          | 5/30/2019      | 0.80 J                    | 66     | < 0.17  | < 1.1     | 0.28 J | < 0.098 | 1.1 J     | < 0.12 |
| TW600                          | 5/30/2019      | <b>1.5</b>                | 240    | < 0.17  | < 1.1     | < 0.19 | < 0.098 | < 0.98    | < 0.12 |
| TW700                          | 5/30/2019      | 0.96 J                    | 100    | < 0.17  | <b>19</b> | 0.81   | < 0.098 | <b>11</b> | < 0.12 |

Key:

- RCRA = Resource Conservation and Recovery Act
- <X = analyte not detected above method detection limit
- "J" = Analyte detected between Limit of Detection and Limit of Quantitation
- µg/L = microgram per liter
- X = concentration detected above Chapter NR 140, Wisconsin Administrative Code (NR 140, Wis. Adm. Code) preventive action limit (PAL)
- X** = concentration detected above NR 140, Wis. Adm. Code enforcement standard (ES)

Table 3b Groundwater Sample Polynuclear Aromatic Hydrocarbon Laboratory Results, BMO Properties, Green Bay, Wisconsin

| Well Number                    | Date Collected | Polynuclear Aromatic Hydrocarbons (µg/L) |                |            |                    |                |                      |                      |                      |          |                        |              |          |                        |                      |                      |             |              |        |
|--------------------------------|----------------|--|----------------|------------|--------------------|----------------|----------------------|----------------------|----------------------|----------|------------------------|--------------|----------|------------------------|----------------------|----------------------|-------------|--------------|--------|
|                                |                | Acenaphthene                             | Acenaphthylene | Anthracene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Chrysene | Dibenzo(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | 1-Methyl naphthalene | 2-Methyl naphthalene | Naphthalene | Phenanthrene | Pyrene |
| NR 140 Preventive Action Limit |                | NE                                       | NE             | 600        | NE                 | 0.02           | 0.02                 | NE                   | NE                   | 0.02     | NE                     | 80           | 80       | NE                     | NE                   | NE                   | 10          | NE           | 50     |
| NR 140 Enforcement Standard    |                | NE                                       | NE             | 3,000      | NE                 | 0.2            | 0.2                  | NE                   | NE                   | 0.2      | NE                     | 400          | 400      | NE                     | NE                   | NE                   | 100         | NE           | 250    |
| TW100                          | 5/30/2019      | < 0.25                                   | < 0.21         | < 0.27     | 0.24               | 0.26           | 0.34                 | < 0.30               | < 0.051              | 0.23     | < 0.041                | < 0.36       | < 0.20   | 0.19                   | < 0.24               | < 0.052              | < 0.25      | < 0.24       | < 0.34 |
| TW600                          | 5/30/2019      | < 0.25                                   | < 0.22         | < 0.27     | < 0.046            | < 0.081        | < 0.066              | < 0.31               | < 0.052              | < 0.056  | < 0.041                | < 0.37       | < 0.20   | < 0.061                | < 0.25               | < 0.053              | < 0.25      | < 0.25       | < 0.35 |
| TW700                          | 5/30/2019      | < 0.25                                   | < 0.22         | < 0.27     | < 0.046            | < 0.081        | < 0.066              | < 0.31               | < 0.052              | < 0.056  | < 0.042                | < 0.37       | < 0.20   | < 0.061                | < 0.25               | < 0.053              | < 0.25      | < 0.25       | < 0.35 |

Key:

- <X = analyte not detected above method detection limit
- "J" = Analyte detected between Limit of Detection and Limit of Quantitation
- µg/L = micrograms per liter
- NE = not established
- X = Concentration detected above Chapter NR 140, Wisconsin Administrative Code (NR 140, Wis. Adm. Code) preventive action limit (PAL)
- X = Concentration detected above NR 140, Wis. Adm. Code enforcement standard (ES)

