MEMORANDUM

TO: Honorable Mayor and City Council
Jon Radermacher, City Administrator

FROM: Bill Angerman, P.E.
Consulting City Engineer

DATE: February 26, 2025

RE: Tract Development – Alternative Urban Areawide Review (AUAR), Cannon Falls MN

The purpose of this memo is to provide an overview of the Cannon Falls Industrial Development project environmental review. The process this project will follow is an Alternative Urban Areawide Review (AUAR). Members of the development team will be present at the March 4th Joint City Council & Planning Commission AUAR work session. The development team will review the timelines and answer questions.

Background

The Cannon Falls Industrial Development project is a significant initiative aimed at developing approximately 251 acres of farmland in the City of Cannon Falls and Randolph Township, Goodhue and Dakota Counties, Minnesota, into either an industrial park or a technology park. The project is proposed by MNLCO Dakota County Two, LLC & MNLCO Dakota County Three, LLC.

The project involves the construction of new infrastructure, including water service, sewer, stormwater management, streets, and utilities. The development is anticipated to begin in 2026.

The study area is currently zoned for agricultural and industrial use. The scoping document evaluates potential impacts on water resources, geology, soils, wildlife, and historic properties. Mitigation measures will be identified to address any adverse effects.

City Staff have met with the site developer and reviewed the "Scoping Document for the Cannon Falls Industrial AUAR" dated February 2025. This and other supporting documents can be found at: https://www.cannonfallsmn.gov/community/page/cannon-falls-technology-park.

Public Comments

The public is invited to comment on the proposed development scenarios and relevant issues to be evaluated in the AUAR. The 30-day comment period will begin on March 4, 2025, and end on April 3, 2025. Comments should be addressed to Jon Radermacher, City Administrator, at cityadmin@cannonfallsmn.gov

Council Action Recommendation

There are no council actions requested at this time.

TO: Interested Parties (Including Minnesota Environmental Quality Board Distribution List)

FROM: Jon Radermacher
City Administrator
City of Cannon Falls

DATE: March 4, 2025

SUBJECT: Draft Order for the City of Cannon Falls Industrial Development Alternative Urban Areawide Review (AUAR)

As the designated Responsible Governmental Unit (RGU), the City of Cannon Falls has determined that an Alternative Urban Areawide Review (AUAR) is required for the proposed Cannon Falls Industrial Development. The Scenarios studied in the AUAR exceed the threshold for a mandatory EIS under MN Rules 4410.4400 Subp. 11. This allows the City to pursue an AUAR in accordance with Minnesota Rule 4410.3610.

This document constitutes an order for review. Enclosed is the Scoping Document for the proposed redevelopment. The Scoping Document is available for review and comment as part of the AUAR process as described in Minnesota Rules, part 4410.3610, subpart 5a.

Pursuant to Minnesota Rules, part 4410.3610, subpart 5a(C), the purpose of the comments on a Scoping Document for an AUAR is to suggest additional development scenarios and relevant issues to be analyzed in the review. Comments may suggest alternatives to the specific large project or projects proposed to be included in the review, including development at sites outside of the proposed geographic boundary. The comments must provide reasons why a suggested development scenario or alternative to a specific project is potentially environmentally superior to those identified in the RGU's draft order.

AUAR Study Area

The AUAR study area encompasses an area totaling approximately 251 acres on 5 parcels in the City of Cannon Falls and Randolph Township, Goodhue and Dakota Counties, Minnesota.

Development Scenarios

Two development scenarios, defined in Table 1 and shown on Figures 2 and 3, are proposed to be evaluated in the AUAR.

Table 1: AUAR Development Scenarios

Component	Scenario 1	Scenario 2
Industrial (square feet)	1,750,000	-
Technology Park (square feet)	-	1,500,000
Total (square feet)	**1,750,000**	**1,500,000**
Total Project Area	**251 acres**	**251 acres**

Public Comment Period

The public is invited to comment on the proposed development scenarios and relevant issues to be evaluated in the AUAR prior to issuance of a final AUAR order. The 30-day comment period will begin on March 4, 2025. Comments will be accepted through 4:00 PM on April 3, 2025, and should be addressed to:

RGU:
City of Cannon Falls
Jon Radermacher
City Administrator
918 River Road
Cannon Falls, MN 55009

Email: cityadmin@cannonfallsmn.gov

Figure 1: AUAR Study Area

Cannon Falls Work Session
AUAR Overview
March 4, 2025

MINNESOTA ENVIRONMENTAL REVIEW

- Minnesota Rules 4410: The environmental review process is a state process that aims to avoid and minimize damage to Minnesota's environmental resources caused by public and private actions. https://www.revisor.mn.gov/rules/4410/

- The Environmental Quality Board (EQB) oversees the state of Minnesota's environmental review program. https://www.eqb.state.mn.us/environmental-review/overview

MINNESOTA ENVIRONMENTAL REVIEW

- Responsible Governmental Unit (RGU)
- As noted in Minnesota Rules, 4410.0500, the RGU is identified as either:
  - a single government unit that proposes to carry out or has sole jurisdiction to approve a project, or
  - when two or more governmental units propose to carry out or have jurisdiction to approve the project, the RGU is the governmental unit with the greatest responsibility for supervising or approving the project as a whole.

MINNESOTA ENVIRONMENTAL REVIEW

- The Environmental Review program is not an approval process.
- It is an information gathering process to help governmental units with permitting authority over a project to make better-informed decisions.
- Multiple levels of Environmental Review
  - Based on Minnesota Rules 4410.4300 and 4410.4400
    - Environmental Assessment Worksheet
    - Environmental Impact Statement
    - Alternative Urban Areawide Review

MINNESOTA ENVIRONMENTAL DOCUMENTATION THRESHOLDS

- The thresholds are established based on the size of the municipality in which the project site or proposed action is located. The class of city or municipality is based on total population and is defined in state statute.

Kimley»Horn

October 2019

MN State Environmental Documentation Thresholds

According to Minnesota Rules, an Environmental Assessment Worksheet (EAW) or an Environmental Impact Statement (EIS) must be prepared for projects that meet or exceed the thresholds under part 4410.4300 or 4410.4400, respectively. The thresholds most pertinent to development are summarized in the table below. Thresholds for other project types are included in Minnesota Rules, part 4410.

Legislative Class	Population
First Class City	More than 100,000 (includes Minneapolis, Saint Paul, Rochester, and Duluth)
Second Class City	20,001 to 100,000
Third Class City	10,001 to 20,000
Fourth Class City	10,000 or less

Industrial, Commercial, and Institutional Facilities

Construction of a new or expansion of an existing warehousing or light industrial facility (expressed in gross floor space)

Threshold for Preparation of an EAW:	Threshold for Preparation of an EIS:
600,000 square feet (First Class City)	1,500,000 square feet (First Class City)
450,000 square feet (Second Class City)	1,000,000 square feet (Second Class City)
300,000 square feet (Third/Fourth Class City)	750,000 square feet (Third/Fourth Class City)
150,000 square feet (Unincorporated)	375,000 square feet (Unincorporated)

Construction of a new or expansion of an existing commercial, institutional, and industrial not including warehousing (including office and hotel) (expressed in gross floor space)

Threshold for Preparation of an EAW:	Threshold for Preparation of an EIS:
400,000 square feet (First Class City)	1,000,000 square feet (First Class City)
300,000 square feet (Second Class City)	750,000 square feet (Second Class City)
200,000 square feet (Third/Fourth Class City)	500,000 square feet (Third/Fourth Class City)
100,000 square feet (Unincorporated)	250,000 square feet (Unincorporated)

Residential Development (In Twin Cities Metro Area or for First Class Cities)

ALTERNATIVE URBAN AREAWIDE REVIEW

- The AUAR process is a hybrid of the Environmental Assessment Worksheet (EAW) and Environmental Impact Statement (EIS) review processes. Responsible Governmental Units (RGUs) can use an AUAR as a planning tool to understand how different development scenarios would affect the environment of their community before the development occurs.
- The process is designed to look at the cumulative impacts of anticipated development scenarios within a given geographic area.
- https://www.eqb.state.mn.us/sites/eqb/files/documents/Quick%20Reference-Alternative%20Urban%20Areawide%20Review%20-%20Updated%20Dec2015.pdf

TOPICS STUDIED IN AN AUAR

Climate Adaption and Resilience

Contamination/ Hazardous Wastes

Greenhouse Gas Emissions

Water Resources

Land Use

Fish/Wildlife/ Plant Communities

Cumulative Potential Effects

Noise

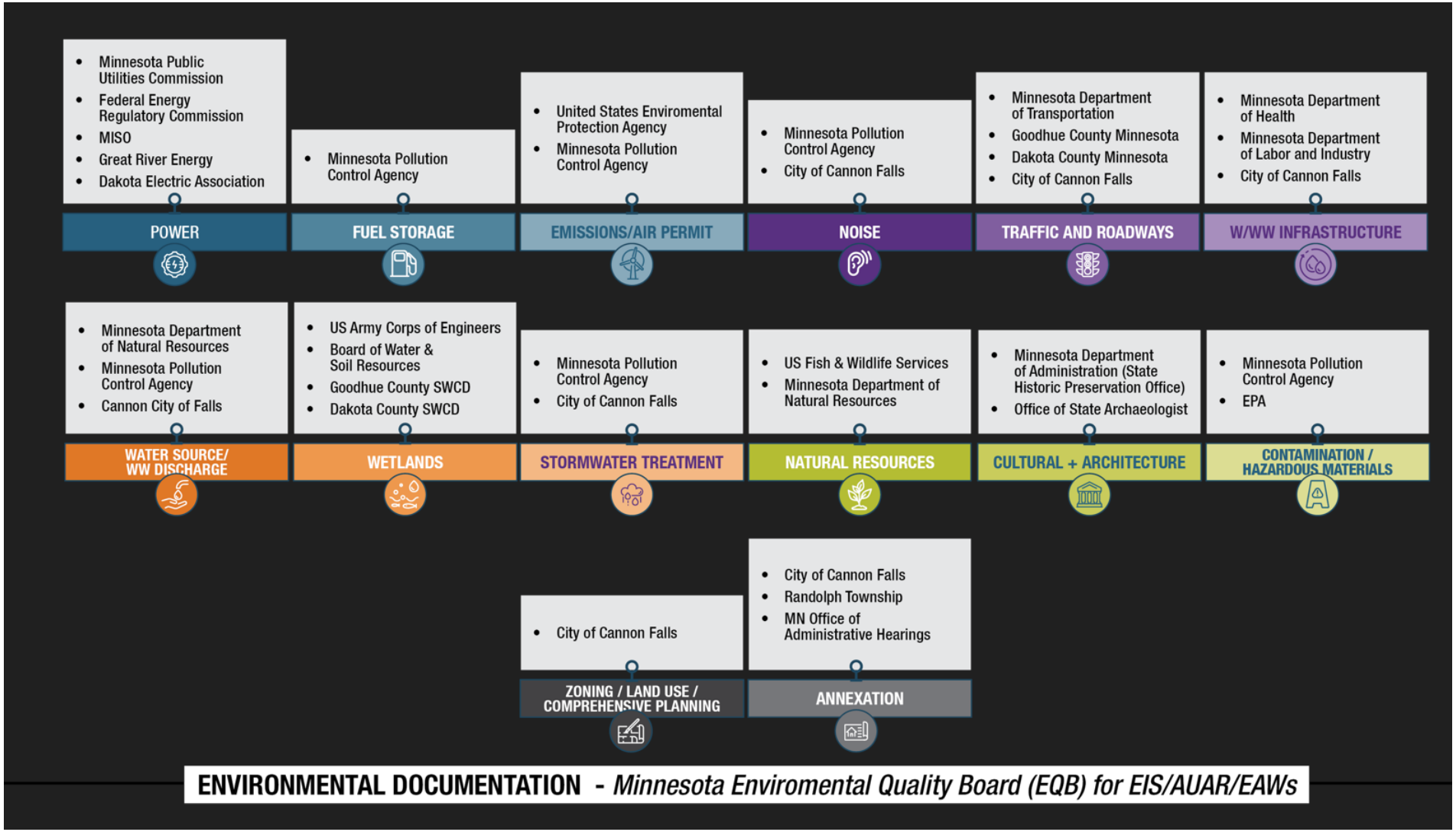
Geology/Soils

Historic Properties

Transportation

Visual

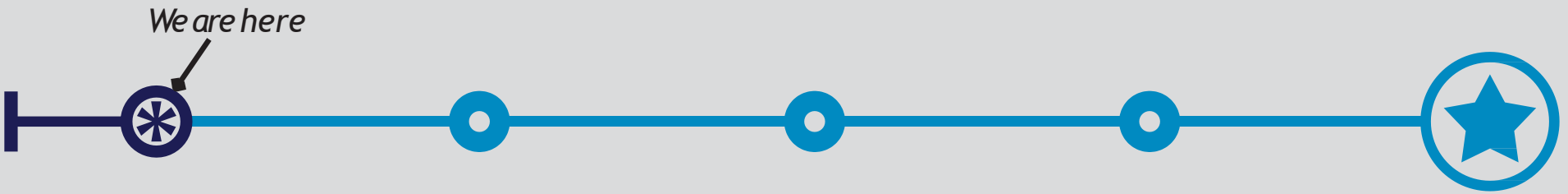
Air


Minnesota Public Utilities Commission
Federal Energy Regulatory Commission
MISO
Great River Energy
Dakota Electric Association
POWER
Minnesota Pollution Control Agency
FUEL STORAGE
United States Enviromental Protection Agency
Minnesota Pollution Control Agency
EMISSIONS/AIR PERMIT
Minnesota Pollution Control Agency
City of Cannon Falls
NOISE
Minnesota Department of Transportation
Goodhue County Minnesota
Dakota County Minnesota
City of Cannon Falls
TRAFFIC AND ROADWAYS
Minnesota Department of Health
Minnesota Department of Labor and Industry
City of Cannon Falls
W/WW INFRASTRUCTURE
Minnesota Department of Natural Resources
Minnesota Pollution Control Agency
Cannon City of Falls
WATER SOURCE/ WW DISCHARGE
US Army Corps of Engineers
Board of Water & Soil Resources
Goodhue County SWCD
Dakota County SWCD
WETLANDS
Minnesota Pollution Control Agency
City of Cannon Falls
STORMWATER TREATMENT
US Fish & Wildlife Services
Minnesota Department of Natural Resources
NATURAL RESOURCES
Minnesota Department of Administration (State Historic Preservation Office)
Office of State Archaeologist
CULTURAL + ARCHITECTURE
Minnesota Pollution Control Agency
EPA
CONTAMINATION / HAZARDOUS MATERIALS
City of Cannon Falls
ZONING / LAND USE / COMPREHENSIVE PLANNING
City of Cannon Falls
Randolph Township
MN Office of Administrative Hearings
ANNEXATION
ENVIRONMENTAL DOCUMENTATION - Minnesota Enviromental Quality Board (EQB) for EIS/AUAR/EAWs

AUAR – STEPS FOR LARGE PROJECTS

- Draft Order and Scoping Document
  - 30-day Public and Agency Comment Period
- Final Order and Scoping Document adopted by RGU
- AUAR and Mitigation Plan
  - Draft AUAR and Mitigation Plan
    - 30-day Public Comment Period
  - Final AUAR and Mitigation Plan
    - 10-day State Agency Objection Period
- Final AUAR and Mitigation Plan adopted by RGU

