

From: [Byers, Harris](#)
To: [Beggs, Tauren R - DNR](#)
Subject: RE: PFAS Scoping Statement for Phase I Construction Area of River Point
Date: Tuesday, September 7, 2021 8:36:29 PM
Attachments: [Fire Department Response on River Point.pdf](#)
Importance: High

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Tauren:

A response to your question below is attached.

Please review and let me know if you need anything else to support you in your meeting.

Sincerely,

Harris Byers, Ph.D.

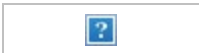
Sr. Brownfields Project Manager
Contaminant Hydrogeologist / Urban Geochemist

Direct: 414 581-6476

Harris.Byers@stantec.com

Stantec

12075 Corporate Parkway Suite 200
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From: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>
Sent: Tuesday, September 7, 2021 11:48 AM
To: Byers, Harris <Harris.Byers@stantec.com>
Subject: RE: PFAS Scoping Statement for Phase I Construction Area of River Point

Thanks Harris

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Tauren R. Beggs

Phone: (920) 510-3472

Tauren.Beggs@wisconsin.gov (preferred contact method during work at home)

From: Byers, Harris <Harris.Byers@stantec.com>
Sent: Tuesday, September 7, 2021 11:47 AM

To: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>

Subject: RE: PFAS Scoping Statement for Phase I Construction Area of River Point

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Good morning; just letting you know I'm working on this. Paul B. has been in meetings all morning. I know he and I looked at photos of the training event – and I'm almost 100% sure I know which structure it was.....but let me confirm.

I'll send over ASAP in a short letter (figures and photos if I can get them) so you can share with your team.

Sincerely,

Harris Byers, Ph.D.

Sr. Brownfields Project Manager
Contaminant Hydrogeologist / Urban Geochemist

Direct: 414 581-6476

Harris.Byers@stantec.com

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12075 Corporate Parkway Suite 200
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From: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>

Sent: Tuesday, September 7, 2021 8:58 AM

To: Byers, Harris <Harris.Byers@stantec.com>

Subject: RE: PFAS Scoping Statement for Phase I Construction Area of River Point

Hi Harris,

Where was the location of the former structure that was used for fire department training activities?
I am assuming I may get asked that question tomorrow.

Regards,

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Tauren R. Beggs

Phone: (920) 510-3472

Tauren.Beggs@wisconsin.gov (preferred contact method during work at home)

From: Beggs, Tauren R - DNR
Sent: Tuesday, September 7, 2021 8:48 AM
To: Byers, Harris <Harris.Byers@stantec.com>
Subject: RE: PFAS Scoping Statement for Phase I Construction Area of River Point

No problem, I have time to review it before tomorrow. Thanks for sending it over Harris

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Tauren R. Beggs

Phone: (920) 510-3472

Tauren.Beggs@wisconsin.gov (preferred contact method during work at home)

From: Byers, Harris <Harris.Byers@stantec.com>
Sent: Tuesday, September 7, 2021 8:37 AM
To: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>
Subject: RE: PFAS Scoping Statement for Phase I Construction Area of River Point

**CAUTION: This email originated from outside the organization.
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Good morning – I realize I sent this late in the day on a Friday before a holiday weekend, so I wanted to put a note towards the top of your inbox to take a look at the scoping statement and call/email with thoughts on strengthening the document.

Sincerely,

Harris Byers, Ph.D.

Sr. Brownfields Project Manager
Contaminant Hydrogeologist / Urban Geochemist

Direct: 414 581-6476

Harris.Byers@stantec.com

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From: Byers, Harris
Sent: Friday, September 3, 2021 4:00 PM
To: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>

Subject: PFAS Scoping Statement for Phase I Construction Area of River Point

Importance: High

Tauren:

From our earlier discussion, attached is a draft PFAS scoping statement for the Phase I Construction Area of River Point for your review.

Please let me know if you need additional information to present to the PFAS committee later this month.

Thanks for your continued support on the project!

Sincerely,

Harris Byers, Ph.D.

