

Cannon Falls Industrial

Final Alternative Urban Areawide Review

July 2025

Prepared for:



Prepared by:

Kimley»Horn

Table of Contents

1. Project Title	4
2. Proposer.....	4
3. RGU	4
4. Reason for EAW Preparation	5
5. Project Location.....	5
6. Project Description.....	8
7. Climate Adaption and Resilience.....	12
8. Cover Types.....	18
9. Permits and Approvals Required	21
10. Land Use	22
11. Geology, Soils, and Topography/Landforms.....	33
12. Water Resources.....	38
13. Contamination/Hazardous Materials/Wastes	52
14. Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features).....	54
15. Historic Properties.....	57
16. Visual.....	58
17. Air.....	58
18. Greenhouse Gas (GHG) Emissions/Carbon Footprint.....	59
19. Noise.....	63
20. Transportation.....	65
21. Cumulative Potential Effects	68
22. Other Potential Environmental Effects	69
Draft Mitigation Plan	70

List of Tables

Table 1: Development Scenarios.....	9
Table 2: Climate Considerations and Adaptations.....	14
Table 3: Cover Types.....	18
Table 4: Anticipated Green Infrastructure.....	19
Table 5: Permits and Approvals Required	21
Table 6: Soil Types.....	35
Table 7: Wetland Delineation Summary.....	39
Table 8: Wells within the AUAR Study Area.....	43
Table 9: Daily Wastewater Flows.....	46
Table 10. Estimated Solid Waste Generation.....	53
Table 11. Construction Emissions	61
Table 12. Operational Emissions	61
Table 13. Trip Generation Forecast.....	66
Table 14. Existing and Projected Intersection LOS.....	67

List of Figures

Figure 1: USGS Map	6
Figure 2: AUAR Study Area Boundary.....	7
Figure 3: Scenario 1.....	10
Figure 4: Scenario 2.....	11
Figure 5: Flood Impact Zones.....	17
Figure 6: Cover Types.....	20
Figure 7: Existing Land Use.....	28
Figure 8: Existing Zoning	29
Figure 9: Future Land Use.....	30
Figure 10: City of Cannon Falls Future Urban Expansion Area	31
Figure 11: City of Cannon Falls Land Use Plan.....	32
Figure 12: Soil Types	37
Figure 13: Wetland Delineation Summary.....	40
Figure 14: Surface Water Resources.....	41
Figure 15: Groundwater Resources	44

List of Appendices

Appendix A: Wetland Delineation Report	
Appendix B: Traffic Impact Analysis	
Appendix C: Greenhouse Gas Quantification	
Appendix D: Additional Species Information	
Appendix E: Sanitary and Water Public Extension Exhibit	
Appendix F: Well Log	
Appendix G: Draft AUAR Comment Responses	
Appendix H: Draft AUAR Comments	

Alternative Urban Areawide Review

This Alternative Urban Areawide Review (AUAR) follows the format of an Environmental Assessment Worksheet (EAW) (December 2022 version). 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*.

1. Project Title

Cannon Falls Industrial

2. Proposer

Proposer: MNLCO Dakota County Two, LLC & MNLCO Dakota County Three, LLC

Contact Person: Kristin Dean

Title: Senior Director, Entitlements

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 EAW Preparation

AUAR Guidance: Not applicable to an AUAR.

The Scenarios examined in the AUAR exceed the threshold for a mandatory EIS under Minnesota 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 / Randolph Township

PLS Location (¼, ¼, Section, Township, Range): Section 1, Township 112N, Range 18W and Section 6, Township 112N, Range 17 W.

Watershed (81 major watershed scale): Cannon River

GPS Coordinates: 44.531494, -92.926475

Tax Parcel Number: 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)
- **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 types map as required for Item 8** (see Figure 6)
- **Land use and planning and zoning maps as required in conjunction with Item 10** (see Figure 7, Figure 8, Figure 9)

Figure 1: USGS Map



Figure 2: AUAR Study Area Boundary



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 253 acres across five parcels in Randolph Township and the City of Cannon Falls, Dakota and Goodhue Counties, Minnesota, see Figure 2. MNLCO Dakota County Two, LLC and MNLCO Dakota County Three, LLC are proposing to develop the study area from existing farmland to industrial or technology park uses. Prior to development, the portion of the study area currently in Randolph Township will be annexed into the City of Cannon Falls, rezoned first to “urban reserve,” then rezoned to either “I-1 – Limited Industrial” or “I-2 - General Industrial” with a Planned Unit Development Overlay.

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.

Development Scenarios

Two development scenarios are under evaluation in the AUAR as outlined in **Table 1: Development Scenarios**. Both scenarios are consistent with the Cannon Falls Comprehensive Plan Future Land Use Designation of “Industrial” for this site. Scenario 1 includes 1,750,000 sq ft of light industrial use, see **Figure 3**. Scenario 2 proposes the development of a 1,750,000 sq ft technology park, see **Figure 4**.

