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Adams County Regional Sewer District

ACRSD – 2024 Sanitary Sewer Improvements
Preliminary Engineering Report
March 2024



CEI Project #22170

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APPENDICES

- Appendix A Figures
- Appendix B Farmland Conversion Impact Rating Form
- Appendix C Cost Estimates & 20-Year Life Cycle Present Worth Cost Estimates
- Appendix D District Letter of Intent for Land Acquisitions
- Appendix E SRF Documents
- Appendix F Public Participation Records
- Appendix G Rate Ordinance

Section 1 – Project Planning

This section defines the Planning Area, the planning period, and the current characteristics of the Planning Area. This information is important to the engineering analyses and the decision-making processes discussed in subsequent sections. The planning period for this study is 20 years.

1.1 Location

The Adams County Regional Sewer District encompasses an area that incorporates all of Adams County except for the corporate limits of existing cities and towns and those areas serviced by other utilities. Currently, the existing service areas can best be broken down into the regions where the District currently provides sewer service to customers. At this time, these regions consist of fifteen (15) separate areas within the county. These areas are known as:

- 1) Monmouth – Roe Acres Service Area
- 2) Arcadia Village Service Area
- 3) Pleasant Mills Service Area
- 4) Rivare (Bobo) Service Area
- 5) Linn Grove Service Area
- 6) Barrington Woods Service Area
- 7) Preble Service Area
- 8) Peterson Service Area
- 9) Monmouth Extended Service Area
- 10) Clem's Lake Service Area
- 11) Sunnybrook Addition Service Area
- 12) Oakwood Addition Service Area
- 13) Magley Service Area
- 14) NW Winchester Extended Service Area
- 15) Clem's Lake South Service Area

The 20-year Study Area and Service Areas are the current unincorporated areas of Adams County. The primary topographic features that dominate the areas are the Wabash River, which is through the southern part of the county, and the St. Mary's River, which runs through the northern part of the county. The elevations within the Planning Areas vary approximately 80' and are as follows: (a) from 790' above mean sea level ('msl') to 825' msl in the N. Piqua Road - SR 101 Service Area; (b) from 785' msl to 805' msl in the N. Piqua South of US 224 Service Area; (c) from 790' msl to 820' msl in the CR E 600 N – SR 101 Service Area; (d) from 790' msl to 810' msl in the CR N 200 E Service Area; (e) from 785' msl to 810' msl in the CR N 100 E – CR E 400 N Service Area; (f) from 825' msl to 850' msl in the US 218 – CR S 400 W Service Area; (g) from 790' msl to 830' msl in the CR E 900 N Extended Service Area; (h) from 785' msl to 820' msl in the CR W 1175 N – W 1000 N – N. Minnich Road Service Area; (i) from 845' msl to 865' msl in the US 27 - South of Berne Service Area; (j) from 805' msl to 815' msl in the CR W 500 N Service

Area; (k) from 775' msl to 810' msl for the location of the Monmouth Force Main Improvements.

Figure 1-1, located in **Appendix "A"**, depicts each of the District's existing service areas within Adams County. **Figure 1-2**, located in **Appendix "A"**, depicts each of the proposed service areas with respect to their location within the District's service area or Adams County.

A. Project Areas

1. N. Piqua Road - SR 101 Service Area

The project area is located in St. Mary's Township, T 27N R 15E, Sections 7,8,9,15,16, Wren Quadrangle. The service area contains approximately 31 structures. The service area lies along N. Piqua Road and is south of the District's existing Rivare (Bobo) Service Area.

2. N. Piqua Road - South of US 224 Service Area

The project area is located in Root Township, T 28N R 14E, Section 35, Decatur Quadrangle. The service area contains approximately 8 structures. The service area lies along N. Piqua Road south of US 224 and is west of the District's existing Clem's Lake South Service Area.

3. CR E 600 N – SR 101 Service Area

The project area is located in Root Township, T 28N R 14E, Sections 34,35, Washington Township, T 27N R 14E, Sections 1,2, Union Township, T 28N R 15E, Sections 31,32,33, and St. Mary's Township, T 27N R 15E, Sections 4,5,6, Wren and Decatur Quadrangles. The service area contains approximately 72 structures and a small mobile home park. The service area generally lies along CR E 600 N and SR 101 east of the District's existing Clem's Lake South Service Area.

4. CR N 200 E Service Area

The project area is located in Washington Township, T 27N R 15E, Sections 11,12,13,14, Decatur Quadrangle. The service area contains approximately 17 structures. The service area lies along CR N 200 E and is south of the District's existing Arcadia Village Service Area's connection point with the City of Decatur.

5. CR N 100 E – CR E 400 N Service Area

The project area is located in Washington Township, T 27N R 15E, Sections 10,11, Decatur Quadrangle. The service area contains approximately 28 structures. The service area lies along CR N 100 E and

CR E 400 N. The service area is southwest of the District's existing Arcadia Village Service Area's connection point with the City of Decatur.

6. US 218 – CR S 400 W Service Area

The project area is located in French Township, T 26N R 13E, Sections 35,36, Hartford Township, T 25N R 13E, Sections 1,2, Monroe Township, T 26N R 14E, Section 31, and Wabash Township, T 25N R 14E, Section 6, Linn Grove and Berne Quadrangles. The service area contains approximately 36 structures. The service area lies along CR S 400 W and SR 218. The area is north of the District's existing Linn Grove transmission main.

7. CR E 900 N Extended Service Area

The project area is located in Root Township, T 28N R 14E, Sections 14,15,22,23, Hoagland Quadrangle. The service area contains approximately 14 structures. The service area lies along N. Piqua Road and N. Monmouth Road. The area is east of the District's existing CR E 900 N Service Area.

8. CR W 1200 N – N 200 W Service Area

The project area is located in Root Township, T 28N R 13E, Section 1, Root Township, T 28N R 14E, Sections 5,6,7,8, and Madison Township, T 29N R 14E, Sections 31,32, Poe and Hoagland Quadrangles. The service area contains approximately 60 structures. The service area generally lies along N. Minnich Road, CR W 1100 N and CR W 1175 N. The area is north of the District's existing Sunnybrook Service Area.

9. US 27 - South Service Area

The project area is located in Wabash Township, T 25N R 14E, Sections 8,9,16,17, Berne Quadrangle. The service area contains approximately 16 structures. The service area lies along US 27 south and is south of the District's existing Linn Grove transmission main.

10. CR W 500 N Service Area

The project area is located in Washington Township, T 27N R 14E, Sections 4,5,9 Decatur Quadrangle. The service area contains approximately 20 structures. The service area lies along CR W 500 N and is southwest of the City of Decatur's Corporate Limits.

11. Monmouth Force Main Improvements

The project area is located in Root Township, T 28N R 14E, Sections 21,22,27, Decatur Quadrangle. The service area lies along N. Piqua Road and N. Monmouth Road. The area is south of the District’s existing Monmouth Service Area.

Table 1-1 summarizes the proposed service areas’ locations.

**Table 1-1
Planning Area Locations**

Proposed Service Area	County	U.S.G.S. Quadrangle Map	Township	Range	Sections
N. Piqua Road - SR 101 Service Area	Adams	Wren	27 N	15 E	7-9,15,16
N. Piqua Road - South of US 224 Service Area	Adams	Decatur	28 N	14 E	35
CR E 600 N – SR 101 Service Area	Adams	Decatur Wren	27 N 27N 28 N 28 N	14 E 15 E 14 E 15 E	1-2 4-6 34-35 31-33
CR N 200 E Service Area	Adams	Decatur	27 N	15 E	11-14
CR N 100 E – CR E 400 N Service Area	Adams	Decatur	27 N	15 E	10-11
US 218 – CR S 400 W Service Area	Adams	Linn Grove Berne	25 N 25 N 26 N 26 N	13 E 14 E 13 E 14 E	1-2 6 35-36 31
CR E 900 N Extended Service Area	Adams	Hoagland	28 N	14 E	14-15, 22-23
CR W 1200 N – N 200 W Service Area	Allen Adams	Hoagland Poe	29N 28 N 28 N	14 E 14 E 13 E	31-32 5-8 1
US 27 South Service Area	Adams	Berne	25 N	14 E	8-9, 16-17
CR W 500 N Service Area	Adams	Decatur	27 N	14 E	4,5,9
Monmouth Force Main Improvements	Adams	Decatur	28 N	14 E	21,22,27

1.2 Environmental Resources Present

This section summarizes the environmental resources present within the planning area. Though the proposed improvements are touched upon within this section of the report, the

overall planning area and corresponding environmental impacts are the focus of this section.

A. Disturbed/Undisturbed Land

As shown in **Figures 1-3a – 1-3k** located in **Appendix “A”**, the land use throughout the Planning Area served by the wastewater utility is primarily developed, open space to developed, medium intensity land. Cultivated crops are present in the surrounding farmed land, with multiple regulated drains and tiles.

The proposed improvements will be constructed on previously disturbed land, specifically within the existing road right-of-way and in existing utility easements. Construction projects are not expected to have any detrimental, long-term impacts on the soils.

Short-term impact associated with material and equipment transport and installation is expected and will be mitigated through appropriate techniques.

B. Historical/Archaeological Resources

DNR’s SHAARD website has been consulted. Adams County currently has many documented archaeological sites. **Figures 1-4a – 1-4k** located in **Appendix “A”**, shows map of the historical areas of significance in the Planning Area. None are anticipated to be adversely affected with respect to the anticipated work.

C. Wetlands

The U.S Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (USEPA) define wetlands as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” This definition suggests that a particular piece of land does not have to be actually a wetland at the moment, but to have the potential of being a wetland to be considered a wetland.

Wetland areas are particularly important due to their ability to sustain a vast array of plant and animal life that depend solely on the hydrologic and physiographic conditions. Because of this, wetlands have higher potential to support certain endangered species habitat, and therefore, the species themselves.

Figures 1-5a – 1-5k located in **Appendix “A”** show the project planning areas along with identified wetlands as obtained from U.S. Fish and Wildlife National Wetlands Inventory. Only a few small areas are identified as wetlands within the planning areas. No structures associated with the proposed project will be constructed on wetlands identified on the NWI maps. Wetlands are not anticipated to be affected by the construction or operation of the project.

D. Surface Water Quality

The Wabash River constitutes an outstanding state resources waterway in Adams County. There are no exceptional use streams, natural or scenic rivers in Adams County near the proposed project sites. There are no waters of high quality in Adams County near the proposed project sites. The Sanitary Sewer Improvements project will not adversely affect any outstanding state resources waters, limited or exceptional use streams, or natural and scenic rivers.

E. Drainage Basins

Drainage basins are identified by twelve-digit codes developed by the U.S. Geological Survey (USGS) and National Resources Conservation Service (NRCS) and are reported on IndianaMap. As suggested by the multiple creeks in the area, the planning area is separated into multiple HUC-12 areas. The following are the HUC-12 areas per project area:

- N. Piqua Road - SR 101 Service Area – 041000040408 City of Decatur – Saint Mary’s River
- N. Piqua Road - South of US 224 Service Area – 041000040408 City of Decatur – Saint Mary’s River
- CR E 600 N – SR 101 Service Area – 041000040408 City of Decatur – Saint Mary’s River & 041000040401 Twentyseven Mile Creek
- CR N 200 E Service Area – 041000040408 City of Decatur – Saint Mary’s River
- CR N 100 E – CR E 400 N Service Area – 041000040407 Borum Run & 041000040408 City of Decatur – Saint Mary’s River
- US 218 – CR S 400 W Service Area – 041000040402 Gales Ditch & 051201010602 Threemile Creek-Wabash River & 051201010604 Rice Ditch-Wabash River
- CR E 900 N Extended Service Area – 041000040502 Weber Ditch-Saint Mary’s River
- CR W 1200 N – N 200 W Service Area – 041000040504 Bulhman Ditch-Saint Mary’s River
- US 27 South Service Area – 051201010601 Jamstutz Ditch-Wabash River
- CR W 500 N Service Area – 041000040501 Holthouse Ditch
- Monmouth Force Main Improvements – 041000040502 Weber Ditch-Saint Mary’s River & 041000040408 City of Decatur-Saint Mary’s River

Figures 1-6a – 1-6k located in **Appendix “A”** illustrate the drainage basins in the area.

F. Groundwater

The USDA-NRCS publishes measured depth to water table data for the project area. This depth to the water table is shown in **Figures 1-7a – 1-7k** located in **Appendix “A”**. Generally, water should be anticipated to be encountered between

0 and 100 centimeters below ground. A geotechnical investigation should be performed during design to determine the effects of groundwater on any new structures proposed. Construction activities are not anticipated to cause long-term detriment to the groundwater table of local wells. No sole source aquifers will be affected by the proposed project.

G. Floodway and Floodplain

The Federal Emergency Management Agency (FEMA) completes comprehensive flood studies for the Planning Area. These studies use standard hydrologic and hydraulic computer models to find out the potential flooding from each riverine flooding source.

FEMA defines a ‘floodway’ and a ‘floodway fringe’ within their modeling and flood management system. A floodway is the channel of a stream and adjacent floodplain area that must be kept free of encroachment to carry the 100-year flood without substantial increases (> 0.1 ft.) in flood height. The floodway fringe is the area between the floodway and the natural 100-year floodplain boundary. The floodway fringe could be completely obstructed without significantly increasing the water surface elevation of the 100-year flood.

Floodways should be taken into consideration in the planning of any project. Due to accessibility, operations, maintenance and safety issues, new facilities should avoid floodways where possible. The FIRM (Flood Insurance Rate Map) for the project areas were obtained from the IndianaMap website and are described below:

- N. Piqua Road - SR 101 Service Area – The Drake Ditch Floodplain Zone AE is within the project area.
- N. Piqua Road - South of US 224 Service Area – The Haugk Ditch Floodway and Floodplain Zones AE & X are within the project area.
- CR E 600 N – SR 101 Service Area – The Koos Ditch Floodplain Zone A is within the project area.
- CR N 200 E Service Area – The Braun-Ayers Ditch Floodplain Zone AE is within the project area.
- CR N 100 E – CR E 400 N Service Area – The Borum Run Floodway and Floodplain Zone AE & X are within the project area.
- US 218 – CR S 400 W Service Area – There are no floodways or floodplains within the project area.
- CR E 900 N Extended Service Area – The Gerke Ditch Floodplain Zone A is within the project area.
- CR W 1200 N – N 200 W Service Area – There are no floodways or floodplains within the project area.
- US 27 South Service Area – There are no floodways or floodplains within the project area.
- CR W 500 N Service Area – The Kohne #1 Ditch Floodplain Zone A is within the project area.

- Monmouth Force Main Improvements – The Sain Mary’s River Floodway and Floodplain Zone AE, along with the Gerke Ditch Floodplan Zone AE are within the project area.

The project areas Floodplain Maps are shown in **Figures 1-8a – 1-8k** located in **Appendix “A”**.

All critical facilities and controls with respect to the operation and maintenance associated with the Sanitary Sewer Improvements project will have final elevations above the 100-year floodplain. Design of the projects will comply with FFRMS requirements.

H. **Plants and Animals**

All construction activity performed as a result of recommendations of the PER will be completed within road rights-of-way and previously disturbed ground from construction. The project will be implemented to minimize impact to non-endangered species and their habitat. Mitigation measures cited in any comment letters received from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented.

I. **Soils**

Figures 1-9a – 1-9k and Figures 1-10a-1-10k located in **Appendix “A”** present the soil maps and hydric soils maps and corresponding legends for the entire planning area as well as the surrounding area. Information discussed herein was obtained from the “Web Soil Survey for Adams County, Indiana” from the US Department of Agriculture (USDA) Natural Resources Conservation Service website (<http://websoilsurvey.nrcs.usda.gov>). The primary soil types identified throughout each project areas are located below:

- N. Piqua Road - SR 101 Service Area
 - Blout silt loam, ground moraine, 0-2% slopes
 - Pewamo silty clay, 0-2% slopes
 - Glynwood silty loam, end moraine, 2-6% slopes
 - Haskins loam, 0-3% slopes
- N. Piqua Road - South of US 224 Service Area
 - Pewamo silty clay, 0-2% slopes
 - Nappanee silt loam, 0-3% slopes
 - Nappanee-Urban land complex, 0-3% slopes
 - Udorthents, loamy
- CR E 600 N – SR 101 Service Area
 - Nappanee silt loam, 0-3% slopes
 - St. Clair clay loam, 3-8% slopes, eroded
 - Blout silt loam, ground moraine, 2-4% slopes
 - Pewamo silty clay, 0-2% slopes
- CR N 200 E Service Area

- Blout silt loam, ground moraine, 2-4% slopes
- Pewamo silty clay, 0-2% slopes
- Glynwood silty loam, end moraine, 2-6% slopes
- CR N 100 E – CR E 400 N Service Area
 - Blout silt loam, ground moraine, 2-4% slopes
 - Blout silt loam, ground moraine, 0-2% slopes
 - Pewamo silty clay, 0-2% slopes
 - Glynwood silty loam, end moraine, 2-6% slopes
- US 218 – CR S 400 W Service Area
 - Blout silt loam, ground moraine, 2-4% slopes
 - Pewamo silty clay, 0-2% slopes
 - Glynwood silty loam, end moraine, 2-6% slopes
 - Blout silt loam, ground moraine, 0-2% slopes
- CR E 900 N Extended Service Area
 - Nappanee silt loam, 0-3% slopes
 - Blout silt loam, ground moraine, 2-4% slopes
 - Shoals silty clay loam, 0-1% slopes, frequently flooded
- CR W 1200 N – N 200 W Service Area
 - Nappanee silt loam, 0-3% slopes
 - St. Clair clay loam, 3-8% slopes, eroded
 - Pewamo silty clay, 0-2% slopes
- US 27 South Service Area
 - Blout silt loam, ground moraine, 2-4% slopes
 - Blout silt loam, ground moraine, 0-2% slopes
 - Glynwood silty loam, end moraine, 2-6% slopes
 - Pewamo silty clay, 0-2% slopes
- CR W 500 N Service Area –
 - Blout silt loam, ground moraine, 0-2% slopes
 - Pewamo silty clay, 0-2% slopes
 - Udorthents, loamy
- Monmouth Force Main Improvements
 - Nappanee silt loam, 0-3% slopes
 - St. Clair clay loam, 3-8% slopes, eroded
 - Tice silty clay loam, 0-2% slopes, frequently flooded
 - Udorthents, loamy

Potential construction projects are not expected to have any detrimental, long-term impacts on the soils. Short-term impacts can be readily mitigated through the use of appropriate techniques for erosion control and surface restoration during and following construction activities.

J. Prime Farmland

Prime Agricultural Land or Farmland is a designation assigned by the USDA and includes land that exhibits the best combination of physical and chemical

characteristics for the production of food crops, feed, forage and fiber. Additionally, this designation includes land that is readily available for these uses.

Prime farmland tends to be well suited to residential and commercial development and is therefore prone to conversion to residential and commercial use when located in close proximity to urban areas. The USDA “Prime Farmland” designation serves to promote growth management and resource conservation efforts near urban areas.

Figures 1-11a – 1-11k located in **Appendix “A”** illustrate the Farmland Designation Map for the planning area and associated legends. The proposed project locations are within road rights-of-way and areas previously disturbed by construction; therefore, the project is not considered to affect prime farmland. That being said, the Natural Resources Conservation Service (NRCS), a department of the U.S. Department of Agriculture (USDA), has been contacted regarding the conversion of prime farmland as a result of this project. All correspondence relating to this project will be inserted into **Appendix “B”**.

K. Air Quality

Air quality impacts from the proposed project will be evaluated for conformance with applicable Rules under Title 326 Articles 1, 2, 6, 7, and 8 of the Federal 1990 Clean Air Act Amendments.

1. Construction Activity

To minimize non-conformance with 326 IAC 6-4, “Fugitive Dust Emissions”, reasonable and proper construction techniques and clean up practices will be provided. In addition, surface wetting practices will be utilized to control dust emissions where required. Please note that 326 IAC 6-4-6(3) provides for an exemption to the rule “...from construction or demolition activity where every reasonable precaution has been taken in minimizing fugitive dust emissions”. Exhausts of construction equipment will be required to have mufflers for noise and air pollution abatement.

2. Clean Air Act Title III – Hazardous Air Pollutants

Title III calls for a program to prevent the accidental releases of hazardous air pollutants from facilities. We do not anticipate use of chemicals in the project that may release hazardous air pollutants as defined by EPA’s Hazardous Air Pollutant Listing. If potential hazardous air pollutants are used on the project, we will require monitoring, record keeping, reporting, and vapor recovery, secondary containment, design, equipment, work practices and operation according to Federal Standards.

L. Open Space and Recreational Opportunities

The proposed project’s construction and operation will neither create not destroy open space and recreational opportunities.

M. Lake Michigan Costal Program

The proposed project will not affect the Lake Michigan Costal Zone.

N. National Natural Landmarks

The construction and operation of the proposed project will not affect National Natural Landmarks.

O. Mitigation Measures

The majority of the environmental impacts will occur during construction of the proposed improvements. These issues will be temporary in nature, since no significant impacts to environmental, historical, or other regulated resources are involved. These temporary construction impacts include the potential for noise, dust, and construction site erosion. Provisions will be included in the construction specifications to limit such problems and to provide erosion control in accordance with current state standards. The work is expected to be completed during normal working hours, restricting any work-related nuisances to those hours. All construction equipment will be required to have mufflers to reduce noise pollution. Additionally, reasonable and proper construction techniques and clean up practices will be required by the contractor to reduce dust emissions. Proper surface wetting practices will be required.

1.3 Population Trends

A. Historic Population

The historical population of the county was reviewed as a basis for population projections during the planning period. The projection of population into the future is an important factor in the planning process.

Currently, the population of the customers serviced by the Adams County Regional Sewer District is estimated at approximately 2,846 persons according to current residential totals (approximately 1,058 residential customers at 2.69 persons per household – 35,809 Adams Co. 2020 Census/13,310 Occupied Households). The population of the areas to be served by the proposed sanitary sewer system improvements project is estimated at approximately 850 persons with 318 new connections.

Due to the changing demographics of the District with respect to service areas and the limited extent of the District’s existing collection systems, it is difficult to gauge actual serviced population in the District as opposed to total statutory District area residents, although it can easily be assumed that the current population is a tiny fraction of the total unserved area within the county. It is safe to assume that the District’s growth will come in the form of new residential connections as the District will primarily be involved in septic elimination projects. Growth associated with the connection of additional service areas and the subsequent financing of capital

costs associated with the new territories is expected to follow a steady rate of expansion in the next 20+ years.

Table 1-2 shows the historical population in the study area during the planning period.

**Table 1-2
Historical Population for Adams County**

Year	Adams County	Annual % Change
1900	22,232	-
1910	21,840	-0.18%
1920	20,503	-0.61%
1930	19,957	-0.27%
1940	21,254	0.65%
1950	22,393	0.54%
1960	24,643	1.00%
1970	26,871	0.90%
1980	29,619	1.02%
1990	31,095	0.50%
2000	33,625	0.81%
2010	34,387	0.23%
2020	35,809	0.41%
2021	35,939	0.36%
2022	36,068	0.36%

B. Population Projection

The projection of the District’s future population is important to the planning and design of any improvements to the collection system. The future increase in wastewater flows is generally in direct proportion to the population growth (unless a major industry or other wastewater user unplanned at this time connects to the system). It should be noted that currently there exists very little growth within the service areas; by and large, the impetus behind providing sewer service to each of the regions was driven by failing septic systems. Based on historical growth rates, the projected growth rate of the county is approximately 0.25% per year.

Table 1-3 shows the projected population in the county during the Planning Period.

**Table 1-3
Population Projections for Adams County**

Year	Adams County	Annual % Change
2025	36,078	0.01%
2030	36,537	0.25%
2035	36,896	0.20%
2040	37,344	0.24%
2045	37,822	0.26%

Source: STATS Indiana.

C. Local Economy

The local economy is an important demographic factor that must be considered when planning for any utility project. Since funding of projects is based on need, it is important to know the economic nature of the community. STATS Indiana (<http://www.stats.indiana.edu>) maintains a rather extensive database of demographic information for cities, towns, townships, and counties located in Indiana. Economic data for Adams County will be utilized to determine the current economic situation of the planning area.

1. Area Employment

The latest data available reported by STATS Indiana for employment and average wage data for Adams County is from the year 2022. The data is shown in **Table 1-4**.

**Table 1-4
Adams County 2022 Employment and Wage Data**

	Employment	Pct Dist. In County	Yearly Average Wage
Total Employment	21,285	100%	\$59,482
Wage and Salary	14,712	69.1%	\$48,966
Farm Proprietors	1,192	5.6%	\$99,887
Nonfarm Properties	5,381	25.3%	\$48,873
Farm	1,404	6.6%	\$90,927
Nonfarm	19,881	93.4%	\$57,261
Private	17,589	82.6%	\$56,847
Accommodation, Food Service	888	4.2%	\$19,307
Arts, Entertain., and Recreation	194	0.9%	\$15,907
Construction	2,344	11.0%	\$84,491
Health Care, Social Service	912	4.3%	\$43,303
Information	210	1.0%	\$115,395
Manufacturing	4,856	22.8%	\$73,519
Professional and Tech. Servs.	Data not available due to BEA non-disclosure req.		
Retail Trade	1,979	9.3%	\$39,702
Transport. and Warehousing	Data not available due to BEA non-disclosure req.		
Wholesale Trade	717	3.4%	\$83,294
Other Private (not above)	4,063	19.1%	\$35,914
Government	2,292	10.8%	\$60,440

Source: STATS Indiana Online

2. Area Income

According to the American Community Survey (ACS), the 2021 ACS 5 year estimate (2017-2021), Adams County had a median household income (MHI) of \$56,037 per year.

1.4 Current and Projected Flows and Loadings

A. Current Customer Base

The Adams County Regional Sewer District currently serves approximately 1,058 residential connections. Theoretically, the residential customers of the District contribute 327,980 gallons in terms of total daily flow to their ultimate treatment provider based upon the general average flow rate per residential service connection derived from state tables. In reality, flows from the areas range from about 125 to 150 gallons per day per connection or 132,250 gallons to 158,700 gallons of total daily flow. Each of the District’s service areas flow through master meters for billing purposes.

B. Projected Customer Base

Preliminary design flow data from each of the proposed new service areas is as follows:

1. **N. Piqua Road - SR 101 Service Area**, 31 connections with total estimated average flow of 9,610 GPD and total estimated peak flows of 38,440 GPD.
2. **North Piqua Road - US 224 Service Area**, 8 connections with total estimated average flow of 2,480 GPD and total estimated peak flows of 9,920 GPD.
3. **CR E 600 N - SR 101 Service Area**, 88 connections (includes 16 trailers) with total estimated average flow of 27,180 GPD and total estimated peak flows of 109,120 GPD.
4. **CR N 200 E Service Area**, 17 connections with total estimated average flow of 5,270 GPD and total estimated peak flows of 21,080 GPD.
5. **CR N 100 E - CR E 400 N Service Area**, 28 connections with total estimated average flow of 8,680 GPD and total estimated peak flows of 34,720 GPD.
6. **SR 218 - CR S 400 W Service Area**, 36 connections (includes 2 churches) with total estimated average flow of 12,540 GPD and total estimated peak flows of 50,160 GPD.
7. **CR E 900 N Extended Service Area**, 14 connections with total estimated average flow of 4,340 GPD and total estimated peak flows of 17,360 GPD.
8. **CR W 1200 N - CR N 200 W Service Area**, 60 connections (includes 1 church and 1 school K-8) with total estimated average flow of 22,430 GPD and total estimated peak flows of 89,720 GPD.
9. **US 27 South Service Area**, 16 connections with total estimated average flow of 4,960 GPD and total estimated peak flows of 19,840 GPD.
10. **CR W 500 N Service Area**, 20 connections with total estimated average flow of 6,200 GPD and total estimated peak flows of 24,800 GPD.

Table 1-5 provides the organic loading summary for the new project areas.

**Table 1-5
Wastewater Loading for Project Areas**

		Concentration mg/l ⁽¹⁾				Loading lbs/day			
		BOD5	TSS	Ammonia	P	BOD5	TSS	Ammonia	P
North Piqua Road - SR 101									
Residential (21)	9,610	220	220	25	8	17.63	17.63	2.00	0.64
North Piqua Road - US 224									
Residential (8)	2,480	220	220	25	8	4.55	4.55	0.52	0.17
CR E 600 N - SR 101									
Residential (72)	27,280	220	220	25	8	50.05	50.05	5.69	1.82
Trailers (16)									
CR N 200 E									
Residential (17)	5,270	220	220	25	8	9.67	9.67	1.10	0.35
CR N 100 E - CR E 400 N									
Residential (28)	8,680	220	220	25	8	15.93	15.93	1.81	0.58
SR 218 - CR S 400 W									
Residential (34)	12,540	220	220	25	8	23.01	23.01	2.61	0.84
Churches (2)									
CR E 900 N Extended									
Residential (14)	4,340	220	220	25	8	7.96	7.96	0.90	0.29
CR W 1200 N - CR N 200 W									
Residential (58)	22,430	220	220	25	8	41.15	41.15	4.68	1.50
Church (1)									
School (1)									
US 27 South									
Residential (16)	4,960	220	220	25	8	9.10	9.10	1.03	0.33
CR W 500 N									
Residential (20)	6,200	220	220	25	8	11.38	11.38	1.29	0.41

⁽¹⁾Residential – Medium Concentrations – *Metcalf & Eddy, Inc. 3rd Edition*

1.5 Community Engagement

Project planning should include but not be limited to helping the community develop an understanding of the need for the project, the utility operational service levels required, and funding and revenue strategies to meet these requirements.

In order to engage the community regarding the project represented in this report a public meeting will be held, which will be a forum for presenting the major elements of this project, and the benefits it will bring to the community.

Section 2 – Existing Facilities

In this section, we provide a description of the Adams County Regional Sewer District's existing service areas. The purpose of this chapter is the description of the current situation of the existing facilities throughout the District with a concentration on the existing sanitary sewage collection systems within the District service areas.

2.1 Description/Condition of Existing Collection System

A. Existing Service Areas

The Adams County Regional Sewer District's service area includes all of the unincorporated areas of Adams County not being served by other utilities. Currently, the existing service areas can best be broken down into the regions where the District currently provides sewer service to customers. At this time, these regions consist of fifteen (15) separate areas within the county. These areas are known as Monmouth – Roe Acres Service Area, Arcadia Village Service Area, Pleasant Mills Service Area, and Rivare (Bobo) Service Area, Linn Grove Service Area, Barrington Woods Service Area, Preble Service Area, Peterson Service Area, Monmouth Extended Service Area, Clem's Lake Service Area, Sunnybrook Addition Service Area, Oakwood (Yost Woods) Addition Service Area, NW Winchester Road Extended Service Area, Magley Service Area, and Clem's Lake South Service Area. **Figure 1** in **Appendix "A"** shows these areas.

B. System Components

The District's collection systems are approximately 285,000 feet long, with most of the area comprising of residential, commercial, and industrial land use. The summary of the inventory of the District's existing sewer system is shown in **Table 2-1**.

Table 2-1
District's Pipe Inventory

Sanitary Sewers	
<u>Size</u>	<u>Length</u>
2"	77,101 L.F.
3"	39,311 L.F.
4"	36,128 L.F.
6"	88,701 L.F.
8"	43,749 L.F.
12"	35 L.F.

The collection system also consists of approximately 618 grinder pump stations and ten (10) regional lift stations: Monmouth/Roe Acres Lift Station, Arcadia Village

Lift Station, Pleasant Mills Lift Station, Rivare (Bobo) Lift Station, Linn Grove Lift Station, Preble Lift Station, Barrington Woods Lift Station, Sunnybrook Lift Station, Oakwood Lift Station, and the Magley Lift Station.

1. Collection System Conditions

The collection system is currently in relatively new condition. Since the District's first project was constructed in 2017, the oldest portions of the collection system are seven (7) years old. Below is a list of the District's projects and their construction dates:

Project 1 (2017)

- 1) Monmouth – Roe Acres Service Area
- 2) Arcadia Village Service Area
- 3) Pleasant Mills Service Area

Project 2 (2020)

- 1) Rivare (Bobo) Service Area

Project 3 (2021)

- 1) Linn Grove Service Area
- 2) Barrington Woods Service Area
- 3) Preble Service Area
- 4) Peterson Service Area
- 5) Monmouth Extended Service Area
- 6) Clem's Lake Service Area

Project 4 (2023)

- 1) Sunnybrook Addition Service Area
- 2) Oakwood (Yost Woods) Addition Service Area

Project 5 (2024)

- 1) NW Winchester Road Extended Service Area
- 2) Magley Service Area
- 3) Clem's Lake South Service Area

2. Lift Station Conditions

As indicated above, the existing lift stations are currently in relatively new conditions with the oldest pumps and controls being seven (7) years old. The following are the lift stations the District owns and operates and their construction dates:

- 1) Pleasant Mills LS (2017)
- 2) Arcadia Village LS (2017)
- 3) Monmouth Lift Station (New Pumps & Controls 2021)

- 4) Rivare (Bobo) LS (2019)
- 5) Barrington Woods LS (2021)
- 6) Preble LS (2021)
- 7) Linn Grove LS (2021)
- 8) Oakwood (Yost Woods) LS (2022)
- 9) Sunnybrook LS (2022)
- 10) Magley LS (2024)

2.2 Financial Status of the Wastewater Utility

A. Customer Base

The User Profile summary is shown in **Table 2-2**.

Table 2-2
Wastewater Users

Users	Number
Residential	1058
Commercial	17
Industrial	4
Institutional	3

B. Current Schedule of Sewer Rates

The District’s current rate for a residential customer is \$93.30. As stipulated in the Adams County Regional Sewer District Amendatory Ordinance No. 2022-4, included in **Appendix G**, rates and charges are based on an equivalent single family dwelling unit.

C. Existing Loans

The District currently has the following loans:

- 2016 – USDA RD Sewage Works Revenue Bond (Project 1 – Payoff 7/2056)
- 2021 – SRF Sewage Works Revenue Bond (Project 3 – Payoff 1/2043)
- 2022 – SRF Sewage Works Revenue Bond (Project 5 – Payoff 7/2057)

D. Existing Wastewater Utility Operation and Maintenance Expenses

Annual operating and maintenance (O&M) expenses for the District’s Wastewater Utility are shown in **Table 2-3**. Additionally, an estimate of the Short-Lived Assets (SLA) is presented in **Table 2-4**.

**Table 2-3
ACRSD Wastewater Utility
2023 Annual Operating and Maintenance Expenses**

Description	Amount
Sewage Treatment	\$163,663.76
Salaries and Wages	\$145,607.65
Employee Pension and Benefits	\$78,387.63
Fuel Expense	\$5,706.88
Electricity - Service Areas	\$20,950.31
Contractor Fees	\$13,097.90
Equipment and Tool Repair	\$18,511.19
Auto Repairs	\$1,336.87
Supplies	\$11,130.67
Administrative Expenses	\$72,435.66
Total	\$530,828.52

**Table 2-4
ACRSD - Existing Short-Lived Assets**

Item	Quantity/ Capacity	Estimated Year of Construction	Replacement Interval	Estimated Remaining Useful Life
Simplex Grinder Pump (Project 1)	61	2017	15	8
Flow Meter (Project 1)	2	2017	15	8
Simplex Grinder Pump (Project 2)	64	2020	15	11
Duplex Grinder Pump (Project 2)	1	2020	15	11
Simplex Grinder Pump (Project 3)	231	2021	15	12
Simplex Grinder Pump (Project 3)	3	2023	15	14
Duplex Grinder Pump (Project 3)	2	2021	15	12
Flow Meter (Project 3)	3	2021	15	12
Simplex Grinder Pump (Project 4)	77	2023	15	14
Flow Meter (Project 4)	1	2023	15	14
Simplex Grinder Pump (Project 5)	182	2024	15	15

Section 3 – Need for Project

The objective of this section is to provide an assessment of the conditions and / or issues associated with the District's existing service area and existing collection system.

3.1 Description Of Operating Problems and Violations

As described in **Section 2**, there are currently no centralized or municipal wastewater collection and treatment systems located in the project planning areas. Each existing structure is currently served by an on-site, conventional septic tank with a soil absorption field or in some cases a direct tile connection to a local waterway or community/county field tile.

A. Health, Sanitation, and Security

Failing septic systems concentrated in clusters of homes throughout the county, primarily, discharging filter beds, no longer in compliance with current codes represent serious health and safety issues that the District intends to address. First and foremost, failing, individual on-site septic systems serving existing residential development represent a serious environmental concern to the impacted receiving waters. Secondly, the lack of appropriate separation between the failed systems and the structure's potable water wells creates concerns with respect to drinking water quality. The current problems generally associated with the presence of failing septic systems include the following:

- The potential for pollution of the receiving waters where outfalls from failed septic systems exist.
- The threat of disease-carrying pathogens from contact with polluted waters as a result of failed systems.
- Inability to sell property or make structural improvements due to a lack of properly functioning septic system.
- The potential for contamination of existing potable drinking water wells due to failed systems.

3.2 Aging Infrastructure

A. WWTP

The City of Decatur and the City of Berne currently treat all wastewater flow collected by the District's collection systems.

B. Collection System

The collection system is currently in relatively new condition. The sewers in the Monmouth – Roe Acres, Arcadia Village and Pleasant Mills Service Areas were constructed and put into service in 2017. The sewers in the Rivare (Bobo) Service

Area were constructed and put into service in 2020. The sewers in the Linn Grove, Barrington Woods, Preble, Peterson, Monmouth Extended and Clem's Lake Service Areas were constructed and put into service in 2021. The sewers in the Sunnybrook addition and the Oakwood Addition Service Areas were constructed and put into service in 2023. The sewers in the NW Winchester Road Extended, Magley, and Clem's Lake South Service Areas were constructed and put into service in 2024.

C. Lift Stations

The District currently owns and operates ten (10) lift stations. Each lift station contains two (2) pumps. As stated before, the lift stations are all in relatively new conditions with the oldest lift stations being seven (7) years old.

3.3 Reasonable Growth

At the present time there are no municipal sewage collection systems serving the areas involved in this study. The only municipal sewage systems are located in the City of Decatur, the City of Berne and the Towns of Geneva and Monroe. Each property owner is responsible for their own individual septic system operation and maintenance as well as for the reconstruction of their system if it fails outside of these established wastewater utilities. The District's growth is generally based on areas identified by the Adams County Health Department and the needs and requests of individual property owners in areas where properties septic systems are failing or have failed.

Section 4 – Alternatives Considered

4.1 Collection System Alternatives

The following alternatives/potential projects with respect to the ongoing mission of the Adams County Regional Sewer District to eliminate failing septic systems and provide rural residents with municipal sanitary sewer service have been considered and investigated. In addition, due to the District's desire to continue to provide a financing mechanism to residents outside of established municipal service areas, the need to correct the health hazards with respect to failing septic systems and the desire of the residents in these areas to achieve municipal sewer service, the District has elected to pursue options to remedy the current situation. It should be noted that there are multiple service areas that only have one option being "Low Pressure Sanitary Sewer w/ GPS". A gravity sewer option in these service areas were deemed not to be feasible to construct due to the elevations, house density, and home distances to roadways. The following alternatives represent the District's options:

A. No Action

This option would require the District to do nothing or take a course of 'No Action' and continue to maintain their existing collection systems and pump stations and pursue no new regions which are currently in need of sewer service. This option is not realistic due to the pressing needs of many of the area's residents, nor is it in line with the District's philosophy with respect to unsewered areas, not to mention the increased pressure for action in many areas from the Adams County Department of Health. Failure to act in many cases would lead to enforcement actions by the AC DOH with respect to individual properties, costly septic system replacements, pump and haul decrees or in some cases the abandonment of homes where no solution exists.

B. N. Piqua Road – SR 101 Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along N. Piqua Road both west and east of SR 101. The pressure sewer main will connect to an existing gravity sewer in the Rivare (Bobo) Service Area along SR 101. **Figure 4-1 in Appendix "A"** shows this option. This option's planning level estimate of project costs is detailed in **Appendix "C"**.

C. N. Piqua Road – South of US 224 Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along N. Piqua Road south of US 224. The pressure sewer main will connect to an existing gravity sewer at the intersection of N. Piqua Road and US 224. **Figure 4-2a in Appendix "A"**

shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

2. Option 2 – Gravity and Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a gravity and low pressure collection system with grinder pump stations to serve the area along N. Piqua Road south of US 224. The gravity sewer main will connect to an existing gravity sewer at the intersection of N. Piqua Road and US 224. **Figure 4-2b in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

D. CR E 600 N – SR 101 Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along CR E 600 N, CR N 400 E, CR E 550 N, and SR 101 west of the Clem’s Lake South Service Area. Due to the distance covered by this service area, an intermediate pump station will be needed to help convey flow to the connection point. The proposed connection point is an existing gravity sewer at the intersection of CR E 600 N and Country Brook Road. **Figure 4-3a in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

2. Option 2 – Gravity and Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a gravity and low pressure collection system with grinder pump stations to serve the area along CR E 600 N, CR N 400 E, CR E 550 N, and SR 101 west of the Clem’s Lake South Service Area. Due to the distance covered by this service area, an intermediate pump station will be needed to help convey flow to the connection point. The proposed connection point is an existing gravity sewer at the intersection of CR E 600 N and Country Brook Road. **Figure 4-3b in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

E. CR N 200 E Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along CR N 200 E south of Salem Road. The proposed connection point is an existing force main at the intersection of CR N 200 E and Salem Road. **Figure 4-4 in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

F. CR N 100 E – CR E 400 N Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along CR N 100 E south of Homestead and along CR E 400 N. The proposed connection point is an existing gravity sewer north of the intersection of CR N 100 E and Homestead. **Figure 4-5 in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

G. SR 218 – CR S 400 W Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along CR S 450 W, SR 218, and CR S 400 W. Due to the distance covered by this service area, an intermediate pump station will be needed to help convey flow to the connection point. The proposed connection point is an existing gravity sewer at the intersection of SR 218 and CR S 200 W. **Figure 4-6 in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

H. CR E 900 N Extended Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along CR E 900 N between CR N 100 E and CR N 200 E. The proposed connection point is an existing low pressure sewer west of the intersection of CR E 900 N and CR N 200 E. **Figure 4-7 in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

I. CR W 1200 N – CR N 200 W Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along CR W 200 N, CR N 350 W, CR W 1175 N, Minnich Road, and N 200 W. Due to the distance covered by this service area, an intermediate pump station will be needed to help convey flow to the connection point. The proposed connection point is an existing gravity sewer at the intersection of CR N 200 W and NW Indiana Street. **Figure 4-8a in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

2. Option 2 – Gravity and Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a gravity and low pressure collection system with grinder pump stations to serve the area along CR W 200 N, CR N 350 W, CR W 1175 N, Minnich Road, and N 200 W. Due to the distance covered by this service area, an intermediate pump station will be needed to help convey flow to the connection point. The proposed connection point is an existing gravity sewer at the intersection of CR N 200 W and NW Indiana Street. **Figure 4-8b in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

J. US 27 South Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along US 27 south of CR W 700 N. The proposed connection point is a low pressure sewer at the intersection of US 27 and CR W 700 N. **Figure 4-9 in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

K. CR W 500 N Service Area

1. Option 1 – Low Pressure Sanitary Sewer w/ GPS

This alternative consists of a low pressure collection system with grinder pump stations to serve the area along CR W 500 N near CR N 100 W and Oak Grove Place. The proposed connection point is an existing low pressure sewer at the intersection of US 27 and CR W 700 N. **Figure 4-10 in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

L. Monmouth Force Main Improvements

This alternative consists of replacing the existing 4-inch force main from the District’s Monmouth Lift Station to the Decatur WWTP with a 6-inch force main. This alternative would be required to be coupled with the CR E 900 N Extension or the CR 1200 N – CR N 200 E alternatives to accommodate the increase in flow to the north and east of the existing District’s service areas. **Figure 4-11 in Appendix “A”** shows this option. This option’s planning level estimate of project costs is detailed in **Appendix “C”**.

The construction and non-construction costs for the collection system alternatives are contained in **Table 4-1**. For the sake of comparison, the non-construction costs have been assumed to be twenty-five percent.

**Table 4-1
Total Capital Cost of the Collection System Alternatives**

Alternative	Construction Cost	Non-Construction Cost	Total Cost
No Action	\$0	\$0	\$0
N. Piqua Road - SR 101 - Option 1	\$1,104,000	\$221,000	\$1,325,000
N. Piqua Road - US 224 - Option 1	\$202,000	\$40,000	\$242,000
N. Piqua Road - US 224 - Option 2	\$245,000	\$49,000	\$294,000
CR E 600 N - SR 101 - Option 1	\$2,785,000	\$557,000	\$3,342,000
CR E 600 N - SR 101 -Option 2	\$3,042,000	\$608,000	\$3,650,000
CR N 200 E - Option 1	\$575,000	\$115,000	\$690,000
CR N 100 E - CR E 400 N - Option 1	\$897,000	\$179,000	\$1,076,000
SR 218 – CR S 400 W - Option 1	\$1,808,000	\$362,000	\$2,170,000
CR E 900 N Extended - Option 1	\$465,000	\$93,000	\$558,000
CR W 1175 N - W 1000 N - Option 1	\$2,321,000	\$464,000	\$2,785,000
CR W 1175 N - W 1000 N - Option 2	\$2,504,000	\$501,000	\$3,005,000
US 27 - South of Berne -Option 1	\$463,000	\$93,000	\$556,000
CR W 500 N - Option 1	\$516,000	\$103,000	\$619,000
Monmouth Force Main Improvements	\$506,000	\$101,000	\$607,000

4.2 Environmental Impacts

Construction will mostly occur on previously developed land. Proper precautions and inspections will be performed prior to any work occurring on land that has not been previously disturbed. No adverse environmental impacts will be generated as a result of this work.

As discussed in **Section 1** of this PER, because of the nature of the projects proposed in this report, no significant environmental impacts are anticipated. Low pressure sewer installation will be directionally drilled and the gravity sewer, manholes, grinder pumps stations, and lift stations will require minor excavation.

No components of this project are anticipated to have any long-term environmental impacts. The purpose of these projects is to eliminate individual failing on-site septic systems. This will therefore contribute to overall water quality improvement in the area.

4.3 Land Requirements

In order to keep project costs at a reasonable rate for the projected new users, the District's acquisition of various utility easements may be required to facilitate the installation of the proposed collection systems in select areas. A letter of intent indicating that the District will negotiate in good faith with the respective landowners for the acquisition of the easement(s) is found in **Appendix "D"**.

Again, land acquisition may be required due to narrow right-of-ways and cost prohibitive installations along the existing roadway. The remaining utility installations will be installed

within existing roadway right-of-way or existing utility easements previously disturbed by construction.

4.4 Potential Construction Problems

Minimal construction challenges are anticipated regarding any of the alternatives outlined in this section. Temporary construction impacts include the potential for noise, dust, and requirements for erosion control, which will be addressed by defining the limitations on construction work within the contract documents during the design phase.

The work associated with these alternatives is expected to be completed during normal working hours, which will restrict work related nuisances to those times. Erosion control measures including seeding, drainage inlet protection, silt fencing, and dust control will also be specified in the contract documents and be required to be implemented in accordance with current practices. Project requirements will also include:

- Traffic control plan to coordinate construction activity through the construction zone, including coordination with INDOT.
- Drainage, erosion, and dust control.
- Coordination with property owners where lateral and grinder pump stations will be located.

4.5 Sustainability Considerations - Water and Energy Efficiency

Substantial water and energy efficiency increases are not anticipated for any of the solutions.

Section 5 – Selection of an Alternative

5.1 Life Cycle Cost Analysis

A cost and effectiveness analysis was completed and meets the minimum requirements of the Water Resources Reform and Development Act of 2014. A Cost & Effectiveness Certification Form will be included.

An economic analysis is useful in selecting the best alternative as it determines a measure of total money spent to implement any particular alternative. The costs of the alternatives are compared on a “present worth” basis whereby the alternative with the smallest present worth is the least costly alternative to implement. Present worth may be thought of as the sum that if invested now at a given interest rate, would provide exactly the funds required to make all necessary expenditures during the life of the project.

The period of time considered in the analysis is 20-years, typically used for planning municipal infrastructure improvements. The analysis is dependent on the discount (interest) rate. In planning work for public wastewater treatment facilities, the federal discount rate is industry standard to use for this calculation, as can be found in OMB Circular No. A-94, Appendix C. The last published value is that of December 2023. The rate is 2.5% for a planning period of 20-years.

The various cost considerations for the ‘present worth’ analysis are as follows:

A. Construction Cost

Construction costs are capital costs to purchase and install the facilities and equipment. The costs are based on 2024 dollar values.

B. Project Related Cost

These costs are those needed for non-construction items that are necessary to develop and finance the project. Items included are design, bidding, permitting, construction related and start-up services, financial, legal, and filed work.

C. Total Estimated Project Capital

Total Cost is the sum of the Estimated Construction Cost and the Project Related Costs.

D. Operation and Maintenance and Equipment Replacement Fund (O&M&R) Cost

The costs are based upon the following unit rate estimates:

- Labor costs are based on a rate of \$45.00 per hour, including benefits, overhead, and other overhead costs.
- Power costs are based on an electric rate of 8 cents per Kilowatt Hour (KWH).
- Equipment Replacement Fund annual cost is the annual funding needed to replace equipment that has an estimated service life of 15 years or less.

The annual cost assigned is the purchase cost of the particular piece of equipment divided by its estimated life.

E. Salvage Value

The planning period used in the analysis is 20-years. At the end of 20-years, the structural and piping components have 30 or 35-years left to their useful life. The value of these assets is used to lower the present worth costs of the alternatives. Straight line depreciation is used.

F. Present Worth Analysis Method

The total present worth of an alternative is determined by summing the initial total project cost, present worth of the operation, maintenance and equipment replacement costs and subtracting the salvage value. Some of the multiplying factors to bring items to present worth current dollars based on the interest rate noted previously include:

- 15.59 to bring the 20-years of O&M&R costs back to present worth;
- 0.61 to convert year 30 salvage value back to present worth.

5.2 Alternative Analysis

A. Collection System Alternatives

1. 20-Year Life Cycle Present Worth Cost Estimates

Table 5-1 compares the 20-Year Life Cycle Present Worth Cost Estimates for the sanitary sewer improvement alternatives presented in **Section 4**. The option's planning level detailed present worth analysis can be found in **Appendix "C"** with the correlating cost estimate.

Table 5-1 – Collection System Alternatives Cost Effective Comparison

Item	No Action Alternative	North Piqua Road - SR 101	North Piqua Road - US 224		CR E 600 N - SR 101		CR N 200 E	CR N 100 E – CR E 400 N
		Opt No. 1	Opt No. 1	Opt No. 2	Opt No. 1	Opt No. 2	Opt No. 1	Opt No. 1
a. Capital Cost (Construction and Non-Construction Cost)	\$0	\$1,325,000	\$242,000	\$294,000	\$3,342,000	\$3,650,000	\$690,000	\$1,076,000
b. 20-Year Present Worth Cost of O&M&R	\$0	\$214,400	\$55,400	\$27,700	\$532,300	\$442,400	\$120,300	\$193,600
c. 20-Year Present Worth of Salvage	\$0	(\$211,700)	(\$25,700)	(\$47,300)	(\$513,100)	(\$604,800)	(\$93,600)	(\$135,900)
20-Year Life Cycle Present Worth Cost	\$0	\$1,327,700	\$271,700	\$274,400	\$3,361,200	\$3,487,700	\$716,700	\$1,133,700
(a + b - c) (Rounded)								
Item	SR 218 CR S 400 W	CR E 900 N Extended	CR W 1200 N - CR N 200 W		US 27 South		Monmouth Force Main	
	Opt No. 1	Opt No. 1	Opt No. 1	Opt No. 2	Opt No. 1	Opt No. 1	Opt No. 1	
a. Capital Cost (Construction and Non-Construction Cost)	\$2,170,000	\$558,000	\$2,785,000	\$3,005,000	\$556,000	\$619,000	\$607,000	
b. 20-Year Present Worth Cost of O&M&R	\$279,200	\$96,800	\$442,400	\$324,900	\$110,700	\$138,300	\$0	
c. 20-Year Present Worth of Salvage	(\$350,200)	(\$85,600)	(\$470,000)	(\$522,500)	(\$73,200)	(\$65,300)	(\$140,000)	
20-Year Life Cycle Present Worth Cost	\$2,099,000	\$569,200	\$2,757,400	\$2,807,400	\$593,500	\$692,000	\$467,000	
(a + b - c) (Rounded)								

Section 6 – Recommended Alternative

6.1 Recommended Improvements Project

Based on the discussions in **Section 4** and the 20-year life cycle present worth costs and additional factors of consideration in **Section 5**, the recommended alternatives are summarized below and in the referenced figures. A preliminary design summary summarizing the recommended alternatives is included.

A. Wastewater Collection System Alternatives

- a. N. Piqua Road - SR 101 Option 1 (**Figure 4-1**)
- b. N. Piqua Road - US 224 Option 2 (**Figure 4-2b**)
- c. CR E 600 N - SR 101 Option 1 (**Figure 4-3a**)
- d. CR N 200 E Option 1 (**Figure 4-4**)
- e. CR N 100 E - CR E 400 N Option 1 (**Figure 4-5**)
- f. SR 218 - CR S 400 W Option 1 (**Figure 4-6**)
- g. CR E 900 N Extended Option 1 (**Figure 4-7**)
- h. CR W 1200 N - CR N 200 W Option 2 (**Figure 4-8b**)
- i. US 27 - South Option 1 (**Figure 4-9**)
- j. CR W 500 N Option 1 (**Figure 4-10**)
- k. Monmouth Force Main Improvements Option 1 (**Figure 4-11**)

6.2 Project Schedule

This project should be constructed in a timely fashion. **Table 6-1** shows a proposed schedule.

Table 6-1
Proposed Schedule for the Sanitary Sewer Improvements Project

<i>Item</i>	<i>Date to be Completed</i>
PER Submittal	April 2024
District Authorizes Design	May 2024
Anticipated PER Approval	July 2024
Completion of Final Design	September 2024
District Submits Plans & Specifications to IDEM	September 2024
Anticipated Issuance of IDEM Construction Permits	October 2024
District Advertises for Construction Bids	October 2024
District Receives Construction Bids	November 2024
District Closes on Interim Financing	December 2024
District Authorizes Construction	January 2025
District Substantially Completes Construction	December 2025
initiation of Operation	January 2026
One Year Performance Certification Date	November 2027

6.3 Permit Requirements

It is anticipated that the following permits will be required for construction of this project, including:

- IDEM Construction Permit
- IDEM CSGP (Erosion Control)
- State Road Permit (INDOT)
- County Road Permit

6.4 Sustainability Consideration

Conservation of resources is becoming more and more a priority to all industries, and specifically those providing public services. The recommended project is inclusive of energy efficient motors and controls to provide the Operators with flexibility to reduce both energy usage and manpower.

6.5 Total Project Cost Estimate

Table 6-2 shows the estimate of probable construction and non-construction costs.

Table 6-2
Estimate of Recommended Project Cost

Item	Estimated Cost
Construction Costs	
N. Piqua Road - SR 101 Option 1	\$ 1,104,000
N. Piqua Road - US 224 Option 2	\$ 245,000
CR E 600 N - SR 101 Option 1	\$ 2,785,000
CR N 200 E Option 1	\$ 575,000
CR N 100 E - CR E 400 N Option 1	\$ 897,000
SR 218 - CR S 400 W Option 1	\$ 897,000
CR E 900 N Extended Option 1	\$ 465,000
CR W 1200 N - CR N 200 W Option 2	\$ 2,504,000
US 27 - South Option 1	\$ 463,000
CR W 500 N Option 1	\$ 516,000
Monmouth Force Main Improvements Option 1	\$ 506,000
Est. Total Construction Costs	\$ 10,957,000
Non-Construction Costs	
Financial	\$ 150,000
Legal	\$ 75,000
Planning - LSA	\$ 50,000
Design, Permitting & Bidding	\$ 1,025,000
CE, Inspection, AIS, FSP, AMP Update & Project Closeout	\$ 796,000
Land - Easement Acquisition	\$ 95,000
Est. Total Non-Construction	\$ 2,191,000
Est. Total Costs	\$ 13,148,000

Section 7 – Legal, Financial & Managerial Capabilities

7.1 Introduction

The purpose of this section is to provide details and documentation pertaining to the legal, financial, and managerial capabilities of the Adams County Regional Sewer District and how those are impacted by the Sanitary Sewer Extension Projects.

7.2 Resolutions

The completed and signed Preliminary Engineering Report Acceptance and the Signatory Authorization Resolution will be inserted in **Appendix “E”**.

7.3 SRF Project Financing Information

The State Revolving Loan Fund Financing Information form is also provided and is included, set forth in **Appendix “E”**. This financing form includes a completed project cost summary and breaks down the current and post-project operation and maintenance costs.

7.4 Asset Management and Fiscal Sustainability Plan

The District has developed an Asset Management Program (AMP) that meets the requirements defined by the State Revolving Fund’s Asset Management Program Guidelines pursuant to Indiana Code 5-1.2-10-16. The Districts Asset Management Plan Certification Form is included in **Appendix “E”**.

7.5 Current Rate Schedule

There are 1,079 total sewer service connections to the existing District Wastewater Utility. The current sewer flat rate for all connections stands at \$93.30 per month.

The potential users of the Adams County Regional Sewer District had a median household income of \$56,037 according to the American Community Survey (ACS), the 2021 ACS 5 year estimate (2017-2021). In addition, the projected sewer rates in each of the areas are expected to exceed \$50 per month for a residential user. This qualifies the District to receive the SRF’s Tier II - Poverty Interest Rate of 2.00% (March 2024). The proposed project may also qualify for an additional 0.50% interest rate reduction due to the nature of the sewer improvements (Nonpoint Source Project financed along with a Point Source Project). It should be noted that the SRF Program Interest rates are re-set on the first business day of each January, April, July and October and generally are 90 percent of the average 20-year AAA-rated, general obligation bond Municipal Market Data (“MMD”) composite index. In addition, SRF interest rates will vary based on three ranges of average monthly user rates for an equivalent dwelling unit (User Rates) within each of the three existing SRF MHI tiers, creating nine possible interest rates and as indicated above the ACRSD qualifies for the appropriate Tier II - Poverty Rate. With IDEM - SRF funding, the term of the loan will be 20 to 35 years and the debt service reserve requirement will be 25%.

7.6 Interlocal Government Agreements

The Adams County Regional Sewer District currently has an existing interlocal treatment agreement with the City of Decatur and the City of Berne. They will need to amend their existing treatment agreement with the City of Decatur and Berne to incorporate the proposed new service areas that will pump to the respective cities for treatment.

Section 8 – Public Participation

8.1 Advertised Public Hearing

In accordance with Indiana rule 327 IAC 13-8-13, the District is required to conduct at least one public hearing to discuss the completed Preliminary Engineering Report. The date of this hearing is yet to be determined. Discussion at the hearing will include project alternatives, project costs, environmental impacts, and residential sewer charges. A legal notice for the public hearing will be published 10 days prior to the hearing in the local newspaper and will be included in **Appendix “F”**.

8.2 Minutes of the Hearing

A copy of the minutes and sign-in sheet of the public hearing will be included in **Appendix “F”**.

8.3 Written Comments from Hearing

A copy of the written comments will be included in **Appendix “F”**.

8.4 Mailing List

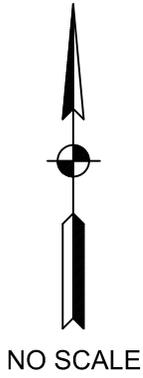
Interested parties who demonstrate an interest in the proposed project and would like to receive a copy of the Environmental Assessment and ‘Finding of No Significant Impact’ documentation will be included in **Appendix “F”**.



Appendix “A”

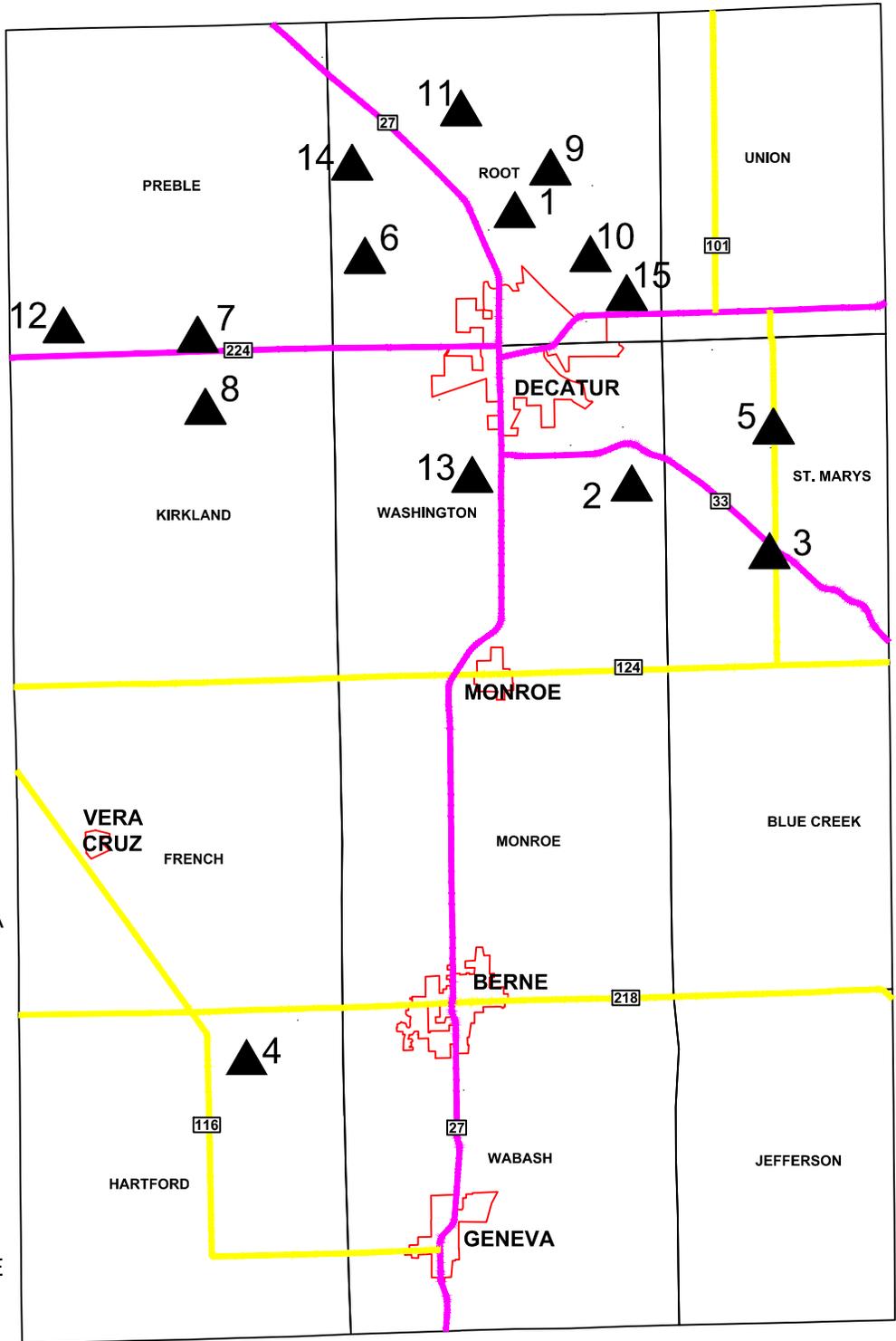
Figures

2024 Sanitary Sewer Improvements Preliminary Engineering Report (PER) For The Adams County Regional Sewer District Adams County, Indiana



▲ LOCATIONS

1. MONMOUTH/ROE ACRES SERVICE AREA
2. ARCADIA VILLAGE SERVICE AREA
3. PLEASANT MILLS SERVICE AREA
4. LINN GROVE SERVICE AREA
5. RIVARE (BOBO) SERVICE AREA
6. BARRINGTON WOODS SERVICE AREA
7. PREBLE SERVICE AREA
8. PETERSON SERVICE AREA
9. MONMOUTH EXTENSION SERVICE AREA
10. CLEM'S LAKE SERVICE AREA
11. SUNNYBROOK
12. MAGLEY SERVICE AREA
13. OAKWOOD ADDITION (YOST WOODS) FRINGE
14. WINCHESTER ROAD SERVICE AREA
15. CLEM'S LAKE SOUTH SERVICE AREA

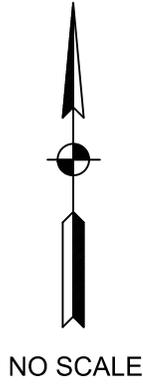


2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

EXISTING SERVICE AREAS

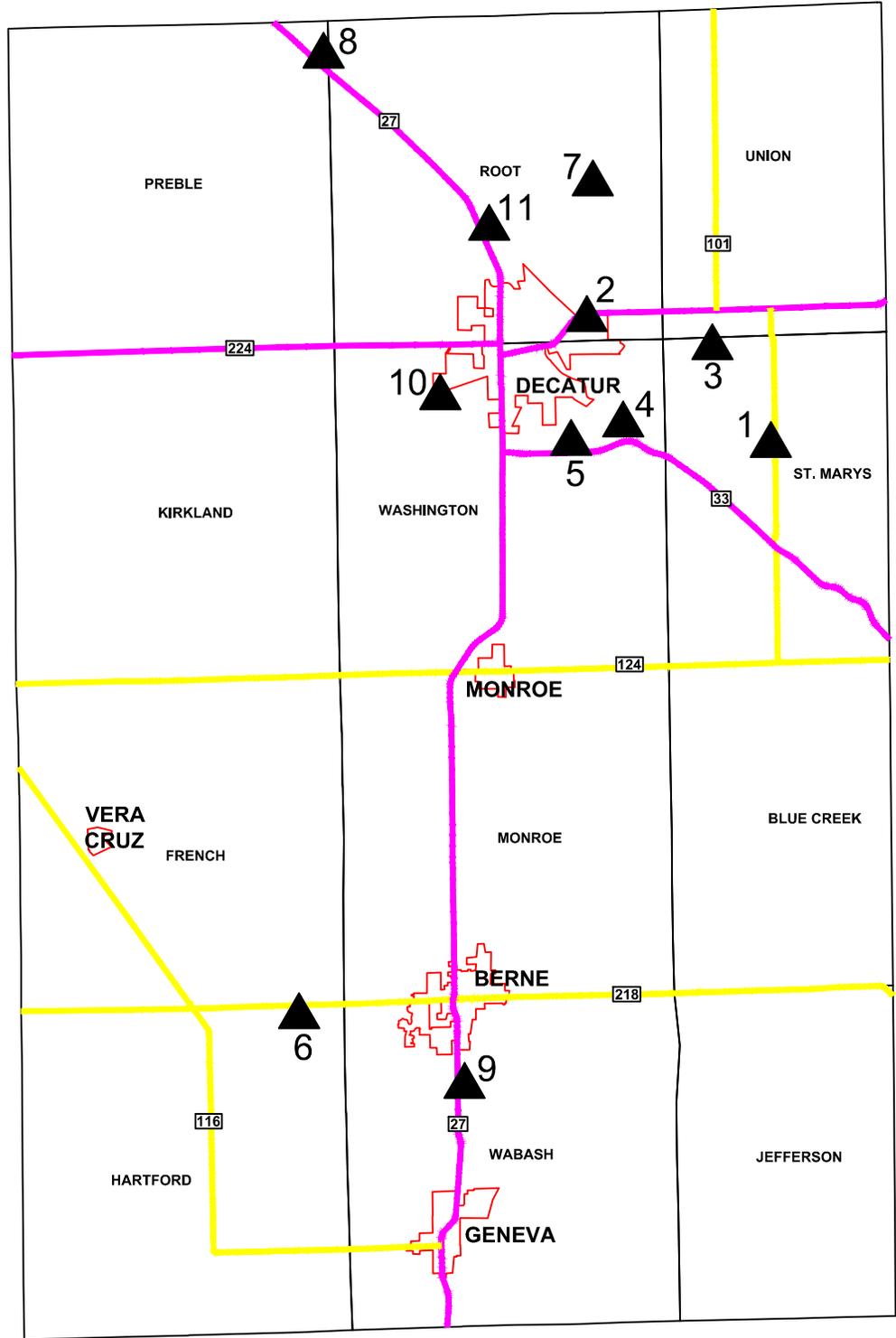
FIGURE

1-1



▲ PROPOSED LOCATIONS

1. N PIQUA ROAD - SR 101 SERVICE AREA
2. N PIQUA ROAD - US 224 SERVICE AREA
3. CR E 600 N - SR 101 SERVICE AREA
4. CR N 200 E SERVICE AREA
5. CR N 100 E - CR E 400 N SERVICE AREA
6. US 218 - CR S 400 W SERVICE AREA
7. CR E 900 N EXTENDED SERVICE AREA
8. CR W 1200 N - CR N 200 W SERVICE AREA
9. US 27 SOUTH SERVICE AREA
10. CR W 500 N SERVICE AREA
11. MONMOUTH FORCE MAIN IMPROVEMENTS



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

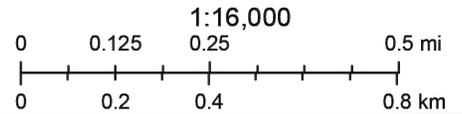
FUTURE SERVICE AREAS

FIGURE

1-2



- Land Cover 2011 (USGS)**
- 11 - Open Water
 - 21 - Developed, Open Space
 - 22 - Developed, Low Intensity
 - 23 - Developed, Medium Intensity
 - 24 - Developed, High Intensity
 - 31 - Barren Land
 - 41 - Deciduous Forest
 - 42 - Evergreen Forest
 - 43 - Mixed Forest
 - 52 - Shrub/Scrub
 - 71 - Grasslands/Herbaceous
 - 81 - Pasture/Hay
 - 82 - Cultivated Crops
 - 90 - Woody Wetlands
 - 95 - Emergent Herbaceous Wetlands

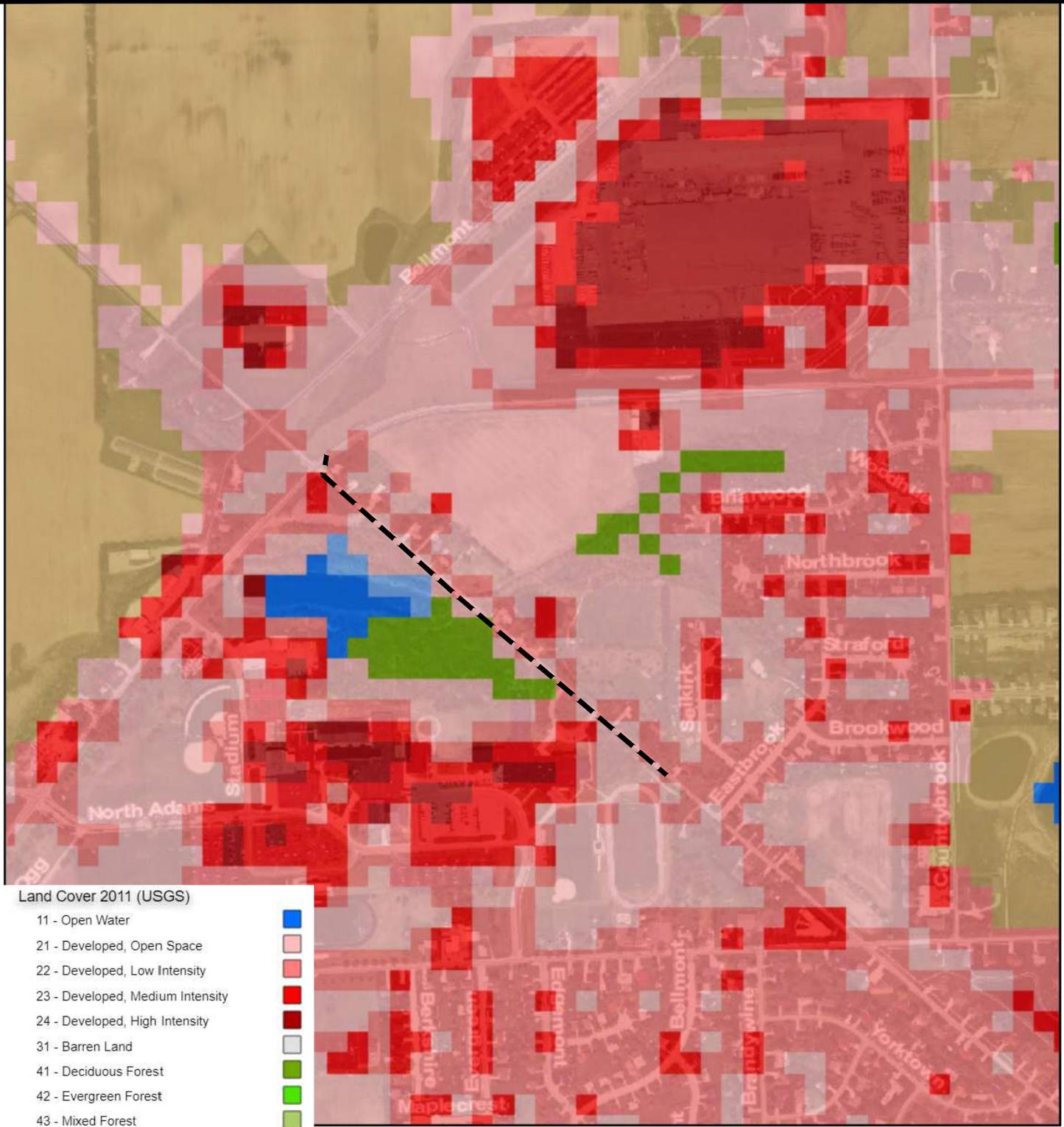


2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA -
LAND USE MAP

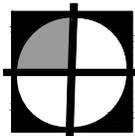
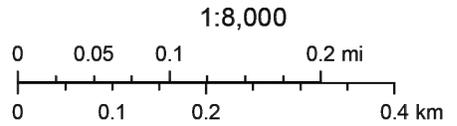
FIGURE

1-3a



Land Cover 2011 (USGS)

- 11 - Open Water
- 21 - Developed, Open Space
- 22 - Developed, Low Intensity
- 23 - Developed, Medium Intensity
- 24 - Developed, High Intensity
- 31 - Barren Land
- 41 - Deciduous Forest
- 42 - Evergreen Forest
- 43 - Mixed Forest
- 52 - Shrub/Scrub
- 71 - Grasslands/Herbaceous
- 81 - Pasture/Hay
- 82 - Cultivated Crops
- 90 - Woody Wetlands
- 95 - Emergent Herbaceous Wetlands



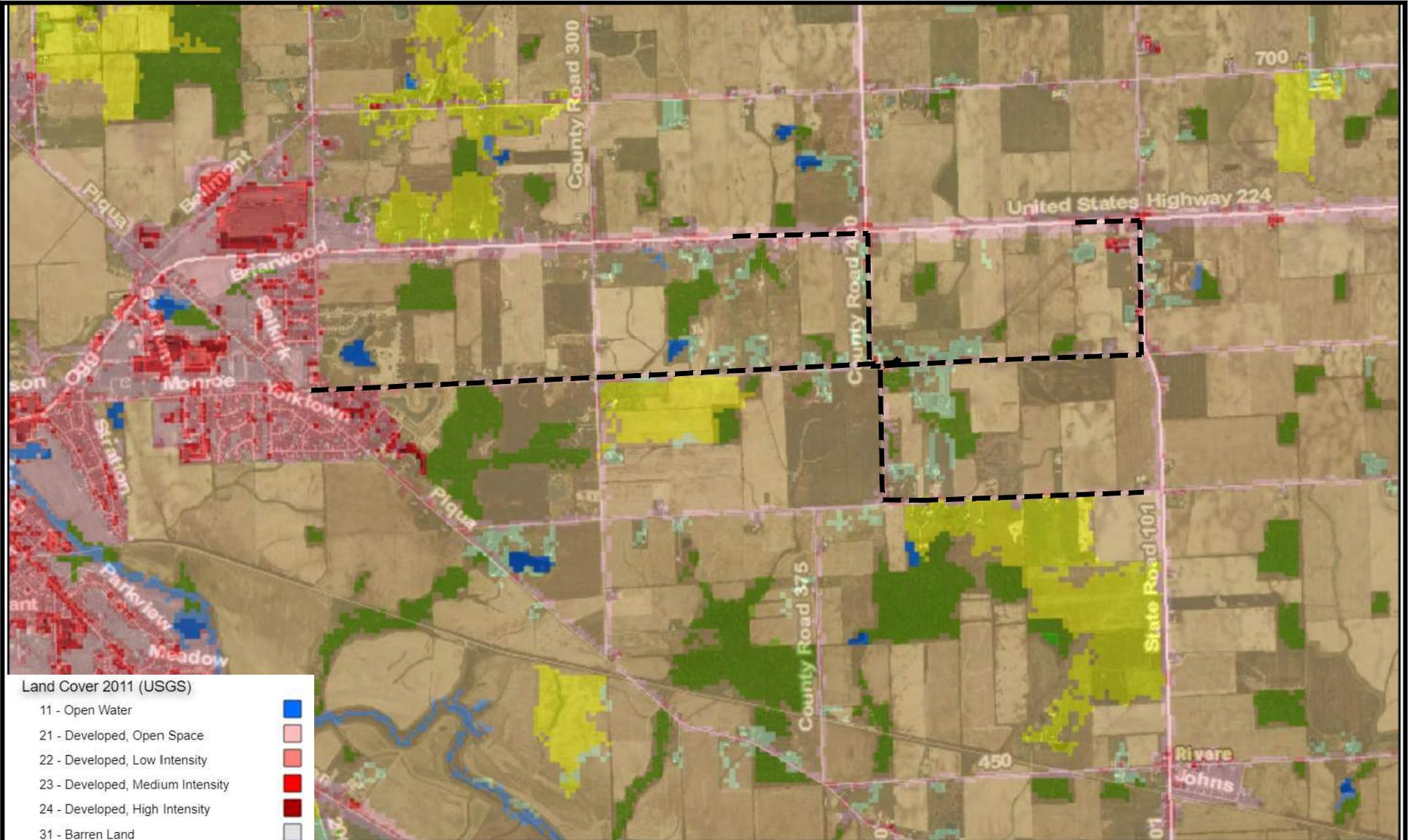
COMMONWEALTH
ENGINEERS, INC.
A wealth of resources to master a common goal.