Sr. Brownfields Project Manager
Contaminant Hydrogeologist / Urban Geochemist

Direct: 414 581-6476

Harris.Byers@stantec.com

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September 7, 2021

Attention: Tauren Beggs
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
2984 Shawano Ave
Green Bay, WI 54313

Dear Mr. Beggs,

**Reference: Fire Department Response During Explosive Demolition of a Former Grain Elevator
1101 Buffalo Street
River Point District – Phase I Construction Area
Manitowoc, Wisconsin
BRRTS ID: 02-36-585491 (Open ERP); 07-36-583000 (LGU Exemption/ General Property)
Stantec Project #: 193708427**

The Stantec (2021b) *Summary of Prior Site Operations and PFAS Scoping Statement* letter evaluated the potential historic uses of per- and polyfluorinated alkyl substances (PFAS) in the Phase I Construction Area (outlined in green on Figure 1) at the River Point District (outlined in yellow on Figure 1) in the City of Manitowoc, Wisconsin. The Phase I Construction Area relative to historic leases issued by the former property owner (Wisconsin Central Limited) to previous industrial tenants (defined as unique parcel identification numbers) is illustrated on Figure 2.

Former Grain Elevator. In following up to our email discussion today, this letter describes a supplemental review of records related to the City of Manitowoc Fire Department's response to a building fire accidentally initiated by the prior owner during demolition of a grain elevator formerly located at 1101 Buffalo Street (PIN No. 000173080; Figure 2). Depending on the georeferencing of historic maps/orthophotographs, the eastern portion of the former grain elevator may be located within the Phase I Construction Area (Figure 3).

Sanborn® Fire Insurance Maps indicate a multi-story grain elevator was constructed on PIN 000173080 between 1894 and 1900, with expansion between 1900 and 1906 by the "Northern Grain Co". Significant expansion occurred between 1906 and 1919 by the "Northern Elevator Co." Historic City Directories published in 1964 and 1967 confirm the "Northern Elevator" was located at 1101 Buffalo Street. The occupants listed at 1101 Buffalo Street in subsequent City Directories included "Enreco Natural Feeds" (1990, 1992, 1995, 2000) and "Enreco, Inc." (2000 and 2001). Photographs (date unknown) of the structure when the grain elevator was occupied by Enreco are shown below.



Source: Stantec (2019) Phase I Environmental Site Assessment; Appendix E.

Fire Department Response. As noted in the Stantec (2019) Phase I ESA, the grain elevator had fallen into disrepair in the late 20th Century, and a demolition permit was issued to Wisconsin Central LTD on February 5, 2001. Utilities were disconnected from the structure in April 2001 and the building was subsequently demolished using explosives. During demolition, records indicate grain residues in the structure combusted

Reference: Fire Department Response During Explosive Demolition of a Former Grain Elevator; 1101 Buffalo Street; River Point District – Phase I Construction Area; Manitowoc, Wisconsin

and the building caught fire. The City of Manitowoc Fire Department responded to manage risks to nearby structures. City records do not indicate the City of Manitowoc Fire Department used aqueous film forming foam (AFFF) during their management of the fire at the structure.

Groundwater Quality Near the Former Grain Elevator.

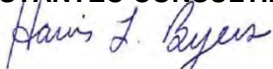
Use of AFFF to manage fires could result in a release of PFAS compounds to the subsurface. The two predominant PFAS compounds associated with AFFF are perfluorooctane sulfonate (PFOS) and perfluorohexane sulfonate (PFHxS). The concentrations of these two fluorinated compounds in groundwater (adapted from the Stantec (2021) *ch. NR 716 Site Investigation Report*) near the former grain elevator are summarized on Figure 3.

The potentiometric surface of shallow groundwater decreases in a southwestern direction from the former grain elevator. The concentrations of PFOS and PFHxS in groundwater from the nearest downgradient/sidegradient monitoring wells, where detected, are mostly single digit nanogram per kilogram concentrations.