The intent of the AUAR is to recognize the worst-case potential impacts and identify 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.

Scenario 1

Scenario 1 represents proposed light industrial development. Construction is anticipated to begin in 2026, see **Figure 3**.

Scenario 2

Scenario 2 represents proposed technology park development. Construction is anticipated to begin in 2026, see **Figure 4**.

Table 1: Development Scenarios

Land Use	Scenario 1	Scenario 2
Light Industrial	1,750,000	-
Technology Park	-	1,750,000
Total Project Area	253 acres	253 acres

Figure 3: Scenario 1

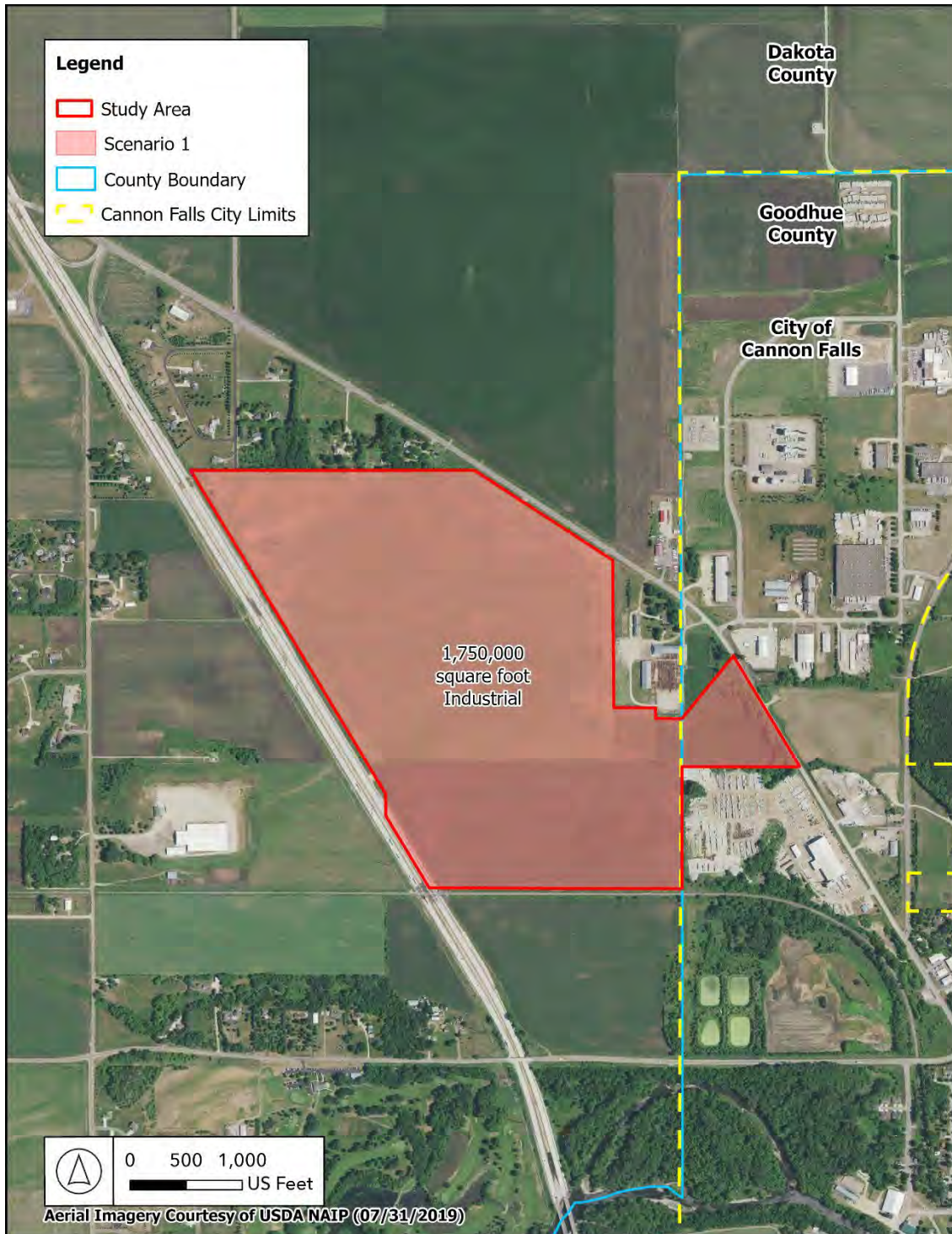


Figure 4: Scenario 2



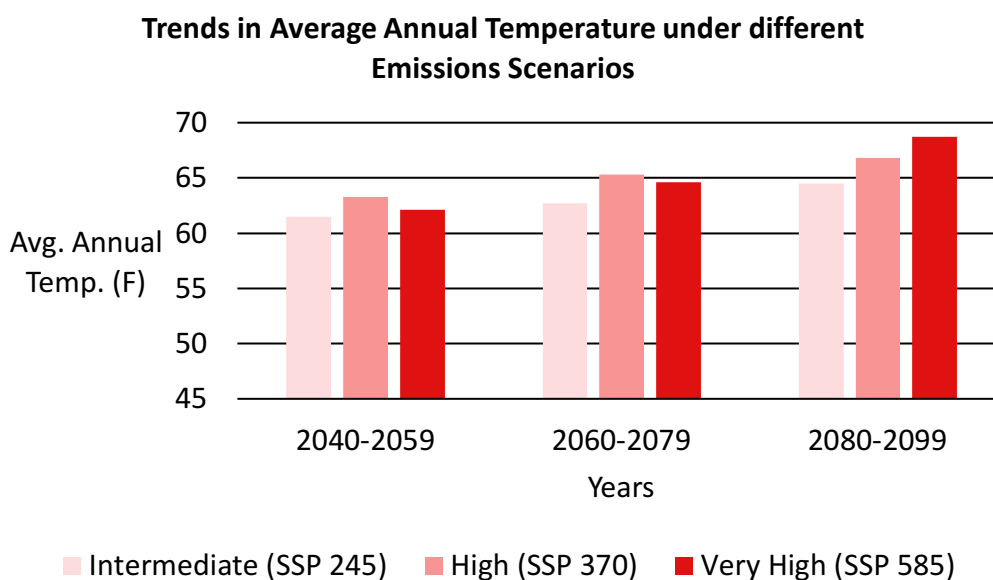
7. Climate Adaption and Resilience

- 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.**

Trends in temperature, precipitation, flood risk, and cooling degree days are described below for the general project location. Some of the climate projections summarized below use shared socioeconomic pathways (SSPs) or representative concentration pathways (RCPs), which are greenhouse gas concentration scenarios used by the Intergovernmental Panel on Climate Change. SSP 245 and RCP 4.5 are intermediate scenarios in which emissions decline after peaking around 2040, and SSP 370 and RCP 8.5 are high-emissions scenarios in which emissions continue to rise through the 21st century.

