STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING

GRETCHEN WHITMER
GOVERNOR

PHILLIP D. ROOS
DIRECTOR

September 26, 2024

TO: All Interested Citizens, Organizations, and Government Agencies

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT
Charter Township of Haring, Wexford County
Emerging Contaminants in Small or Disadvantaged Communities Grant Program Project Number EC-003

The purpose of this notice is to seek public input and comment on a preliminary decision by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) that an Environmental Impact Statement (EIS) is not required to implement recommendations discussed in the attached Environmental Assessment of a water supply project planning document submitted by the applicant mentioned above.

HOW WERE ENVIRONMENTAL ISSUES CONSIDERED?

Consistent with the procedural requirements of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321 et seq., as implemented by the Council of Environmental Quality (CEQ) Regulations (40 CFR Parts 1500 through 1508), and the Environmental Protection Agency's NEPA Regulations (40 CFR Part 6), EGLE is required to evaluate all environmental implications of a proposed water supply project. EGLE has done this by incorporating a detailed analysis of the environmental impact of the proposed alternatives in its review and approval process. A project planning document was prepared by the applicant and reviewed by the State. EGLE has prepared the attached Environmental Assessment and found that the proposed project does not require the preparation of an EIS.

WHY IS AN EIS NOT REQUIRED?

Our environmental review concluded that no significant environmental impacts would result from the proposed action. Any adverse impacts have either been eliminated by changes in the project planning document or will be reduced by the implementation of the mitigative measures discussed in the attached Environmental Assessment.

HOW DO I GET MORE INFORMATION?

A map depicting the location of the proposed project is attached. This information is also available on our website at Michigan.gov/DWSRF under "Additional Links." The Environmental Assessment presents additional information on the project, alternatives that were considered, impacts of the proposed action, and the basis for our decision. Further information can be obtained by calling or writing one of the contact people listed below.

HOW DO I SUBMIT COMMENTS?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at EGLE, P.O. Box 30457, Lansing, Michigan 48909-4957. We will not take any action on this project planning document for 30 calendar days from the date of this notice in order to receive and consider any comments.

WHAT HAPPENS NEXT?

In the absence of substantive comments during this period, our preliminary decision will become final. The applicant will then be eligible to receive loan assistance from this Agency to construct the proposed project.

Any information you feel should be considered by EGLE should be brought to our attention. If you have any questions, please contact Jessica Ferris, the project manager, at 517-331-3744; FerrisJ6@Michigan.gov; or you may contact me. Your interest in this process and the environment is appreciated.

Sincerely,

Dan Beauchamp

Dan Beauchamp, Section Manager
Water Infrastructure Funding and Financing Section
Finance Division
517-388-3380

Attachment

MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Emerging Contaminants in Small or Disadvantaged Communities Grant Program
Charter Township of Haring, Wexford County
Environmental Assessment
September 2024

PROJECT IDENTIFICATION

Applicant:	Charter Township of Haring
Address:	515 Bell Avenue, Cadillac, Michigan 49601
Project Contact:	Bob Scarbrough, Township Supervisor
Project Number:	EC-003

PROJECT BACKGROUND

The Charter Township of Haring (Haring) is located in Wexford County in northern Michigan (Figure 1). According to the United States Census Bureau, the population of Haring will see a steady increase from 2,025 persons in 2020 to 2,094 persons in 2040. Haring's water system supplies the business district north of the City of Cadillac and the residential area from Third Avenue to Tenth Avenue north of Thirteenth Street (Figure 2).
Haring is receiving funding from the Emerging Contaminants in Small or Disadvantaged Communities Grant Program (EC-SDC) for the installation of a new water supply well and to extend water service to properties with private wells that have been found to contain per and polyfluoroalkyl substances (PFAS). The estimated cost of the project is $3,000,000.

EXISTING SYSTEM AND PROJECT NEED

Haring's water system is supplied by two wells, Well Nos. 1 and 2, with pump capacities of 1,071 gallons per minute (gpm) and 1,100 gpm, respectively. Both well pumps are vertical line shaft turbine pumps and are located in separate buildings on property owned by Haring, north of Works Avenue between North Mitchell Street and Hanthorn Street. The water is treated at each of the well buildings. The well capacity for each pump was tested in 2022 and the wells and pumps were found to be in good condition.