TENTATIVE AUAR SCHEDULE



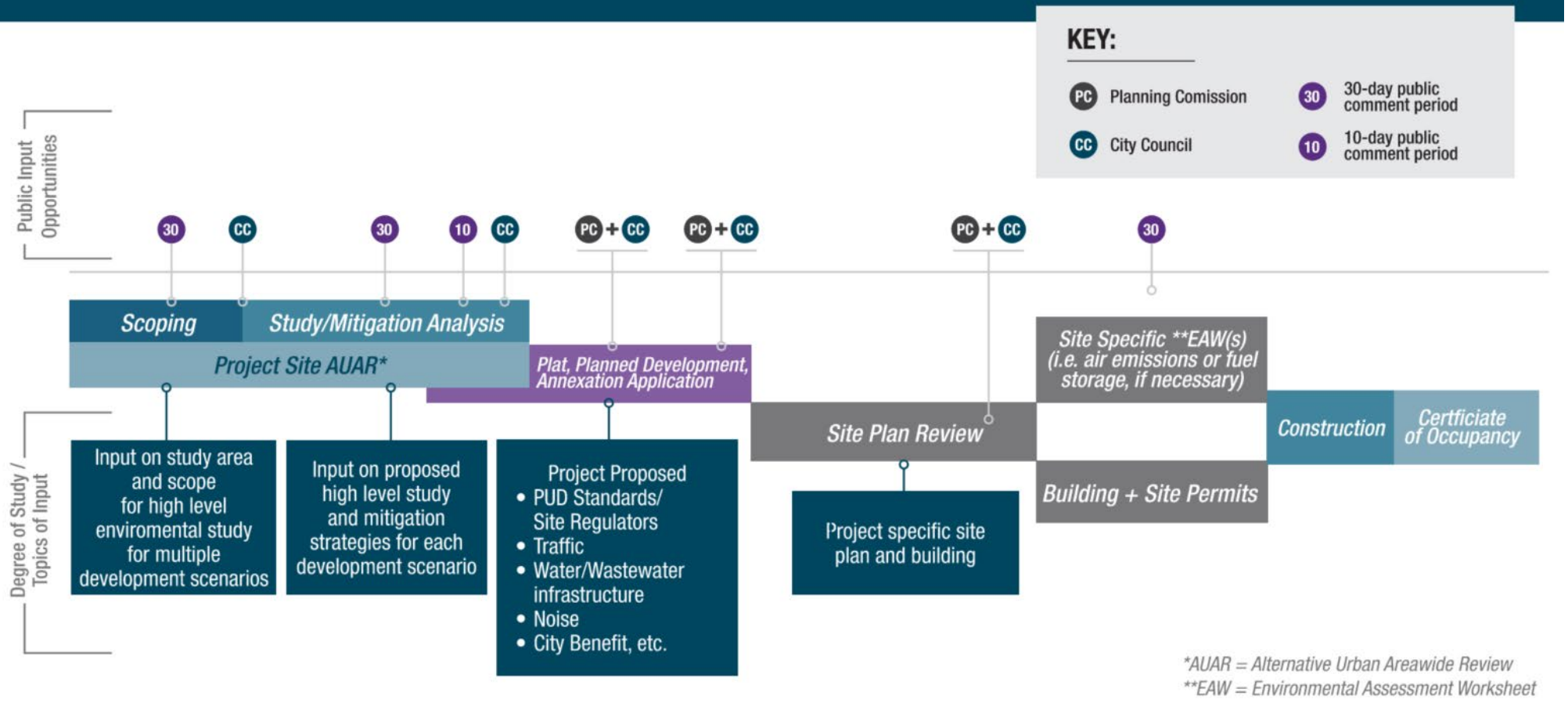
Preparation of the Scoping Document and Scenarios	Draft Order and Scoping 30-day Public Comment Period	Preparation of Draft AUAR	Draft AUAR 30-day Public Comment Period	Final AUAR and Adoption of the Final AUAR
November 2024 – January 2025	Feb. – April 2025	January – April 2025	Spring 2025	Summer 2025

Questions?

More information about the AUAR process can be found on the EQB webpage
https://www.eqb.state.mn.us/environmental-review/overview/alternative-urban-areawide-review-auar-process

TYPICAL DATA CENTER DEVELOPMENT PROCESS

Kimley»Horn



Cannon Falls Industrial AUAR

SCOPING DOCUMENT

FEBRUARY 2025

PREPARED FOR:

Cannon City of Falls

PREPARED BY:

Kimley»Horn

Table of Contents

List of Tables

List of Figures

Draft Scoping Document

This EAW form is being used to delineate the issues and analyses to be reviewed in an Alternative Urban Areawide Review (AUAR). Where the AUAR guidance provided by the Minnesota Environmental Quality Board (EQB) indicates that an AUAR response should differ notably from what is required for an EAW, the guidance is noted in *italics.*

Note to reviewers: Comments must be submitted to the Responsible Governmental Unit (RGU) during the 30-day comment period following notice of the Scoping Document in the *EQB Monitor*.

1. PROJECT TITLE

Cannon Falls Industrial

2. PROPOSER

Proposer: MNLCO Dakota County Two, LLC & MNLCO Dakota County Three, LLC
Contact Person: Kristin Dean
Address: 3300 E 1st Ave Ste 600
City, State, ZIP: Denver, CO 80206
Phone: 303-276-7950
Email: kristin.dean@tract.com

3. RGU

RGU: City of Cannon Falls
Contact Person: Jon Radermacher
Title: City Administrator
Address: 918 River Road
City, State, ZIP: Cannon Falls, MN 55009
Phone: 507-263-9304
Email: cityadmin@cannonfallsmn.gov

4. REASON FOR PREPARATION

The Scenarios studied in the AUAR exceed the threshold for a mandatory EIS under MN Rules 4410.4400 Subp. 11. This allows the City to pursue an AUAR in accordance with Minnesota Rule 4410.3610.

5. PROJECT LOCATION

County: Dakota and Goodhue
City/Township: Cannon Falls and Randolph Township
PLS Location (¼, ¼, Section, Township, Range): Section 1, Township 112N, Range 18W and Section 6 Township 112N, Range 17W
Watershed (81 major watershed scale): Cannon River
Tax Parcel: 310010051010, 310010085010, 310010090011, 310120001012, 525100100
At a minimum, attach each of the following to the AUAR:

- **US Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries** (see **Figure 1)**
- **Map depicting the boundaries of the AUAR and any subdistricts used in the AUAR analysis** (see **Figure 2** through **Figure 4**)
- List of data sources, models, and other resources (from the Item-by-Item Guidance: Climate Adaptation and Resilience or other) used for information about current Minnesota climate trends and how climate change is anticipated to affect the general location of the project during the life of the project (as detailed below in Item 7)
- **Cover type map as required for Item 8** (see **Figure 5**)
- **Land use and planning maps as required in conjunction with Item 10** (see **Figure 6** and **Figure 7**)

Figure 1: USGS Map

Figure 2: AUAR Study Area

6. PROJECT DESCRIPTION

AUAR Guidance: Instead of the information called for on the EAW form, the description section of an AUAR should include the following elements for each major development scenario included:

- *Anticipated types and intensity (density) of residential and commercial/warehouse/light industrial development throughout the AUAR area.*
- *Infrastructure planned to serve development (roads, sewers, water, stormwater system, etc.). Roadways intended primarily to serve as adjoining land uses within an AUAR area are normally expected to be reviewed as part of an AUAR. More "arterial" types of roadways that would cross an AUAR area are an optional inclusion in the AUAR analysis; if they are included, a more intensive level of review, generally including an analysis of alternative routes, is necessary.*
- *Information about the anticipated staging of various developments, to the extent known, and of the infrastructure, and how the infrastructure staging will influence the development schedule.*

The AUAR study area encompasses an area totaling approximately 251 acres on 5 parcels in the City of Cannon Falls and Randolph Township, Goodhue and Dakota Counties, Minnesota (shown on Figure 2). MNLCO Dakota County Two, LLC & MNLCO Dakota County Three, LLC is proposing to develop the study area from existing farmland to industrial or technology park uses. Upon approval, the portion of the study area currently in Randolph Township will be annexed into the City of Cannon Falls; refer to Table 4 for required permits and approvals.

Two scenarios are proposed for evaluation in the AUAR as outlined in Table 1. Scenario 1 includes multiple buildings for a total of 1,750,000 square feet of a proposed industrial development (see Figure 3). Scenario 2 includes multiple buildings for a total of 1,500,000 square feet of technology park (see Figure 4). The proposed development within the AUAR study area is anticipated to begin construction in 2026 A general development timeline and potential phasing will be discussed in the AUAR.

The intent of the AUAR is to recognize the maximum build for the study area and identify impacts and mitigation measures that may be taken to compensate for those impacts. Development of the study area would include new infrastructure, including water service, sewer, stormwater, streets, and utilities. All new services would be extensions to existing infrastructure or upgrades to existing systems to support the new development.

A more detailed discussion of infrastructure needs, including water service, sanitary sewer connections, stormwater management, will be included in the AUAR.

Table 1: Development Scenarios

Component	Scenario 1	Scenario 2
Industrial (square feet)	1,750,000	-
Technology Park (square feet)	-	1,500,000
Total (square feet)	**1,750,000**	**1,500,000**
Total Project Area	**251 acres**	**251 acres**

Figure 3: Development Scenario 1 – Light Industrial

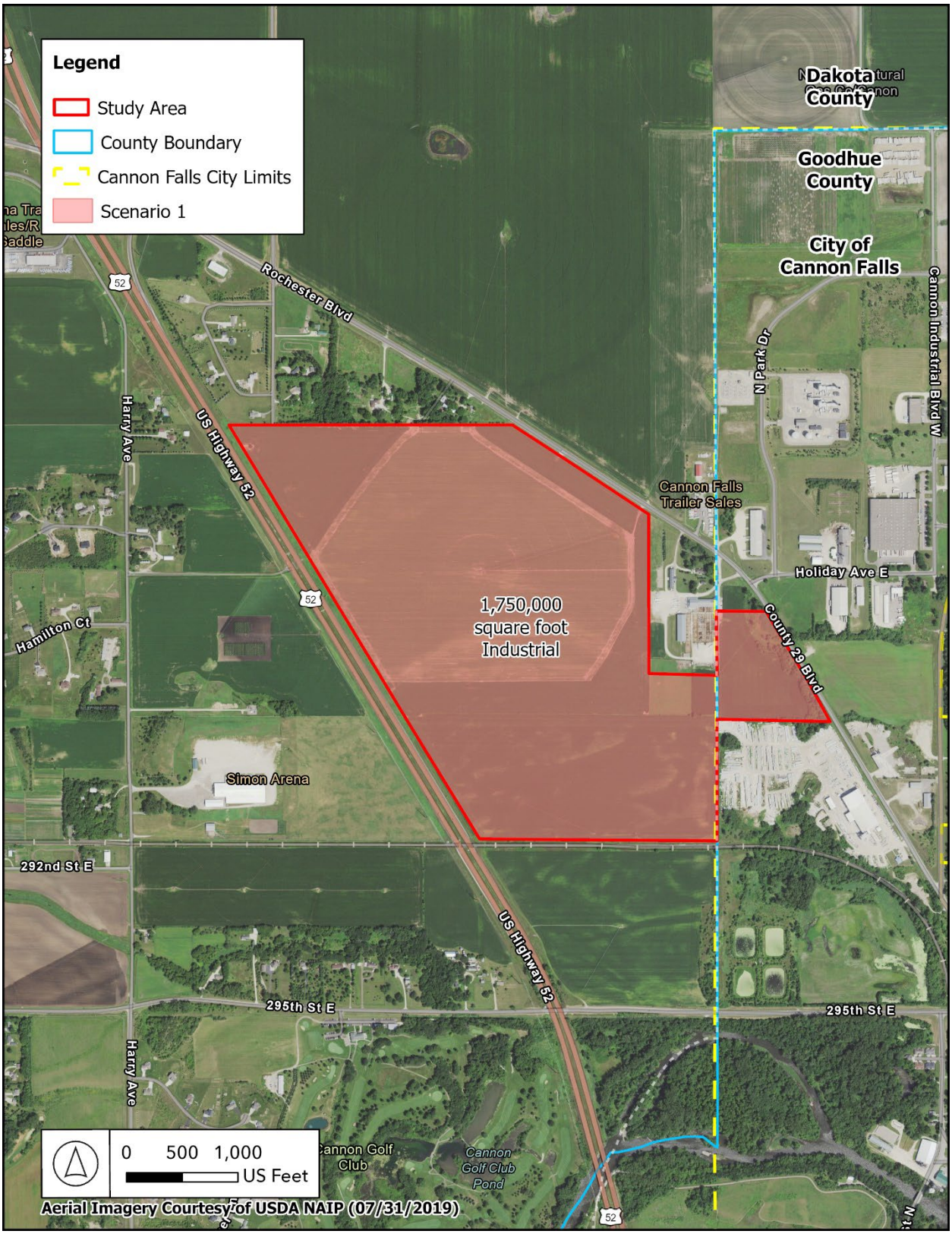
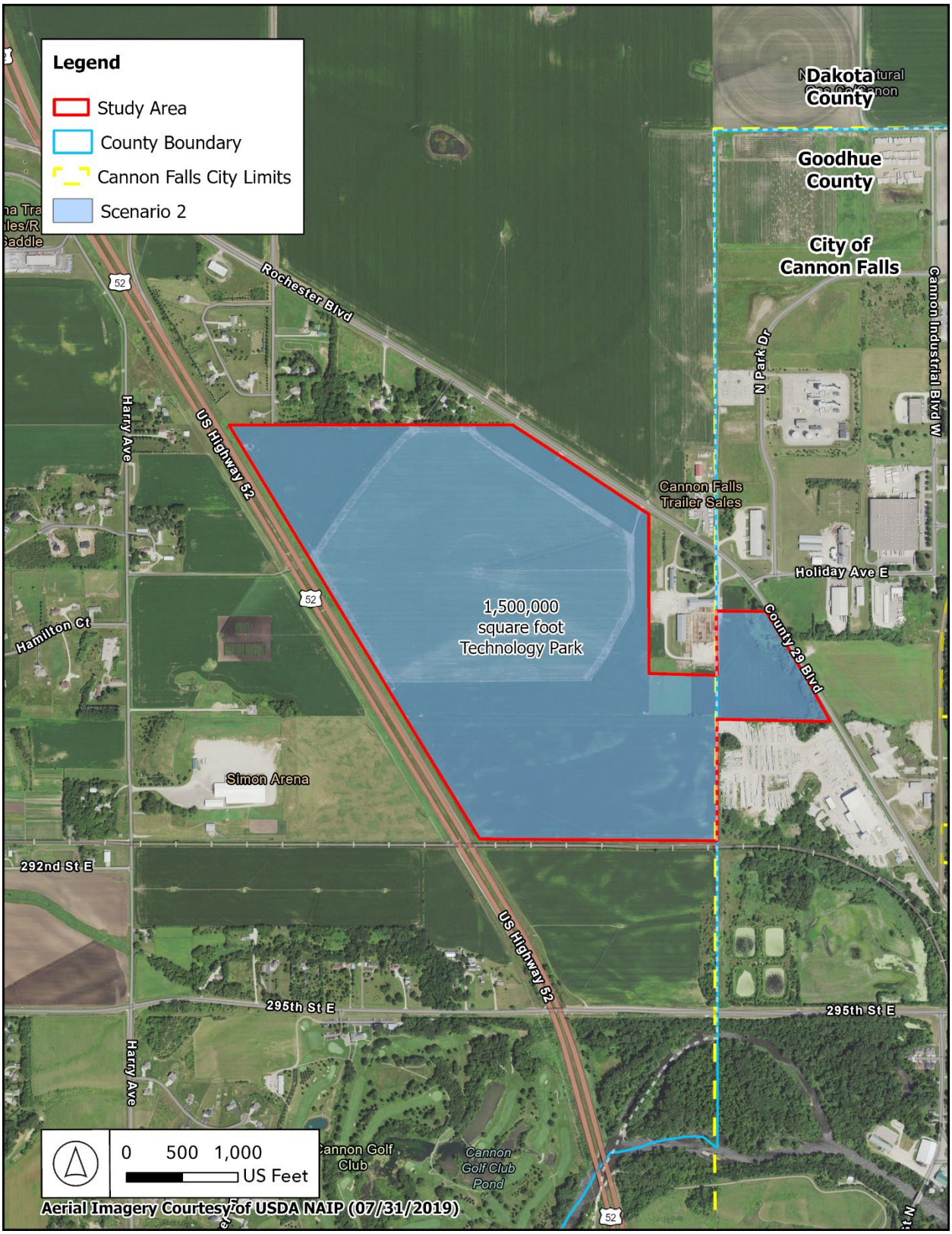


Figure 4: Development Scenario 2 – Technology Park



7. CLIMATE ADAPTION AND RESILIENCE

a. Describe the climate trends in the general location of the project (see guidance: *Climate Adaptation and Resilience*) and how climate change is anticipated to affect that location during the life of the project.