Table 3c: Groundwater Sample Volatile Organic Compound Laboratory Results, BMO Properties, Green Bay, Wisconsin

| Well Number                    | Date Collected | Volatile Organic Compounds (µg/L) |                  |                   |                        |              |                  |                    |        |             |                |                 |                         |         |                       |                |               |
|--------------------------------|----------------|-----------------------------------|------------------|-------------------|------------------------|--------------|------------------|--------------------|--------|-------------|----------------|-----------------|-------------------------|---------|-----------------------|----------------|---------------|
|                                |                | Benzene                           | sec-Butylbenzene | tert-Butylbenzene | cis-1,2-Dichloroethene | Ethylbenzene | Isopropylbenzene | Methylene Chloride | MTBE   | Naphthalene | n-Butylbenzene | N-Propylbenzene | Tetrachloroethene (PCE) | Toluene | Trichloroethene (TCE) | Vinyl Chloride | Total Xylenes |
| NR 140 Preventive Action Limit |                | 0.5                               | NE               | NE                | 7                      | 140          | NE               | 0.5                | 12     | 10          | NE             | NE              | 0.5                     | 160     | 0.5                   | 0.02           | 400           |
| NR 140 Enforcement Standard    |                | 5                                 | NE               | NE                | 70                     | 700          | NE               | 5                  | 60     | 100         | NE             | NE              | 5                       | 800     | 5                     | 0.2            | 2,000         |
| TW100                          | 5/30/2019      | < 0.15                            | < 0.40           | < 0.40            | < 0.41                 | < 0.18       | < 0.39           | < 1.6              | < 0.39 | < 0.34      | < 0.39         | < 0.41          | 1.8                     | < 0.15  | 0.35 J                | < 0.22         | < 0.22        |
| TW400                          | 5/30/2019      | 0.22 J                            | 7.6              | 2                 | 0.73 J                 | < 0.18       | 9.5              | < 1.6              | < 0.39 | 0.47 J      | 2.7            | 10              | < 0.37                  | < 0.15  | < 0.16                | 0.63 J         | < 0.22        |
| TW700                          | 5/30/2019      | < 0.15                            | < 0.40           | < 0.40            | < 0.41                 | < 0.18       | < 0.39           | < 1.6              | < 0.39 | < 0.34      | < 0.39         | < 0.41          | < 0.37                  | < 0.15  | < 0.16                | < 0.20         | < 0.22        |

Key:  
 "J" = Analyte detected between Limit of Detection and Limit of Quantitation.  
 µg/L = microgram per liter  
 NE = not established  
 X = Concentration detected above Chapter NR 140, Wisconsin Administrative Code [NR 140, Wis. Adm. Code] preventive action limit [PAL]  
X = Concentration detected above NR 140, Wis. Adm. Code enforcement standard [ES]