PFAS is classified as an emerging contaminant by the United States Environmental Protection Agency. The water supply wells that are used to provide drinking water to Haring customers have been sampled and found to have detectable levels of PFAS. Sample results can be found in Table 1 below. Private residential drinking water wells throughout Haring as

well as the wells serving the Wexford-Missaukee Intermediate School District (WMISD) have also been impacted by PFAS contamination.

Table 1: PFAS Results for Haring Water Supply Wells

Parameter (ng/L[1])	Well No. 1	Well No. 2	MCL[2]
PFBS[3]	<2.0	<2.0	420
PFHxA[4]	2.6	<2.0	400,000
HFPO-DA[5]	<2.0	<2.0	370
PFHxS[6]	3.9	2.1	51
PFOA[7]	4.3	2.4	8
PFOS[8]	4.6	2.4	16
PFNA[9]	<2.0	<2.0	6

Notes:
[1] – Nanograms per liter (ng/L)
[2] – Maximum contaminant levels (MCLs) are legally enforceable standards set by EGLE
[3] – Perfluorobutanesulfonic acid (PFBS)
[4] – Perfluorohexanoic acid (PFHxA)
[5] – Hexofluoropropylene oxide (HFPO-DA)
[6] – Perfluorohexansulfonic acid (PFHxS)
[7] – Perfluorooctanoic acid (PFOA)
[8] – Perfluorooctanesulfonic acid (PFOS)
[9] – Perfluorononanoic acid (PFNA)

Sampling for PFAS compounds was also completed in and near the project area between October 2018 and February 2022. As shown in Tables 2, 3, and 4, below, three locations tested above the Maximum Contaminant Level (MCL) for Perfluorononanioc acid (PFNA) and Perfluorooctanoic acid (PFOA).

Table 2: PFAS Testing Results for Project Area

Parameter (ng/L[1])	Baker College of Cadillac 1	Baker College of Cadillac 2	Cadillac, City of TP100	Cadillac, City of TP011	Curry House Assisted Living TP101	Haring Distribution	Haring Distribution TP101	Wexford Missaukee Career LOC02	Wexford Missaukee Career LOC01	YMCA TP101	MCL[2]
PFBS[3]	ND[10]	ND	ND	ND	ND	-2	-2	5	3	-2	420
PFHpA[4]	3	ND	ND	ND	ND	-2	-2	3	ND	-2	
PFHxA[5]	12	ND	ND	ND	ND	-2	-2	12	8	-2	4000,000
PFHxS[6]	4	ND	ND	ND	ND	-2	3	ND	2	-2	51
PFOA[7]	5	ND	ND	ND	ND		2.6	3.2	5	4	8
PFOS[8]	ND	ND	ND	ND	ND	3.4	3	7	4	-2	16
PFNA[9]	ND	ND	ND	ND	ND	-2	-2	**14**	**9**	-2	6

Notes:
[1] – Nanograms per liter (ng/L)
[2] – Maximum contaminant levels (MCLs) are legally enforceable standards set by EGLE
[3] – Perfluorobutanesulfonic acid (PFBS)
[4] – Perfluorohexanoic acid (PFHxA)
[5] – Hexofluoropropylene oxide (HFPO-DA)
[6] – Perfluorohexansulfonic acid (PFHxS)
[7] – Perfluorooctanoic acid (PFOA)
[8] – Perfluorooctanesulfonic acid (PFOS)
[9] – Perfluorononanoic acid (PFNA)
[10] – Not Detected (ND)

Table 3: PFAS Results for Private Residential Wells on John R Street

Parameter (ng/L[1])	4879 John R Street	4787 John R Street	4884 John R Street	4895 John R Street	4835 John R Street	4843 John R Street	4795 John R Street	4838 John R Street	4976 John R Street	MCL[2]
PFBS[3]	2	5	5	10			6	5	16	420
PFHpA[4]	2			3	3					
PFHxA[5]	3	2		7	3	3		2		4000,000
PFHxS[6]										51
PFOA[7]	85	7	3	3	8	**10**	3		3	8
PFOS[8]	10		2	8	10	2		2	6	16
PFNA[9]										6

Notes:
[1] – Nanograms per liter (ng/L)
[2] – Maximum contaminant levels (MCLs) are legally enforceable standards set by EGLE
[3] – Perfluorobutanesulfonic acid (PFBS)
[4] – Perfluoroheptanoic acid (PFHpA)
[5] – Perfluorohexanoic acid (PFHxA)
[6] – Perfluorohexansulfonic acid (PFHxS)
[7] – Perfluorooctanoic acid (PFOA)
[8] – Perfluorooctanesulfonic acid (PFOS)
[9] – Perfluorononanoic acid (PFNA)