The AUAR will describe trends in temperature, urban heat island, precipitation, flood risk, and cooling degree days for the general project location. Climate projections will use Representative Concentration Pathways (RCPs), which are greenhouse gas concentration scenarios used by the Intergovernmental Panel on Climate Change. RCP 4.5 is an intermediate scenario in which emissions decline after peaking around 2040, and RCP 8.5 is a worst-case scenario in which emissions continue to rise through the 21st century.[1]

b. For each resource category in the table below, describe the project's proposed activities and how the project's design will interact with those climate trends. Describe proposed adaptations to address the project effects identified.

Table 2: Climate Considerations and Adaptions

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptions
Project Design	The AUAR will discuss aspects of building architecture/ materials choices and site design that could impact climate.	To be discussed in AUAR, Section 6 and 18	To be discussed in AUAR, Section 6 and 18
Land Use	The AUAR will discuss critical facilities and flood risk.	To be discussed in AUAR, Section 10 and 12	To be discussed in AUAR
Water Resources	The AUAR will discuss current Minnesota climate trends and anticipated climate change in the general location of the project and how that may influence water resources.	To be discussed in AUAR, Section 12	To be discussed in AUAR

[1] Climate Explorer Metadata. Available at https://www.dnr.state.mn.us/climate/climate-explorer-metadata.html.

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptions
Contamination/ Hazardous Materials/ Wastes	The AUAR will discuss current Minnesota climate trends and anticipated climate change in the general location of the project and how that may influence the potential environmental effects of generation/use/storage of hazardous waste and materials.	To be discussed in AUAR, Section 13	To be discussed in AUAR
Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	The AUAR will discuss current Minnesota climate trends and anticipated climate change in the general location of the project how that may influence the local species and suitable habitat.	To be discussed in AUAR Section 14	To be discussed in AUAR

8. COVER TYPES

AUAR Guidance: The following information should be provided:

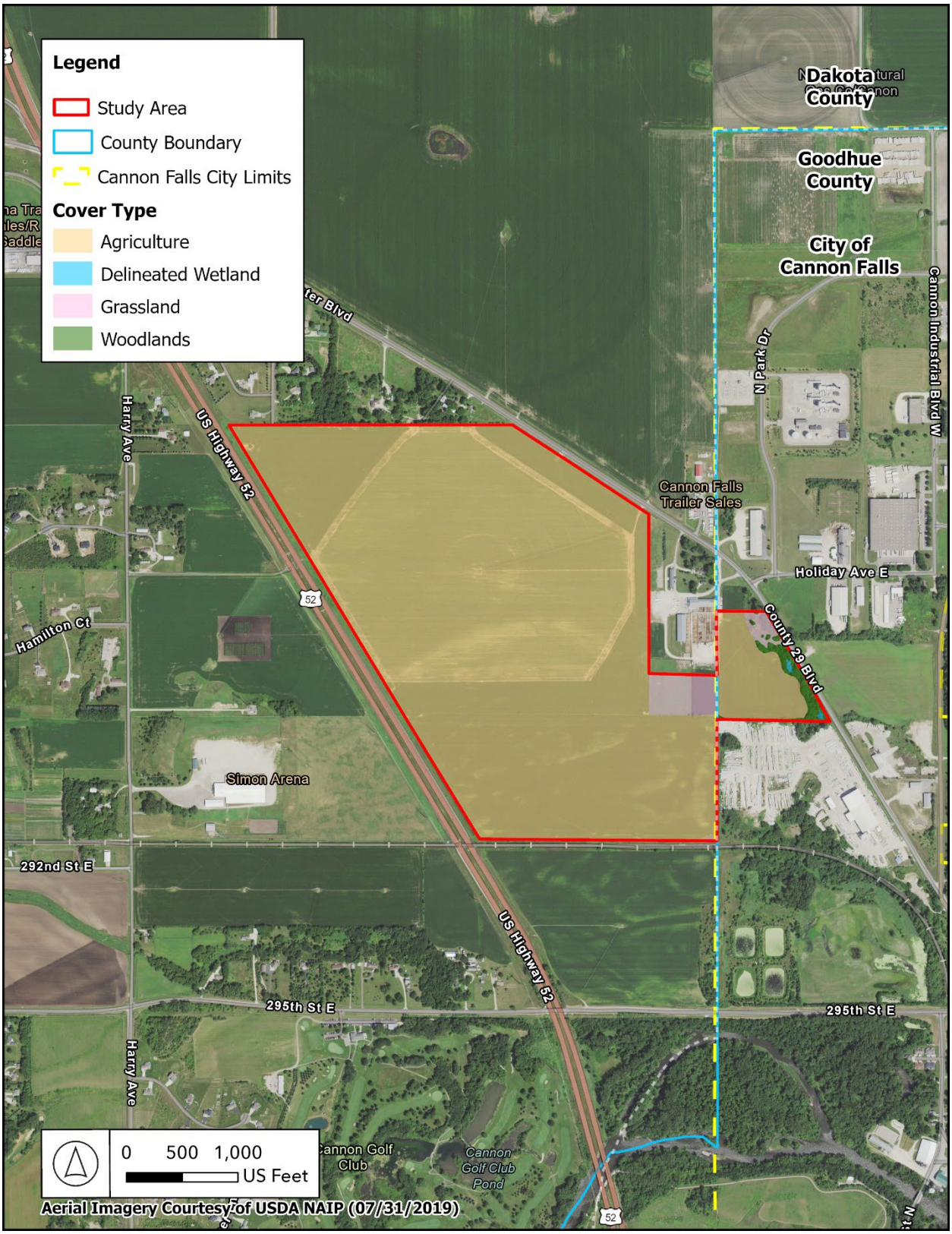
- *A cover type map, at least at the scale of a USGS topographic map, depicting:*
  - *Wetlands (identified by Circular 39 type)*
  - *Watercourses (rivers, streams, creeks, ditches)*
  - *Lakes (identify public waters status and shoreland management classification)*
  - *Woodlands (break down by classes where possible)*
  - *Grassland (identify native and old field)*
  - *Cropland*
  - *Current development*
- *An overlay map showing anticipated development in relation to the cover types. This map should also depict any "protection areas," existing or proposed, that will preserve sensitive cover types. Separate maps for each major development scenario should be generally provided.*

The AUAR study area is approximately 251 acres of farmland, woodland, and grasslands. A wetland delineation was conducted on October 10, 2024, in which one wetland was identified in the eastern wooded portion of the study area. See Table 3 for complete acreage of each cover type within the AUAR study area. The AUAR will include an analysis of existing and proposed cover types within the study area that are shown on Figure 5. These cover types were determined by reviewing recent aerial photography and a wetland delineation completed for the study area.

Table 3: Existing Cover Types

Cover Type	Approximate Acreage
Agriculture	242.84
Grassland	6.0
Woodlands	2.0
Delineated Wetland	0.16

Figure 5: Cover Types



9. PERMITS AND APPROVALS REQUIRED

AUAR Guidance: A listing of major approvals (including any comprehensive plan amendments and zoning amendments) and public financial assistance and infrastructure likely to be required by the anticipated types of development projects should be given for each major development scenario. This list will help orient reviewers to the framework that will protect environmental resources. The list can also serve as a starting point for the development of the implementation aspects of the mitigation plan to be developed as part of the AUAR.

Table 4: Anticipated Permits and Approvals

Unit of Government	Type of Application	Status
Federal		
US Army Corps of Engineers	Section 404 Permit	To be applied for, if applicable
State		
Minnesota Pollution Control Agency	Section 401 Water Quality Certification	To be applied for, if applicable
	National Pollutant Discharge Elimination System Stormwater Permit for Construction Activities	To be applied for, if applicable
	Sanitary Sewer Extension Permit	To be applied for, if applicable
	Industrial Wastewater Permit	To be applied for, if applicable
	Significant Industrial User Permit	To be applied for, if applicable
	Construction Stormwater Permit	To be applied for, if applicable
	Fuel Storage Tank	To be applied for, if applicable
	Air Permit	To be applied for, if applicable
	Discharge Permit	To be applied for, if applicable
	Water Treatment Plant	To be applied for, if applicable
Minnesota Department of Natural Resources	Temporary Groundwater Appropriation Permit for Construction Dewatering	To be applied for, if applicable
	Water Appropriation Permit	To be applied for, if applicable
Minnesota Department of Health	Water Main Installation Permit	To be applied for, if applicable
Minnesota Department of Labor Industry	Plumbing Review	To be applied for, if applicable
	Electrical Permit	To be applied for, if applicable

Unit of Government	Type of Application	Status
County		
Dakota County	Driveway Permit	To be applied for, if applicable
	Public Drainage Permit	To be applied for, if applicable
	Right-of-Way Permit	To be applied for, if applicable
	Final Plat Review	To be applied for, if applicable
	Well closure permit	To be applied for, if applicable
Goodhue County	Public Drainage Permit	To be applied for, if applicable
	Driveway Permit	To be applied for, if applicable
	Wetland Conservation Act	To be applied for, if applicable
	Right-of-Way Permit	To be applied for, if applicable
City/Township		
City of Cannon Falls	Preliminary/Final Plat	To be applied for, if applicable
	Building Permit	To be applied for, if applicable
	Site Plan Approval	To be applied for, if applicable
	Stormwater Permit	To be applied for, if applicable
	Right-of-Way Permit	To be applied for, if applicable
	Wetland Conservation Act	To be applied for, if applicable
	AUAR Adoption	In process
	Annexation	To be completed
Randolph Township	Annexation Agreement	To be completed

10. LAND USE

a. Describe:

i. Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, and prime or unique farmlands.

The AUAR study area is located in a semirural area in the northern portion of the City of Cannon Falls and in Randolph Township, Dakota and Goodhue Counties, Minnesota, (refer to Figure 2). The study area consists of 5 existing parcels and is generally bounded by U.S. Highway 52 to the west; parcel boundaries to north; Dakota County 86 and Goodhue County 29 to the east; and PGR railroad to the south. Land uses adjacent to the study area include residential and farmstead uses to the north; farmstead and industrial uses to the east; vacant land to the south, and agriculture and some commercial uses to the west. The existing land uses of the of the study area are shown in Figure 6.

There are no existing parks within the study area. The closest parks to the study area include Lake Byllesby Regional Park and Hannahs Bend Park located approximately 0.6 mile to the southwest and approximately 0.8 mile to the southeast, respectively. Additionally, Mill Towns State Trail is located approximately 0.8 mile to the southeast, just across from Hannahs Bend Park.

According to the Web Soil Survey for the study area, 54.5 percent of the study area is considered prime farmland, 43.8 percent of the study area is considered farmland of statewide importance, and the remaining 1.7 percent of the study area is not considered prime farmland.[2] According to the U.S. Department of Agriculture, areas classified as prime farmland contain the best combinations of landscape and soil chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Agricultural areas classified as farmland of statewide importance include those that generally contain soils nearly meeting the criteria for prime farmland and that economically produce high crop yields when managed under acceptable farming methodology, but are also typically designated on a state-by-state basis.

ii. Planned land use as identified in comprehensive plans (if available) and any other applicable plan for land use, water, or resource management by a local, regional, state, or federal agency.

City of Cannon Falls Comprehensive Plan

The City of Cannon Falls updated their Comprehensive Plan in 2003 to provide guidance on how to combat growth, environmental protections, and retention of the City's small-town atmosphere.[3] The plan is comprised of several interrelated chapters that address the environment protection, land use, transportation, community services, growth and housing, and economic development. According to the Cannon Falls Land Use Plan, the entire study area has a land use designation of Industrial as this area has been envisioned for future growth since 2003.[4] This area is identified as a growth area for the City of Cannon Falls. Refer to Table 5 for description of the land use designation and allowed uses.

Table 5: Study Area Future Land Use Designations Purpose and Allowed Uses

Land Use Designation	Purpose	Allowed Uses
Industrial	Area for large-scale industrial business that provides jobs for Cannon Falls and the surrounding area	Major industrial, processing, storage, warehouse, trucking, and similar uses

Source: City of Cannon Falls. 2003. *Comprehensive Plan,* page 8.5. https://www.cannonfallsmn.gov/sites/default/files/fileattachments/economic_development/page/86/comprehensive_plan_cf_2005_reduced_file_size.pdf.

Cannon River Watershed Joint Powers Organization

The study area is located within the Cannon River Watershed Joint Powers Organization (CRWJPO) planning area. The CRWJPO was created in 2020 to serve the goal of implemented the Cannon River Comprehensive Watershed Management Plan that was

[2] USDA. 2024. *Web Soil Survey*. Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
[3] City of Cannon Falls. 2003. *Cannon Falls Comprehensive Plan*. Available at: https://www.cannonfallsmn.gov/sites/default/files/fileattachments/economic_development/page/86/comprehensive_plan_cf_2005_reduced_file_size.pdf.
[4] Ibid, page 8.6.

created in 2016 and developed through the Cannon River One Watershed, One Plan process in partnership with the Minnesota Board of Soil and Water Resources (BWSR). The Minnesota counties and soil and water conservation districts that are part of the CRWJPO include Dakota, Goodhue, Le Sueur, Rice, Steele, and Waseca. The Belle Creek Watershed District and the North Cannon Watershed Management Organization are also members of the CRWJPO.

The AUAR will discuss how the study area will comply with the CRWJPO watershed management plans.