2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

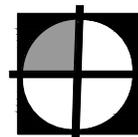
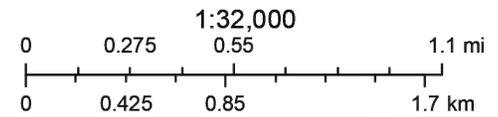
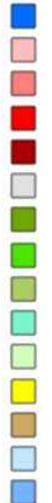
N. PIQUA ROAD - US 224 SERVICE AREA -
LAND USE MAP

FIGURE

1-3b



- Land Cover 2011 (USGS)**
- 11 - Open Water
 - 21 - Developed, Open Space
 - 22 - Developed, Low Intensity
 - 23 - Developed, Medium Intensity
 - 24 - Developed, High Intensity
 - 31 - Barren Land
 - 41 - Deciduous Forest
 - 42 - Evergreen Forest
 - 43 - Mixed Forest
 - 52 - Shrub/Scrub
 - 71 - Grasslands/Herbaceous
 - 81 - Pasture/Hay
 - 82 - Cultivated Crops
 - 90 - Woody Wetlands
 - 95 - Emergent Herbaceous Wetlands



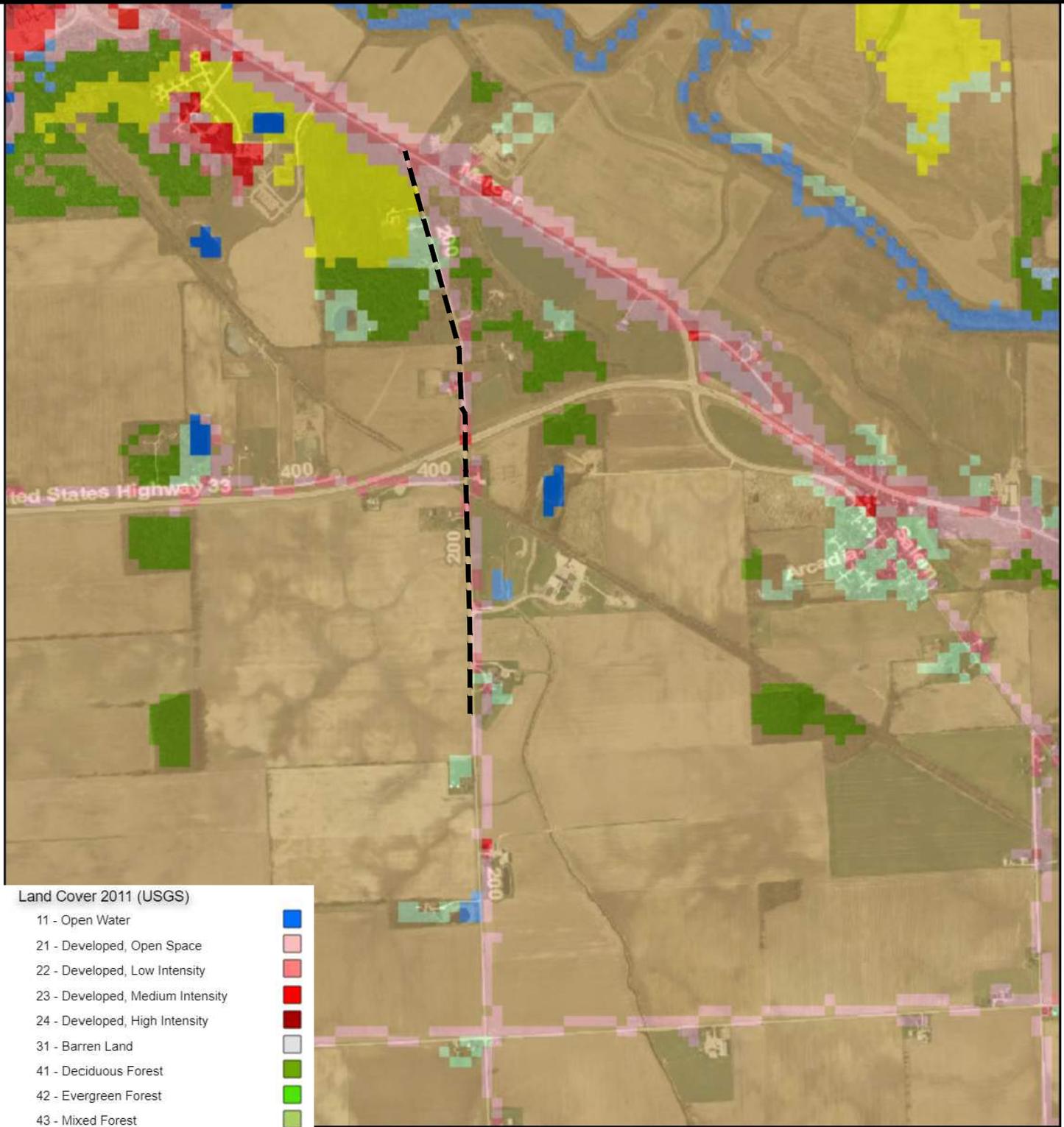
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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 600 N - SR 101 SERVICE AREA -
LAND USE MAP**

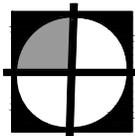
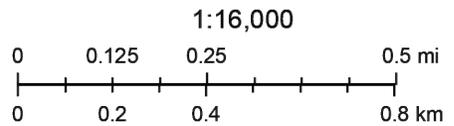
FIGURE

1-3C



Land Cover 2011 (USGS)

- 11 - Open Water
- 21 - Developed, Open Space
- 22 - Developed, Low Intensity
- 23 - Developed, Medium Intensity
- 24 - Developed, High Intensity
- 31 - Barren Land
- 41 - Deciduous Forest
- 42 - Evergreen Forest
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- 52 - Shrub/Scrub
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- 82 - Cultivated Crops
- 90 - Woody Wetlands
- 95 - Emergent Herbaceous Wetlands



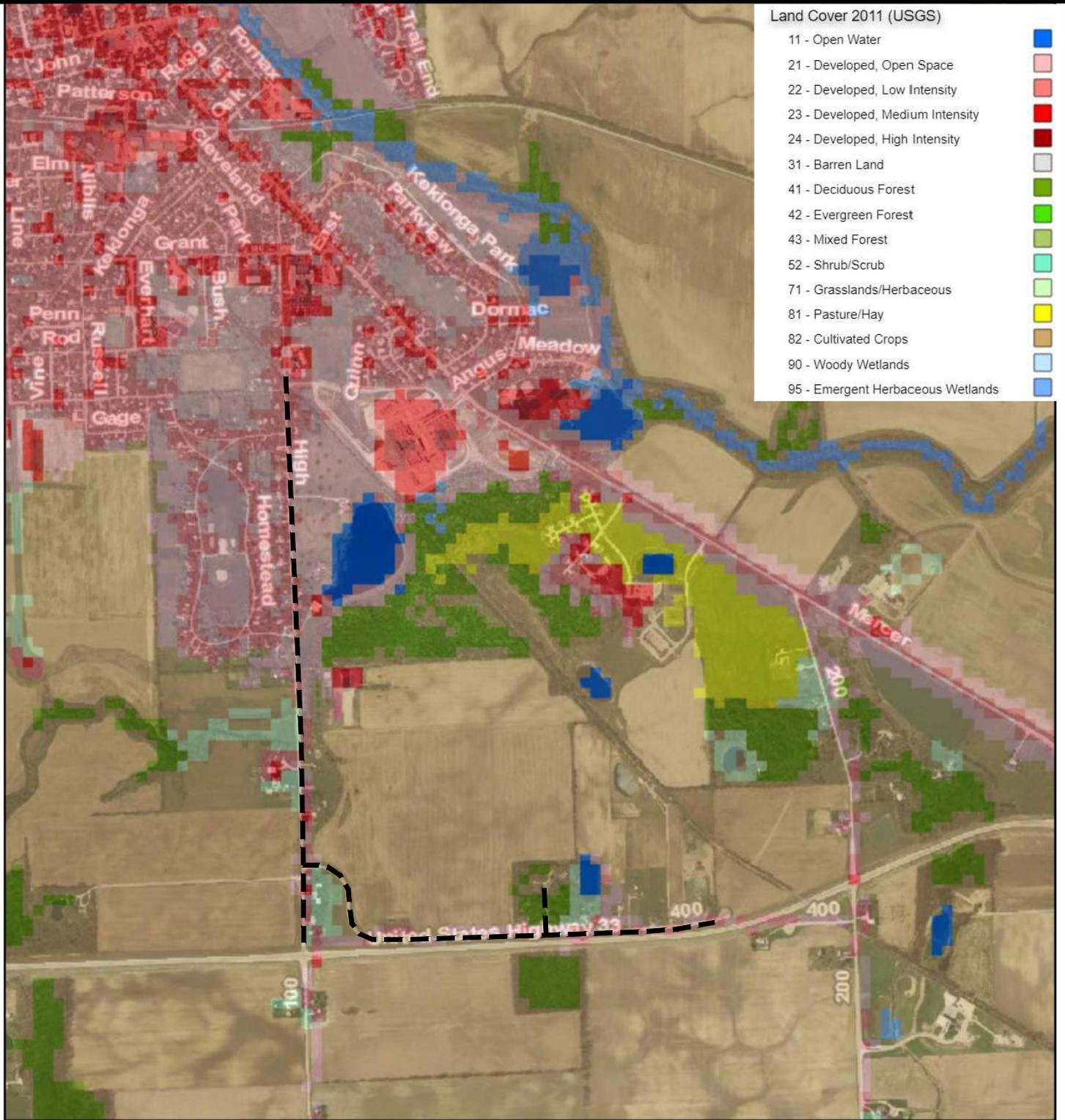
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ADAMS COUNTY REGIONAL SEWER DISTRICT**

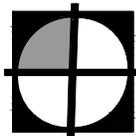
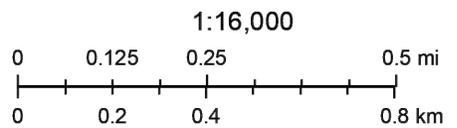
**CR N 200 E SERVICE AREA -
LAND USE MAP**

FIGURE

1-3d



March 11, 2024



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA -
LAND USE MAP

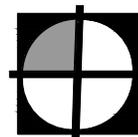
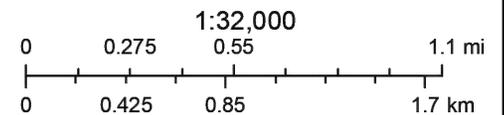
FIGURE

1-3e

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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
 LAND USE MAP

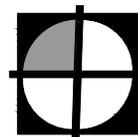
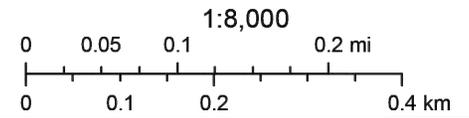
FIGURE

1-3f



Land Cover 2011 (USGS)

- 11 - Open Water
- 21 - Developed, Open Space
- 22 - Developed, Low Intensity
- 23 - Developed, Medium Intensity
- 24 - Developed, High Intensity
- 31 - Barren Land
- 41 - Deciduous Forest
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- 71 - Grasslands/Herbaceous
- 81 - Pasture/Hay
- 82 - Cultivated Crops
- 90 - Woody Wetlands
- 95 - Emergent Herbaceous Wetlands



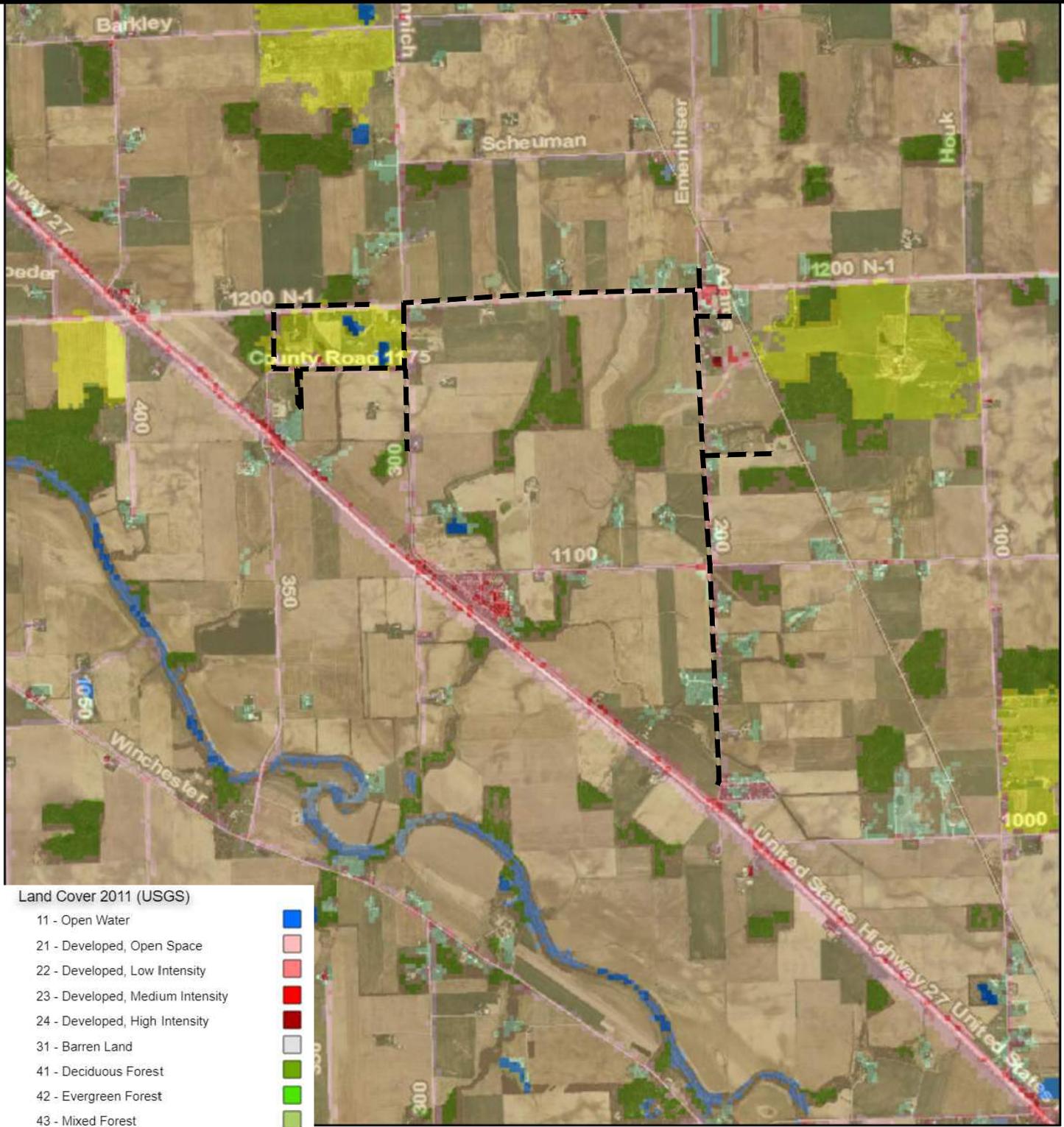
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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 900 N EXTENDED SERVICE AREA -
LAND USE MAP**

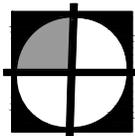
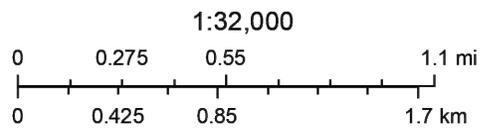
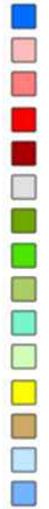
FIGURE

1-3g



Land Cover 2011 (USGS)

- 11 - Open Water
- 21 - Developed, Open Space
- 22 - Developed, Low Intensity
- 23 - Developed, Medium Intensity
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- 31 - Barren Land
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- 42 - Evergreen Forest
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- 52 - Shrub/Scrub
- 71 - Grasslands/Herbaceous
- 81 - Pasture/Hay
- 82 - Cultivated Crops
- 90 - Woody Wetlands
- 95 - Emergent Herbaceous Wetlands



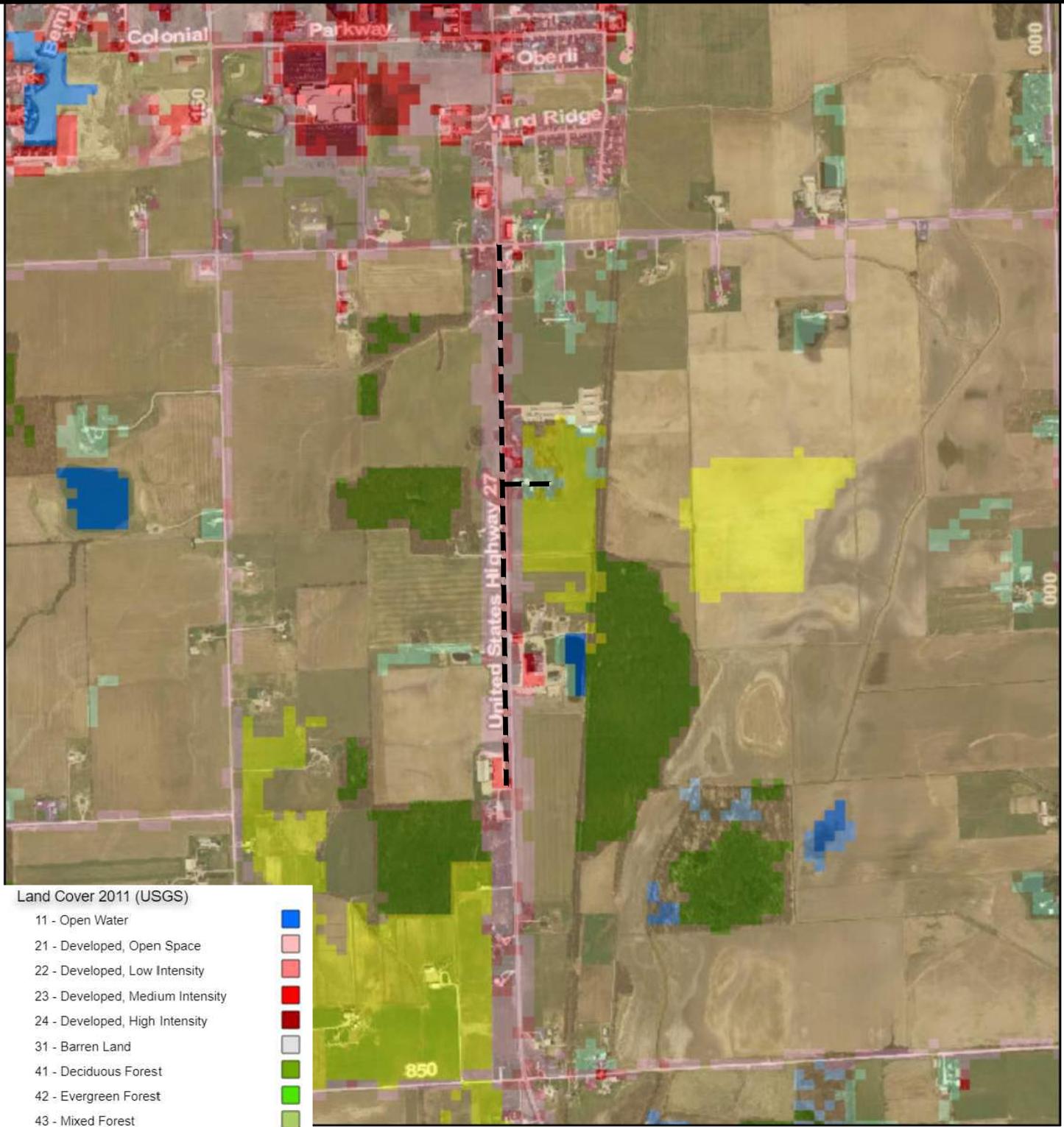
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ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR W 1200 N - CR N 200 W SERVICE AREA -
LAND USE MAP**

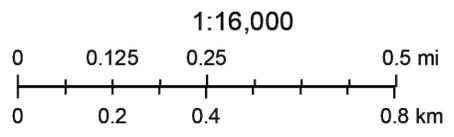
FIGURE

1-3h



Land Cover 2011 (USGS)

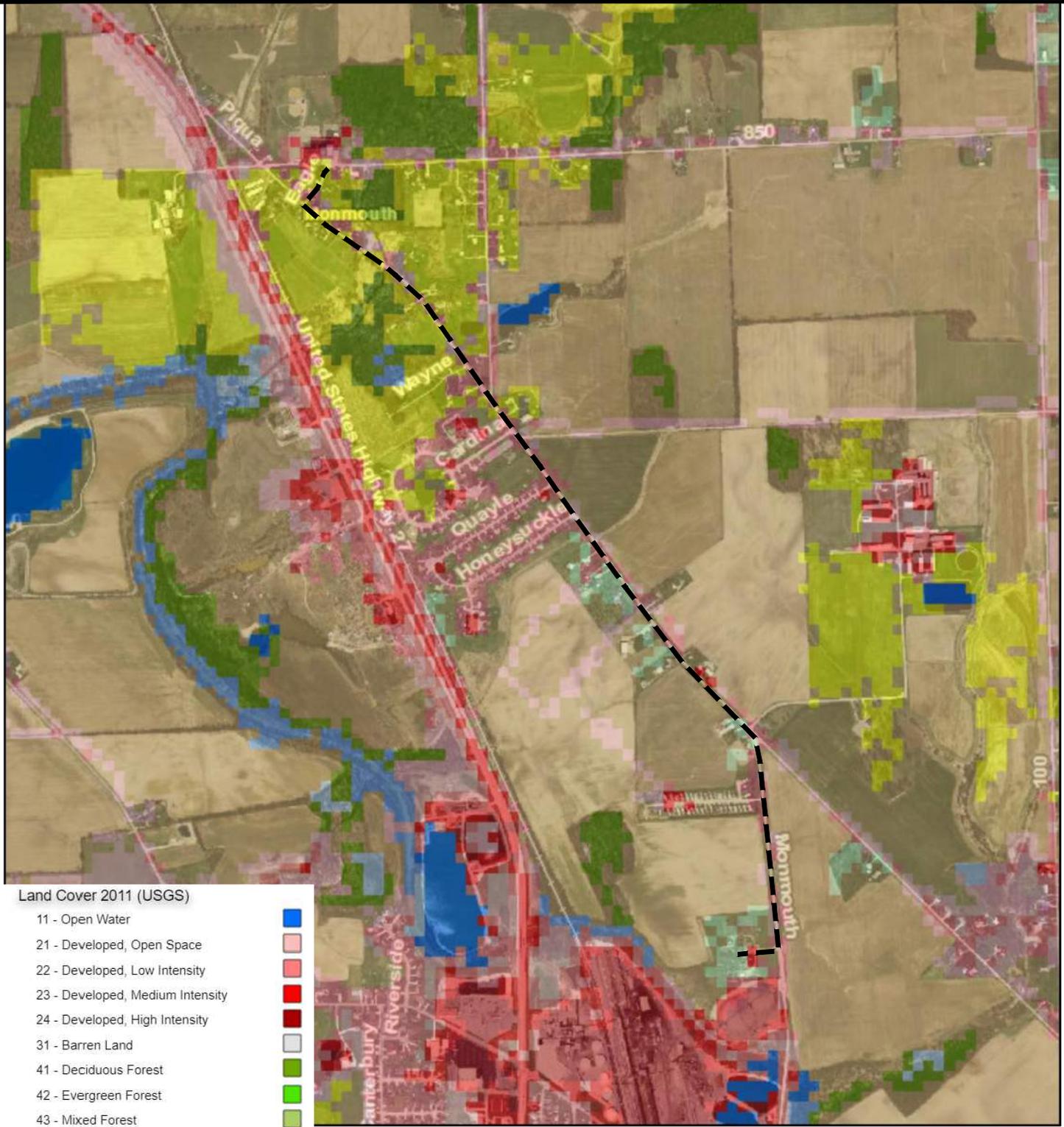
- 11 - Open Water
- 21 - Developed, Open Space
- 22 - Developed, Low Intensity
- 23 - Developed, Medium Intensity
- 24 - Developed, High Intensity
- 31 - Barren Land
- 41 - Deciduous Forest
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- 82 - Cultivated Crops
- 90 - Woody Wetlands
- 95 - Emergent Herbaceous Wetlands



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

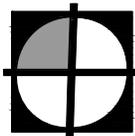
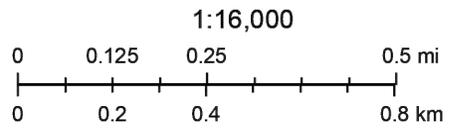
US 27 SOUTH SERVICE AREA -
LAND USE MAP

FIGURE
1-3i



Land Cover 2011 (USGS)

- 11 - Open Water
- 21 - Developed, Open Space
- 22 - Developed, Low Intensity
- 23 - Developed, Medium Intensity
- 24 - Developed, High Intensity
- 31 - Barren Land
- 41 - Deciduous Forest
- 42 - Evergreen Forest
- 43 - Mixed Forest
- 52 - Shrub/Scrub
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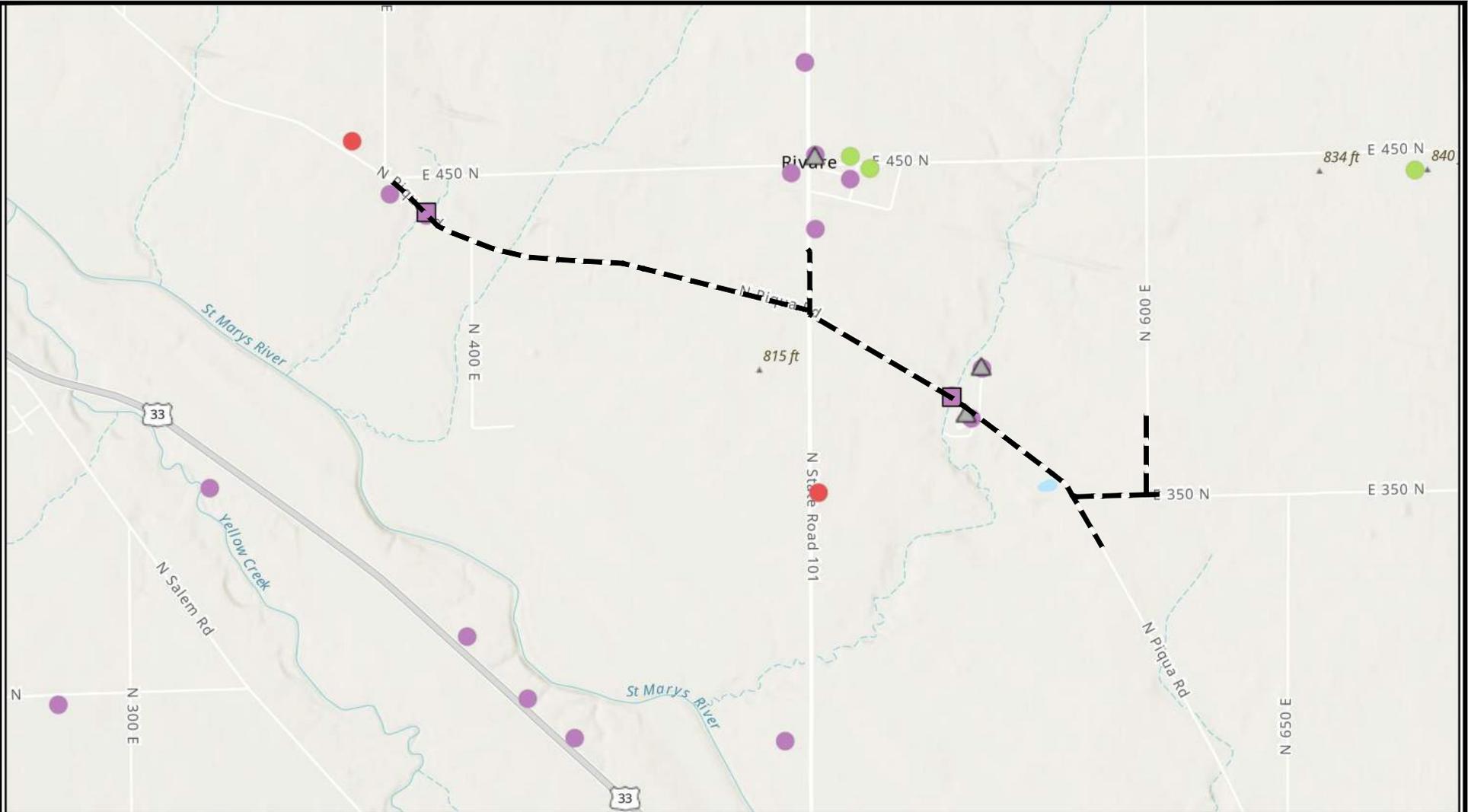
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**MONMOUTH FORCE MAIN IMPROVEMENTS -
LAND USE MAP**

FIGURE

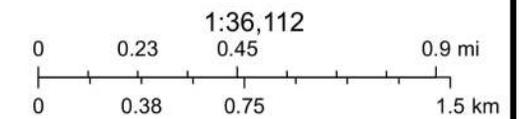
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- ▲ Cemeteries
- Contributing
- Outstanding
- Contributing
- Notable
- ▲ Historic Bridges
- ▲ County Survey Sites



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Indiana DNR DHPA

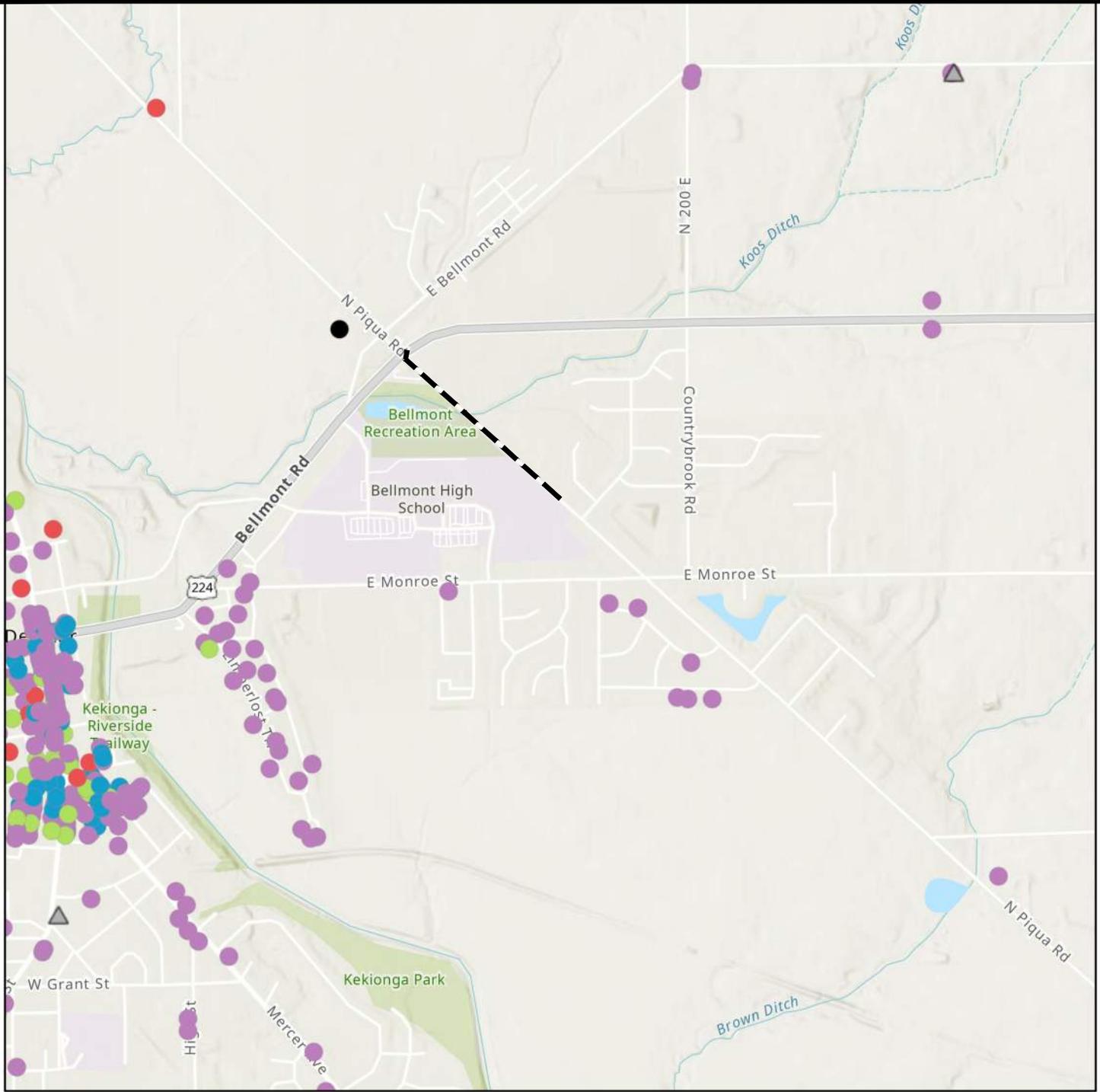


2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA -
SHAARD MAP

FIGURE

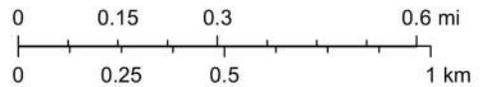
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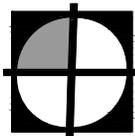
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-  Cemeteries
-  Contributing
-  Non-Contributing
-  Outstanding
-  Demolished
-  Notable



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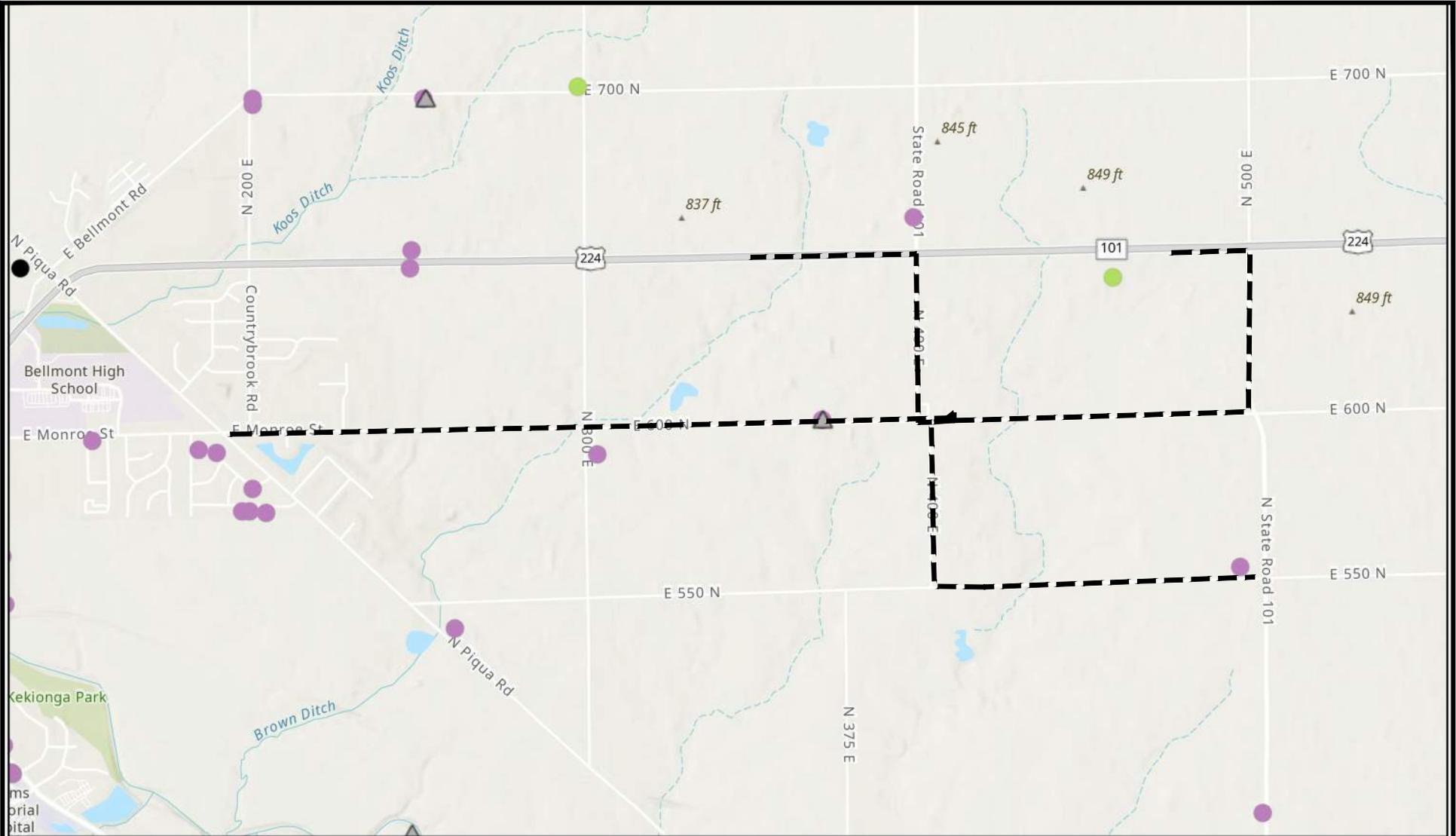
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - US 224 SERVICE AREA -
SHAARD MAP

FIGURE

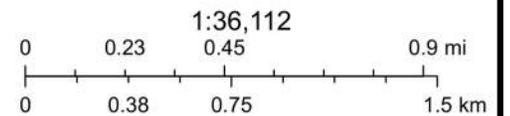
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- Cemeteries
- Contributing
- Notable
- Demolished



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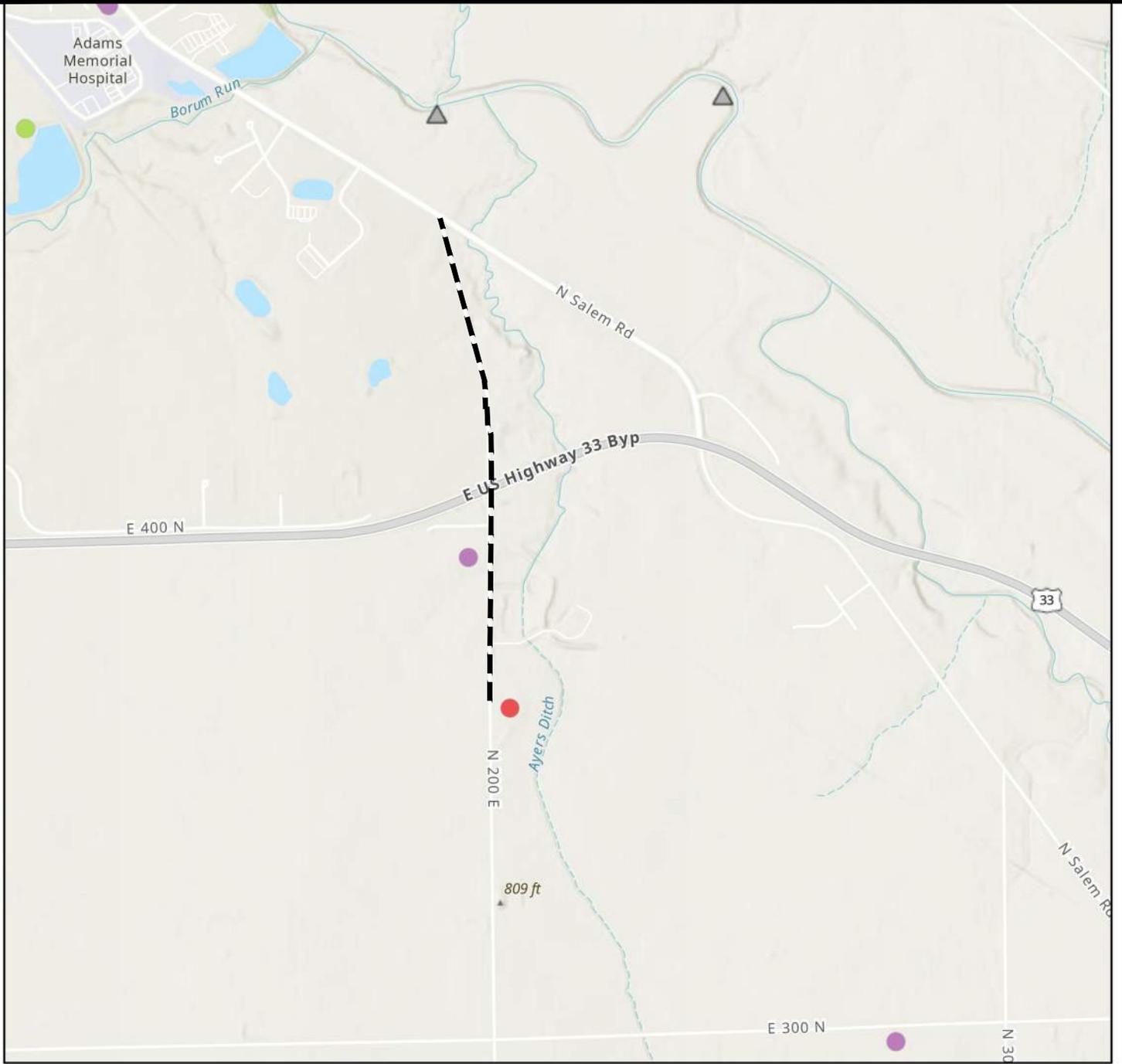
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 600 N - SR 101 SERVICE AREA -
SHAARD MAP

FIGURE

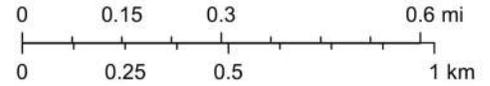
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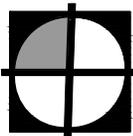
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-  Cemeteries
- County Survey Sites**
-  Outstanding
-  Notable
-  Contributing



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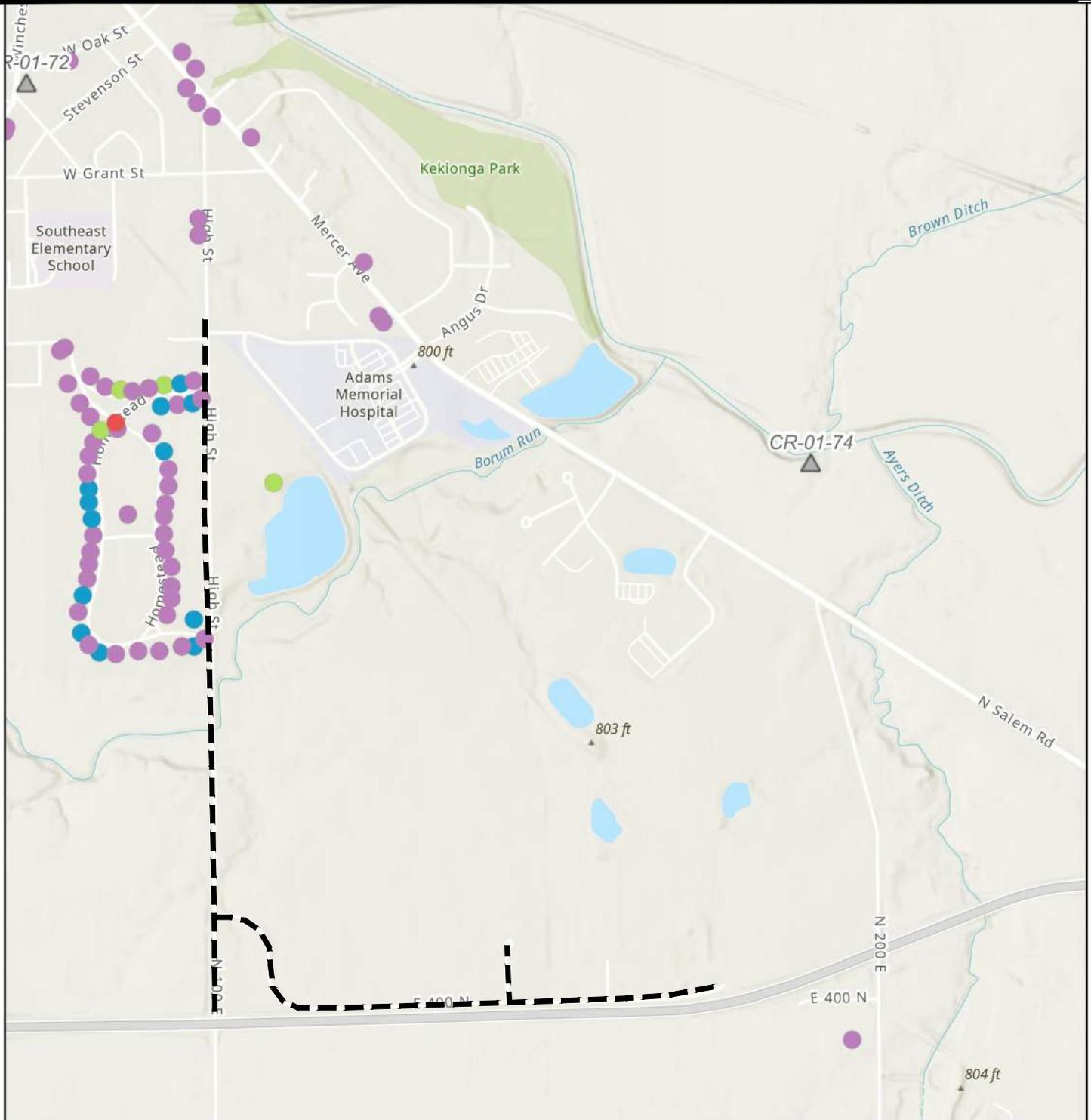
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 200 E SERVICE AREA -
SHAARD MAP**

FIGURE

1-4d

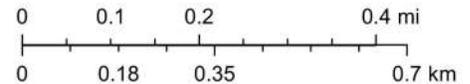
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- Cemeteries
- Notable
- Contributing
- Outstanding
- Non-Contributing



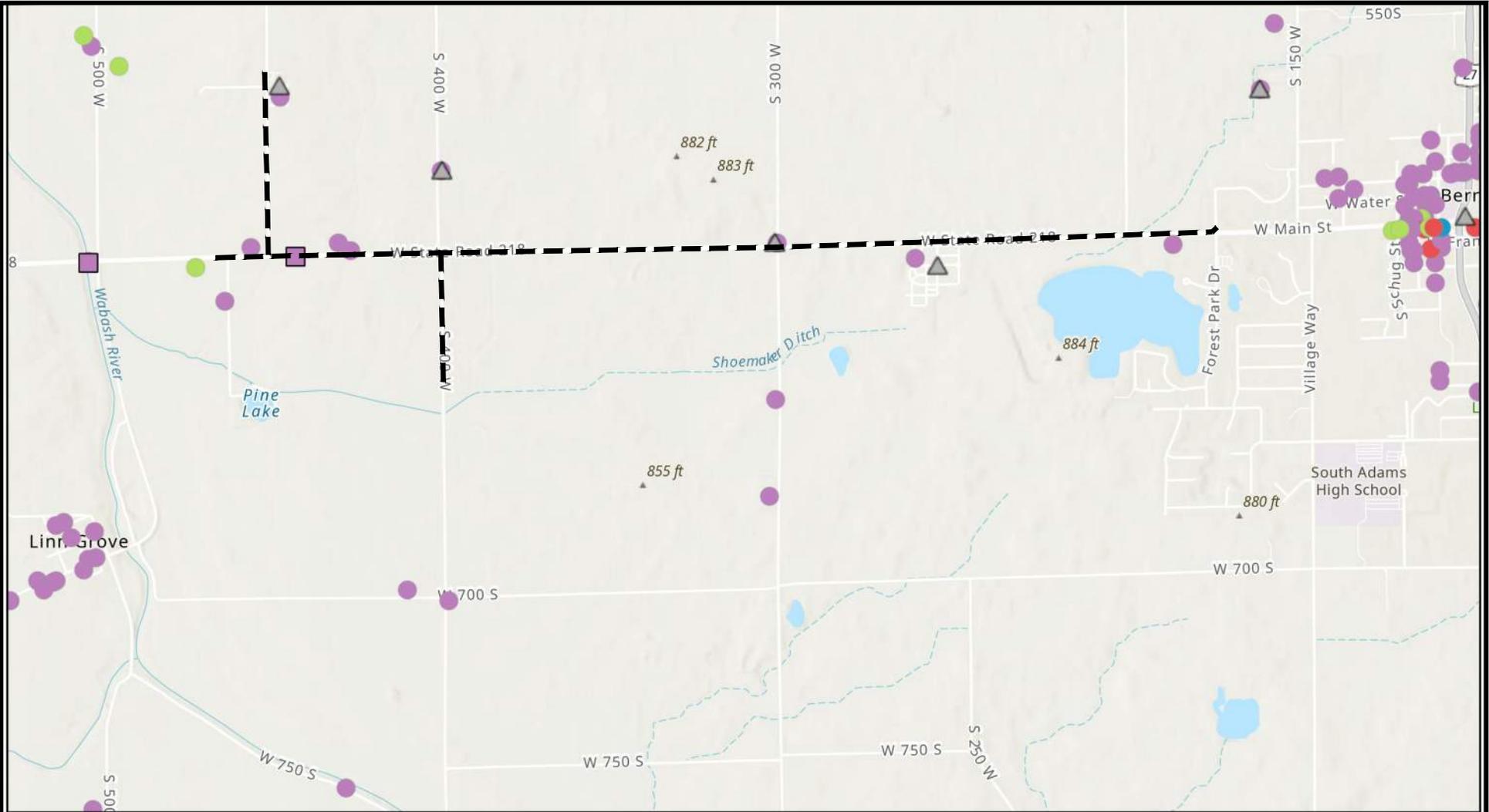
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA -
SHAARD MAP

FIGURE

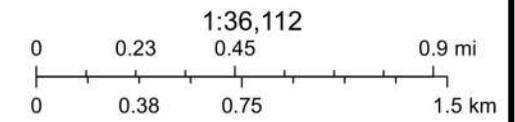
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- ▲ Cemeteries
- Historic Bridges
- Contributing
- County Survey Sites
- Outstanding
- Notable
- Contributing
- Non-Contributing



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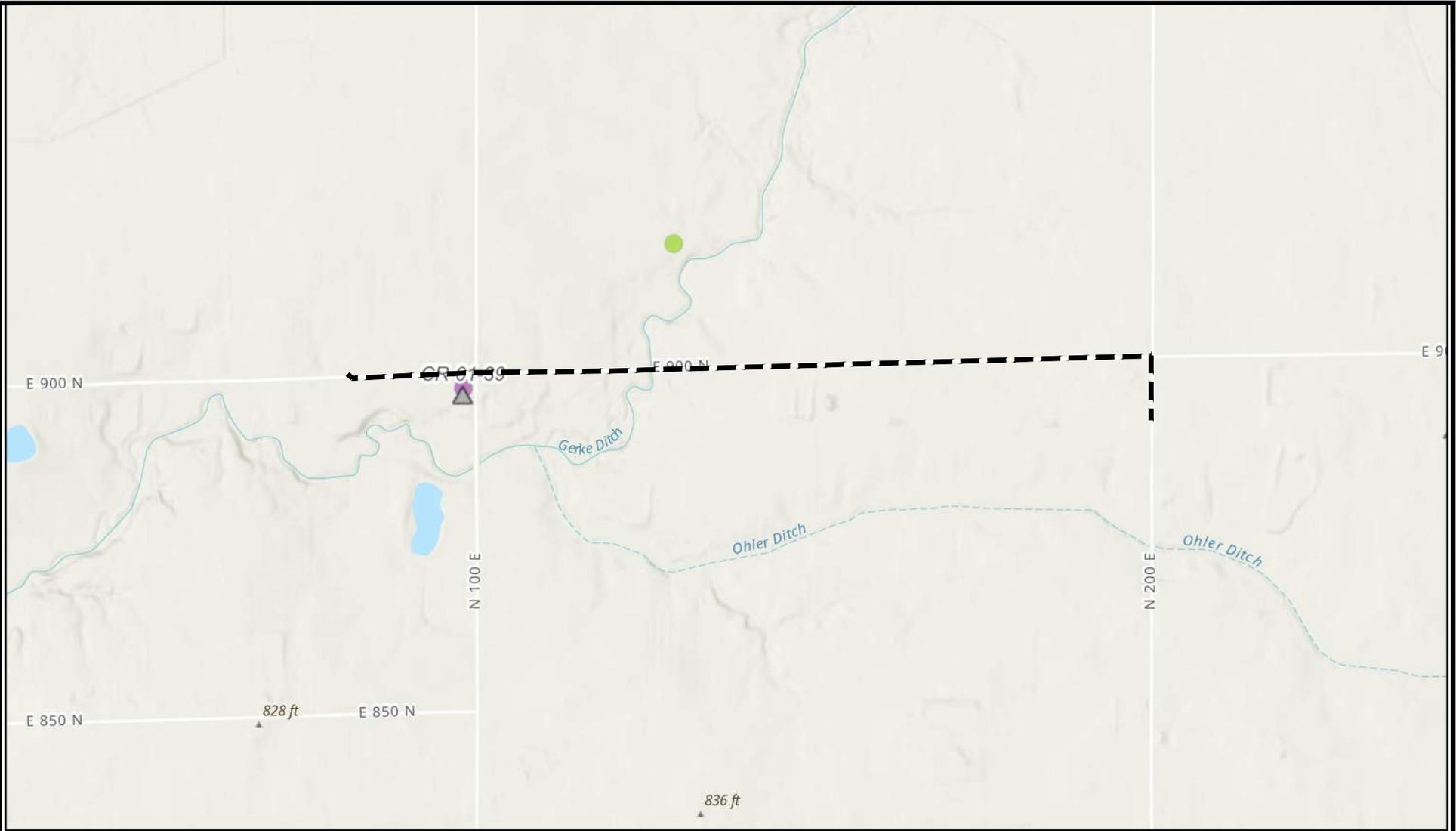
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
SHAARD MAP

FIGURE

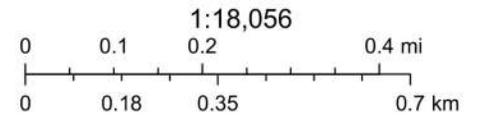
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- Cemeteries
- Notable
- Contributing
- County Survey Sites*



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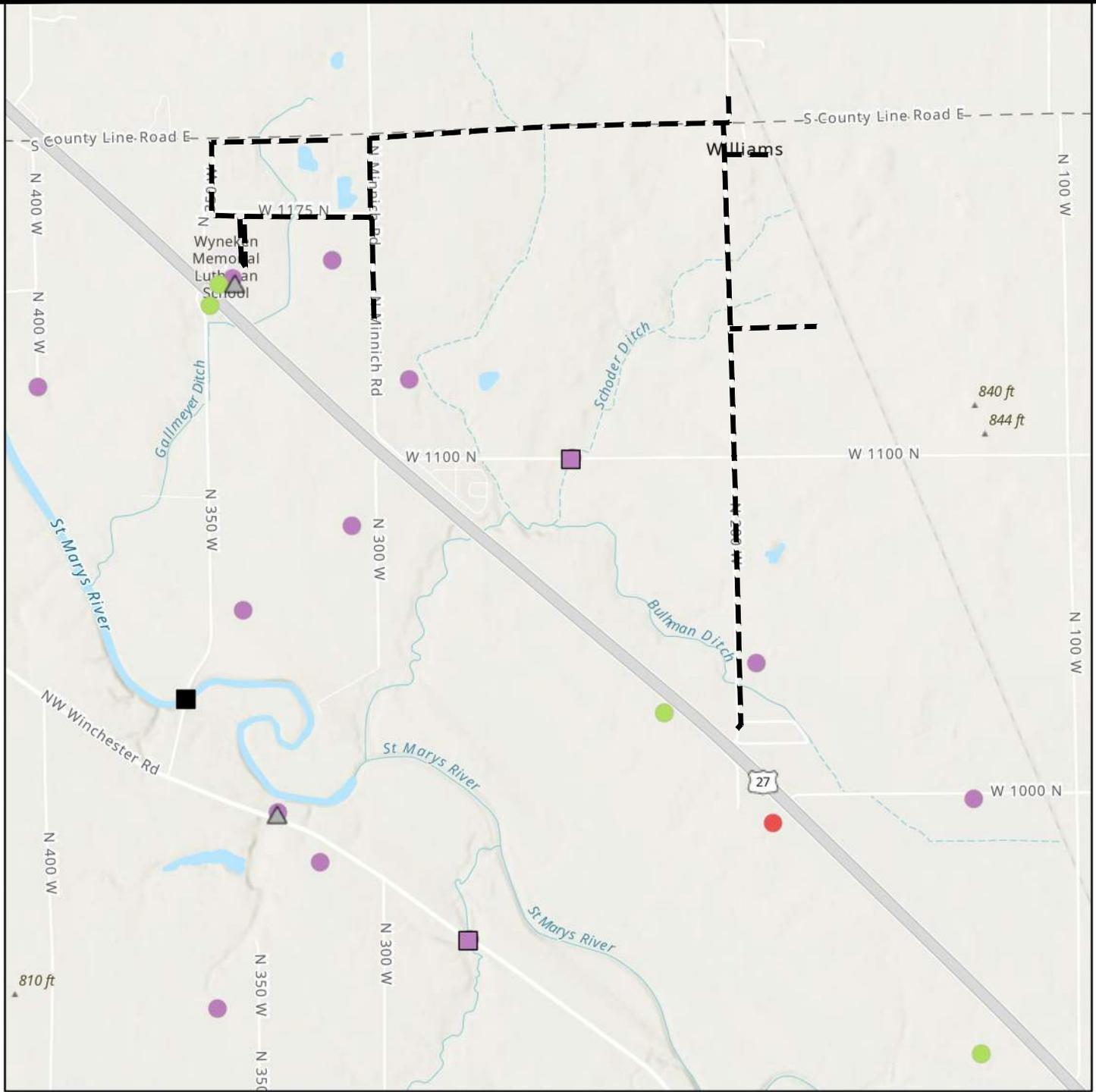
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 900 N EXTENDED SERVICE AREA -
SHAARD MAP**

FIGURE

1-4g

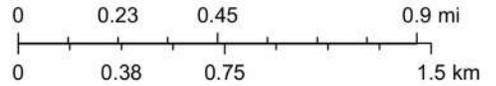
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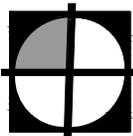
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1:36,112

- Cemeteries
 - Outstanding
 - Contributing
 - Notable
 - Demolished
 - Contributing
- County Survey Sites*



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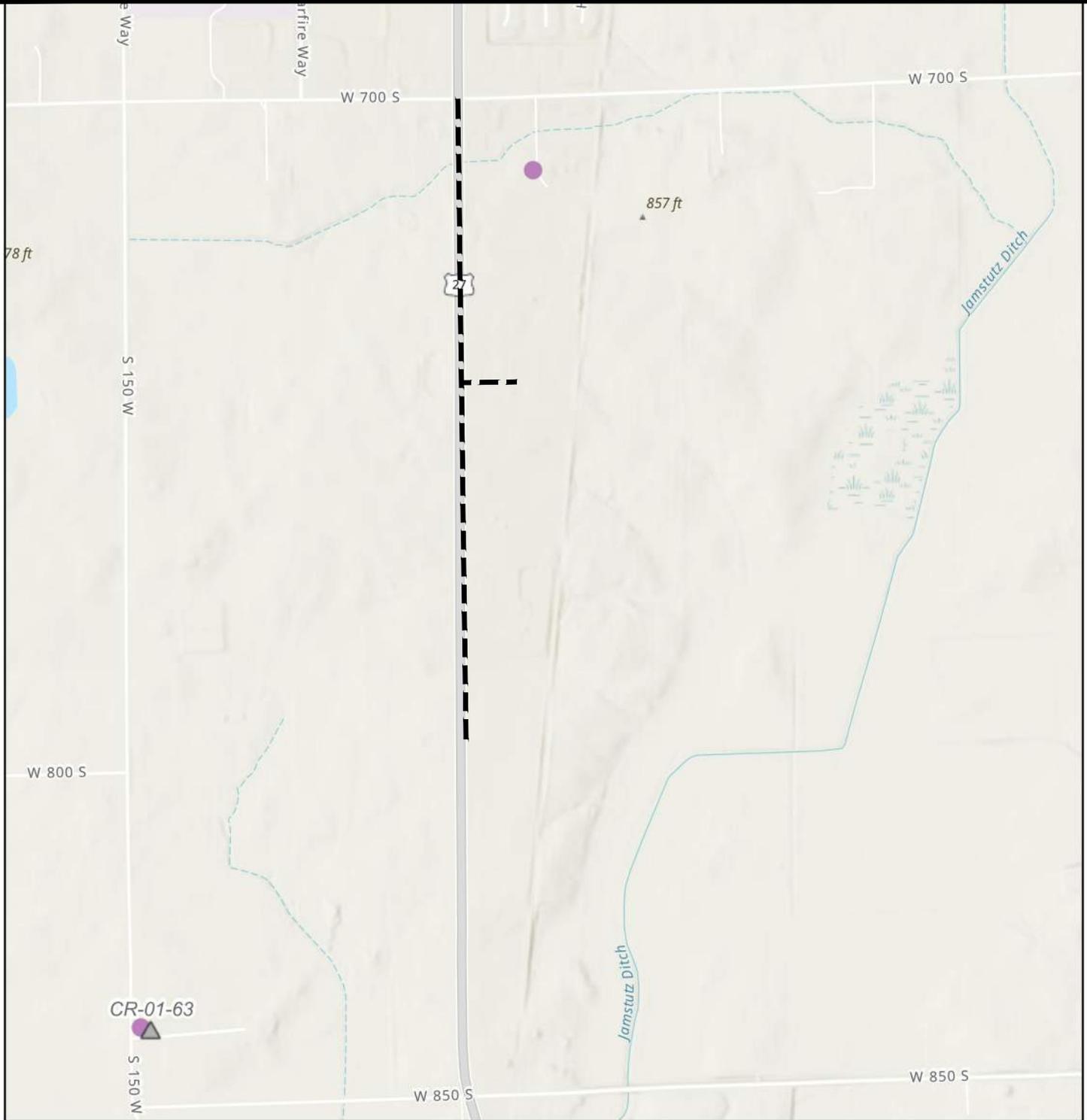
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR W 1200 N - CR N 200 W SERVICE AREA -
SHAARD MAP**

FIGURE

1-4h

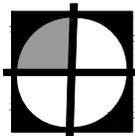
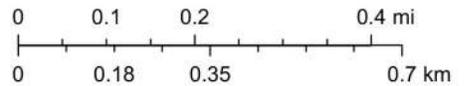
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-  *Cemeteries*
 -  *Contributing*
- County Survey Sites



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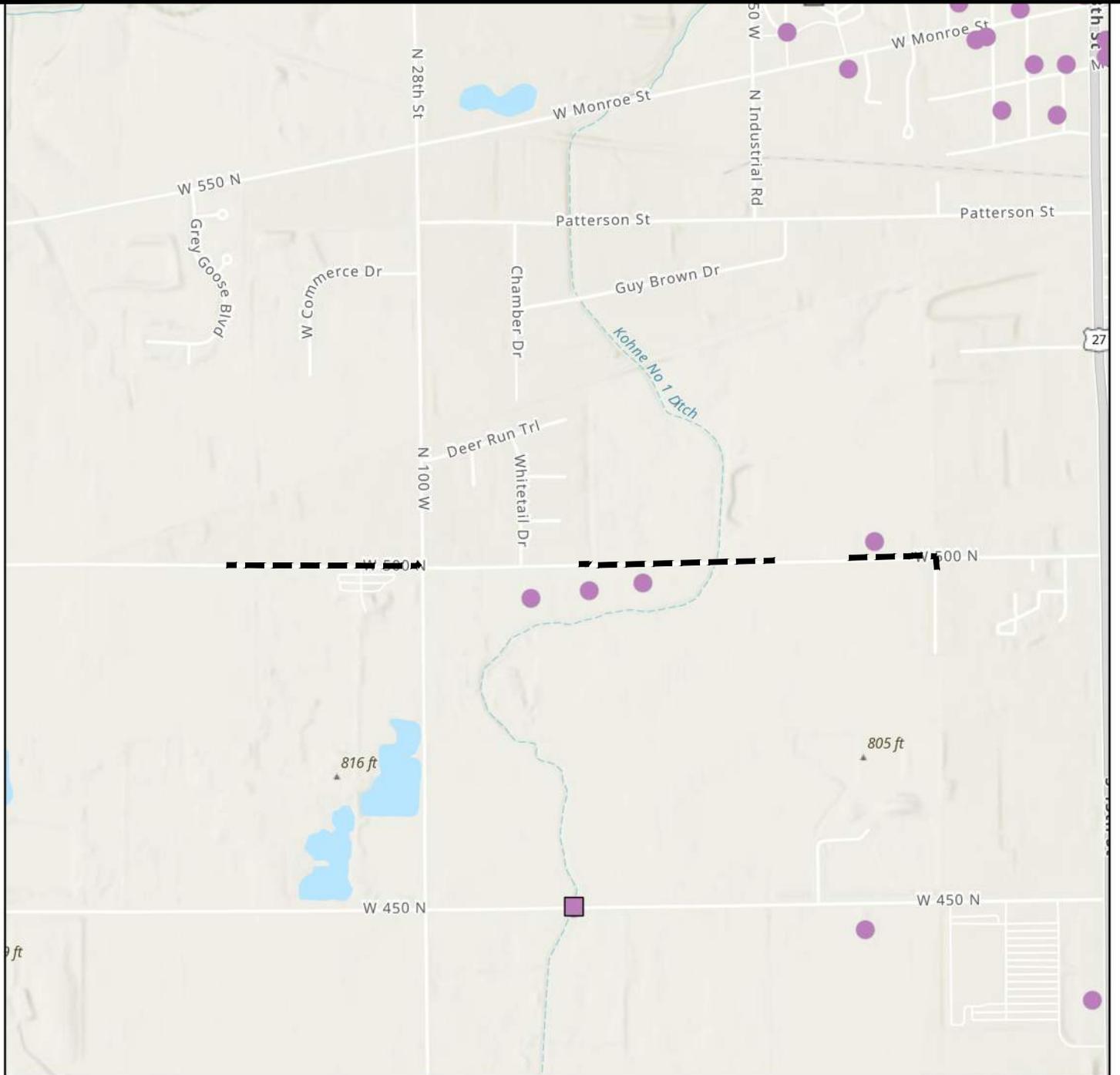
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ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 SOUTH SERVICE AREA -
SHAARD MAP

FIGURE

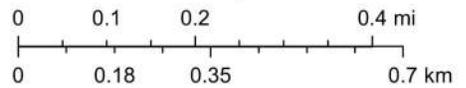
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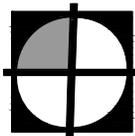
1:18,056



-  Cemeteries
- Historic Bridges*
-  Contributing
- County Survey Sites*
-  Contributing



Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



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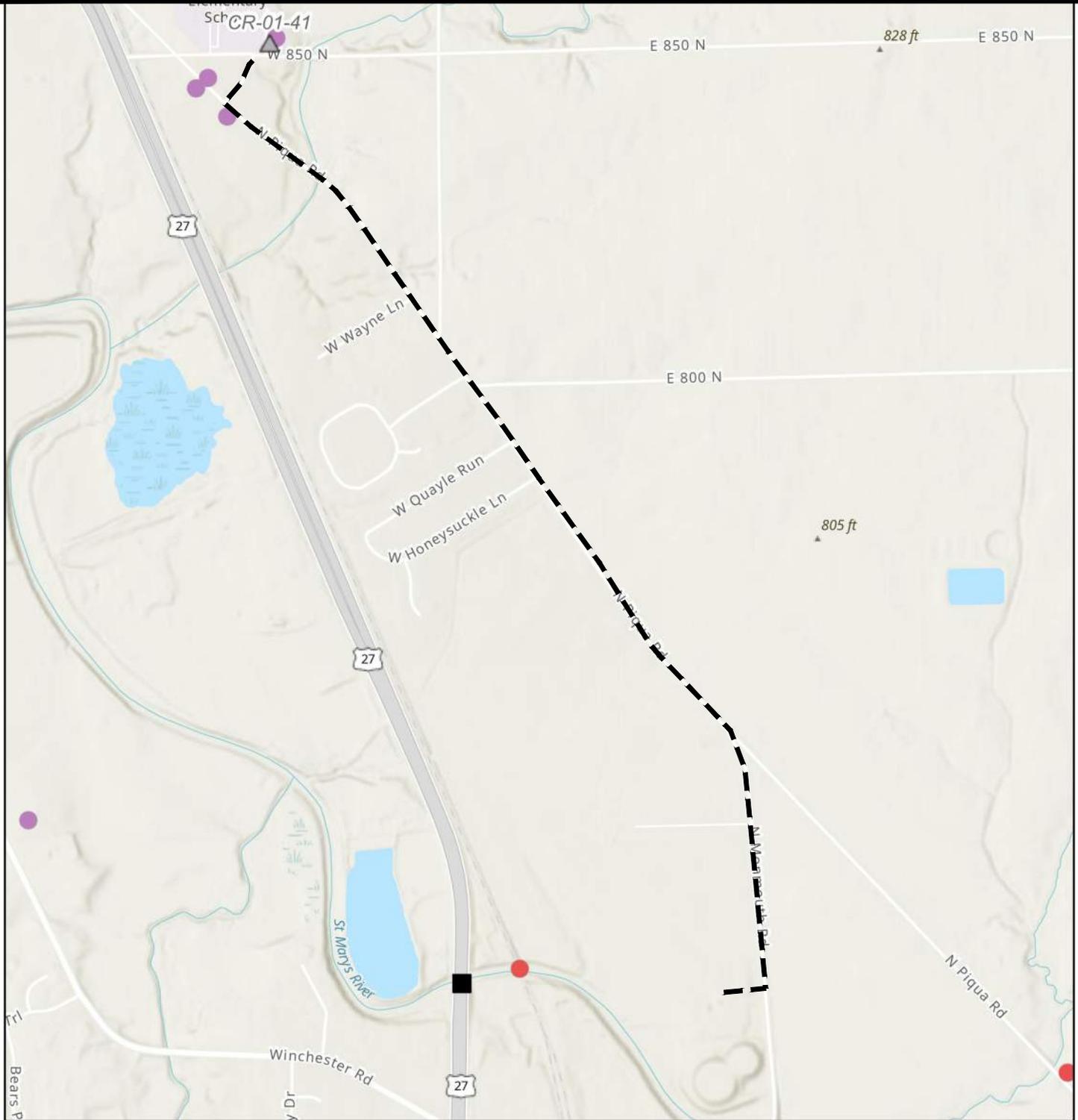
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA -
SHAARD MAP

FIGURE

1-4j

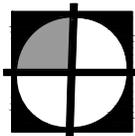
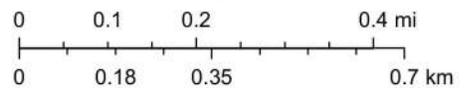
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3/11/2024, 9:40:46 AM

1:18,056

- Cemeteries
- Outstanding
- Demolished
- Contributing
- County Survey Sites
- Historic Bridges



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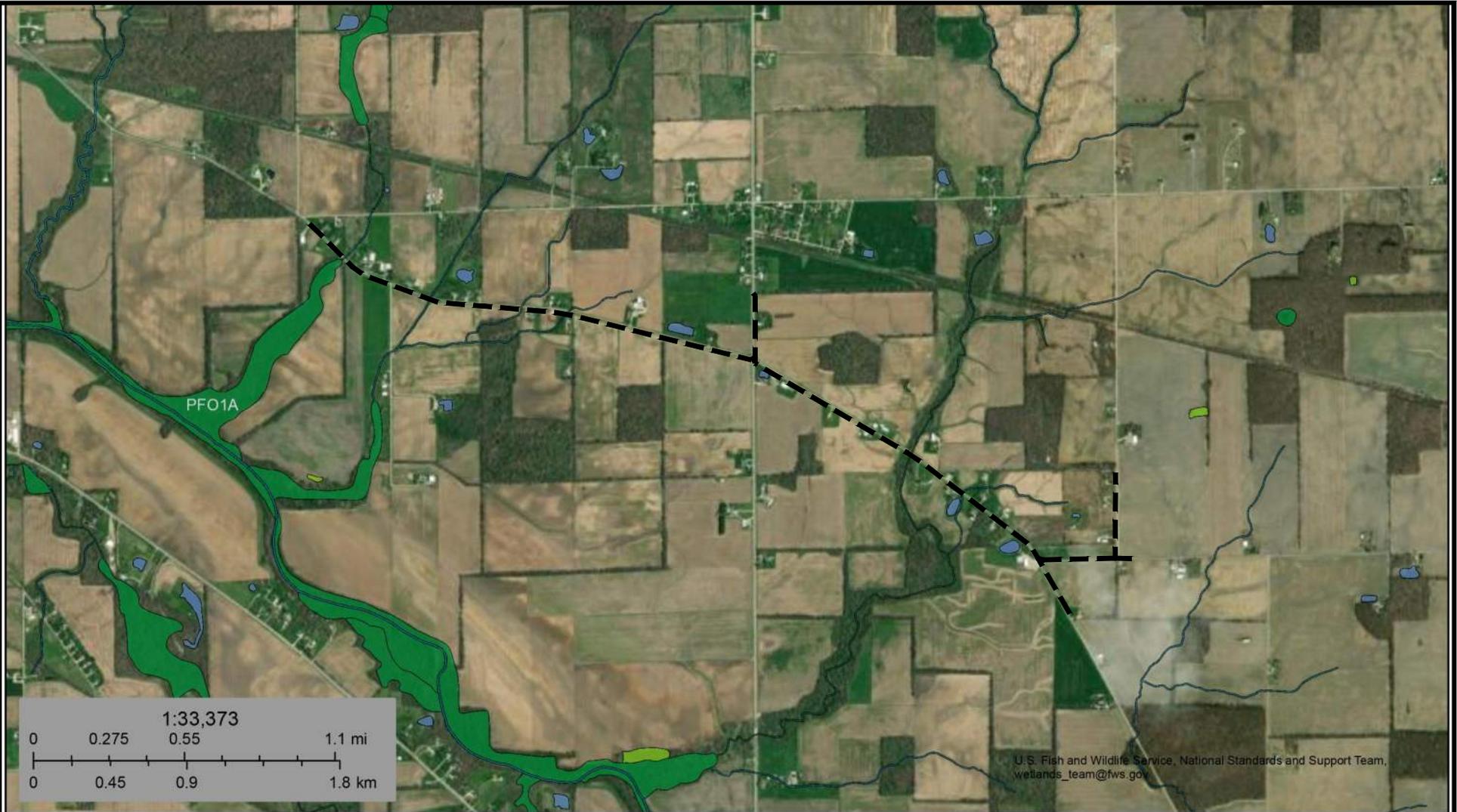
2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
 SHAARD MAP

FIGURE

1-4k

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March 7, 2024

Wetlands

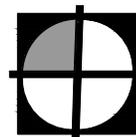
-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland

-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond

-  Lake
-  Other
-  Riverine



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**N. PIQUA ROAD - SR 101 SERVICE AREA -
WETLAND MAP**

FIGURE

1-5a

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U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov

January 30, 2024

Wetlands

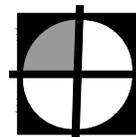
-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland

-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond

-  Lake
-  Other
-  Riverine



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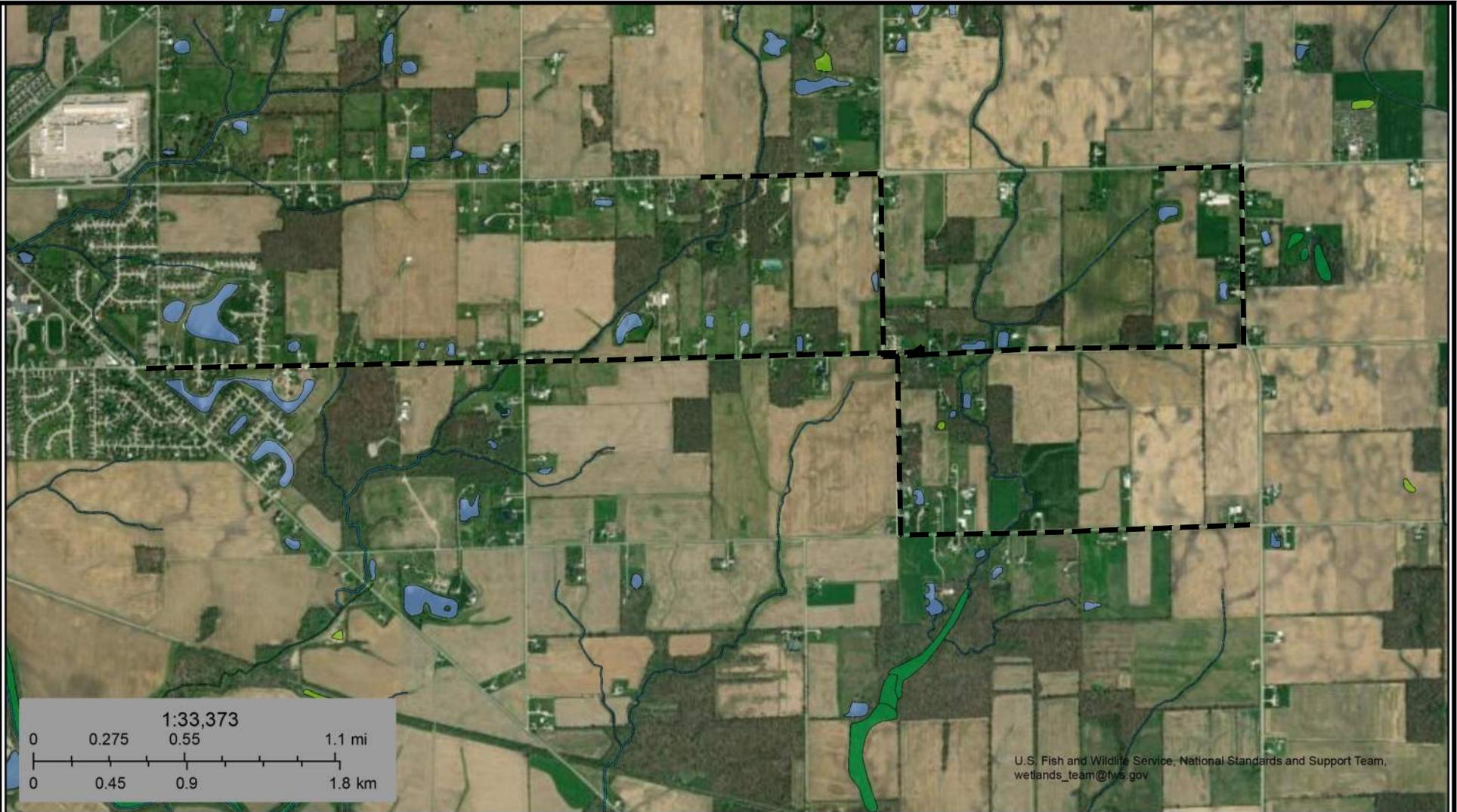
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - US 224 SERVICE AREA -
WETLAND MAP

FIGURE

1-5b

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March 11, 2024

Wetlands

- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Lake
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Other
- Riverine



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 600 N - SR 101 SERVICE AREA -
WETLAND MAP**

FIGURE

1-5c

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January 30, 2024

Wetlands

- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Lake
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Other
- Riverine



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 200 E SERVICE AREA -
WETLAND MAP**

FIGURE

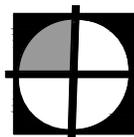
1-5d

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Wetlands

- Estuarine and Marine Deepwater
- Freshwater Forested/Shrub Wetland
- Lake
- Freshwater Emergent Wetland
- Freshwater Pond
- Other
- Riverine
- Estuarine and Marine Wetland



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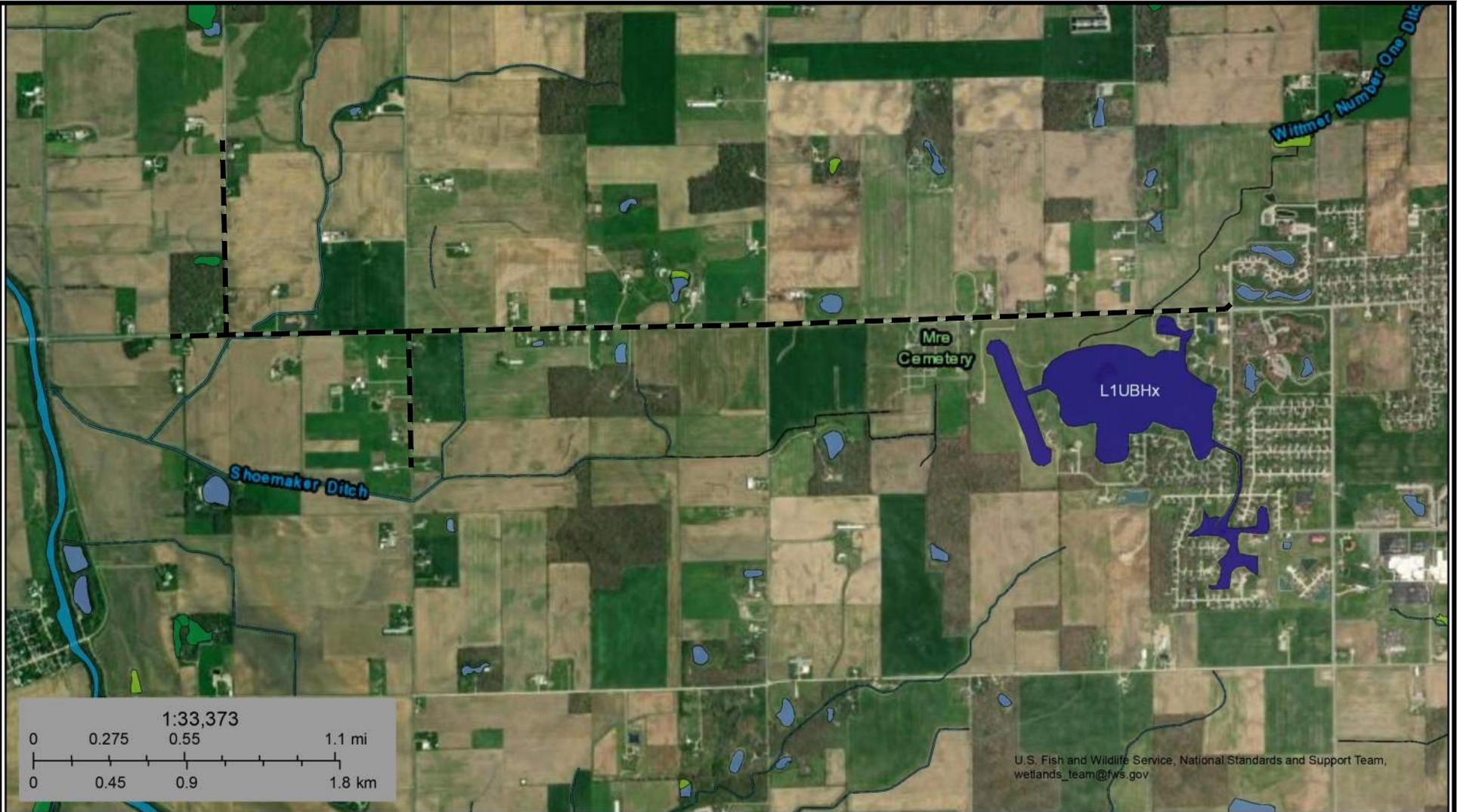
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA -
WETLAND MAP

FIGURE

1-5e

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March 11, 2024

Wetlands

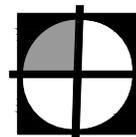
-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland

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-  Freshwater Pond

-  Lake
-  Other
-  Riverine



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**US 218 - CR S 400 W SERVICE AREA -
WETLAND MAP**

FIGURE

1-5f

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Wetlands

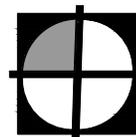
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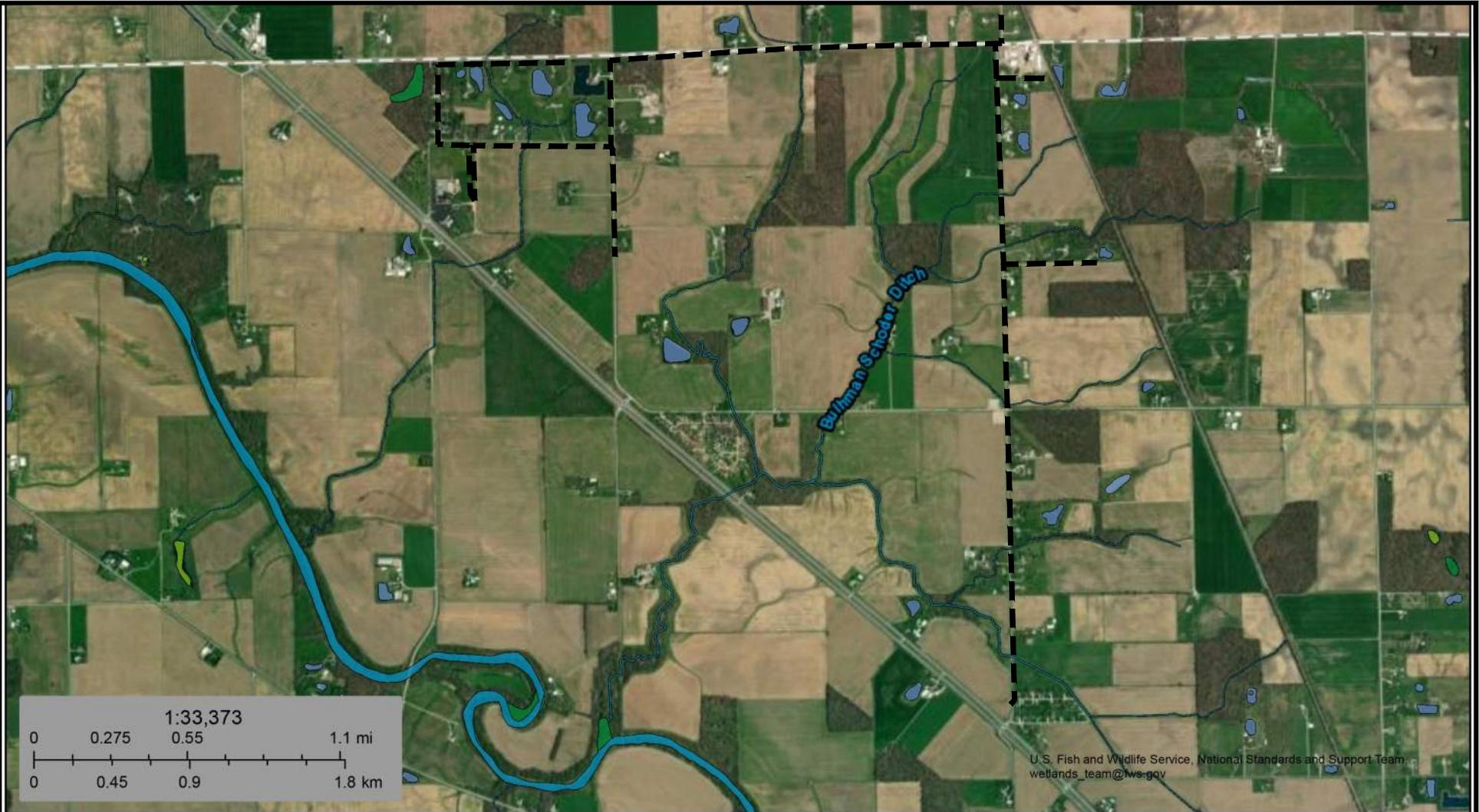
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 900 N EXTENDED SERVICE AREA -
WETLAND MAP**

FIGURE

1-5g

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February 2, 2024

Wetlands

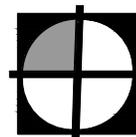
-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland

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-  Freshwater Pond

-  Lake
-  Other
-  Riverine



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N CR N 200 W - WETLAND MAP

FIGURE

1-5h

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February 2, 2024

Wetlands

- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 SOUTH SERVICE AREA -
WETLAND MAP

FIGURE

1-5i



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February 2, 2024

Wetlands

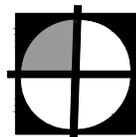
-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland

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-  Freshwater Pond

-  Lake
-  Other
-  Riverine



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA -
WETLAND MAP

FIGURE

1-5j

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Wetlands

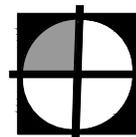
-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland

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-  Freshwater Pond

-  Lake
-  Other
-  Riverine



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**MONMOUTH FORCE MAIN IMPROVEMENTS -
WETLAND MAP**

FIGURE

1-5k

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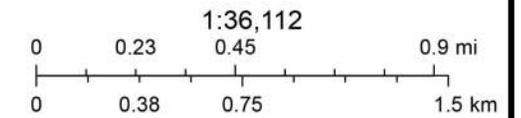
NHD Linear Waterbodies - Linear Water Bodies

 Stream/River

 HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries

NHD Discrete Waterbodies

 Lake/Pond



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Indiana Viewer



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA -
DRAINAGE BASIN MAP

FIGURE

1-6a

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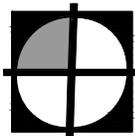
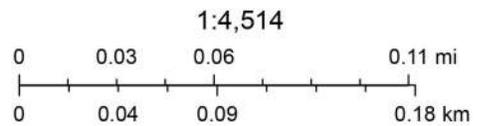


January 30, 2024

NHD Discrete Waterbodies

 LakePond

 HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries



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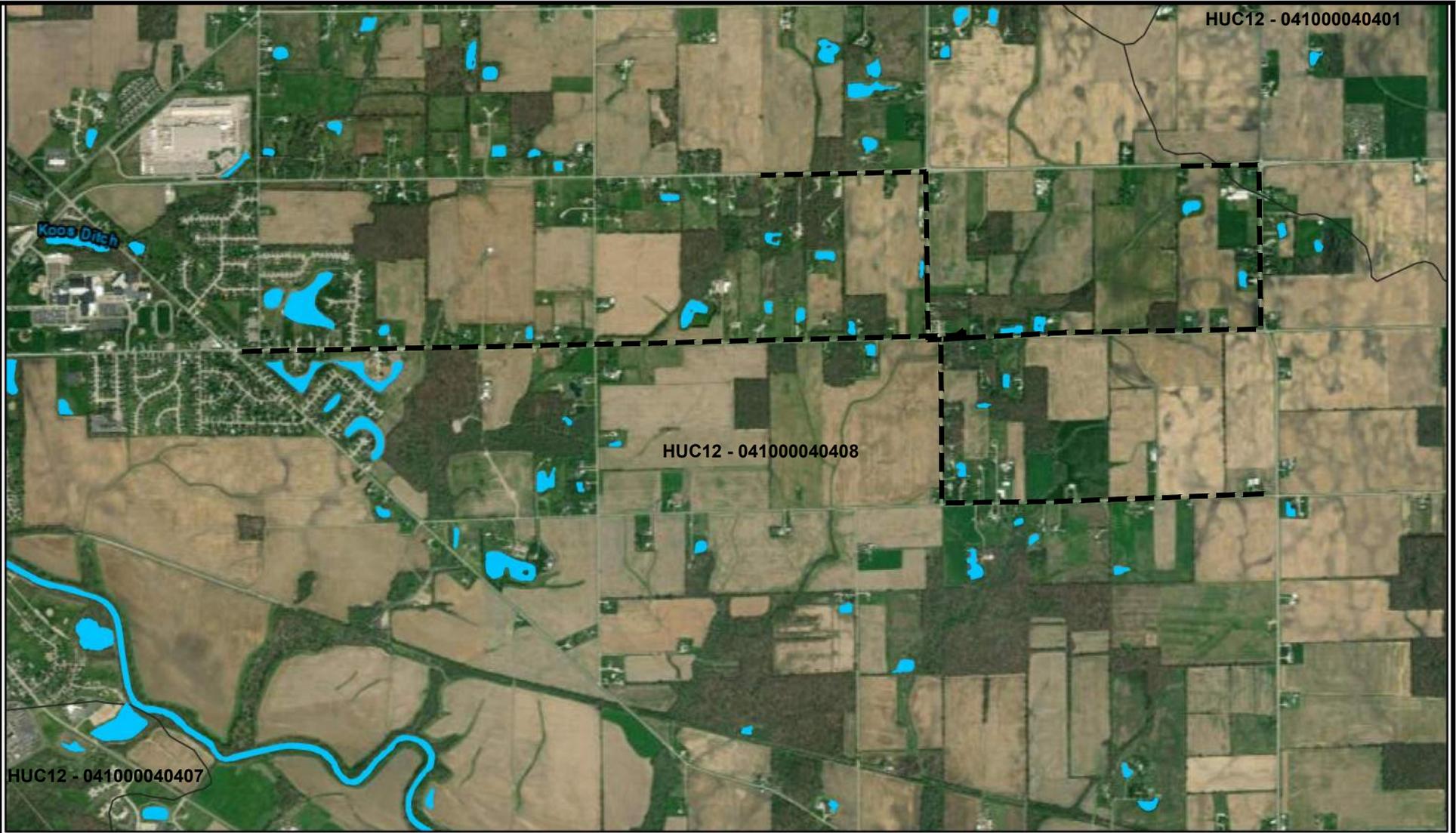
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - US 224 SERVICE AREA -
DRAINAGE BASIN MAP

FIGURE

1-6b

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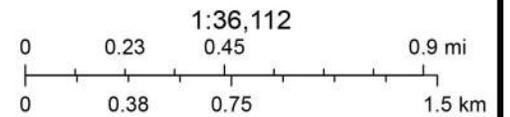
NHD Discrete Waterbodies

LakePond

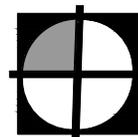
HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries

NHD Linear Waterbodies - Linear Water Bodies

StreamRiver



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 600 N - SR 101 SERVICE AREA -
DRAINAGE BASIN MAP**

FIGURE

1-6c

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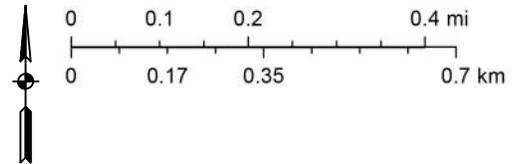
NHD Discrete Waterbodies

 LakePond

 HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries

NHD Linear Waterbodies - Linear Water Bodies

 StreamRiver



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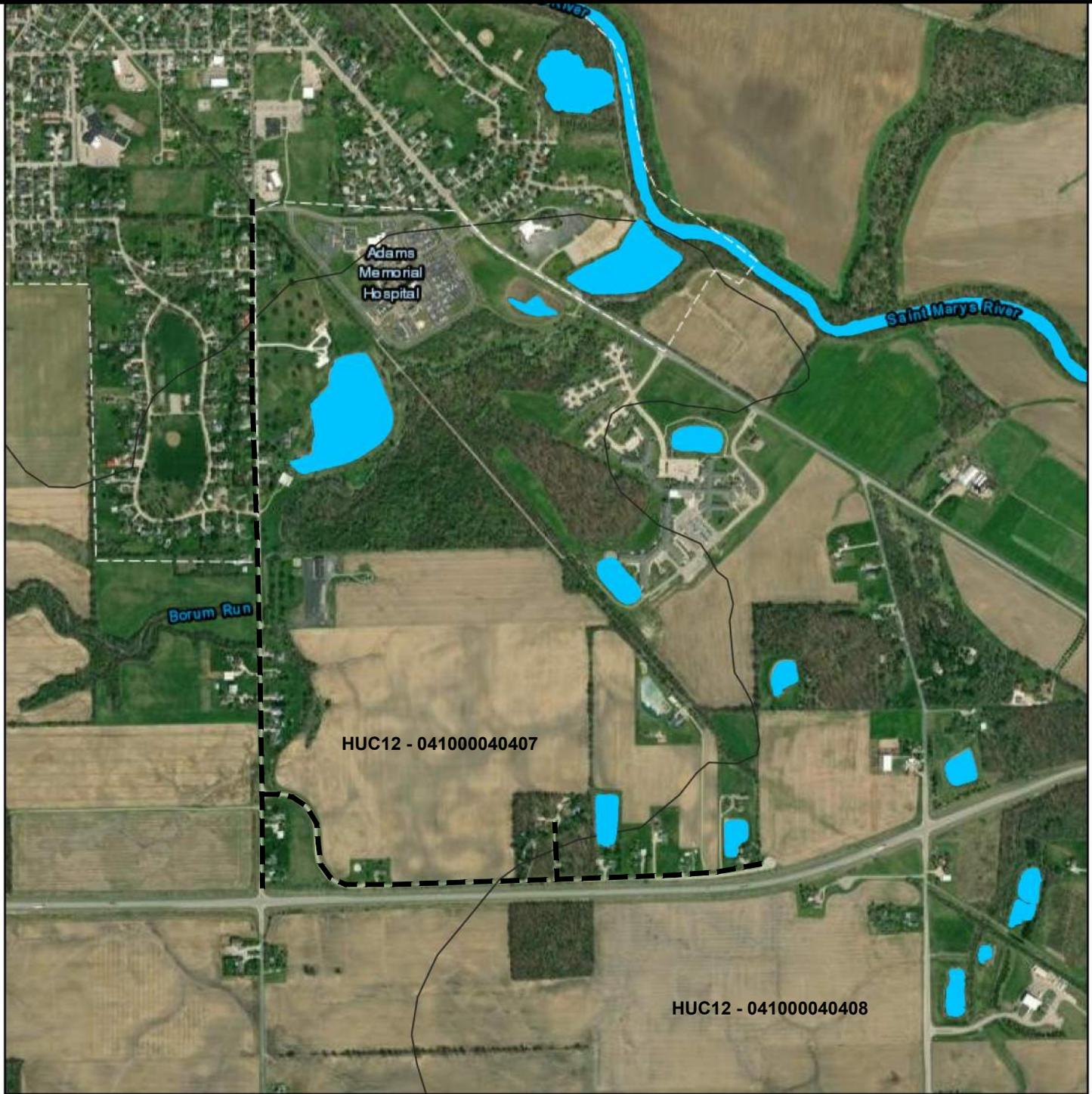


2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 200 E SERVICE AREA -
DRAINAGE BASIN MAP

FIGURE

1-6d



March 11, 2024

NHD Discrete Waterbodies

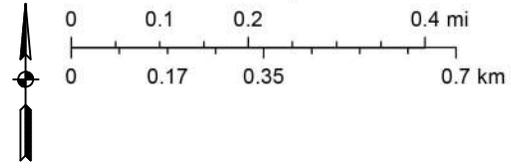
 Lake/Pond

 HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries

NHD Linear Waterbodies - Linear Water Bodies

 Stream/River

1:18,056



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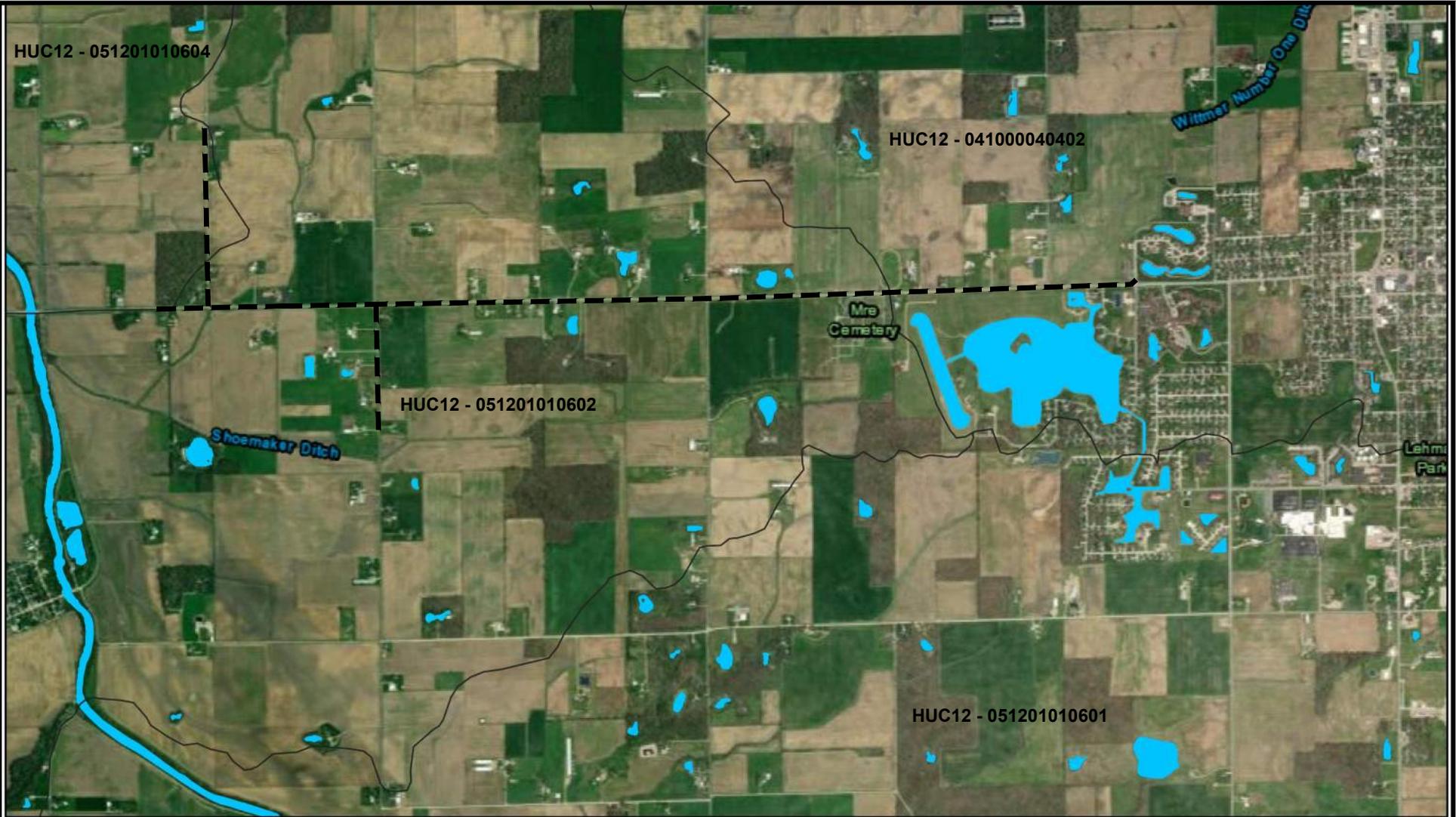
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA -
DRAINAGE BASIN MAP

FIGURE

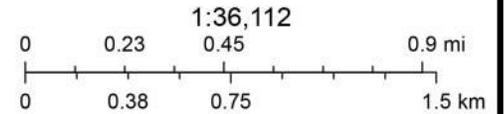
1-6e

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March 11, 2024

- NHD Discrete Waterbodies
 - LakePond
 - SwampMarsh
- NHD Linear Waterbodies - Linear Water Bodies
 - StreamRiver
- HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries



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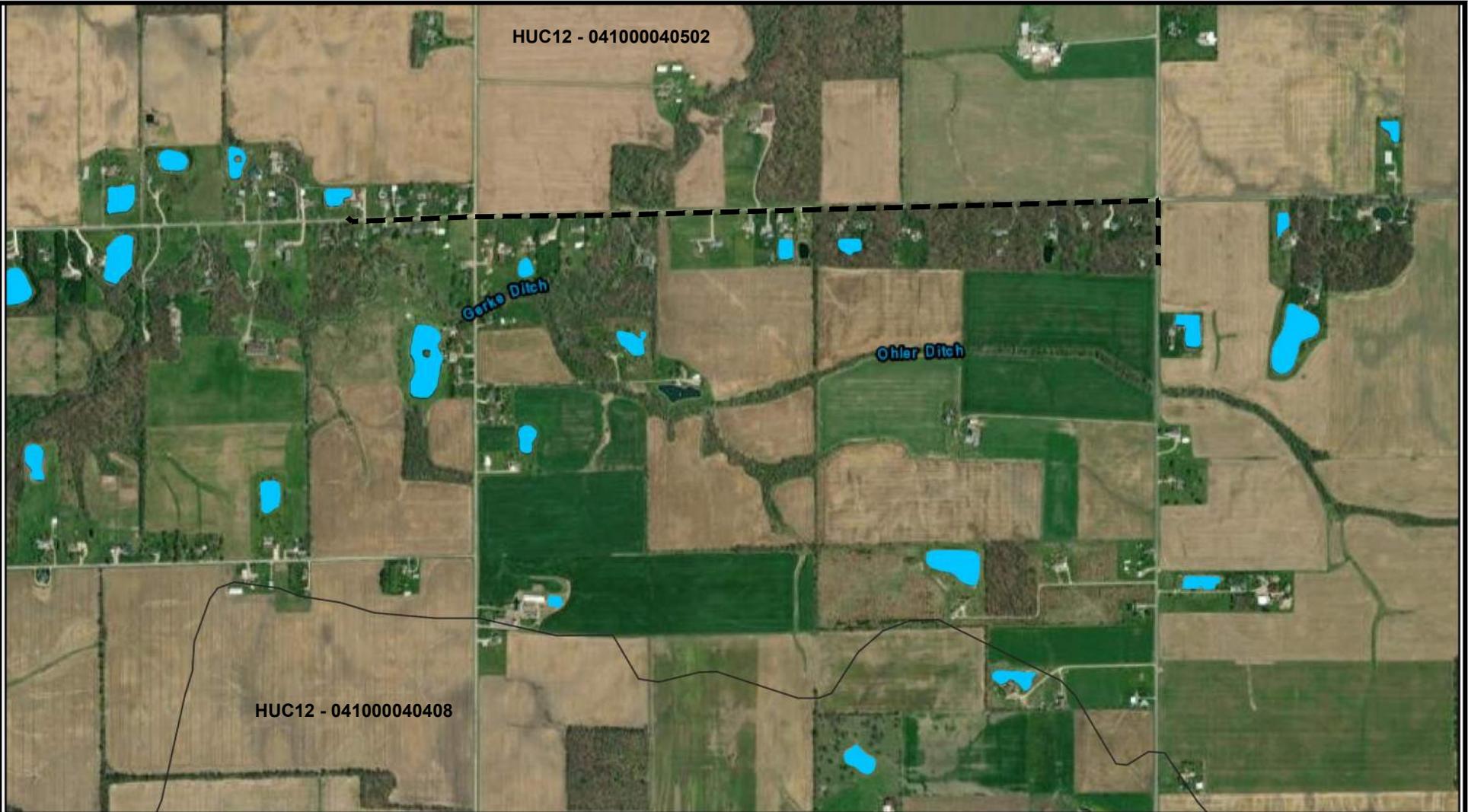
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
DRAINAGE BASIN MAP

FIGURE

1-6f

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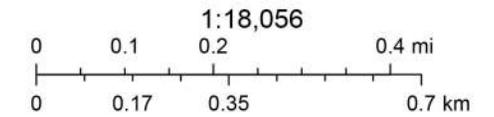


March 11, 2024

NHD Discrete Waterbodies

 LakePond

 HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries



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Indiana Viewer



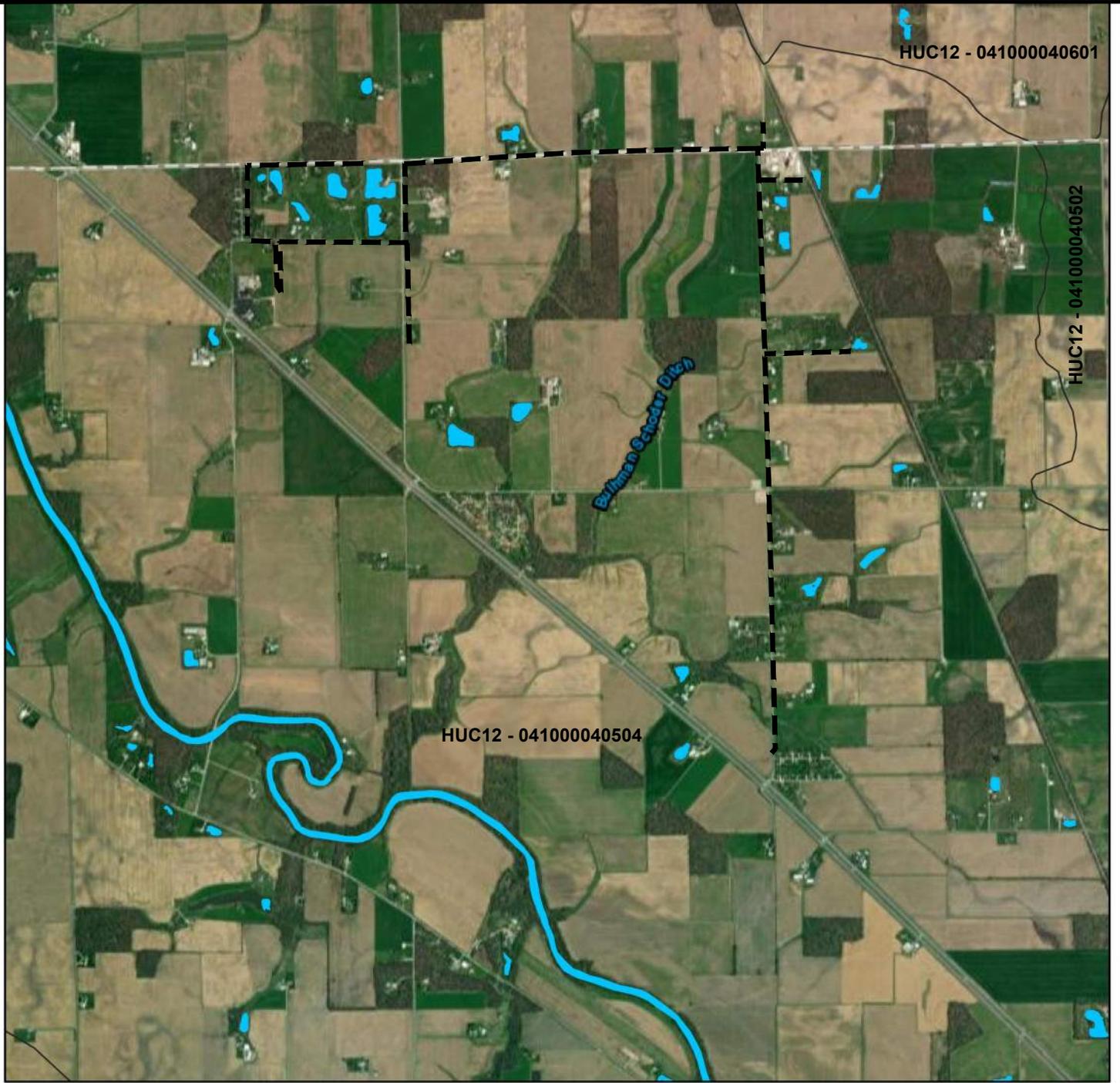
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA -
DRAINAGE BASIN MAP

FIGURE

1-6g

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NHD Discrete Waterbodies

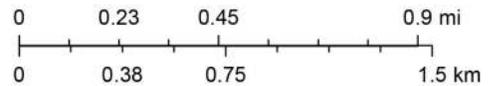
 LakePond

 SwampMarsh

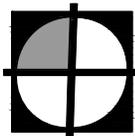
NHD Linear Waterbodies - Linear Water Bodies

 StreamRiver

 HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



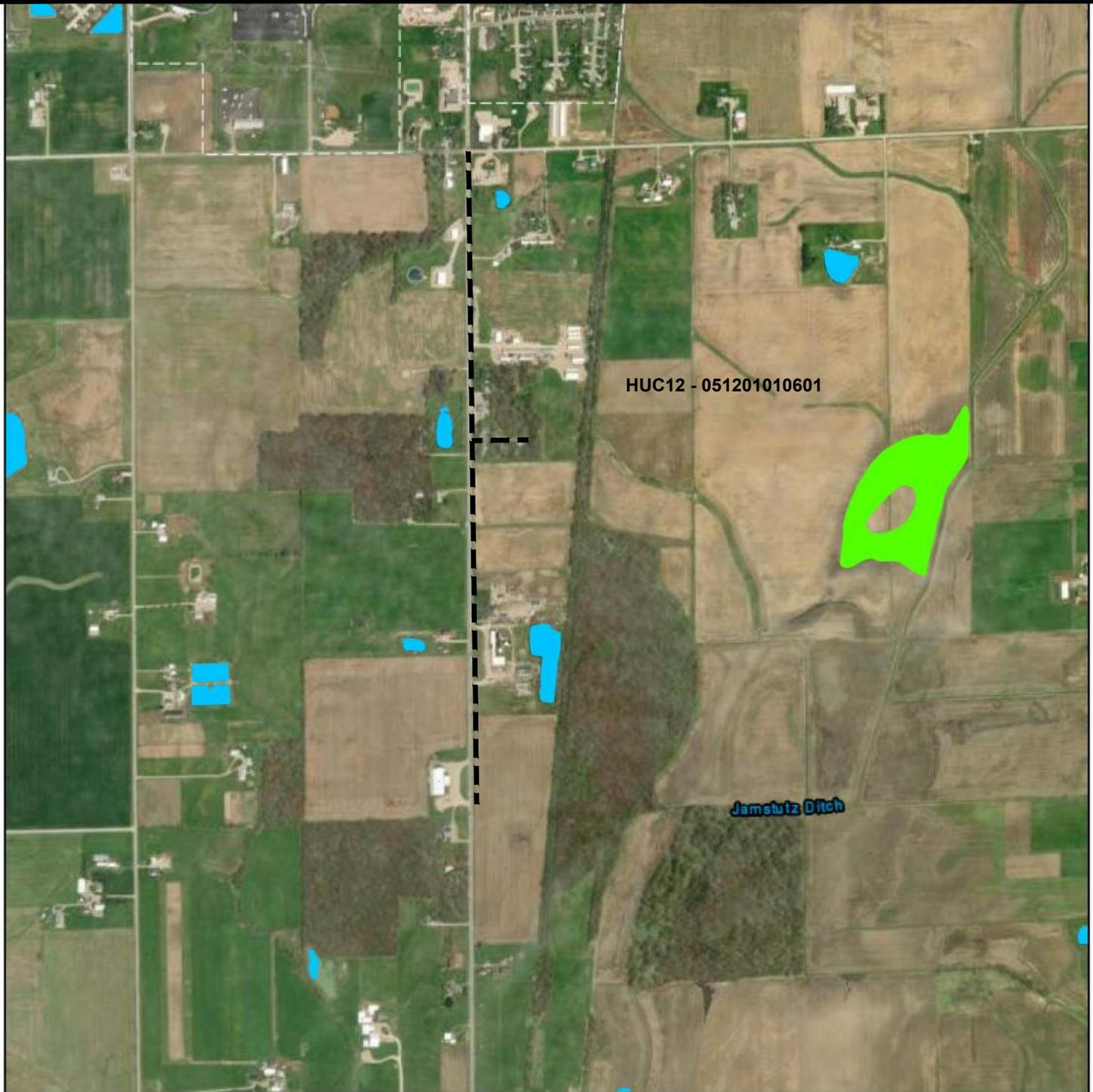
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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
DRAINAGE BASIN MAP

FIGURE

1-6h



February 2, 2024

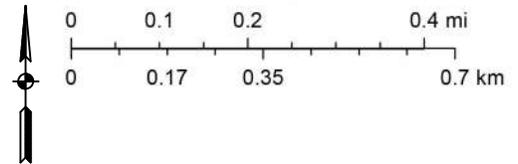
NHD Discrete Waterbodies

 Lake/Pond

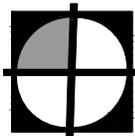
 Swamp/Marsh

 HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries

1:18,056



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



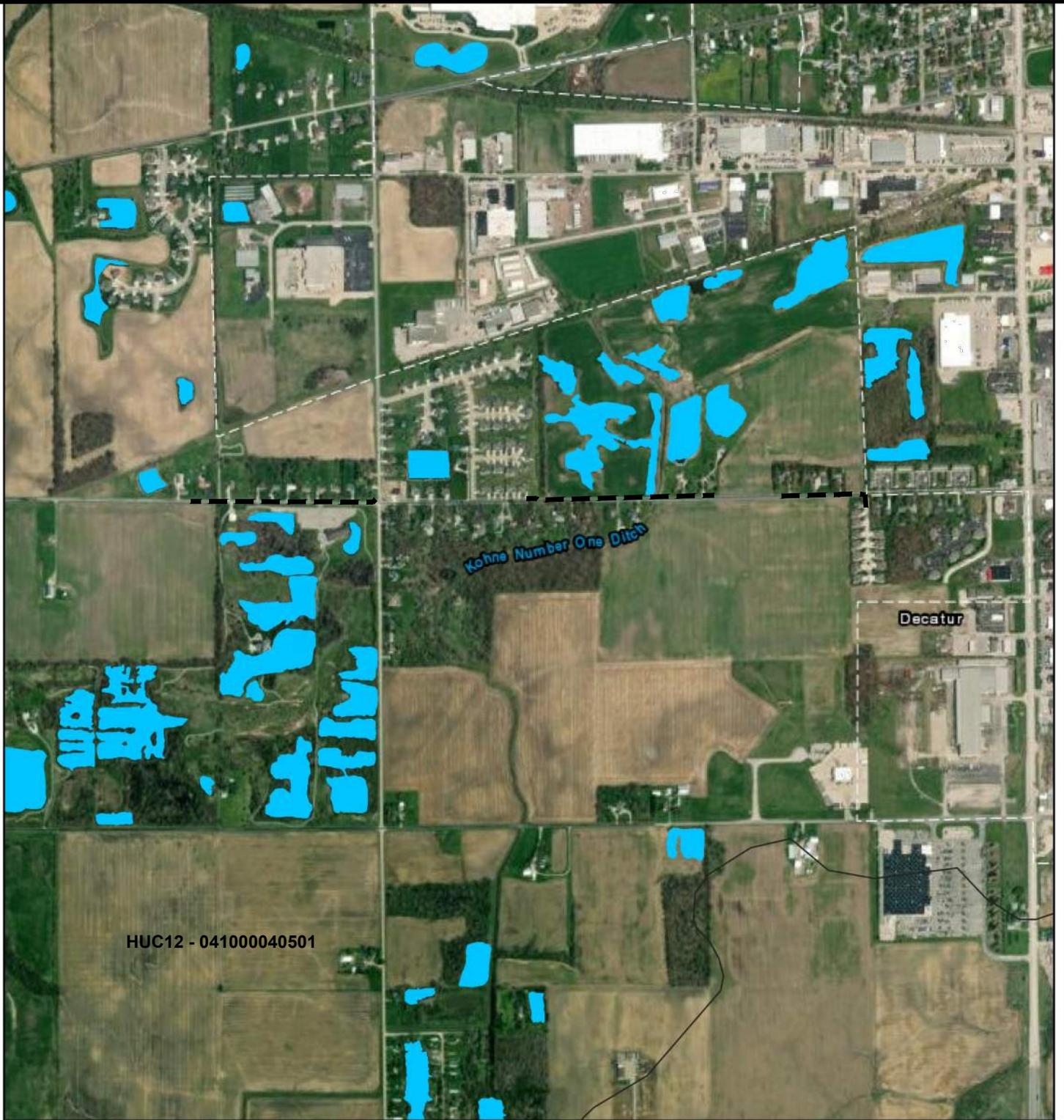
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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**US 27 SOUTH SERVICE AREA -
DRAINAGE BASIN MAP**

FIGURE

1-6i

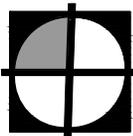
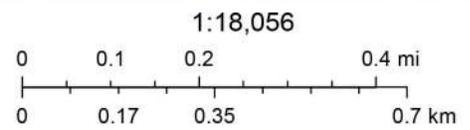


February 2, 2024

NHD Discrete Waterbodies

 LakePond

 HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA -
DRAINAGE BASIN MAP

FIGURE

1-6j



March 11, 2024

NHD Discrete Waterbodies

 Lake/Pond

 Stream/River

 Reservoir

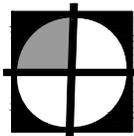
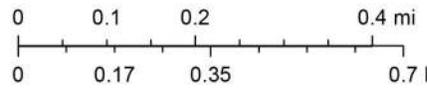
 HUC12 Boundaries - HUC12 Subwatershed Hydrologic Unit Boundaries

 Swamp/Marsh

NHD Linear Waterbodies - Linear Water Bodies



1:18,056



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
DRAINAGE BASIN MAP

FIGURE

1-6k

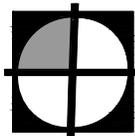
MAP LEGEND

- Area of Interest (AOI)
- Not rated or not available
- Soils**
- Soil Rating Polygons**
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available
- Soil Rating Lines**
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available
- Soil Rating Points**
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200

- Water Features**
- Streams and Canals
- Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads
- Background**
- Aerial Photography

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	>200	0.8	0.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	23	11.5	0.6%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23	158.0	7.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	23	437.1	21.3%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	153	47.4	2.3%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	46	239.6	11.7%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	46	10.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	30	226.5	11.1%
McA	Martinsville loam, 0 to 2 percent slopes	>200	14.9	0.7%
McB	Martinsville loam, 2 to 6 percent slopes	>200	55.0	2.7%
Mh	Milford silty clay loam, 0 to 2 percent slopes	7	119.3	5.8%
Na	Nappanee silt loam, 0 to 3 percent slopes	38	22.6	1.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	268.3	13.1%
RdB	Rawson loam, 2 to 6 percent slopes	77	154.6	7.5%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	7	74.6	3.6%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	31	110.0	5.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8	20.8	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	38	43.6	2.1%
W	Water	>200	6.9	0.3%
Wh	Whitaker silt loam	38	26.9	1.3%
Totals for Area of Interest			2,049.4	100.0%



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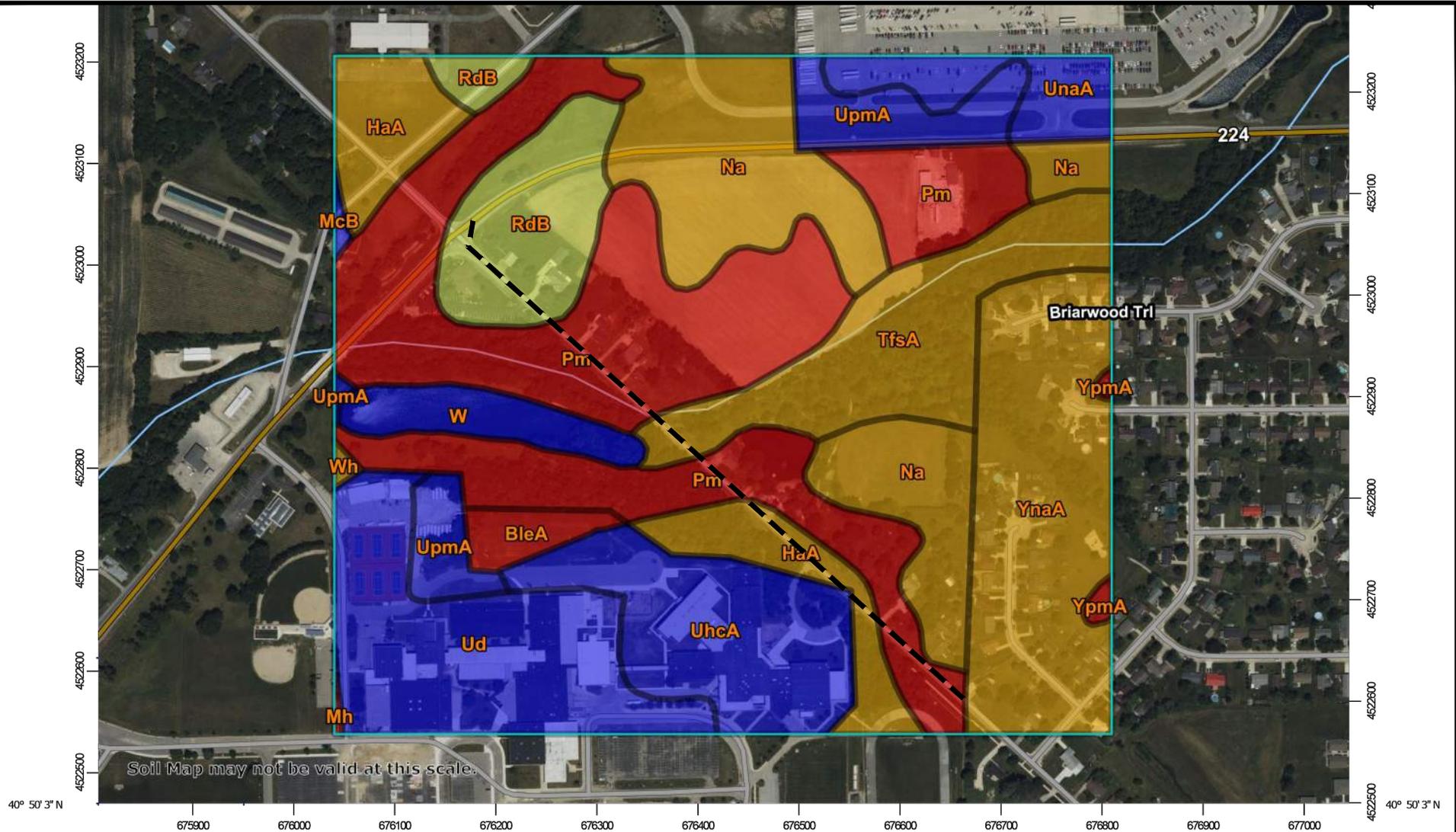
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA -
WATER TABLE LEGEND

FIGURE

1-7a2

Z:\Shared\IN Clients\A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD\1b PER Reports\ACAD\NEW Environmental Maps\Area 2\Area 2 PER Figures.dwg PRINTED: 3/13/2024 10:37 AM BY: Bryce Pensing

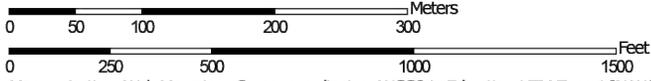


Soil Map may not be valid at this scale.

84° 54' 53" W



Map Scale: 1:5,660 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84

84° 54' 0" W



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - US 224 SERVICE AREA -
WATER TABLE MAP

FIGURE

1-7b1

MAP LEGEND

<p>Area of Interest (AOI)</p> <p> Area of Interest (AOI)</p>	<p>Water Features</p> <p> Streams and Canals</p> <p>Transportation</p> <p> Rails</p> <p> Interstate Highways</p> <p> US Routes</p> <p> Major Roads</p> <p> Local Roads</p> <p>Background</p> <p> Aerial Photography</p>	<p>Soil Rating Lines</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p>>200 Soil Rating Lines symbol" style="vertical-align: middle;"/> > 200</p> <p> Not rated or not available</p>	<p>Soil Rating Points</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p>
<p>Soils</p> <p>Soil Rating Polygons</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p> <p> Not rated or not available</p>			

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23	1.6	1.2%
HaA	Haskins loam, 0 to 3 percent slopes	30	7.5	5.9%
McB	Martinsville loam, 2 to 6 percent slopes	>200	0.2	0.2%
Mh	Milford silty clay loam, 0 to 2 percent slopes	7	0.1	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	38	16.6	13.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	33.0	25.9%
RdB	Rawson loam, 2 to 6 percent slopes	77	7.8	6.1%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	38	10.4	8.2%
Ud	Udorthents, loamy	>200	12.8	10.0%
UhcA	Urban land-Haskins complex, 0 to 3 percent slopes	>200	10.0	7.8%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	>200	3.6	2.8%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	>200	5.2	4.1%
W	Water	>200	3.2	2.5%
Wh	Whitaker silt loam	38	0.2	0.1%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	38	15.1	11.9%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	15	0.3	0.3%
Totals for Area of Interest			127.5	100.0%



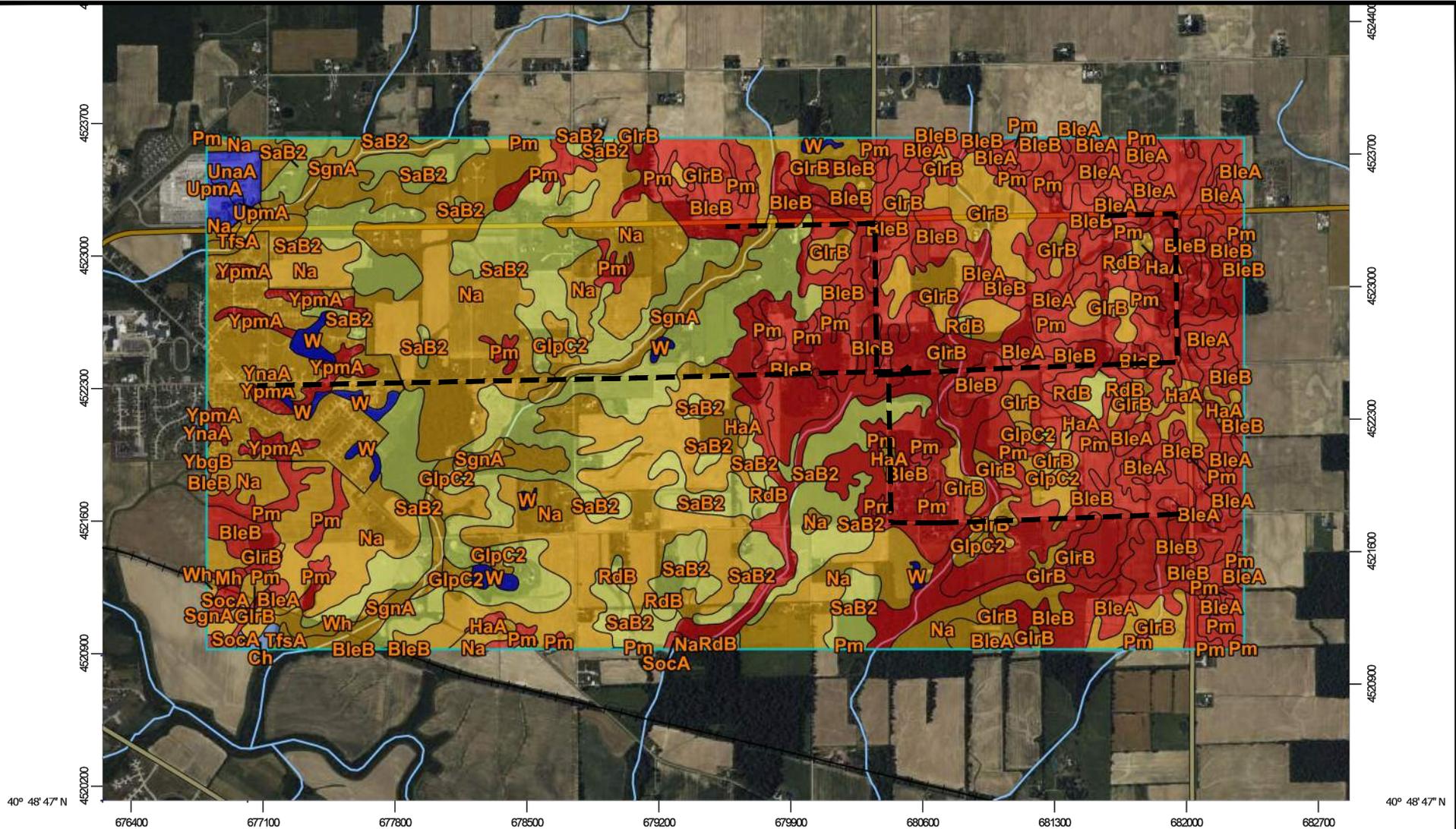
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**N. PIQUA ROAD - US 224 SERVICE AREA -
WATER TABLE LEGEND**

FIGURE

1-7b2

Z:\Shared\IN Clients A-L\Adams County RSD\522170 - 2024 Sanitary Sewer Extensions\06 CAD\ib PER Reports\ACAD\NEW Environmental Maps\Area 3\Area 3 PER Figures.dwg PRINTED: 3/13/2024 10:38 AM BY: Bryce Petersinger



84° 54' 37" W

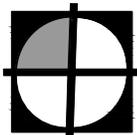


Map Scale: 1:30,200 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

84° 49' 54" W



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 600 N - SR 101 SERVICE AREA -
 WATER TABLE MAP

FIGURE

1-7c1

MAP LEGEND

Depth to Water Table

Area of Interest (AOI)

 Area of Interest (AOI)

 Not rated or not available

Soils

Soil Rating Polygons

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Lines

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Points

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200

Water Features

 Streams and Canals

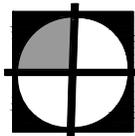
Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23	158.5	4.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	23	653.9	17.7%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	153	4.4	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	46	50.1	1.4%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	46	290.3	7.9%
HaA	Haskins loam, 0 to 3 percent slopes	30	33.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	7	3.6	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	38	822.7	22.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	578.5	15.7%
RdB	Rawson loam, 2 to 6 percent slopes	77	27.8	0.8%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	69	673.3	18.3%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	31	88.9	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8	11.5	0.3%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	38	10.3	0.3%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	>200	23.5	0.6%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	>200	3.0	0.1%
W	Water	>200	33.2	0.9%
Wh	Whitaker silt loam	38	14.5	0.4%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	23	0.0	0.0%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	38	161.5	4.4%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	15	44.2	1.2%
Totals for Area of Interest			3,687.2	100.0%



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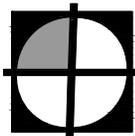
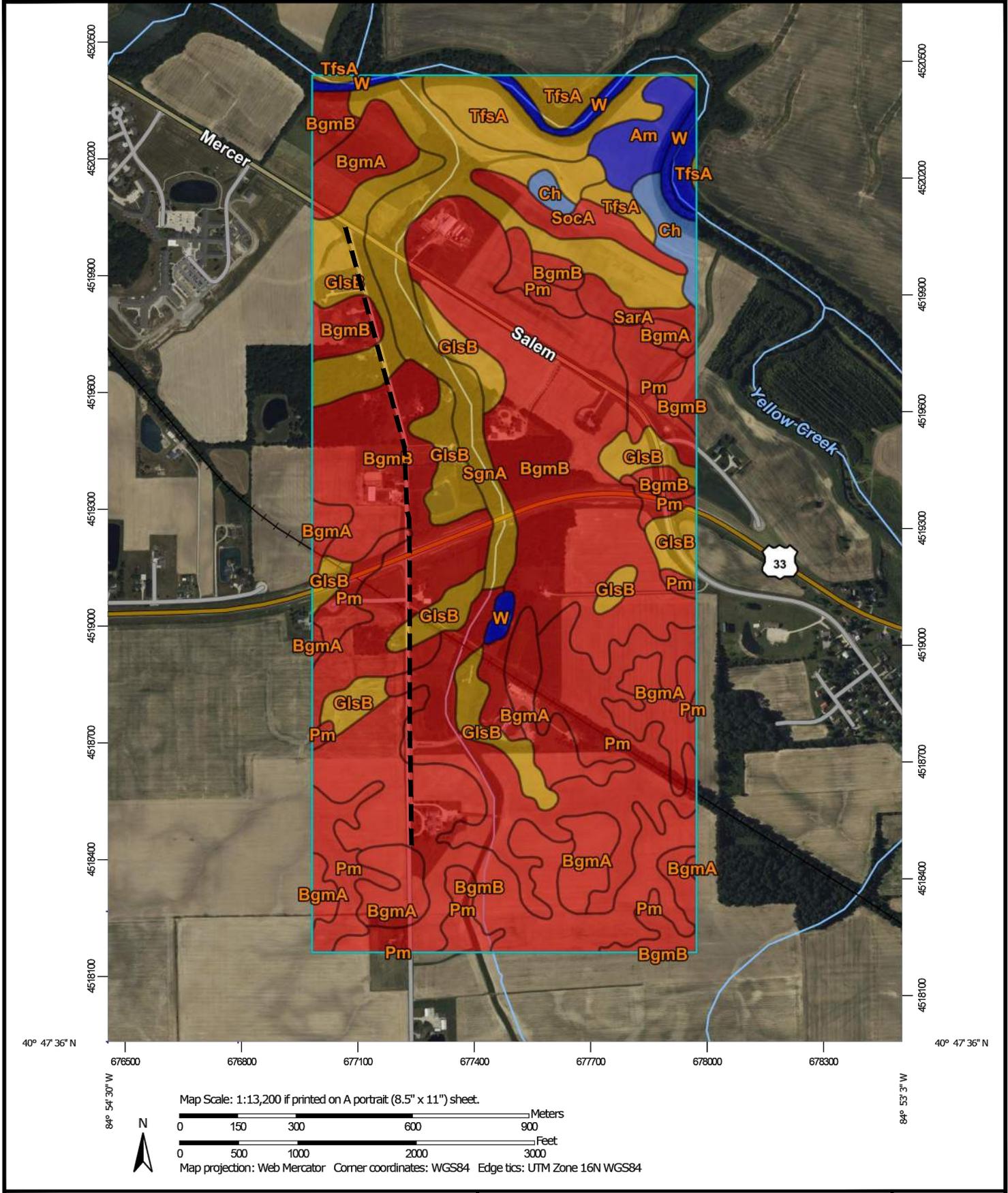
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 600 N - SR 101 SERVICE AREA -
WATER TABLE LEGEND

FIGURE

1-7c2

Z:\Shared\IN\Clients\A-L\Adams County\RD\S22170 - 2024 Sanitary Sewer Extensions\06_CADD\PER Reports\CAD\NEW Environmental Maps\Area 4\Area 4.PER Figures.dwg PRINTED: 3/13/2024 10:38 AM BY: Bryce Pestinger



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 200 E SERVICE AREA -
WATER TABLE MAP

FIGURE

1-7d1

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

Aerial Photography

Soil Rating Lines

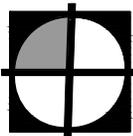
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Points

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	>200	12.2	2.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	23	52.7	9.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	23	221.7	40.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	153	7.5	1.4%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	46	60.7	11.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	103.3	18.7%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	7	5.0	0.9%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	31	49.2	8.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8	8.9	1.6%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	38	24.1	4.4%
W	Water	>200	8.2	1.5%
Totals for Area of Interest			553.5	100.0%



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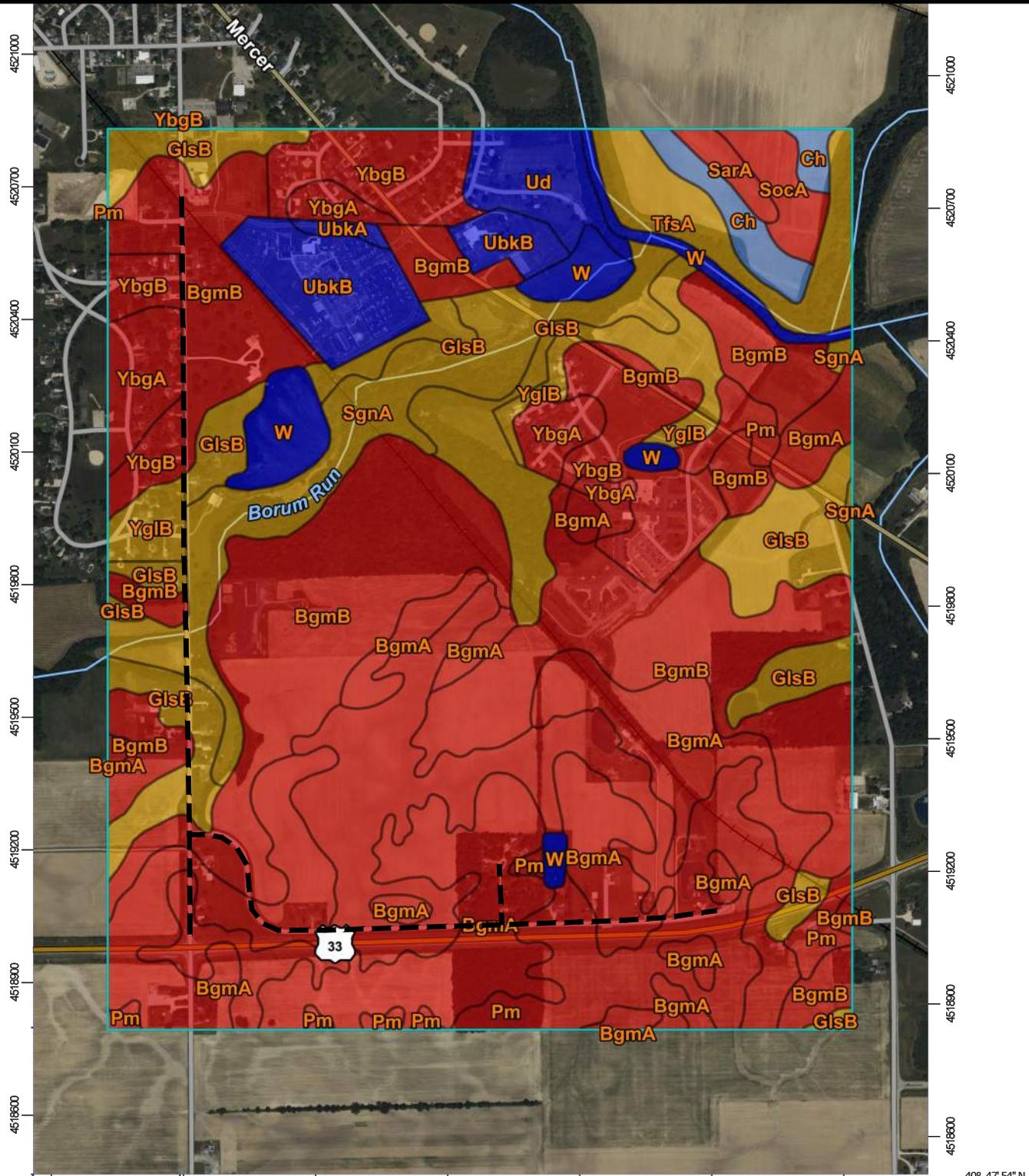
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 200 E SERVICE AREA -
WATER TABLE LEGEND

FIGURE

1-7d2

Z:\Shared\IN\Clients\A-L\Adams County\RD\SD\22170 - 2024 Sanitary Sewer Extensions\06_CADD\PER Reports\CAD\NEW Environmental Maps\Area 5\Area 5_PER Figures.dwg PRINTED: 3/13/2024 10:38 AM BY: Bryce Peestinger



40° 47' 54" N

40° 47' 54" N

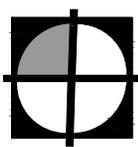
84° 53' 20" W

84° 53' 54" W

Map Scale: 1:13,100 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA -
 WATER TABLE MAP

FIGURE

1-7e1

MAP LEGEND

<p>Area of Interest (AOI)</p> <p> Area of Interest (AOI)</p>	<p> Not rated or not available</p> <p>Water Features</p> <p> Streams and Canals</p> <p>Transportation</p> <p> Rails</p> <p> Interstate Highways</p> <p> US Routes</p> <p> Major Roads</p> <p> Local Roads</p> <p>Background</p> <p> Aerial Photography</p>	<p>Soil Rating Lines</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p>> 200 symbol" style="vertical-align: middle;"/> > 200</p> <p> Not rated or not available</p>	<p>Soil Rating Points</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p>
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Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	23	156.6	18.3%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	23	223.0	26.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	153	11.4	1.3%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	46	94.7	11.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	120.1	14.1%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	7	4.1	0.5%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	31	50.6	5.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8	8.6	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	38	23.4	2.7%
UbkA	Urban land-Blount complex, 0 to 2 percent slopes	>200	1.7	0.2%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	>200	29.3	3.4%
Ud	Udorthents, loamy	>200	15.4	1.8%
W	Water	>200	24.8	2.9%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	23	25.1	2.9%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	23	53.9	6.3%
YglB	Glynwood-Urban land complex, 2 to 6 percent slopes	46	12.1	1.4%
Totals for Area of Interest			854.7	100.0%



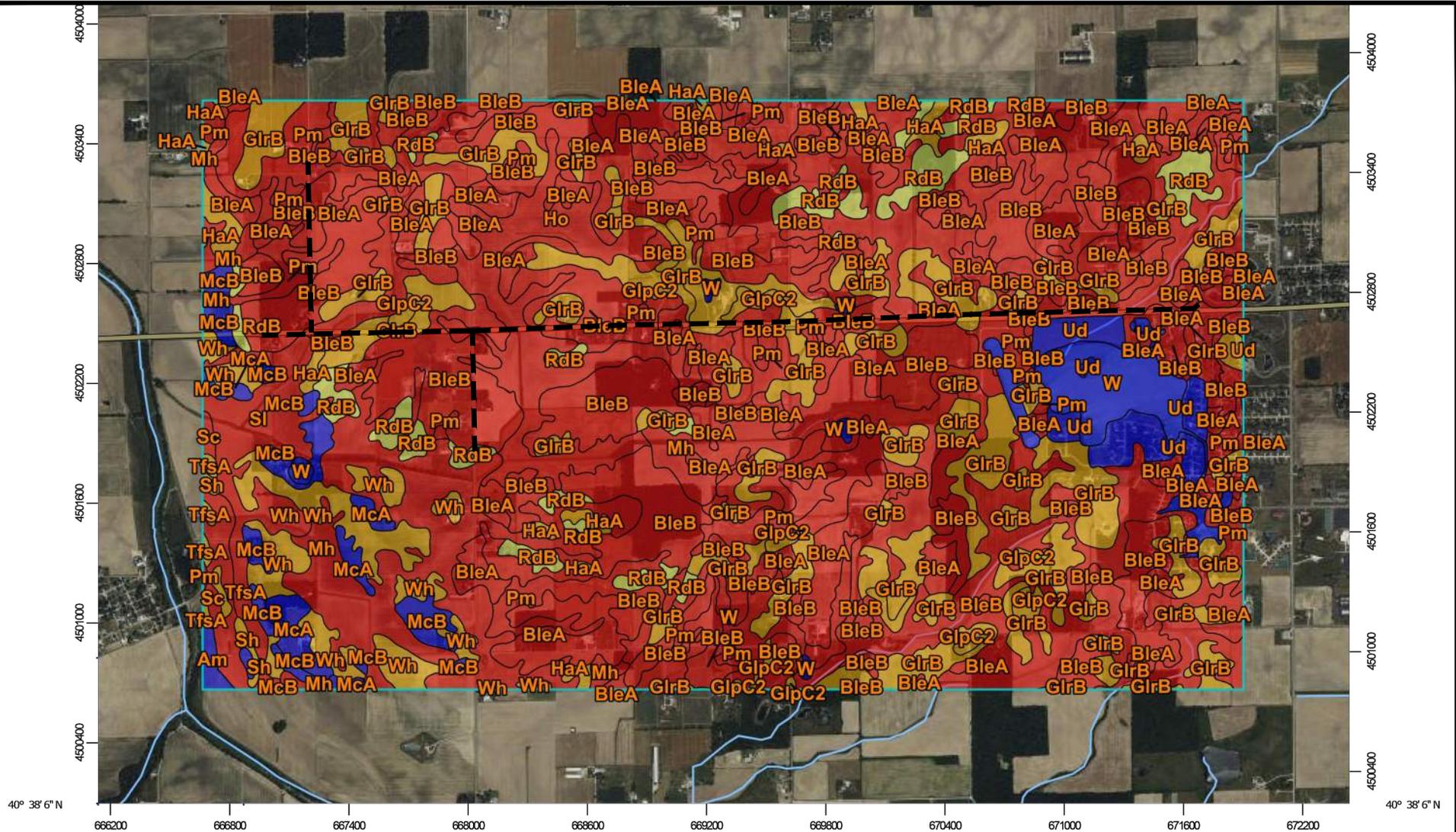
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 100 E - CR E 400 N SERVICE AREA -
WATER TABLE LEGEND**

FIGURE

1-7e2

Z:\Shared\IN Clients A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD\B PER Figures\Area 6 PER Figures.dwg PRINTED: 3/19/2024 10:38 AM BY: Bryce Pensing



Map Scale: 1:28,800 if printed on A landscape (11" x 8.5") sheet.