Table 4: PFAS Results for Private Residential Wells on 13th Street

Parameter (ng/L[1])	9900 13th Street	9960 13th Street	9826 13th Street	9930 13th Street	9762 13th Street	9712 13th Street	9731 13th Street	MCL[2]
PFBS[3]			16					420
PFHpA[4]			4					
PFHxA[5]		7		4				4000,000
PFHxS[6]		3	2					51
PFOA[7]			8				2	8
PFOS[8]	ND[10]					ND	ND	16
PFNA[9]								6

Notes:
[1] – Nanograms per liter (ng/L)
[2] – Maximum contaminant levels (MCLs) are legally enforceable standards set by EGLE
[3] – Perfluorobutanesulfonic acid (PFBS)
[4] – Perfluoroheptanoic acid (PFHpA)
[5] – Perfluorohexanoic acid (PFHxA)
[6] – Perfluorohexansulfonic acid (PFHxS)
[7] – Perfluorooctanoic acid (PFOA)
[8] – Perfluorooctanesulfonic acid (PFOS)
[9] – Perfluorononanoic acid (PFNA)
[10] – Not Detected (ND)

Refer to Figure 3 for the locations of the sampling events.

EGLE has reported that private drinking water wells for properties on the south side of 36 Road between John R Street and Crosby have also identified concentrations of PFAS.

The WMISD has three drinking water wells on its campus serving four buildings: Career Tech Center (CTC), Special Services (SS)-AG/Heavy Equipment, and General Education (GE). In 2019 the WMISD began voluntarily sampling its wells for PFAS. Initial sampling identified PFAS in the CTC and SS wells. All concentrations were below the MCL, except for levels of PFNA in the CTC well. As

requested by EGLE, the WMISD started sampling all three wells quarterly. Results from September 2019 to June 2021 indicated an average PFNA concentration that was 1.667 nanograms per liter (ng/L) above the MCL, which resulted in the WMISD receiving a violation from the District Health Department #10 for exceeding the MCL over four quarterly samples.

PROPOSED PROJECT

Alternatives Considered

The following alternatives were evaluated to address Haring's water supply wells.

Alternative 1: No Action

If no action is taken, Haring will continue to supply its customers with water containing PFAS. If the concentration of PFAS increases in the source water, Haring will not meet its water quality requirements. Therefore, this alternative is not viable.

Alternative 2: Construction of a New Water Supply Well

This alternative would include locating and constructing a new 800 gpm supply well that does not contain PFAS. Three potential well sites have been identified that have a groundwater source that meets the needs capacity and based on a desktop review are believed to not contain PFAS. A new well would include the well, well house with treatment equipment, meter, well controls, electrical power, and the water main needed to connect the new supply well to the existing water system. Each of the proposed sites included at least four acres to maintain at least 200 feet from common sources of contaminants and would also include a hydrogeological study as needed to confirm this.

Well Site No. 1 is located adjacent to a 12-inch diameter water main that loops into the existing system and requires the least amount of water main to connect to the current system.

Well Site No. 2 did not pass the Adverse Resource Impact Determination and was also identified as medium risk during the Desktop Environmental Review. If this site is selected, the properties along 36 Mile Road would need to connect to municipal service if their wells are found to contain PFAS or when Haring requires them, given that the new water main to connect the well to the system will bypass this area. Services to these properties would be installed as needed by directional drill installation under the existing roadway.

Well Site No. 3 is in a commercial area and would be located at the end of a dead end 8-inch diameter water main.

Once the new well is installed, the existing wells would be kept and maintained and only used for fire protection. In the long term, additional wells would be developed and the existing testing for PFAS at the wells would be abandoned.

Alternative 3: Treat Existing Water Supply Wells for PFAS

Activated carbon is an option to treat PFAS by removal through filters adsorbing the compounds. Activated carbon is an effected adsorbent because it is a highly porous material and provides a large surface area to which contaminants may adsorb. Activated carbon is made from organic materials with high carbon contents such as wood, lignite, and coal and is often used in a granular form called granular activated carbon.