Table 4: Sub Slab Vapor Laboratory Results, BMO Properties, Green Bay, Wisconsin

| Sample Location Building Address                               | Sample Point | Vacuum Testing of Sampling Fittings** (Pass/Fail) | Helium Shroud QA/QC Testing       |                                | Date Sampled | Date Analyzed | Sample Location       | Sample Duration (minutes)   | Detected Volatile Organic Compounds (micrograms per cubic meter) |                       |                        |                   |           |          |                       |                      |              |             |                         |              |         |                   |                  |                     |             |          |         |         |           |         |                 |                   |
|--|--------------|---|-----------------------------------|--------------------------------|--------------|---------------|-----------------------|-----------------------------|--|-----------------------|------------------------|-------------------|-----------|----------|-----------------------|----------------------|--------------|-------------|-------------------------|--------------|---------|-------------------|------------------|---------------------|-------------|----------|---------|---------|-----------|---------|-----------------|-------------------|
|  |              |   | Helium Concentration Under Shroud | Helium Concentration in Sample |              |               |                       |                             | 1,2,4-Trichlorobenzene   | 1,2,4-Dimethylbenzene | 1,2,3-Trichlorobenzene | 2-Butanone (MIBK) | Aroclene  | Benzene  | Carbon Disulfide      | Carbon tetrachloride | Chloroethane | Cyclohexane | Dichlorodifluoromethane | Ethylbenzene | Heptane | Isopropyl alcohol | Isopropylbenzene | m-Xylene & p-Xylene | Naphthalene | o-Xylene | Styrene | Toluene | Toluene   | Toluene | Trichloroethene | Trichloroethylene |
| Target Sub-Slab Air Concentration (micrograms per cubic meter) |              |   |                                   |                                |              |               |                       | Residential                 | 69.5   | 2,100                 | 2,100                  | 174,000           | 320,000   | 120      | 73                    | 160                  | 3,100        | 209,000     | 3,300                   | 370          | 24,300  | 6,950             | 13,900           | 3,300               | 28          | 3,300    | 34,800  | 1,400   | 170,000   | 70      | NE              | 3,300             |
|  |              |   |                                   |                                |              |               |                       | Small Commercial            | 292  | 8,700                 | 8,700                  | 730,000           | 1,400,000 | 530      | 31,000                | 670                  | 13,000       | 876,000     | 15,000                  | 1,600        | 102,000 | 29,200            | 58,400           | 440                 | 120         | 440      | 146,000 | 6,000   | 730,000   | 290     | NE              | 15,000            |
|  |              |   |                                   |                                |              |               |                       | Large Commercial/Industrial | NE   | 26,000                | 26,000                 | NE                | NE        | 1,600    | NE                    | 2,000                | 39,000       | NE          | 44,000                  | 4,900        | NE      | NE                | NE               | 44,000              | 360         | 44,000   | NE      | 18,000  | 2,200,000 | 880     | NE              | 44,000            |
|  |              |   |                                   |                                |              |               |                       | 117 South Chestnut Avenue   | VP1  | Pass                  | 64%                    | 0%                | 06/05/19  | 02/26/19 | ground floor sub-slab | 30                   | 0.63         | 3.8         | 1.0                     | 3.4          | 79      | 1.7               | 1.1              | 0.36                | 0.98        | 0.56     | 72      | 1.3     | 1.1       | 4.5     | 0.27            | 3.0               |
| 117 South Chestnut Avenue                                      | VP2          | Pass  | 66%                               | 0%                             | 06/05/19     | 02/26/19      | ground floor sub-slab | 30                          | < 1.3  | 3.6                   | < 0.47                 | 3.3               | 51        | 0.60     | 1.6                   | < 0.35               | < 0.62       | < 0.17      | 220                     | 0.80         | < 0.49  | 4.9               | < 0.47           | 2.2                 | 1.5         | 1.3      | 1.0     | 710     | 2.4       | < 0.81  | < 1.3           | 3.4               |

Notes:  
 \* = screening levels from USEPA Region 3 Screening Level Table - November 2017 and, if applicable, representing 1 in 100,000 cancer risk  
 < = analyte not detected to a detection limit of x  
 ? = analyte exceeds the limit of detection but is below the limit of quantification  
 \*\* = a vacuum of greater than 50 inches of water was applied to the hoses and fittings used to collect each sample. A passing grade was given if no noticeable drop in vacuum was observed after at least 1 minute

**Soil Analytical Results Table (page 1 of 2)**  
 BMO Harris Bank-Green Bay  
 117 and 125 S. Chestnut Street and 412 Howard Street  
 Green Bay, Wisconsin  
 PSI Project No. 00542126