Given the absence of records indicating AFFF was used onsite and the magnitude and gradient of detected compounds in groundwater, the “source” of detected PFAS compounds in groundwater does not appear to be located in the Phase I Construction Area. Therefore, PFAS are not considered constituents of concern for the *ch. NR 716 Site Investigation* on this portion of the River Point District. Stantec requests a written response from the WDNR which concurs with these findings.

Regards,

STANTEC CONSULTING SERVICES INC



Harris L. Byers, Ph.D.

Sr. Brownfields Project Manager

Email: Harris.Byers@Stantec.com

Attachments: Figures

SELECT REFERENCES

ITRC, 2020 (September), “Per- and Polyfluoroalkyl Substances (PFAS).” <https://pfas-1.itrcweb.org/>

Stantec, 2019, 10th Street Railroad Property, Manitowoc, Wisconsin, Phase I Environmental Site Assessment, March 21, 2019.

Stantec, 2021a, NR716 Site Investigation Report, River Point District Phase 1 Construction Area; Manitowoc, Wisconsin, July 19, 2021.

Stantec, 2021b, Summary of Prior Site Operations and PFAS Scoping Statement, September 3, 2021.

FIGURES

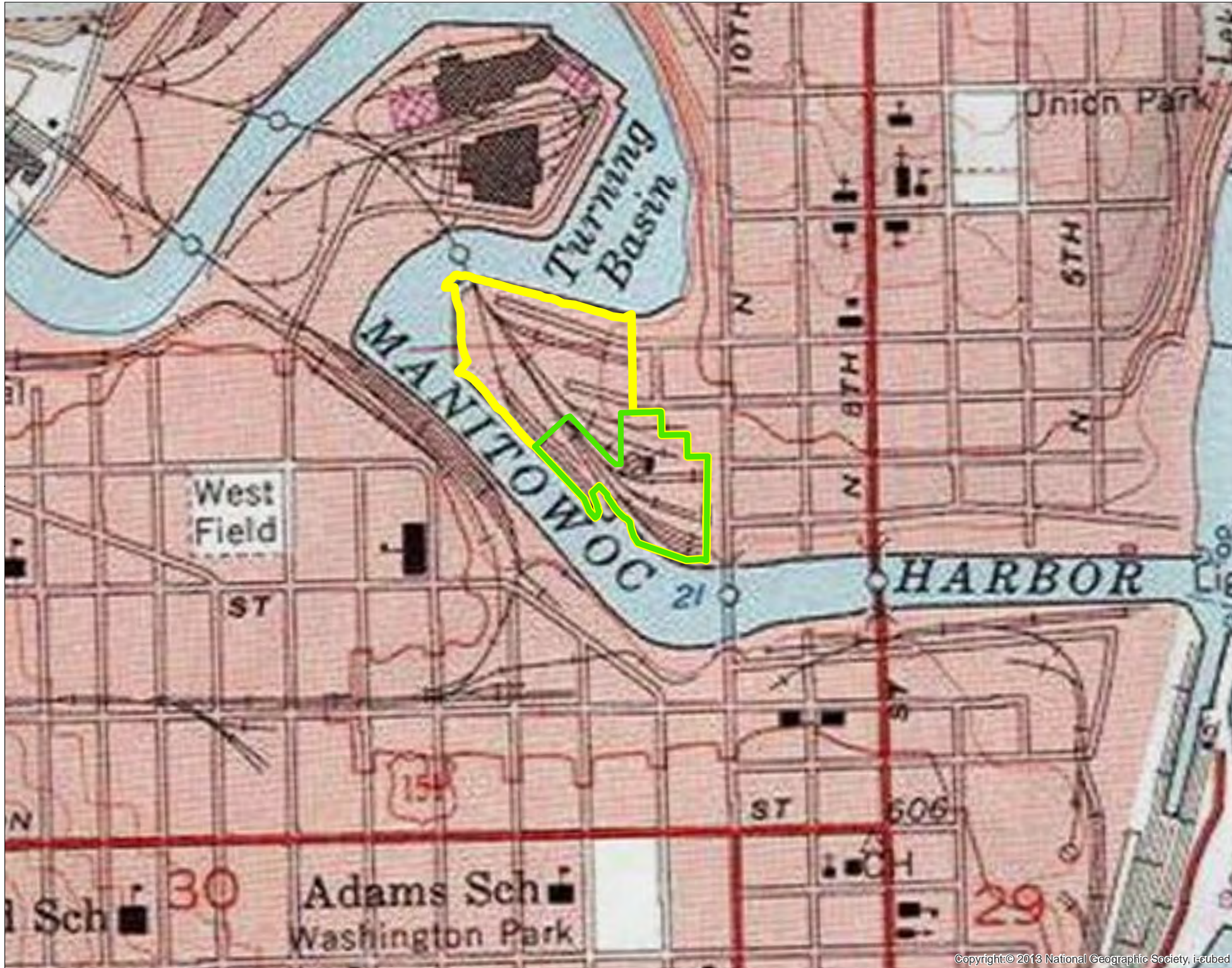





Figure No.
1
 Title
Property Location and Regional Topography
 Client/Project
 Site Investigation Project Area
 River Point District
 City of Manitowoc
 0 390 780 Feet
 Prepared by HLB on 4/21/21

Legend
 Site Investigation Project Area
 River Point District


Notes
 1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 2. Historic Site features illustrated on this figure were digitized from multiple historic maps/sources, including City Assessor files, WDNR files, and Sanborn (R) Fire Insurance Maps. These features are provided for illustration purposes only; Stantec makes no warranty as to the accuracy of these features.
 3. Orthophotograph: Manitowoc County, 2017





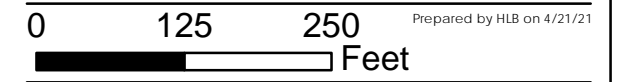
Figure No.

2

Title

Project Area and Property Identification Numbers

Client/Project
 Site Investigation Project Area
 River Point District
 City of Manitowoc



Legend



- Site Investigation Project Area
- River Point District
- Parcel Identification Numbers

NOTE:
 1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
 2. Orthophotograph: Manitowoc County, 2017