0 400 800 1600 2400 Meters

0 1000 2000 4000 6000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
WATER TABLE MAP

FIGURE

1-7f1

MAP LEGEND

- Area of Interest (AOI)
 - Not rated or not available
- Soils**
- Soil Rating Polygons**
- 0 - 25
 - 25 - 50
 - 50 - 100
 - 100 - 150
 - 150 - 200
 - > 200
 - Not rated or not available
- Soil Rating Lines**
- 0 - 25
 - 25 - 50
 - 50 - 100
 - 100 - 150
 - 150 - 200
 - > 200
 - Not rated or not available
- Soil Rating Points**
- 0 - 25
 - 25 - 50
 - 50 - 100
 - 100 - 150
 - 150 - 200
 - > 200
- Water Features**
- Streams and Canals
- Transportation**
- Rails
 - Interstate Highways
 - US Routes
 - Major Roads
 - Local Roads
- Background**
- Aerial Photography

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	>200	6.8	0.2%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23	435.9	11.4%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	23	890.9	23.2%
Glpc2	Glynwood clay loam, 6 to 12 percent slopes, eroded	46	39.8	1.0%
Glrb	Glynwood silt loam, end moraine, 2 to 6 percent slopes	46	501.7	13.1%
HaA	Haskins loam, 0 to 3 percent slopes	30	45.4	1.2%
Ho	Houghton muck, drained	0	158.5	4.1%
McA	Martinsville loam, 0 to 2 percent slopes	>200	31.7	0.8%
McB	Martinsville loam, 2 to 6 percent slopes	>200	62.9	1.6%
Mh	Milford silty clay loam, 0 to 2 percent slopes	7	263.5	6.9%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	873.5	22.8%
RdB	Rawson loam, 2 to 6 percent slopes	77	115.6	3.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	7	32.1	0.8%
Sh	Shoals clay loam, frequently flooded	38	8.2	0.2%
Sl	Sloan loam, frequently flooded	0	82.9	2.2%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	38	8.1	0.2%
Ud	Udorthents, loamy	>200	62.2	1.6%
W	Water	>200	97.8	2.6%
Wh	Whitaker silt loam	38	114.5	3.0%
Totals for Area of Interest			3,832.6	100.0%



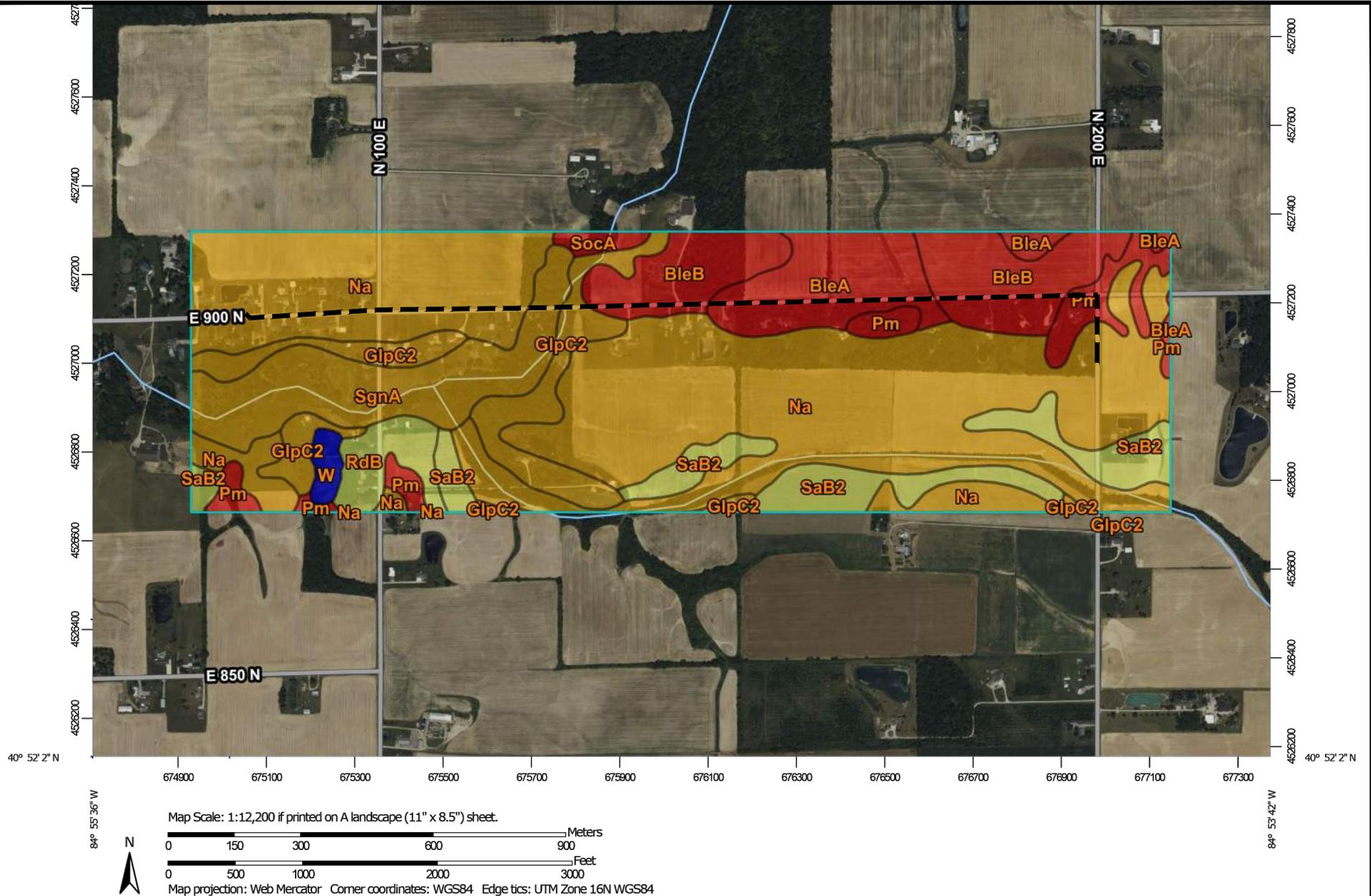
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
WATER TABLE LEGEND

FIGURE

1-7f2

Z:\Shared\IN Clients\A-L\Adams County RSD\522170 - 2024 Sanitary Sewer Extensions\06 CAD\ib PER Reports\ACAD\NEW Environmental Maps\Area 7\Area 7 PER Figures.dwg PRINTED: 3/13/2024 10:38 AM BY: Bryce Pertsinger



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA -
WATER TABLE MAP

FIGURE

1-7g1

MAP LEGEND

<p>Area of Interest (AOI)</p> <p> Area of Interest (AOI)</p>	<p> Not rated or not available</p> <p>Water Features</p> <p> Streams and Canals</p> <p>Transportation</p> <p> Rails</p> <p> Interstate Highways</p> <p> US Routes</p> <p> Major Roads</p> <p> Local Roads</p> <p>Background</p> <p> Aerial Photography</p>	<p>Soil Rating Lines</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p>>200 Soil Rating Lines symbol" style="vertical-align: middle;"/> > 200</p> <p> Not rated or not available</p>	<p>Soil Rating Points</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p>
<p>Soils</p> <p>Soil Rating Polygons</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p> <p> Not rated or not available</p>			

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23	23.2	6.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	23	33.0	9.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	46	27.4	7.9%
Na	Nappanee silt loam, 0 to 3 percent slopes	38	175.7	50.5%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	14.5	4.2%
RdB	Rawson loam, 2 to 6 percent slopes	77	8.5	2.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	69	28.3	8.1%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	31	32.8	9.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8	2.2	0.6%
W	Water	>200	2.5	0.7%
Totals for Area of Interest			348.1	100.0%



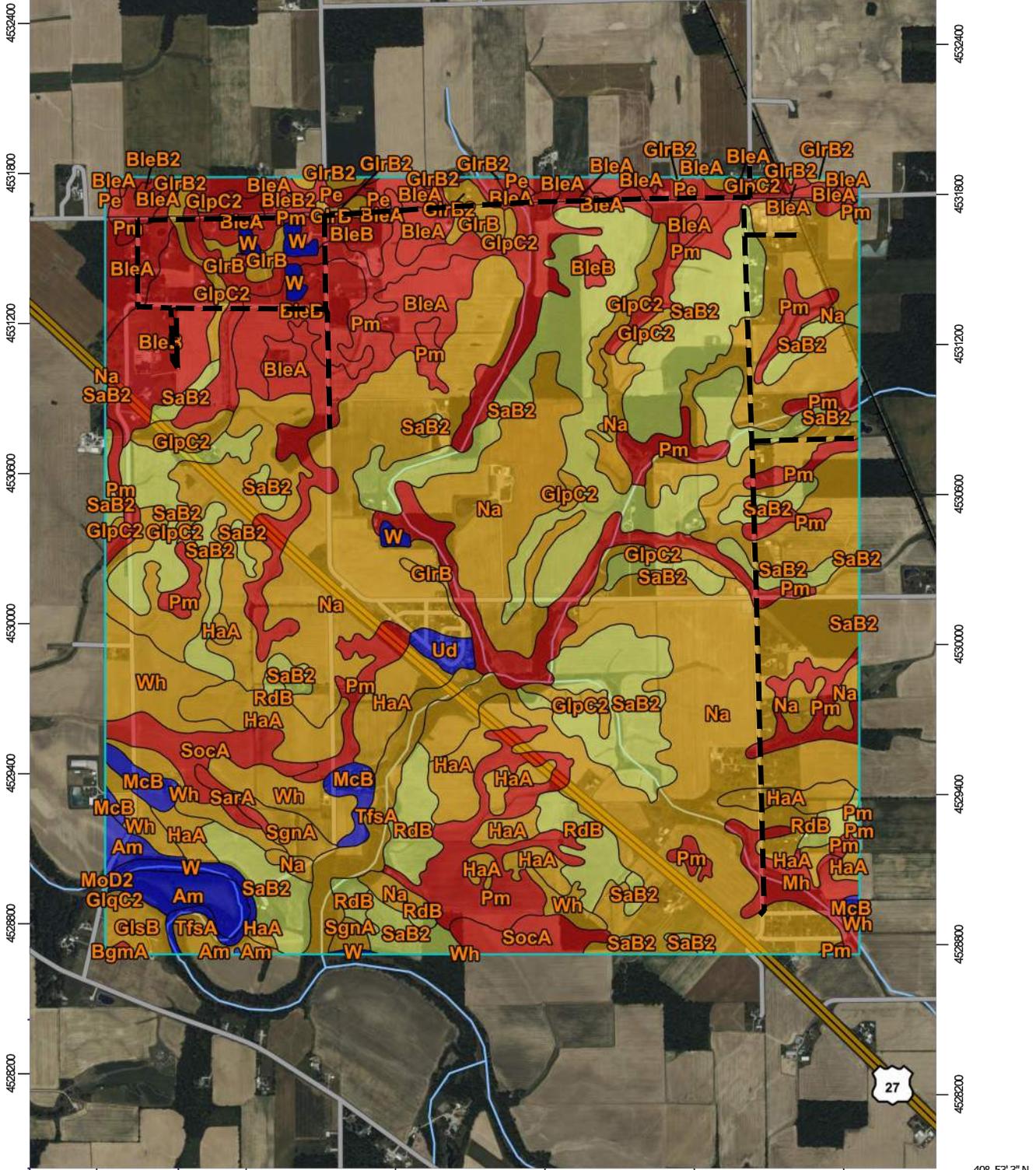
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 900 N EXTENDED SERVICE AREA -
WATER TABLE LEGEND**

FIGURE

1-7g2

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40° 53' 3" N

40° 53' 3" N

85° 0' 41" W

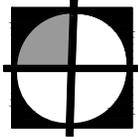
84° 58' 5" W



Map Scale: 1:23,500 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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CR W 1200 N - CR N 200 W SERVICE AREA -
 WATER TABLE MAP

FIGURE

1-7h1

MAP LEGEND

Depth to Water Table

Area of Interest (AOI)

 Area of Interest (AOI)

 Not rated or not available

Soils

Soil Rating Polygons

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Lines

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Points

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Am	Armsburg silty clay loam, 0 to 2 percent slopes, frequently flooded	>200	27.2	1.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	23	1.0	0.0%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23	76.5	3.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	23	105.2	4.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	46	54.4	2.3%
GliqC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	46	0.9	0.0%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	46	17.9	0.8%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	46	11.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	30	116.8	5.0%
McB	Martinsville loam, 2 to 6 percent slopes	>200	20.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	7	24.5	1.0%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	84	0.1	0.0%
Na	Nappanee silt loam, 0 to 3 percent slopes	38	774.9	33.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	339.9	14.6%
RdB	Rawson loam, 2 to 6 percent slopes	77	54.5	2.3%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	69	406.5	17.4%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	7	3.9	0.2%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	31	13.5	0.6%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8	46.7	2.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	38	42.1	1.8%
Ud	Udortheints, loamy	>200	7.5	0.3%
W	Water	>200	21.7	0.9%
Wh	Whitaker silt loam	38	79.4	3.4%
Subtotals for Soil Survey Area			2,247.0	96.3%
Totals for Area of Interest			2,333.7	100.0%

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23	27.1	1.2%
BleB2	Blount silt loam, end moraine, 1 to 4 percent slopes, eroded	23	1.8	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	46	3.5	0.1%
GlrB2	Glynwood silt loam, end moraine, 2 to 6 percent slopes, eroded	46	11.9	0.5%
Pe	Pewamo silty clay loam, 0 to 1 percent slopes	15	41.7	1.8%
Wh	Washtenaw silt loam	7	0.7	0.0%
Subtotals for Soil Survey Area			86.6	3.7%
Totals for Area of Interest			2,333.7	100.0%



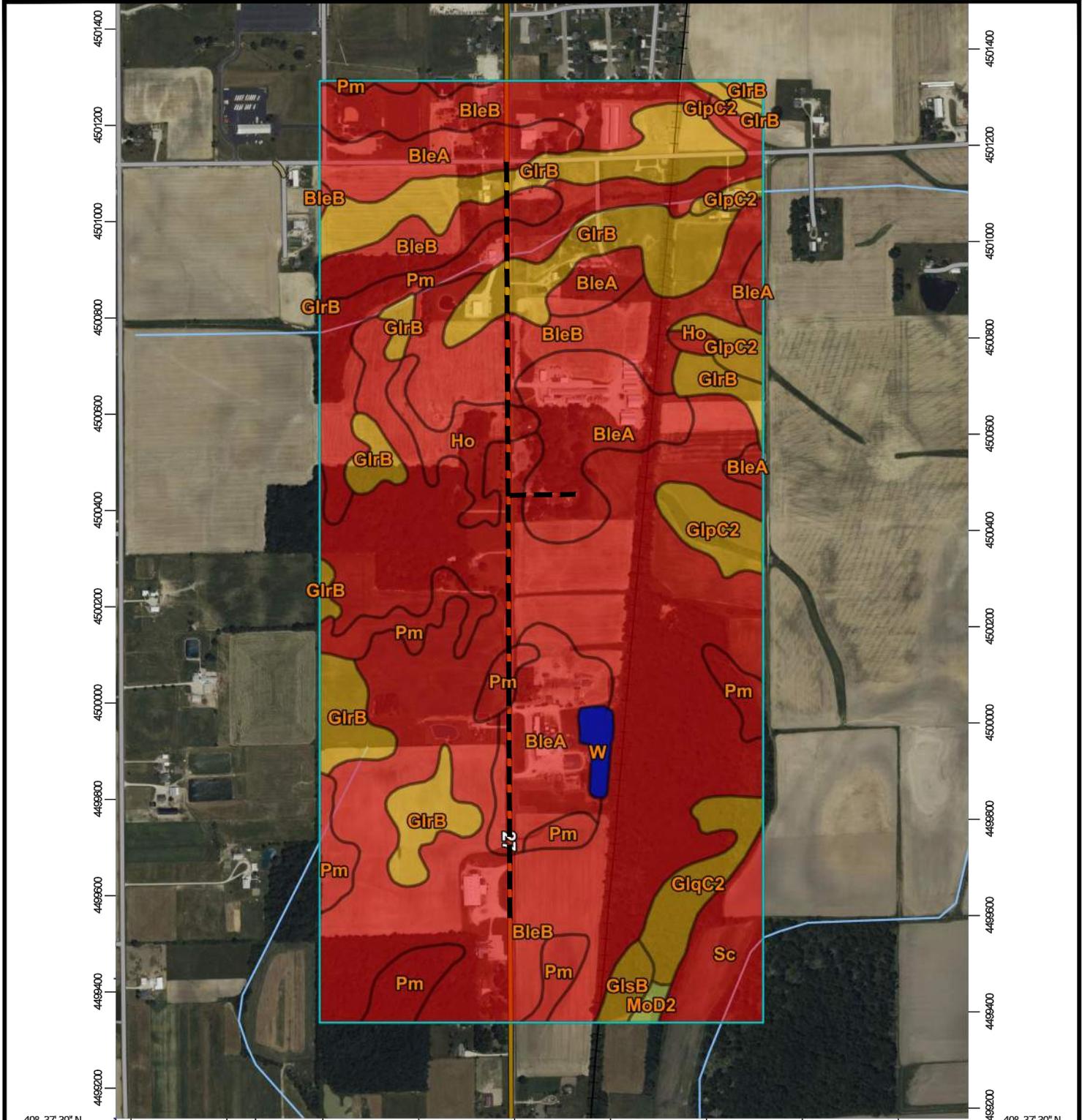
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
WATER TABLE LEGEND

FIGURE

1-7h2

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40° 37' 30" N

40° 37' 30" N

84° 57' 51" W

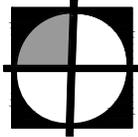
84° 56' 35" W



Map Scale: 1:11,500 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84



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 ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 SOUTH SERVICE AREA -
 WATER TABLE MAP

FIGURE

1-7i1

MAP LEGEND

<p>Area of Interest (AOI)</p> <p> Area of Interest (AOI)</p>	<p> Not rated or not available</p>	<p>Soil Rating Lines</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p> <p> Not rated or not available</p>	<p>Soil Rating Points</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p>
<p>Soils</p> <p>Soil Rating Polygons</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p> <p> Not rated or not available</p>	<p>Water Features</p> <p> Streams and Canals</p>	<p>Transportation</p> <p> Rails</p> <p> Interstate Highways</p> <p> US Routes</p> <p> Major Roads</p> <p> Local Roads</p>	<p>Background</p> <p> Aerial Photography</p>

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23	60.5	13.5%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	23	230.1	51.3%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	46	12.3	2.7%
GlcC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	46	9.3	2.1%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	46	58.4	13.0%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	46	3.0	0.7%
Ho	Houghton muck, drained	0	9.6	2.1%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	84	1.1	0.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	49.3	11.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	7	12.8	2.8%
W	Water	>200	2.4	0.5%
Totals for Area of Interest			448.7	100.0%



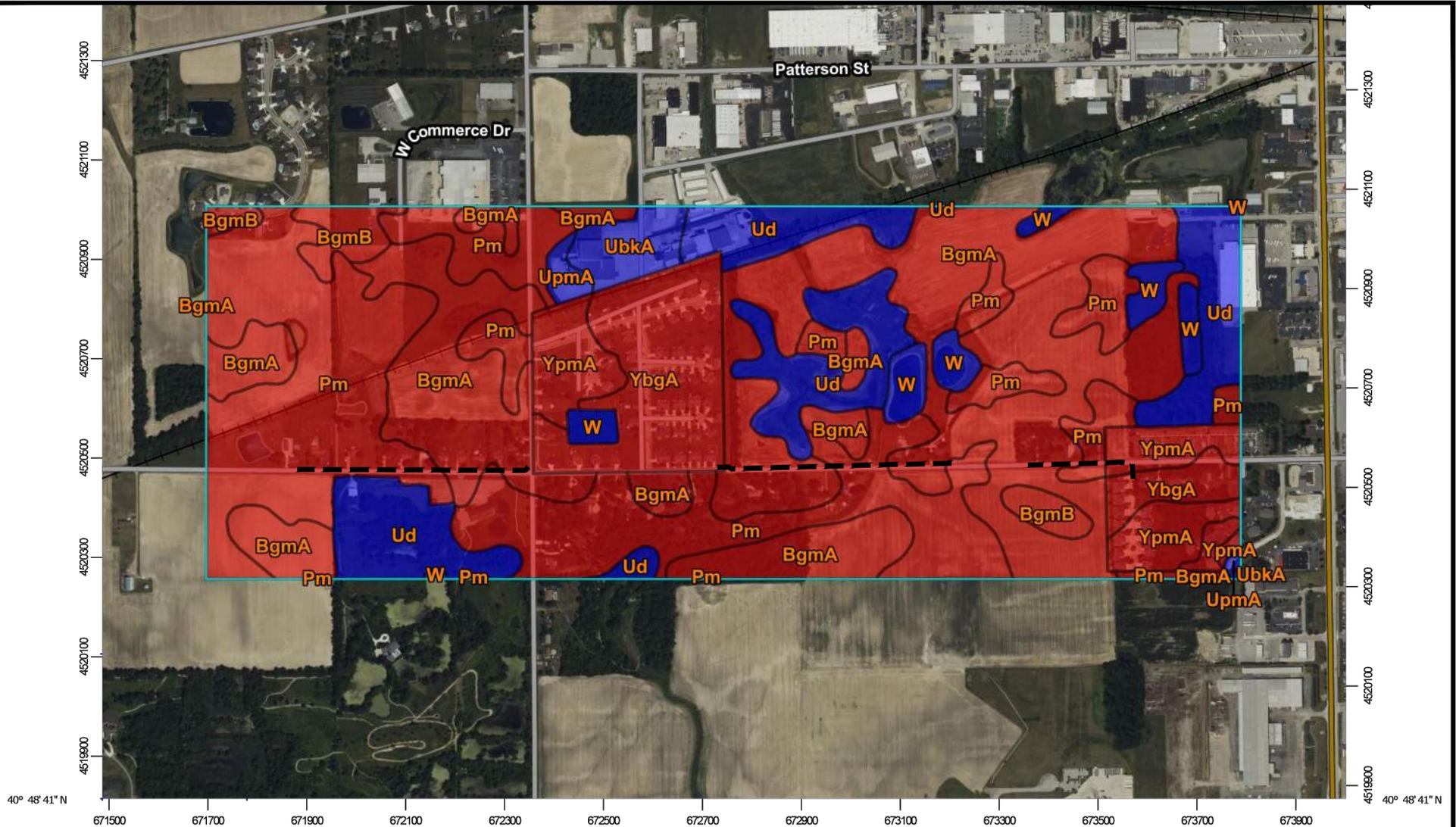
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**US 27 SOUTH SERVICE AREA -
WATER TABLE LEGEND**

FIGURE

1-7i2

Z:\Shared\IN Clients A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD\B PER Reports\ACAD\NEW Environmental Maps\Area 10\Area 10 PER Figures.dwg PRINTED: 3/13/2024 10:39 AM BY: Bryce Petersinger



40° 48' 41" N 671500 671700 671900 672100 672300 672500 672700 672900 673100 673300 673500 673700 673900 4519800 4520100 4520300 4520500 4520700 4520900 4521100 4521300 40° 48' 41" N

84° 58' 0" W

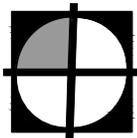


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Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

84° 56' 13" W



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CR W 500 N SERVICE AREA -
WATER TABLE MAP

FIGURE

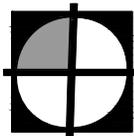
1-7j1

MAP LEGEND

<p>Area of Interest (AOI)</p> <p> Area of Interest (AOI)</p>	<p> Not rated or not available</p>	<p>Soil Rating Lines</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p> <p> Not rated or not available</p>	<p>Soil Rating Points</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p>
<p>Soils</p> <p>Soil Rating Polygons</p> <p> 0 - 25</p> <p> 25 - 50</p> <p> 50 - 100</p> <p> 100 - 150</p> <p> 150 - 200</p> <p> > 200</p> <p> Not rated or not available</p>	<p>Water Features</p> <p> Streams and Canals</p>	<p>Transportation</p> <p> Rails</p> <p> Interstate Highways</p> <p> US Routes</p> <p> Major Roads</p> <p> Local Roads</p>	<p>Background</p> <p> Aerial Photography</p>

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	23	138.4	35.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	23	8.8	2.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	116.3	29.9%
UbKA	Urban land-Blount complex, 0 to 2 percent slopes	>200	7.0	1.8%
Ud	Udorthents, loamy	>200	50.6	13.0%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	>200	2.2	0.6%
W	Water	>200	11.7	3.0%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	23	34.1	8.8%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	15	20.2	5.2%
Totals for Area of Interest			389.4	100.0%



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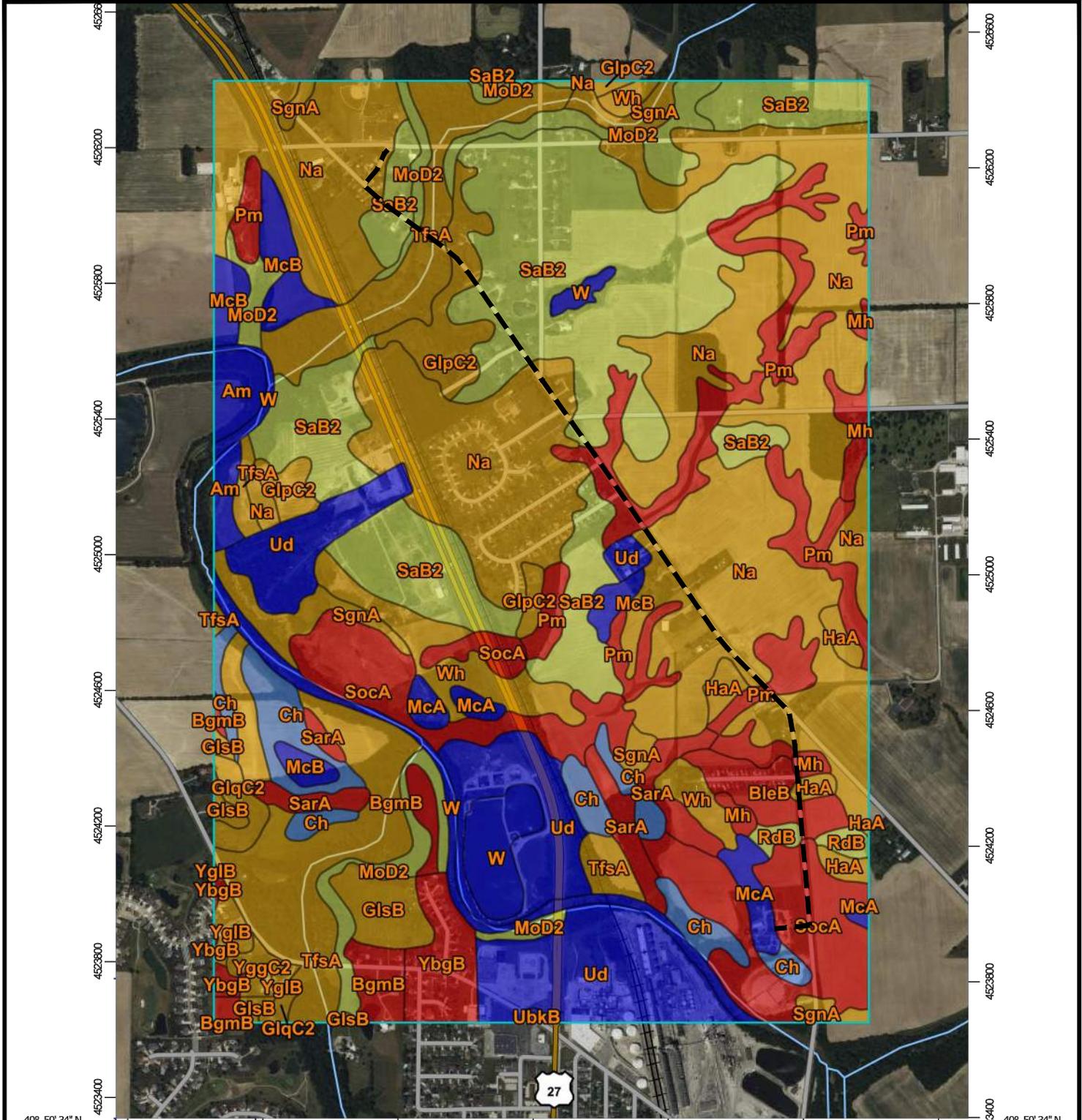
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA -
WATER TABLE LEGEND

FIGURE

1-7j2

Z:\Share\IN\Clients\A-L\Adams County\RD\S22170 - 2024 Sanitary Sewer Extensions\06 CAD\B PER Reports\CAD\NEW Environmental Maps\Area 11\Area 11 PER Figures.dwg PRINTED: 3/13/2024 10:39 AM BY: Bryce Prestigier



40° 50' 34" N

40° 50' 34" N

84° 57' 10" W

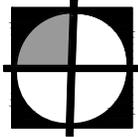
84° 55' 23" W



Map Scale: 1:16,300 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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 ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
 WATER TABLE MAP

FIGURE

1-7k1

MAP LEGEND

Depth to Water Table

Area of Interest (AOI)

 Area of Interest (AOI)

 Not rated or not available

Soils

Water Features

 Streams and Canals

Soil Rating Polygons

Transportation

 Rails

 0 - 25

 Interstate Highways

 25 - 50

 US Routes

 50 - 100

 Major Roads

 100 - 150

 Local Roads

 150 - 200

Background

 Aerial Photography

 > 200

 Not rated or not available

Soil Rating Lines

 0 - 25

 25 - 50

 50 - 100

 100 - 150

 150 - 200

 > 200

 Not rated or not available

Soil Rating Points

 0 - 25

 25 - 50

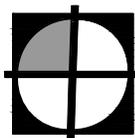
 50 - 100

 100 - 150

 150 - 200

 > 200

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	>200	13.2	1.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	23	14.5	1.1%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	23	14.4	1.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	153	37.1	2.8%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	46	27.8	2.1%
GlcC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	46	8.1	0.6%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	46	16.8	1.3%
HaA	Haskins loam, 0 to 3 percent slopes	30	10.9	0.8%
McA	Martinsville loam, 0 to 2 percent slopes	>200	13.3	1.0%
McB	Martinsville loam, 2 to 6 percent slopes	>200	23.8	1.8%
Mh	Milford silty clay loam, 0 to 2 percent slopes	7	10.8	0.8%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	84	42.2	3.2%
Na	Nappanee silt loam, 0 to 3 percent slopes	38	347.7	26.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	15	79.7	6.0%
RdB	Rawson loam, 2 to 6 percent slopes	77	5.0	0.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	69	227.3	17.0%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	7	22.3	1.7%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	31	31.7	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8	85.0	6.4%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	38	103.0	7.7%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	>200	0.6	0.0%
Ud	Udorthents, loamy	>200	101.5	7.6%
W	Water	>200	37.9	2.8%
Wh	Whitaker silt loam	38	30.7	2.3%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	23	20.1	1.5%
YggC2	Glynwood-Urban land complex, ground moraine, 6 to 12 percent slopes, eroded	46	3.5	0.3%
YglB	Glynwood-Urban land complex, 2 to 6 percent slopes	46	5.9	0.4%
Totals for Area of Interest			1,334.9	100.0%



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
WATER TABLE LEGEND

FIGURE

1-7k2

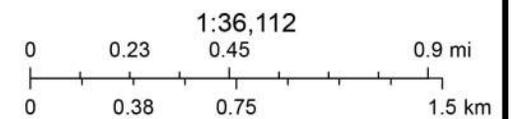
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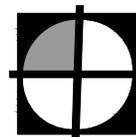
March 11, 2024

FIRM Flood Hazard Zones 2023  AE, FLOODWAY

 AE, <Null>



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA -
FLOODPLAIN MAP

FIGURE

1-8a

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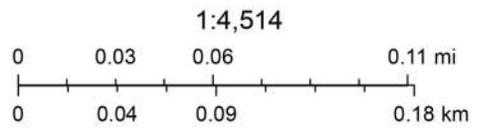
January 30, 2024

FIRM Flood Hazard Zones 2023

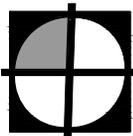
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 AE, FLOODWAY

 X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**N. PIQUA ROAD - US 224 SERVICE AREA -
FLOODPLAIN MAP**

FIGURE

1-8b

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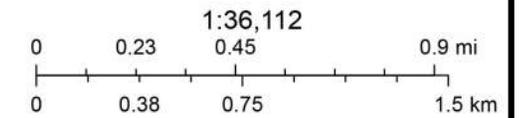
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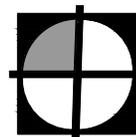
 AE, FLOODWAY

 X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD



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Indiana Viewer



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 600 N - SR 101 SERVICE AREA -
FLOODPLAIN MAP

FIGURE

1-8C

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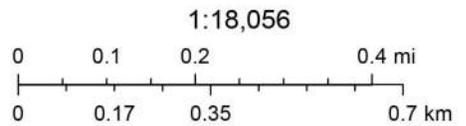
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FIRM Flood Hazard Zones 2023

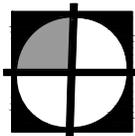
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 AE, FLOODWAY

 X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD



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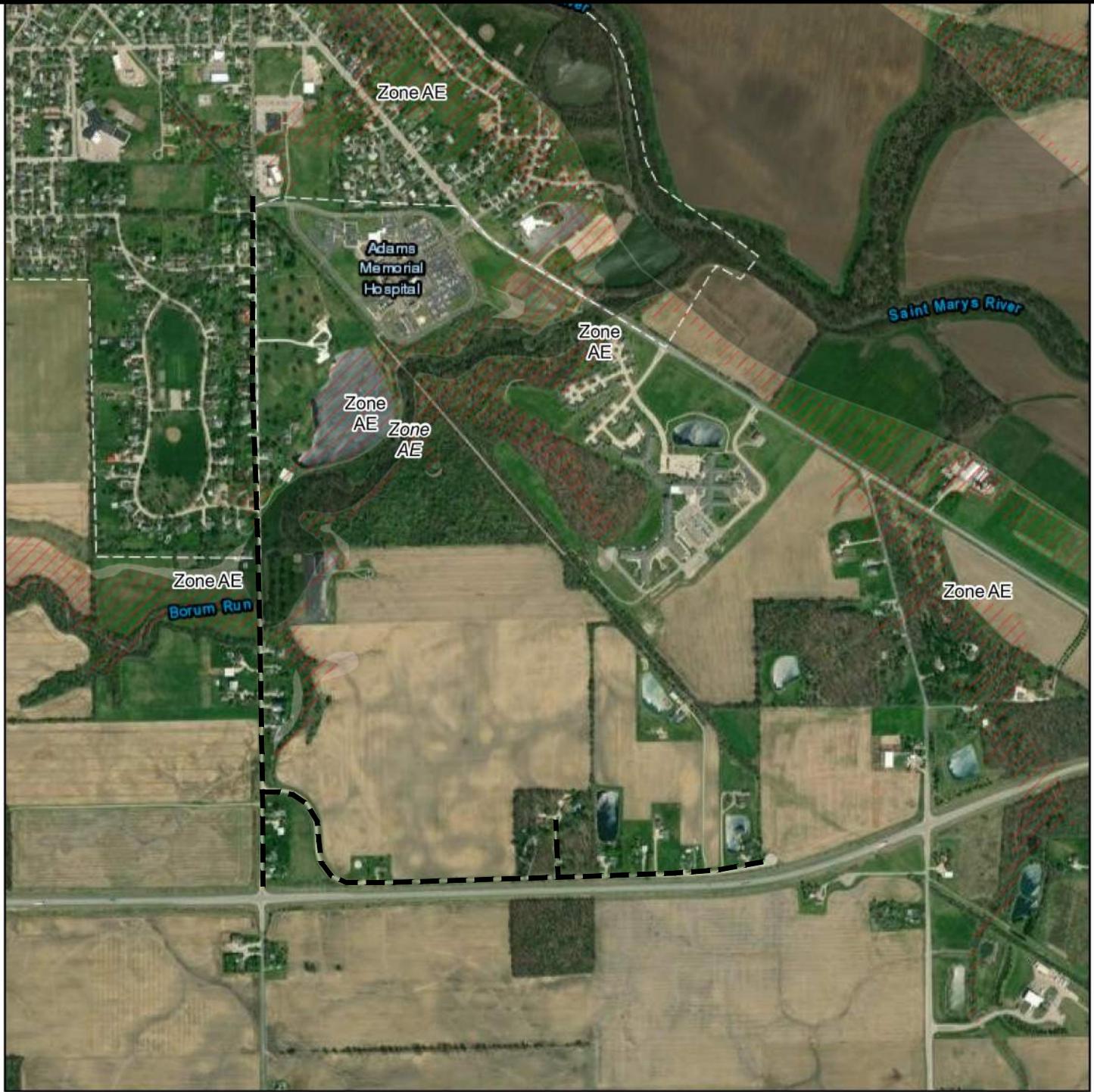
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 200 E SERVICE AREA -
FLOODPLAIN MAP**

FIGURE

1-8d

Z:\Shared\IN\Clients A-L\Adams County RSD\S22170 - 2024 Sanitary Sewer Extensions\06_CADD\PER Reports\CAD\NEW Environmental Maps\Area 5\Area 5 PER Figures.dwg PRINTED: 3/13/2024 10:40 AM BY: Bryce Pestinger



March 11, 2024

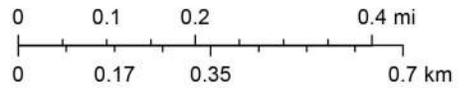
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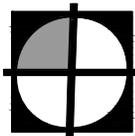
 AE, FLOODWAY

 X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD

1:18,056



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 100 E - CR E 400 N SERVICE AREA -
FLOODPLAIN MAP**

FIGURE

1-8e



February 2, 2024

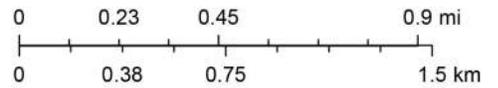
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FIRM Flood Hazard Zones 2023

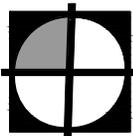
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AE, FLOODWAY

X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD



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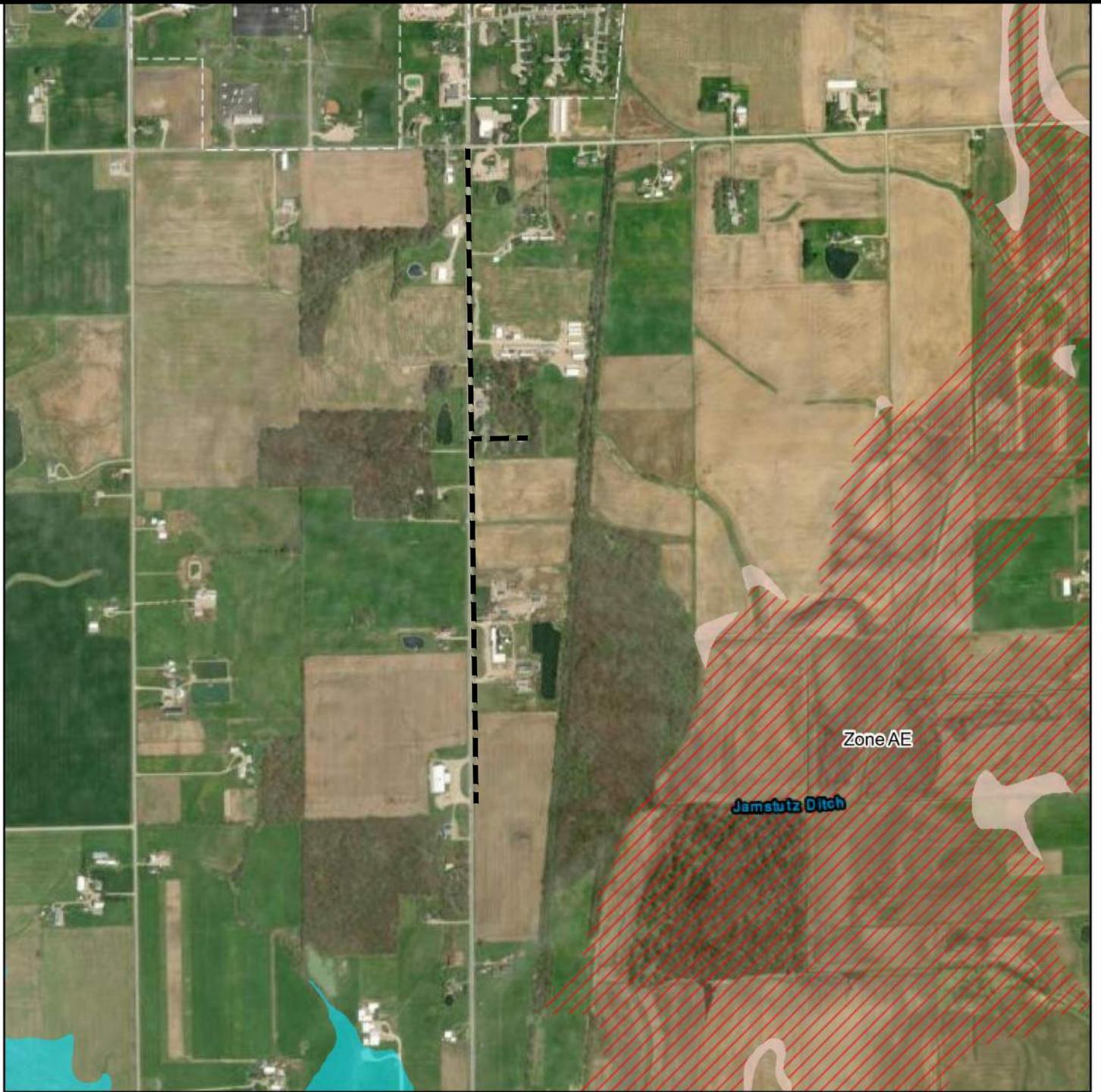
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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
 FLOODPLAIN MAP

FIGURE

1-8h



February 2, 2024

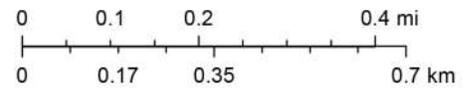
FIRM Flood Hazard Zones 2023

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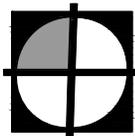
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 X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD

1:18,056



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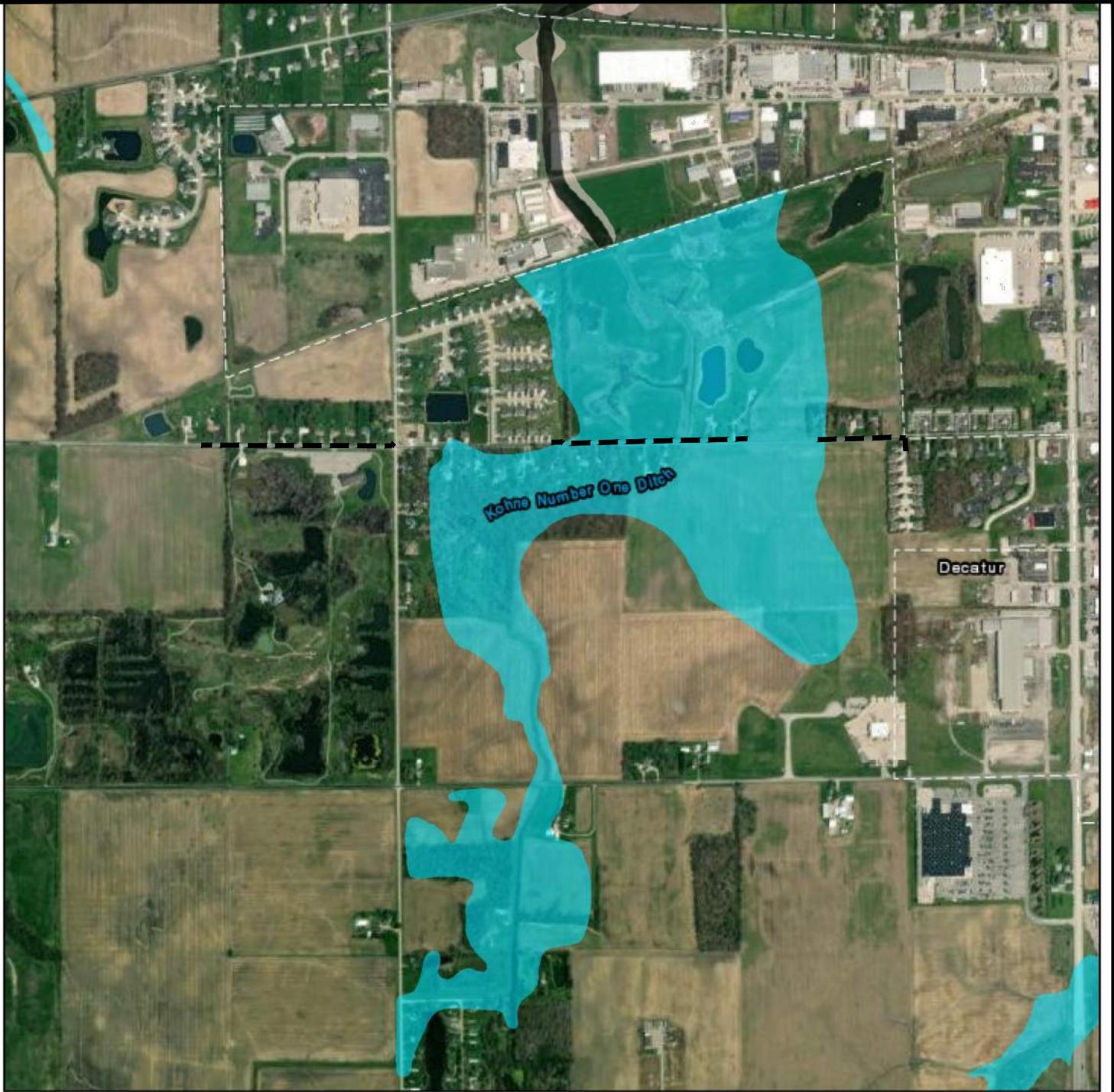
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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 SOUTH SERVICE AREA -
 FLOODPLAIN MAP

FIGURE

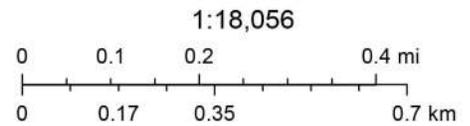
1-8i



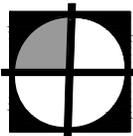
February 2, 2024

FIRM Flood Hazard Zones 2023

- A, <Null>
- AE, FLOODWAY
- X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD



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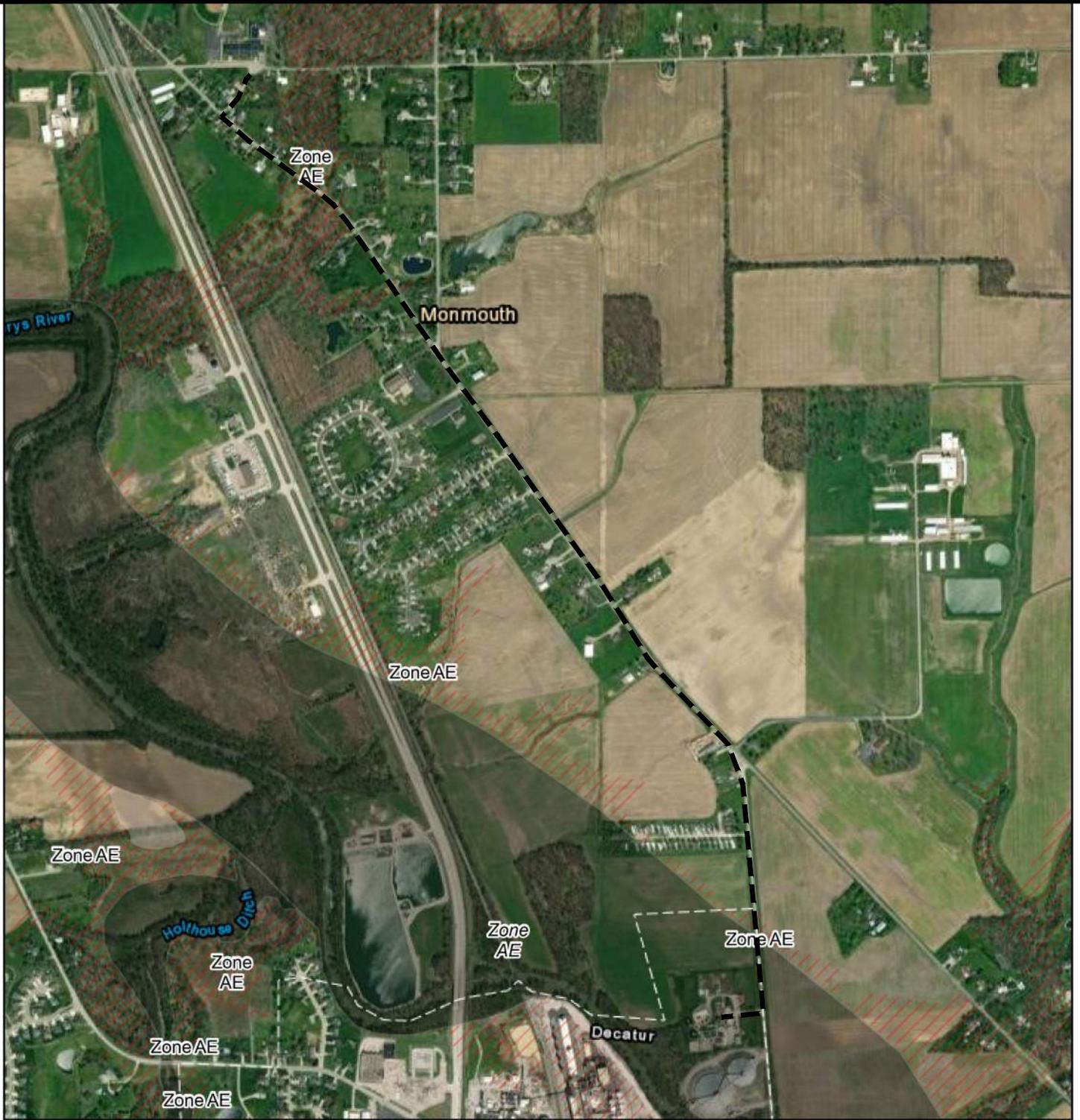
**2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR W 500 N SERVICE AREA -
 FLOODPLAIN MAP**

FIGURE

1-8j

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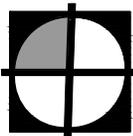
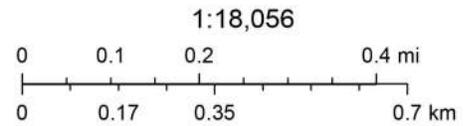
March 11, 2024

FIRM Flood Hazard Zones 2023

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 AE, FLOODWAY

 X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
FLOODPLAIN MAP

FIGURE

1-8k

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March 11, 2024

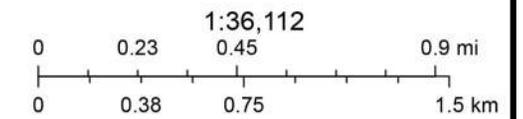
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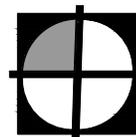
 AE, FLOODWAY

 X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD



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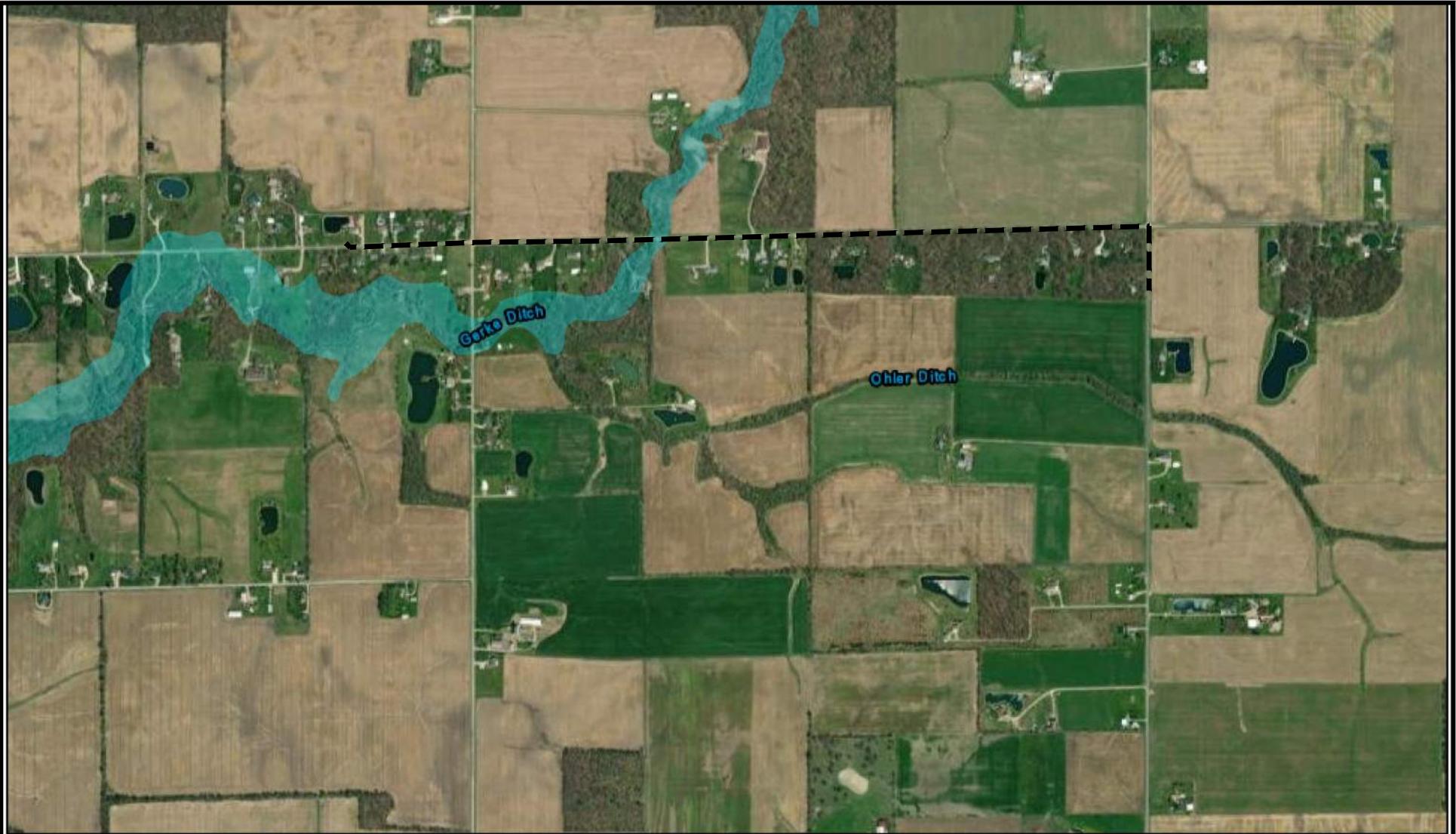
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
FLOODPLAIN MAP

FIGURE

1-8f

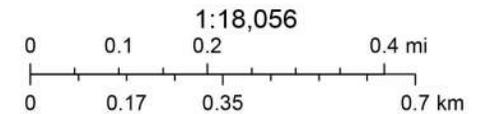
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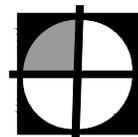
March 11, 2024

FIRM Flood Hazard Zones 2023  AE,<Null>

 A,<Null>



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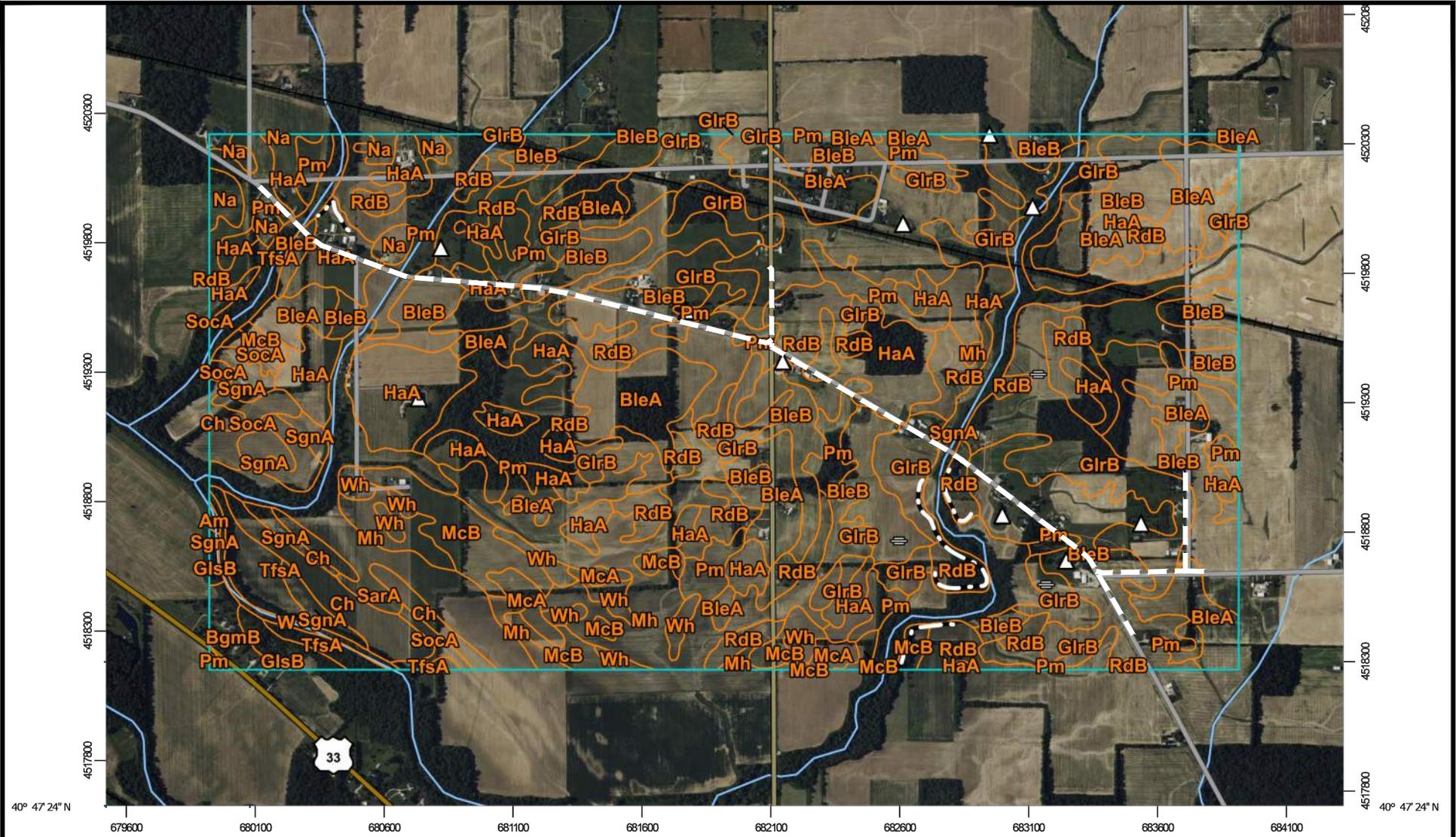
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA -
FLOODPLAIN MAP

FIGURE

1-8g

Z:\Shared\IN Clients\A-L\Adams County RSD\622170 - 2024 Sanitary Sewer Extensions\06 CAD\B PER Reports\ACAD\NEW Environmental Maps\Area 1\Area 1 PER Figures.dwg PRINTED: 3/13/2024 10:41 AM BY: Bryce Pensing



Map Scale: 1:21,900 if printed on A landscape (11" x 8.5") sheet.

0 300 600 1200 1800 Meters

0 1000 2000 4000 6000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA -
SOILS MAP

FIGURE

1-9a1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

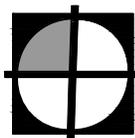
 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

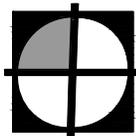
N. PIQUA ROAD - SR 101 SERVICE AREA -
SOILS MAP LEGEND

FIGURE

1-9a2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	0.8	0.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	11.5	0.6%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	158.0	7.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	437.1	21.3%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	47.4	2.3%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	239.6	11.7%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	10.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	226.5	11.1%
McA	Martinsville loam, 0 to 2 percent slopes	14.9	0.7%
McB	Martinsville loam, 2 to 6 percent slopes	55.0	2.7%
Mh	Milford silty clay loam, 0 to 2 percent slopes	119.3	5.8%
Na	Nappanee silt loam, 0 to 3 percent slopes	22.6	1.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	268.3	13.1%
RdB	Rawson loam, 2 to 6 percent slopes	154.6	7.5%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	74.6	3.6%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	110.0	5.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	20.8	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	43.6	2.1%
W	Water	6.9	0.3%
Wh	Whitaker silt loam	26.9	1.3%
Totals for Area of Interest		2,049.4	100.0%



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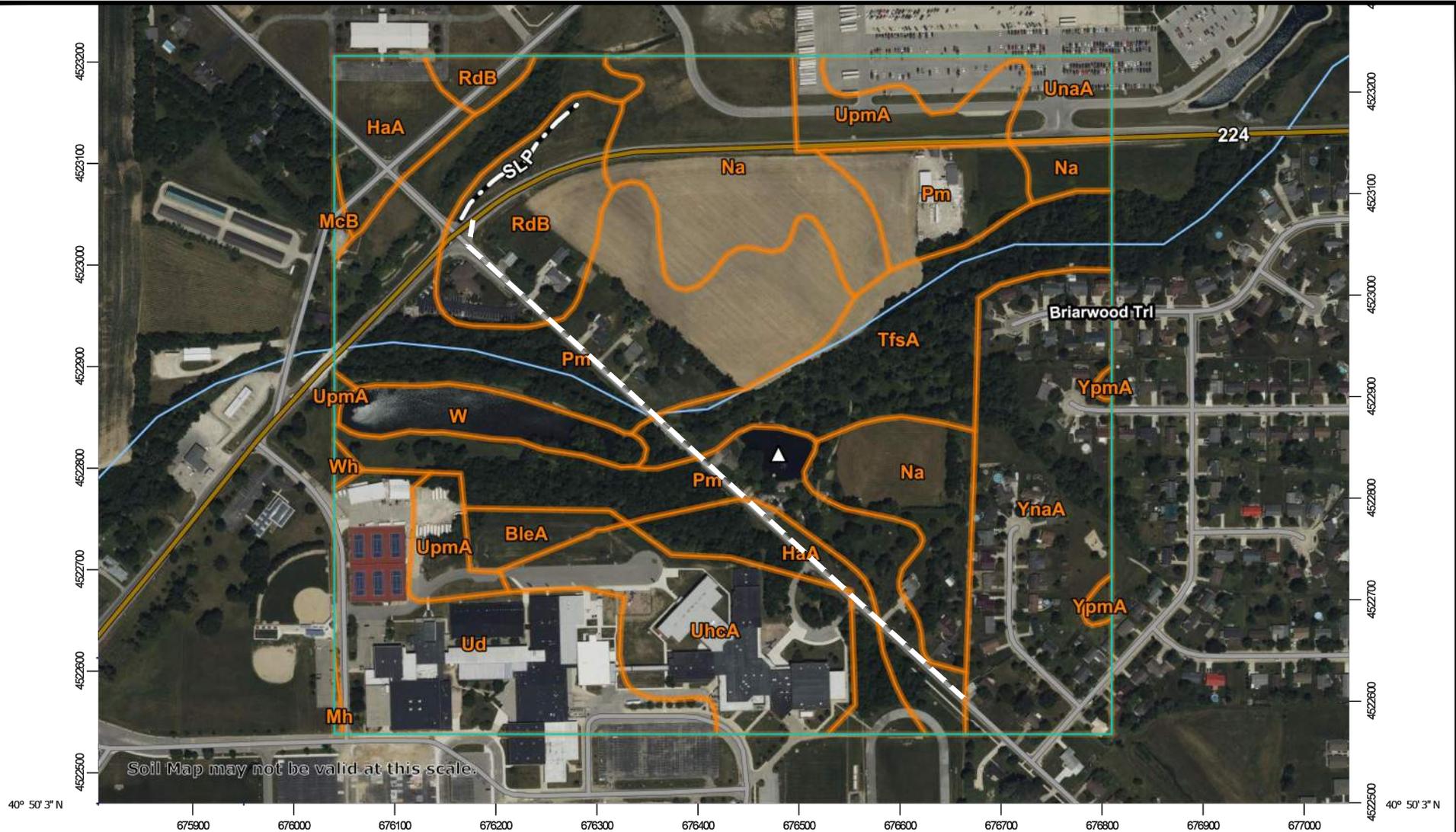
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**N. PIQUA ROAD - SR 101 SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9a3

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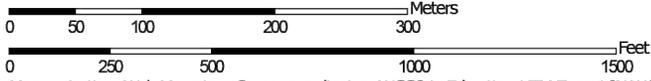


Soil Map may not be valid at this scale.