**BRRTS No. 02-05-585287**

| Analytical Parameter               | Location | SP-1      | SP-2      | SP-3       | SP-4      | SP-5      | SP-6      | NR 720            |                |             |
|------------------------------------|----------|-----------|-----------|------------|-----------|-----------|-----------|-------------------|----------------|-------------|
|                                    | Depth    | 3-5'      | 0.5-2'    | 0.5-2'     | 0.5-2'    | 2-4'      | 2-4'      | RCL               |                |             |
|                                    | Date     | 7/16/2020 | 7/16/2020 | 7/16/2020  | 7/16/2020 | 7/16/2020 | 7/16/2020 |                   |                |             |
|                                    | Units    |           |           |            |           |           |           | Direct Contact    | Direct Contact | Groundwater |
| saturated/unsaturated              |          | u         | u         | u          | u         | u         | u         | Non-Industrial    | Industrial     | Pathway     |
| PID                                | i.u.     | 0         | 0         | 0          | 0         | 0         | 0         |                   |                |             |
| <b>No VOCs Detected/Not Tested</b> |          |           |           |            |           |           |           |                   |                |             |
| <b>Detected PAHs</b>               |          |           |           |            |           |           |           |                   |                |             |
| Acenaphthene                       | ug/kg    | <2.7      | 4.8J      | 20.7J      | <2.3      | <2.8      | <2.6      | <b>3,590,000</b>  | 45,200,000     | ---         |
| Acenaphthylene                     | ug/kg    | <2.6      | 3.6J      | 24.0J      | <2.3      | <2.7      | <2.5      | ---               | ---            | ---         |
| Anthracene                         | ug/kg    | <2.6      | 25.3      | 55.7J      | <2.2      | 3.0J      | 2.8J      | <b>17,900,000</b> | 100,000,000    |             |
| Benzo(a)anthracene                 | ug/kg    | 4.6J      | 62.5      | 283        | 16.4J     | 10.3J     | 4.9J      | <b>1,150</b>      | 21,100         | 478.1       |
| Benzo(a)pyrene                     | ug/kg    | 3.1J      | 77.5      | <b>353</b> | 17.6J     | 8.0J      | <2.2      | <b>115</b>        | 2,110          | 470         |
| Benzo(b)fluoranthene               | ug/kg    | 4.8J      | 103       | 497        | 32.2      | 17.5J     | 3.6J      | <b>1,150</b>      | 21,100         | 478.1       |
| Benzo(g,h,i)perylene               | ug/kg    | <3.7      | 56.8      | 248        | 18.6      | 9.8J      | <3.5      | ---               | ---            | ---         |
| Benzo(k)fluoranthene               | ug/kg    | <2.7      | 49.2      | 196        | 11.8J     | 7.7J      | <2.5      | <b>11,500</b>     | 211,000        | ---         |
| Chrysene                           | ug/kg    | 4.4J      | 84.8      | 388        | 28.2      | 16.3J     | 5.1J      | <b>115,000</b>    | 2,110,000      | 144.2       |
| Dibenz(a,h)anthracene              | ug/kg    | <2.9      | 14.0J     | 61.6J      | 4.0J      | <2.6      | <2.7      | <b>115</b>        | 2,110          | ---         |
| Fluoranthene                       | ug/kg    | 6.1J      | 163       | 844        | 40.8      | 27.1      | 15.0J     | <b>2,390,000</b>  | 30,100,000     | 888,777.8   |
| Fluorene                           | ug/kg    | <2.5      | 6.4J      | 26.3J      | <2.2      | <2.6      | <2.4      | <b>2,390,000</b>  | 30,100,000     | 14,829.9    |
| Indeno(1,2,3-cd)pyrene             | ug/kg    | <4.4      | 52.6      | 223        | 13.2J     | 7.8J      | 14.3      | <b>1,150</b>      | 21,100         | ---         |
| 1-Methylnaphthalene                | ug/kg    | 3.7J      | 4.9J      | 39.9J      | <2.6      | <3.1      | <2.9      | <b>17,600</b>     | 72,700         | ---         |
| 2-Methylnaphthalene                | ug/kg    | 7.2J      | 6.6J      | 56.6J      | <2.6      | 3.8J      | <2.9      | <b>239,000</b>    | 3,010,000      | ---         |
| Naphthalene                        | ug/kg    | 4.7J      | 7.4J      | 96         | <1.8      | 11.6J     | <1.9      | <b>5,520</b>      | 24,100         | 658.2       |
| Phenanthrene                       | ug/kg    | 4.6J      | 85.6      | 430        | 8.4J      | 14.6J     | 13.4J     | ---               | ---            | ---         |
| Pyrene                             | ug/kg    | 5.0J      | 127       | 602        | 36.2      | 23.3      | 10.2J     | <b>1,790,000</b>  | 22,600,000     | 54,545.5    |
| <b>Detected RCRA Metal</b>         |          |           |           |            |           |           |           |                   |                |             |
| Silver                             | mg/kg    | <0.37     | <0.35     | <0.32      | <0.32     | <0.38     | <0.35     | <b>391</b>        | 5,840          | 0.8491      |