North Cannon River Watershed Management Organization

The North Cannon River Watershed Management Organization (NCRWMO) was created in 1983 through a joint powers' agreement between the eight townships and three small cities in Dakota County that are located within the Cannon River Watershed. Although the NCRWMO participates on the CRWJPO board, it will continue to operate under its current watershed management plan.[5] The NCRWMO adopted its 4th Generation Watershed Management Plan that will govern watershed management through 2033 focusing on surface water, groundwater, policy and regulation, outreach and education, habitat, data, and emerging issues.[6]

iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

AUAR Guidance: Water-related land use management districts should be delineated on appropriate maps, and the land use restrictions applicable in those districts should be described. If any variances or deviations from these restrictions within the AUAR area are envisioned, this should be discussed.

Existing Zoning

According to the City of Cannon Falls Zoning Map, a portion of the study area is located within Goodhue County, within General Industrial (I-2) zoning district, while the rest of the study area is located in Dakota County in Agricultural Preservation (AP) zoning district (see Figure 7).

It is intended that the property be annexed into Cannon Falls and zoned to "General Industrial (I-2)". Uses in this zoning district include[7]:

- Bottling establishments
- Building material sales
- Essential services

[5] Cannon River Watershed Joint Powers Organization. 2020. *Cannon River Comprehensive Watershed Management Plan*. Available at: https://www.cannonriverwatershedmn.gov/_files/ugd/33ebb8_742368ec2fcd48a7981e7c6d2a5bb874.pdf.
[6] North Cannon River Watershed Management Organization. 2023. *4th Generation Watershed Management Plan 2023 - 2033*. Available at: https://northcannonriverwmo.org/wp-content/uploads/2023/07/2023-2033_FINAL-RED_NCRWMO-4th-Gen-Plan.pdf.
[7] City of Cannon Falls. 2022. *Cannon Falls, MN Code of Ordinances,* Section 152.686 Permitted Uses. Available at: https://codelibrary.amlegal.com/codes/cannonfalls/latest/cannonfalls_mn/0-0-0-9335

- Feed and see sales
- Government and public utility buildings and/or structures
- Greenhouses, nurseries
- Laundry, dry cleaning or dying plant
- Machine shops and metal products manufacturing when not equipped with heavy (exceeding 50-ton pressure punch presses, drop forges, riveting and grinding machines or any equipment which may create noise, vibration, smoke, odors, heat or glare and the like, disturbing to adjacent property occupants
- Manufacturing or assembly of a wide variety of products that produces no exterior noise, glare, fumes, obnoxious products, by-products or wastes or creates other objectionable impact on the environment, including the generation of large volumes of traffic.
- Mass transit terminals
- Professional offices
- Radio and television stations
- Shops and offices for contractors including plumbing, heating, glazing, paper hanging, roofing, ventilating, electrical, carpentry, welding, landscaping, excavating and general contracting, including contractor storage of equipment and building materials if enclosed within a building, but not storage yards
- Truck terminals
- Warehousing and distribution facilities but not including mini self-storage facilities
- Wholesale businesses and offices

Randolph Township Agricultural Preservation zoning allowed uses include[8]:

- Agriculture and accessory agricultural uses
- Stands for the sale of agricultural produces raised on the premises
- Single family residential dwellings at a density not exceeding one (1) home per quarter/quarter section
- Accessory residential uses and structures
- Home occupations
- A state licensed residential facility or a housing with services establishment registered to serve six (6) or fewer persons, except those as provided for under Minnesota Statute 46.357, subdivision 7
- A state licensed day care facility serving twelve (12) or fewer persons or a group family day care facility licensed under Minnesota Rules, parts 9502.0315 to 9502.0445 to serve fourteen (14) or fewer children
- Township governmental facilities and structures
- Essential services

[8] Randolph Township. 2023. *Zoning Ordinance*, Section 5.05. Available at: https://www.randolph-township.com/.

FEMA National Flood Hazard

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (panel number 27037C0420E, effective 12/02/2011; panel number 27037C0418E, effective 12/02/2011; and panel number 27049C0118E, effective 9/25/2009), the majority of the AUAR study area is located in an area of minimal flooding area, or Zone X.[9] The AUAR will discuss design measures implemented to reduce impacts to the floodplain.

North Cannon Falls Watershed Management Plan[10]

The 4th Generation North Cannon Falls Watershed Management Plan serves as a comprehensive planning document to guide in protecting, preserving, and managing its surface water resources for fish and wildlife habitat, aesthetics, and aquatic recreation as well as groundwater water resources for human consumption and non-potable uses, such as irrigation. The main priorities in the management plan include surface water, groundwater, policy and regulation, outreach and education, habitat, data and studies, and emerging issues. Each priority has associated actionable and measurable goals that will be used to carry out the watershed management mission statement.

iv. If any critical facilities (i.e., facilities necessary for public health and safety, those storing hazardous materials, or those housing occupants who may be insufficiently mobile) are proposed in floodplain areas and other areas identified as at risk for localized flooding, describe the risk potential considering changing precipitation and event intensity.

No critical facilities are proposed as part of the project.

b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.

AUAR Guidance: The extent of conversion of existing farmlands anticipated in the AUAR should be described. If any farmland will be preserved by special protection programs, this should be discussed.

If development of the AUAR will interfere or change the use of any existing designated parks, recreation areas, or trails, this should be described in the AUAR. The RGU may also want to discuss under this item any proposed parks, recreation areas, or trails to be developed in conjunction with development of the AUAR area.

The AUAR must include a statement of certification from the RGU that its comprehensive plan complies with the requirements set out at Minnesota Rules, part 4410.3610, subpart 1. The AUAR document should discuss the proposed AUAR area development in the context of the

[9] FEMA. 2024. *FEMA Flood Map Service Center*. Available at: https://msc.fema.gov/portal/search?AddressQuery=cannon%20falls.

[10] North Cannon River Watershed Management Organization. 2023. *4th Generation Watershed Management Plan*. Available at: https://northcannonriverwmo.org/wp-content/uploads/2023/07/2023-2033_FINAL-RED_NCRWMO-4th-Gen-Plan.pdf. https://lakevillemn.gov/DocumentCenter/View/408/Water-Resources-Management-Plan-PDF

comprehensive plan. If this has not been done as part of the responses to Items 6, 9, 11, 18, and others, it must be addressed here; a brief synopsis should be presented here if the material has been presented in detail under other items. Necessary amendments to comprehensive plan elements to allow for any of the development scenarios should be noted. If there are any management plans of any other local, state, or federal agencies applicable to the AUAR area, the document must discuss the compatibility of the plan with the various development scenarios studied, with emphasis on any incompatible elements.

The AUAR will discuss the project's compatibility with nearby land uses, zoning, parks and trails, and other relevant plans. The AUAR will also include a statement of certification from the RGU that its comprehensive plan complies with the requirements set out at Minnesota Rules, part 4410.3610, subpart 1.

1 Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

The proposed development scenarios are anticipated to be compatible with planned land use in the project vicinity. The AUAR will identify measures to mitigate any potential incompatibilities.

Figure 6: Existing Land Use

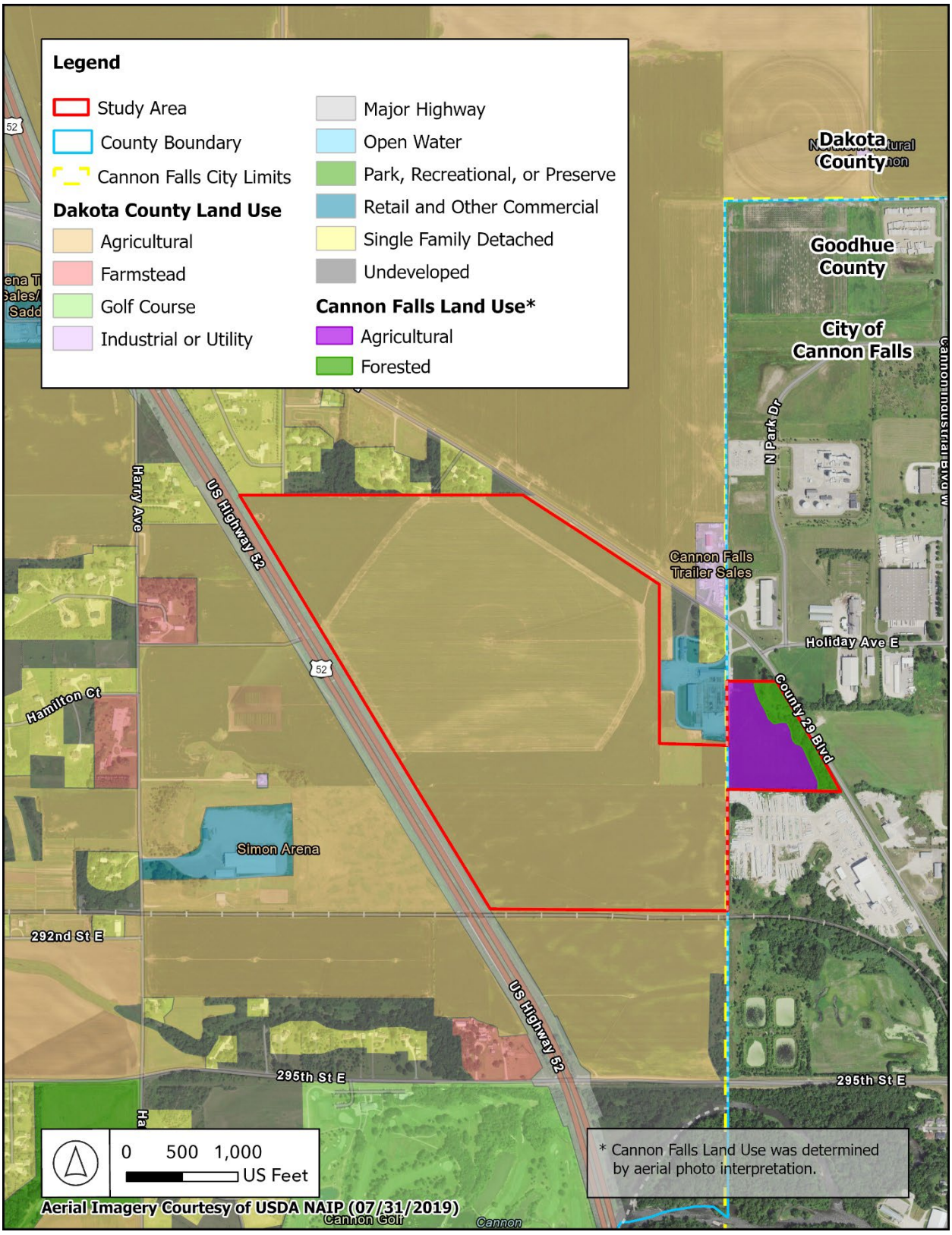


Figure 7: Existing Zoning

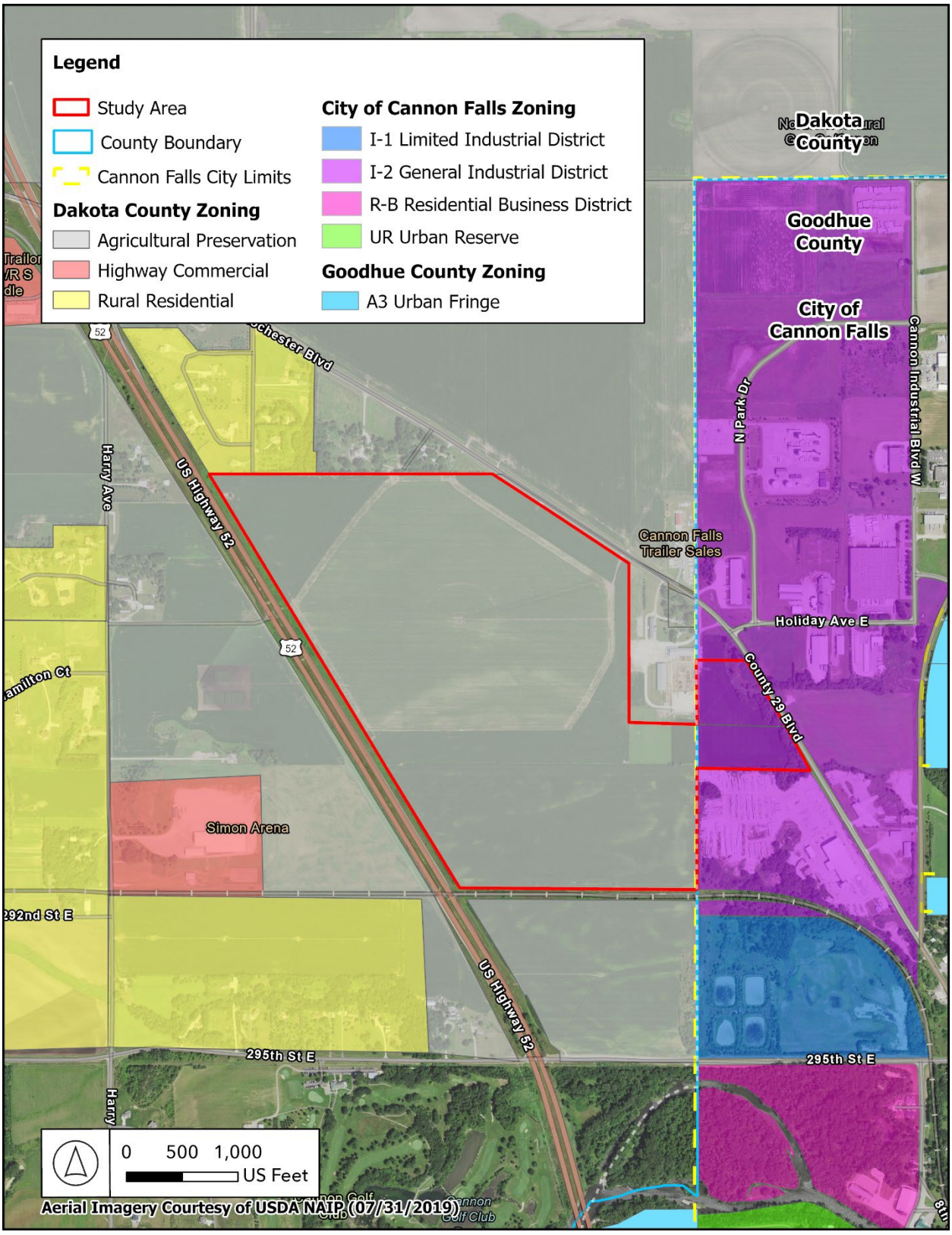
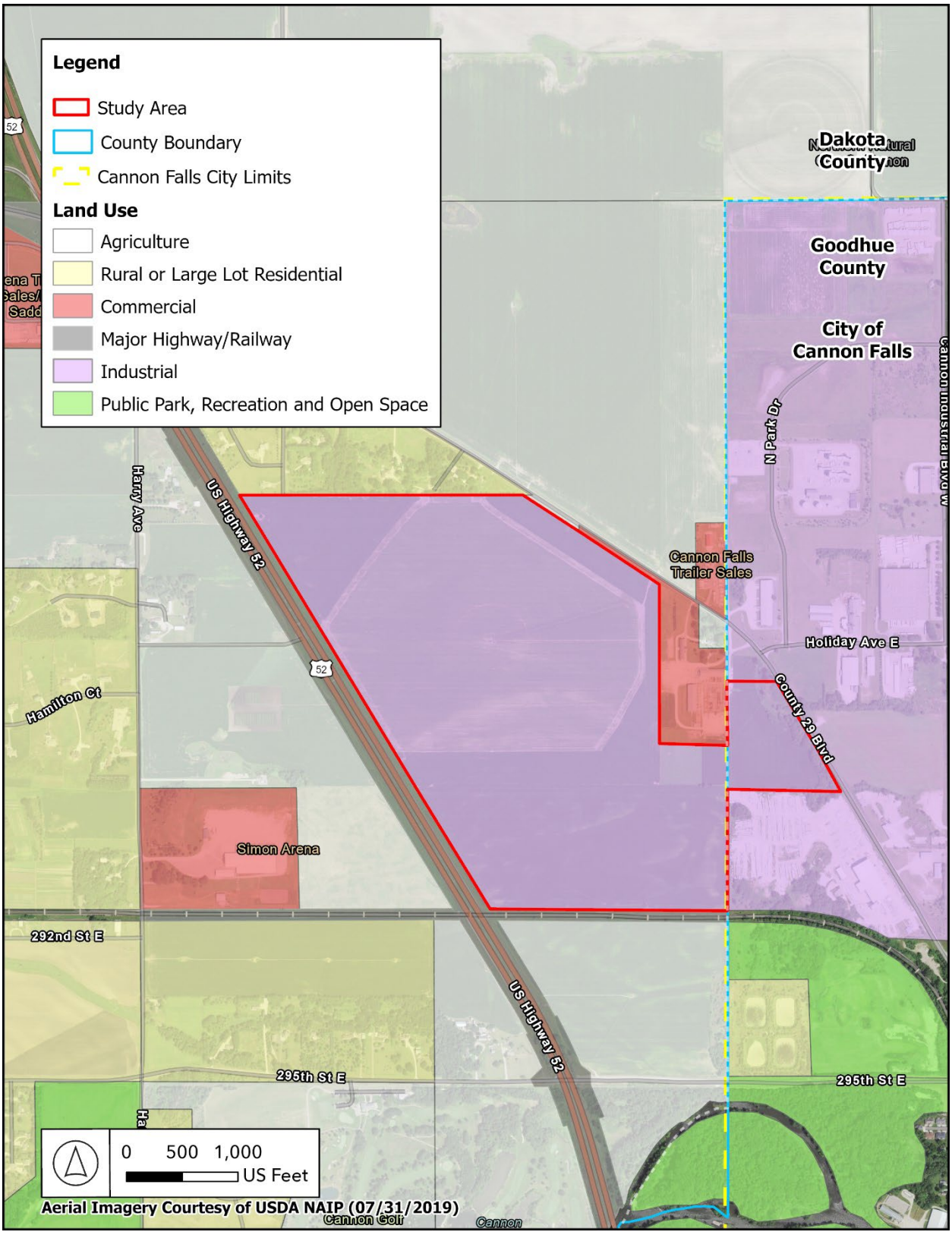