Temperature

According to the Minnesota Climate Mapping and Analysis Tool (CliMAT), the annual daily average temperature in the study area from 1995 to 2014 was approximately 58.0°F. The annual daily average temperature in the study area is projected to increase to 61.5°F from 2040 to 2059 under an intermediate emissions pathway (SSP 245). In 2080 to 2099, annual daily temperature is projected to further increase to 64.5°F and 66.8°F under intermediate emissions (SSP 245) and high emissions (SSP 370) scenarios, respectively.



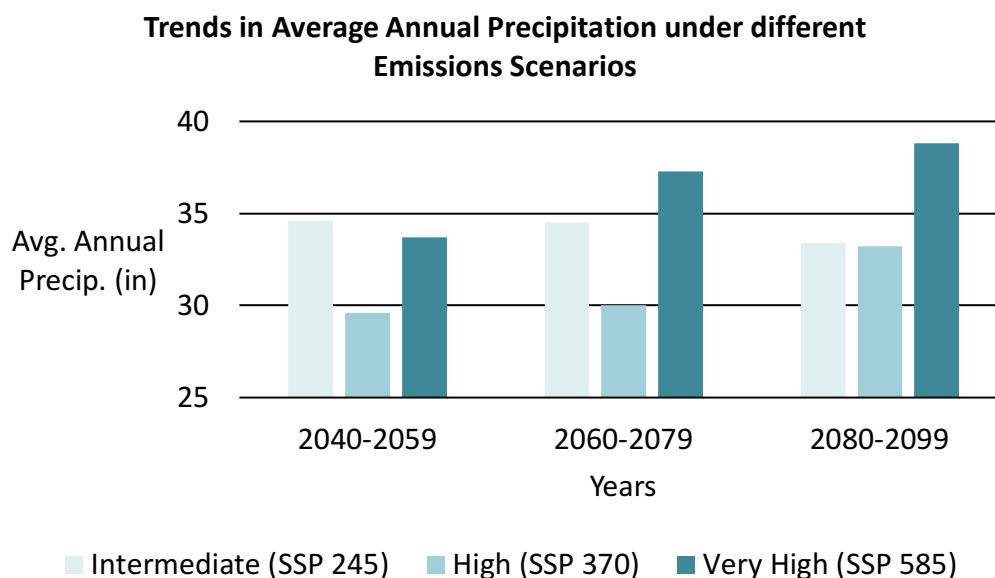
Urban Heat Island

Surfaces and structures such as roads, parking lots, and buildings absorb and re-emit more heat from the sun than natural landscapes. This can significantly raise air temperature and overall extreme heat vulnerability in urban areas where there are dense concentrations of these surfaces. This is referred to as an urban heat island effect. According to the Metropolitan Council's Extreme Heat Map Tool, the AUAR study area is located in an area primarily defined by low heat with some areas of medium heat.