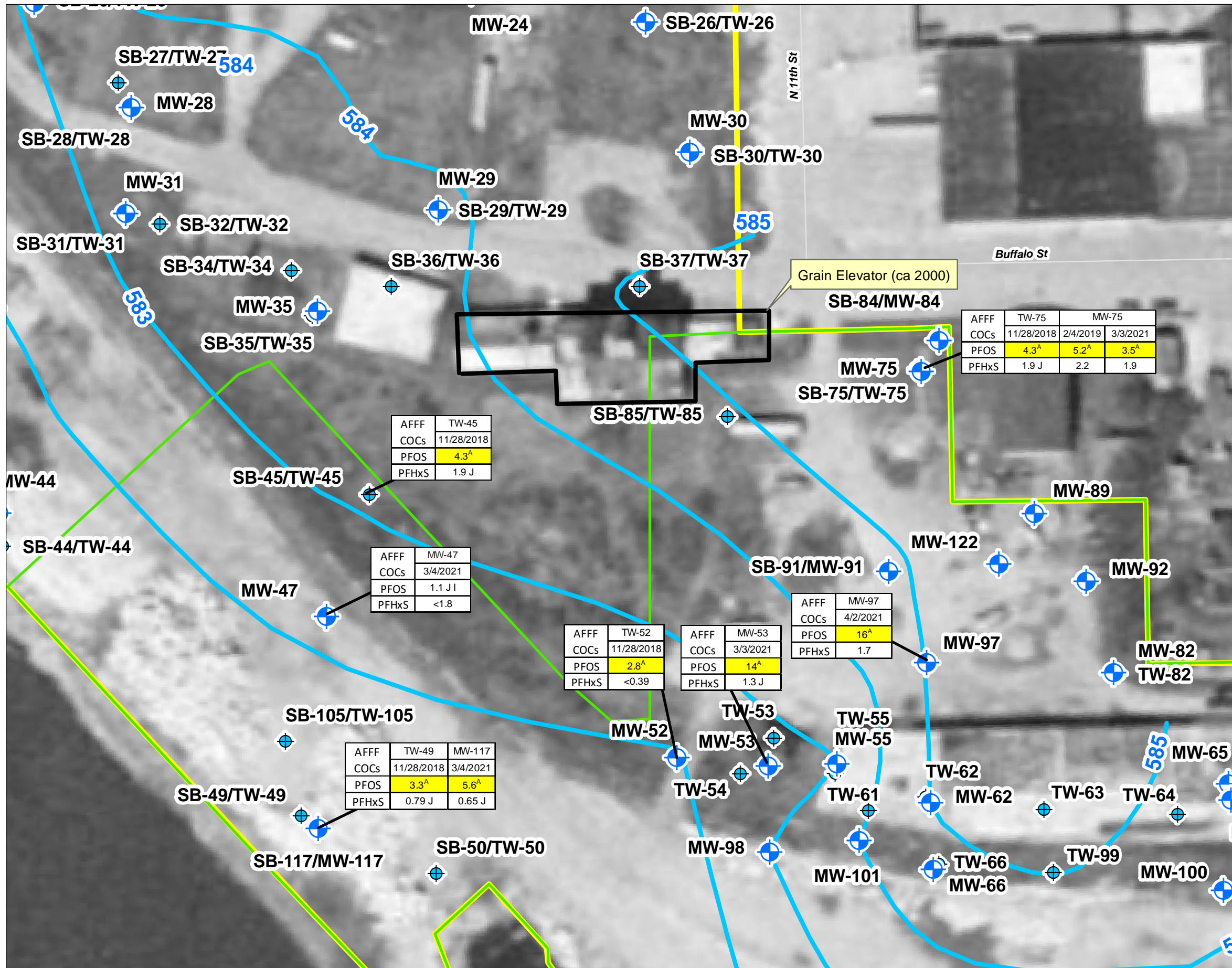


Figure No. **3**
 Title
2000 Orthophoto and Concentration of AFFF COCs in Groundwater (ng/L)
 Client/Project
 Site Investigation Project Area
 River Point District
 City of Manitowoc
 0 50 100 Feet
 Prepared by HLB on 9/7/2021

Legend

- Groundwater Elevation (ft amls)
- Site Investigation Project
- River Point District

Sample Locations

- Monitoring Well (29)
- Soil Boring / Temp Well (32)

AFFF COCs	TW-75 11/28/2018	MW-75 2/4/2019	MW-75 3/3/2021
PFOS	4.3 ^A	5.2 ^A	3.5 ^A
PFHxS	1.9 J	2.2	1.9

AFFF COCs	TW-45 11/28/2018
PFOS	4.3 ^A
PFHxS	1.9 J

AFFF COCs	MW-47 3/4/2021
PFOS	1.1 J I
PFHxS	<1.8

AFFF COCs	TW-52 11/28/2018
PFOS	2.8 ^A
PFHxS	<0.39

AFFF COCs	MW-53 3/3/2021
PFOS	14 ^A
PFHxS	1.3 J

AFFF COCs	MW-97 4/2/2021
PFOS	16 ^A
PFHxS	1.7

AFFF COCs	TW-49 11/28/2018	MW-117 3/4/2021
PFOS	3.3 ^A	5.6 ^A
PFHxS	0.79 J	0.65 J

Notes

- Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet
- Orthophotograph: Manitowoc County, 2017
- Fluorinated compounds commonly associated with aqueous film-forming foam (AFFF) include perfluorooctane sulfonate (PFOS) and perfluorohexane sulfonate (PFHxS).
- Concentrations of PFOS greater than the proposed preventive action limit are highlighted yellow with an "A" superscript and concentrations greater than the proposed enforcement standard are highlighted red with an "AB" superscript.