Another treatment option is high-pressure membranes, such as nanofiltration or reverse osmosis, which have been found to be effective at removing PFAS. With both high pressure membrane types, about 80 percent of the water coming into the membrane passes through to the effluent and the remaining 20 percent of the water is retained as a high-strength concentrated waste which can be difficult to treat or dispose of.

The following alternatives were evaluated for private wells impacted by PFAS.

Alternative 1: No Action

If the water system is not extended to the residential properties and the WMISD facilities, the water in the existing wells will continue to contain concentrations of PFAS. This poses a health risk to the community and therefore is not a viable alternative.

Alternative 2: Water Main Extension to Impacted Private Drinking Water Wells

Extension of the municipal water system to areas impacted by PFAS contamination includes the installation of approximately 2,500 linear feet (LF) of 8-inch diameter water main and 2,525 LF of 12-inch diameter water main which would supply up to 33 residential customers and the WMISD facilities with drinking water from Haring's water system. Properties adjacent to the water main extension will be required to connect to the system as required by the Haring water ordinance. Extension of the system will consolidate the WMISD Type 2 system with Haring's drinking water system. Following connection to the system, all private wells will be required to be abandoned.

Extending the drinking water system will improve the health and safety of the public, which would be ensured by continuous monitoring of the system for PFAS.

Alternative 3: Treat Existing Private Drinking Water Wells for PFAS

As discussed previously, PFAS can be treated by activated carbon or high-pressure membranes, such as nanofiltration of reverse osmosis. However, installing PFAS treatment on individual private drinking water wells is not considered as a viable option because the health and safety of the public cannot be confirmed without continuous monitoring of PFAS levels.

Selected Alternative

Construction of a New Water Supply Well

The recommended alternative is construction of a new 800 gpm well that would not contain PFAS compounds at Well Site No. 1, which is located in Haring Township, south of the intersection of Caribou Trail and E. Boon Rd. The property is owned by Haring and consists of 3.7-acres of wooded land. An electrical power line crosses the southeast corner of the property. No other utilities are present on the site.

The new well will include the well, well house, and approximately 250 feet of 12-inch diameter polyvinyl chloride (PVC) water main. The well house will be a single-story concrete block building with space for disinfection and metering equipment. Permanent backup power will be provided next to the well house. Tree clearing will be required to provide a utility corridor and an access drive to the well.

Water Main Extension to Impacted Private Drinking Water Wells

Extension of the water system to areas impacted by PFAS contamination is also part of the selected alternative. This includes extending approximately 2,500 linear feet of 8-inch diameter PVC water main and 2,525 feet of 12-inch diameter water main, including associated service lines, which would supply up to 33 existing residential customers and the WMISD facilities. Properties adjacent to the water main extension will be required to connect to municipal services. Any existing private drinking water wells will be abandoned.

Refer to Figure 4 for the locations of the selective alternatives.

EXISTING ENVIRONMENT AND PROJECT IMPACTS

Water Quality Impacts

The proposed project does not have any anticipated impacts to water resources or surface waters such as inland lakes, streams, or wetlands.

Construction Impacts

Associated impacts with this project are related to construction disturbances including dust and soil erosion/sedimentation. Typical construction mitigation is expected for the selected alternative. Watering will take place during dry days to mitigate dust. Soil erosion and sedimentation control measures will be required by the contract documents.

A Section 7 United States Fish and Wildlife Service (USFWS) review was completed which identified the Northern long-eared bat, the Eastern massasauga rattlesnake, and the Monarch butterfly in the project area. It was determined that no critical habitats within the project area were under the jurisdiction of the USFWS. However, to mitigate the risk to these species, tree removal will not be allowed in June or July and pesticides/herbicides will not be used.

A review by the Michigan Natural Features Inventory indicated that the Kirtland's warbler has been observed in Wexford County but is not prevalent. It is not anticipated that the project will have an adverse impact on this species.

A Section 106 review was completed for the proposed project. Based on the information that was provided by Haring's archaeological consultant, it is the opinion of the State Historic Preservation Office (SHPO) that no historic properties are affected as a result of the proposed project. If the scope of the project changes in any way, SHPO will need to be contacted. In the unlikely event that human remains, or archaeological material are encountered during construction activities, work must be halted and SHPO and other appropriate authorities must be contacted immediately.

Federally identified tribes for Wexford County were contacted requesting comments as to any potential impacts to tribal historic, religious, or cultural resources. To date, no comments have been received.