Figure 8: Future Land Use



11. GEOLOGY, SOILS, AND TOPOGRAPHY/LANDFORMS

a. Geology – Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.

AUAR Guidance: A map should be included to show any groundwater hazards identified.

According to the Geologic Atlas' of Dakota County and Goodhue County, the entirety of the AUAR study area is underlain by Paleozoic bedrocks. The depth to bedrock across the study area ranges from 0 – 50 feet in the northwest corner to 50 – 100 feet along the eastern boundary. The Paleozoic rocks are characterized by relatively thin, widespread layers of sandstone, shale, and carbonate deposited in shallow seas during the Cambrian and Ordovician Periods. The entirety of the study area is within the *Shakopee Formation*, which is a heterolithic unit composed of tan- to orangish-brown dolostone, sandy dolostone, sandstone, and shale.[11,12]

There are no known sinkholes or unconfined/shallow aquifers located within the AUAR study area. Additionally, there are no karst conditions located within or near the study area.

The AUAR will discuss any limitations of these features for future development and any effects development could have on these features.

b. Soils and Topography – Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability, or other soil limitations, such as steep slopes or highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections, or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

AUAR Guidance: The number of acres to be graded and number of cubic yards of soil to be moved need not be given; instead, a general discussion of the likely earthmoving needs for development of the area should be given, with an emphasis on unusual or problem areas. In discussing mitigation measures, both the standard requirements of the local ordinances and any special measures that would be added for AUAR purposes should be included. A standard soils map for the area should be included.

[11] University of Minnesota. 2023. *Bedrock Geology* (Dakota County). Available at: https://conservancy.umn.edu/server/api/core/bitstreams/699a0e2d-0666-491d-89d9-ffda1c6b2ed0/content. https://conservancy.umn.edu/server/api/core/bitstreams/c8f26a04-9210-476a-9e2c-b098c1209760/content

[12] University of Minnesota. 1998. *Bedrock Geology* (Goodhue County). Available at: https://conservancy.umn.edu/server/api/core/bitstreams/1aec21d9-0b5d-41e7-b7a8-9d70ecb1b4dc/content.

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, the study area is comprised of 13 different soil types. Soils are classified by the NRCS into four hydrologic soil groups, A, B, C, and D, with A having the lowest runoff potential and D having the greatest runoff potential. The erosion hazard indicates the hazard of soil loss from off-road areas after disturbance activities that expose the soil surface. All soil information for the Study Area is described in Table 6 and locations within the study area are shown in Figure 9. Within the study area, 1.3 percent of the soil surface is mapped with a "moderate" rating, indicating that some erosion is likely in these areas and that erosion control measures may be needed. The remaining 98.7 percent of the study area is mapped with a "slight" rating, meaning that erosion is unlikely under ordinary climatic conditions. Exposed soils may have the potential for erosion during construction due to wind or precipitation.

According to USGS, the approximate elevation within the study area ranges from 842 feet to 894 above mean sea level and water would generally flow toward the southeast.

The AUAR will include a general discussion of the likely earthmoving needs for the development and identify measures to minimize erosion and identify short-term and long-term establishment and erosion control plans that account for seasonal changes and comply with permit conditions.

Any additional information provided by the developer will be utilized to supplement the information provided above.

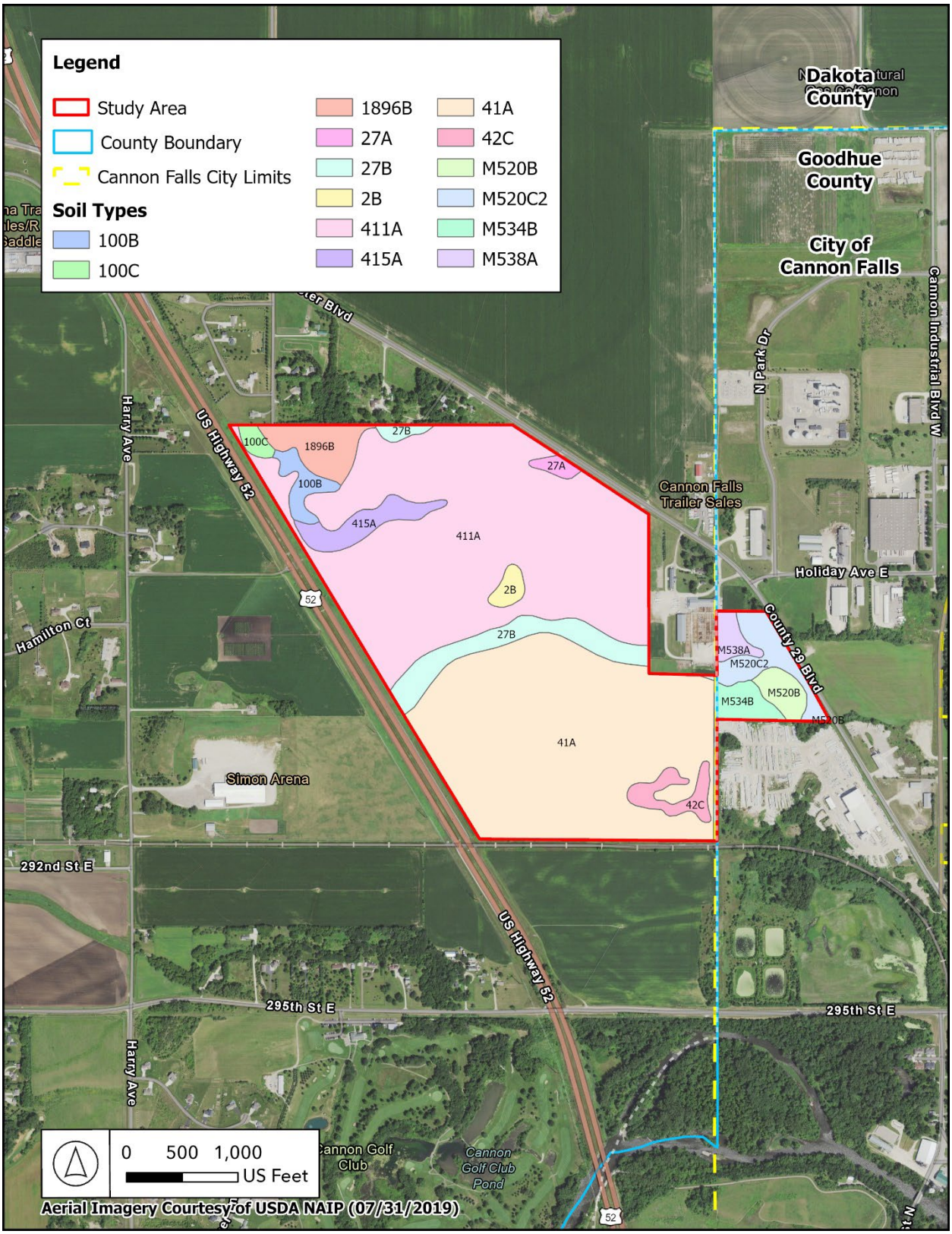
Table 6: Soil Types

Map unit symbol	Map unit name	Acres in AOI	Depth to Restrictive Layer	Percent of AOI	Farmland Rating	Hydric Rating	Hydrologic Soil Group	Erosion Hazard Rating
2B	Ostrander loam, 1 to 6 percent slopes	1.8	> 80 inches	0.7%	All areas are prime farmland	0	B	Slight
27A	Dickinson sandy loam, 0 to 2 percent slopes	1.3	> 80 inches	0.5%	All areas are prime farmland	0	A	Slight
27B	Dickinson sandy loam, 2 to 6 percent slopes	12.1	> 80 inches	5.0%	All areas are prime farmland	1	A	Slight

Map unit symbol	Map unit name	Acres in AOI	Depth to Restrictive Layer	Percent of AOI	Farmland Rating	Hydric Rating	Hydrologic Soil Group	Erosion Hazard Rating
41A	Estherville sandy loam, 0 to 2 percent slopes	89.6	> 80 inches	36.8%	Farmland of statewide importance	0	A	Slight
42C	Salida gravelly coarse sandy loam, 2 to 12 percent slopes	4.2	> 80 inches	1.7%	Not prime farmland	0	A	Slight
100B	Copaston loam, 2 to 6 percent slopes	3.5	12 – 20 inches	1.4%	Farmland of statewide importance	0	D	Slight
100C	Copaston loam, 6 to 12 percent slopes	1.4	12 – 20 inches	0.6%	Farmland of statewide importance	0	D	Moderate
411A	Waukegan silt loam, 0 to 1 percent slopes	107.6	> 80 inches	44.2%	All areas are prime farmland	0	B	Slight
415A	Kanaranzi loam, 0 to 2 percent slopes	5.8	> 80 inches	2.4%	Farmland of statewide importance	0	B	Slight
1896B	Ostrander-carmi loams, 2 to 6 percent slopes	7.1	> 80 inches	2.9%	All areas are prime farmland	0	B	Slight
M520B	Rasset sandy loam, 0 to 6 percent slopes	2.9	> 80 inches	1.2%	All areas are prime farmland	0	A	Slight

Map unit symbol	Map unit name	Acres in AOI	Depth to Restrictive Layer	Percent of AOI	Farmland Rating	Hydric Rating	Hydrologic Soil Group	Erosion Hazard Rating
M520C2	Rasset sandy loam, 6 to 12 percent slopes, moderately eroded	1.7	> 80 inches	0.7%	Farmland of statewide importance	0	A	Moderate
M534B	Estherville-Ridgeport complex, 0 to 6 percent slopes	4.5	> 80 inches	1.9%	Farmland of statewide importance	0	A	Slight
	Source: United States Department of Agriculture. 2024. *Web Soil Survey.* https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.							

Figure 9: Soil Types



Source: United States Department of Agriculture. 2024. *Web Soil Survey.* https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

12. WATER RESOURCES

AUAR Guidance: The information called for on the EAW form should be supplied for any of the infrastructure associated with the AUAR development scenarios, and for any development expected to physically impact any water resources. Where it is uncertain whether water resources will be impacted depending on the exact design of future development, the AUAR should cover the possible impacts through a "worst case scenario" or else prevent impacts through the provisions of the mitigation plan.

a. Describe surface water and groundwater features on or near the site below.

i. Surface Water – lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within one mile of the project. Include DNR Public Waters Inventory number(s), if any.

The field wetland delineation conducted by Kimley-Horn in October 2024 identified two wetlands and two intermittent streams within the study area, as described in Table 7 and shown in Figure 10. Both wetlands and both intermittent streams are anticipated to be regulated by the U.S. Army Corps of Engineers and the Minnesota Board of Soil and Water Resources (BWSR) due to connections to offsite Traditionally Navigable Waterways (TNWs). The AUAR will include a summary of the findings from the wetland delineation.

As shown in Figure 11, no MPCA 303d Impaired Waters are located within the study area. The closest MPCA 303d Impaired Water is Cannon River, located approximately 1,700 feet south of the study area.[13] The Mississippi River Corridor Critical Area is not within one mile of the AUAR Study Area.[14] Lastly, no trout streams are located within the study area; the closest stream is Pine Creek located approximately 1.3 miles to the northeast.[15] The project study area is unlikely to drain into Pine Creek as elevation within the study area generally slopes southeast. Additional water resources identified during the wetland delineation as well as potential impacts to surface waters and mitigation measures, if applicable, will be discussed in the AUAR.

[13] Minnesota Pollution Control Agency. 2024. *Impaired Waters: final 2024*. Available at: https://mpca.maps.arcgis.com/apps/webappviewer/index.html?id=fcfc5a12d2fd4b16bc95bb535d09ae82.
[14] Minnesota Department of Natural Resources. 2024. *Background and Purpose MRCCA*. Available at: https://www.dnr.state.mn.us/waters/watermgmt_section/critical_area/background-and-purpose.html.
[15] Minnesota Department of Natural Resources. 2024. *Trout Fishing Streams and Lakes.* Available at: https://www.dnr.state.mn.us/fishing/trout/map.html.

The study area is located within the North Cannon River Watershed Management Organization and Cannon River Watershed Joint Powers Organization areas.