84° 54' 0" W

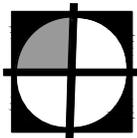


Map Scale: 1:5,660 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84

84° 54' 0" W



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - US 224 SERVICE AREA -
SOILS MAP

FIGURE

1-9b1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

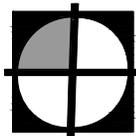
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	1.6	1.2%
HaA	Haskins loam, 0 to 3 percent slopes	7.5	5.9%
McB	Martinsville loam, 2 to 6 percent slopes	0.2	0.2%
Mh	Milford silty clay loam, 0 to 2 percent slopes	0.1	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	16.6	13.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	33.0	25.9%
RdB	Rawson loam, 2 to 6 percent slopes	7.8	6.1%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	10.4	8.2%
Ud	Udorthents, loamy	12.8	10.0%
Uhca	Urban land-Haskins complex, 0 to 3 percent slopes	10.0	7.8%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	3.6	2.8%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	5.2	4.1%
W	Water	3.2	2.5%
Wh	Whitaker silt loam	0.2	0.1%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	15.1	11.9%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	0.3	0.3%
Totals for Area of Interest		127.5	100.0%



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**N. PIQUA ROAD - US 224 SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9b3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

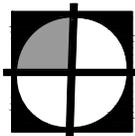
 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

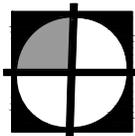
CR E 600 N - SR 101 SERVICE AREA -
SOILS MAP LEGEND

FIGURE

1-9c2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	158.5	4.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	653.9	17.7%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	4.4	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	50.1	1.4%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	290.3	7.9%
HaA	Haskins loam, 0 to 3 percent slopes	33.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	3.6	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	822.7	22.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	578.5	15.7%
RdB	Rawson loam, 2 to 6 percent slopes	27.8	0.8%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	673.3	18.3%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	88.9	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	11.5	0.3%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	10.3	0.3%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	23.5	0.6%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	3.0	0.1%
W	Water	33.2	0.9%
Wh	Whitaker silt loam	14.5	0.4%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	0.0	0.0%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	161.5	4.4%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	44.2	1.2%
Totals for Area of Interest		3,687.2	100.0%



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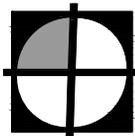
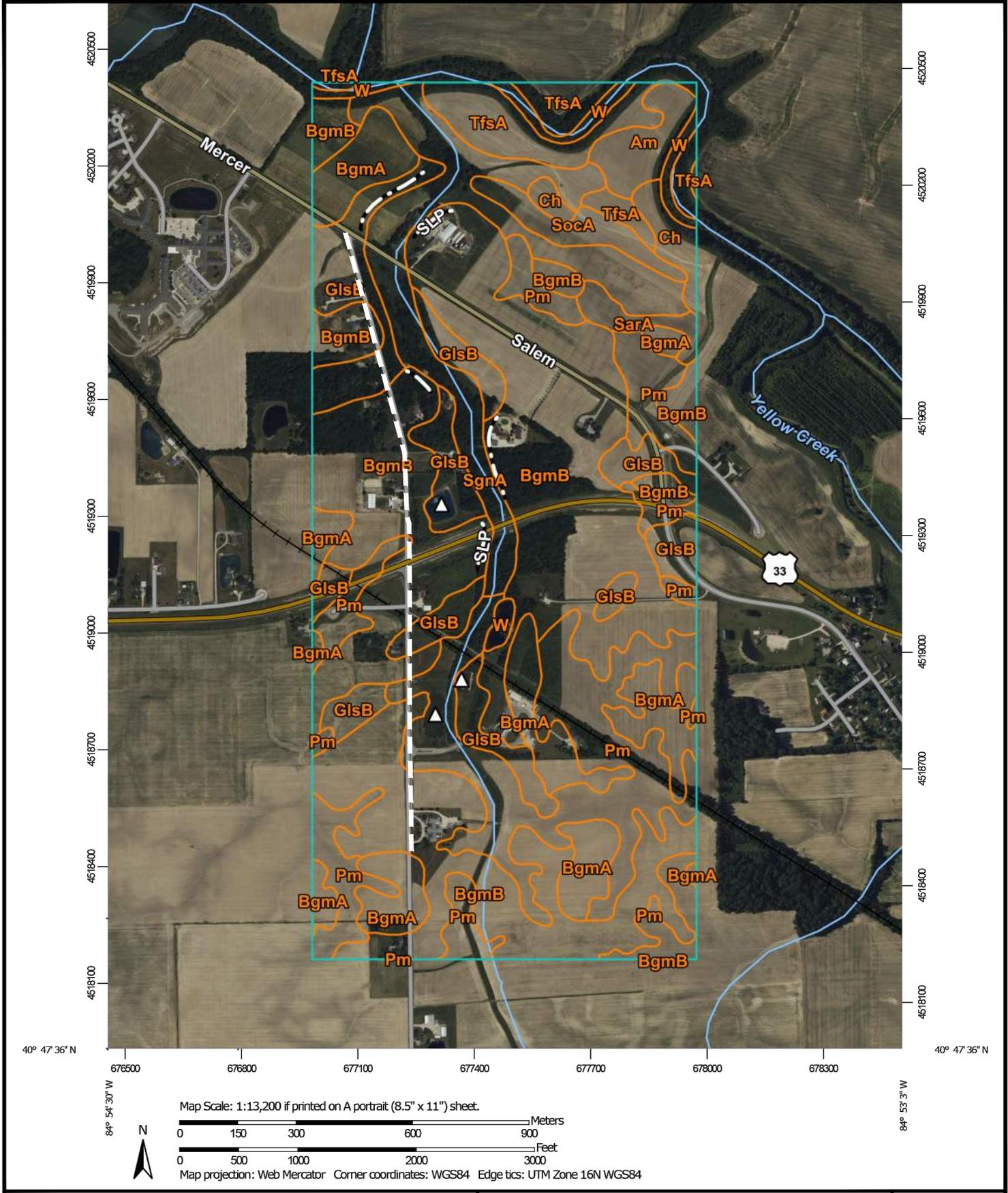
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 600 N - SR 101 SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9c3

Z:\Shared\IN\Clients\A-L\Adams County\RSD\S22170 - 2024 Sanitary Sewer Extensions\06_CADD\PER Reports\CAD\NEW Environmental Maps\Area 4\Area 4.PER Figures.dwg PRINTED: 3/13/2024 10:41 AM BY: Bryce Peestinger



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 200 E SERVICE AREA -
 SOILS MAP

FIGURE

1-9d1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

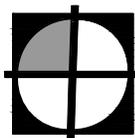
 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

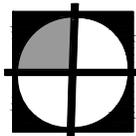
CR N 200 E SERVICE AREA -
SOILS MAP LEGEND

FIGURE

1-9d2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	12.2	2.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	52.7	9.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	221.7	40.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	7.5	1.4%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	60.7	11.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	103.3	18.7%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	5.0	0.9%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	49.2	8.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8.9	1.6%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	24.1	4.4%
W	Water	8.2	1.5%
Totals for Area of Interest		553.5	100.0%



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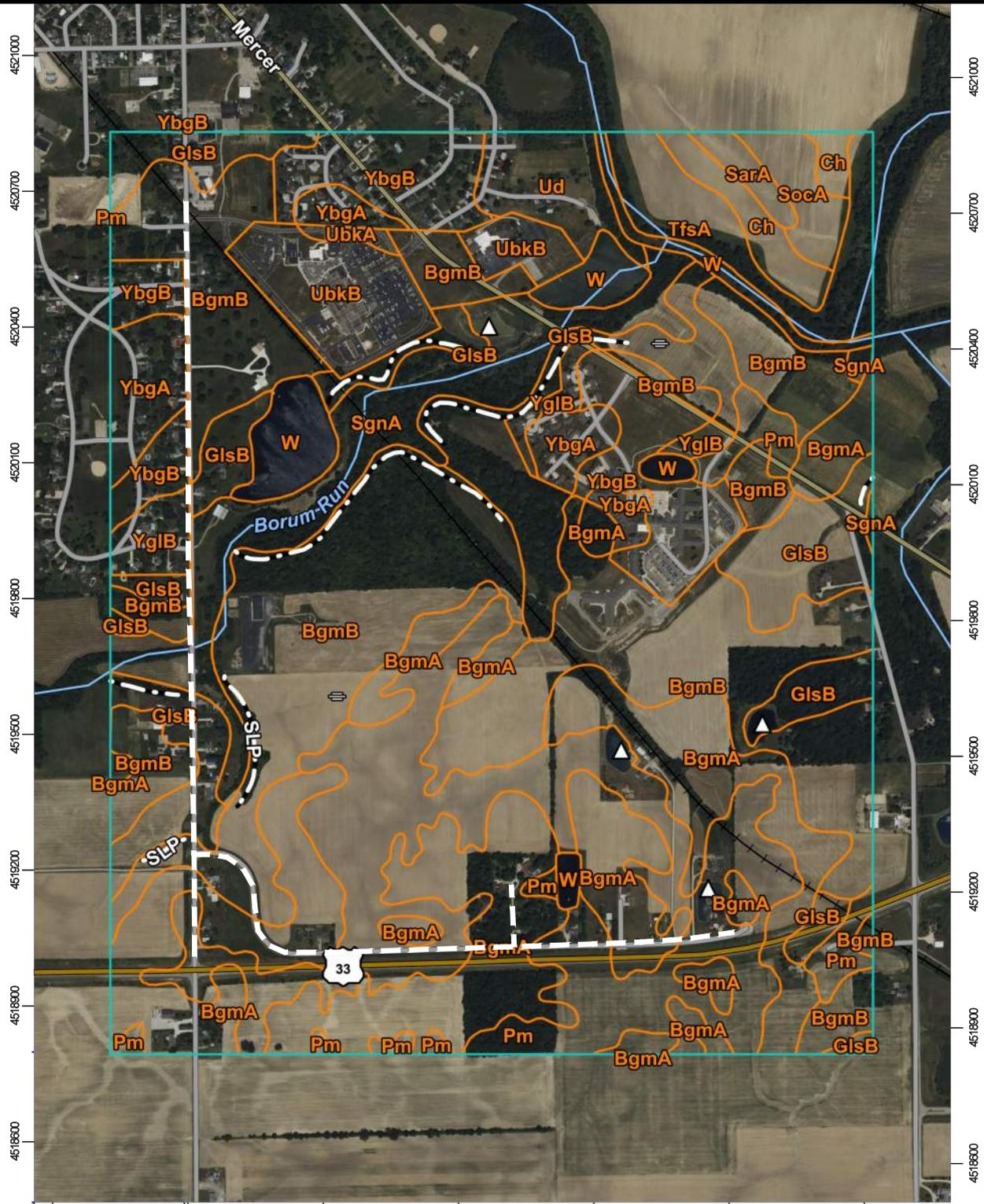
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 200 E SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9d3

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40° 47' 54" N

40° 47' 54" N

84° 53' 20" W

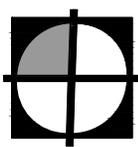
84° 53' 54" W



Map Scale: 1:13,100 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA -
 SOILS MAP

FIGURE

1-9e1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

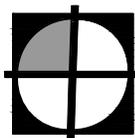
 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 100 E - CR E 400 N SERVICE AREA -
SOILS MAP LEGEND**

FIGURE

1-9e2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	156.6	18.3%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	223.0	26.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	11.4	1.3%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	94.7	11.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	120.1	14.1%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	4.1	0.5%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	50.6	5.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8.6	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	23.4	2.7%
UbkA	Urban land-Blount complex, 0 to 2 percent slopes	1.7	0.2%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	29.3	3.4%
Ud	Udorthents, loamy	15.4	1.8%
W	Water	24.8	2.9%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	25.1	2.9%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	53.9	6.3%
YglB	Glynwood-Urban land complex, 2 to 6 percent slopes	12.1	1.4%
Totals for Area of Interest		854.7	100.0%



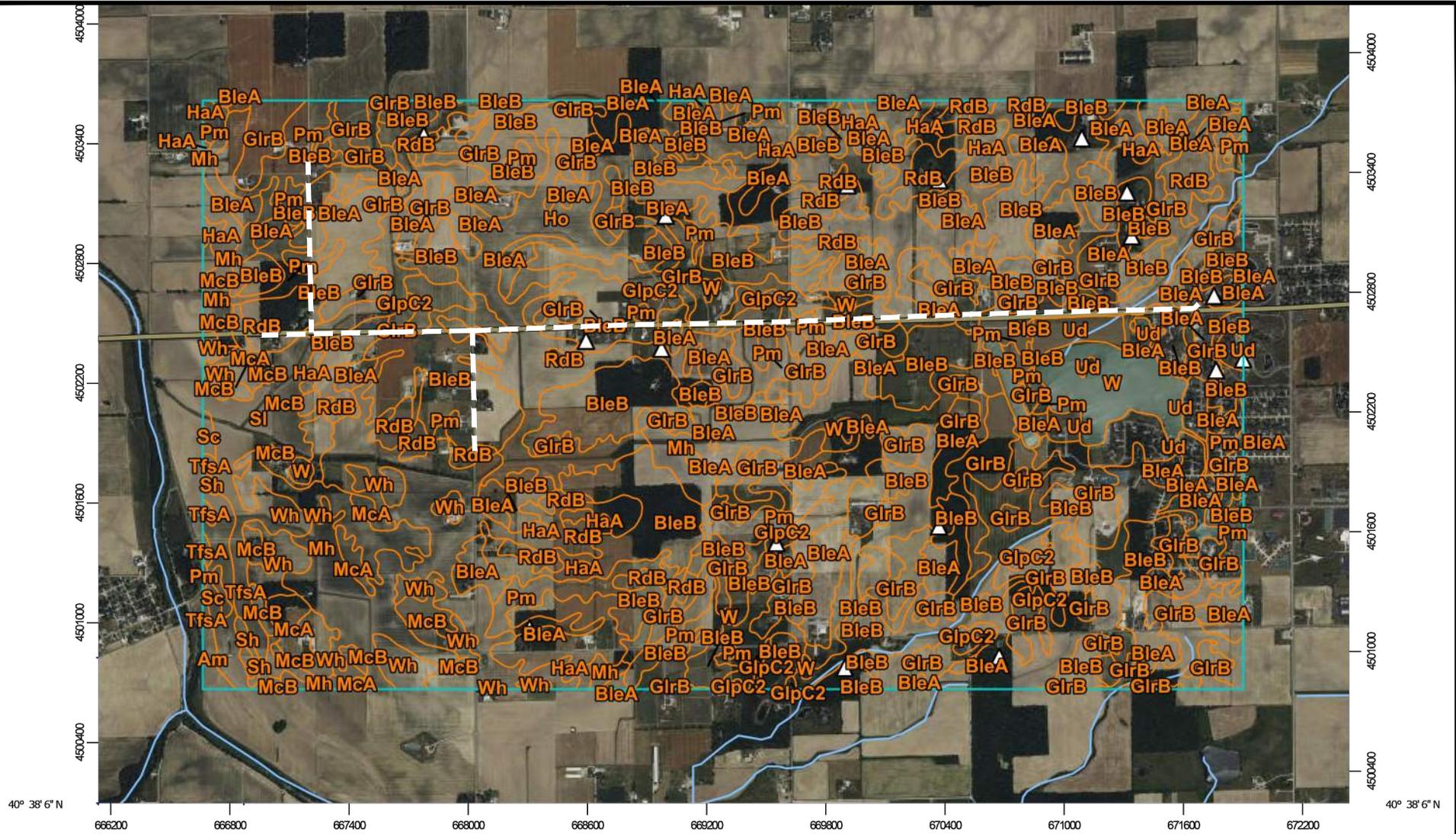
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 100 E - CR E 400 N SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9e3

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Map Scale: 1:28,800 if printed on A landscape (11" x 8.5") sheet.

0 400 800 1600 2400 Meters

0 1000 2000 4000 6000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
SOILS MAP

FIGURE

1-9f1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

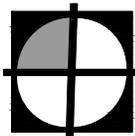
 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
SOILS MAP LEGEND

FIGURE

1-9f2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	6.8	0.2%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	435.9	11.4%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	890.9	23.2%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	39.8	1.0%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	501.7	13.1%
HaA	Haskins loam, 0 to 3 percent slopes	45.4	1.2%
Ho	Houghton muck, drained	158.5	4.1%
McA	Martinsville loam, 0 to 2 percent slopes	31.7	0.8%
McB	Martinsville loam, 2 to 6 percent slopes	62.9	1.6%
Mh	Milford silty clay loam, 0 to 2 percent slopes	263.5	6.9%
Pm	Pewamo silty clay, 0 to 2 percent slopes	873.5	22.8%
RdB	Rawson loam, 2 to 6 percent slopes	115.6	3.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	32.1	0.8%
Sh	Shoals clay loam, frequently flooded	8.2	0.2%
Sl	Sloan loam, frequently flooded	82.9	2.2%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	8.1	0.2%
Ud	Udorthents, loamy	62.2	1.6%
W	Water	97.8	2.6%
Wh	Whitaker silt loam	114.5	3.0%
Totals for Area of Interest		3,832.6	100.0%



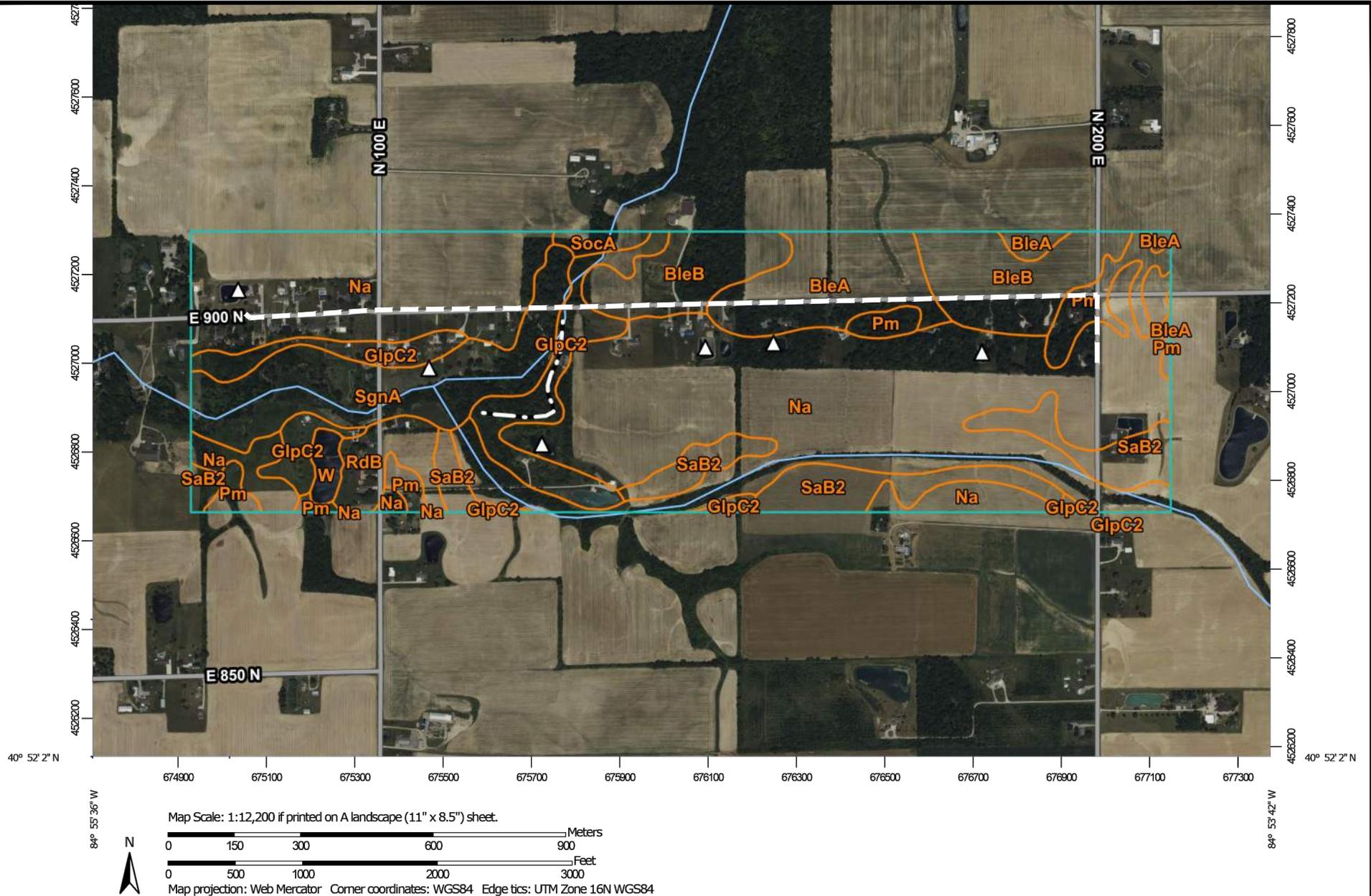
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**US 218 - CR S 400 W SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9f3

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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA -
SOILS MAP

FIGURE

1-9g1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

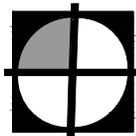
 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography



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ADAMS COUNTY REGIONAL SEWER DISTRICT

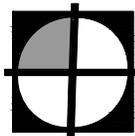
CR E 900 N EXTENDED SERVICE AREA -
SOILS MAP LEGEND

FIGURE

1-9g2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23.2	6.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	33.0	9.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	27.4	7.9%
Na	Nappanee silt loam, 0 to 3 percent slopes	175.7	50.5%
Pm	Pewamo silty clay, 0 to 2 percent slopes	14.5	4.2%
RdB	Rawson loam, 2 to 6 percent slopes	8.5	2.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	28.3	8.1%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	32.8	9.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	2.2	0.6%
W	Water	2.5	0.7%
Totals for Area of Interest		348.1	100.0%



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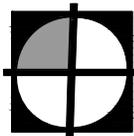
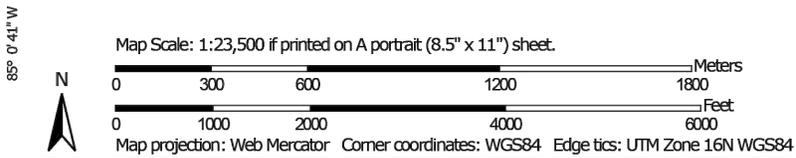
2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA -
 SOILS MAP UNIT LEGEND

FIGURE

1-9g3

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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
SOILS MAP

FIGURE

1-9h1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

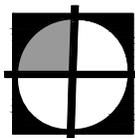
 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
SOILS MAP LEGEND

FIGURE

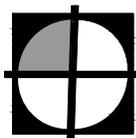
1-9h2

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	27.2	1.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	1.0	0.0%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	76.5	3.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	105.2	4.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	54.4	2.3%
GlpC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	0.9	0.0%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	17.9	0.8%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	11.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	116.8	5.0%
McB	Martinsville loam, 2 to 6 percent slopes	20.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	24.5	1.0%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	0.1	0.0%
Na	Nappanee silt loam, 0 to 3 percent slopes	774.9	33.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	339.9	14.6%
RdB	Rawson loam, 2 to 6 percent slopes	54.5	2.3%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	406.5	17.4%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	3.9	0.2%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	13.5	0.6%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	46.7	2.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	42.1	1.8%
Ud	Udorthents, loamy	7.5	0.3%
W	Water	21.7	0.9%
Wh	Whitaker silt loam	79.4	3.4%
Subtotals for Soil Survey Area		2,247.0	96.3%
Totals for Area of Interest		2,333.7	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	27.1	1.2%
BleB2	Blount silt loam, end moraine, 1 to 4 percent slopes, eroded	1.8	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	3.5	0.1%
GlrB2	Glynwood silt loam, end moraine, 2 to 6 percent slopes, eroded	11.9	0.5%
Pe	Pewamo silty clay loam, 0 to 1 percent slopes	41.7	1.8%
Wh	Washtenaw silt loam	0.7	0.0%
Subtotals for Soil Survey Area		86.6	3.7%
Totals for Area of Interest		2,333.7	100.0%



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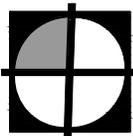
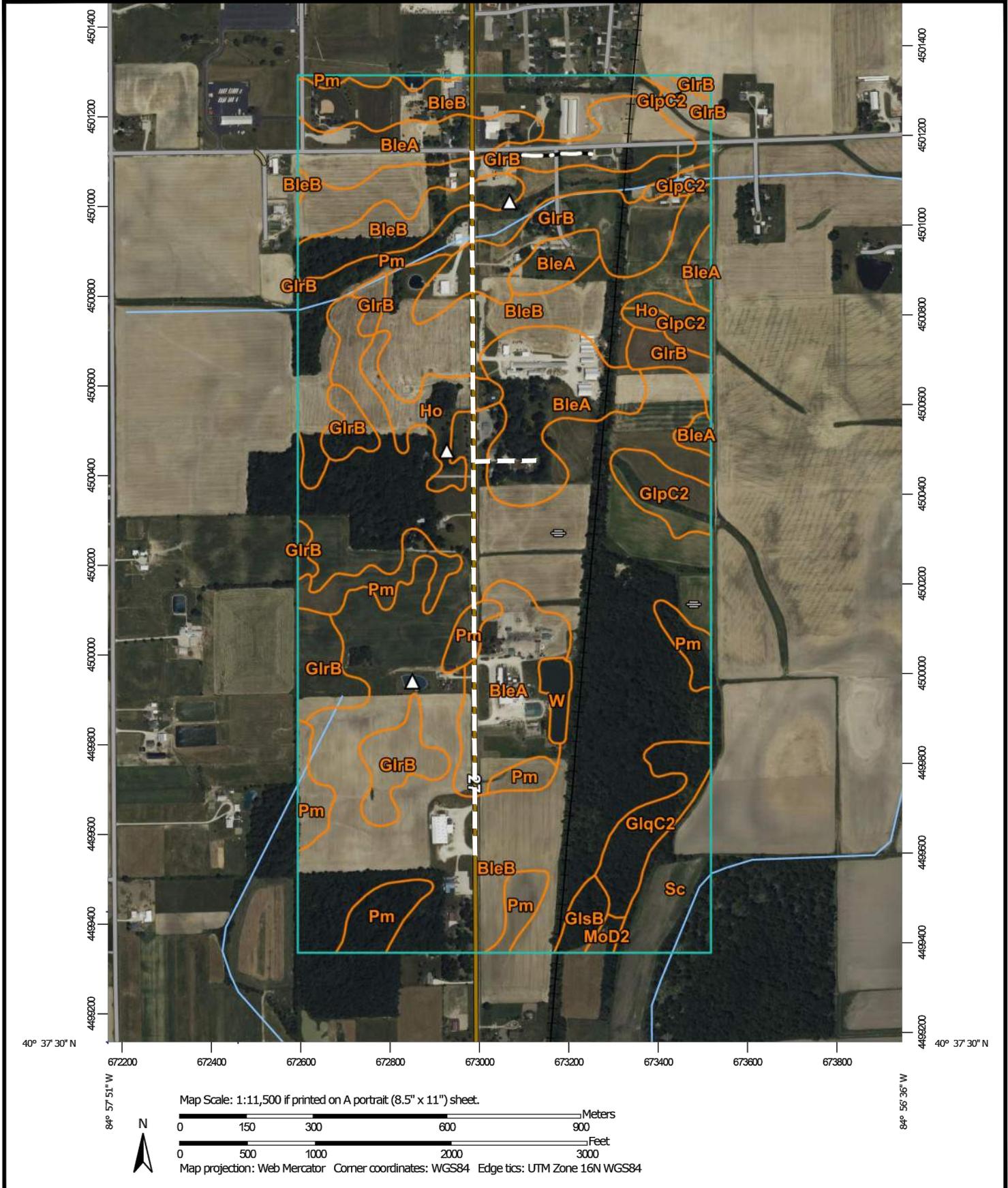
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR W 1200 N - CR N 200 W SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9h3

Z:\Shared\IN\Clients\A-L\Adams County RSD\S22170 - 2024 Sanitary Sewer Extensions\06_CAD\B PER Reports\CAD\NEW Environmental Maps\Area 9\Area 9 PER Figures.dwg PRINTED: 3/13/2024 10:42 AM BY: Bryce Pestinger



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 SOUTH SERVICE AREA -
 SOILS MAP

FIGURE

1-9i1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

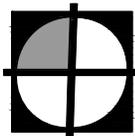
 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography



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ADAMS COUNTY REGIONAL SEWER DISTRICT

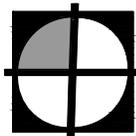
US 27 SOUTH SERVICE AREA -
SOILS MAP LEGEND

FIGURE

1-9i2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	60.5	13.5%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	230.1	51.3%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	12.3	2.7%
GlcC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	9.3	2.1%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	58.4	13.0%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	3.0	0.7%
Ho	Houghton muck, drained	9.6	2.1%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	1.1	0.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	49.3	11.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	12.8	2.8%
W	Water	2.4	0.5%
Totals for Area of Interest		448.7	100.0%



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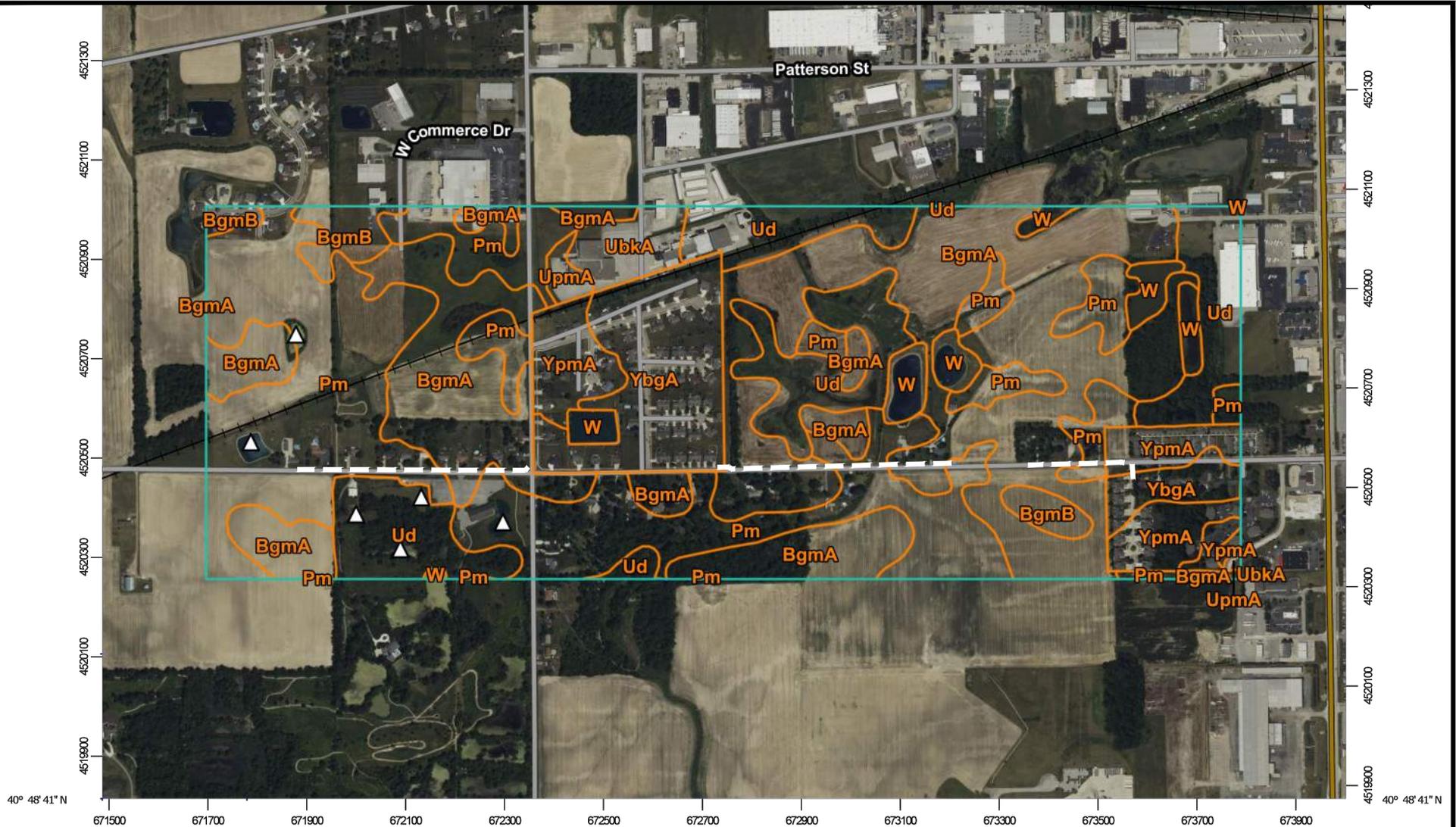
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**US 27 SOUTH SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9i3

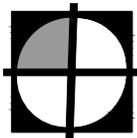
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Map Scale: 1:11,500 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA -
 SOILS MAP

FIGURE

1-9j1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

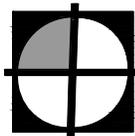
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	138.4	35.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	8.8	2.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	116.3	29.9%
UbKA	Urban land-Blount complex, 0 to 2 percent slopes	7.0	1.8%
Ud	Udorthents, loamy	50.6	13.0%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	2.2	0.6%
W	Water	11.7	3.0%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	34.1	8.8%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	20.2	5.2%
Totals for Area of Interest		389.4	100.0%



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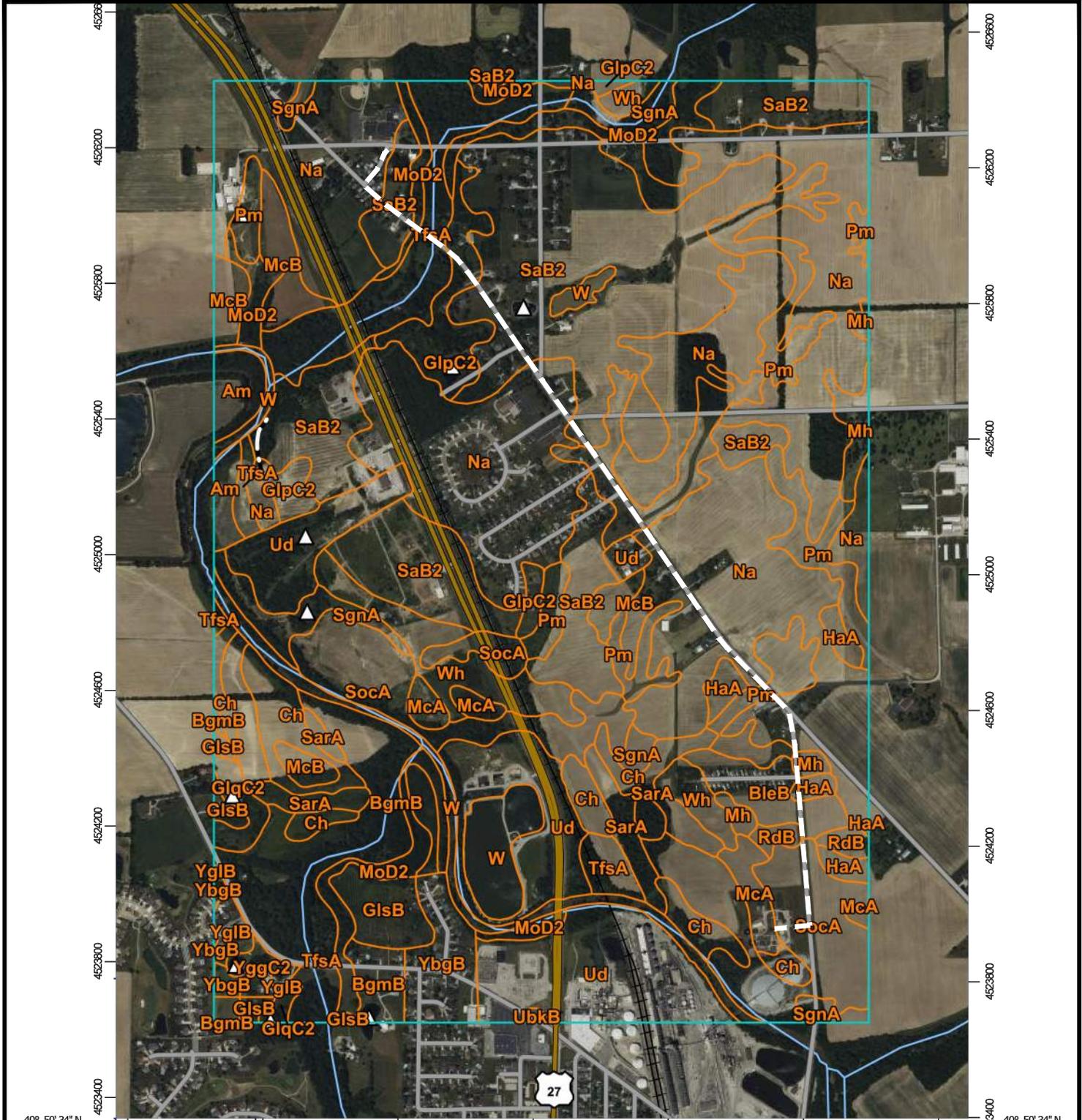
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR W 500 N SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9j3

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40° 50' 34" N

84° 57' 10" W



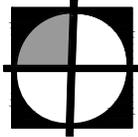
Map Scale: 1:16,300 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84

84° 55' 23" W

40° 50' 34" N



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
 SOILS MAP

FIGURE

1-9k1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

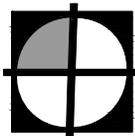
 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography



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ADAMS COUNTY REGIONAL SEWER DISTRICT

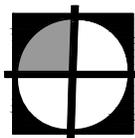
MONMOUTH FORCE MAIN IMPROVEMENTS -
SOILS MAP LEGEND

FIGURE

1-9k2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	13.2	1.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	14.5	1.1%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	14.4	1.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	37.1	2.8%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	27.8	2.1%
GlpC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	8.1	0.6%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	16.8	1.3%
HaA	Haskins loam, 0 to 3 percent slopes	10.9	0.8%
McA	Martinsville loam, 0 to 2 percent slopes	13.3	1.0%
McB	Martinsville loam, 2 to 6 percent slopes	23.8	1.8%
Mh	Milford silty clay loam, 0 to 2 percent slopes	10.8	0.8%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	42.2	3.2%
Na	Nappanee silt loam, 0 to 3 percent slopes	347.7	26.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	79.7	6.0%
RdB	Rawson loam, 2 to 6 percent slopes	5.0	0.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	227.3	17.0%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	22.3	1.7%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	31.7	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	85.0	6.4%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	103.0	7.7%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	0.6	0.0%
Ud	Udorthents, loamy	101.5	7.6%
W	Water	37.9	2.8%
Wh	Whitaker silt loam	30.7	2.3%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	20.1	1.5%
YggC2	Glynwood-Urban land complex, ground moraine, 6 to 12 percent slopes, eroded	3.5	0.3%
YglB	Glynwood-Urban land complex, 2 to 6 percent slopes	5.9	0.4%
Totals for Area of Interest		1,334.9	100.0%



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**MONMOUTH FORCE MAIN IMPROVEMENTS -
SOILS MAP UNIT LEGEND**

FIGURE

1-9k3

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MAP LEGEND

<p>Area of Interest (AOI)</p> <p> Area of Interest (AOI)</p> <p>Soils</p> <p>Soil Rating Polygons</p> <ul style="list-style-type: none">  Hydric (100%)  Hydric (66 to 99%)  Hydric (33 to 65%)  Hydric (1 to 32%)  Not Hydric (0%)  Not rated or not available 	<p>Transportation</p> <ul style="list-style-type: none">  Rails  Interstate Highways  US Routes  Major Roads  Local Roads <p>Background</p> <ul style="list-style-type: none">  Aerial Photography 	<p>Soil Rating Lines</p> <ul style="list-style-type: none">  Hydric (100%)  Hydric (66 to 99%)  Hydric (33 to 65%)  Hydric (1 to 32%)  Not Hydric (0%)  Not rated or not available 	<p>Soil Rating Points</p> <ul style="list-style-type: none">  Hydric (100%)  Hydric (66 to 99%)  Hydric (33 to 65%)  Hydric (1 to 32%)  Not Hydric (0%)  Not rated or not available <p>Water Features</p> <ul style="list-style-type: none">  Streams and Canals
---	--	---	--

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	7	0.8	0.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	9	11.5	0.6%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	6	158.0	7.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	6	437.1	21.3%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	5	47.4	2.3%
GlrB	Glywood silt loam, end moraine, 2 to 6 percent slopes	6	239.6	11.7%
GlsB	Glywood silt loam, ground moraine, 2 to 6 percent slopes	6	10.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	8	226.5	11.1%
McA	Martinsville loam, 0 to 2 percent slopes	0	14.9	0.7%
McB	Martinsville loam, 2 to 6 percent slopes	0	55.0	2.7%
Mh	Milford silty clay loam, 0 to 2 percent slopes	93	119.3	5.8%
Na	Nappanee silt loam, 0 to 3 percent slopes	5	22.6	1.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	268.3	13.1%
RdB	Rawson loam, 2 to 6 percent slopes	5	154.6	7.5%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	93	74.6	3.6%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	7	110.0	5.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	94	20.8	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	5	43.6	2.1%
W	Water	0	6.9	0.3%
Wh	Whitaker silt loam	3	26.9	1.3%
Totals for Area of Interest			2,049.4	100.0%



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA -
HYDRIC SOILS LEGEND

FIGURE

1-10a2

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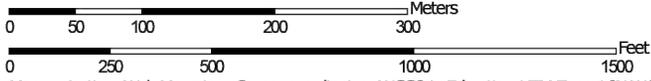


Soil Map may not be valid at this scale.

84° 54' 53" W

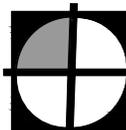


Map Scale: 1:5,660 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

84° 54' 0" W



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - US 224 SERVICE AREA -
HYDRIC SOILS MAP

FIGURE

1-10b1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

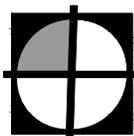
-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features

 Streams and Canals

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	6	1.6	1.2%
HaA	Haskins loam, 0 to 3 percent slopes	8	7.5	5.9%
McB	Martinsville loam, 2 to 6 percent slopes	0	0.2	0.2%
Mh	Milford silty clay loam, 0 to 2 percent slopes	93	0.1	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	5	16.6	13.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	33.0	25.9%
RdB	Rawson loam, 2 to 6 percent slopes	5	7.8	6.1%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	5	10.4	8.2%
Ud	Udorthents, loamy	0	12.8	10.0%
UhcA	Urban land-Haskins complex, 0 to 3 percent slopes	5	10.0	7.8%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	5	3.6	2.8%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	37	5.2	4.1%
W	Water	0	3.2	2.5%
Wh	Whitaker silt loam	3	0.2	0.1%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	5	15.1	11.9%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	56	0.3	0.3%
Totals for Area of Interest			127.5	100.0%



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**N. PIQUA ROAD - US 224 SERVICE AREA -
HYDRIC SOILS LEGEND**

FIGURE

1-10b2

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

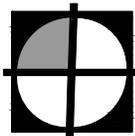
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	6	158.5	4.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	6	653.9	17.7%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	5	4.4	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	0	50.1	1.4%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	6	290.3	7.9%
HaA	Haskins loam, 0 to 3 percent slopes	8	33.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	93	3.6	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	5	822.7	22.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	578.5	15.7%
RdB	Rawson loam, 2 to 6 percent slopes	5	27.8	0.8%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	0	673.3	18.3%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	7	88.9	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	94	11.5	0.3%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	5	10.3	0.3%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	5	23.5	0.6%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	37	3.0	0.1%
W	Water	0	33.2	0.9%
Wh	Whitaker silt loam	3	14.5	0.4%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	9	0.0	0.0%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	5	161.5	4.4%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	56	44.2	1.2%
Totals for Area of Interest			3,687.2	100.0%



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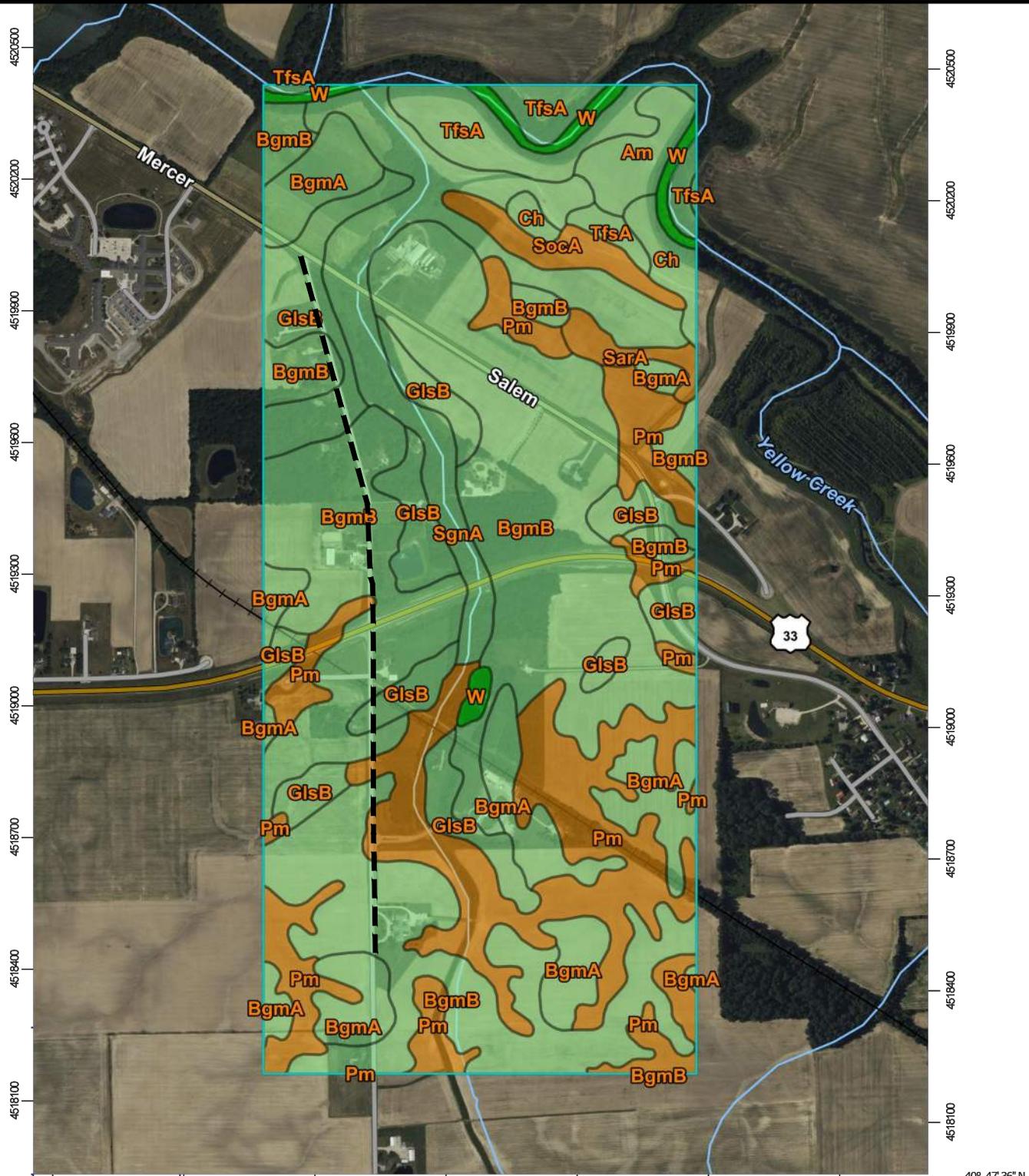
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 600 N - SR 101 SERVICE AREA -
HYDRIC SOILS LEGEND

FIGURE

1-10c2

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40° 47' 36" N 676500 676800 677100 677400 677700 678000 678300 40° 47' 36" N

84° 54' 30" W 84° 53' 3" W

Map Scale: 1:13,200 if printed on A portrait (8.5" x 11") sheet.

0 150 300 600 900 Meters

0 500 1000 2000 3000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 200 E SERVICE AREA -
HYDRIC SOILS MAP

FIGURE
1-10d1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features

 Streams and Canals

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	7	12.2	2.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	9	52.7	9.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	9	221.7	40.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	5	7.5	1.4%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	6	60.7	11.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	103.3	18.7%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	93	5.0	0.9%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	7	49.2	8.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	94	8.9	1.6%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	5	24.1	4.4%
W	Water	0	8.2	1.5%
Totals for Area of Interest			553.5	100.0%



**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 200 E SERVICE AREA -
HYDRIC SOILS LEGEND**

FIGURE

1-10d2

MAP LEGEND

<p>Area of Interest (AOI)</p> <p> Area of Interest (AOI)</p> <p>Soils</p> <p>Soil Rating Polygons</p> <ul style="list-style-type: none"> Hydric (100%) Hydric (66 to 99%) Hydric (33 to 65%) Hydric (1 to 32%) Not Hydric (0%) Not rated or not available 	<p>Transportation</p> <ul style="list-style-type: none"> Rails Interstate Highways US Routes Major Roads Local Roads <p>Background</p> <ul style="list-style-type: none"> Aerial Photography 	<p>Soil Rating Lines</p> <ul style="list-style-type: none"> Hydric (100%) Hydric (66 to 99%) Hydric (33 to 65%) Hydric (1 to 32%) Not Hydric (0%) Not rated or not available 	<p>Soil Rating Points</p> <ul style="list-style-type: none"> Hydric (100%) Hydric (66 to 99%) Hydric (33 to 65%) Hydric (1 to 32%) Not Hydric (0%) Not rated or not available <p>Water Features</p> <ul style="list-style-type: none"> Streams and Canals
--	--	---	---

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	9	156.6	18.3%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	9	223.0	26.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	5	11.4	1.3%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	6	94.7	11.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	120.1	14.1%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	93	4.1	0.5%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	7	50.6	5.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	94	8.6	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	5	23.4	2.7%
UbkA	Urban land-Blount complex, 0 to 2 percent slopes	6	1.7	0.2%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	6	29.3	3.4%
Ud	Udorthents, loamy	0	15.4	1.8%
W	Water	0	24.8	2.9%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	9	25.1	2.9%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	9	53.9	6.3%
YglB	Glynwood-Urban land complex, 2 to 6 percent slopes	5	12.1	1.4%
Totals for Area of Interest			854.7	100.0%



**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 100 E - CR E 400 N SERVICE AREA -
HYDRIC SOILS LEGEND**

FIGURE

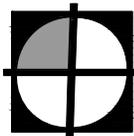
1-10e2

MAP LEGEND

- Area of Interest (AOI)**
-  Area of Interest (AOI)
- Soils**
- Soil Rating Polygons**
-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available
- Soil Rating Lines**
-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available
- Soil Rating Points**
-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available
- Water Features**
-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	7	6.8	0.2%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	6	435.9	11.4%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	6	890.9	23.2%
GlpC2	Glywood clay loam, 6 to 12 percent slopes, eroded	0	39.8	1.0%
GlrB	Glywood silt loam, end moraine, 2 to 6 percent slopes	6	501.7	13.1%
HaA	Haskins loam, 0 to 3 percent slopes	8	45.4	1.2%
Ho	Houghton muck, drained	100	158.5	4.1%
McA	Martinsville loam, 0 to 2 percent slopes	0	31.7	0.8%
McB	Martinsville loam, 2 to 6 percent slopes	0	62.9	1.6%
Mh	Milford silty clay loam, 0 to 2 percent slopes	93	263.5	6.9%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	873.5	22.8%
RdB	Rawson loam, 2 to 6 percent slopes	5	115.6	3.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	93	32.1	0.8%
Sh	Shoals clay loam, frequently flooded	15	8.2	0.2%
Sl	Sloan loam, frequently flooded	90	82.9	2.2%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	5	8.1	0.2%
Ud	Udorthents, loamy	0	62.2	1.6%
W	Water	0	97.8	2.6%
Wh	Whitaker silt loam	3	114.5	3.0%
Totals for Area of Interest			3,832.6	100.0%



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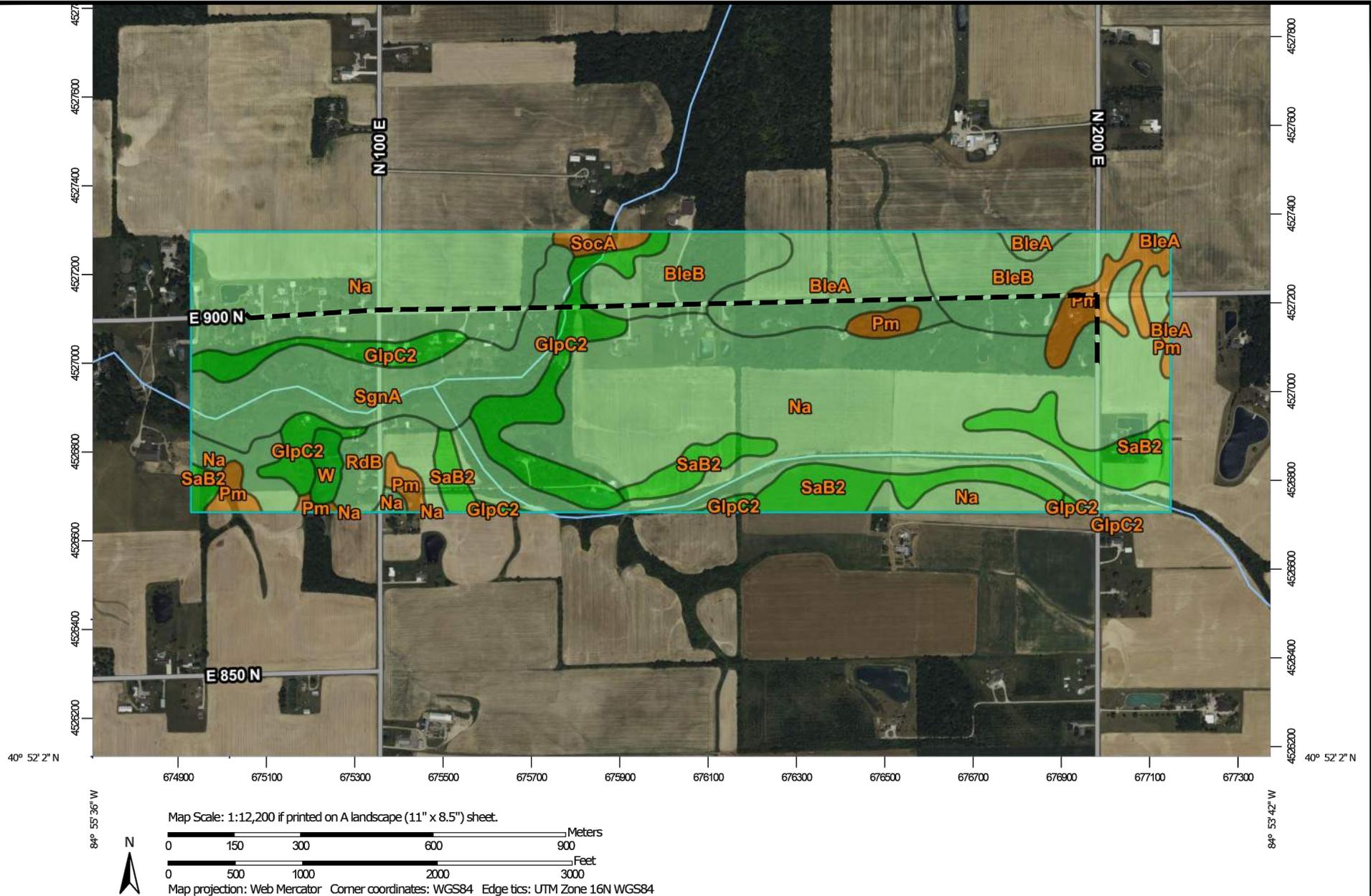
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
HYDRIC SOILS LEGEND

FIGURE

1-10f2

Z:\Shared\IN Clients\A-L\Adams County RSD\522170 - 2024 Sanitary Sewer Extensions\06 CAD\ib PER Reports\ACAD\NEW Environmental Maps\Area 7\Area 7 PER Figures.dwg PRINTED: 3/13/2024 10:44 AM BY: Bryce Pensing



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA -
HYDRIC SOILS MAP

FIGURE

1-10g1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features

 Streams and Canals

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	6	23.2	6.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	6	33.0	9.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	0	27.4	7.9%
Na	Nappanee silt loam, 0 to 3 percent slopes	5	175.7	50.5%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	14.5	4.2%
RdB	Rawson loam, 2 to 6 percent slopes	5	8.5	2.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	0	28.3	8.1%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	7	32.8	9.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	94	2.2	0.6%
W	Water	0	2.5	0.7%
Totals for Area of Interest			348.1	100.0%



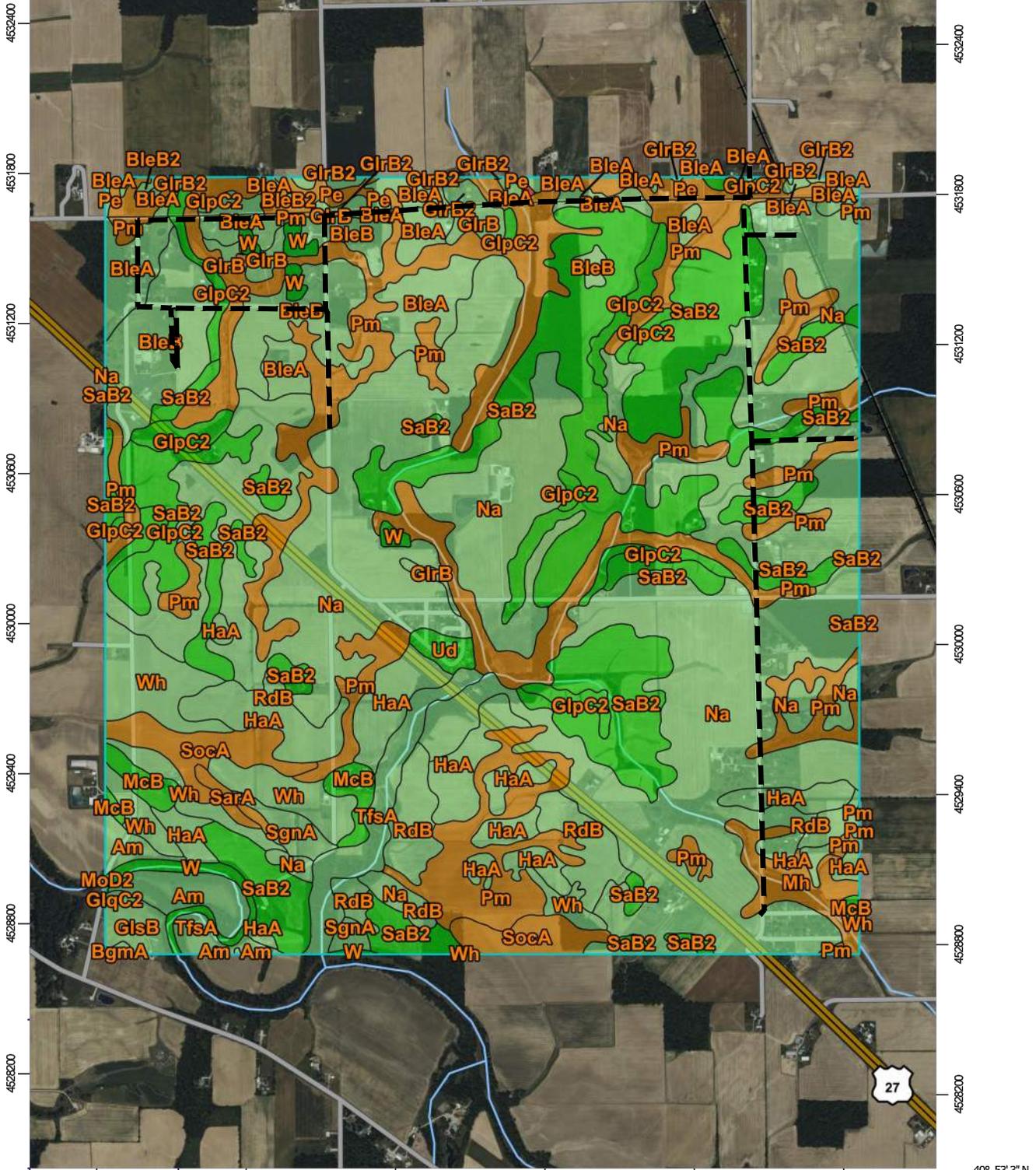
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 900 N EXTENDED SERVICE AREA -
HYDRIC SOILS LEGEND**

FIGURE

1-10g2

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40° 53' 3" N

40° 53' 3" N

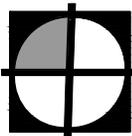
85° 0' 41" W

84° 58' 5" W

Map Scale: 1:23,500 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84



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 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
 HYDRIC SOILS MAP

FIGURE

1-10h1

Hydric Rating by Map Unit

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features
 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background
 Aerial Photography

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	7	27.2	1.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	9	1.0	0.0%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	6	76.5	3.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	6	105.2	4.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	0	54.4	2.3%
GlcC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	7	0.9	0.0%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	6	17.9	0.8%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	6	11.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	8	116.8	5.0%
McB	Martinsville loam, 2 to 6 percent slopes	0	20.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	93	24.5	1.0%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	0	0.1	0.0%
Na	Nappanee silt loam, 0 to 3 percent slopes	5	774.9	33.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	339.9	14.6%
RdB	Rawson loam, 2 to 6 percent slopes	5	54.5	2.3%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	0	406.5	17.4%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	93	3.9	0.2%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	7	13.5	0.6%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	94	46.7	2.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	5	42.1	1.8%
Ud	Udorthents, loamy	0	7.5	0.3%
W	Water	0	21.7	0.9%
Wh	Whitaker silt loam	3	79.4	3.4%
Subtotals for Soil Survey Area			2,247.0	96.3%
Totals for Area of Interest			2,333.7	100.0%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	6	27.1	1.2%
BleB2	Blount silt loam, end moraine, 1 to 4 percent slopes, eroded	6	1.8	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	0	3.5	0.1%
GlrB2	Glynwood silt loam, end moraine, 2 to 6 percent slopes, eroded	6	11.9	0.5%
Pe	Pewamo silty clay loam, 0 to 1 percent slopes	91	41.7	1.8%
Wh	Washtenaw silt loam	100	0.7	0.0%
Subtotals for Soil Survey Area			86.6	3.7%
Totals for Area of Interest			2,333.7	100.0%



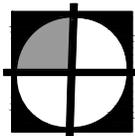
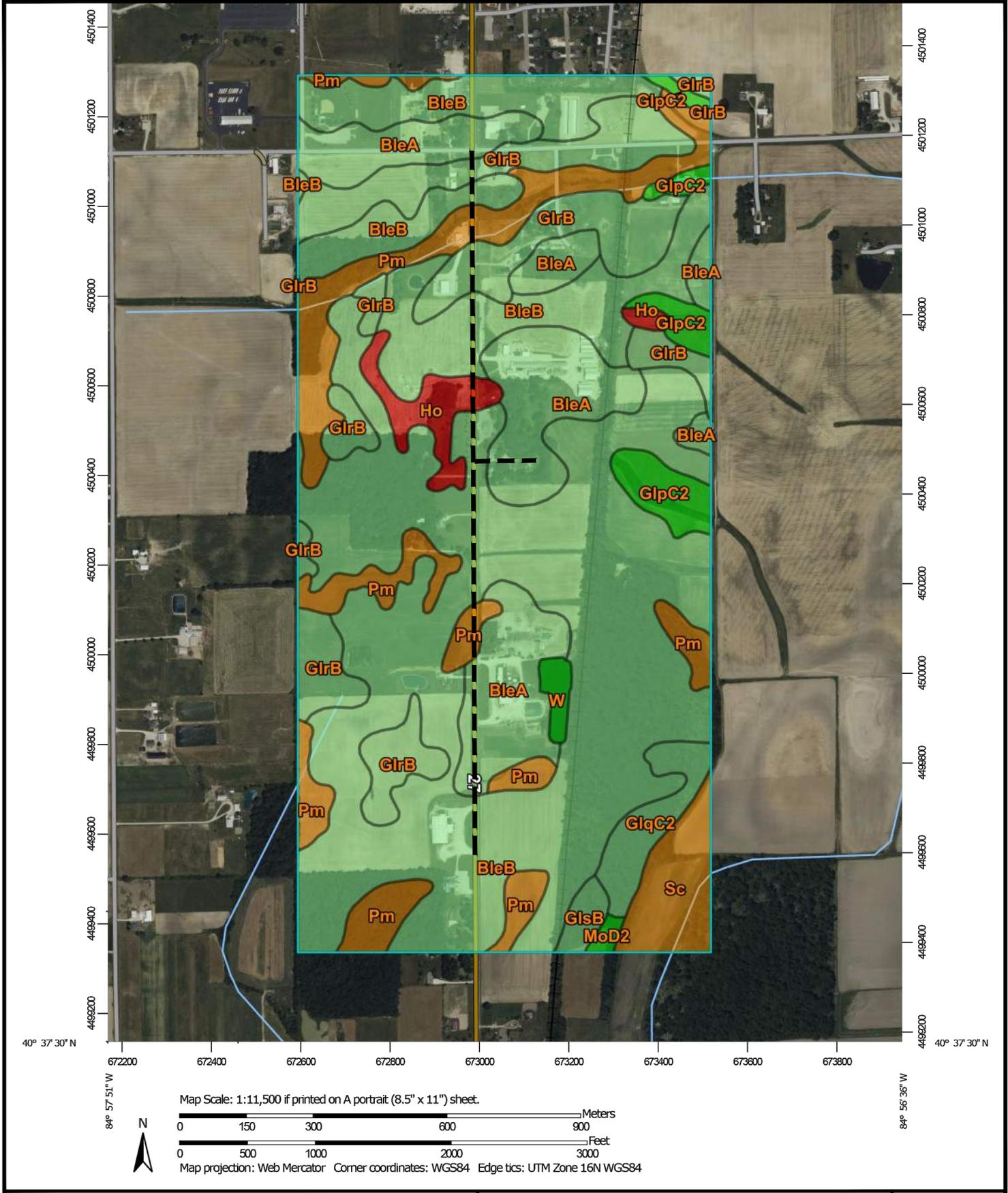
2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
 HYDRIC SOILS LEGEND

FIGURE

1-10h2

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 ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 SOUTH SERVICE AREA -
 HYDRIC SOILS MAP

FIGURE

1-10i1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features

 Streams and Canals

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	6	60.5	13.5%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	6	230.1	51.3%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	0	12.3	2.7%
GlcC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	7	9.3	2.1%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	6	58.4	13.0%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	6	3.0	0.7%
Ho	Houghton muck, drained	100	9.6	2.1%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	0	1.1	0.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	49.3	11.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	93	12.8	2.8%
W	Water	0	2.4	0.5%
Totals for Area of Interest			448.7	100.0%



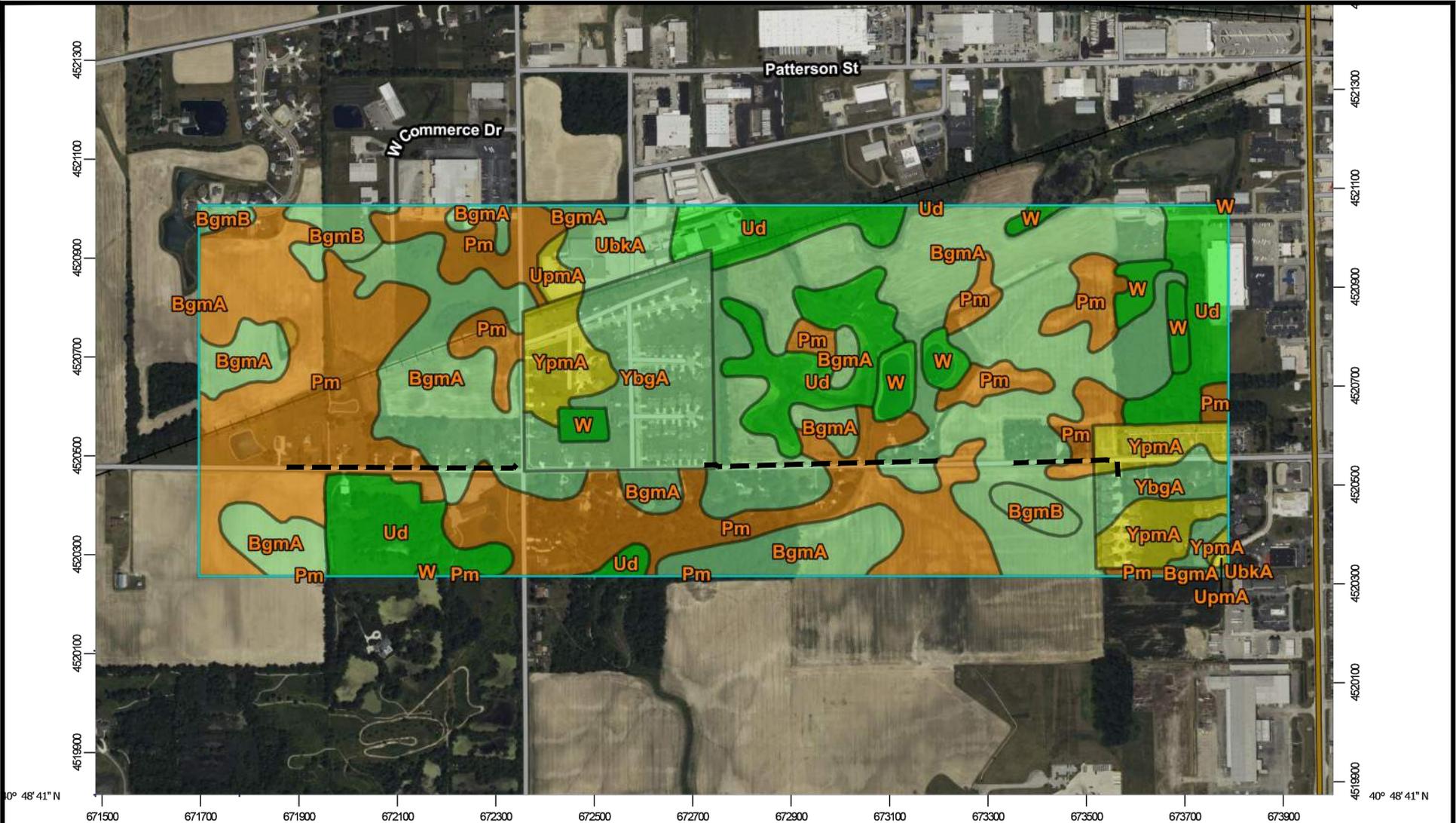
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**US 27 SOUTH SERVICE AREA -
HYDRIC SOILS LEGEND**

FIGURE

1-10i2

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Map Scale: 1:11,500 if printed on A landscape (11" x 8.5") sheet.