**Notes:**

Bold concentrations exceed NR 720 non-industrial direct contact RCLs

Boxed concentrations exceed NR 720 industrial direct contact RCLs

Italicized concentrations exceed NR 720 groundwater pathway RCLs

--- Not analyzed/Not Established

RCL - residual contaminant level

J - concentration detected between the laboratory Limit of Detection and the Limit of Quantitation

PID = Photoionization Detector

S/U = Sample Saturated/Unsaturated

i.u. - instrument units

PAH - polynuclear aromatic hydrocarbons

VOC - volatile organic compounds

mg/kg - milligrams per kilogram, parts per million

ug/kg - micrograms per kilogram, parts per billion



**Soil Analytical Results Table (page 2 of 2)**  
 BMO Harris Bank-Green Bay  
 117 and 125 S. Chestnut Street and 412 Howard Street  
 Green Bay, Wisconsin  
 PSI Project No. 00542126

**BRRTS No. 02-05-585287**

| Analytical Parameter               | Location | SP-7         | SP-7      | SP-8      | SP-9       | SP-9       | NR 720            |                |             |
|------------------------------------|----------|--------------|-----------|-----------|------------|------------|-------------------|----------------|-------------|
|                                    | Depth    | 2-4'         | 4-5'      | 2-4'      | 2-4'       | 4-6'       | RCL               |                |             |
|                                    | Date     | 7/16/2020    | 7/16/2020 | 7/16/2020 | 7/16/2020  | 7/16/2020  |                   |                |             |
|                                    | Units    |              |           |           |            |            | Direct Contact    | Direct Contact | Groundwater |
| saturated/unsaturated              |          | u            | u         | u         | u          | s          | Non-Industrial    | Industrial     | Pathway     |
| PID                                | i.u.     | 0            | 0         | 0         | 0          | 0          |                   |                |             |
| <b>No VOCs Detected/Not Tested</b> |          |              |           |           |            |            |                   |                |             |
| <b>Detected PAHs</b>               |          |              |           |           |            |            |                   |                |             |
| Acenaphthene                       | ug/kg    | <2.8         | 27.8      | <2.3      | 5.7J       | <11.5      | <b>3,590,000</b>  | 45,200,000     | ---         |
| Acenaphthylene                     | ug/kg    | <2.7         | 2.7J      | <2.3      | <4.5       | <11.5      | ---               | ---            | ---         |
| Anthracene                         | ug/kg    | <2.6         | 30.8      | 3.3J      | 34.0J      | 47.5J      | <b>17,900,000</b> | 100,000,000    |             |
| Benzo(a)anthracene                 | ug/kg    | 6.1J         | 95.7      | 15.8J     | 173        | 405        | <b>1,150</b>      | 21,100         | 478.1       |
| Benzo(a)pyrene                     | ug/kg    | 4.3J         | 71.2      | 16.1J     | <b>218</b> | <b>530</b> | <b>115</b>        | 2,110          | 470         |
| Benzo(b)fluoranthene               | ug/kg    | 5.2J         | 135       | 26.3      | 316        | 663        | <b>1,150</b>      | 21,100         | 478.1       |
| Benzo(g,h,i)perylene               | ug/kg    | <3.7         | 45.3      | 13.2J     | 161        | 368        | ---               | ---            | ---         |
| Benzo(k)fluoranthene               | ug/kg    | 3.1J         | 60.0      | 12.9J     | 120        | 388        | <b>11,500</b>     | 211,000        | ---         |
| Chrysene                           | ug/kg    | 4.9J         | 131       | 24.7      | 226        | 592        | <b>115,000</b>    | 2,110,000      | 144.2       |
| Dibenz(a,h)anthracene              | ug/kg    | <3.0         | 9.9J      | 3.3J      | 38.3       | 93.6       | <b>115</b>        | 2,110          | ---         |
| Fluoranthene                       | ug/kg    | 9.4J         | 251       | 41.5      | 499        | 1,080      | <b>2,390,000</b>  | 30,100,000     | 888,777.8   |
| Fluorene                           | ug/kg    | <2.6         | 14.9J     | <2.2      | 5.8J       | 11.6J      | <b>2,390,000</b>  | 30,100,000     | 14,829.9    |
| Indeno(1,2,3-cd)pyrene             | ug/kg    | <4.4         | 40.1      | 11.2J     | 145        | 334        | <b>1,150</b>      | 21,100         | ---         |
| 1-Methylnaphthalene                | ug/kg    | <3.1         | <2.7      | <2.6      | <5.2       | <13        | <b>17,600</b>     | 72,700         | ---         |
| 2-Methylnaphthalene                | ug/kg    | <3.1         | 3.3J      | <2.6      | <5.2       | 18.6J      | <b>239,000</b>    | 3,010,000      | ---         |
| Naphthalene                        | ug/kg    | <2.1         | 3.5J      | 2.5J      | <3.5       | 26.8J      | <b>5,520</b>      | 24,100         | 658.2       |
| Phenanthrene                       | ug/kg    | 5.8J         | 145       | 18.9      | 189        | 312        | ---               | ---            | ---         |
| Pyrene                             | ug/kg    | 8.0J         | 234       | 35.1      | 347        | 810        | <b>1,790,000</b>  | 22,600,000     | 54,545.5    |
| <b>Detected RCRA Metal</b>         |          |              |           |           |            |            |                   |                |             |
| Silver                             | mg/kg    | <b>0.39J</b> | <0.35     | <0.32     | <0.32      | <0.38      | <b>391</b>        | 5,840          | 0.8491      |

**Notes:**

Bold concentrations exceed NR 720 non-industrial direct contact RCLs

Boxed concentrations exceed NR 720 industrial direct contact RCLs

Italicized concentrations exceed NR 720 groundwater pathway RCLs

--- Not analyzed/Not Established

RCL - residual contaminant level

J - concentration detected between the laboratory Limit of Detection and the Limit of Quantitation

PID = Photoionization Detector

S/U = Sample Saturated/Unsaturated

i.u. - instrument units

PAH - polynuclear aromatic hydrocarbons

VOC - volatile organic compounds

mg/kg -milligrams per kilogram, parts per million

ug/kg -micrograms per kilogram, parts per billion

**Groundwater Analytical Results Table**  
 BMO Harris Bank - Green Bay  
 117 and 125 S. Chestnut Street and 412 Howard Street  
 Green Bay, Wisconsin  
 PSI Project No. 00542126