Table 7: Delineation Summary

Resource ID	Wetland Plant Community	HGM	Cowardin Classification[16]	Size (acres/linear feet)[17]	NWI?	Hydric Soils?[18]	NOTES	Regulatory Status[19]
Wetland 1	Seasonally Flooded Basin/Scrub Shrub	Depression	PEM1A	0.10	-	No	Wetland located in a depression in the eastern section of the study area. The wetland collects runoff from the surrounding landscape and a series of onsite/offsite mapped NWI and NHD features. The wetland boundary was based on the change in topography, offsite aerial analysis, and hydrophytic vegetation dominance. The resource appears surficially isolated from other aquatic resources.	Jurisdictional (USACE): does have a continuous surficial connection to a Traditionally Navigable Water (TNW) or Relatively Permanent Water (RPW). WCA Jurisdictional
Wetland 2	Seasonally Flooded Basin/ Scrub Shrub	Depression	PEM1A	0.06	-	No	Wetland located in a depression in the eastern section of the study area. The wetland collects runoff from the surrounding landscape and a series of onsite/offsite mapped NWI and NHD features. The wetland boundary was based on the change in topography, offsite aerial analysis, and hydrophytic vegetation dominance. The resource appears surficially isolated from other aquatic resources.	Jurisdictional (USACE): does have a continuous surficial connection to a Traditionally Navigable Water (TNW) or Relatively Permanent Water (RPW). WCA Jurisdictional

Non-Wetland Aquatic Resources								
Intermittent Stream 1	-	-	PEMG	302 ln ft	R4SBC	No	Intermittent Stream 1 located along the eastern portion of the site and collects drainage from the surrounding landscape. The stream drains offsite to the east. The stream had banks 1 to 3 feet deep and 3 to 6 feet wide. Flowing water was observed entering the stream through the northern portion of the study area and flowing offsite to the east. Water levels were approximately 3 inches in depth.	USACE-Jurisdictional: tributary contributes surface water flow to an offsite Traditionally Navigable Water (TNW) or Relatively Permanent Water (RPW).
Intermittent Stream 2	-	-	PEMG	264 ln ft	R4SBC	No	Intermittent Stream 2 located along the eastern portion of the site and collects drainage from the surrounding landscape. The stream drains offsite to the south. The stream had banks 1 to 3 feet deep and 3 to 6 feet wide. Flowing water was observed entering the stream through the eastern portion of the study area and flowing offsite to the south. Water levels were approximately 3 inches in depth.	USACE-Jurisdictional: tributary contributes surface water flow to an offsite Traditionally Navigable Water (TNW) or Relatively Permanent Water (RPW).

[16] The Cowardin Classification System codes are found here: https://www.fws.gov/wetlands/documents/Wetlands-and-Deepwater-Habitats-Classification-chart.pdf
[17] Size of wetland features and additional areas investigated provided in acres and size of non-wetland, linear features provided in linear feet.
[18] Areas identified as hydric contain partially hydric soils (equal to or greater than 33% of soil component) mapped within the resource area.
[19] Regulatory Status is based on best professional judgment and has not been verified with agency staff.

Figure 10: Delineated Wetlands

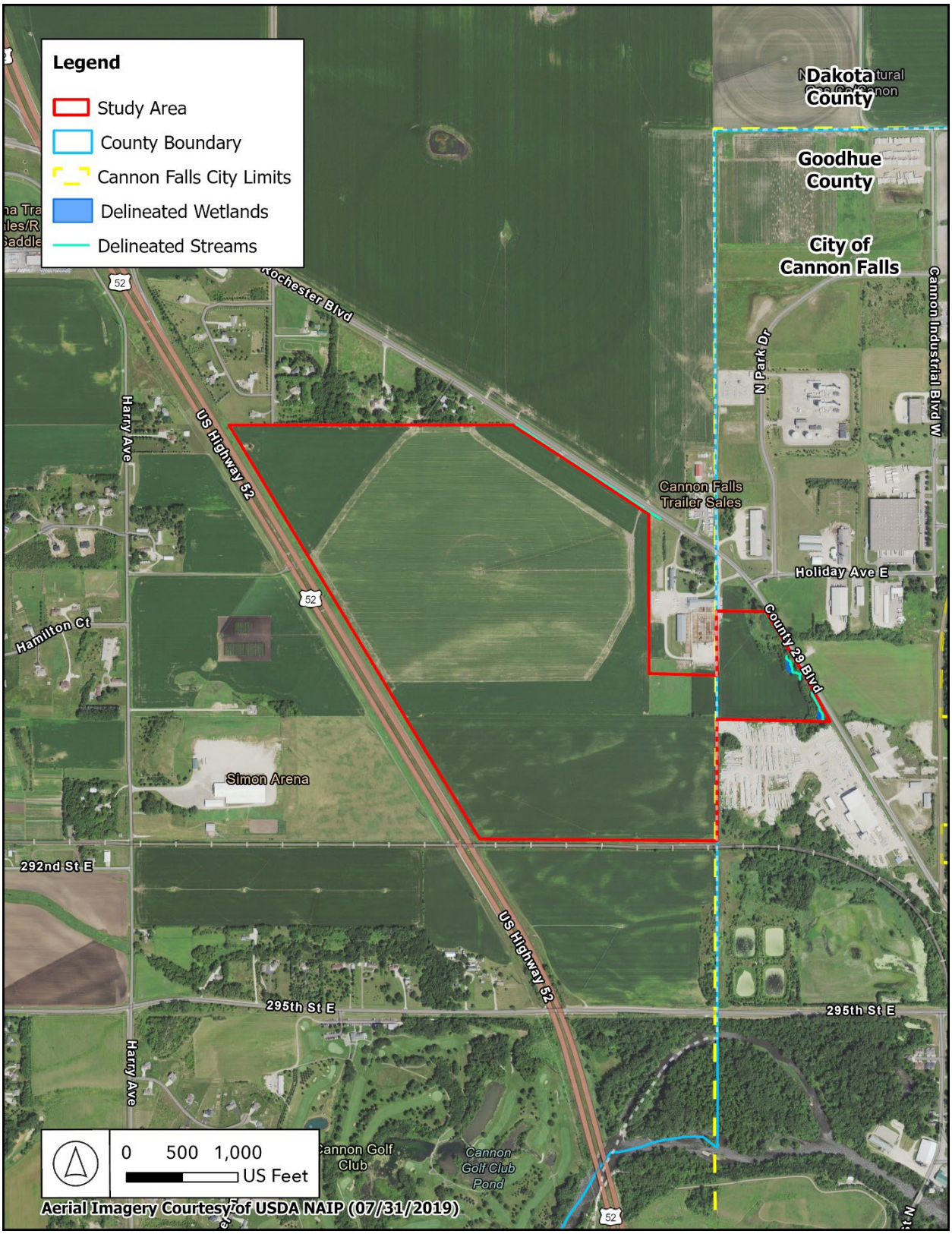
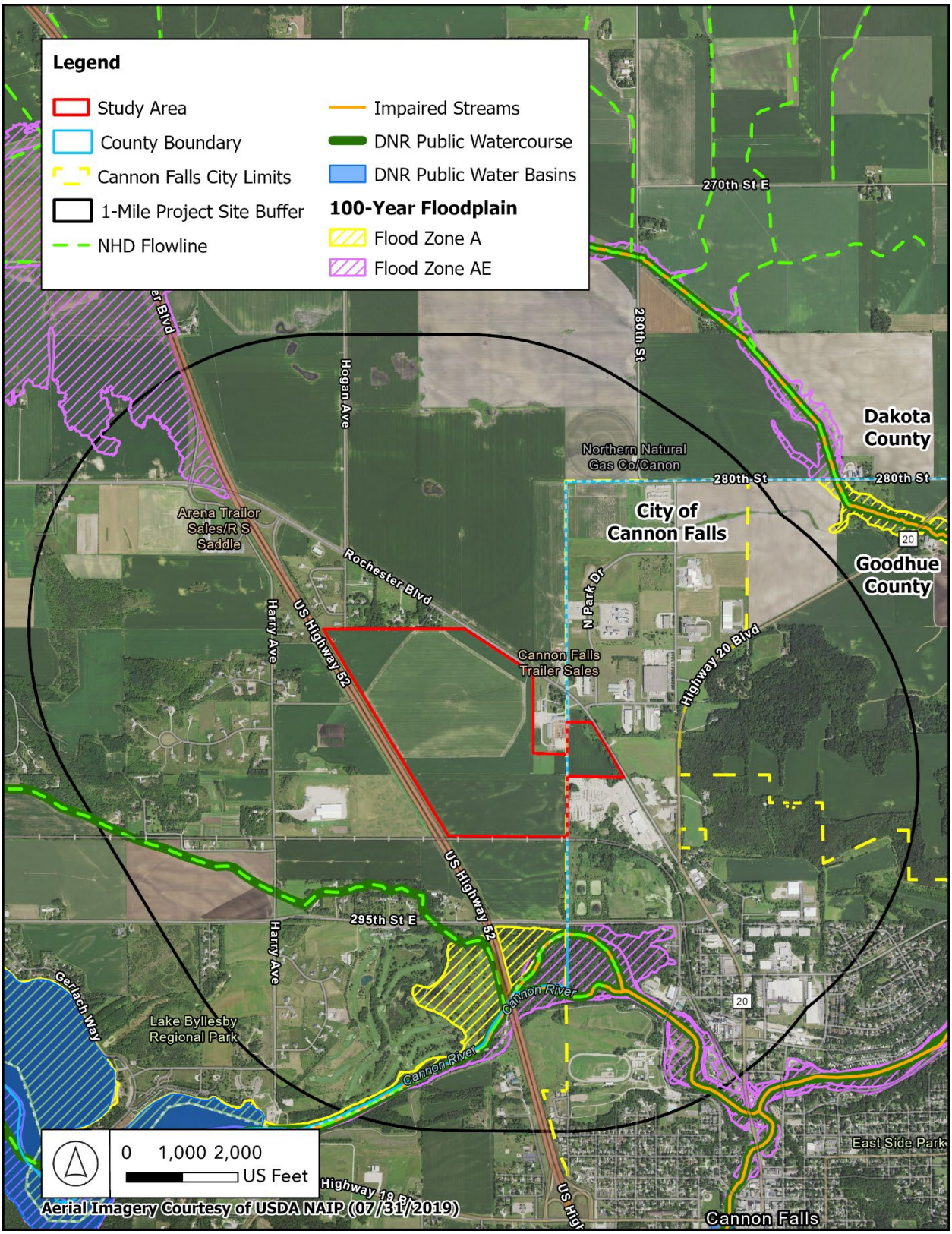


Figure 11: Surface Water Resources



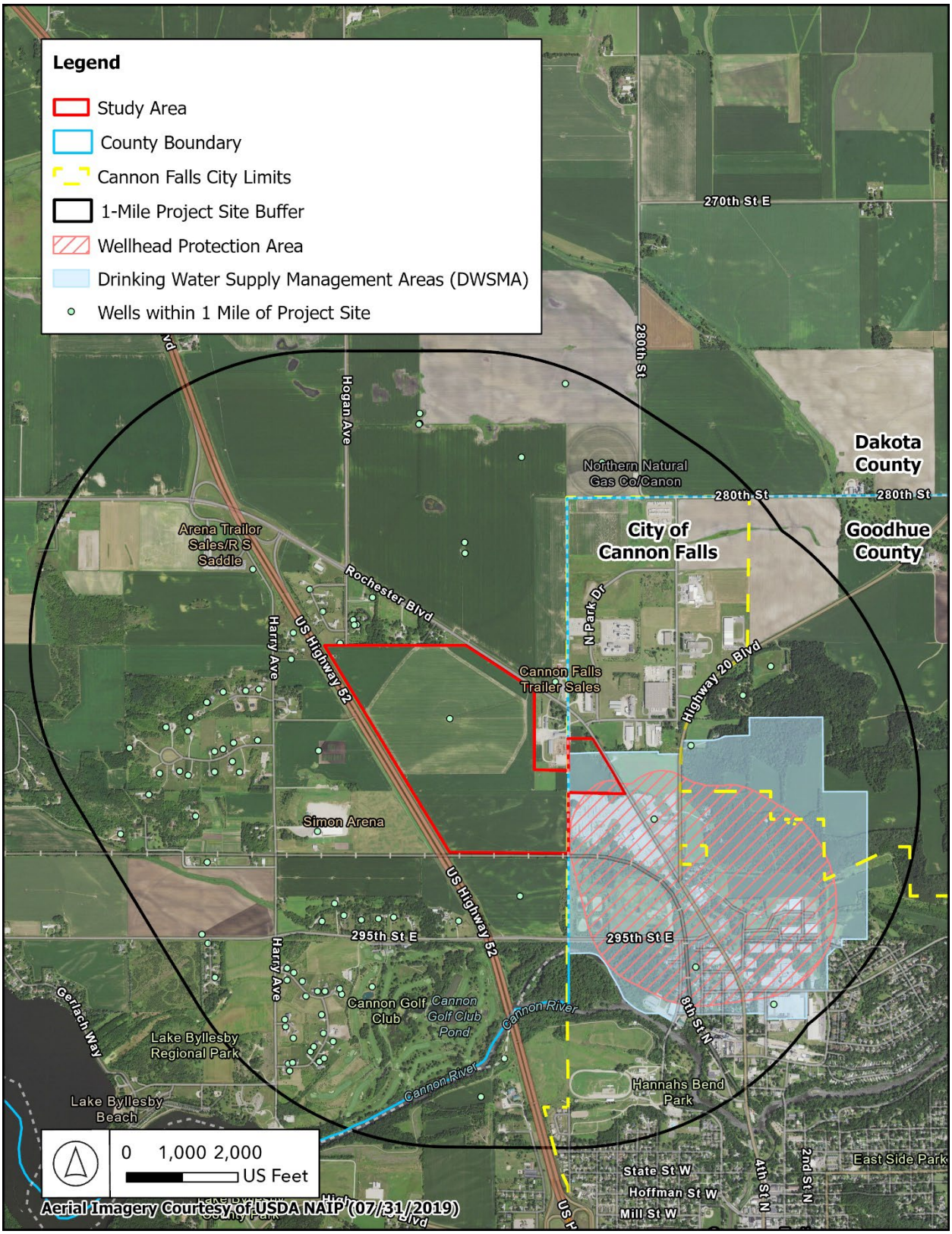
ii. Groundwater – aquifers, springs, and seeps. Include 1) depth to groundwater; 2) if project is within a MDH well protection area; and 3) identification of any onsite and/or nearby wells, including unique numbers and well logs, if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

According to the Geologic Atlas of Dakota County, hydrogeology surveys, which include discussion of depth to groundwater, have yet to be completed. However, the majority of the groundwater that supplies Dakota County comes from the Paleozoic bedrock formations. The depth to the bedrock within the study area ranges from 176 feet to 250, and even down to 275 in some areas.[20]

According to the Minnesota Department of Health, and as shown in Figure 12, one irrigation well is located within the AUAR study area. Additionally, there are several wells located within one mile of the study area, with the majority located to the west and southwest. Additionally, the most eastern portion of the study area is located within a drinking water supply management area and a small area is located within a wellhead protection area, as shown in Figure 12.

[20] University of Minnesota. 2023. *Bedrock Geology*. Available at: https://conservancy.umn.edu/server/api/core/bitstreams/699a0e2d-0666-491d-89d9-ffda1c6b2ed0/content.

Figure 12: Groundwater Resources



b. Describe effects from project activities on water resources and measures to minimize or mitigate the effects below.

i. Wastewater – For each of the following, describe the sources, quantities, and composition of all sanitary, municipal/domestic, and industrial wastewaters projected or treated at the site.