0 150 300 600 900 Meters

0 500 1000 2000 3000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA -
HYDRIC SOILS MAP

FIGURE

1-10j1

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads
- Aerial Photography

Background

Aerial Photography

Soil Rating Lines

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features

Streams and Canals

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	9	138.4	35.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	9	8.8	2.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	116.3	29.9%
UbKA	Urban land-Blount complex, 0 to 2 percent slopes	6	7.0	1.8%
Ud	Udorthents, loamy	0	50.6	13.0%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	37	2.2	0.6%
W	Water	0	11.7	3.0%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	9	34.1	8.8%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	56	20.2	5.2%
Totals for Area of Interest			389.4	100.0%



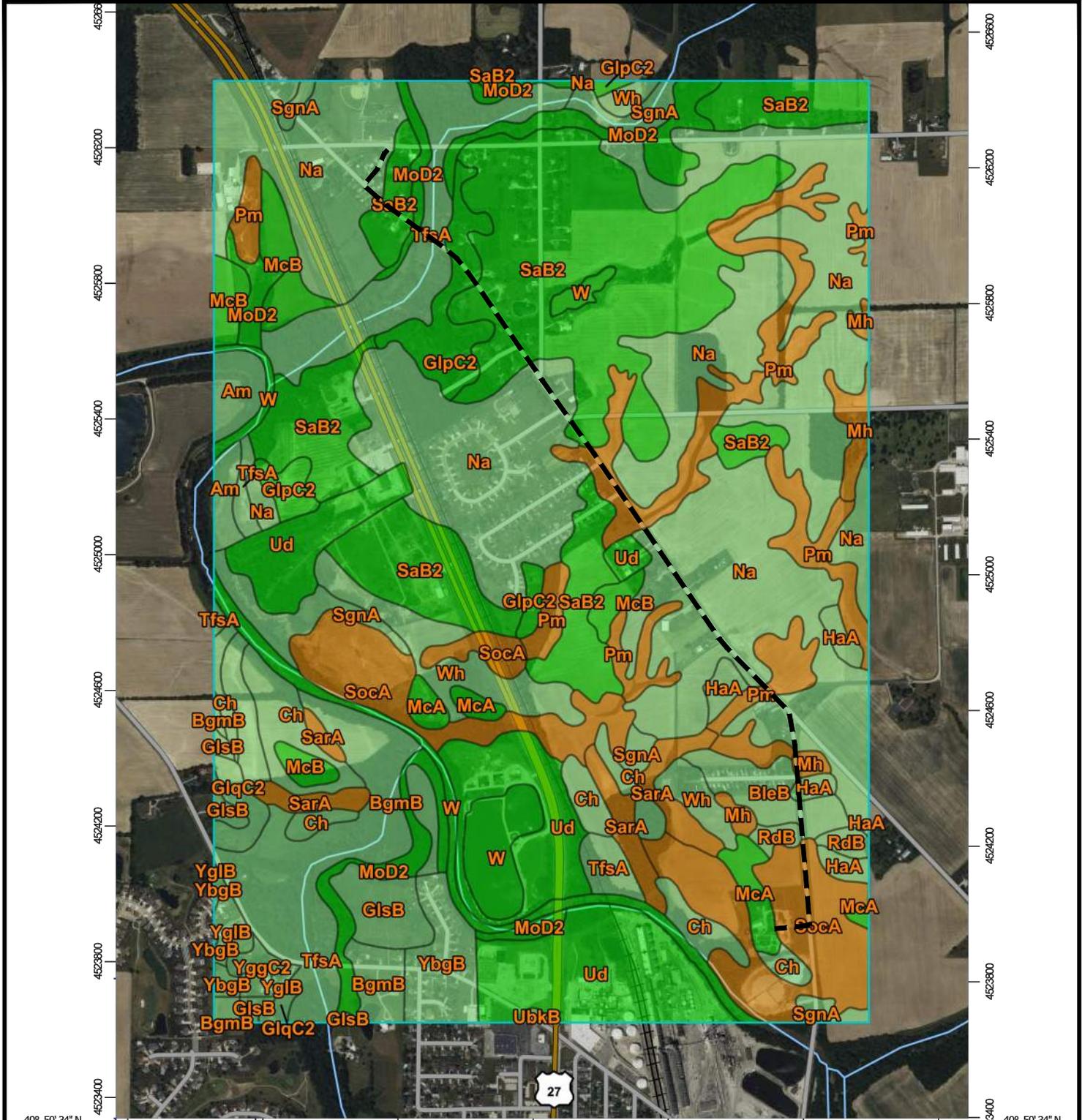
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR W 500 N SERVICE AREA -
HYDRIC SOILS LEGEND**

FIGURE

1-10j2

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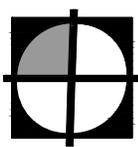


40° 50' 34" N 672600 673000 673400 673800 674200 674600 675000 4523400 4523800 4524200 4524600 4525000 4525400 4525800 4526200 4526600

Map Scale: 1:16,300 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
HYDRIC SOILS MAP

FIGURE

1-10k1

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

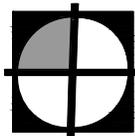
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	7	13.2	1.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	9	14.5	1.1%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	6	14.4	1.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	5	37.1	2.8%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	0	27.8	2.1%
GlcC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	7	8.1	0.6%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	6	16.8	1.3%
HaA	Haskins loam, 0 to 3 percent slopes	8	10.9	0.8%
McA	Martinsville loam, 0 to 2 percent slopes	0	13.3	1.0%
McB	Martinsville loam, 2 to 6 percent slopes	0	23.8	1.8%
Mh	Milford silty clay loam, 0 to 2 percent slopes	93	10.8	0.8%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	0	42.2	3.2%
Na	Nappanee silt loam, 0 to 3 percent slopes	5	347.7	26.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	91	79.7	6.0%
RdB	Rawson loam, 2 to 6 percent slopes	5	5.0	0.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	0	227.3	17.0%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	93	22.3	1.7%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	7	31.7	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	94	85.0	6.4%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	5	103.0	7.7%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	6	0.6	0.0%
Ud	Udorthents, loamy	0	101.5	7.6%
W	Water	0	37.9	2.8%
Wh	Whitaker silt loam	3	30.7	2.3%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	9	20.1	1.5%
YggC2	Glynwood-Urban land complex, ground moraine, 6 to 12 percent slopes, eroded	7	3.5	0.3%
YglB	Glynwood-Urban land complex, 2 to 6 percent slopes	5	5.9	0.4%
Totals for Area of Interest			1,334.9	100.0%



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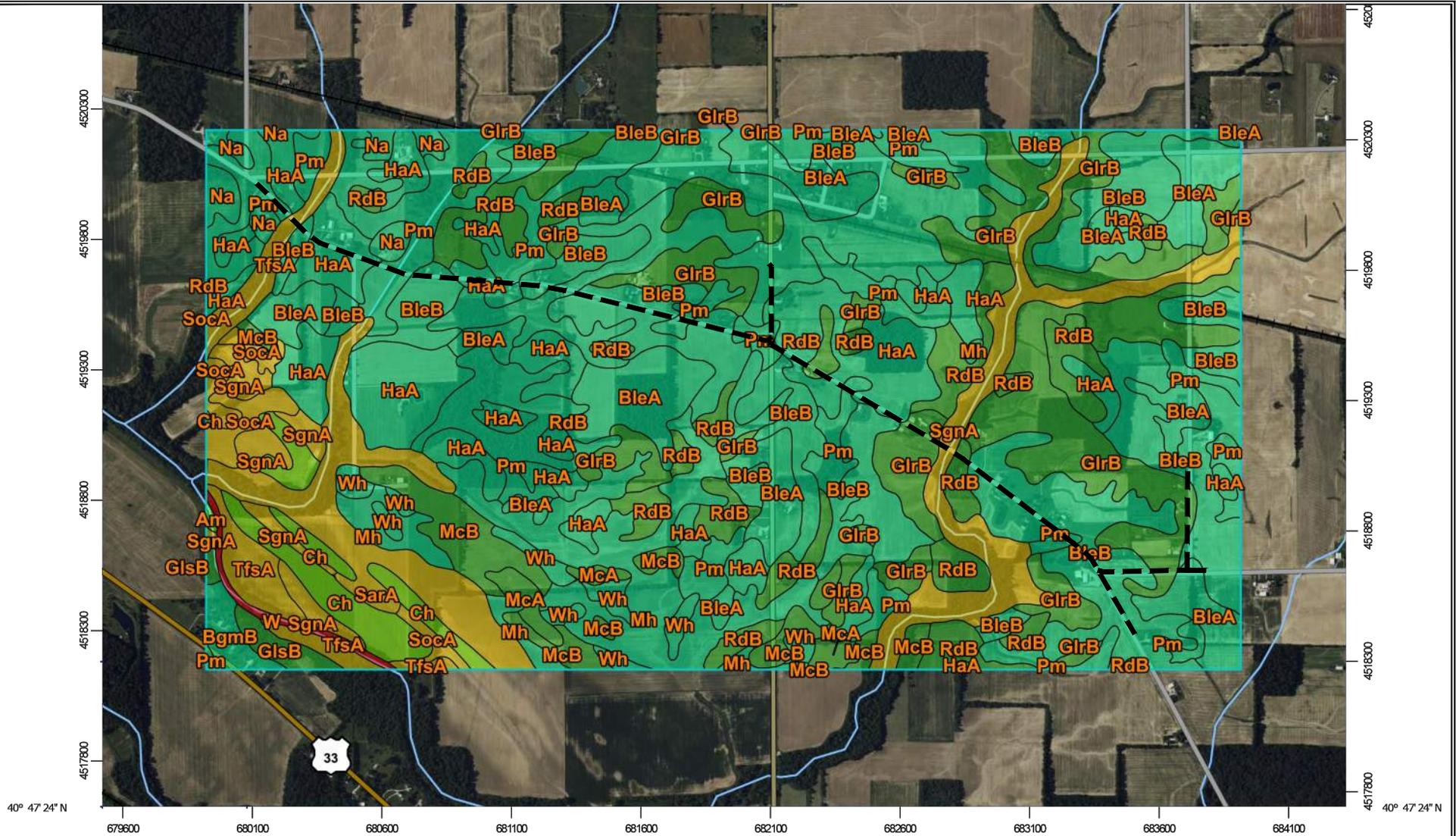
2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
 HYDRIC SOILS LEGEND

FIGURE

1-10k2

Z:\Shared\IN Clients\A-L\Adams County RSD\522170 - 2024 Sanitary Sewer Extensions\06 CAD\B PER Reports\ACAD\NEW Environmental Maps\Area 1\Area 1 PER Figures.dwg PRINTED: 3/13/2024 10:44 AM BY: Bryce Persinger



Map Scale: 1:21,900 if printed on A landscape (11" x 8.5") sheet.

0 300 600 1200 1800 Meters

0 1000 2000 4000 6000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA -
FARMLAND DESIGNATION MAP

FIGURE
1-11a1

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

MAP LEGEND

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if thawed
- Farmland of local importance, if irrigated

- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of unique importance
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

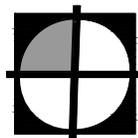
Aerial Photography

- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**N. PIQUA ROAD - SR 101 SERVICE AREA -
FARMLAND DESIGNATION LEGEND**

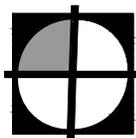
FIGURE

1-11a2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	0.8	0.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	Prime farmland if drained	11.5	0.6%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	Prime farmland if drained	158.0	7.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	Prime farmland if drained	437.1	21.3%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	47.4	2.3%
GlrB	Glywood silt loam, end moraine, 2 to 6 percent slopes	All areas are prime farmland	239.6	11.7%
GlsB	Glywood silt loam, ground moraine, 2 to 6 percent slopes	All areas are prime farmland	10.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	Prime farmland if drained	226.5	11.1%
McA	Martinsville loam, 0 to 2 percent slopes	All areas are prime farmland	14.9	0.7%
McB	Martinsville loam, 2 to 6 percent slopes	All areas are prime farmland	55.0	2.7%
Mh	Milford silty clay loam, 0 to 2 percent slopes	Prime farmland if drained	119.3	5.8%
Na	Nappanee silt loam, 0 to 3 percent slopes	Prime farmland if drained	22.6	1.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	268.3	13.1%
RdB	Rawson loam, 2 to 6 percent slopes	All areas are prime farmland	154.6	7.5%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	74.6	3.6%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	110.0	5.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	20.8	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	43.6	2.1%
W	Water	Not prime farmland	6.9	0.3%
Wh	Whitaker silt loam	Prime farmland if drained	26.9	1.3%
Totals for Area of Interest			2,049.4	100.0%

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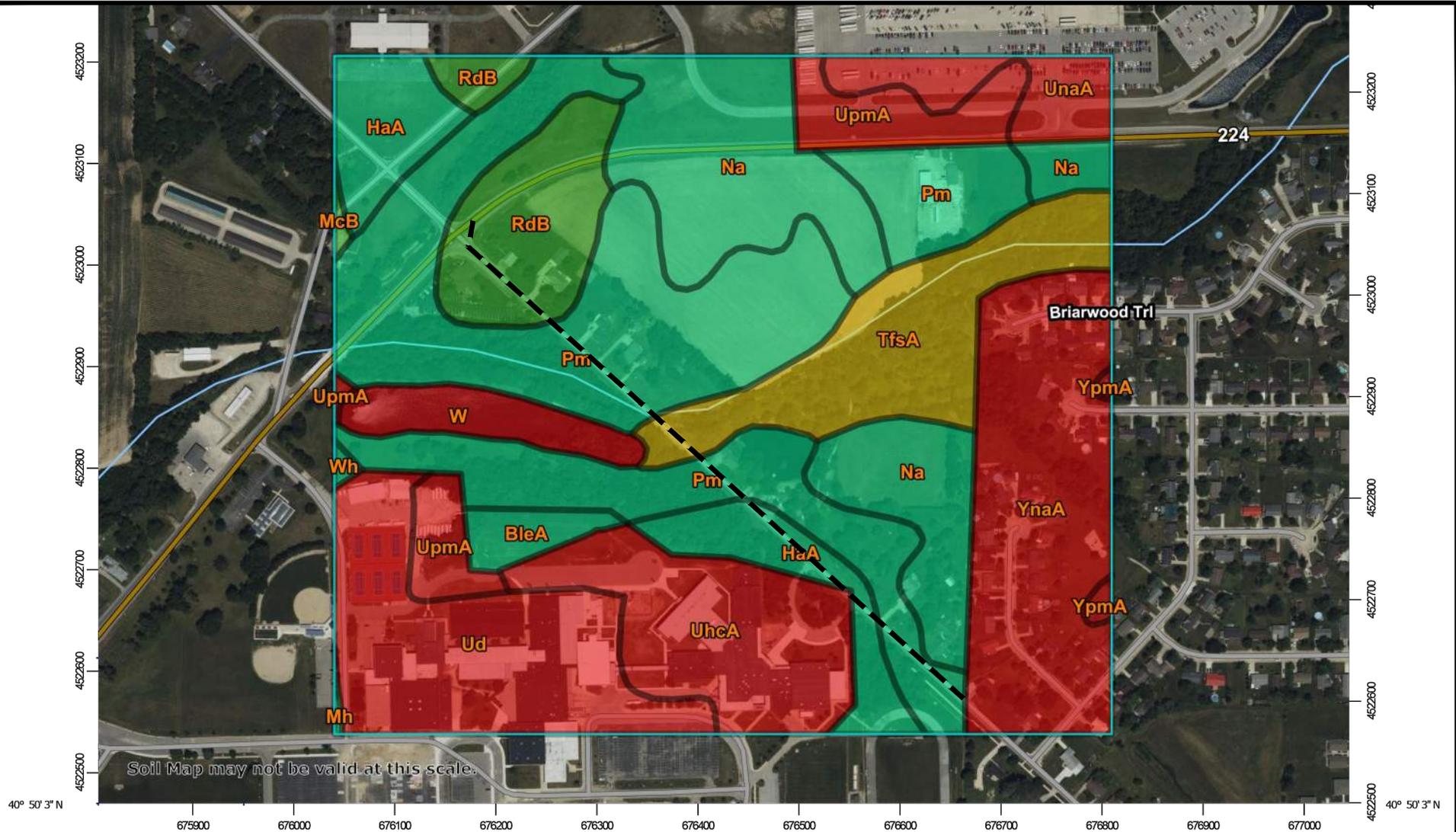
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**N. PIQUA ROAD - SR 101 SERVICE AREA -
FARMLAND DESIGNATION TABLE**

FIGURE

1-11a3

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Soil Map may not be valid at this scale.

84° 54' 53" W



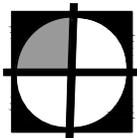
Map Scale: 1:5,660 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 250 500 1000 1500 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84

84° 54' 0" W



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - US 224 SERVICE AREA -
 FARMLAND DESIGNATION MAP

FIGURE

1-11b1

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

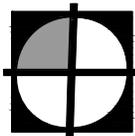
Background

- Aerial Photography

- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - US 224 SERVICE AREA -
 FARMLAND DESIGNATION LEGEND

FIGURE

1-11b2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	Prime farmland if drained	1.6	1.2%
HaA	Haskins loam, 0 to 3 percent slopes	Prime farmland if drained	7.5	5.9%
McB	Martinsville loam, 2 to 6 percent slopes	All areas are prime farmland	0.2	0.2%
Mh	Milford silty clay loam, 0 to 2 percent slopes	Prime farmland if drained	0.1	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	Prime farmland if drained	16.6	13.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	33.0	25.9%
RdB	Rawson loam, 2 to 6 percent slopes	All areas are prime farmland	7.8	6.1%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	10.4	8.2%
Ud	Udorthents, loamy	Not prime farmland	12.8	10.0%
Uhca	Urban land-Haskins complex, 0 to 3 percent slopes	Not prime farmland	10.0	7.8%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	Not prime farmland	3.6	2.8%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	Not prime farmland	5.2	4.1%
W	Water	Not prime farmland	3.2	2.5%
Wh	Whitaker silt loam	Prime farmland if drained	0.2	0.1%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	Not prime farmland	15.1	11.9%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	Not prime farmland	0.3	0.3%
Totals for Area of Interest			127.5	100.0%



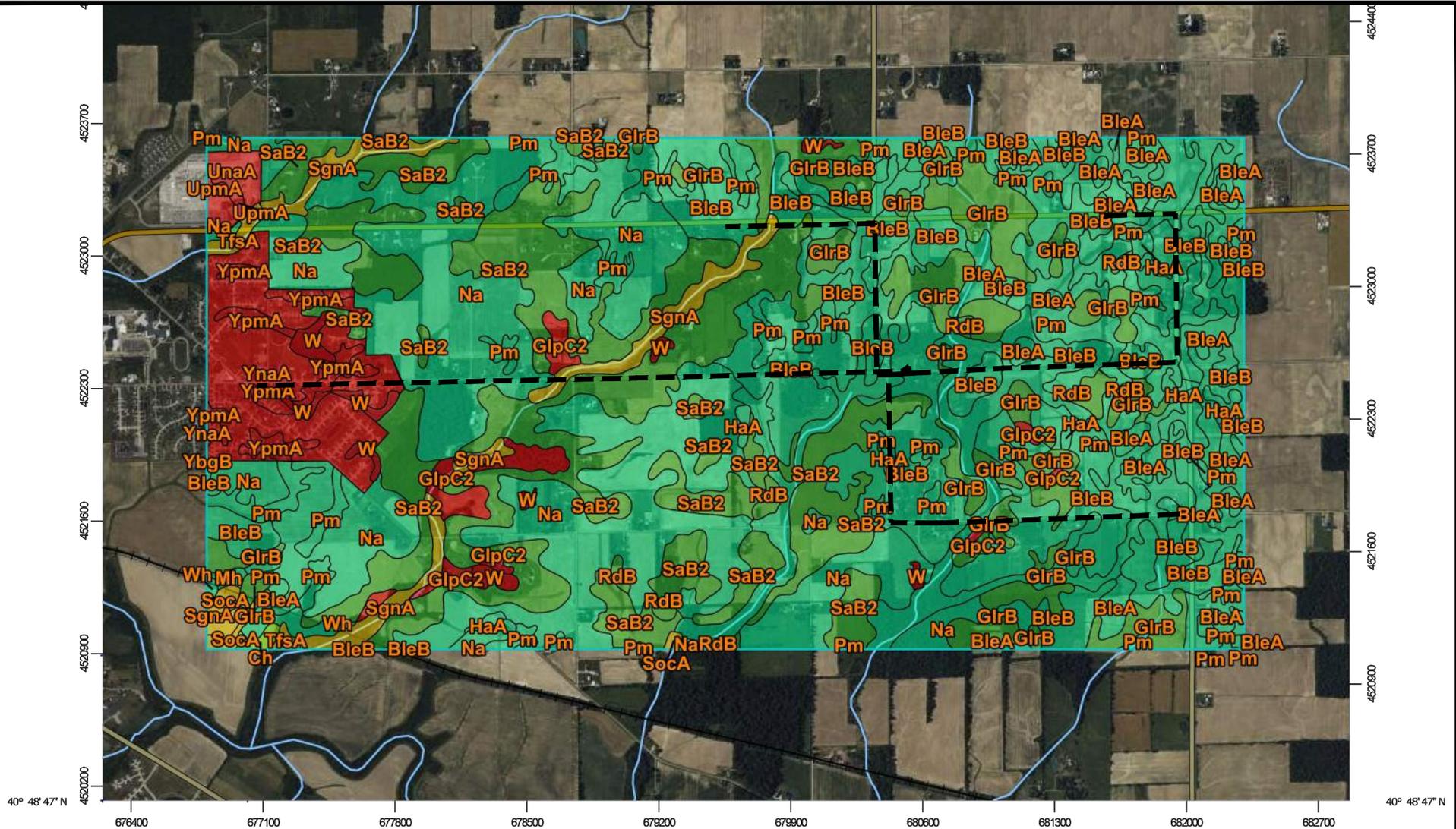
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**N. PIQUA ROAD - US 224 SERVICE AREA -
FARMLAND DESIGNATION TABLE**

FIGURE

1-11b3

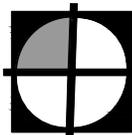
Z:\Shared\IN Clients A-L\Adams County RSD\GIS\2170 - 2024 Sanitary Sewer Extensions\06 CAD\ib PER Reports\ACAD\NEW Environmental Maps\Area 3\Area 3 PER Figures.dwg PRINTED: 3/13/2024 10:45 AM BY: Bryce Persinger



Map Scale: 1:30,200 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 600 N - SR 101 SERVICE AREA -
 FARMLAND DESIGNATION MAP

FIGURE

1-11c1

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if thawed
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of unique importance
-  Not rated or not available

Water Features

-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

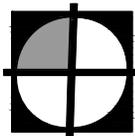
Background

-  Aerial Photography

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

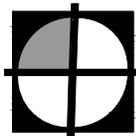
CR E 600 N - SR 101 SERVICE AREA -
 FARMLAND DESIGNATION LEGEND

FIGURE

1-11c2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	Prime farmland if drained	158.5	4.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	Prime farmland if drained	653.9	17.7%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	4.4	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	Not prime farmland	50.1	1.4%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	All areas are prime farmland	290.3	7.9%
HaA	Haskins loam, 0 to 3 percent slopes	Prime farmland if drained	33.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	Prime farmland if drained	3.6	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	Prime farmland if drained	822.7	22.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	578.5	15.7%
RdB	Rawson loam, 2 to 6 percent slopes	All areas are prime farmland	27.8	0.8%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	All areas are prime farmland	673.3	18.3%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	88.9	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	11.5	0.3%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	10.3	0.3%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	Not prime farmland	23.5	0.6%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	Not prime farmland	3.0	0.1%
W	Water	Not prime farmland	33.2	0.9%
Wh	Whitaker silt loam	Prime farmland if drained	14.5	0.4%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	Not prime farmland	0.0	0.0%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	Not prime farmland	161.5	4.4%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	Not prime farmland	44.2	1.2%
Totals for Area of Interest			3,687.2	100.0%



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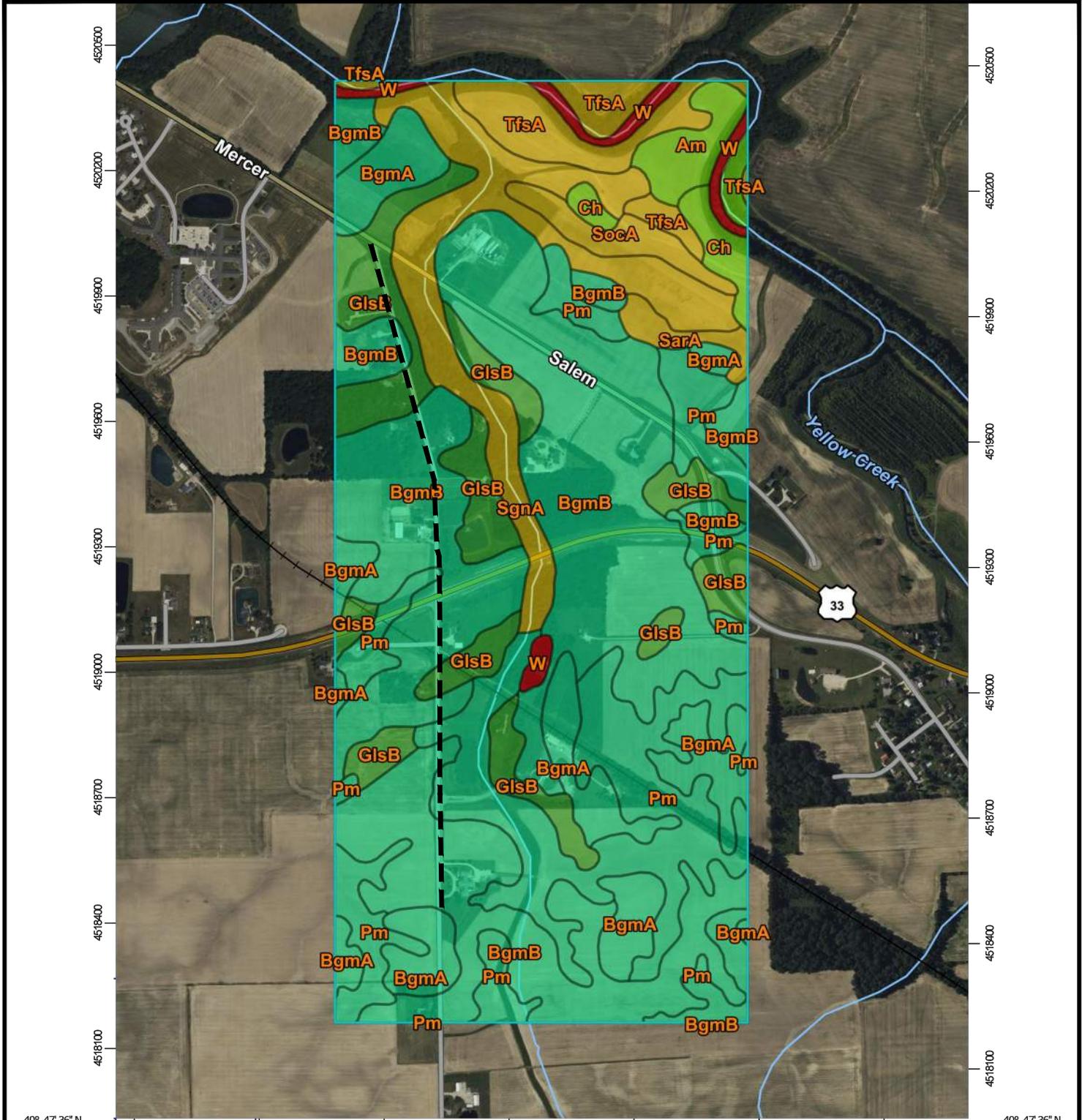
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 600 N - SR 101 SERVICE AREA -
FARMLAND DESIGNATION TABLE**

FIGURE

1-11c3

Z:\Shared\IN\Clients\A-L\Adams County RSD\S22170 - 2024 Sanitary Sewer Extensions\06_CADD\PER Reports\CAD\NEW Environmental\Maps\Area 4\Area 4_PER Figures.dwg PRINTED: 3/13/2024 10:45 AM BY: Bryce Pestinger



40° 47' 36" N

40° 47' 36" N

84° 54' 30" W

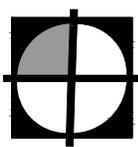
84° 53' 3" W



Map Scale: 1:13,200 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 200 E SERVICE AREA -
 FARMLAND DESIGNATION MAP

FIGURE

1-11d1

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated



2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT
 CR N 200 E SERVICE AREA -
 FARMLAND DESIGNATION LEGEND

FIGURE
 1-11d2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	12.2	2.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	Prime farmland if drained	52.7	9.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	Prime farmland if drained	221.7	40.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	7.5	1.4%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	All areas are prime farmland	60.7	11.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	103.3	18.7%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	5.0	0.9%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	49.2	8.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	8.9	1.6%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	24.1	4.4%
W	Water	Not prime farmland	8.2	1.5%
Totals for Area of Interest			553.5	100.0%

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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 200 E SERVICE AREA -
FARMLAND DESIGNATION TABLE**

FIGURE

1-11d3

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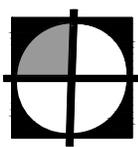


Map Scale: 1:13,100 if printed on A portrait (8.5" x 11") sheet.

0 150 300 600 900 Meters

0 500 1000 2000 3000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA -
FARMLAND DESIGNATION MAP

FIGURE

1-11e1

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

Farmland of unique importance
 Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Farmland of unique importance
- Not rated or not available

Water Features

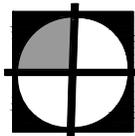
Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

Aerial Photography



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 ADAMS COUNTY REGIONAL SEWER DISTRICT

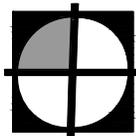
CR N 100 E - CR E 400 N SERVICE AREA -
 FARMLAND DESIGNATION LEGEND

FIGURE

1-11e2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	Prime farmland if drained	156.6	18.3%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	Prime farmland if drained	223.0	26.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	11.4	1.3%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	All areas are prime farmland	94.7	11.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	120.1	14.1%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	4.1	0.5%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	50.6	5.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	8.6	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	23.4	2.7%
UbkA	Urban land-Blount complex, 0 to 2 percent slopes	Not prime farmland	1.7	0.2%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	Not prime farmland	29.3	3.4%
Ud	Udorthents, loamy	Not prime farmland	15.4	1.8%
W	Water	Not prime farmland	24.8	2.9%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	Not prime farmland	25.1	2.9%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	Not prime farmland	53.9	6.3%
YglB	Glynwood-Urban land complex, 2 to 6 percent slopes	Not prime farmland	12.1	1.4%
Totals for Area of Interest			854.7	100.0%



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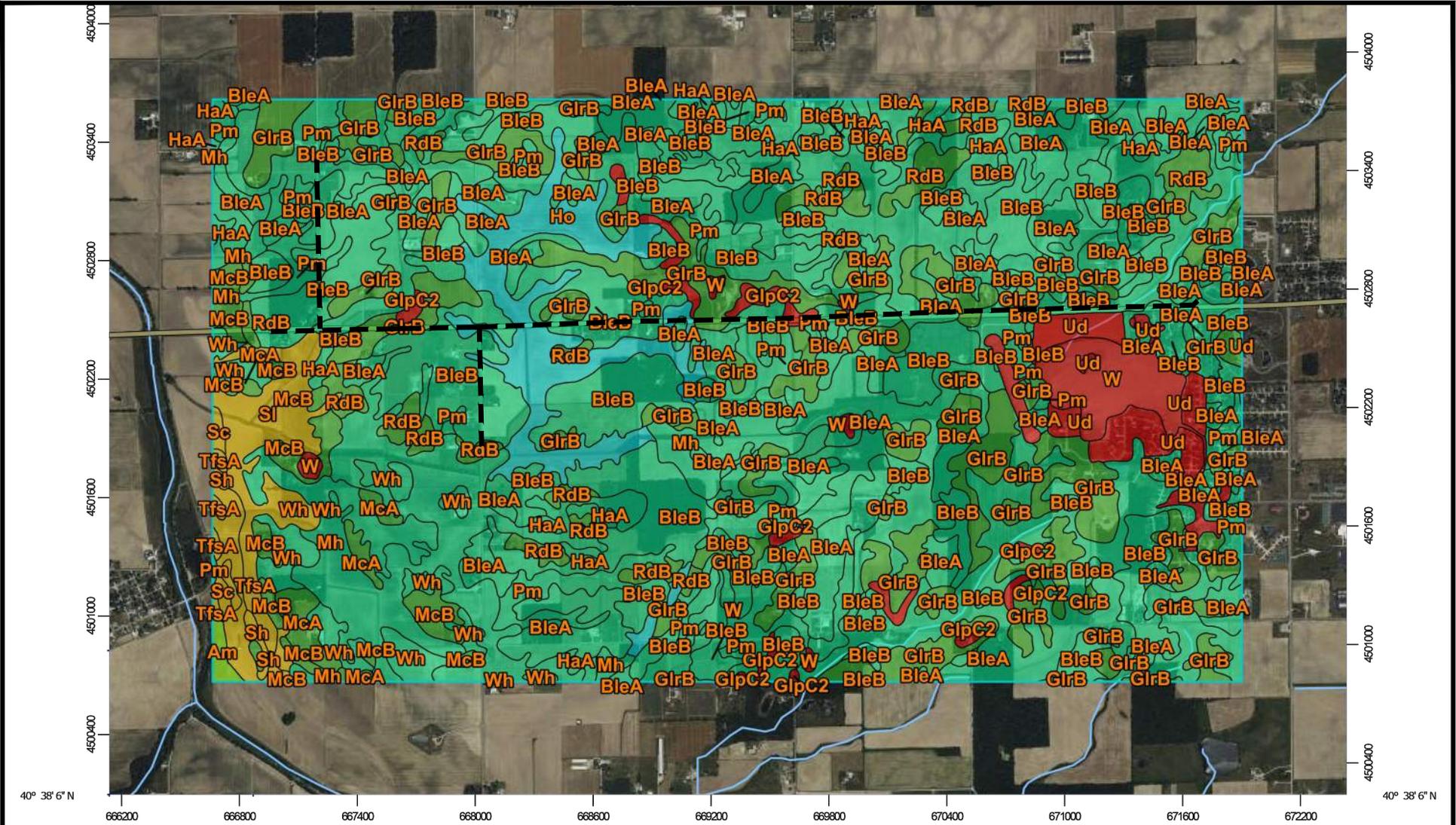
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR N 100 E - CR E 400 N SERVICE AREA -
FARMLAND DESIGNATION TABLE**

FIGURE

1-11e3

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Map Scale: 1:28,800 if printed on A landscape (11" x 8.5") sheet.

0 400 800 1600 2400 Meters

0 1000 2000 4000 6000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA -
FARMLAND DESIGNATION MAP

FIGURE

1-11f1

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of unique importance
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

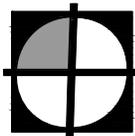
Background

Aerial Photography

- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

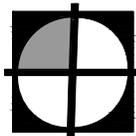
US 218 - CR S 400 W SERVICE AREA -
FARMLAND DESIGNATION LEGEND

FIGURE

1-11f2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	6.8	0.2%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	Prime farmland if drained	435.9	11.4%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	Prime farmland if drained	890.9	23.2%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	Not prime farmland	39.8	1.0%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	All areas are prime farmland	501.7	13.1%
HaA	Haskins loam, 0 to 3 percent slopes	Prime farmland if drained	45.4	1.2%
Ho	Houghton muck, drained	Farmland of statewide importance	158.5	4.1%
McA	Martinsville loam, 0 to 2 percent slopes	All areas are prime farmland	31.7	0.8%
McB	Martinsville loam, 2 to 6 percent slopes	All areas are prime farmland	62.9	1.6%
Mh	Milford silty clay loam, 0 to 2 percent slopes	Prime farmland if drained	263.5	6.9%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	873.5	22.8%
RdB	Rawson loam, 2 to 6 percent slopes	All areas are prime farmland	115.6	3.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	32.1	0.8%
Sh	Shoals clay loam, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	8.2	0.2%
Sl	Sloan loam, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	82.9	2.2%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	8.1	0.2%
Ud	Udorthents, loamy	Not prime farmland	62.2	1.6%
W	Water	Not prime farmland	97.8	2.6%
Wh	Whitaker silt loam	Prime farmland if drained	114.5	3.0%
Totals for Area of Interest			3,832.6	100.0%



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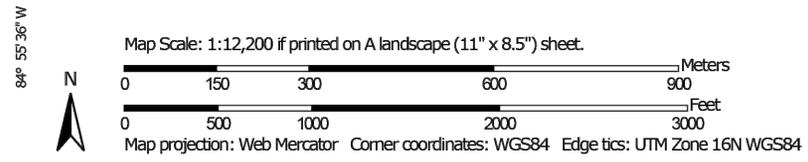
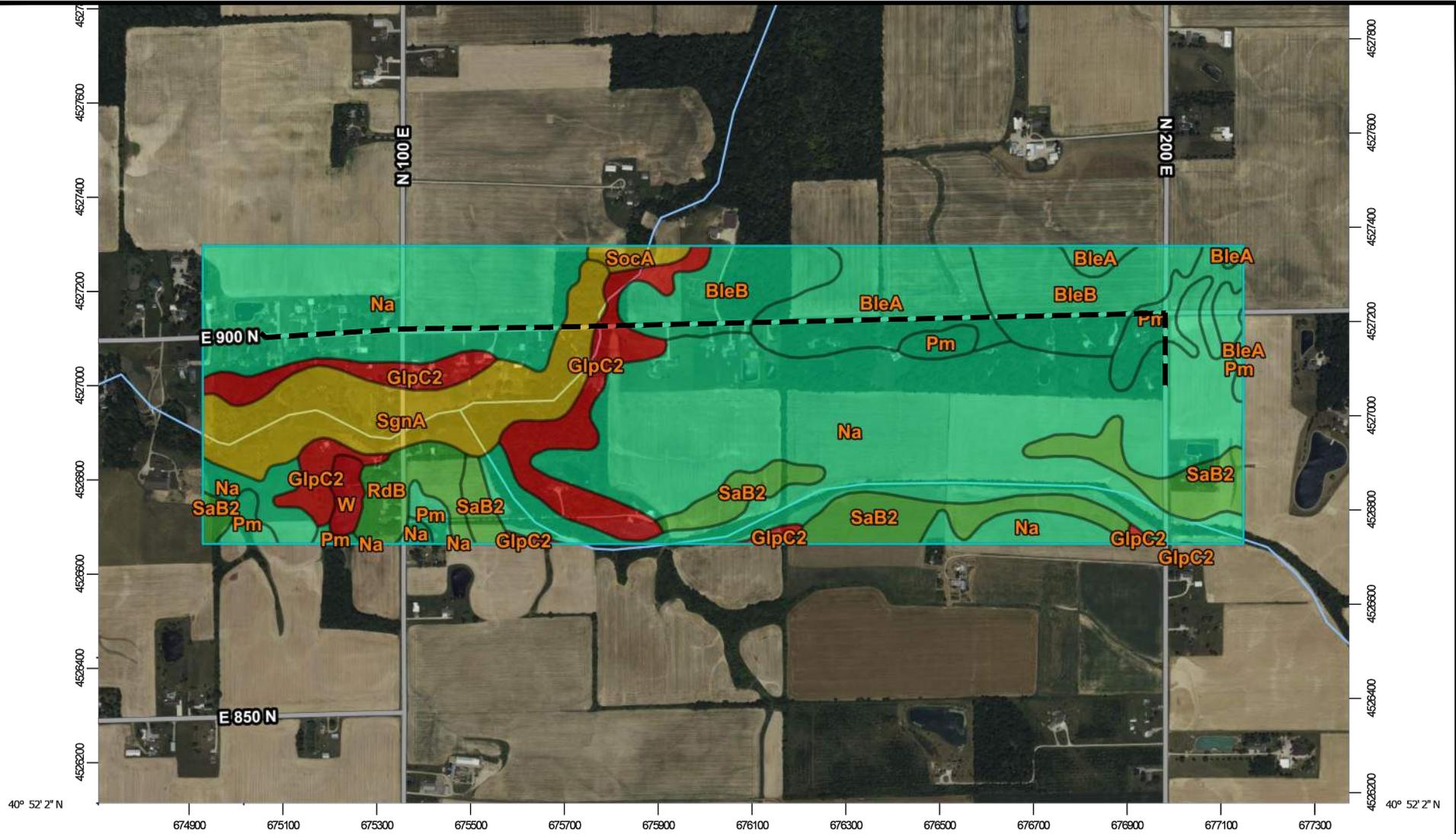
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**US 218 - CR S 400 W SERVICE AREA -
FARMLAND DESIGNATION TABLE**

FIGURE

1-11f3

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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA -
FARMLAND DESIGNATION MAP

FIGURE

1-11g1

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of unique importance
-  Not rated or not avail

Water Features

-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

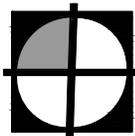
Background

-  Aerial Photography

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated



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**2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 900 N EXTENDED SERVICE AREA -
 FARMLAND DESIGNATION LEGEND**

FIGURE

1-11g2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	Prime farmland if drained	23.2	6.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	Prime farmland if drained	33.0	9.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	Not prime farmland	27.4	7.9%
Na	Nappanee silt loam, 0 to 3 percent slopes	Prime farmland if drained	175.7	50.5%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	14.5	4.2%
RdB	Rawson loam, 2 to 6 percent slopes	All areas are prime farmland	8.5	2.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	All areas are prime farmland	28.3	8.1%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	32.8	9.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	2.2	0.6%
W	Water	Not prime farmland	2.5	0.7%
Totals for Area of Interest			348.1	100.0%



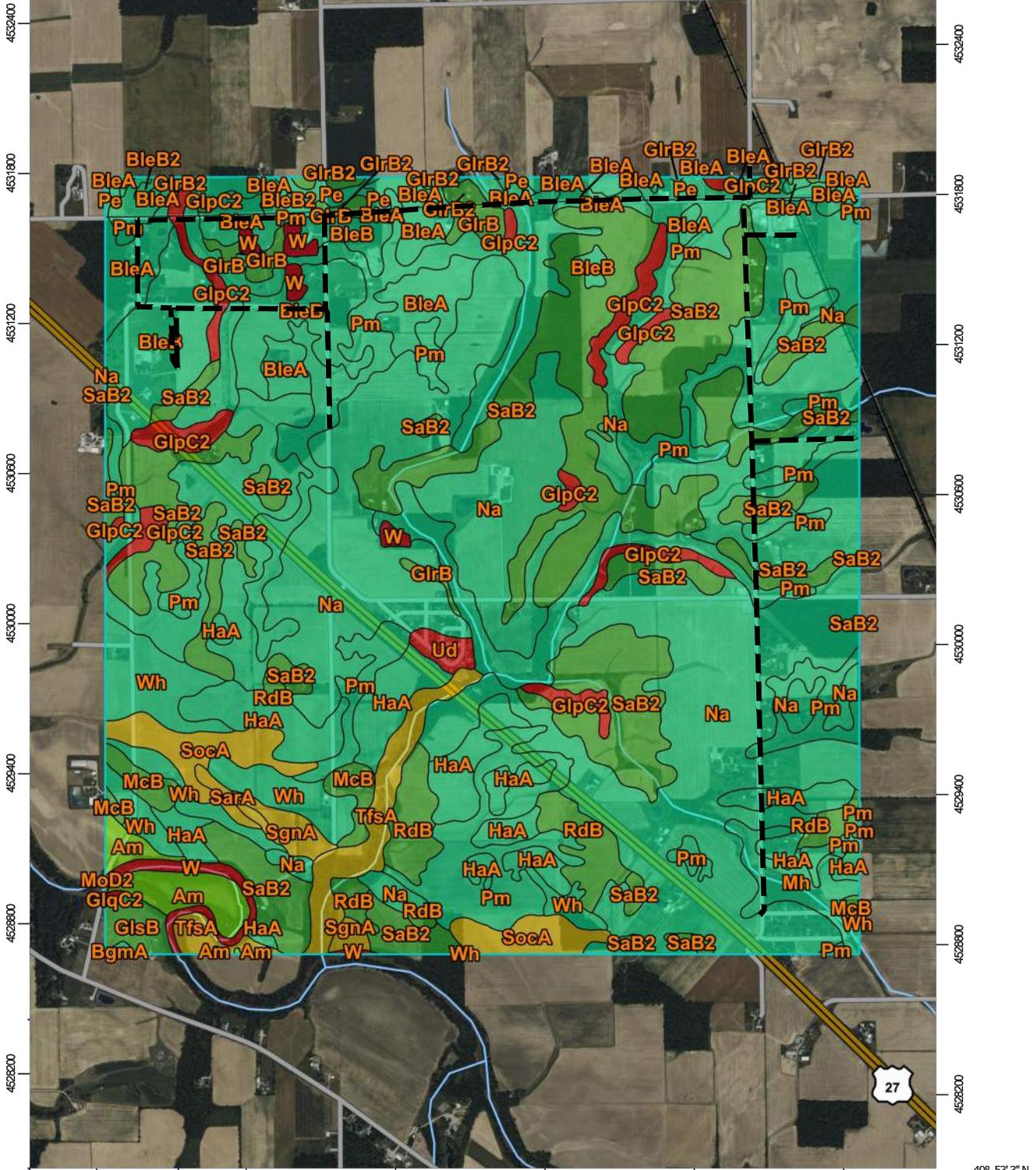
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA -
FARMLAND DESIGNATION TABLE

FIGURE

1-11g3

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40° 53' 3" N

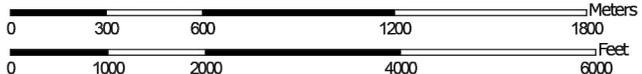
40° 53' 3" N

85° 0' 41" W

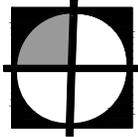
84° 58' 5" W



Map Scale: 1:23,500 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
 FARMLAND DESIGNATION MAP

FIGURE

1-11h1

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of unique importance
- Not rated or not available

Water Features

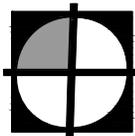
- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
 FARMLAND DESIGNATION LEGEND

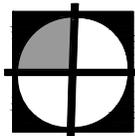
FIGURE

1-11h2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Amiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	27.2	1.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	Prime farmland if drained	1.0	0.0%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	Prime farmland if drained	76.5	3.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	Prime farmland if drained	105.2	4.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	Not prime farmland	54.4	2.3%
GlpC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	Not prime farmland	0.9	0.0%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	All areas are prime farmland	17.9	0.8%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	All areas are prime farmland	11.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	Prime farmland if drained	116.8	5.0%
McB	Martinsville loam, 2 to 6 percent slopes	All areas are prime farmland	20.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	Prime farmland if drained	24.5	1.0%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	Not prime farmland	0.1	0.0%
Na	Nappanee silt loam, 0 to 3 percent slopes	Prime farmland if drained	774.9	33.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	339.9	14.6%
RdB	Rawson loam, 2 to 6 percent slopes	All areas are prime farmland	54.5	2.3%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	All areas are prime farmland	406.5	17.4%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	3.9	0.2%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	13.5	0.6%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	46.7	2.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	42.1	1.8%
Ud	Udorthents, loamy	Not prime farmland	7.5	0.3%
W	Water	Not prime farmland	21.7	0.9%
Wh	Whitaker silt loam	Prime farmland if drained	79.4	3.4%
Subtotals for Soil Survey Area			2,247.0	96.3%
Totals for Area of Interest			2,333.7	100.0%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	Prime farmland if drained	27.1	1.2%
BleB2	Blount silt loam, end moraine, 1 to 4 percent slopes, eroded	Prime farmland if drained	1.8	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	Not prime farmland	3.5	0.1%
GlrB2	Glynwood silt loam, end moraine, 2 to 6 percent slopes, eroded	All areas are prime farmland	11.9	0.5%
Pe	Pewamo silty clay loam, 0 to 1 percent slopes	Prime farmland if drained	41.7	1.8%
Wh	Washtenaw silt loam	Prime farmland if drained	0.7	0.0%
Subtotals for Soil Survey Area			86.6	3.7%
Totals for Area of Interest			2,333.7	100.0%



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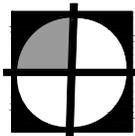
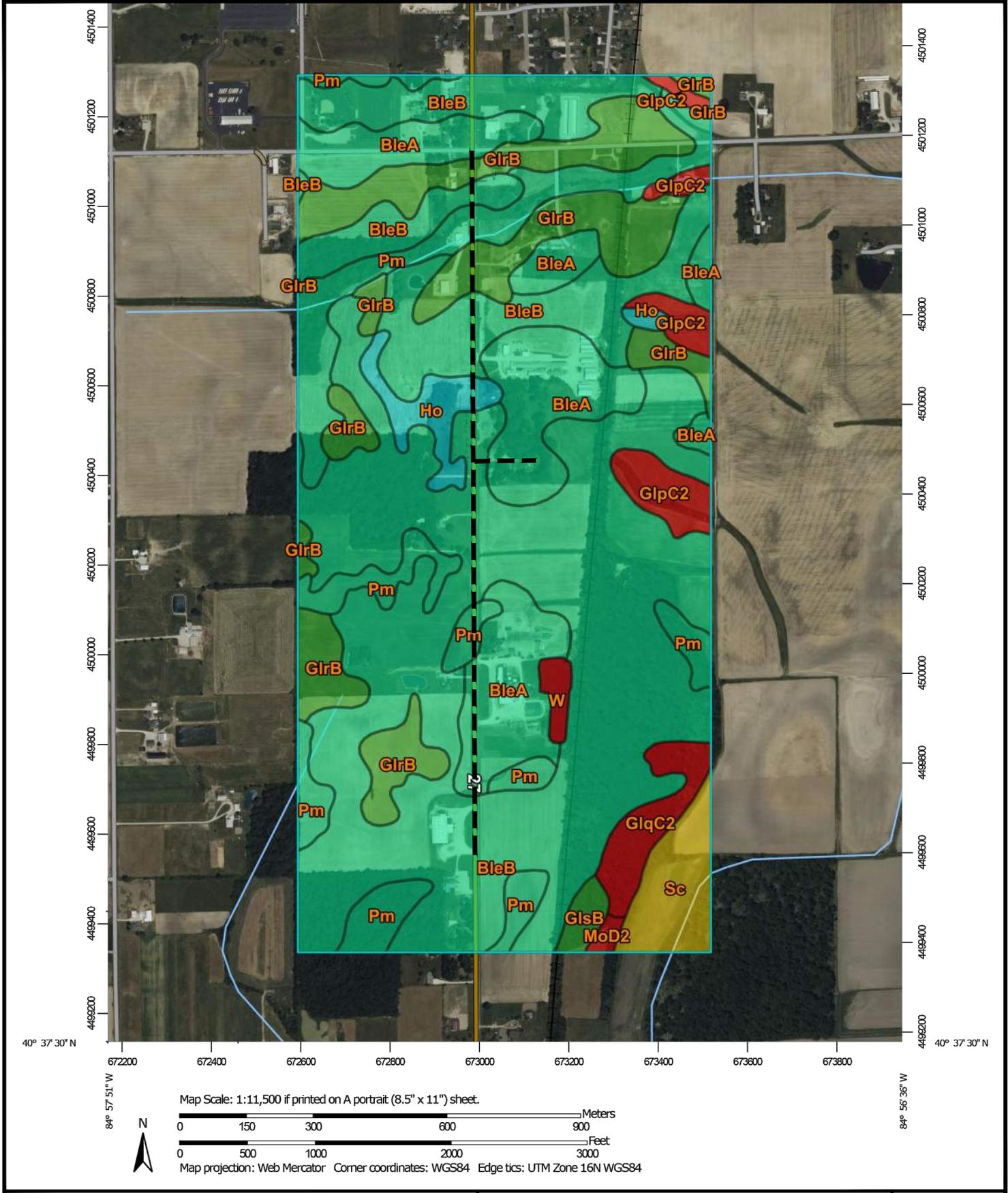
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR W 1200 N - CR N 200 W SERVICE AREA -
FARMLAND DESIGNATION TABLE**

FIGURE

1-11h3

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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 SOUTH SERVICE AREA -
 FARMLAND DESIGNATION MAP

FIGURE

1-11i1

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if drained and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of unique importance
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

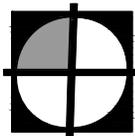
Background

Aerial Photography

- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 SOUTH SERVICE AREA -
FARMLAND DESIGNATION LEGEND

FIGURE

1-11i2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	Prime farmland if drained	60.5	13.5%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	Prime farmland if drained	230.1	51.3%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	Not prime farmland	12.3	2.7%
GlqC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	Not prime farmland	9.3	2.1%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	All areas are prime farmland	58.4	13.0%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	All areas are prime farmland	3.0	0.7%
Ho	Houghton muck, drained	Farmland of statewide importance	9.6	2.1%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	Not prime farmland	1.1	0.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	49.3	11.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	12.8	2.8%
W	Water	Not prime farmland	2.4	0.5%
Totals for Area of Interest			448.7	100.0%



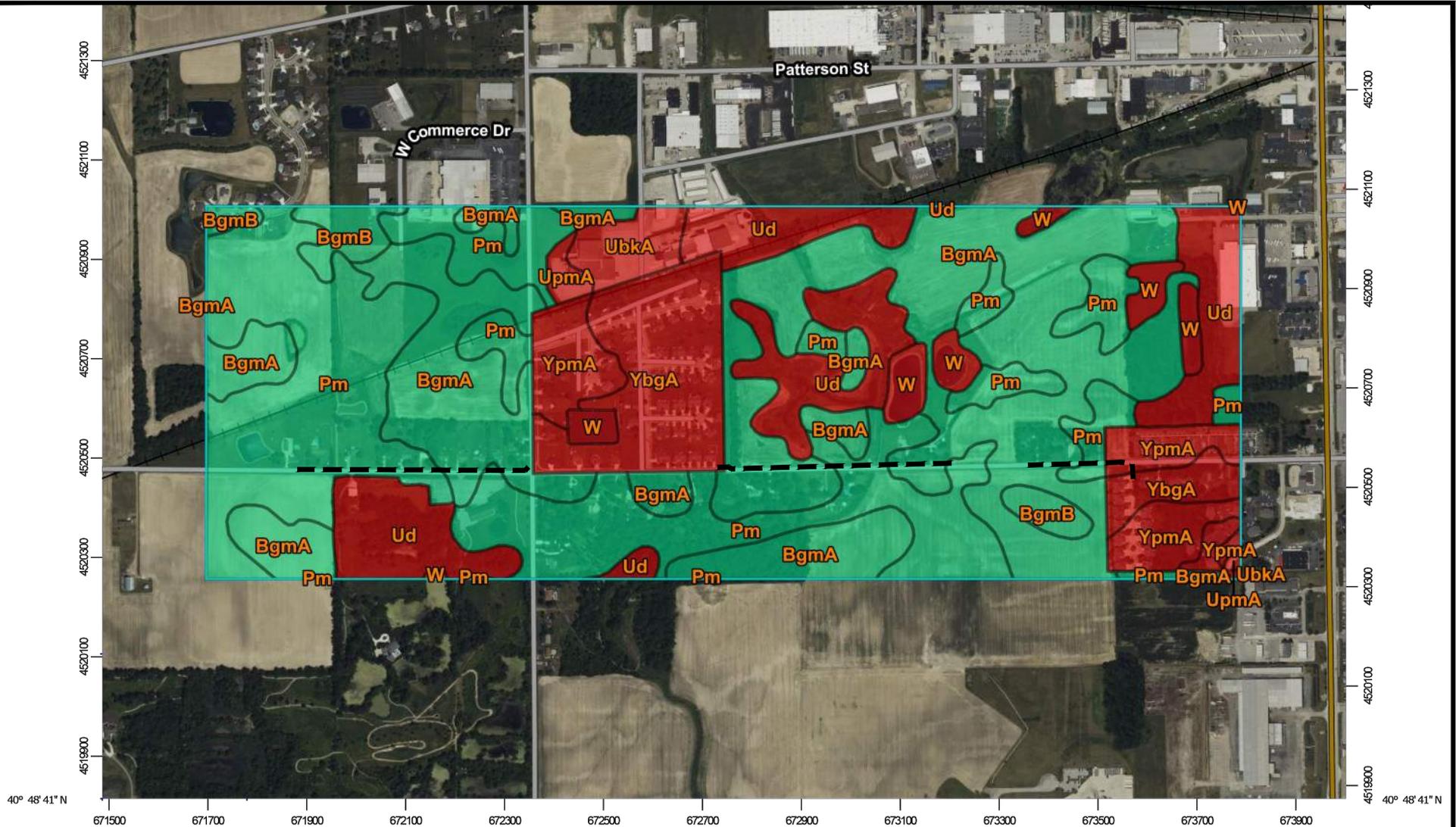
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**US 27 SOUTH SERVICE AREA -
FARMLAND DESIGNATION TABLE**

FIGURE

1-11i3

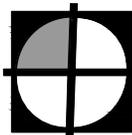
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Map Scale: 1:11,500 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA -
 FARMLAND DESIGNATION MAP

FIGURE

1-11j1

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Farmland of unique importance
-  Not rated or not available

Water Features

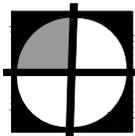
-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

-  Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA -
 FARMLAND DESIGNATION LEGEND

FIGURE

1-11j2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	Prime farmland if drained	138.4	35.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	Prime farmland if drained	8.8	2.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	116.3	29.9%
UbKA	Urban land-Blount complex, 0 to 2 percent slopes	Not prime farmland	7.0	1.8%
Ud	Udorthents, loamy	Not prime farmland	50.6	13.0%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	Not prime farmland	2.2	0.6%
W	Water	Not prime farmland	11.7	3.0%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	Not prime farmland	34.1	8.8%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	Not prime farmland	20.2	5.2%
Totals for Area of Interest			389.4	100.0%



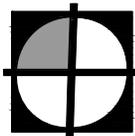
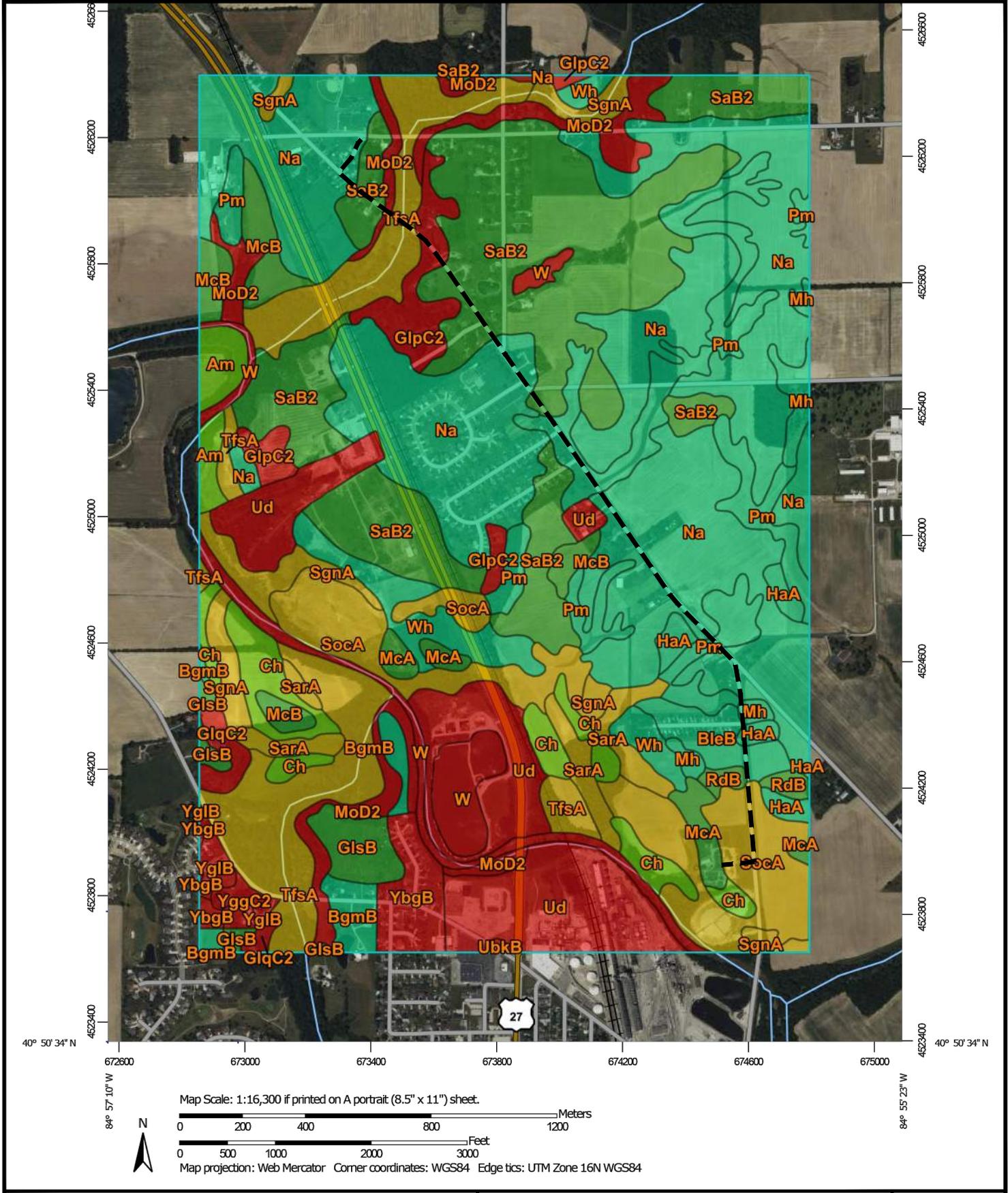
**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR W 500 N SERVICE AREA -
FARMLAND DESIGNATION TABLE**

FIGURE

1-11j3

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ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
FARMLAND DESIGNATION MAP

FIGURE

1-11k1

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Farmland of local importance, if irrigated

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
 -  Not rated or not available
- Soil Rating Lines**
-  Not prime farmland
 -  All areas are prime farmland
 -  Prime farmland if drained
 -  Prime farmland if protected from flooding or not frequently flooded during the growing season
 -  Prime farmland if irrigated
 -  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
 -  Prime farmland if irrigated and drained
 -  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of unique importance
-  Not rated or not available

Water Features

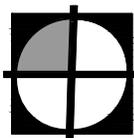
-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

-  Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

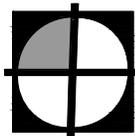
MONMOUTH FORCE MAIN IMPROVEMENTS -
 FARMLAND DESIGNATION LEGEND

FIGURE

1-11k2

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	13.2	1.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	Prime farmland if drained	14.5	1.1%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	Prime farmland if drained	14.4	1.1%
Ch	Chagrín loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	37.1	2.8%
Glpc2	Glynwood clay loam, 6 to 12 percent slopes, eroded	Not prime farmland	27.8	2.1%
Glqc2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	Not prime farmland	8.1	0.6%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	All areas are prime farmland	16.8	1.3%
HaA	Haskins loam, 0 to 3 percent slopes	Prime farmland if drained	10.9	0.8%
McA	Martinsville loam, 0 to 2 percent slopes	All areas are prime farmland	13.3	1.0%
McB	Martinsville loam, 2 to 6 percent slopes	All areas are prime farmland	23.8	1.8%
Mh	Milford silty clay loam, 0 to 2 percent slopes	Prime farmland if drained	10.8	0.8%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	Not prime farmland	42.2	3.2%
Na	Nappanee silt loam, 0 to 3 percent slopes	Prime farmland if drained	347.7	26.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	Prime farmland if drained	79.7	6.0%
RdB	Rawson loam, 2 to 6 percent slopes	All areas are prime farmland	5.0	0.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	All areas are prime farmland	227.3	17.0%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	22.3	1.7%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	31.7	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	85.0	6.4%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	103.0	7.7%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	Not prime farmland	0.6	0.0%
Ud	Udorthents, loamy	Not prime farmland	101.5	7.6%
W	Water	Not prime farmland	37.9	2.8%
Wh	Whitaker silt loam	Prime farmland if drained	30.7	2.3%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	Not prime farmland	20.1	1.5%
YggC2	Glynwood-Urban land complex, ground moraine, 6 to 12 percent slopes, eroded	Not prime farmland	3.5	0.3%
YgB	Glynwood-Urban land complex, 2 to 6 percent slopes	Not prime farmland	5.9	0.4%
Totals for Area of Interest			1,334.9	100.0%



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**MONMOUTH FORCE MAIN IMPROVEMENTS -
FARMLAND DESIGNATION TABLE**

FIGURE

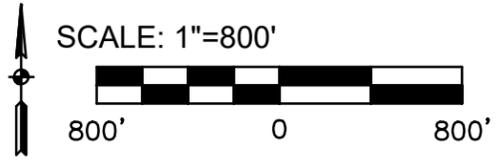
1-11k3

Z:\Shared\IN Clients\A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD\1b PER Reports\ACAD\Figure - 1 - Piqua Rd - East and West of 101.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Perreanger



LEGEND

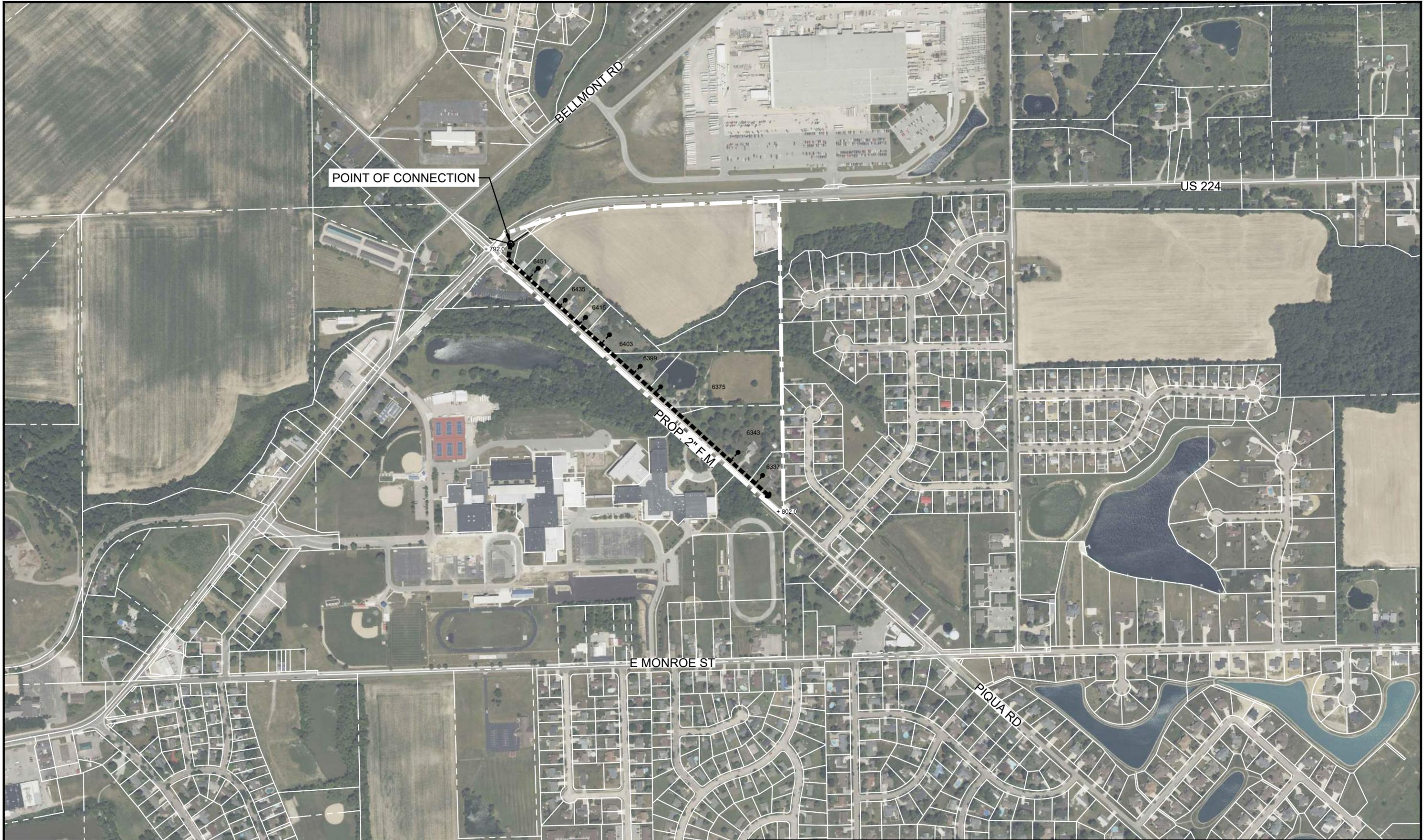
-  AREA OF CONCERN (31 CONNECTIONS)
-  EXISTING FORCE MAIN
-  PROPOSED FORCE MAIN WITH GRINDER PUMP STATION
-  EXISTING SANITARY SEWER



2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT
 N. PIQUA ROAD - EAST & WEST OF SR 101 SERVICE AREA
 OPTION 1 - LOW PRESSURE SANITARY SEWER W/ GPS

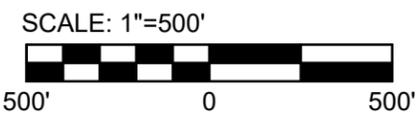
FIGURE
 4-1

Z:\Shared\IN Clients A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD\to PER Reports\ACAD\Figures - 2 7 11 - P14 Rd - CR 900 - Monmouth Area.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Peranger



LEGEND

- AREA OF CONCERN (8 CONNECTIONS)
- PROPOSED FORCE MAIN WITH GRINDER PUMP STATION
- EXISTING SANITARY SEWER

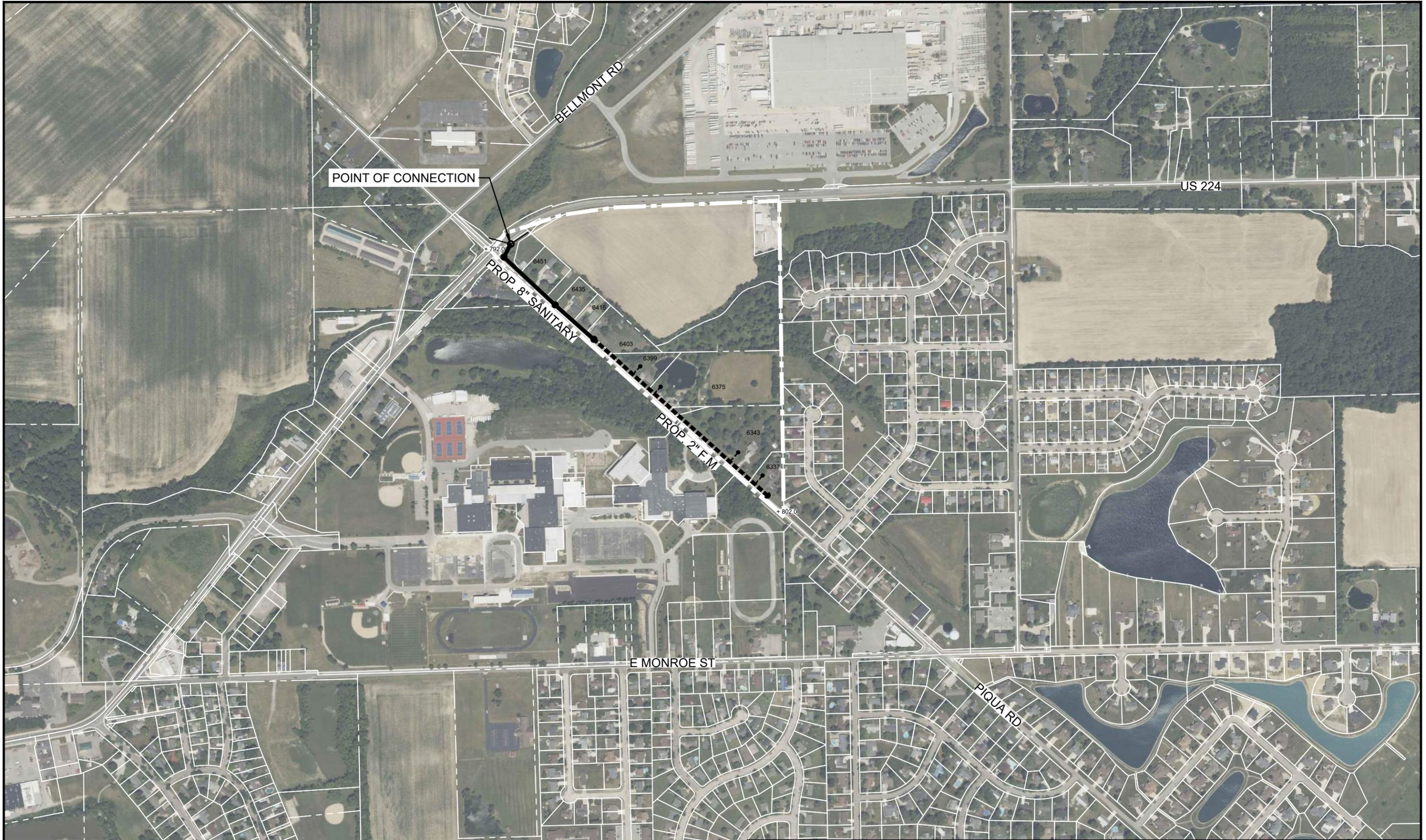


2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SOUTH OF US 224 SERVICE AREA
 OPTION 1 - LOW PRESSURE SANITARY SEWER W/ GPS

FIGURE
 4-2a

Z:\Shared\IN Clients A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD\to PER Reports\ACAD\Figures - 2 7 11 - P14 Rd - CR 900 - Monmouth Area.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Peranger

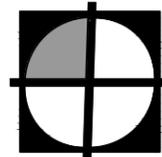


LEGEND

-  AREA OF CONCERN (8 CONNECTIONS)
-  PROPOSED FORCE MAIN WITH GRINDER PUMP STATION

-  EXISTING SANITARY SEWER
-  PROPOSED SANITARY SEWER

SCALE: 1"=500'



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT
N. PIQUA ROAD - SOUTH OF US 224 SERVICE AREA
OPTION 2 - GRAVITY AND LOW PRESSURE SANITARY
SEWER W/ GPS

FIGURE

4-2b

Z:\Shared\IN Clients\A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extension\06 CAD\06 PER Reports\ACAD\Figure - 3 - East of Clems Lake Area.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Perrenger

MATCHLINE (SEE BELOW)

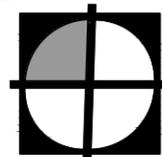


MATCHLINE (SEE ABOVE)

LEGEND

-  AREA OF CONCERN (72 CONNECTIONS + 16 TRAILERS)
-  PROPOSED FORCE MAIN WITH GRINDER PUMP STATION
-  PROPOSED GRAVITY SEWER
-  PROPOSED LIFT STATION

SCALE: 1"=1000'