**BRRTS No. 02-05-585287**

| Analytical Parameter        | Location      | MW-1    | MW-2         | MW-3         | MW-4       | MW-5         | MW-6          | NR 140      |             |
|-----------------------------|---------------|---------|--------------|--------------|------------|--------------|---------------|-------------|-------------|
|                             | Date<br>Units | 7/29/20 | 7/17/20      | 7/17/20      | 7/17/20    | 7/17/20      | 7/17/20       | ES          | PAL         |
| <b>Detected VOCs</b>        |               |         |              |              |            |              |               |             |             |
| Benzene                     | ug/l          | <0.25   | <i>0.58J</i> | <0.25        | 0.30J      | <0.25        | <0.25         | <b>5</b>    | <i>0.5</i>  |
| n-Butylbenzene              | ug/l          | <0.71   | <b>6.1</b>   | 1.2J         | 2.2J       | <0.71        | <0.71         | ---         | ---         |
| sec-Butylbenzene            | ug/l          | <0.85   | <b>19.4</b>  | 6.9          | 5.2        | 3.1J         | <0.85         | ---         | ---         |
| tert-Butylbenzene           | ug/l          | <0.3    | <b>3.4</b>   | 1.1          | 0.43J      | <0.3         | <0.3          | ---         | ---         |
| 1,2-Dichlorobenzene         | ug/l          | <0.71   | <b>1.5J</b>  | <0.71        | <0.71      | <0.71        | <0.71         | <b>600</b>  | <i>60</i>   |
| cis-1,2-Dichloroethene      | ug/l          | <0.27   | <b>0.88J</b> | <i>55.9</i>  | 0.90J      | 0.65J        | 1.2           | <b>70</b>   | <i>7</i>    |
| trans-1,2-Dichloroethene    | ug/l          | <0.46   | <0.46        | <b>3.7</b>   | <0.46      | <0.46        | 1.2J          | <b>100</b>  | <i>20</i>   |
| 1,2-Dichloropropane         | ug/l          | <0.28   | <b>0.38J</b> | <i>1.1</i>   | <0.28      | <0.28        | <0.28         | <b>5</b>    | <i>0.5</i>  |
| Isopropylbenzene            | ug/l          | <1.7    | <b>17</b>    | 3.2J         | 2.9J       | <1.7         | <1.7          | ---         | ---         |
| p-Isopropyltoluene          | ug/l          | <0.8    | <0.8         | <0.8         | 2.6J       | <0.8         | <0.8          | ---         | ---         |
| n-Propylbenzene             | ug/l          | <0.81   | <b>17.7</b>  | 0.95J        | 3.7J       | <0.81        | <0.81         | ---         | ---         |
| Tetrachloroethene           | ug/l          | <0.33   | <0.33        | <0.33        | <0.33      | <i>0.85J</i> | <b>7.4</b>    | <b>5</b>    | <i>0.5</i>  |
| Trichloroethene             | ug/l          | <0.26   | <0.26        | <i>0.90J</i> | <0.26      | <i>1.9</i>   | <i>3.3</i>    | <b>5</b>    | <i>0.5</i>  |
| Total Tirmethylbenzenes     | ug/l          | <1.71   | <1.71        | <1.71        | <1.71      | 1.1J         | <1.71         | <b>480</b>  | <i>96</i>   |
| Vinyl Chloride              | ug/l          | <0.17   | <b>0.78J</b> | <b>19.8</b>  | <b>1.2</b> | <0.17        | <b>0.37J</b>  | <b>0.2</b>  | <i>0.02</i> |