AUAR Guidance: Observe the following points of guidance in an AUAR:

- *Only domestic wastewater should be considered in an AUAR—industrial wastewater would be coming from industrial uses that are excluded from review through an AUAR process. Wastewater details will be discussed in the AUAR.*
- *Wastewater flows should be estimated by land use subareas of the AUAR area; the basis of flow estimates should be explained.*
- *The major sewer system features should be shown on a map, and the expected flows should be identified*
- *If not explained under Item 6, the expected staging of the sewer system construction should be described.*
- *The relationship of the sewer system extension to the RGU's comprehensive sewer plan, including MUSA expansions, should be discussed. For non-metro area AUARs, the AUAR must discuss the capacity of the RGU's wastewater treatment system compared to the flows from the AUAR area; any necessary improvements should be described.*
- *If on-site systems will serve part of the AUAR, the guidance in the February 2000 edition of the EAW Guidelines on page 16 regarding item 18b under Residential development should be followed.*

1) If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.

It is assumed that sanitary sewer service for the AUAR study area will be provided by existing City sanitary sewer connections in the area.

The AUAR will evaluate the estimated wastewater flows for the proposed development scenarios, and the existing City sanitary sewer system will be evaluated to determine if there is adequate capacity to convey wastewater. Appropriate mitigation measures or system improvements will be identified, if needed. The AUAR will discuss Minnesota Pollution Control Agency (MPCA) requirements and potential pretreatment measures for industrial wastewater.

2) If the wastewater discharge is to a subsurface sewage treatment system (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.

No subsurface sewage treatment systems (SSTS) are anticipated within the AUAR study area for the proposed development scenario.

3) If the wastewater discharge is to surface water, identify the wastewater treatment methods, discharge points, and proposed effluent limitations to mitigation impacts. Discuss any effects to surface or groundwater from wastewater discharges.

No wastewater discharge to surface waters is anticipated for the proposed development scenario.

ii. Stormwater – Describe changes in surface hydrology resulting from change of land cover. Describe the routes and receiving water bodies for runoff from the project site (major downstream water bodies as well as the immediate receiving waters). Discuss environmental effects from stormwater discharges on receiving waters post-construction, including how the project will affect runoff volume, discharge rate, and change in pollutants. Consider the effects of current Minnesota climate trends and anticipated changes in rainfall frequency, intensity, and amount with this discussion. For projects requiring NPDES/SDS Construction Stormwater permit coverage, state the total number of acres that will be disturbed by the project and describe the stormwater pollution prevention plan (SWPPP), including specific best management practices to address soil erosion and sedimentation during and after project construction. Discuss permanent stormwater management plans, including methods of achieving volume reduction to restore or maintain the natural hydrology of the site using green infrastructure practices or other stormwater management practices. Identify any receiving waters that have construction-related water impairments or are classified as special as defined in the Construction Stormwater permit. Describe additional requirements for special and/or impaired waters.

AUAR Guidance: For an AUAR the following additional guidance should be followed in addition to that in EAW Guidelines:

- *It is expected that an AUAR will have a detailed analysis of stormwater issues.*
- *A map of the proposed stormwater management system and of the water bodies that will receive stormwater should be provided.*
- *The description of the stormwater systems would identify on-site and "regional" detention ponding and also indicate whether the various ponds will be new water bodies or converted existing ponds or wetlands. Where on-site ponds will be used but have not yet been designed, the discussion should indicate the design standards that will be followed.*

- *If present in or adjoining the AUAR area, the following types of water bodies must be given special analyses:*
    - *Lakes: Within the Twin Cities metro area, a nutrient budget analysis must be prepared for any "priority lake" identified by the Metropolitan Council. Outside of the metro area, lakes needing a nutrient budget analysis must be determined by consultation with the MPCA and DNR staffs.*
    - *Trout streams: If stormwater discharges will enter or affect a trout stream, an evaluation of the impacts on the chemical composition and temperature regime of the stream and the consequent impacts on the trout population (and other species of concern) must be included.*

There is currently minimal impervious surface area within the study area. The total amount of impervious surface under the development scenarios will be described in the AUAR.

The AUAR will address stormwater rates, water quality, and volumes for the AUAR study area, and any temporary and permanent stormwater run-off controls will be identified. An existing and proposed conditions analysis will be completed showing the locations of the temporary and permanent stormwater run-off controls.

The National Pollution Discharge Elimination System (NPDES) permit requirements will be adhered to. Special or impaired waters on or near the site will be identified.

Based on the results of the climate trends analysis and flooding risk assessment, any additional volume and rate control needed for stormwater management will be discussed in the AUAR. Stormwater management strategies including any proposed green infrastructure will be documented in the AUAR.

iii. **Water Appropriation – Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use, and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Discuss how the proposed water use is resilient in the event of changes in total precipitation, large precipitation events, drought, increased temperatures, variable surface water flows and elevations, and longer growing seasons. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation. Describe contingency plans should the appropriation volume increase beyond infrastructure capacity or water supply for the project diminish in quantity or quality, such as reuse of water, connections with another water source, or emergency connections.**

AUAR Guidance: If the area requires new water supply wells, specific information about that appropriation and its potential impacts on groundwater levels should be given; if groundwater levels would be affected, any impacts resulting on other resources should be addressed.

The water supply for the study area will be obtained from the City of Cannon Falls. The city provides water to residents from three groundwater wells ranging from 393 to 400 feet deep that draw water from the Jordan and Jordan-St. Lawrence aquifers.[21]

The AUAR will discuss the water demands for the site and the existing city water system capacity. Mitigation strategies or system improvements, if applicable, will be identified and discussed in the AUAR.

The AUAR will evaluate the existing and proposed infrastructure needs and will discuss the viability of supplementing City water with alternative water sources.

Handling of any required construction dewatering discharge will be addressed in the AUAR.

iv. Surface Waters

1) Wetlands – Describe any anticipated physical effects or alterations to wetland features, such as draining, filling, permanent inundation, dredging, and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed, taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed and identify those probable locations.

A wetland delineation has been completed for this project, however, the delineation report has not yet been submitted and approved. The AUAR will address potential wetland impacts based on the proposed scenarios, and mitigation strategies will be identified, if applicable.

2) Other surface waters – Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal, and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features, taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. Identify measures to avoid, minimize, or

[21] City of Cannon Falls. 2023. *Cannon Falls 2023 Drinking Water Report*. Available at: https://www.cannonfallsmn.gov/sites/default/files/fileattachments/public_works/page/7682/2023_consumer_confidence_report.pdf.

mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.

AUAR Guidance: Water surface use need only be addressed if the AUAR area would include or adjoin recreational water bodies.

Wetlands are present within the AUAR study area. Surface water alterations will be discussed in the AUAR.

13. CONTAMINATION/HAZARDOUS MATERIALS/WASTES

a. Pre-project Site Conditions – Describe existing contamination or potential environmental hazards on or in close proximity to the project site, such as soil or groundwater contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize, or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.

The AUAR will review the Minnesota Pollution Control Agency's (MPCA) What's in My Neighborhood database and both Dakota County and Goodhue County's MPCA site inventory to determine if any known contaminated properties or potential environmental hazards are located within and adjacent to the AUAR study area.

b. Project Related Generation/Storage of Solid Wastes – Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage, and disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

AUAR Guidance: Generally, only the estimated total quantity of municipal solid waste generated and information about any recycling or source separation programs of the RGU need to be included.

The AUAR will provide information on the estimated quantity of municipal solid waste to be generated during construction and operational phases of the development scenarios.

c. Project Related Use/Storage of Hazardous Materials – Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location, and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spills or releases of hazardous materials. Identify measures to avoid, minimize, or mitigate

adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

AUAR Guidance: Not required for an AUAR. Potential locations of storage tanks associated with commercial uses in the AUAR should be identified (e.g., gasoline tanks at service stations).

The AUAR will identify any potential future storage tanks anticipated as part of the proposed development and if any existing storage tanks are anticipated to be used under the development scenarios.

d. Project Related Generation/Storage of Hazardous Wastes – Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of hazardous wastes including source reduction and recycling.

AUAR Guidance: Not required for an AUAR.

Not applicable.

14. FISH, WILDLIFE, PLANT COMMUNITIES, AND SENSITIVE ECOLOGICAL RESOURCES (RARE FEATURES)

a. Describe fish and wildlife resources as well as habitats and vegetation on or near the site.

AUAR Guidance: The description of fish and wildlife resources should be related to the habitat types depicted on the cover types of map. Any differences in impacts between development scenarios should be highlighted in the discussion.

No native plant communities or critical habitats under the jurisdiction of the United States Fish and Wildlife Service (USFWS) are located within the study area.[22]

Habitats that can be found within the study area include grassland and woodlands. Wildlife that can be found within the study area include birds, small mammals, and insects. There are no areas of biodiversity significance within one mile of the study area. Additionally, there are no areas ecologically significant within one mile of the study area.

The AUAR will address the cover types for the existing conditions and the post-construction scenarios.

b. Describe rare features such as state-listed (endangered, threatened, or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number and/or correspondence number (ERDB) from which the data were obtained and attach the Natural Heritage letter from the DNR. Indicate if any

[22] USFWS. ND. Critical Habitat for Threatened & Endangered Species. Available at: https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77.

additional habitat or species survey work has been conducted within the site and describe results.

AUAR Guidance: For an AUAR, prior consultation with the DNR Division of Ecological Resources for information about reports of rare plant and animal species in the vicinity is required. Include the reference numbers called for on the EAW form in the AUAR and include the DNR's response letter. If such consultation indicates the need, an on-site habitat survey for rare species in the appropriate portions of the AUAR area is required. Areas of on-site surveys should be depicted on a map, as should any "protection zones" established as a result.

State-Listed Species

Kimley-Horn submitted a DNR Natural Heritage Information System (NHIS) review for the study area and area within a one-mile radius for state-listed threatened, endangered, and special concern species (*response is pending*). The results of the review will be discussed in the AUAR. Any potential impacts to wildlife habitat, federally listed species, and state-listed species will be provided in the AUAR.

Federally-Listed Species

The U.S. Fish and Wildlife (USFWS) Service Information for Planning and Conservation (IPaC) tool was used to identify federally-listed species within or near the AUAR study area. This review identified two federally-listed endangered species, the Northern Long-eared Bat (*Myotis septentrionalis*) and Minnesota Dwarf (*Erythronium propullans*), and one federally-listed threatened species, prairie bush-clover (*Lespedeza leptostachya*). This review also identified, one federally-listed candidate species, monarch butterfly (*Danaus Plexippus*) and one experimental population, whooping crane (*Grus americana*).

Northern Long-Eared Bat

A record for the Northern Long-eared Bat (NLEB) is located within Dakota County, but not for Goodhue County. NLEB was designated a federally endangered species by USFWS in May 2015.[23] According to the Minnesota DNR, NLEB have been found in the winter in Minnesota in natural caves, sand mines, and iron mines. In summer, the species is often found within forested habitats, especially around wetlands. Roosting sites include loose bark, broken tree limbs, cavities, and cracks in a tree.[24] Given that the site area has been cultivated for agricultural use and does not contain caves or large expanses of forested habitat, the potential for the NELB to utilize the site is considered low. Potential impacts to the NLEB and mitigation measures will be discussed in the AUAR.

Monarch Butterfly

The Monarch butterfly is designated as proposed threatened by the USFWS. The preferred habitat for this species is prairie where milkweed and flowers are present. According to the USFWS, there are many potential reasons for the butterfly's decline, including habitat loss at

[23] USFWS. Northern Long-Eared Bat. Available at: https://ecos.fws.gov/ecp/species/9045
[24] Minnesota DNR. *Rare Species Guide*. Available at: https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=AMACC01150

breeding and overwintering sites, disease, pesticides, logging at overwintering sites, and climate change.[25] The Monarch butterfly is currently a candidate species and is not yet listed or proposed for listing; consultation with USFWS is not required for candidate species.

Whooping Crane

The whooping crane is designated as an experimental population, non-essential species by the USFWS. Non-essential experimental populations are treated as threatened species on National Wildlife Refuge and National Park land (require consultation under 7(a)(2) of the ESA) and as a proposed species on private land (no section 7(a)(2) requirements, but Federal agencies must not jeopardize their existence (section 7(a)(4))). The preferred habitat for the species includes shallow mashes and adjacent, open grasslands.[26] The project will not occur on federal land; therefore, consultation with USFWS is not required for the species.

Minnesota Dwarf Trout Lily

Minnesota dwarf trout lily is designated endangered caused by habitat destruction. The preferred habitat for the species includes floodplains and forest lands.[27] Given that the study area has been cultivated for agricultural use, the potential for the Minnesota dwarf trout lily to remain on site is low. Potential impacts to Minnesota dwarf trout lily and mitigation measures will be discussed in the AUAR.

Prairie Bush-Clover

Prairie bush-clover is designated threatened by the USFWS. The preferred habitat for the species includes upland prairies and rock outcrops.[28] Given that the vast majority of the study area has been cultivated for agricultural use, and other grassland areas are manicured roadside right-of-ways, the potential for the prairie bush-clover to remain on site is low. Potential impacts to prairie bush-clover and mitigation measures will be discussed in the AUAR.

c. Discuss how the identified fish, wildlife, plant communities, rare features, and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

Invasive Species

Invasive species are a major cause of biodiversity loss and are considered biological pollutants by the DNR. Invasive species can be moved on construction equipment, landscaping equipment, and other debris. The AUAR will include a discussion on best management practices to prevent the introduction and spread of invasive species during construction and operation.

[25] USFWS. Monarch Butterfly. Available at: https://ecos.fws.gov/ecp/species/9743
[26] USFWS. Whopping Crane. Available at: https://ecos.fws.gov/ecp/species/758
[27] Minnesota Department of Natural Resources. 2024. *Rare Species Guide*. Available at: https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=PMLIL0U0D0.
[28] Minnesota Department of Natural Resources. 2024. *Rare Species Guide.* Available at: https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=PDFAB27090.

Stormwater

Stormwater run-off can cause a number of environmental problems. When stormwater drains off a construction site, it can carry sediment and pollutants that harm lakes, rivers, streams, and wetlands which in turn may harm wildlife. Strategies for stormwater management and treatment of stormwater run-off within the study area will be discussed in Section 12 of the AUAR.

Impacts to protected species and habitats

The AUAR will further investigate the potential for impacts to any federally listed species, state-listed species, or protected wildlife habitats.

d. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

The AUAR will address any potential mitigation measures identified by the DNR and USFWS to minimize and avoid adverse impacts to any protected species and wildlife habitats.

15. HISTORIC PROPERTIES

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include 1) historic designations; 2) known artifact areas; and 3) architectural features. Attach letter received from the Minnesota State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

AUAR Guidance: For an AUAR, contact with the State Historic Preservation Office and State Archeologist is required to determine whether there are areas of potential impacts to these resources. If any exist, an appropriate site survey of high probability areas is needed to address the issue in more detail. The mitigation plan must include mitigation for any impacts identified.

According to the State Historic Preservation Office, no above-ground historic resources are identified within the study area on the available public map.[29] Further, no identified archaeological resources are located within the study area, per the Minnesota Office of the State Archaeologist. The closest archaeological sites are located adjacent to southeastern boundary of the study area, and one located approximately 0.5 mile to the west of the study area.[30] The AUAR will discuss the results of this database review and any potential impacts to archaeological, historical, and/or architectural resources as well as any applicable mitigation strategies.