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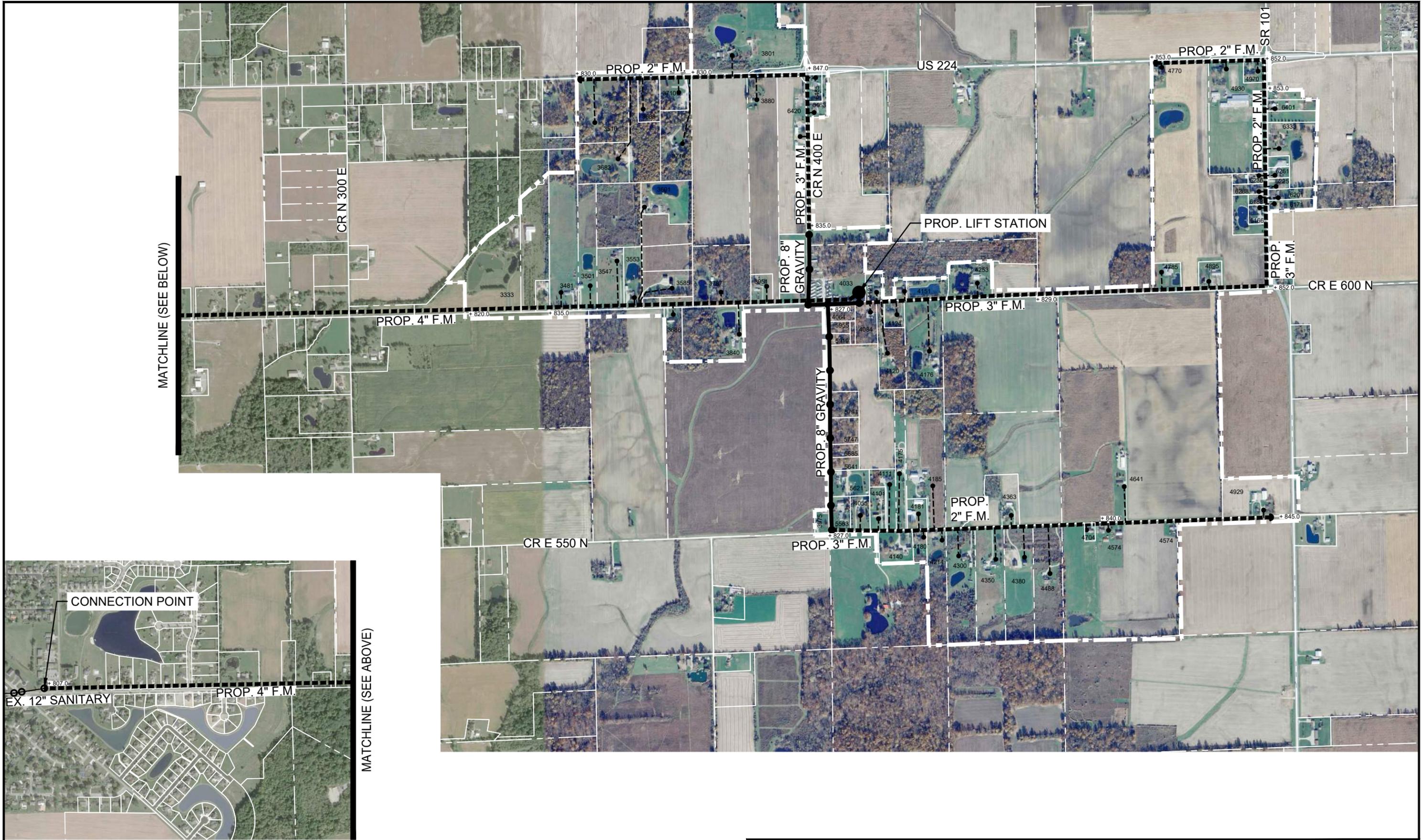
2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 600 N - SR 101 SERVICE AREA
 OPTION 1 - LOW PRESSURE SANITARY SEWER W/ GPS

FIGURE

4-3a

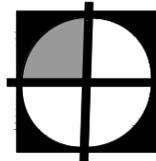
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LEGEND

-  AREA OF CONCERN (73 CONNECTIONS + 16 TRAILERS)
-  PROPOSED FORCE MAIN WITH GRINDER PUMP STATION
-  PROPOSED GRAVITY SEWER
-  PROPOSED LIFT STATION

SCALE: 1"=1000'



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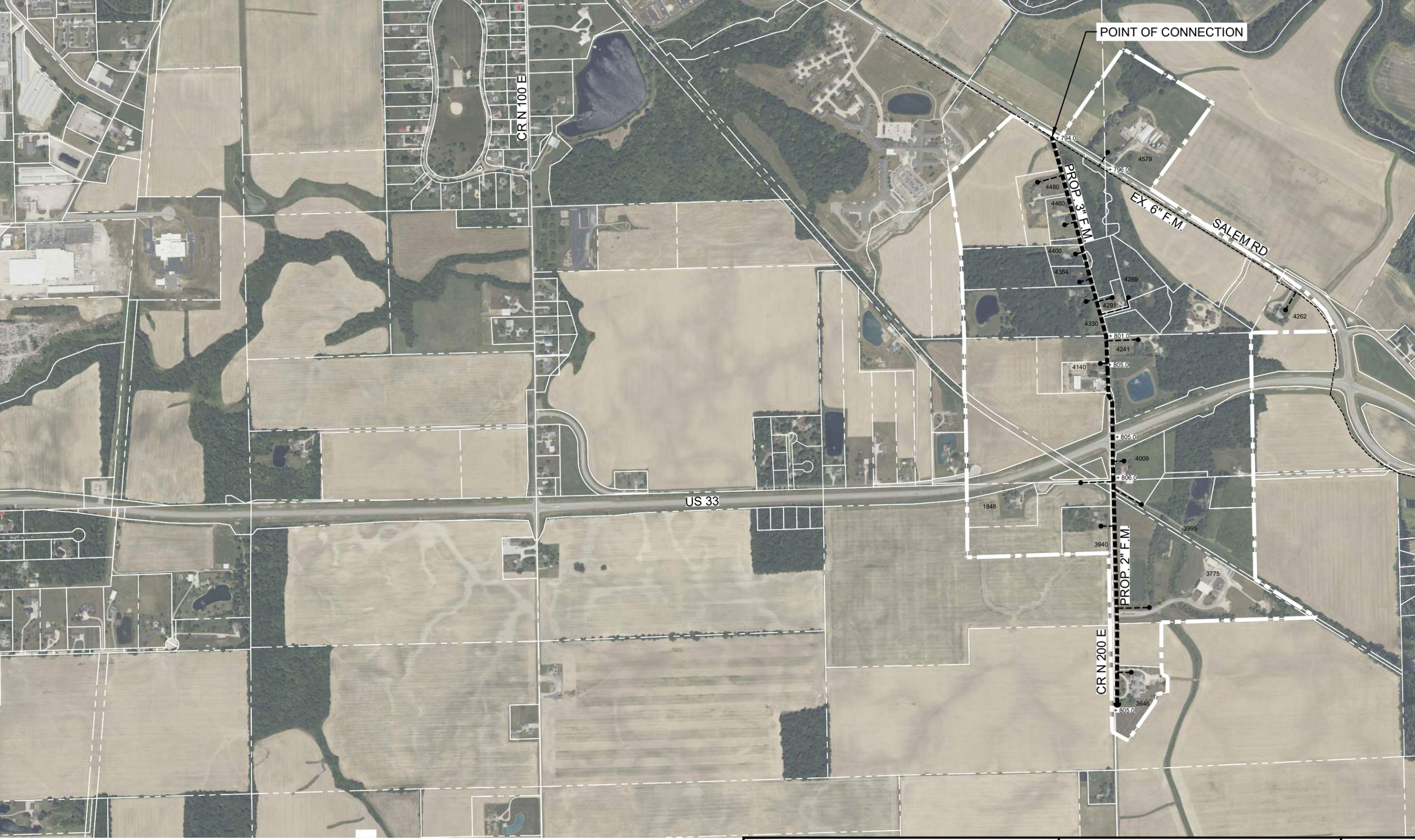
2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 600 N - SR 101 SERVICE AREA
 OPTION 2 - GRAVITY AND LOW PRESSURE SANITARY SEWER W/ GPS

FIGURE

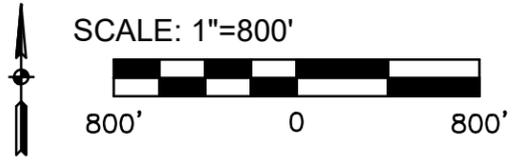
4-3b

Z:\Shared\IN Clients A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD's PER Reports\ACAD\Figures - 4 5 10 - CR 200 E South of Salem Road Area.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Peranger



LEGEND

- AREA OF CONCERN (17 CONNECTIONS)
- EXISTING FORCE MAIN
- PROPOSED FORCE MAIN WITH GRINDER PUMP STATION



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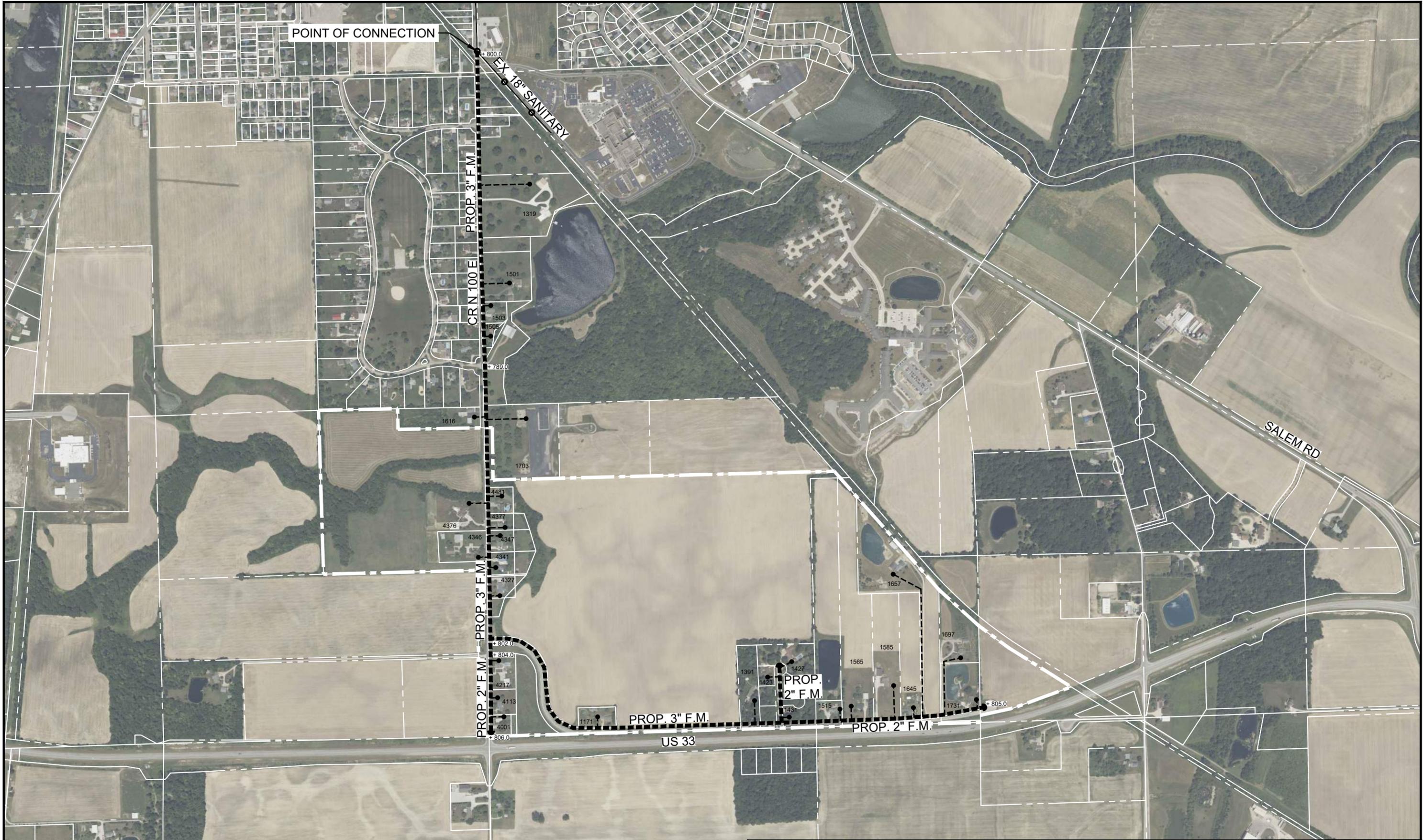
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 200 E SERVICE AREA
OPTION 1 - LOW PRESSURE SANITARY SEWER WITH GPS

FIGURE

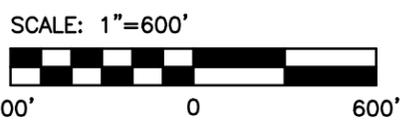
4-4

Z:\Shared\IN Clients A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD\6 PER Reports\ACAD\Figures - 4 5 10 - CR 200 E South of Salem Road Area.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Peranger



LEGEND

-  AREA OF CONCERN (28 CONNECTIONS)
-  EXISTING FORCE MAIN
-  PROPOSED FORCE MAIN WITH GRINDER PUMP STATION
-  EXISTING SANITARY SEWER

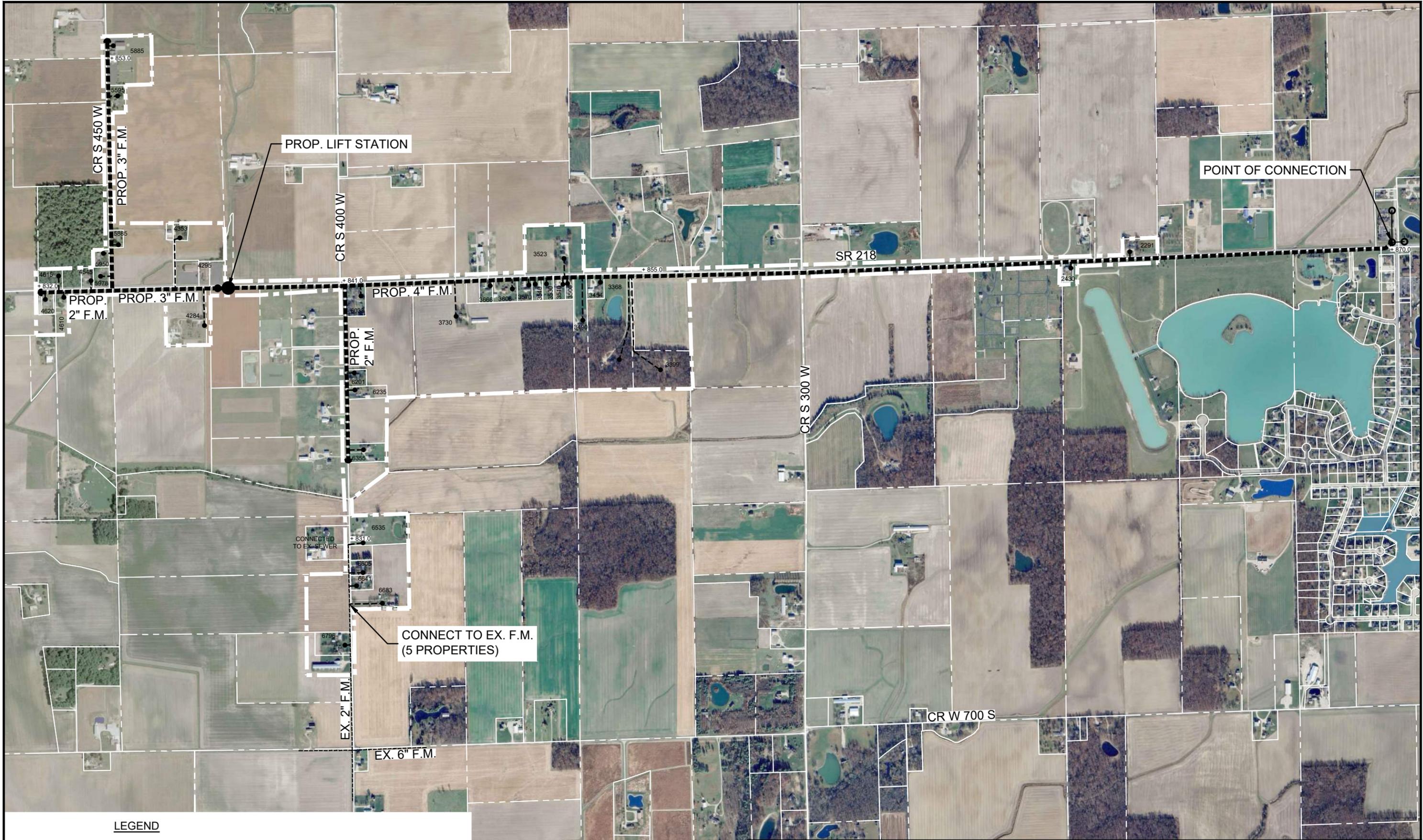


2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA
 OPTION 1 - LOW PRESSURE SANITARY SEWER WITH GPS

FIGURE
 4-5

Z:\Shared\IN Clients A-L\Adams County RSD\SS2170 - 2024 Sanitary Sewer Extensions\06 CAD\B PER Reports\ACAD\Figure - 6 - CR 400 W Area.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Peranger



LEGEND

-  AREA OF CONCERN (36 CONNECTIONS)
-  PROPOSED FORCE MAIN WITH GRINDER PUMP STATION
-  PROPOSED SANITARY SEWER
-  EXISTING FORCE MAIN
-  EXISTING SANITARY SEWER
-  PROPOSED LIFT STATION

SCALE: 1"=1000'



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

SR 218 - CR S 400 W SERVICE AREA
OPTION 1 - LOW PRESSURE SANITARY SEWER WITH GPS

FIGURE

4-6

Z:\Shared\IN Clients A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD\16 PER Reports\ACAD\Figures - 2 7 11 - Plq Rd - CR 900 - Morimouth Area.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Perlinger

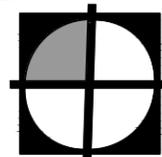
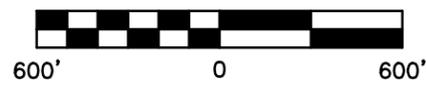


LEGEND

- AREA OF CONCERN (14 CONNECTIONS)
- EXISTING FORCE MAIN
- PROPOSED FORCE MAIN WITH GRINDER PUMP STATION



SCALE: 1"=600'



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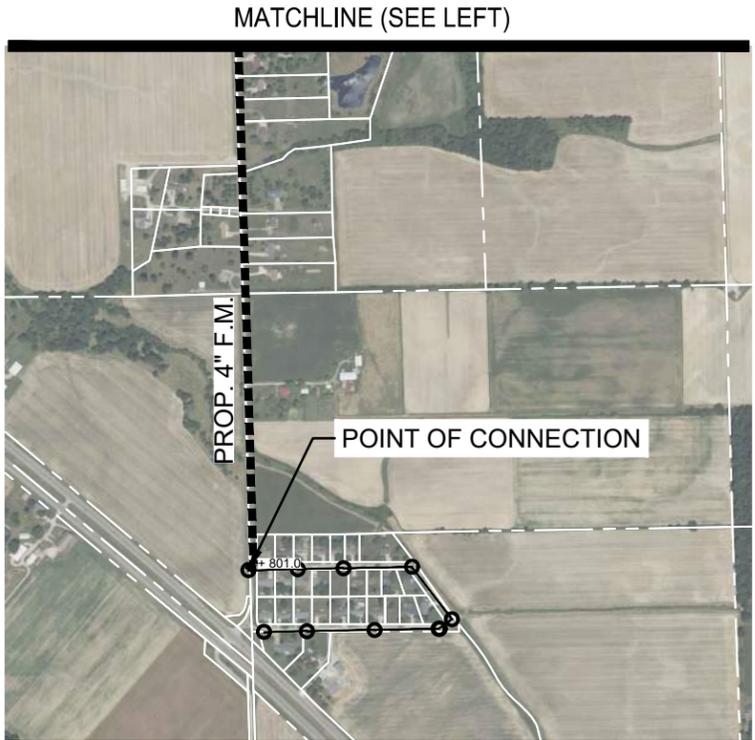
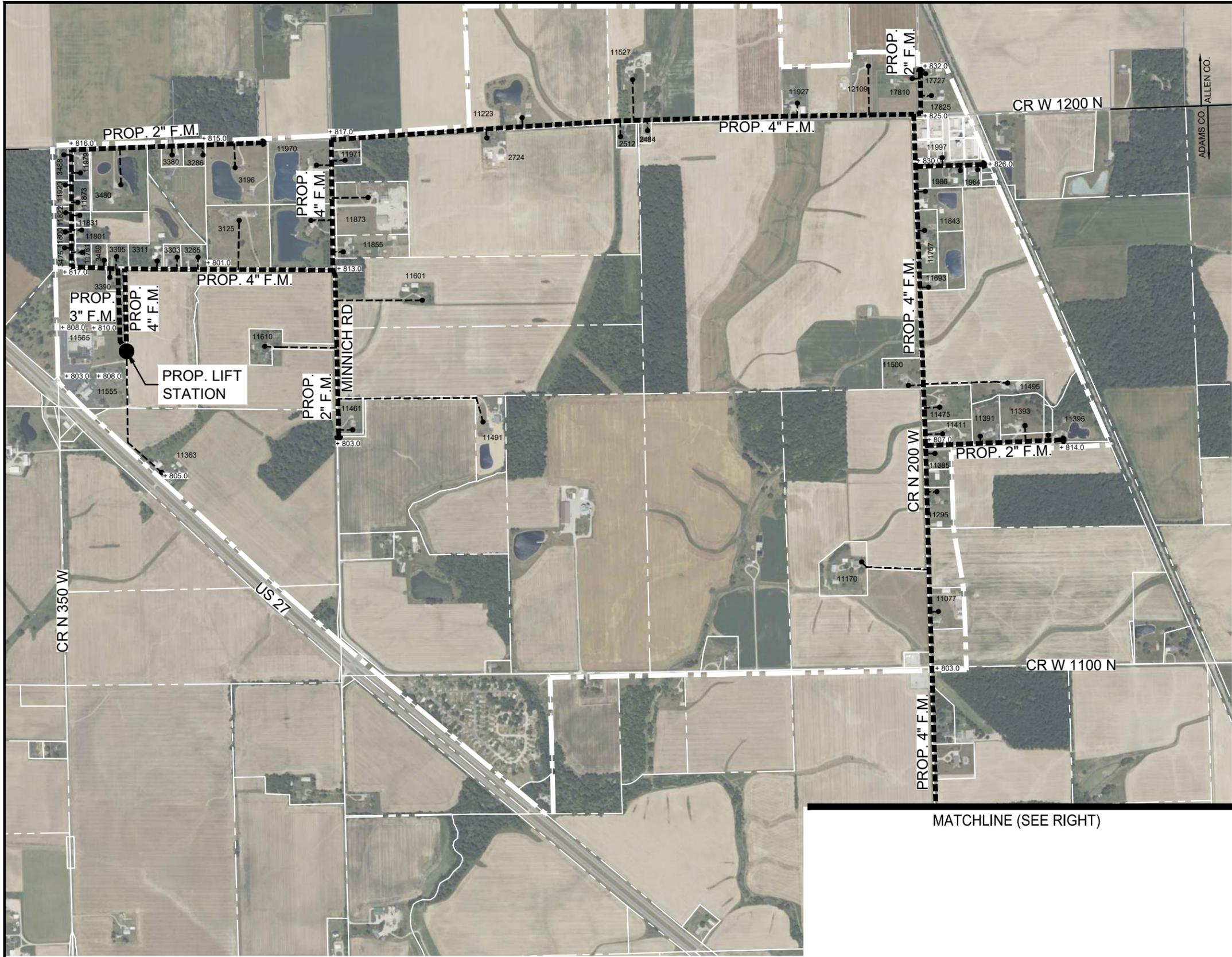
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA
OPTION 1 - LOW PRESSURE SANITARY SEWER W/ GPS

FIGURE

4-7

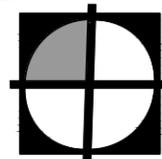
Z:\Shared\IN Clients A-L\Adams County RSD\522170 - 2024 Sanitary Sewer Extensions\06 CAD\B PER Reports\ACAD\Figure - 8 - Wyncken School Area.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Peringer



LEGEND

- AREA OF CONCERN (60 CONNECTIONS)
- PROPOSED FORCE MAIN WITH GRINDER PUMP STATION
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- PROPOSED LIFT STATION

SCALE: 1"=1000'



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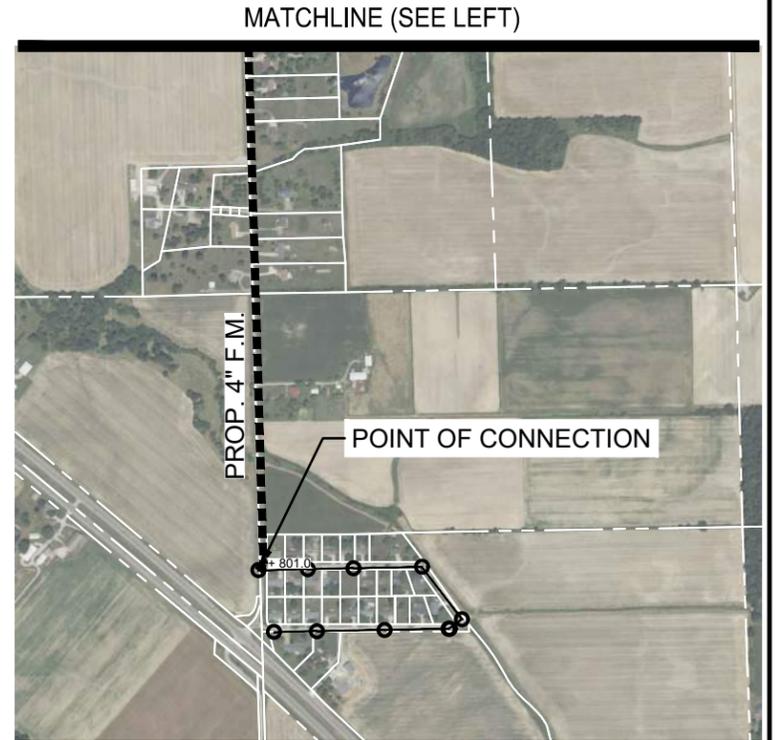
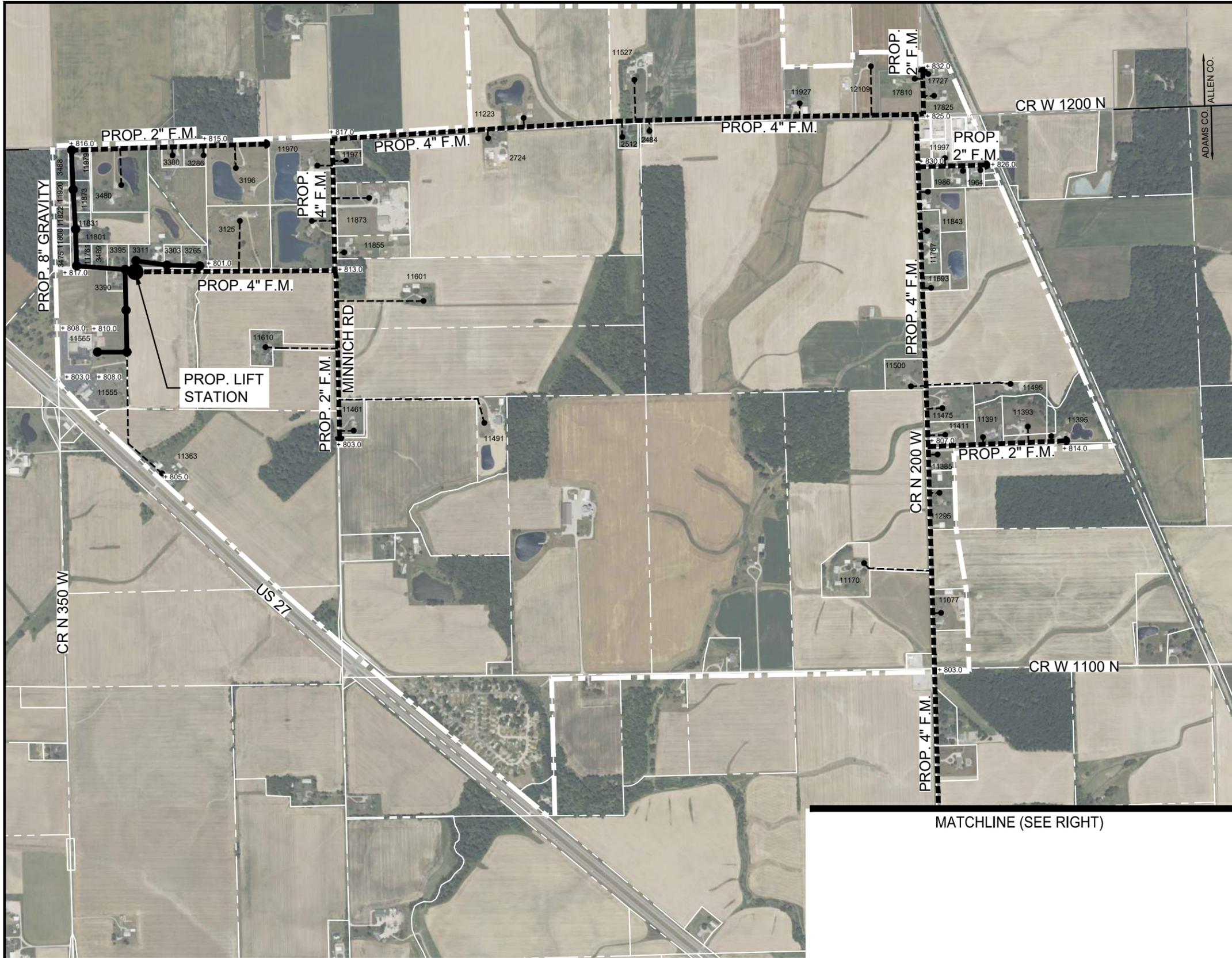
2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA
 OPTION 1 - LOW PRESSURE SANITARY SEWER W/ GPS

FIGURE

4-8a

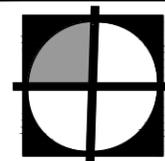
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LEGEND

- AREA OF CONCERN (60 CONNECTIONS)
- PROPOSED FORCE MAIN WITH GRINDER PUMP STATION
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- PROPOSED LIFT STATION

SCALE: 1"=1000'



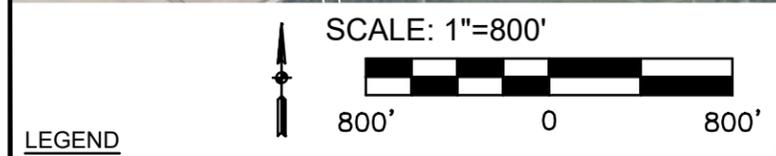
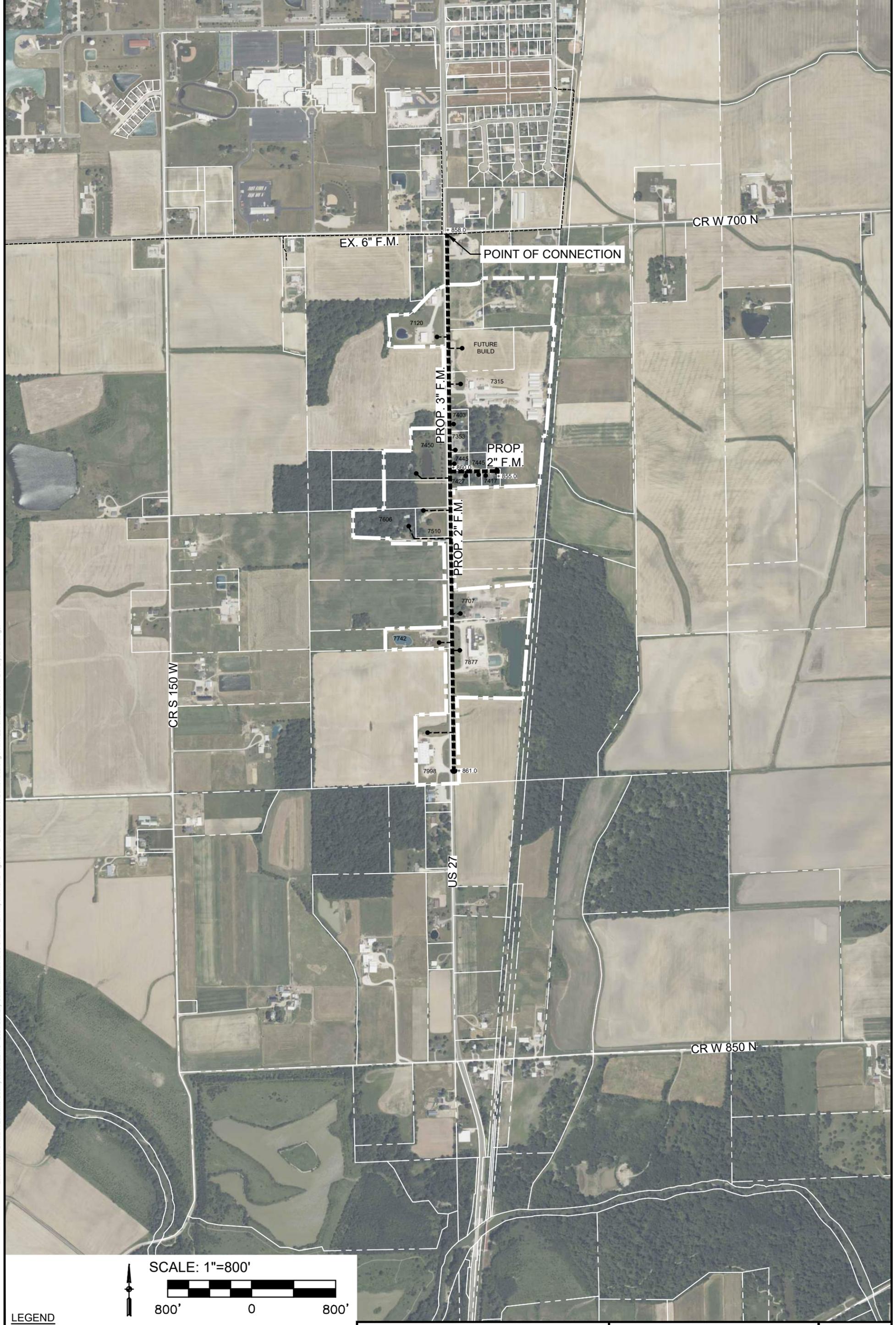
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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT
CR W 1200 N - CR N 200 W SERVICE AREA
OPTION 2 - GRAVITY AND LOW PRESSURE SANITARY
SEWER W/ GPS

FIGURE

4-8b

Z:\Share\01\N Clients A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD\1b PER Reports\ACAD\Figure - 9 - US 27 - South of Berne Area.dwg, PRINTED: 3/7/2024 3:36 PM BY: Bryce Persinger



LEGEND	
	AREA OF CONCERN (16 CONNECTIONS)
	EXISTING FORCE MAIN
	PROPOSED FORCE MAIN WITH GRINDER PUMP STATION



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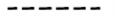
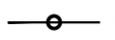
2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT
US 27 SOUTH SERVICE AREA
OPTION 1 - LOW PRESSURE SANITARY
SEWER W/ GPS

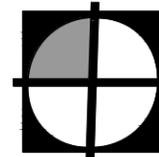
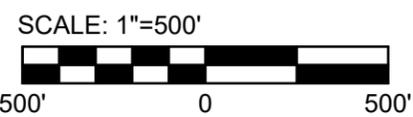
FIGURE
4-9

Z:\Shared\In Clients A-L\Adams County RSD\22170 - 2024 Sanitary Sewer Extensions\06 CAD's PER Reports\ACAD\Figures - 4 5 10 - CR 200 E South of Salem Road Area.dwg PRINTED: 3/7/2024 3:36 PM BY: Bryce Peranger



LEGEND

-  AREA OF CONCERN (20 CONNECTIONS)
-  EXISTING FORCE MAIN
-  PROPOSED FORCE MAIN WITH GRINDER PUMP STATION
-  EXISTING SANITARY SEWER



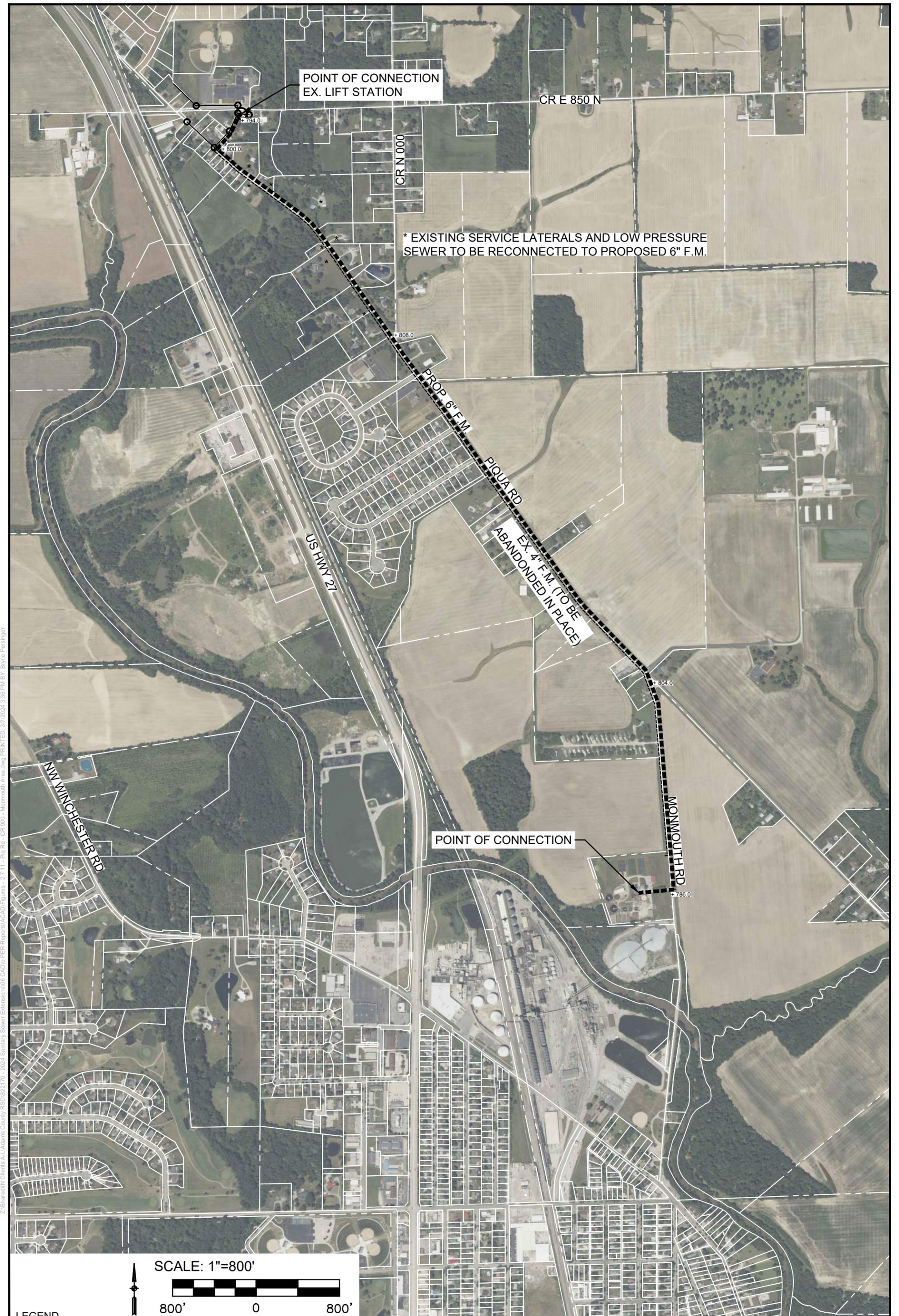
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2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA
 OPTION 1 - LOW PRESSURE SANITARY SEWER W/ GPS

FIGURE

4-10



POINT OF CONNECTION
EX. LIFT STATION

CR E 850 N

CR N 000

* EXISTING SERVICE LATERALS AND LOW PRESSURE
SEWER TO BE RECONNECTED TO PROPOSED 6" F.M.

+808.0

PROP. 6" F.M.

PIQUARD RD

EX. 4" F.M. (TO BE
ABANDONED IN PLACE)

US HWY 27

MONMOUTH RD

+804.0

+786.0

POINT OF CONNECTION

NW WINCHESTER RD

SCALE: 1"=800'



-----	EXISTING FORCE MAIN	—○—	EXISTING SANITARY SEWER
-----	PROPOSED FORCE MAIN		



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT
MONMOUTH FORCE MAIN IMPROVEMENTS

FIGURE
4-11

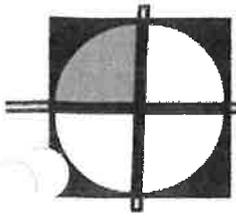
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Appendix “B”

Farmland Conversion Impact Rating Form

**2024 Sanitary Sewer Improvements
Preliminary Engineering Report
(PER)
For The
Adams County Regional Sewer District
Adams County, Indiana**



March 15, 2024

U.S. Department of Agriculture
Soil Conservation Service
6013 Lakeside Boulevard
Indianapolis, IN 46278

Attn: Demarys Mortenson
State Conservationist

Re: Sanitary Sewer System Extensions
Adams County Regional Sewer District
Adams County, Indiana

Dear Demarys,

Enclosed herewith please find three partially completed Farmland Conversion Impact Rating Form, Form AD-1006, in addition to appropriate site plan for the proposed project area alternatives. The submittal of this form is required for inclusion within the Preliminary Engineering Report generated to satisfy the funding requirements of the IDEM - State Revolving Fund Agency.

The eleven proposed projects consist of the construction of new gravity and/or low pressure sanitary collection sewers coupled with grinder pump stations. Three of the areas will have lift stations and transmission force mains. The discharge of these projects will be to the City of Decatur or the City of Berne for treatment. The projects will service existing residential development served by failing individual, on-site septic systems. The soils and geology of the project areas will not be adversely impacted by the proposed projects. All proposed utility work will occur in road right-of-way, existing easements and areas previously disturbed by construction within the following areas:

Sanitary Sewer System Extensions #1

- A) N. Piqua Road - SR 101
- B) N. Piqua Road - US 224
- C) CR E 600 N – SR 101
- D) CR N 200 E

Sanitary Sewer System Extensions #2

- A) CR N 100 E – CR E 400 N
- B) SR 218 – CR S 400 W
- C) CR E 900 N Extended
- D) CR W 1175 N - W 1000 N

Sanitary Sewer System Extensions #3

- A) US 27 - South



- B) CR W 500 N
- C) Monmouth Force Main Improvements

If there are any further questions or concerns with the proposed project or the completed portions of the Form, please feel free to contact the author.

Respectfully yours,
COMMONWEALTH ENGINEERS, INC.



Chris Ripke, E.I.

encl.

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %		Amount of Farmland As Defined in FPPA Acres: %		
Name of Land Evaluation System Used	Name of State or Local Site Assessment System		Date Land Evaluation Returned by NRCS		
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

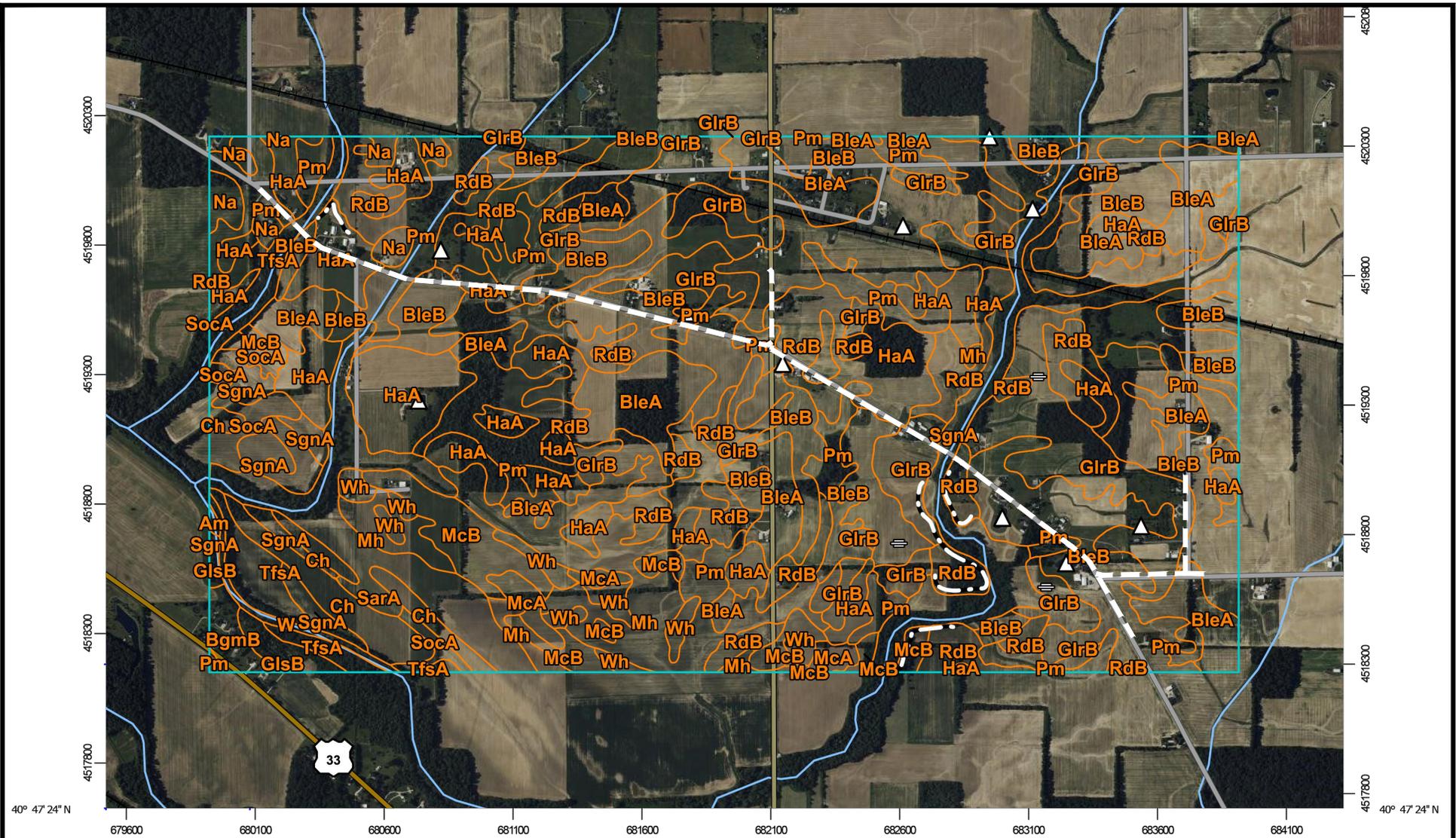
Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

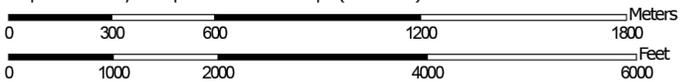
$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

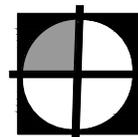
NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.



Map Scale: 1:21,900 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA - SOILS MAP

FIGURE

1-9a1

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 -  Soil Map Unit Polygons
 -  Soil Map Unit Lines
 -  Soil Map Unit Points
- Special Point Features**
 -  Blowout
 -  Borrow Pit
 -  Clay Spot
 -  Closed Depression
 -  Gravel Pit
 -  Gravelly Spot
 -  Landfill
 -  Lava Flow
 -  Marsh or swamp
 -  Mine or Quarry
 -  Miscellaneous Water
 -  Perennial Water
 -  Rock Outcrop
 -  Saline Spot
 -  Sandy Spot
 -  Severely Eroded Spot
 -  Sinkhole
 -  Slide or Slip
 -  Sodic Spot
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads
- Background**
 -  Aerial Photography
- Other Features**
 -  Spoil Area
 -  Stony Spot
 -  Very Stony Spot
 -  Wet Spot
 -  Other
 -  Special Line Features



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

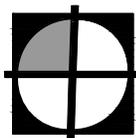
N. PIQUA ROAD - SR 101 SERVICE AREA - SOILS
MAP LEGEND

FIGURE

1-9a2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	0.8	0.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	11.5	0.6%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	158.0	7.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	437.1	21.3%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	47.4	2.3%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	239.6	11.7%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	10.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	226.5	11.1%
McA	Martinsville loam, 0 to 2 percent slopes	14.9	0.7%
McB	Martinsville loam, 2 to 6 percent slopes	55.0	2.7%
Mh	Milford silty clay loam, 0 to 2 percent slopes	119.3	5.8%
Na	Nappanee silt loam, 0 to 3 percent slopes	22.6	1.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	268.3	13.1%
RdB	Rawson loam, 2 to 6 percent slopes	154.6	7.5%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	74.6	3.6%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	110.0	5.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	20.8	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	43.6	2.1%
W	Water	6.9	0.3%
Wh	Whitaker silt loam	26.9	1.3%
Totals for Area of Interest		2,049.4	100.0%



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD - SR 101 SERVICE AREA - SOILS
MAP UNIT LEGEND

FIGURE

1-9a3

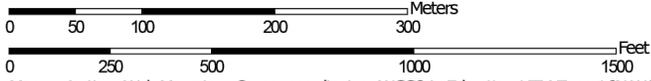


Soil Map may not be valid at this scale.

84° 54' 53" W

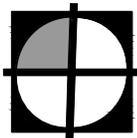


Map Scale: 1:5,660 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

84° 54' 0" W



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD SOUTH OF US 224 SERVICE
AREA - SOILS MAP

FIGURE

1-9b1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	1.6	1.2%
HaA	Haskins loam, 0 to 3 percent slopes	7.5	5.9%
McB	Martinsville loam, 2 to 6 percent slopes	0.2	0.2%
Mh	Milford silty clay loam, 0 to 2 percent slopes	0.1	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	16.6	13.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	33.0	25.9%
RdB	Rawson loam, 2 to 6 percent slopes	7.8	6.1%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	10.4	8.2%
Ud	Udorthents, loamy	12.8	10.0%
UhcA	Urban land-Haskins complex, 0 to 3 percent slopes	10.0	7.8%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	3.6	2.8%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	5.2	4.1%
W	Water	3.2	2.5%
Wh	Whitaker silt loam	0.2	0.1%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	15.1	11.9%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	0.3	0.3%
Totals for Area of Interest		127.5	100.0%



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

N. PIQUA ROAD SOUTH OF US 224 SERVICE
AREA - SOILS MAP UNIT LEGEND

FIGURE

1-9b3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	158.5	4.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	653.9	17.7%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	4.4	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	50.1	1.4%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	290.3	7.9%
HaA	Haskins loam, 0 to 3 percent slopes	33.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	3.6	0.1%
Na	Nappanee silt loam, 0 to 3 percent slopes	822.7	22.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	578.5	15.7%
RdB	Rawson loam, 2 to 6 percent slopes	27.8	0.8%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	673.3	18.3%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	88.9	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	11.5	0.3%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	10.3	0.3%
UnaA	Urban land-Nappanee complex, 0 to 3 percent slopes	23.5	0.6%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	3.0	0.1%
W	Water	33.2	0.9%
Wh	Whitaker silt loam	14.5	0.4%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	0.0	0.0%
YnaA	Nappanee-Urban land complex, 0 to 3 percent slopes	161.5	4.4%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	44.2	1.2%
Totals for Area of Interest		3,687.2	100.0%

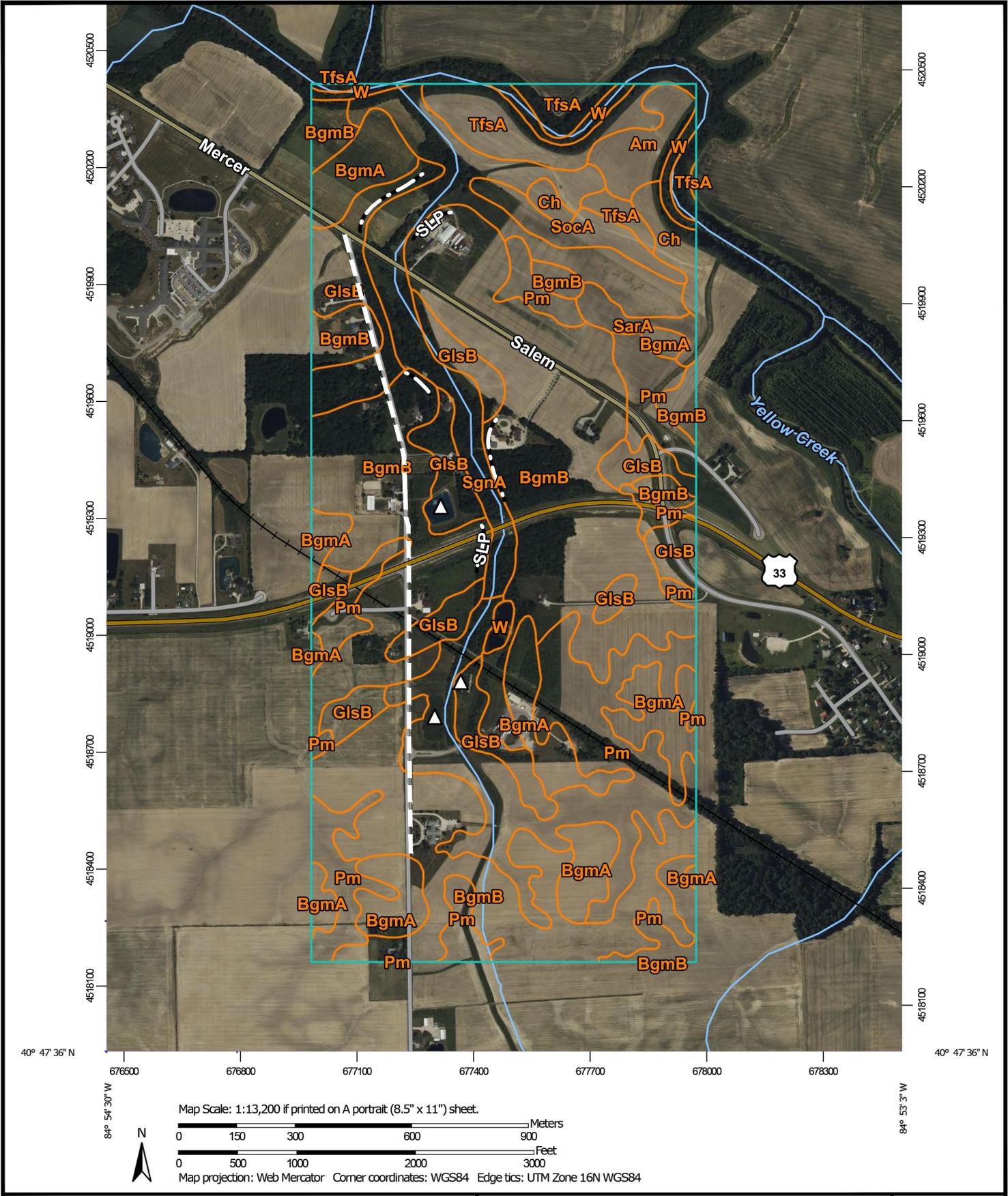


**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR E 600 N - SR 101 SERVICE AREA - SOILS MAP
UNIT LEGEND**

FIGURE

1-9c3



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 200 E SERVICE AREA - SOILS MAP

FIGURE
1-9d1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	12.2	2.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	52.7	9.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	221.7	40.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	7.5	1.4%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	60.7	11.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	103.3	18.7%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	5.0	0.9%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	49.2	8.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8.9	1.6%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	24.1	4.4%
W	Water	8.2	1.5%
Totals for Area of Interest		553.5	100.0%



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 200 E SERVICE AREA - SOILS MAP UNIT
LEGEND

FIGURE

1-9d3

FARMLAND CONVERSION IMPACT RATING

PART I <i>(To be completed by Federal Agency)</i>		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II <i>(To be completed by NRCS)</i>		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %		Amount of Farmland As Defined in FPPA Acres: %		
Name of Land Evaluation System Used	Name of State or Local Site Assessment System		Date Land Evaluation Returned by NRCS		
PART III <i>(To be completed by Federal Agency)</i>		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV <i>(To be completed by NRCS)</i> Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V <i>(To be completed by NRCS)</i> Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI <i>(To be completed by Federal Agency)</i> Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII <i>(To be completed by Federal Agency)</i>					
Relative Value Of Farmland <i>(From Part V)</i>		100			
Total Site Assessment <i>(From Part VI above or local site assessment)</i>		160			
TOTAL POINTS <i>(Total of above 2 lines)</i>		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

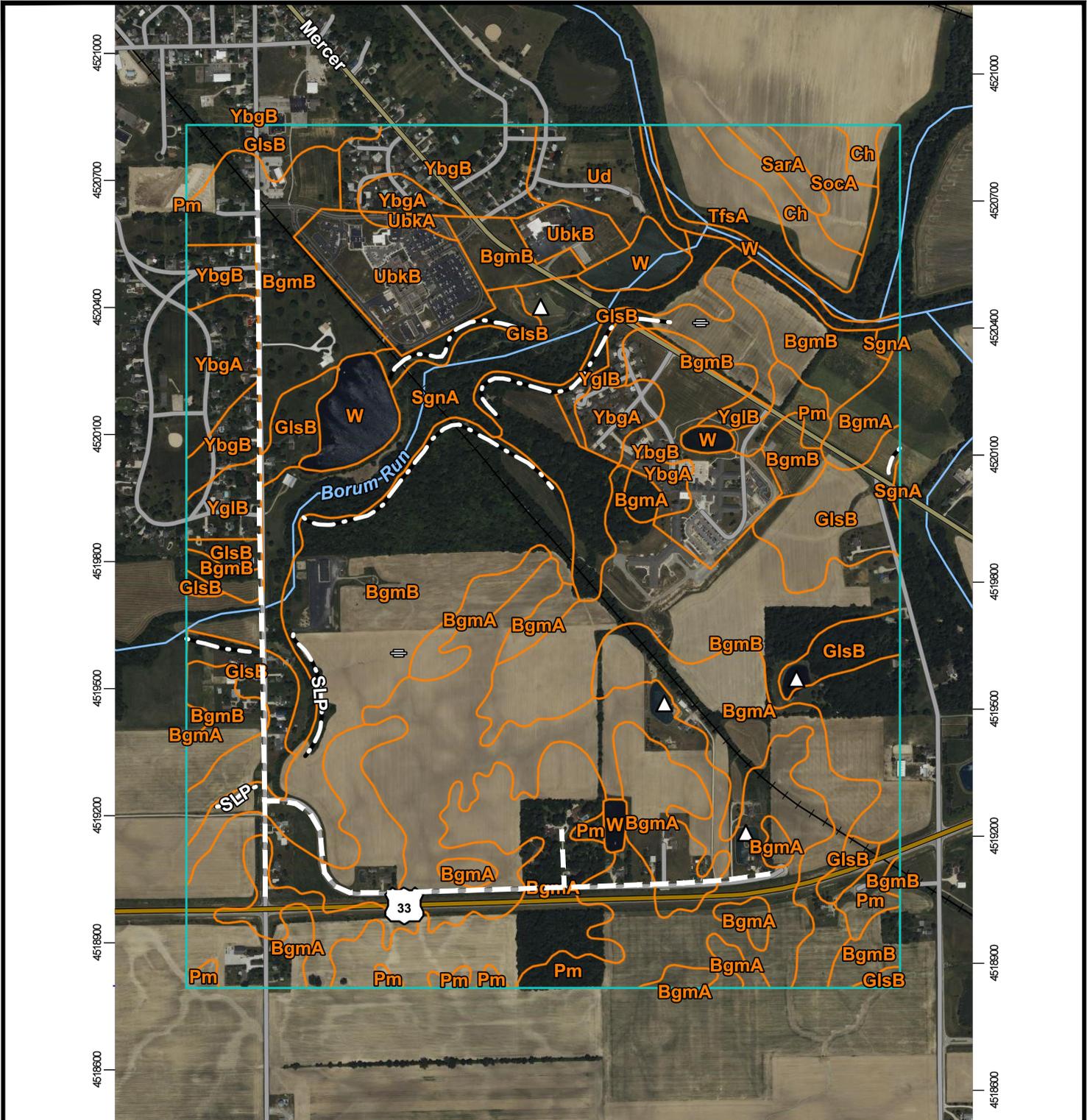
Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.



40° 47' 54" N 40° 47' 54" N

Map Scale: 1:13,100 if printed on A portrait (8.5" x 11") sheet.

0 150 300 600 900 Meters

0 500 1000 2000 3000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA - SOILS
MAP

FIGURE
1-9e1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

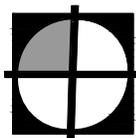
 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA - SOILS
MAP LEGEND

FIGURE

1-9e2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	156.6	18.3%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	223.0	26.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	11.4	1.3%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	94.7	11.1%
Pm	Pewamo silty clay, 0 to 2 percent slopes	120.1	14.1%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	4.1	0.5%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	50.6	5.9%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	8.6	1.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	23.4	2.7%
UbkA	Urban land-Blount complex, 0 to 2 percent slopes	1.7	0.2%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	29.3	3.4%
Ud	Udorthents, loamy	15.4	1.8%
W	Water	24.8	2.9%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	25.1	2.9%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	53.9	6.3%
YglB	Glynwood-Urban land complex, 2 to 6 percent slopes	12.1	1.4%
Totals for Area of Interest		854.7	100.0%



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR N 100 E - CR E 400 N SERVICE AREA - SOILS
MAP UNIT LEGEND

FIGURE

1-9e3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

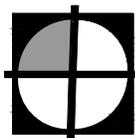
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	6.8	0.2%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	435.9	11.4%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	890.9	23.2%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	39.8	1.0%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	501.7	13.1%
HaA	Haskins loam, 0 to 3 percent slopes	45.4	1.2%
Ho	Houghton muck, drained	158.5	4.1%
McA	Martinsville loam, 0 to 2 percent slopes	31.7	0.8%
McB	Martinsville loam, 2 to 6 percent slopes	62.9	1.6%
Mh	Milford silty clay loam, 0 to 2 percent slopes	263.5	6.9%
Pm	Pewamo silty clay, 0 to 2 percent slopes	873.5	22.8%
RdB	Rawson loam, 2 to 6 percent slopes	115.6	3.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	32.1	0.8%
Sh	Shoals clay loam, frequently flooded	8.2	0.2%
Sl	Sloan loam, frequently flooded	82.9	2.2%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	8.1	0.2%
Ud	Udorthents, loamy	62.2	1.6%
W	Water	97.8	2.6%
Wh	Whitaker silt loam	114.5	3.0%
Totals for Area of Interest		3,832.6	100.0%



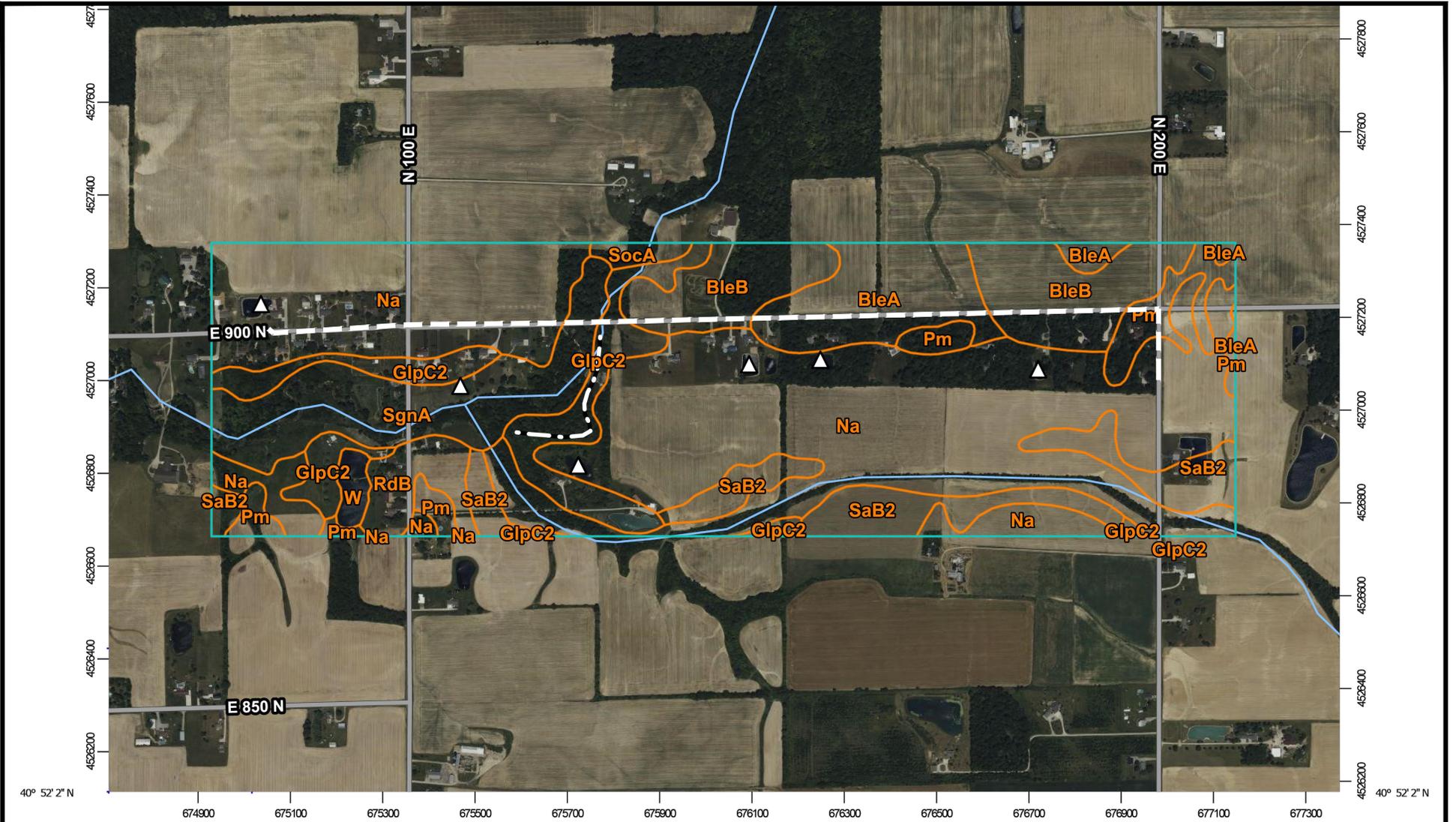
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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 218 - CR S 400 W SERVICE AREA - SOILS
MAP UNIT LEGEND

FIGURE

1-9f3



Map Scale: 1:12,200 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84




2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA - SOILS
MAP

FIGURE

1-9g1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

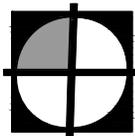
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	23.2	6.7%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	33.0	9.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	27.4	7.9%
Na	Nappanee silt loam, 0 to 3 percent slopes	175.7	50.5%
Pm	Pewamo silty clay, 0 to 2 percent slopes	14.5	4.2%
RdB	Rawson loam, 2 to 6 percent slopes	8.5	2.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	28.3	8.1%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	32.8	9.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	2.2	0.6%
W	Water	2.5	0.7%
Totals for Area of Interest		348.1	100.0%



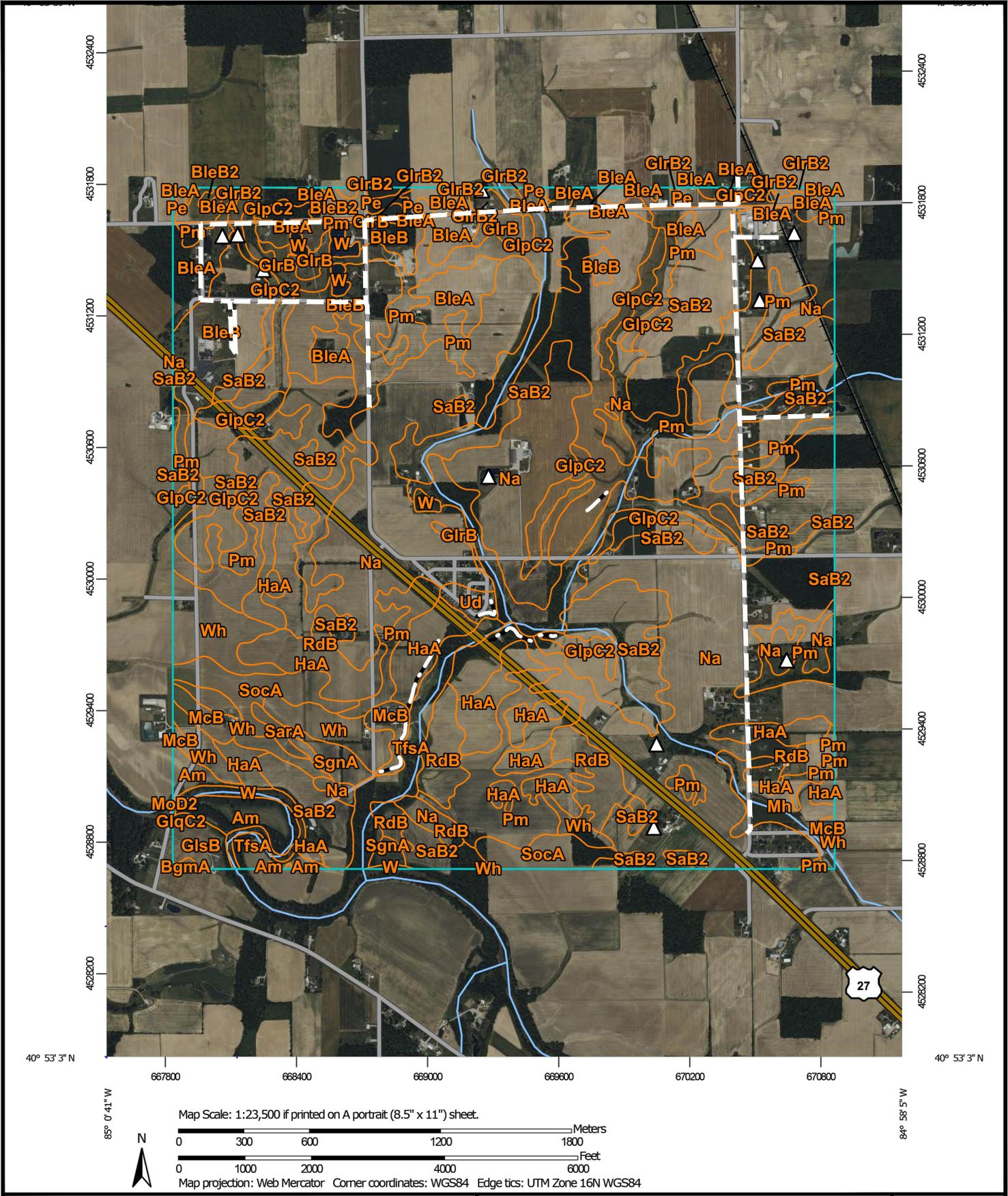
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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR E 900 N EXTENDED SERVICE AREA - SOILS
MAP UNIT LEGEND

FIGURE

1-9g3



2024 SANITARY SEWER EXTENSIONS
 ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
 SOILS MAP

FIGURE

1-9h1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

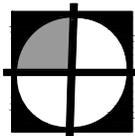
 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 1200 N - CR N 200 W SERVICE AREA -
SOILS MAP LEGEND

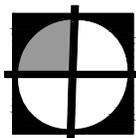
FIGURE

1-9h2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	27.2	1.2%
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	1.0	0.0%
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	76.5	3.3%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	105.2	4.5%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	54.4	2.3%
GlpC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	0.9	0.0%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	17.9	0.8%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	11.7	0.5%
HaA	Haskins loam, 0 to 3 percent slopes	116.8	5.0%
McB	Martinsville loam, 2 to 6 percent slopes	20.0	0.9%
Mh	Milford silty clay loam, 0 to 2 percent slopes	24.5	1.0%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	0.1	0.0%
Na	Nappanee silt loam, 0 to 3 percent slopes	774.9	33.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	339.9	14.6%
RdB	Rawson loam, 2 to 6 percent slopes	54.5	2.3%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	406.5	17.4%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	3.9	0.2%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	13.5	0.6%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	46.7	2.0%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	42.1	1.8%
Ud	Udorthents, loamy	7.5	0.3%
W	Water	21.7	0.9%
Wh	Whitaker silt loam	79.4	3.4%
Subtotals for Soil Survey Area		2,247.0	96.3%
Totals for Area of Interest		2,333.7	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	27.1	1.2%
BleB2	Blount silt loam, end moraine, 1 to 4 percent slopes, eroded	1.8	0.1%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	3.5	0.1%
GlrB2	Glynwood silt loam, end moraine, 2 to 6 percent slopes, eroded	11.9	0.5%
Pe	Pewamo silty clay loam, 0 to 1 percent slopes	41.7	1.8%
Wh	Washtenaw silt loam	0.7	0.0%
Subtotals for Soil Survey Area		86.6	3.7%
Totals for Area of Interest		2,333.7	100.0%



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**CR W 1200 N - CR N 200 W SERVICE AREA -
SOILS MAP UNIT LEGEND**

FIGURE

1-9h3

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %		Amount of Farmland As Defined in FPPA Acres: %		
Name of Land Evaluation System Used	Name of State or Local Site Assessment System		Date Land Evaluation Returned by NRCS		
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.