| <b>Detected PAHs</b>        |               |         |              |              |            |              |               |             |             |
| Acenaphthene                | ug/l          | 0.0099J | 0.013J       | 0.021J       | 0.14       | 0.010J       | 0.018J        | ---         | ---         |
| Acenaphthylene              | ug/l          | <0.0045 | 0.14         | 0.039        | 0.043      | <0.0047      | <0.0048       | ---         | ---         |
| Anthracene                  | ug/l          | <0.0095 | <0.01        | 0.020J       | 0.027J     | 0.030J       | 0.010J        | <b>3000</b> | <i>600</i>  |
| Benzo(a)anthracene          | ug/l          | 0.0083J | <0.0075      | <0.0073      | 0.011J     | <0.0072      | 0.011J        | ---         | ---         |
| Benzo(b)fluoranthene        | ug/l          | <0.0096 | <0.0057      | 0.0056J      | 0.0089J    | 0.0062J      | 0.018J        | <b>0.2</b>  | <i>0.02</i> |
| Benzo(k)fluoranthene        | ug/l          | <0.0052 | <0.0075      | <0.0073      | 0.0086J    | <0.0072      | 0.012J        | ---         | ---         |
| Benzo(a)pyrene              | ug/l          | <0.0062 | <0.010       | <0.010       | <0.010     | <0.010       | 0.012J        | <b>0.2</b>  | <i>0.02</i> |
| Benzo(ghi)perylene          | ug/l          | <0.0069 | <0.0067      | <0.0066      | 0.0063J    | <0.0065      | 0.013J        | ---         | ---         |
| Chrysene                    | ug/l          | <0.012  | <0.013       | 0.017J       | 0.016J     | 0.014J       | <i>0.028J</i> | <b>0.2</b>  | <i>0.02</i> |
| Fluoranthene                | ug/l          | 0.019J  | 0.014J       | 0.015J       | 0.035J     | 0.020J       | 0.076         | <b>400</b>  | <i>80</i>   |
| Fluorene                    | ug/l          | 0.0089J | <0.0079      | 0.011J       | 0.042      | 0.018J       | 0.031J        | <b>400</b>  | <i>80</i>   |
| 1-Methylnaphthalene         | ug/l          | 0.0098J | 0.051        | 0.027J       | 0.094      | 0.021J       | 0.010J        | ---         | ---         |
| 2-Methylnaphthalene         | ug/l          | 0.012J  | 0.022J       | 0.04         | 0.11       | 0.020J       | 0.0095J       | ---         | ---         |
| Naphthalene                 | ug/l          | 0.023J  | 0.68         | 0.1          | 0.27       | 0.082J       | 0.033J        | <b>100</b>  | <i>10</i>   |
| Phenanthrene                | ug/l          | 0.038J  | 0.031J       | 0.061J       | 0.14       | 0.042J       | 0.062J        | ---         | ---         |
| Pyrene                      | ug/l          | 0.013J  | 0.012J       | 0.012J       | 0.026J     | 0.017J       | 0.041         | <b>250</b>  | <i>50</i>   |
| <b>Detected RCRA Metals</b> |               |         |              |              |            |              |               |             |             |
| Barium                      | ug/l          | 211     | <i>523</i>   | 339          | <i>771</i> | 201          | 114           | <b>2000</b> | <i>400</i>  |