[29] MnDOA. Minnesota's Statewide Historic Inventory. Available at: https://mnship.gisdata.mn.gov/
[30] MnOSA. MN OSA Public Viewer. Available at: https://osaportal.gisdata.mn.gov/OSAViewer.

16. VISUAL

Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

AUAR Guidance: Any impacts on scenic views and vistas present in the AUAR should be addressed. This would include both direct physical impacts and impacts on visual quality or integrity. EAW Guidelines contains a list of possible scenic resources.

If any non-routine visual impacts would occur from the anticipated development, this should be discussed here along with appropriate mitigation.

There are no scenic views or vistas on or near the AUAR study area. The AUAR will discuss any potential visual impacts of the proposed development scenarios on the surrounding area and any applicable mitigation strategies.

17. AIR

a. Stationary Source Emissions – Describe the type, sources, quantities, and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health, or applicable regulatory criteria. Include a discussion of any methods used to assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

AUAR Guidance: This item is not applicable to an AUAR. Any stationary air emissions source large enough to merit environmental review requires individual review.

Not applicable to an AUAR.

b. Vehicle Emissions – Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g., traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.

AUAR Guidance: Although the MPCA no longer issues Indirect Source Permits, traffic-related air quality may still be an issue if the analysis in Item 18 indicates that development would cause or worsen traffic congestion. The general guidance from the EAW form should still be followed. Questions about the details of air quality analysis should be directed to MPCA staff.

The Minnesota Department of Transportation (MnDOT) has developed a screening method designed to identify intersections that will not cause a carbon monoxide (CO) impact above state standards. MnDOT has demonstrated that even the 10 highest traffic volume intersections in the Twin Cities do not experience CO impacts. Therefore, intersections with traffic volumes lower than these 10 highest intersections will not cause a CO impact above state standards. MnDOT's screening method demonstrates that intersections with total daily approaching traffic

volumes below 82,300 vehicles per day will not have the potential for causing CO air pollution problems. None of the intersections in the study area exceed the criteria that would lead to a violation of the air quality standards.[31]

No further air quality analysis is anticipated for the AUAR.

c. Dust and Odors – Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under Item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

AUAR Guidance: Dust and odors need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any dust control ordinances in effect.

The AUAR will include discussion of dust control ordinances, including best management practices that would be applicable during demolition and construction within the AUAR study area. Any demolition activities must comply with state and federal regulations that require inspection of the structure for hazardous materials such as asbestos, lead based paint, light ballasts, thermostats, stored chemicals, and ozone depleting chemicals.

18. GREENHOUSE GAS (GHG) EMISSIONS/CARBON FOOTPRINT

a. GHG Quantification – For all proposed projects, provide quantification and discussion of project GHG emissions. Include additional rows in the tables as necessary to provide project-specific emission sources. Describe the methods used to quantify emissions. If calculation methods are not readily available to quantify GHG emissions for a source, describe the process used to come to that conclusion and any GHG emission sources not included in the total calculation.

About Greenhouse Gases (GHGs)

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of

[31] MnDOT. Traffic Mapping Application. Available at: https://mndot.maps.arcgis.com/apps/webappviewer/index.html?id=7b3be07daed84e7fa170a91059ce63bb

the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming.[32]

Project Related GHG Emissions

The AUAR will include an estimated quantification of the following GHG emissions associated with the proposed scenarios:

- Carbon dioxide (CO_2)
- Nitrous oxide (N_2O)
- Methane (CH_4)

The projected GHG emissions will be provided on an average annual basis using the CO_2 equivalent (CO_2e) and include the proposer's best estimate of average annual emissions over the proposed life/design service life of future development. The estimates will also include emissions from the construction and operating phases of the scenario. Emissions will be estimated using the US Environmental Protection Agency's Simplified GHG Emissions Calculator (SGEC) (Version 7 June 2021)[33] and will be summarized by project phase (i.e., construction and operations) and source type (e.g., combustion from mobile equipment, off-site electricity).

b. GHG Assessment

i. Describe any mitigation considered to reduce the project's GHG emissions.

The AUAR will describe potential design strategies and sustainability measures for the proposed scenarios to reduce emissions.

ii. Describe and quantify reductions from selected mitigation, if proposed to reduce the project's GHG emissions. Explain why the selected mitigation was preferred.

The AUAR will describe and quantify reductions from selected mitigation options.

iii. Quantify the proposed project's predicted net lifetime GHG emissions (total tons per number of years) and how those predicted emissions may affect achievement of the Minnesota Next Generation Energy Act goals and/or other more stringent state or local GHG reduction goals.

[32] Summarized from U.S. EPA, Overview of Greenhouse Gases: https://www.epa.gov/ghgemissions/overview-greenhouse-gases
[33] Source: https://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator

The Next Generation Energy Act requires the state to reduce greenhouse gas emissions in the state by 80 percent between 2005 and 2050, while supporting clean energy, energy efficiency, and supplementing other renewable energy standards in Minnesota. The MPCA's biennial GHG emissions reduction report from 2023 identifies strategies for reducing emissions in the three economic sectors with the highest emissions – transportation, electricity generation, and agriculture, forestry, and land use.

The AUAR will discuss the expected lifespan of the project and calculate how many estimated metric tons of CO_2 will be emitted over the project's lifespan. The proposer will evaluate implementing the sustainability measures described in the AUAR. To reduce operational emissions to the extent practicable. The proposed project will be built in compliance with state regulations and city code.

19. NOISE

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area; 2) nearby sensitive receptors; 3) conformance to state noise standards; and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

AUAR Guidance: Construction noise need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any construction noise ordinances in effect.

If the area will include or adjoin major noise sources, a noise analysis is needed to determine if any noise levels in excess of standards would occur, and if so, to identify appropriate mitigation measures. With respect to traffic-generated noise, the noise analysis should be based on the traffic analysis of Item 18.

Existing Noise

The AUAR study area is currently agricultural land, with the eastern portion of the study area zoned as industrial. The existing noise sources at the site consist mainly of the surrounding roadways.

Construction Noise

As stated in the AUAR guidelines, construction noise need not be addressed unless there is some unusual reason to do so. No unusual circumstances have been identified that would necessitate a detailed construction noise analysis. The City's municipal code regulates the hours of operation for construction equipment. Construction activities are permitted between the hours of 7:00 a.m. and 10:00 p.m.[34] Construction of the proposed project would comply with these requirements.

[34] City of Cannon Falls. 2022. *Cannon Falls, MN Code or Ordinances Section 91.16*. Available at: https://codelibrary.amlegal.com/codes/cannonfalls/latest/cannonfalls_mn/0-0-0-1959.

Traffic Generated Noise

A sound increase of 3 dBA is barely noticeable by the human ear, a 5 dBA increase is clearly noticeable, and a 10 dBA increase is heard as twice as loud. For example, if the sound energy is doubled (i.e., the amount of traffic doubles), there is a 3 dBA increase in noise, which is just barely noticeable to most people. On the other hand, if traffic increases by a factor of 10, the resulting sound level will increase by about 10 dBA and be heard as twice as loud.

Traffic volumes in the project area are either on roadways that do not have receivers that are sensitive to noise, or the traffic levels attributable to the project are well below the amount that would generate a sound increase that could be noticeable.

The change in traffic noise levels is not anticipated to be readily perceptible.

Operational Noise

According to the City's Code of Ordinances, noises emanating from any use shall comply with and be regulated by the State of Minnesota pollution control standards and rules.[35] As such, all future development will be required to comply with these requirements. The AUAR will include a discussion of operational noise and identify potential operational noise mitigation measures.

20. TRANSPORTATION

a. Describe traffic-related aspects of project construction and operation. Include 1) existing and proposed additional parking spaces; 2) estimated total average daily traffic generated; 3) estimated maximum peak hour traffic generated and time of occurrence; 4) source of trip generation rates used in the estimates; and 5) availability of transit and/or other alternative transportation modes.

The information listed above will be provided in the traffic and transportation analysis that will be included in the AUAR. Coordination will occur with the City of Cannon Falls, Dakota County, and Goodhue County to determine analysis scenarios and trip generation for the traffic study. The trip generation will be calculated based on the latest edition of the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition.

Transit

Currently, there are no convenient alternative transportation routes serving the study area. It is not anticipated that there will be significant change in transit usage.

Bike and Pedestrian Infrastructure

There are no existing bike or pedestrian infrastructure within or near the study area.

b. Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system. If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Use the

[35] City of Cannon Falls. 2022. *Cannon Falls, MN Code of Ordinances Section 152.191*. Available at: https://codelibrary.amlegal.com/codes/cannonfalls/latest/cannonfalls_mn/0-0-0-7064.

format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5 (available at: http://www.dot.state.mn.us/accessmanagement/resources.html) or a similar local guidance.

AUAR Guidance: For AUAR reviews, a detailed traffic analysis will be needed, conforming to the MnDOT guidance as listed on the EAW form. The results of the traffic analysis must be used in the response to Items 16 and 17.

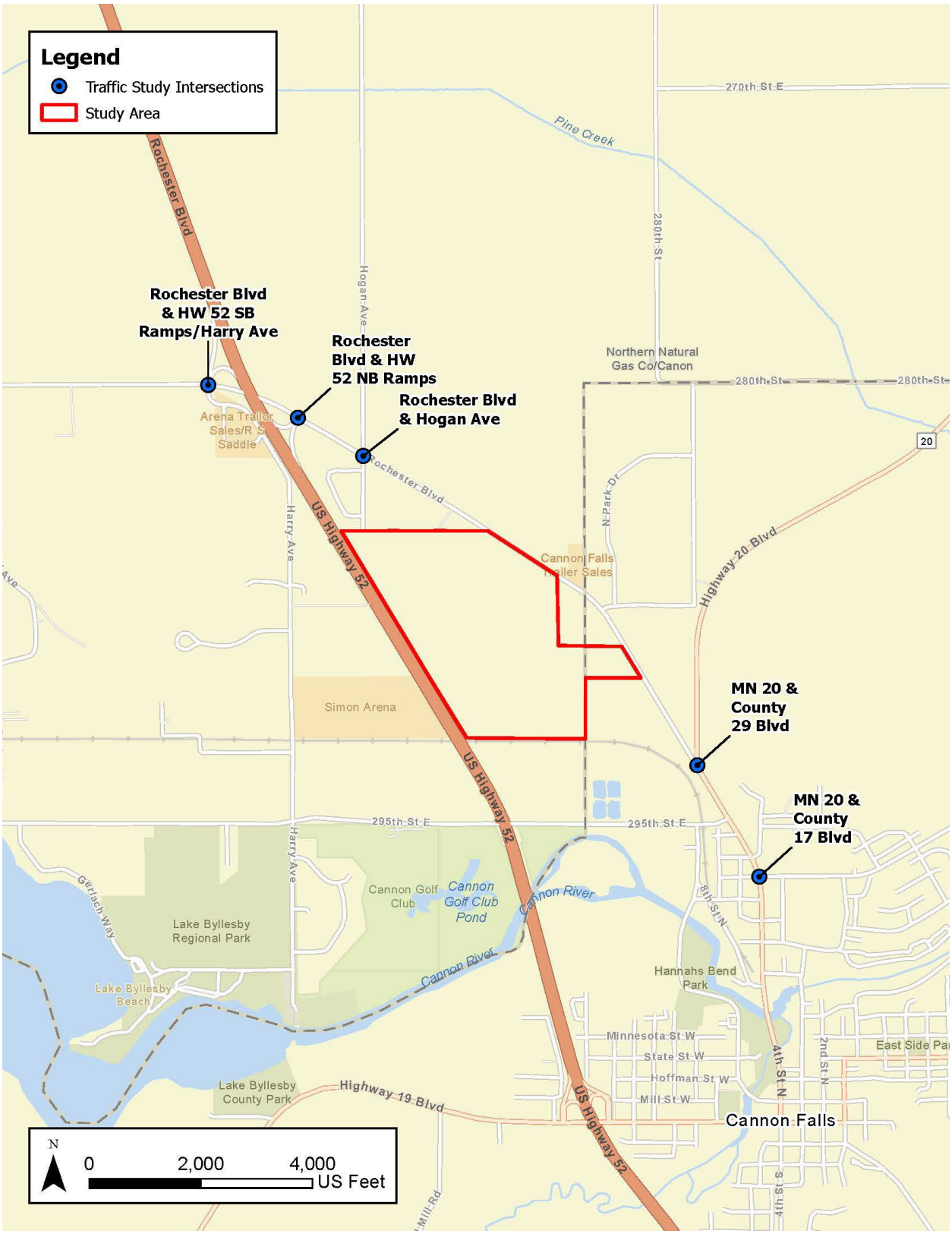
A traffic impact study will be completed as part of the AUAR because the trip generation is anticipated to exceed the 250-trip peak hour vehicle threshold. The traffic impact study will be summarized in the AUAR, including information on estimated traffic generation, traffic impacts, relevant information from relevant transportation plans and traffic studies, and potential improvements and mitigation measures. The analysis will be completed for existing conditions as well as future no-build and build conditions for the opening year of the development and the 20 year forecasted condition. The AUAR will include intersection capacity analyses for intersections adjacent to the AUAR study area and will include the review of intersection operations at site access points. The following intersections will be included in the analysis and are shown in Figure 13:

- Rochester Boulevard & Highway 52 SB Ramps/Harry Avenue
- Rochester Boulevard & Highway 52 NB Ramps
- Rochester Boulevard & Hogan Avenue
- County 29 Boulevard & Cannon Falls Boulevard (MN 20)
- County 29 Boulevard (MN 20) & County 17 Boulevard

c. Identify measures that will be taken to minimize or mitigate project related transportation effects.

The AUAR will address any mitigation measures identified through the traffic analysis.

Figure 13: Traffic Study Intersections



21. CUMULATIVE POTENTIAL EFFECTS

AUAR Guidance: Because the AUAR process by its nature is intended to deal with cumulative potential effects from all future developments within the AUAR area, it is presumed that the responses to all items on the EAW form automatically encompass the impacts from all anticipated developments within the AUAR area.

However, the total impact on the environment with respect to any of the items on the EAW form may also be influenced by past, present, and reasonably foreseeable future projects outside of the AUAR area. The cumulative potential effect descriptions may be provided as part of the responses to other appropriate EAW items, or in response to this item.

a. Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

Cumulative effects are defined as the "effect on the environment that results from the incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid, regardless of what person undertakes the other projects or what jurisdictions have authority over the projects."[36] The geographic areas considered for cumulative effects are those areas adjacent to the AUAR study area, and the timeframe considered includes projects that would be constructed in the reasonably foreseeable future (by 2030).

b. Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

The AUAR will identify any additional reasonably foreseeable projects that may interact with the environmental effects of either development scenario.

c. Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

The AUAR will include a discussion of potential cumulative effects associated with nearby ongoing or planned projects.

[36] Minnesota Rules, part 4410.0200, subpart 11a

22. OTHER POTENTIAL ENVIRONMENTAL EFFECTS

AUAR Guidance: If the project may cause any additional environmental effects not addressed by Items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

Additional Environmental Effects

Any other potential environmental effects will be addressed in the AUAR.