Precipitation

According to Minnesota CliMAT, the historic average precipitation in the study area from 1995 to 2014 was approximately 34.0 inches. Average annual precipitation in the study area from 2040-2059 is projected to be 34.6 inches under an SSP 245 scenario. From 2080-2099, average annual precipitation is projected to be 33.4 inches and 33.2 inches under SSP 245 and SSP 370 scenarios, respectively.

According to the EPA Climate Resilience Evaluation and Awareness Tool (CREAT) Climate Change Scenarios Projection Map, there is a projected 3.1% to 13.3% increase in 100-year storm intensity by 2035 and a projected 6.0% to 25.8% increase in 100-year storm intensity by 2060.



Flood Risk

In many places, climate change is exacerbating the frequency and intensity of the extreme rainfall events and associated flooding. According to the Metropolitan Council Localized Flood Map Screening Tool, which identifies potential surface flooding locations, the study area is located within Primary, Secondary, Tertiary, and Shallow Flood Impact Zones (FIZ) as shown in **Figure 5**. Primary, Secondary, and Tertiary FIZ describe the first areas to fill with water during a flood event, with Primary filling first, followed by Secondary and Tertiary. Shallow FIZ are separate low areas generally considered low risk, but this depth may still be a concern for certain types of infrastructure.

Cooling Degree Days

As defined by the National Weather Service, degree days are based on the assumption that when the outside temperature is 65°F, heating or cooling is not needed to be comfortable. Degree days are the difference between the daily temperature mean and 65°F. If the temperature mean is above 65°F, 65 is subtracted from the mean and the result is the cooling degree days. For example, if the mean temperature over a 24-hour period is 70°F,

then there have been 5 cooling degree days. Cooling degree days are used as a proxy to estimate cooling needs for buildings.

According to Heat Vulnerability in Minnesota, the number of cooling degree days in 2019 for Dakota County was 424, and 375 for Goodhue County. The number of cooling days in 2050 for Dakota County is projected to be 505 and 652 for RCP 4.5 and 8.5, respectively. The number of cooling degree days in 2050 for Goodhue County for both RCP 4.5 and 8.5 is projected to be 460 and 601, respectively.

- 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.**

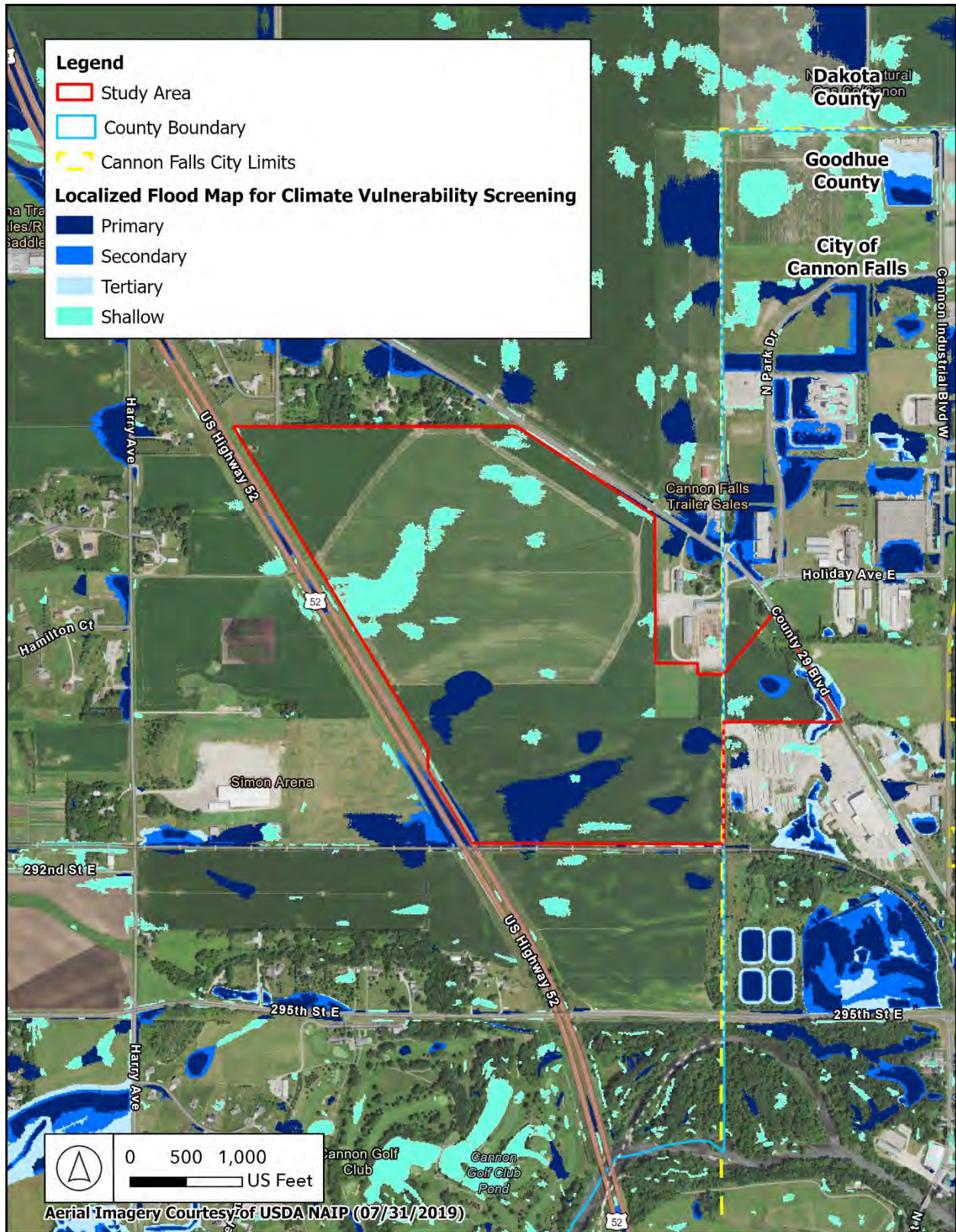
Table 2: Climate Considerations and Adaptations