**Notes:**

Bold concentrations exceed NR 140 Enforcement Standards

Italicized/underlined concentrations exceed NR 140 Preventive Action Limits

--- - Not analyzed/Not Established

ug/l -micrograms per liter

J - laboratory estimated concentration detected between the laboratory Limit of Detection and the Limit of Quantitation

### Groundwater Elevations Table

BMO Harris Bank Branch  
125 S. Chestnut Avenue  
Green Bay, Wisconsin  
PSI Project No. 00542126  
**BRRTS No. 02-05-585287**

| ELEVATIONS             | MW-1   | MW-2   | MW-3   | MW-4   | MW-5   |
|------------------------|--------|--------|--------|--------|--------|
| Surface                | 589.29 | 588.40 | 588.76 | 589.47 | 589.45 |
| Top of Casing          | 589.03 | 587.98 | 588.41 | 589.12 | 589.10 |
| Top of Screen          | 583.7  | 584.8  | 585.7  | 586.0  | 585.1  |
| Bottom of Screen       | 573.7  | 574.8  | 575.7  | 576.0  | 575.1  |
| Groundwater Elevations |        |        |        |        |        |
| 8/3/2020               | 579.25 | 584.14 | 584.83 | 583.70 | 584.89 |
|                        |        |        |        |        |        |
|                        |        |        |        |        |        |
|                        |        |        |        |        |        |
|                        |        |        |        |        |        |

**Notes:**

Benchmark - hydrant bonnet flange located on NWC of Howard and Chestnut (EL. 590.53)

|        |
|--------|
| MW-6   |
| 589.34 |
| 588.99 |
| 585.0  |
| 575.0  |
|        |
| 584.92 |
|        |
|        |
|        |
|        |