40° 37' 30" N

40° 37' 30" N

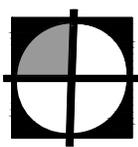
84° 57' 51" W

84° 56' 36" W

Map Scale: 1:11,500 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 - SOUTH OF BERNE SERVICE AREA -
SOILS MAP

FIGURE

1-9i1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BleA	Blount silt loam, end moraine, 0 to 2 percent slopes	60.5	13.5%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	230.1	51.3%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	12.3	2.7%
GlcC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	9.3	2.1%
GlrB	Glynwood silt loam, end moraine, 2 to 6 percent slopes	58.4	13.0%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	3.0	0.7%
Ho	Houghton muck, drained	9.6	2.1%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	1.1	0.2%
Pm	Pewamo silty clay, 0 to 2 percent slopes	49.3	11.0%
Sc	Saranac silty clay, 0 to 2 percent slopes, frequently flooded	12.8	2.8%
W	Water	2.4	0.5%
Totals for Area of Interest		448.7	100.0%



2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

US 27 - SOUTH OF BERNE SERVICE AREA -
SOILS MAP UNIT LEGEND

FIGURE

1-9i3



Map Scale: 1:11,500 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA - SOILS MAP

FIGURE

1-9j1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BgmA	Blount silt loam, ground moraine, 0 to 2 percent slopes	138.4	35.5%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	8.8	2.3%
Pm	Pewamo silty clay, 0 to 2 percent slopes	116.3	29.9%
UbkA	Urban land-Blount complex, 0 to 2 percent slopes	7.0	1.8%
Ud	Udorthents, loamy	50.6	13.0%
UpmA	Urban land-Pewamo complex, 0 to 2 percent slopes	2.2	0.6%
W	Water	11.7	3.0%
YbgA	Blount-Urban land complex, 0 to 2 percent slopes	34.1	8.8%
YpmA	Pewamo silty clay-Urban land complex, 0 to 2 percent slopes	20.2	5.2%
Totals for Area of Interest		389.4	100.0%

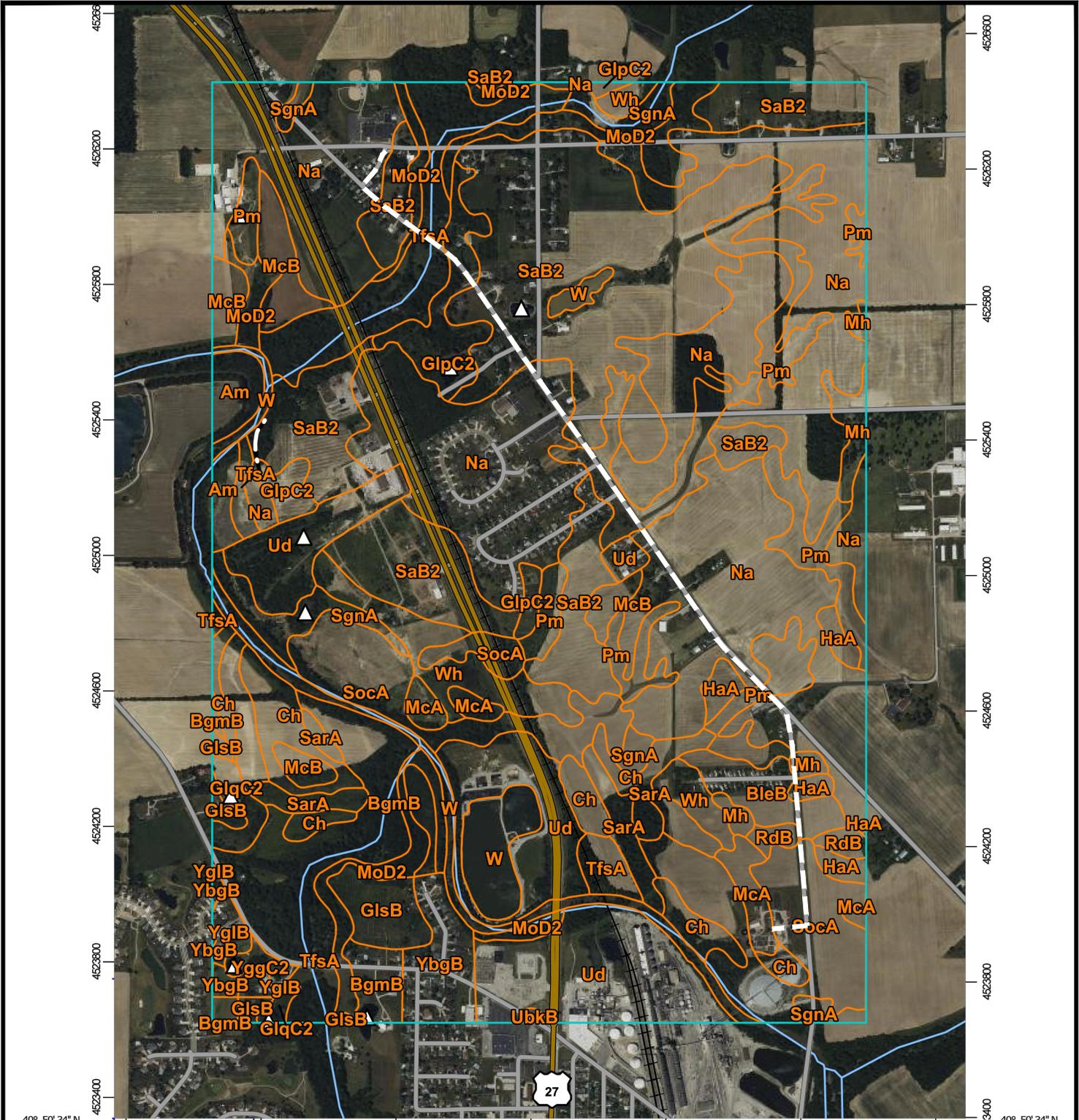


2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

CR W 500 N SERVICE AREA - SOILS MAP UNIT
LEGEND

FIGURE

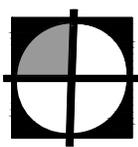
1-9j3



Map Scale: 1:16,300 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



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2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT

MONMOUTH FORCE MAIN IMPROVEMENTS -
SOILS MAP

FIGURE

1-9k1

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

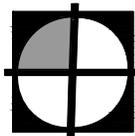
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Am	Armiesburg silty clay loam, 0 to 2 percent slopes, frequently flooded	13.2	1.0%
BgmB	Blount silt loam, ground moraine, 2 to 4 percent slopes	14.5	1.1%
BleB	Blount silt loam, end moraine, 2 to 4 percent slopes	14.4	1.1%
Ch	Chagrin loam, 0 to 2 percent slopes, frequently flooded	37.1	2.8%
GlpC2	Glynwood clay loam, 6 to 12 percent slopes, eroded	27.8	2.1%
GlcC2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	8.1	0.6%
GlsB	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	16.8	1.3%
HaA	Haskins loam, 0 to 3 percent slopes	10.9	0.8%
McA	Martinsville loam, 0 to 2 percent slopes	13.3	1.0%
McB	Martinsville loam, 2 to 6 percent slopes	23.8	1.8%
Mh	Milford silty clay loam, 0 to 2 percent slopes	10.8	0.8%
MoD2	Morley silty clay loam, 12 to 18 percent slopes, eroded	42.2	3.2%
Na	Nappanee silt loam, 0 to 3 percent slopes	347.7	26.0%
Pm	Pewamo silty clay, 0 to 2 percent slopes	79.7	6.0%
RdB	Rawson loam, 2 to 6 percent slopes	5.0	0.4%
SaB2	St. Clair clay loam, 3 to 8 percent slopes, eroded	227.3	17.0%
SarA	Saranac silty clay loam, 0 to 2 percent slopes, frequently flooded	22.3	1.7%
SgnA	Shoals silty clay loam, 0 to 1 percent slopes, frequently flooded	31.7	2.4%
SocA	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded	85.0	6.4%
TfsA	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	103.0	7.7%
UbkB	Urban land-Blount complex, 2 to 4 percent slopes	0.6	0.0%
Ud	Udorthents, loamy	101.5	7.6%
W	Water	37.9	2.8%
Wh	Whitaker silt loam	30.7	2.3%
YbgB	Blount-Urban land complex, 2 to 4 percent slopes	20.1	1.5%
YggC2	Glynwood-Urban land complex, ground moraine, 6 to 12 percent slopes, eroded	3.5	0.3%
YglB	Glynwood-Urban land complex, 2 to 6 percent slopes	5.9	0.4%
Totals for Area of Interest		1,334.9	100.0%



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**2024 SANITARY SEWER EXTENSIONS
ADAMS COUNTY REGIONAL SEWER DISTRICT**

**MONMOUTH FORCE MAIN IMPROVEMENTS -
SOILS MAP UNIT LEGEND**

FIGURE

1-9k3



Appendix “C”

Cost Estimates & 20-Year Life Cycle Present Worth Cost Estimates

2024 Sanitary Sewer Improvements Preliminary Engineering Report (PER) For The Adams County Regional Sewer District Adams County, Indiana

North Piqua Road - SR 101 Service Area

Option 1 - Low Pressure Sanitary Sewer with Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 47,900	\$ 47,900
3" Force Main	9200	LF	\$ 22	\$ 202,400
2" Force Main	7500	LF	\$ 18	\$ 135,000
1-1/2" Service Lateral	6200	LF	\$ 16	\$ 99,200
Grinder Pump Station Connection	31	EA	\$ 1,000	\$ 31,000
1-1/2" Corp. Stop Assembly	31	EA	\$ 1,000	\$ 31,000
Manhole Connection	1	EA	\$ 2,000	\$ 2,000
Manhole Lining	10	VF	\$ 300	\$ 3,000
Air Release Valve Manhole	10	EA	\$ 7,000	\$ 70,000
Terminal & Inline Flushing Cleanout	17	EA	\$ 2,500	\$ 42,500
Simplex Grinder Pump Station	31	EA	\$ 10,000	\$ 310,000
Traffic Control	1	LS	\$ 10,000	\$ 10,000
Final Grading & Seeding	1	LS	\$ 15,000	\$ 15,000
Erosion & Sediment Control	1	LS	\$ 7,500	\$ 5,000
			Subtotal	\$ 1,004,000
			Contingency (10%)	\$ 100,000
			Total Construction	\$ 1,104,000
			Non-Construction (20%)	\$ 221,000
			Total Project Cost	\$ 1,325,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

North Piqua Road - SR 101 Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
North Piqua Road - SR 101 Service Area - Opt No. 1 Construction Cost	1	\$ 1,104,000	1	\$ 1,104,000
North Piqua Road - SR 101 Service Area - Opt No. 1 Non-Construction Costs	1	\$ 221,000	1	\$ 221,000
Total Construction Capital Cost =				\$ 1,325,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (31)	1 - 20	\$ 3,100	15.59	\$ 48,329
Controls O & M (31)	1 - 20	\$ 3,100	15.59	\$ 48,329
Grinder Pump (31)	15	\$ 124,000	0.69	\$ 85,560
Grinder Pump Controls (31)	15	\$ 46,500	0.69	\$ 32,085
Total O&M Cost =				\$ 214,400

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 436,600	36%	\$ 157,176	\$ 279,424	0.61	\$ 170,449
Structures	50	\$ 112,500	40%	\$ 45,000	\$ 67,500	0.61	\$ 41,175
Total Salvage Value =							\$ 211,700

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 1,325,000
Operation & Maintenance (O&M)	\$ 214,400
Salvage Value (SV)	\$ (211,700)
Net Present Value (ROUNDED) =	\$ 1,327,700

North Piqua Road - US 224 Service Area

Option 1 - Low Pressure Sanitary Sewer with Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 8,700	\$ 8,700
2" Force Main	2000	LF	\$ 18	\$ 36,000
1-1/2" Service Lateral	800	LF	\$ 16	\$ 12,800
Grinder Pump Station Connection	8	EA	\$ 1,000	\$ 8,000
1-1/2" Corp. Stop Assembly	8	EA	\$ 1,000	\$ 8,000
Manhole Connection	1	EA	\$ 2,000	\$ 2,000
Manhole Lining	10	VF	\$ 400	\$ 4,000
Air Release Valve Manhole	2	EA	\$ 7,000	\$ 14,000
Terminal & Inline Flushing Cleanout	1	EA	\$ 2,500	\$ 2,500
Simplex Grinder Pump Station	8	EA	\$ 10,000	\$ 80,000
Traffic Control	1	LS	\$ 2,500	\$ 2,500
Final Grading & Seeding	1	LS	\$ 4,000	\$ 4,000
Erosion & Sediment Control	1	LS	\$ 1,500	\$ 1,500
			Subtotal	\$ 184,000
			Contingency (10%)	\$ 18,000
			Total Construction	\$ 202,000
			Non-Construction (20%)	\$ 40,000
			Total Project Cost	\$ 242,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

North Piqua Road - US 224 Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
North Piqua Road - US 224 Service Area - Option No. 1 Construction Cost	1	\$ 202,000	1	\$ 202,000
North Piqua Road - US 224 Service Area - Option No. 1 Non-Construction Costs	1	\$ 40,000	1	\$ 40,000
Total Construction Capital Cost =				\$ 242,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (8)	1 - 20	\$ 800	15.59	\$ 12,472
Controls O & M (8)	1 - 20	\$ 800	15.59	\$ 12,472
Grinder Pump (8)	15	\$ 32,000	0.69	\$ 22,080
Grinder Pump Controls (8)	15	\$ 12,000	0.69	\$ 8,280
Total O&M Cost =				\$ 55,400

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 48,800	36%	\$ 17,568	\$ 31,232	0.61	\$ 19,052
Structures	50	\$ 18,000	40%	\$ 7,200	\$ 10,800	0.61	\$ 6,588
Total Salvage Value =							\$ 25,700

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 242,000
Operation & Maintenance (O&M)	\$ 55,400
Salvage Value (SV)	\$ (25,700)
Net Present Value (ROUNDED) =	\$ 271,700

North Piqua Road - US 224 Service Area

Option 2 - Gravity and Low Pressure Sanitary Sewer with Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 10,350	\$ 10,350
8" PVC Gravity Sewer (SDR-35)	775	LF	\$ 75	\$ 58,125
2" Force Main	1300	LF	\$ 18	\$ 23,400
1-1/2" Service Lateral	400	LF	\$ 16	\$ 6,400
Grinder Pump Station Connection	4	EA	\$ 1,000	\$ 4,000
1-1/2" Corp. Stop Assembly	4	EA	\$ 1,000	\$ 4,000
Manhole	3	EA	\$ 6,500	\$ 19,500
Manhole Connection	1	EA	\$ 2,500	\$ 2,500
Air Release Valve Manhole	1	EA	\$ 7,000	\$ 7,000
Terminal & Inline Flushing Cleanout	1	EA	\$ 2,500	\$ 2,500
Service Wyes (8" x 6")	4	EA	\$ 750	\$ 3,000
6" Service Lateral (Open Cut)	40	LF	\$ 75	\$ 3,000
Simplex Grinder Pump Station	4	EA	\$ 10,000	\$ 40,000
Special Backfill	190	CY	\$ 40	\$ 7,600
Concrete Driveway Repair	40	SY	\$ 200	\$ 8,000
Stone Driveway Repair	15	SY	\$ 25	\$ 375
Asphalt Driveway Repair	35	SY	\$ 150	\$ 5,250
Traffic Control	1	LS	\$ 4,000	\$ 4,000
Final Grading & Seeding	1	LS	\$ 10,000	\$ 10,000
Erosion & Sediment Control	1	LS	\$ 4,000	\$ 4,000
			Subtotal	\$ 223,000
			Contingency (10%)	\$ 22,000
			Total Construction	\$ 245,000
			Non-Construction (20%)	\$ 49,000
			Total Project Cost	\$ 294,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

North Piqua Road - US 224 Service Area - Option No. 2

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
North Piqua Road - US 224 Service Area - Option No. 2 Construction Cost	1	\$ 245,000	1	\$ 245,000
North Piqua Road - US 224 Service Area - Option No. 2 Non-Construction Costs	1	\$ 49,000	1	\$ 49,000
Total Construction Capital Cost =				\$ 294,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (4)	1 - 20	\$ 400	15.59	\$ 6,236
Controls O & M (4)	1 - 20	\$ 400	15.59	\$ 6,236
Grinder Pump (4)	15	\$ 16,000	0.69	\$ 11,040
Grinder Pump Controls (4)	15	\$ 6,000	0.69	\$ 4,140
Total O&M Cost =				\$ 27,700

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 93,925	36%	\$ 33,813	\$ 60,112	0.61	\$ 36,668
Structures	50	\$ 29,000	40%	\$ 11,600	\$ 17,400	0.61	\$ 10,614
Total Salvage Value =							\$ 47,300

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 294,000
Operation & Maintenance (O&M)	\$ 27,700
Salvage Value (SV)	\$ (47,300)
Net Present Value (ROUNDED) =	\$ 274,400

CR E 600 N - SR 101 Service Area

Option 1 - Low Pressure Sanitary Sewer with Lift Station and Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 120,100	\$ 120,100
8" PVC Gravity Sewer (SDR-35)	25	LF	\$ 100	\$ 2,500
4" Force Main	11400	LF	\$ 25	\$ 285,000
3" Force Main	11900	LF	\$ 22	\$ 261,800
2" Force Main	9900	LF	\$ 18	\$ 178,200
1-1/2" Service Lateral	14200	LF	\$ 16	\$ 227,200
Grinder Pump Station Connection	71	EA	\$ 1,000	\$ 71,000
1-1/2" Corp. Stop Assembly	71	EA	\$ 1,000	\$ 71,000
Manhole	1	EA	\$ 6,500	\$ 6,500
Manhole Connection	1	EA	\$ 2,500	\$ 2,500
Manhole Lining	10	VF	\$ 400	\$ 4,000
Air Release Valve Manhole	11	EA	\$ 7,000	\$ 77,000
Terminal & Inline Flushing Cleanout	22	EA	\$ 2,500	\$ 55,000
Simplex Grinder Pump Station	71	EA	\$ 10,000	\$ 710,000
CR E 600 N Lift Station	1	LS	\$ 325,000	\$ 325,000
Flow Metering Structure	1	LS	\$ 60,000	\$ 60,000
Special Backfill	30	CY	\$ 40	\$ 1,200
Asphalt Replacement	20	SY	\$ 200	\$ 4,000
Traffic Control	1	LS	\$ 25,000	\$ 25,000
Final Grading & Seeding	1	LS	\$ 35,000	\$ 35,000
Erosion & Sediment Control	1	LS	\$ 10,000	\$ 10,000
			Subtotal	\$ 2,532,000
			Contingency (10%)	\$ 253,000
			Total Construction	\$ 2,785,000
			Non-Construction (20%)	\$ 557,000
			Total Project Cost	\$ 3,342,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

CR E 600 N - SR 101 Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
CR E 600 N - SR 101 Service Area - Option No. 1 Construction Cost	1	\$ 2,785,000	1	\$ 2,785,000
CR E 600 N - SR 101 Service Area - Option No. 1 Non-Construction Costs	1	\$ 557,000	1	\$ 557,000
Total Construction Capital Cost =				\$ 3,342,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (71)	1 - 20	\$ 7,100	15.59	\$ 110,689
Controls O & M (71)	1 - 20	\$ 7,100	15.59	\$ 110,689
Lift Station	1 - 20	\$ 2,500	15.59	\$ 38,975
Grinder Pump (71)	15	\$ 284,000	0.69	\$ 195,960
Grinder Pump Controls (71)	15	\$ 106,500	0.69	\$ 73,485
Lift Station Pumps Rebuild (15 yrs)	15	\$ 3,500	0.69	\$ 2,415
Total O&M Cost =				\$ 532,300

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 954,700	36%	\$ 343,692	\$ 611,008	0.61	\$ 372,715
Structures	50	\$ 383,500	40%	\$ 153,400	\$ 230,100	0.61	\$ 140,361
Total Salvage Value =						\$	513,100

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 3,342,000
Operation & Maintenance (O&M)	\$ 532,300
Salvage Value (SV)	\$ (513,100)
Net Present Value (ROUNDED) =	\$ 3,361,200

CR E 600 N - SR 101 Service Area

Option 2 - Gravity and Low Pressure Sanitary Sewer with Lift Station and Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 132,195	\$ 132,195
8" PVC Gravity Sewer (SDR-35)	4165	LF	\$ 75	\$ 312,375
4" Force Main	11400	LF	\$ 25	\$ 285,000
3" Force Main	7740	LF	\$ 22	\$ 170,280
2" Force Main	10050	LF	\$ 18	\$ 180,900
1-1/2" Service Lateral	11000	LF	\$ 16	\$ 176,000
Grinder Pump Station Connection	58	EA	\$ 1,000	\$ 58,000
1-1/2" Corp. Stop Assembly	58	EA	\$ 1,000	\$ 58,000
Manhole	12	EA	\$ 6,500	\$ 78,000
Manhole Connection	1	EA	\$ 2,500	\$ 2,500
Manhole Lining	10	VF	\$ 400	\$ 4,000
Air Release Valve Manhole	8	EA	\$ 7,000	\$ 56,000
Terminal & Inline Flushing Cleanout	17	EA	\$ 2,500	\$ 42,500
Service Wyes (8" x 6")	13	EA	\$ 750	\$ 9,750
6" Service Lateral (Open Cut)	260	LF	\$ 75	\$ 19,500
Simplex Grinder Pump Station	58	EA	\$ 10,000	\$ 580,000
CR E 600 N Lift Station	1	LS	\$ 325,000	\$ 325,000
Flow Metering Structure	1	LS	\$ 60,000	\$ 60,000
Special Backfill	900	CY	\$ 40	\$ 36,000
Driveway Repair	360	SY	\$ 200	\$ 72,000
Asphalt Replacement	60	SY	\$ 200	\$ 12,000
Traffic Control	1	LS	\$ 30,000	\$ 30,000
Final Grading & Seeding	1	LS	\$ 50,000	\$ 50,000
Erosion & Sediment Control	1	LS	\$ 15,000	\$ 15,000
			Subtotal	\$ 2,765,000
			Contingency (10%)	\$ 277,000
			Total Construction	\$ 3,042,000
			Non-Construction (20%)	\$ 608,000
			Total Project Cost	\$ 3,650,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

CR E 600 N - SR 101 Service Area - Option No. 2

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
CR E 600 N - SR 101 Service Area - Option No. 2 Construction Cost	1	\$ 3,042,000	1	\$ 3,042,000
CR E 600 N - SR 101 Service Area - Option No. 2 Non-Construction Costs	1	\$ 608,000	1	\$ 608,000
Total Construction Capital Cost =				\$ 3,650,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (58)	1 - 20	\$ 5,800	15.59	\$ 90,422
Controls O & M (58)	1 - 20	\$ 5,800	15.59	\$ 90,422
Lift Station	1 - 20	\$ 2,500	15.59	\$ 38,975
Grinder Pump (58)	15	\$ 232,000	0.69	\$ 160,080
Grinder Pump Controls (58)	15	\$ 87,000	0.69	\$ 60,030
Lift Station Pumps Rebuild (15 yrs)	15	\$ 3,500	0.69	\$ 2,415
Total O&M Cost =				\$ 442,400

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 1,153,805	36%	\$ 415,370	\$ 738,435	0.61	\$ 450,445
Structures	50	\$ 421,500	40%	\$ 168,600	\$ 252,900	0.61	\$ 154,269
Total Salvage Value =							\$ 604,800

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 3,650,000
Operation & Maintenance (O&M)	\$ 442,400
Salvage Value (SV)	\$ (604,800)
Net Present Value (ROUNDED) =	\$ 3,487,700

CR N 200 E Service Area

Option 1 - Low Pressure Sanitary Sewer with GPS

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 25,320	\$ 25,320
3" Force Main	2600	LF	\$ 22	\$ 57,200
3" Force Main (Highway Crossing)	400	LF	\$ 90	\$ 36,000
2" Force Main	2260	LF	\$ 18	\$ 40,680
1-1/2" Service Lateral	4500	LF	\$ 16	\$ 72,000
Grinder Pump Station Connection	16	EA	\$ 1,000	\$ 16,000
1-1/2" Corp. Stop Assembly	16	EA	\$ 1,000	\$ 16,000
Force Main Connection	1	EA	\$ 1,800	\$ 1,800
Air Release Valve Manhole	3	EA	\$ 7,000	\$ 21,000
Terminal & Inline Flushing Cleanout	6	EA	\$ 2,500	\$ 15,000
Simplex Grinder Pump Station	16	EA	\$ 10,000	\$ 160,000
Duplex Grinder Pump Station	1	EA	\$ 40,000	\$ 40,000
Traffic Control	1	LS	\$ 2,500	\$ 5,000
Final Grading & Seeding	1	LS	\$ 10,000	\$ 12,000
Erosion & Sediment Control	1	LS	\$ 2,500	\$ 5,000
			Subtotal	\$ 523,000
			Contingency (10%)	\$ 52,000
			Total Construction	\$ 575,000
			Non-Construction (20%)	\$ 115,000
			Total Project Cost	\$ 690,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

CR N 200 E Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
CR N 200 E Service Area - Option No. 1 Construction Cost	1	\$ 575,000	1	\$ 575,000
CR N 200 E Service Area - Option No. 1 Non-Construction Costs	1	\$ 115,000	1	\$ 115,000
Total Construction Capital Cost =				\$ 690,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (17)	1 - 20	\$ 1,700	15.59	\$ 26,503
Controls O & M (17)	1 - 20	\$ 1,700	15.59	\$ 26,503
Grinder Pump (18)	15	\$ 72,000	0.69	\$ 49,680
Grinder Pump Controls (17)	15	\$ 25,500	0.69	\$ 17,595
Total O&M Cost =				\$ 120,300

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 205,880	36%	\$ 74,117	\$ 131,763	0.61	\$ 80,376
Structures	50	\$ 36,000	40%	\$ 14,400	\$ 21,600	0.61	\$ 13,176
Total Salvage Value =							\$ 93,600

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 690,000
Operation & Maintenance (O&M)	\$ 120,300
Salvage Value (SV)	\$ (93,600)
Net Present Value (ROUNDED) =	\$ 716,700

CR N 100 E - CR E 400 N Service Area

Option 1 - Low Pressure Sanitary Sewer with Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 37,940	\$ 37,940
3" Force Main	7450	LF	\$ 22	\$ 163,900
2" Force Main	2720	LF	\$ 18	\$ 48,960
1-1/2" Service Lateral	5200	LF	\$ 16	\$ 83,200
Grinder Pump Station Connection	28	EA	\$ 1,000	\$ 28,000
1-1/2" Corp. Stop Assembly	28	EA	\$ 1,000	\$ 28,000
Manhole Connection	1	EA	\$ 2,000	\$ 2,000
Manhole Lining	15	VF	\$ 400	\$ 6,000
Air Release Valve Manhole	4	EA	\$ 7,000	\$ 28,000
Terminal & Inline Flushing Cleanout	11	EA	\$ 2,500	\$ 27,500
Simplex Grinder Pump Station	28	EA	\$ 10,000	\$ 280,000
Flow Metering Structure	1	LS	\$ 60,000	\$ 60,000
Traffic Control	1	LS	\$ 5,000	\$ 5,000
Final Grading & Seeding	1	LS	\$ 12,500	\$ 12,500
Erosion & Sediment Control	1	LS	\$ 4,000	\$ 4,000
			Subtotal	\$ 815,000
			Contingency (10%)	\$ 82,000
			Total Construction	\$ 897,000
			Non-Construction (20%)	\$ 179,000
			Total Project Cost	\$ 1,076,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

CR N 100 E – CR E 400 N Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
CR N 100 E – CR E 400 N Service Area - Option No. 1 Construction Cost	1	\$ 897,000	1	\$ 897,000
CR N 100 E – CR E 400 N Service Area - Option No. 1 Non-Construction Costs	1	\$ 179,000	1	\$ 179,000
Total Construction Capital Cost =				\$ 1,076,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (28)	1 - 20	\$ 2,800	15.59	\$ 43,652
Controls O & M (28)	1 - 20	\$ 2,800	15.59	\$ 43,652
Grinder Pump (28)	15	\$ 112,000	0.69	\$ 77,280
Grinder Pump Controls (28)	15	\$ 42,000	0.69	\$ 28,980
Total O&M Cost =				\$ 193,600

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 296,060	36%	\$ 106,582	\$ 189,478	0.61	\$ 115,582
Structures	50	\$ 55,500	40%	\$ 22,200	\$ 33,300	0.61	\$ 20,313
Total Salvage Value =							\$ 135,900

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 1,076,000
Operation & Maintenance (O&M)	\$ 193,600
Salvage Value (SV)	\$ (135,900)
Net Present Value (ROUNDED) =	\$ 1,133,700

SR 218 - CR S 400 W Service Area

Option 1 - Low Pressure Sanitary Sewer with Lift Station and Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 77,820	\$ 77,820
8" PVC Gravity Sewer (SDR-35)	25	LF	\$ 100	\$ 2,500
4" Force Main	13400	LF	\$ 25	\$ 335,000
3" Force Main	4200	LF	\$ 22	\$ 92,400
2" Force Main	2710	LF	\$ 18	\$ 48,780
1-1/2" Service Lateral	7000	LF	\$ 16	\$ 112,000
Grinder Pump Station Connection	35	EA	\$ 1,000	\$ 35,000
1-1/2" Corp. Stop Assembly	35	EA	\$ 1,000	\$ 35,000
Manhole	1	EA	\$ 6,500	\$ 6,500
Manhole Connection	1	EA	\$ 2,500	\$ 2,500
Manhole Lining	10	VF	\$ 400	\$ 4,000
Air Release Valve Manhole	8	EA	\$ 7,000	\$ 56,000
Terminal & Inline Flushing Cleanout	7	EA	\$ 2,500	\$ 17,500
Service Wyes (8" x 6")	1	EA	\$ 750	\$ 750
6" Service Lateral (Open Cut)	10	LF	\$ 75	\$ 750
Simplex Grinder Pump Station	34	EA	\$ 10,000	\$ 340,000
Duplex Grinder Pump Station	1	EA	\$ 40,000	\$ 40,000
SR 218 Lift Station	1	LS	\$ 325,000	\$ 325,000
Flow Metering Structure	1	LS	\$ 60,000	\$ 60,000
Traffic Control	1	LS	\$ 20,000	\$ 20,000
Final Grading & Seeding	1	LS	\$ 25,000	\$ 25,000
Erosion & Sediment Control	1	LS	\$ 7,500	\$ 7,500
			Subtotal	\$ 1,644,000
			Contingency (10%)	\$ 164,000
			Total Construction	\$ 1,808,000
			Non-Construction (20%)	\$ 362,000
			Total Project Cost	\$ 2,170,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

SR 218 - CR S 400 W Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
SR 218 - CR S 400 W Service Area - Option No. 1 Construction Cost	1	\$ 1,808,000	1	\$ 1,808,000
SR 218 - CR S 400 W Service Area - Option No. 1 Non-Construction Costs	1	\$ 362,000	1	\$ 362,000
Total Construction Capital Cost =				\$ 2,170,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (34)	1 - 20	\$ 3,400	15.59	\$ 53,006
Controls O & M (34)	1 - 20	\$ 3,400	15.59	\$ 53,006
Lift Station	1 - 20	\$ 2,500	15.59	\$ 38,975
Grinder Pump (35)	15	\$ 140,000	0.69	\$ 96,600
Grinder Pump Controls (34)	15	\$ 51,000	0.69	\$ 35,190
Lift Station Pumps Rebuild (15 yrs)	15	\$ 3,500	0.69	\$ 2,415
Total O&M Cost =				\$ 279,200

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 592,180	36%	\$ 213,185	\$ 378,995	0.61	\$ 231,187
Structures	50	\$ 325,000	40%	\$ 130,000	\$ 195,000	0.61	\$ 118,950
Total Salvage Value =						\$	350,200

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 2,170,000
Operation & Maintenance (O&M)	\$ 279,200
Salvage Value (SV)	\$ (350,200)
Net Present Value (ROUNDED) =	\$ 2,099,000

CR E 900 N Extended Service Area

Option 1 - Low Pressure Sanitary Sewer with Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 19,220	\$ 19,220
3" Force Main	4300	LF	\$ 22	\$ 94,600
2" Force Main	2560	LF	\$ 18	\$ 46,080
1-1/2" Service Lateral	2800	LF	\$ 16	\$ 44,800
Grinder Pump Station Connection	14	EA	\$ 1,000	\$ 14,000
1-1/2" Corp. Stop Assembly	14	EA	\$ 1,000	\$ 14,000
Force Main Connection	1	EA	\$ 1,800	\$ 1,800
Air Release Valve Manhole	3	EA	\$ 7,000	\$ 21,000
Terminal & Inline Flushing Cleanout	6	EA	\$ 2,500	\$ 15,000
Simplex Grinder Pump Station	14	EA	\$ 10,000	\$ 140,000
Traffic Control	1	LS	\$ 5,000	\$ 2,500
Final Grading & Seeding	1	LS	\$ 15,000	\$ 7,500
Erosion & Sediment Control	1	LS	\$ 2,500	\$ 2,500
			Subtotal	\$ 423,000
			Contingency (10%)	\$ 42,000
			Total Construction	\$ 465,000
			Non-Construction (20%)	\$ 93,000
			Total Project Cost	\$ 558,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

CR E 900 N Extended Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
CR E 900 N Extended Service Area - Option No. 1 Construction Cost	1	\$ 465,000	1	\$ 465,000
CR E 900 N Extended Service Area - Option No. 1 Non-Construction Costs	1	\$ 93,000	1	\$ 93,000
Total Construction Capital Cost =				\$ 558,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (14)	1 - 20	\$ 1,400	15.59	\$ 21,826
Controls O & M (14)	1 - 20	\$ 1,400	15.59	\$ 21,826
Grinder Pump (14)	15	\$ 56,000	0.69	\$ 38,640
Grinder Pump Controls (14)	15	\$ 21,000	0.69	\$ 14,490
Total O&M Cost =				\$ 96,800

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 185,480	36%	\$ 66,773	\$ 118,707	0.61	\$ 72,411
Structures	50	\$ 36,000	40%	\$ 14,400	\$ 21,600	0.61	\$ 13,176
Total Salvage Value =							\$ 85,600

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 558,000
Operation & Maintenance (O&M)	\$ 96,800
Salvage Value (SV)	\$ (85,600)
Net Present Value (ROUNDED) =	\$ 569,200

CR W 1200 N - CR N 200 W Service Area

Option 1 - Low Pressure Sanitary Sewer with Lift Station and Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 100,440	\$ 100,440
4" Force Main	18980	LF	\$ 25	\$ 474,500
3" Force Main	2340	LF	\$ 22	\$ 51,480
2" Force Main	5860	LF	\$ 18	\$ 105,480
1-1/2" Service Lateral	11600	LF	\$ 16	\$ 185,600
Grinder Pump Station Connection	58	EA	\$ 1,000	\$ 58,000
1-1/2" Corp. Stop Assembly	58	EA	\$ 1,000	\$ 58,000
Manhole Connection	1	EA	\$ 2,500	\$ 2,500
Air Release Valve Manhole	12	EA	\$ 7,000	\$ 84,000
Terminal & Inline Flushing Cleanout	7	EA	\$ 2,500	\$ 17,500
Simplex Grinder Pump Station	58	EA	\$ 10,000	\$ 580,000
CR W 1175 N Lift Station	1	LS	\$ 325,000	\$ 325,000
Traffic Control	1	LS	\$ 15,000	\$ 15,000
Final Grading & Seeding	1	LS	\$ 45,000	\$ 45,000
Erosion & Sediment Control	1	LS	\$ 7,500	\$ 7,500
			Subtotal	\$ 2,110,000
			Contingency (10%)	\$ 211,000
			Total Construction	\$ 2,321,000
			Non-Construction (20%)	\$ 464,000
			Total Project Cost	\$ 2,785,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

CR W 1200 N - CR N 200 W Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
CR W 1200 N - CR N 200 W Service Area - Option No. 1 Construction Cost	1	\$ 2,321,000	1	\$ 2,321,000
CR W 1200 N - CR N 200 W Service Area - Option No. 1 Non-Construction Costs	1	\$ 464,000	1	\$ 464,000
Total Construction Capital Cost =				\$ 2,785,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (58)	1 - 20	\$ 5,800	15.59	\$ 90,422
Controls O & M (58)	1 - 20	\$ 5,800	15.59	\$ 90,422
Lift Station	1 - 20	\$ 2,500	15.59	\$ 38,975
Grinder Pump (58)	15	\$ 232,000	0.69	\$ 160,080
Grinder Pump Controls (58)	15	\$ 87,000	0.69	\$ 60,030
Lift Station Pumps Rebuild (15 yrs)	15	\$ 3,500	0.69	\$ 2,415
Total O&M Cost =				\$ 442,400

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 817,060	36%	\$ 294,142	\$ 522,918	0.61	\$ 318,980
Structures	50	\$ 412,500	40%	\$ 165,000	\$ 247,500	0.61	\$ 150,975
Total Salvage Value =							\$ 470,000

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 2,785,000
Operation & Maintenance (O&M)	\$ 442,400
Salvage Value (SV)	\$ (470,000)
Net Present Value (ROUNDED) =	\$ 2,757,400

CR W 1200 N - CR N 200 W Service Area

Option 2 - Gravity and Low Pressure Sanitary Sewer with Lift Station and Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 108,120	\$ 108,120
8" PVC Gravity Sewer (SDR-35)	3440	LF	\$ 75	\$ 258,000
4" Force Main	18200	LF	\$ 25	\$ 455,000
2" Force Main	5860	LF	\$ 18	\$ 105,480
1-1/2" Service Lateral	8400	LF	\$ 16	\$ 134,400
Grinder Pump Station Connection	42	EA	\$ 1,000	\$ 42,000
1-1/2" Corp. Stop Assembly	42	EA	\$ 1,000	\$ 42,000
Manhole	11	EA	\$ 6,500	\$ 71,500
Manhole Connection	1	EA	\$ 2,500	\$ 2,500
Air Release Valve Manhole	10	EA	\$ 7,000	\$ 70,000
Terminal & Inline Flushing Cleanout	5	EA	\$ 2,500	\$ 12,500
Service Wyes (8" x 6")	18	EA	\$ 750	\$ 13,500
6" Service Lateral (Open Cut)	720	LF	\$ 75	\$ 54,000
Simplex Grinder Pump Station	42	EA	\$ 10,000	\$ 420,000
CR W 1175 N Lift Station	1	LS	\$ 325,000	\$ 325,000
Special Backfill	600	CY	\$ 40	\$ 24,000
Driveway Repair	200	SY	\$ 200	\$ 40,000
Asphalt Replacement	40	SY	\$ 200	\$ 8,000
Traffic Control	1	LS	\$ 15,000	\$ 15,000
Final Grading & Seeding	1	LS	\$ 60,000	\$ 60,000
Erosion & Sediment Control	1	LS	\$ 15,000	\$ 15,000
			Subtotal	\$ 2,276,000
			Contingency (10%)	\$ 228,000
			Total Construction	\$ 2,504,000
			Non-Construction (20%)	\$ 501,000
			Total Project Cost	\$ 3,005,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

CR W 1200 N - CR N 200 W Service Area - Option No. 2

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
CR W 1200 N - CR N 200 W Service Area - Option No. 2 Construction Cost	1	\$ 2,504,000	1	\$ 2,504,000
CR W 1200 N - CR N 200 W Service Area - Option No. 2 Non-Construction Costs	1	\$ 501,000	1	\$ 501,000
Total Construction Capital Cost =				\$ 3,005,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (42)	1 - 20	\$ 4,100	15.59	\$ 63,919
Controls O & M (42)	1 - 20	\$ 4,100	15.59	\$ 63,919
Lift Station	1 - 20	\$ 2,500	15.59	\$ 38,975
Grinder Pump (42)	15	\$ 164,000	0.69	\$ 113,160
Grinder Pump Controls (42)	15	\$ 61,500	0.69	\$ 42,435
Lift Station Pumps Rebuild (15 yrs)	15	\$ 3,500	0.69	\$ 2,415
Total O&M Cost =				\$ 324,900

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 1,020,380	36%	\$ 367,337	\$ 653,043	0.61	\$ 398,356
Structures	50	\$ 339,000	40%	\$ 135,600	\$ 203,400	0.61	\$ 124,074
Total Salvage Value =							\$ 522,500

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 3,005,000
Operation & Maintenance (O&M)	\$ 324,900
Salvage Value (SV)	\$ (522,500)
Net Present Value (ROUNDED) =	\$ 2,807,400

US 27 South Service Area

Option 1 - Low Pressure Sanitary Sewer with Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 20,060	\$ 20,060
3" Force Main	2300	LF	\$ 22	\$ 50,600
2" Force Main	2880	LF	\$ 18	\$ 51,840
1-1/2" Service Lateral	3200	LF	\$ 16	\$ 51,200
Grinder Pump Station Connection	16	EA	\$ 1,000	\$ 16,000
1-1/2" Corp. Stop Assembly	16	EA	\$ 1,000	\$ 16,000
Force Main Connection	1	EA	\$ 1,800	\$ 1,800
Air Release Valve Manhole	3	EA	\$ 7,000	\$ 21,000
Terminal & Inline Flushing Cleanout	6	EA	\$ 2,500	\$ 15,000
Simplex Grinder Pump Station	16	EA	\$ 10,000	\$ 160,000
Traffic Control	1	LS	\$ 7,500	\$ 7,500
Final Grading & Seeding	1	LS	\$ 7,500	\$ 7,500
Erosion & Sediment Control	1	LS	\$ 2,500	\$ 2,500
			Subtotal	\$ 421,000
			Contingency (10%)	\$ 42,000
			Total Construction	\$ 463,000
			Non-Construction (20%)	\$ 93,000
			Total Project Cost	\$ 556,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

US 27 South Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
US 27 South Service Area - Option No. 1 Construction Cost	1	\$ 463,000	1	\$ 463,000
US 27 South Service Area - Option No. 1 Non-Construction Costs	1	\$ 93,000	1	\$ 93,000
Total Construction Capital Cost =				\$ 556,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (16)	1 - 20	\$ 1,600	15.59	\$ 24,944
Controls O & M (16)	1 - 20	\$ 1,600	15.59	\$ 24,944
Grinder Pump (16)	15	\$ 64,000	0.69	\$ 44,160
Grinder Pump Controls (16)	15	\$ 24,000	0.69	\$ 16,560
Total O&M Cost =				\$ 110,700

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 153,640	36%	\$ 55,310	\$ 98,330	0.61	\$ 59,981
Structures	50	\$ 36,000	40%	\$ 14,400	\$ 21,600	0.61	\$ 13,176
Total Salvage Value =							\$ 73,200

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 556,000
Operation & Maintenance (O&M)	\$ 110,700
Salvage Value (SV)	\$ (73,200)
Net Present Value (ROUNDED) =	\$ 593,500

CR W 500 N Service Area

Option 1 - Low Pressure Sanitary Sewer with Grinder Pump Stations

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 22,200	\$ 22,200
2" Force Main	3990	LF	\$ 18	\$ 71,800
1-1/2" Service Lateral	4000	LF	\$ 16	\$ 64,000
Grinder Pump Station Connection	20	EA	\$ 1,000	\$ 20,000
1-1/2" Corp. Stop Assembly	20	EA	\$ 1,000	\$ 20,000
Manhole Connection	3	EA	\$ 2,000	\$ 6,000
Manhole Lining	30	VF	\$ 400	\$ 12,000
Air Release Valve Manhole	3	EA	\$ 7,000	\$ 21,000
Terminal & Inline Flushing Cleanout	5	EA	\$ 2,500	\$ 12,500
Simplex Grinder Pump Station	20	EA	\$ 10,000	\$ 200,000
Traffic Control	1	LS	\$ 5,000	\$ 5,000
Final Grading & Seeding	1	LS	\$ 12,000	\$ 12,000
Erosion & Sediment Control	1	LS	\$ 2,500	\$ 2,500
			Subtotal	\$ 469,000
			Contingency (10%)	\$ 47,000
			Total Construction	\$ 516,000
			Non-Construction (20%)	\$ 103,000
			Total Project Cost	\$ 619,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

CR W 500 N Service Area - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
CR W 500 N Service Area - Option No. 1 Construction Cost	1	\$ 516,000	1	\$ 516,000
CR W 500 N Service Area - Option No. 1 Non-Construction Costs	1	\$ 103,000	1	\$ 103,000
Total Construction Capital Cost =				\$ 619,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (20)	1 - 20	\$ 2,000	15.59	\$ 31,180
Controls O & M (20)	1 - 20	\$ 2,000	15.59	\$ 31,180
Grinder Pump (20)	15	\$ 80,000	0.69	\$ 55,200
Grinder Pump Controls (20)	15	\$ 30,000	0.69	\$ 20,700
Total O&M Cost =				\$ 138,300

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 135,800	36%	\$ 48,888	\$ 86,912	0.61	\$ 53,016
Structures	50	\$ 33,500	40%	\$ 13,400	\$ 20,100	0.61	\$ 12,261
Total Salvage Value =							\$ 65,300

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 619,000
Operation & Maintenance (O&M)	\$ 138,300
Salvage Value (SV)	\$ (65,300)
Net Present Value (ROUNDED) =	\$ 692,000

Monmouth Force Main Improvements

Option 1 - New 6" Force Main

Description	Quantity	Unit	Unit Cost	Total Cost
Mobilization, Bonds & Start-Up	1	LS	\$ 21,800	\$ 21,800
6" Force Main	9400	LF	\$ 35	\$ 329,000
1-1/2" Service Lateral	200	LF	\$ 16	\$ 3,200
Grinder Pump Station Re-Connections	8	EA	\$ 1,000	\$ 8,000
Connection With Existing Lift Station	1	LS	\$ 10,000	\$ 10,000
Connection With Existing Flow Meter	1	LS	\$ 10,000	\$ 10,000
Connection With Existing Headworks	1	LS	\$ 25,000	\$ 25,000
Air Release Valve Manhole	4	EA	\$ 7,000	\$ 28,000
Traffic Control	1	LS	\$ 7,500	\$ 7,500
Final Grading & Seeding	1	LS	\$ 15,000	\$ 15,000
Erosion & Sediment Control	1	LS	\$ 2,500	\$ 2,500
			Subtotal	\$ 460,000
			Contingency (10%)	\$ 46,000
			Total Construction	\$ 506,000
			Non-Construction (20%)	\$ 101,000
			Total Project Cost	\$ 607,000

Twenty (20) Year Life-Cycle Present Worth Cost Analysis

Monmouth Force Main Improvements - Option No. 1

Real Discount Rate (OMB Circular A-94)

2.50%

Construction Capital Costs (C)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Monmouth Force Main Improvements - Opt No. 1 Construction Cost	1	\$ 506,000	1	\$ 506,000
Monmouth Force Main Improvements - Opt No. 1 Non-Construction Costs	1	\$ 101,000	1	\$ 101,000
Total Construction Capital Cost =				\$ 607,000

Operation & Maintenance (O&M)				
Item	Year(s)	Cost (\$)	Present Worth Factor	Present Worth (\$)
Grinder Pump O & M (0)	1 - 20	\$ -	15.59	\$ -
Controls O & M (0)	1 - 20	\$ -	15.59	\$ -
Grinder Pump (0)	15	\$ -	0.69	\$ -
Grinder Pump Controls (0)	15	\$ -	0.69	\$ -
Total O&M Cost =				\$ -

Salvage Value (SV)							
Item	Useful Life (Years)	Initial Cost (\$)	Percent Depreciated (%)	Depreciated Cost (\$)	20 Year Salvage Value (\$)	Present Worth Factor	Present Worth Salvage Value
Pipe	55	\$ 332,200	36%	\$ 119,592	\$ 212,608	0.61	\$ 129,691
Structures	50	\$ 28,000	40%	\$ 11,200	\$ 16,800	0.61	\$ 10,248
Total Salvage Value =							\$ 140,000

Net Present Value (NPV) = (C) + (O&M) - (SV)	
Item	Present Worth (\$)
Construction Capital Costs (C)	\$ 607,000
Operation & Maintenance (O&M)	\$ -
Salvage Value (SV)	\$ (140,000)
Net Present Value (ROUNDED) = \$ 467,000	



Appendix “D”

District Letter of Intent for Land Acquisitions

**2024 Sanitary Sewer Improvements
Preliminary Engineering Report
(PER)
For The
Adams County Regional Sewer District
Adams County, Indiana**

ADAMS COUNTY REGIONAL SEWER DISTRICT
313 W. JEFFERSON STREET, ROOM 337
DECATUR, IN 46733

March 21, 2024

Indiana Department of Environmental Management
State Revolving Loan Fund
100 North Senate Ave., Rm. 1275
Indianapolis, IN 46204

Attn: Jennifer Pence, SRF Program Manager

Re: 2024 Sanitary Sewer Improvements
Land Acquisition
Adams County Regional Sewer District
Adams County, IN

Dear Jennifer,

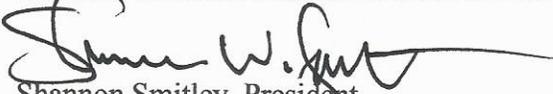
With regard to the referenced project, please be advised that the District intends to negotiate in good faith with prospective land owners when acquiring property for easements for the proposed Adams County Regional Sewer District projects. We also intend to follow all applicable State and Federal guidelines pertaining to land acquisition issues.

The proposed projects revolve around the construction of sanitary sewer collection systems in new service areas coupled with discharge to the City of Decatur and the City of Berne for treatment to affect the relief of individual, on-site, failing residential septic systems.

We look forward to working with your agency on this important project. If you should have any questions or concerns, please don't hesitate to contact our engineering consultant, Ben Adams, CEI at (260) 494-3225.

Sincerely,

ADAMS COUNTY REGIONAL SEWER DISTRICT


Shannon Smitley, President

cc: Ben Adams, P.E., CEI
Nathan Scherer, District Superintendent
Board of Trustees, ACRSD



Appendix “E”

SRF Documents

2024 Sanitary Sewer Improvements Preliminary Engineering Report (PER) For The Adams County Regional Sewer District Adams County, Indiana

SRF Loan Program
ADAMS COUNTY REGIONAL SEWER DISTRICT
PER Acceptance Resolution

RESOLUTION # _____

Whereas, the Board of Trustees of the Adams County Regional Sewer District, Indiana, has caused a 2024 Sanitary Sewer Improvements Preliminary Engineering Report (“PER”), dated March 2024, to be prepared by the consulting firm of Commonwealth Engineers, Inc.; and

Whereas, said PER has been presented to the public at a public hearing held on May 9, 2024, at 1:00 p.m., for public comment; and

Whereas, the Board of Trustees of the Adams County Regional Sewer District, Indiana finds that there was not sufficient evidence presented in objection to the recommended project in the PER.

Now, therefore be it resolved that:

1. The PER dated March 2024 be approved and adopted by the Adams County Regional Sewer District, Indiana; and
2. Said PER be submitted to the State Revolving Fund Loan Program for review and approval.

Adopted and Passed by the Board of Trustees of the Adams County Regional Sewer District, Indiana, this 9th day of May, of 2024.

Shannon Smitley, President

John Carroll, Member

Nate Rumschlag, Secretary

Josh Zimmerman, Member

Jim Franz, Member

John Summers, Member

Attest: _____

SRF Loan Program
ADAMS COUNTY REGIONAL SEWER DISTRICT
Signatory Authorization Resolution

RESOLUTION # _____

Whereas, the Board of Trustees of the Adams County Regional Sewer District, Indiana (the “Participant”) has plans for a sanitary sewer improvements project to meet State and Federal regulations and the Participant intends to proceed with the construction of such project:

Now, therefore, be it resolved by the Board, the governing body of the Participant, that:

1. Shannon Smitley, Board President, be authorized to make application for a State Revolving Fund Loan (“SRF Loan”) and provide the SRF Loan Program such information, data and documents pertaining to the loan process as may be required, and otherwise act as the authorized representative of the Participant; and
2. The Participant agrees to comply with State and Federal requirements as they pertain to the SRF Loan Program; and
3. Two certified copies of this Resolution be prepared and submitted as part of the Participant’s Preliminary Engineering Report.

Adopted and Passed by the Board of Trustees of the Adams County Regional Sewer District, Indiana, this 9th day of May, of 2024.

Shannon Smitley, President

John Carroll, Member

Nate Rumschag, Secretary

Josh Zimmerman, Member

Jim Franz, Member

John Summers, Member

Attest: _____

CLEAN WATER SRF PROJECT FINANCING INFORMATION

Proposed Project Costs

a.	Collection System cost	\$	<u>9,961,000</u>
b.	Treatment System cost	\$	<u>0</u>
c.	Non-Point Source (NPS) cost	\$	<u>0</u>
d.	Subtotal Construction Cost	\$	<u>9,961,000</u>
e.	Contingencies (should not exceed 10% of construction cost)	\$	<u>996,000</u>
f.	Non-construction cost e.g., engineering, legal, and financial services related to the project, land costs, start-up costs, and construction inspection	\$	<u>2,191,000</u>
g.	Total Project Cost (lines d+e+f)	\$	<u>13,148,000</u>

Ineligible costs (see below) **\$** 0

Proposed Funding Information

a.	Requested SRF Financing	\$	<u>13,148,000</u>
b.	Co-Source: _____	\$	<u> </u>
c.	Co-Source: _____	\$	<u> </u>
d.	Co-Source: _____	\$	<u> </u>
e.	Total Funding Sources	\$	<u>13,148,000</u>

CALCULATIONS FOR INELIGIBLE COSTS

The following are not eligible for Clean Water SRF reimbursements:

1.	Materials & work done on private property	\$	<u>N/A</u>
2.	Grant applications and income surveys completed for other agencies	\$	<u>N/A</u>
3.	Project components with the primary intent of promoting economic development and growth	\$	<u>N/A</u>
4.	Land Cost (unless for sludge application), <i>note that professional fees associated with acquiring land are eligible</i>	\$	<u>N/A</u>
5.	Expenses incurred as a part of forming RWDs, CDs, etc., or changing boundaries, or other non-SRF District activities	\$	<u>N/A</u>
6.	Costs for preparing permits and other tasks unrelated to the SRF project	\$	<u>N/A</u>
7.	Cleaning of equipment/tanks or other routine operation and maintenance activities, <i>note cleaning is eligible if required for proposed construction activities to occur</i>	\$	<u>N/A</u>
8.	Total Ineligible Costs	\$	<u>0</u>

**State Revolving Fund Loan Program
Asset Management Program Certification Form
Inclusive of
Fiscal Sustainability Plan Certification**

(To be submitted either at the time of loan closing or no later than the final disbursement of a Participant's loan proceeds)

Participant Name Adams County Regional Sewer District			
Street Address 313 W. Jefferson St., Room 337		P. O. Box Number	
City Decatur	State IN	Zip Code 46733	

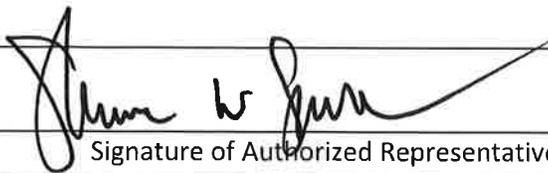
Indiana Code 5-1.2-10-16 requires a Participant that receives a loan or other financial assistance from the State Revolving Fund Loan Program (SRF) to certify that the Participant has documentation demonstrating it has the financial, managerial, technical and legal capability to operate and maintain its water or wastewater collection and treatment system. A Participant must demonstrate that it has developed an asset management program as defined in the Indiana Finance Authority's (Authority) Asset Management Program Guidelines.

Section 603(d)(1)(E) of the Federal Water Pollution Control Act (FWPCA) requires a recipient of a loan for a project that involves the repair, replacement, or expansion of a publicly owned treatment works to develop and implement a Fiscal Sustainability Plan (FSP). The requirement pertains to those portions of the treatment works paid for with Clean Water SRF Loan Funds.

The Asset Management Program (AMP) shall be inclusive of the requirements of the FSP for Wastewater and Drinking Water projects and shall include at a minimum the following: (1) A system map (2) An inventory and assessment of system assets (3) development of an infrastructure inspection, repair, and maintenance plan, including a plan for funding such activities (4) an evaluation and implementation of water and energy conservation efforts (5) An analysis of the customer rates necessary to support the AMP (6) Audit performed at least every two years (7) Demonstration of the technical, managerial, legal and financial capability to operate and maintain the system, per the guidelines established by the Authority.

I hereby certify that I am an authorized representative for the above listed Participant and pursuant to IC 5-1.2-10-16 and Section 603(d)(1)(E), the Participant has developed and is implementing an AMP (inclusive of the requirements of an FSP) that meets the requirements established by the Authority. Upon the request of the Environmental Protection Agency (EPA) or the Indiana SRF, the Participant agrees to make the AMP (which includes the FSP requirements) available for inspection and/or review.

Participant's estimated capital asset needs in the next 5 years: \$ 14,913,200.00

 Signature of Authorized Representative	March 26, 2024 Date
Shannon Smitley, President Printed Name	(260) 525-1187 / ssmitley@cityofberne.com Phone Number/Email Address

Cost & Effectiveness Certification Form

(Pursuant to Section 602(B)(13) of the Federal Water Pollution Control Act)
(Applies to all assistance recipients submitting an application on or after October 1, 2015)
(To be submitted prior to Participant's Wastewater Loan Closing)

Participant Name Adams County Regional Sewer District		
Street Address 313 W. Jefferson St., Room 337	P. O. Box Number	
City Decatur	State IN	Zip Code 46733

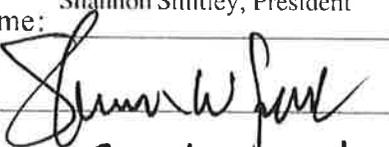
Section 602(B)(13) of the Federal Water Pollution Control Act (FWPCA) requires a recipient of a loan to certify that the recipient:

- 1) has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought under the Clean Water State Revolving Fund Loan Program; and
- 2) has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account
 - (i) the cost of constructing the project or activity;
 - (ii) the cost of operating and maintaining the project or activity over the life of the project or activity; and
 - (iii) the cost of replacing the project or activity

Certification

We hereby certify pursuant to Section 602(B)(13) that the Participant has completed the requirements of Section 602(B)(13) as set forth in items (1) and (2) above.

Signature of the Authorized Representative

Printed Name: Shannon Smitley, President
Signature: 
Date: 3-14-2024

Signature of Consulting Engineer

Printed Name: Benjamin Adams, P.E.
Signature: 
Date: 3-25-2024



Appendix “F”

Public Participation Records

**2024 Sanitary Sewer Improvements
Preliminary Engineering Report
(PER)
For The
Adams County Regional Sewer District
Adams County, Indiana**



Appendix “G”

Rate Ordinance

2024 Sanitary Sewer Improvements Preliminary Engineering Report (PER) For The Adams County Regional Sewer District Adams County, Indiana

**ADAMS COUNTY REGIONAL SEWER DISTRICT
AMENDATORY ORDINANCE NO. 2022-4**

AN ORDINANCE AMENDING AND RESTATING ORDINANCE 2022-2 ESTABLISHING A SCHEDULE OF RATES AND CHARGES TO BE COLLECTED BY THE ADAMS COUNTY REGIONAL SEWER DISTRICT FROM THE OWNERS OF PROPERTY SERVED BY THE SEWAGE WORKS OF THE SAID DISTRICT AND OTHER MATTERS CONNECTED THEREWITH.

WHEREAS, the Board of the Adams County Regional Sewer District, hereafter “the District” heretofore approved plans, specifications and estimates and determined to establish, construct, equip, own, operate and maintain the Sewage Works provided for therein, pursuant to Chapter 284 of the Acts of the General Assembly of the State of Indiana for the year 1967 and all acts supplemental thereto, and

WHEREAS, the District is the recipient of a Rural Development (“RD”) loan from the U.S. Department of Agriculture to fund that portion of the cost of improvements not covered by government grants; and

WHEREAS, the District is the recipient of a loan and forgivable bond anticipation note (“BAN”) from the State Revolving Fund Loan Program (“SRF”) to fund the cost of improvements; and

WHEREAS, following a public hearing for which notice was duly provided, the District previously adopted Ordinance No. 2022-02 on March 10, 2022 (the “Existing Rate Ordinance”), establishing a schedule of rates and charges to be collected from owners of property served by the Sewage Works of the District and it is necessary to amend said ordinance to include additional service areas for the purpose of establishing a schedule of rates and charges to produce sufficient revenue to pay expenses of maintenance and operation and to provide funds for necessary replacements and improvements to the Sewage Works and to pay the principal and interest on proposed revenue bonds in accordance with the applicable bond ordinances; and

WHEREAS, the District desires to amend and restate the Existing Rate Ordinance to add additional service areas in the definition of the term “Project” in the Existing Rate Ordinance;

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE ADAMS COUNTY REGIONAL SEWER DISTRICT THAT ORDINANCE NO. 2022-02 IS HEREBY AMENDED AND RESTATED AS FOLLOWS:

Section 1. Unless the context specifically indicates otherwise, the meaning of terms used in this ordinance shall be as follows:

- (a) “Board” shall mean the Board of Trustees of the Adams County Regional Sewer District, or any duly authorized officials acting on its behalf.
- (b) “District” shall mean the Adams County Regional Sewer District acting by and through the Board.

- (c) “Debt service costs” shall mean the average annual principal and interest payments on all outstanding revenue bonds or other long-term capital debt.
- (d) “Industrial wastes” shall mean the wastewater discharges from industrial, trade or business processes as distinct from employee wastes or wastes from sanitary conveniences.
- (e) “NPDES (National Pollutant Discharge Elimination System) Permit” shall have the same meaning as defined in the Sewer Use Ordinance.
- (f) “Operation and maintenance costs” include all costs, direct and indirect, necessary to provide adequate wastewater collection, transport and treatment on a continuing basis and produce discharges to receiving waters that conform with all related Federal, State and local requirements. (These costs include replacement.)
- (g) “Other service charges” shall mean tap charges, connection charges, area charges, and other identifiable charges, other than billing charges, service charges and excessive strength surcharges.
- (h) “Person” shall mean any and all persons, natural or artificial, including any individual, firm, company, municipal or Private Corporation, association, society, institution, enterprise, governmental agency or other entity.
- (i) “Project” shall mean the construction of the wastewater facilities and collection system to provide sewer service to the following and surrounding areas:
 - Monmouth – Roe Acres service area
 - Arcadia Village service area
 - Pleasant Mills service area
 - Rivare (Bobo) service area
 - US 33 and Salem Road service area
 - Linn Grove service area
 - Preble service area
 - Peterson service area
 - Barrington Woods service area
 - Monmouth Extended CR 900N service area
 - Clem’s Lake service area
 - Sunnybrook Addition – CR 100W – CR 200W service area
 - Oakwood Addition (Yost Woods Fringe) service area
 - Magley – CR 600W service area
 - NW Winchester – CR 200W service area
 - Clem’s Lake South – US 224 service area
- (j) “Replacement costs” shall mean the expenditures for obtaining and installing equipment, accessories or appurtenances which are necessary during the useful life of treatment works to maintain the capacity and performance for which such works were designed and constructed

- (k) "Shall" is mandatory; "May" is permissive.
- (l) "Wastewater Facilities" shall mean the structure, equipment, and processes required to collect, carry away, and treat domestic and commercial wastes and dispose of the effluent.

Section 2. Every person whose premises are served by said Sewage Works shall be charged for the services provided. These charges are established for each user in order that the District shall recover, from each user, revenue which is proportional to its use of the treatment works in terms of volume and load.

Section 3. For the use of and the service rendered by said Sewage Works, rates and charges shall be collected from the owners of each and every lot, parcel of real estate or building that is connected with the District's sanitary system or otherwise discharges sanitary sewage, industrial wastes, water or other liquids, either directly or indirectly, into the sanitary sewerage system of the District. Which rates and charges shall be payable as hereinafter provided and shall be in an amount determinable as follows:

- (a) Each lateral connection shall pay a bill which shall consist of the sewer rate per month of:

Billing Charge per bill	\$ 3.35
Service Charge per equivalent single family dwelling unit	89.95
Total Monthly Bill	\$93.30*

*Additional minimum electric service charge (if applicable) **\$24.00/meter.**

- (b) The service charges shall be based on the quantity of water used on or in the property or premises subject to such rates and charges as the same is determined by equivalent single family dwelling units as found on Appendix A.
- (c) The monthly rates and charges provided herein shall be applied throughout the year based upon the maximum sewage service required in any month in any calendar year. For example, the service charges based upon employment shall be applied throughout the year based upon the maximum employment (full- and part-time) of the user for such single maximum employment month, and such maximum usage shall be applied through the year.
- (d) An additional monthly service charge (*) for the cost of electric service to power grinder stations shall be charged to those customers who do not provide electric power to a grinder station in a Project that requires customers to supply such power.

In order to produce an amount sufficient to meet the interest on the revenue bonds and other expenses payable prior to the completion of the Project, after the contract for construction of sewer system has been let and the actual work commenced thereunder, the owners of each and every lot, parcel or real estate or building to be connected with the District's sanitary sewage system, as a

result of the construction of said Works, shall pay each month the Monthly Billing Charge of \$3.35 plus the Service Charge of \$26.65 per equivalent single family dwelling unit for a total monthly interim rate in the amount of \$30.00/month during construction. Beginning with the first month after the sanitary sewers are available for connection and use to any lot, parcel of real estate or building, the full rates and charges shall become effective for such lot, parcel of real estate or building; but in any event, said full rates and charges shall become effective, with respect to Magley – CR 600W, NW Winchester – CR 200W, and Clem’s Lake South - US 224, no later than January 1, 2024, so that billings for full rates and charges shall be issued for the month of January and each month thereafter on a schedule to be determined and/or approved by the Board of Trustees.

Section 4. The owner of any lot, parcel of real estate or building connecting to the Sewage Works shall, prior to being permitted to make a connection, pay a connection charge in the amount of \$2,000.00 for each connection. The Board of Trustees now finds such a connection charge to be a reasonable and equitable pro rata cost of construction of a local or lateral sewer adequate to serve the property so connecting and the cost of providing a connection to the sewer system.

Provided, however, no connection charge will be required of any customer that was part of the original plans and specifications prepared for a District financed Project connecting to a local or lateral sewer within 90 days of the date on which said sewer was available for connection. Each customer making a connection to the sewer system shall be required to pay an inspection fee of \$75.00 to the District to cover the cost of inspecting the customer’s connection to the system before the work is commenced and in accordance with any policies and procedures adopted or approved by the Board of Trustees for connections.

Unless otherwise determined by the Board of Trustees, connection charges will be imposed on any connection made after 90 days of availability for connection and on all connections made to future extensions of the system based on the actual cost to make a lateral connection plus the connection fee of \$2,000.00. The Board may waive or reduce a connection charge to the District’s sewer system upon a finding by the Board of one or more of the following circumstances or conditions:

- (a) The Owner of property requesting an exemption has granted an easement to the District that will permit the District to extend lines to immediately serve additional users other than the person requesting the exemption.
- (b) The Owner requesting an exemption is paying a portion of the cost to extend a line that will provide current or future benefit to the District.
- (c) The Owner has paid monthly sewer charges to the District before requesting or making a connection.
- (d) Any other condition that the Board finds will substantially benefit the District according to a policy approved by the Board.

Section 5. Such rates and charges shall be prepared, billed and collected by the District in the manner provided by law and ordinance.

- (a) The rates and charges for all users shall be prepared and billed monthly.
- (b) The rates and charges will be billed to the deeded owner of the property unless otherwise determined by a policy approved by the Board. Any billing issued to a person or entity other than the deeded owner shall in no way relieve the owner from the liability in the event payment is not made as herein required. The owners of properties served, which are occupied by a tenant or tenants, shall have the right to examine the collection records of the District for the purpose of determining whether bills have been paid by such tenant or tenants, provided that such examination shall be made at the office at which said records are kept and during the hours that such office is open for business.
- (c) As is provided by statute, all rates and charges not paid when due are hereby declared to be delinquent and a penalty of ten percent (10%) of the amount of the rates or charges shall thereupon attach thereto unless some additional grace period is approved by the Board. The time at which such rates or charges shall be paid is now fixed at fifteen (15) days after the date of mailing of the bill or the due date stated upon the bill, whichever is later.

Section 6. In order that the rates and charges for sewage services may remain fair and equitable and be in proportion to the cost of providing services to the various users or user classes, the District shall cause a study to be made once reliable operating revenue and expenses are known and regularly as needed thereafter. Such study shall include, but not be limited to, an analysis of the costs associated with the treatment of excessive strength effluents from industrial users, volume and delivery flow rate characteristics attributed to the various users or user classes, the financial position of the Sewage Works and the adequacy of its revenue to provide reasonable funds for the operation and maintenance, replacements, debt service requirements and capital improvements to the waste treatment systems. The District shall adjust its rates and charges to reflect the results of the study.

Thereafter, within a reasonable period of time following the normal accounting period, the District may cause a similar study to be made for the purpose of reviewing the fairness, equity and proportionality of the rates and charges for sewage services on a continuing basis. Said studies shall be conducted by officers or employees of the District, or by a firm of certified public accountants, or a firm of consulting engineers which firms shall have experience in such studies, or by such combination of officers, employees, certified public accountants, or engineers as the District shall determine to be best under the circumstances. The District shall, upon completion of said study revise and adjust the rates and charges, as necessary in accordance therewith in order to maintain the proportionality and sufficiency of the rates.

Section 7. The District shall make and enforce such by-laws and regulations as may be deemed necessary for the safe, economical and efficient management of the District's sewerage system, pumping stations and sewage conveyance system, for the construction and use of house sewers and connections to the sewerage system, and for the regulation, collection, rebating and refunding of such rates and charges.

The District is hereby authorized to prohibit dumping of wastes into the Districts' sewage system which, in its discretion, are deemed harmful to the operation of the sewage treatment works of the District or to require methods affecting pretreatment of said wastes to comply with the pretreatment standards included in the National Pollution Discharge Elimination System (NPDES) permit issued to the City of Decatur and the City of Berne.

Section 8. The invalidity of any section, clause, sentence, or provision of this ordinance shall not affect the validity of any other part of this ordinance which can be given effect without such invalid part or parts.

Section 9. That the rules and regulations promulgated by the District, after approval of the Board of Trustees shall, among other things, provide for an appeal procedure whereby a user shall have the right to appeal a decision of the Administrator of the user charge to the Board of Trustees and that any decision concerning user charges of the Board of Trustees may be appealed to a court of competent jurisdiction under the Appeal Procedures provided for in the Indiana Administrative Adjudication Act.

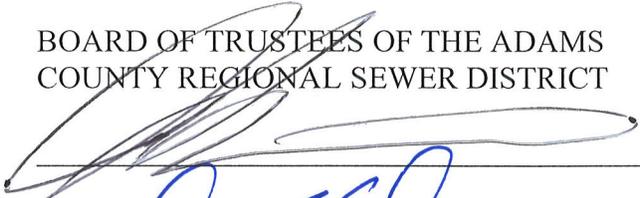
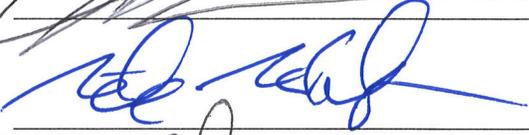
Section 10. The Board is hereby further authorized to enter into special rate contracts with customers of the Sewage Works where clearly definable cost to the Sewage Works can be determined, and such rate shall be limited to such costs.

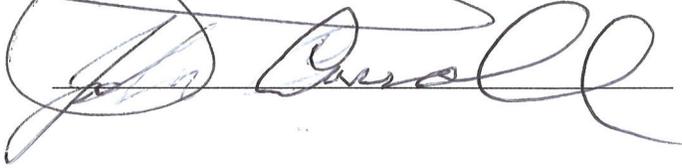
Section 11. The Board shall not grant free service or use of the sewage treatment system to any person, group or entity. It is not necessary for an area or parcel of real estate to be annexed to the District to receive sewage treatment.

[Signatures follow on next page.]

Passed and adopted by the Board of Trustees for the Adams County Regional Sewer District on the 10th day of November, 2022.

BOARD OF TRUSTEES OF THE ADAMS COUNTY REGIONAL SEWER DISTRICT



Attest:



Secretary

ADAMS COUNTY REGIONAL SEWER DISTRICT
Adams County, Indiana

APPENDIX A

EQUIVALENT SINGLE-FAMILY DWELLING UNITS

	<u>ESFDU</u> <u>Determinant</u>	<u>ESFDU</u>
Residential:		
Single family residence	Per unit	1.000
Apartment	Per unit	0.750
Commercial:		
Assembly Hall	Per seat	0.010
Food Service Operation – Restaurant or Tavern	Per Seat	0.110
Office Building (without showers)	Per employee	0.060
Office Building (with showers)	Per employee	0.110
Other Commercial		
Per 1,000 square feet	Per square feet	0.300
PLUS: Per Employee	Per employee	0.060
Governmental:		
First 3 employees		1.000
Each additional employee	Per employee	0.06
Fire department	Per unit	1.000
Institutional:		
Church without kitchen	Per sanctuary seat	0.010
Church with full kitchen	Per sanctuary seat	0.020
Daycare Center	Per person	0.060
Schools:		
For each enrolled student:		
Full-time	Per student	0.100
Part-time	Per student	0.050
Industrial: (sanitary flow only)		
Factory without showers	Per employee	0.060
Factory with showers	Per employee	0.110

*All uses: Minimum of 1 EDU or per unit whichever is greater.



Fort Wayne Office

9604 Coldwater Road, Suite 203
Fort Wayne, IN 46825

Corporate Office: 7256 Company Drive, Indianapolis, IN 46237

Regional Offices: Crown Point, Evansville, Fort Wayne,
Indianapolis North, and South Bend, IN | Bowling Green, KY



260.494.3223



cei@contactcei.com