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptations
Project Design	Aspects of building architecture/materials choices and site design that may negatively affect urban heat island conditions in the area considering changing climate zones, temperature trends, and potential for extended heat waves	<p>In the coming decades, the location of the study area is anticipated to experience:</p> <ul style="list-style-type: none"> • Increased annual temperatures • Increased annual precipitation and more frequent heavy rainfall events • Increased freeze-thaw cycles • Medium urban heat island effect 	<ul style="list-style-type: none"> • Energy end-use efficient appliances and equipment and energy efficient lighting will be incorporated into building design • Building shells will be energy efficient • Proposed native trees and landscaping will reduce runoff and mitigate heat island effect • Parking areas will be evaluated to potentially reduce impervious areas within the AUAR study area • Water efficient design will be incorporated in landscaping

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptations
Land Use	No critical facilities (i.e., facilities necessary for public health and safety, those storing hazardous materials, or those with housing occupants who may be insufficiently mobile) are proposed. Portions of the study area are within FEMA 100-Year floodplains.	Portions of the proposed development may experience flooding during extreme rain events	Design of the stormwater management facilities will be completed to reduce the risk of flooding in the AUAR study area. Infiltration areas will be used to improve water quality and stormwater runoff in the project vicinity
Water Resources	Current Minnesota climate trends and anticipated climate change in the general location of the project may influence water resources	Water resources in the general project area may become warmer, more polluted, and change in volume due to increased temperatures and runoff. There may be more evaporation and water available when it rains leading to an increase in the flood potential. It is projected that there will be more severe storm events with high, intense rain amounts which will require drainage systems to be adequately maintained to accommodate for the increase in water volume.	<ul style="list-style-type: none"> • The project proposer will consider using native plants and perennials for landscaping and stormwater features will absorb water and reduce the water demand for irrigation. • The project proposer will use native plants and perennials for landscaping within water resource buffers. • Water reuse systems may be implemented to reduce water usage. • Stormwater BMP's shall be designed to meet City of Cannon Falls criteria for rate control and runoff volume

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptations
			reduction and criteria for MPCA water quality requirements.
Contamination/ Hazardous Materials/ Wastes	Current Minnesota climate trends and anticipated climate change in the general location of the project may influence the potential environmental effects of generation/use/storage of hazardous waste and materials.	The proposed development scenarios are not anticipated to generate hazardous waste or materials.	Not applicable.
Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	Current Minnesota climate trends and anticipated climate change in the general location of the project may influence the local species and suitable habitat.	Suitable habitat for species may become unsuitable due to land use changes, increased temperature, and increased runoff.	Climate-appropriate native plantings and stormwater BMP's will provide suitable habitat for small mammals, insects, and bird species.

Figure 5: Flood Impact Zones



8. Cover Types

Estimate the acreage of the site with each of the following cover types before and after development.

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 currently 253 acres of undeveloped farmland, woodland, grassland, and some wetland/waterway. Proposed future land use, according to Dakota county, includes approximately 235 acres of agricultural preservation and 18 acres of industrial.