PUBLIC PARTICIPATION

Public hearings to discuss the proposed project were advertised in *The Cadillac News* on April 27, 2023, and June 29, 2023. The public hearings were held at the Haring offices on May 8, 2023, and July 10, 2023. The initial presentation included an introduction to the State Revolving Fund program, the need for the project, the alternatives evaluated, impacts to cultural resources and the natural environment, cost to users, and the recommended alternative. The second public hearing presented the revisions to the plan and change in costs. At the conclusion of each of the hearings, Haring passed resolutions to adopt the project plan to implement the selected alternative.

REASONS FOR CONCLUDING NO SIGNIFICANT IMPACTS

The project will present no long-term significant impacts associated with its construction or operation. Long term positive impacts, providing safe drinking water to the residents of Haring, outweighs the short-term impacts that may be encountered during construction.

Questions regarding this Environmental Assessment should be directed to:

Ms. Jessica Ferris, Project Manager
Water Infrastructure Funding and Financing Section
Finance Division
Michigan Department of Environment, Great Lakes, and Energy
P.O. Box 30457
Lansing, Michigan 48909-4957
Telephone: 517-331-3744
E-Mail: FerrisJ6@Michigan.gov

Figure 1: Location of Haring

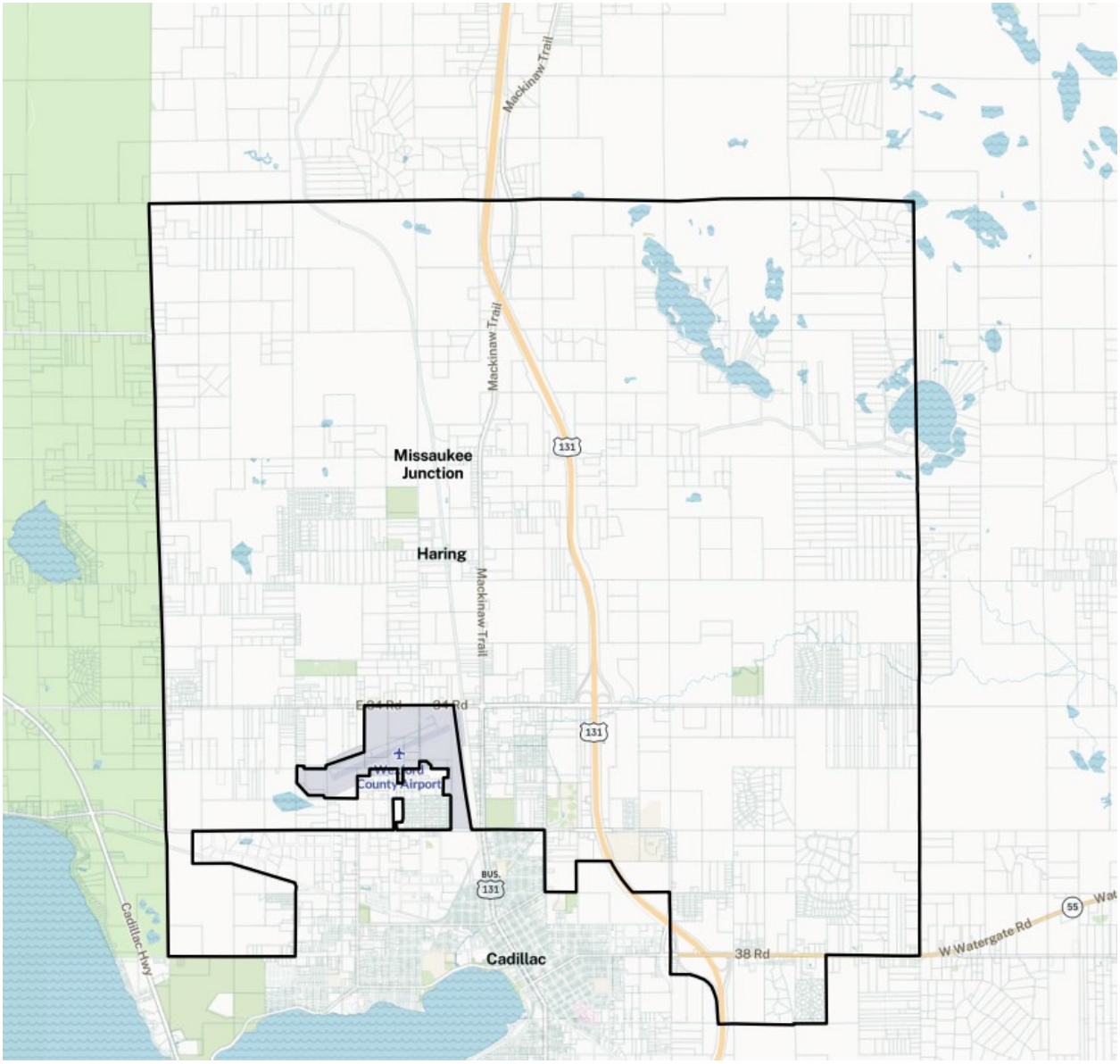

Figure 2: Haring Service Area

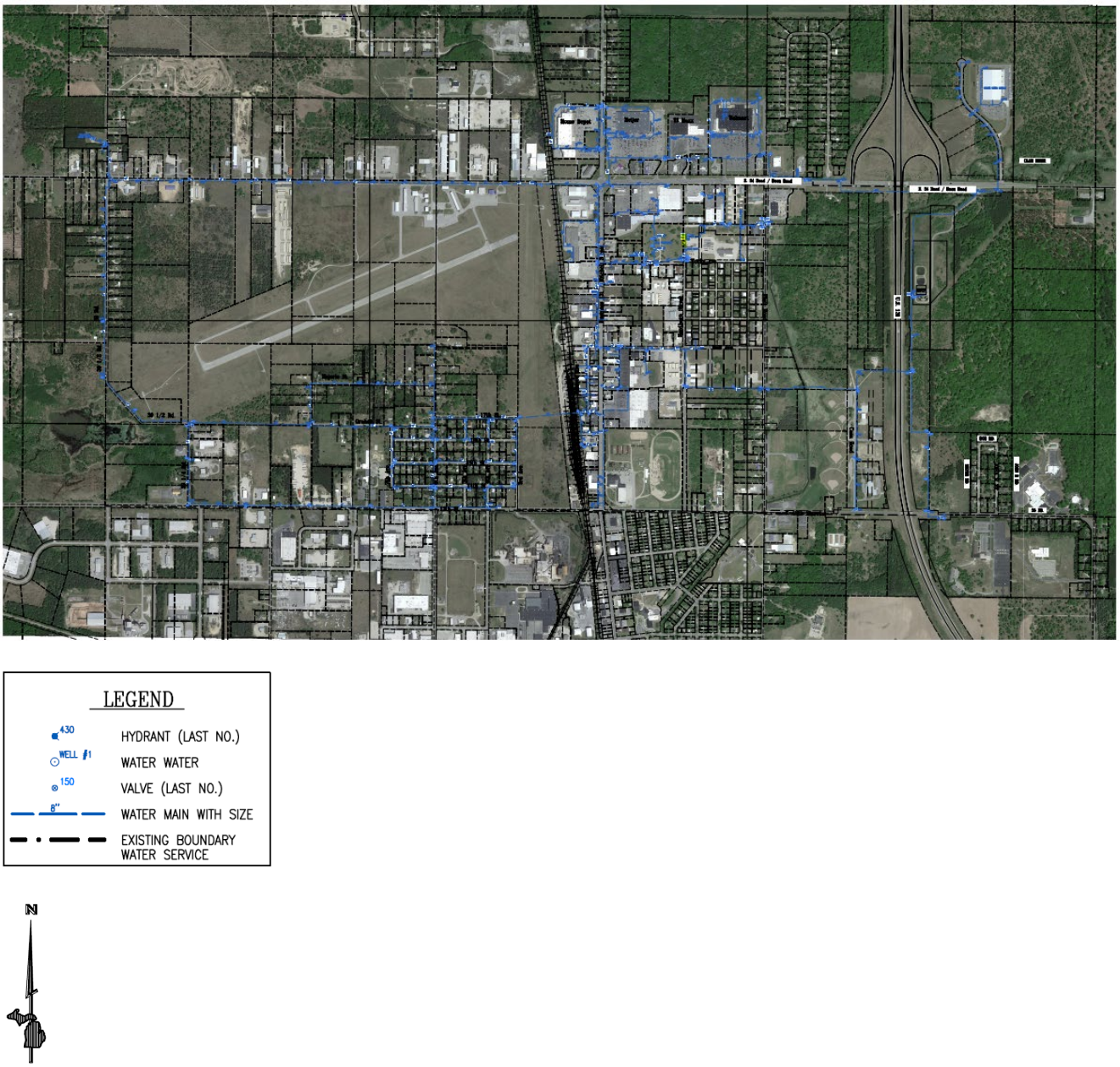

Figure 3: Locations of PFAS Sampling

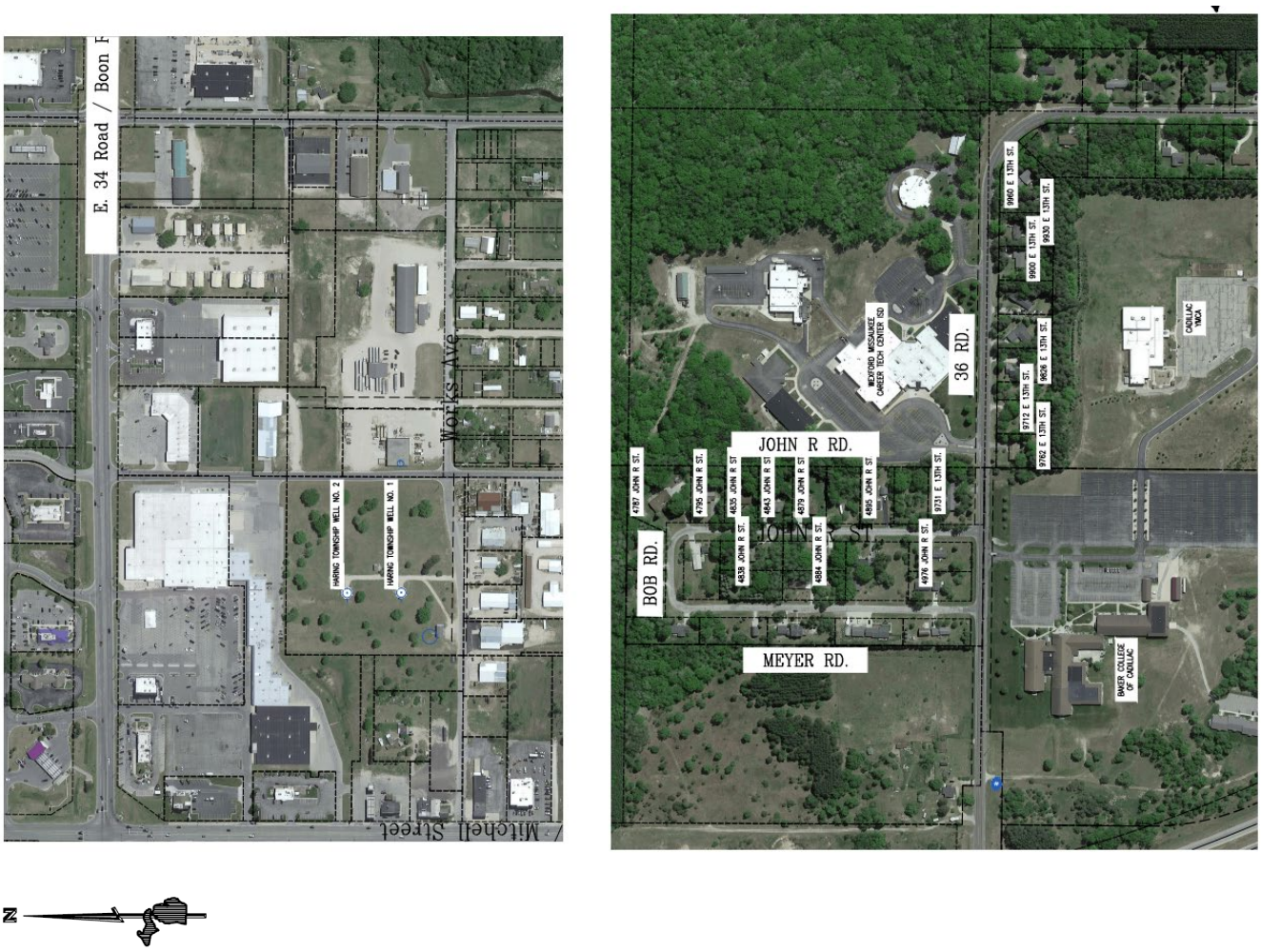

Figure 4: Proposed Project Locations