Table 3: Cover Types

Cover Type	Existing (Acres)	Scenario 1 (Acres)	Scenario 2 (Acres)
Wetlands and Shallow Lakes (less than 2 meters deep)	0.16	-	-
Rivers/Streams	565.27 feet	565.27 feet	565.27 feet
Wooded/Forest	2.90	2.90	2.90
Brush/Grassland	7.78	-	-
Cropland	242	-	-
Lawn/Landscaping	-	100	100
Green Infrastructure (total from Table 4)	-	13	13
Impervious Surface	-	124	124
Stormwater Pond (wet sedimentation basin)	-	13	13
Total	253	253	253

Table 4: Anticipated Green Infrastructure

Green Infrastructure	Existing (Acres)	Scenario 1 (Acres)	Scenario 2 (Acres)
Constructed Infiltration Systems (infiltration basins, infiltration trenches, rainwater gardens, bioretention areas without underdrains, swales with impermeable check dams)	-	13	13
Total	-	13	13

Figure 6: 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 5: Permits and Approvals Required

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 or Amendment	To be applied for, if applicable
Minnesota Department of Health	Water Main Installation Permit	To be applied for, if applicable
	Well reconstruction 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
Minnesota Department of Transportation	Grading and Drainage Permit	To be applied for; if applicable
County		
Dakota County	Driveway Permit	To be applied for, if applicable
	Public Drainage Permit	To be applied for, if applicable

Unit of Government	Type of Application	Status
	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
	Final Plat Review	To be applied for, if applicable
	Preliminary Plat Review	To be applied for, if applicable
	Right-of-Way Permit	To be applied for, if applicable
City		
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
	Rezoning	To be completed, if applicable
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 and open space, cemeteries, 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 five parcels, four Dakota County parcels and one Goodhue County parcel. Land use within the study area is generally row crop agriculture, with some undeveloped woodland in the east portion of the study area. The study area is generally bound by Rochester Blvd to the east, a railway to the south, Hwy 52 to the west, and residential properties to the north. Land uses adjacent to the study area include agricultural, commercial, and single family residential, see **Figure 7**.

There are no existing parks within or adjacent to the study area.

According to the Natural Resources Conservation Service (NRCS), approximately 54% of the AUAR study area is classified as All Areas Are Prime Farmland, an additional 44% is classified as Farmland of Statewide Importance, and the remaining 2% is classified as Not Prime Farmland. Impacts to farmland within the AUAR study area will occur as a result of Scenarios 1 and 2. The study area is within Cannon Falls city

limits or is within the future land use area for the City of Cannon Falls; therefore, no further evaluation is needed.

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.**

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.

City of Cannon Falls Comprehensive Plan

The City of Cannon Falls updated their Comprehensive Plan in 2003 to provide guidance on how to plan for growth, identify environmental protections, and retain the City's small-town atmosphere.¹ The plan is comprised of several interrelated chapters that address 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.² Refer to **Figure 11** for description of the land use designation.

Randolph Township Future Land Use Plan

The Randolph Township Future Land Use Plan³ from 2018 provides guidance on the future land use of Randolph Township. The future land use for the AUAR study area within Randolph Township identifies it as agricultural and commercial. Adjacent future land uses within the AUAR Study Area vicinity include rural, large-lot residential, agricultural, and commercial land. With the property planned to be annexed into Cannon Falls, then the land use designation under the Cannon Falls Comprehensive Plan is applicable.

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 implementing the Cannon River Comprehensive Watershed Management Plan that was 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.

¹ 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.

² Ibid, page 8.6.

³ https://clients.bolton-menk.com/ruralcommunities/wp-content/uploads/sites/16/2018/02/DACO_RC_FutureLandUse_Randolph-Township.pdf

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.⁴ 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.⁵

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.

According to the City of Cannon Falls Zoning Map, a portion of the study area is located within the City of Cannon Falls, in the General Industrial (I-1 or I-2) zoning district, while the rest of the study area is located in Randolph Township in the Agricultural Preservation (AP) zoning district and is planned to be annexed into Cannon Falls and rezoned to I-1 or I-2 with a PUD Overlay (See **Figure 8**).

Cannon Falls General Industrial (I-1 or I-2) zoning allowed uses include⁶:

- Bottling establishments
- Building material sales
- Essential services
- Feed and seed 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,

⁴ Cannon River Watershed Joint Powers Organization. 2020. *Cannon River Comprehensive Watershed Management Plan*. Available at:

https://www.cannonriverwatershedmn.gov/files/ugd/33ebbb8_742368ec2fcd48a7981e7c6d2a5bb874.pdf.

⁵ 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.

⁶ 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

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:

- 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

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.⁷ The AUAR will discuss design measures implemented to reduce impacts to the floodplain.

*North Cannon Falls Watershed Management Plan*⁸

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 10a 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 comprehensive plan. If this has not been done as part of the responses to Items 6, 10, 12, 20, 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.

⁷ FEMA. 2024. *FEMA Flood Map Service Center*. Available at: <https://msc.fema.gov/portal/search?AddressQuery=cannon%20falls>.

⁸ 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.

Existing Land Use

The existing land use for the AUAR study area is primarily agricultural land. A small portion of the study area is classified as woodland.

Existing Zoning

The portion of the property currently located in the Randolph Township is zoned "Agricultural Preservation". The portion of the property located in Cannon Falls is zoned "Industrial". The Randolph Township land area is intended to be annexed into Cannon Falls and zoned to either "I-1 Limited Industrial District" or "I-2 General Industrial District" with a Planned Unit Development (PUD) Overlay.

2003 Cannon Falls Comprehensive Plan

The Cannon Falls Comprehensive Plan was last updated in 2003. Since that time all land area within this AUAR has held a Land Use Designation of "Industrial" (see **Figure 10**). Also, in accordance with this Comprehensive Plan, the land currently located in Randolph Township has been identified to be within the Cannon Falls "Future Urban Expansion Area" (see **Figure 11**). Thus, the majority of the land within the AUAR has been envisioned as a future growth area for Cannon Falls and it has been recognized as an appropriate location for Industrial Uses for well over two decades. The remainder of the land currently located in Cannon Falls is also recognized as being an appropriate location for Industrial Uses within the City. Thus, with the entire area within the AUAR being identified as appropriate for Industrial Uses which also include a Technology Park, a Comprehensive Plan Amendment is not needed.

Scenario 1

Scenario 1, which includes light industrial use, is consistent with the 2003 Comprehensive Plan that anticipates industrial land use north of the City between County Road 20 and Highway 52. The city classifies industrial use as encompassing all major industrial, processing, storage, warehouse, trucking activities, and other similar uses.

Scenario 2

Scenario 2, which includes technology park use, is consistent with the 2003 Comprehensive Plan that anticipates industrial land use north of the City between County Road 20 and Highway 52. The city classifies industrial use as encompassing all major industrial, processing, storage, warehouse, trucking activities, and other similar uses.

c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 10b above and any risk potential.

Scenarios 1 and 2 would require rezoning as the parcels will be annexed into the city as an Urban Reserve (UR) zoning district. The sites would be rezoned to either "I-1 Limited Industrial District" or "I-2 General Industrial District" with a Planned Unit Development (PUD) Overlay which is consistent with the City of Cannon Falls comprehensive plan.

Figure 7: Existing Land Use

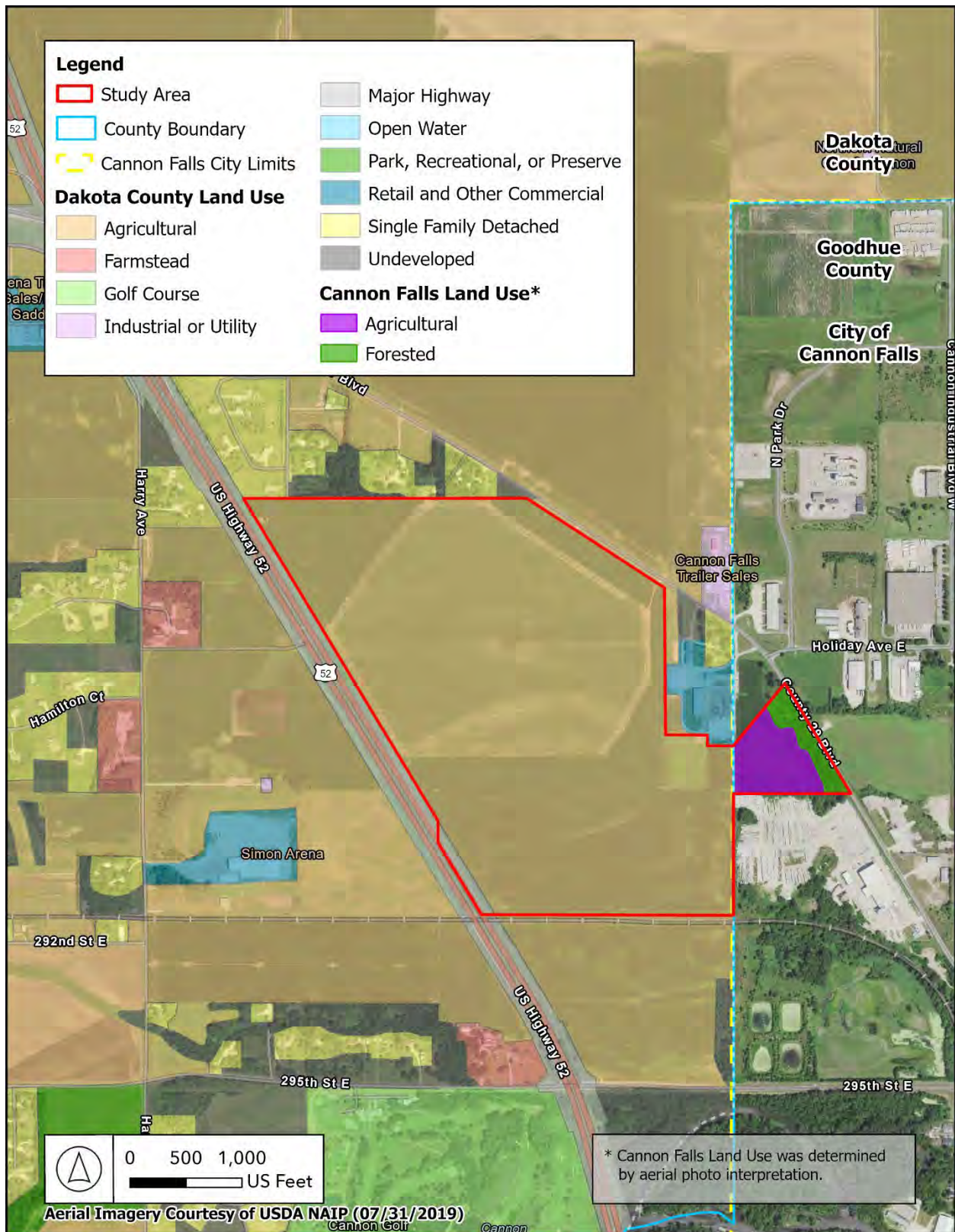


Figure 8: Existing Zoning

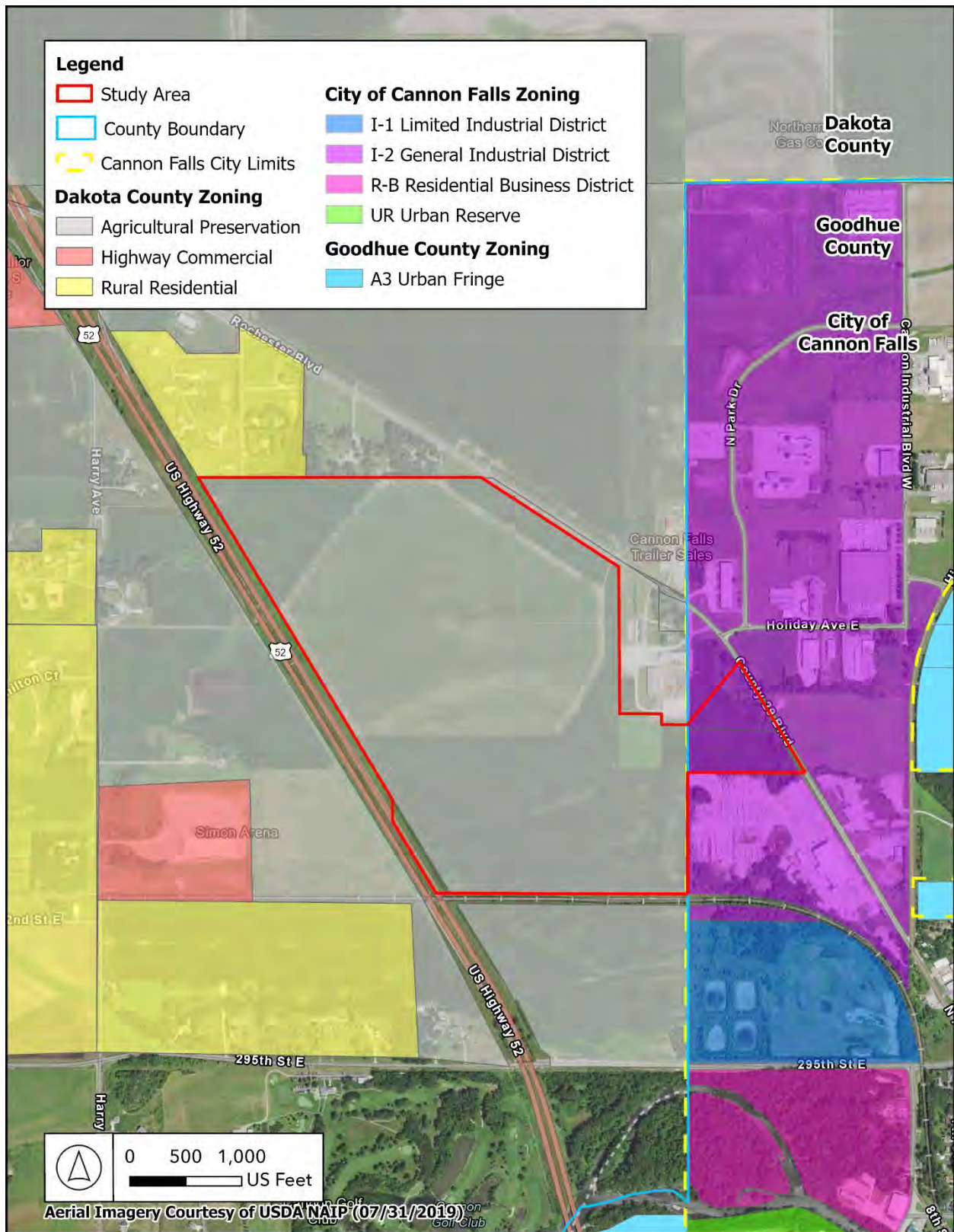


Figure 9: Future Land Use

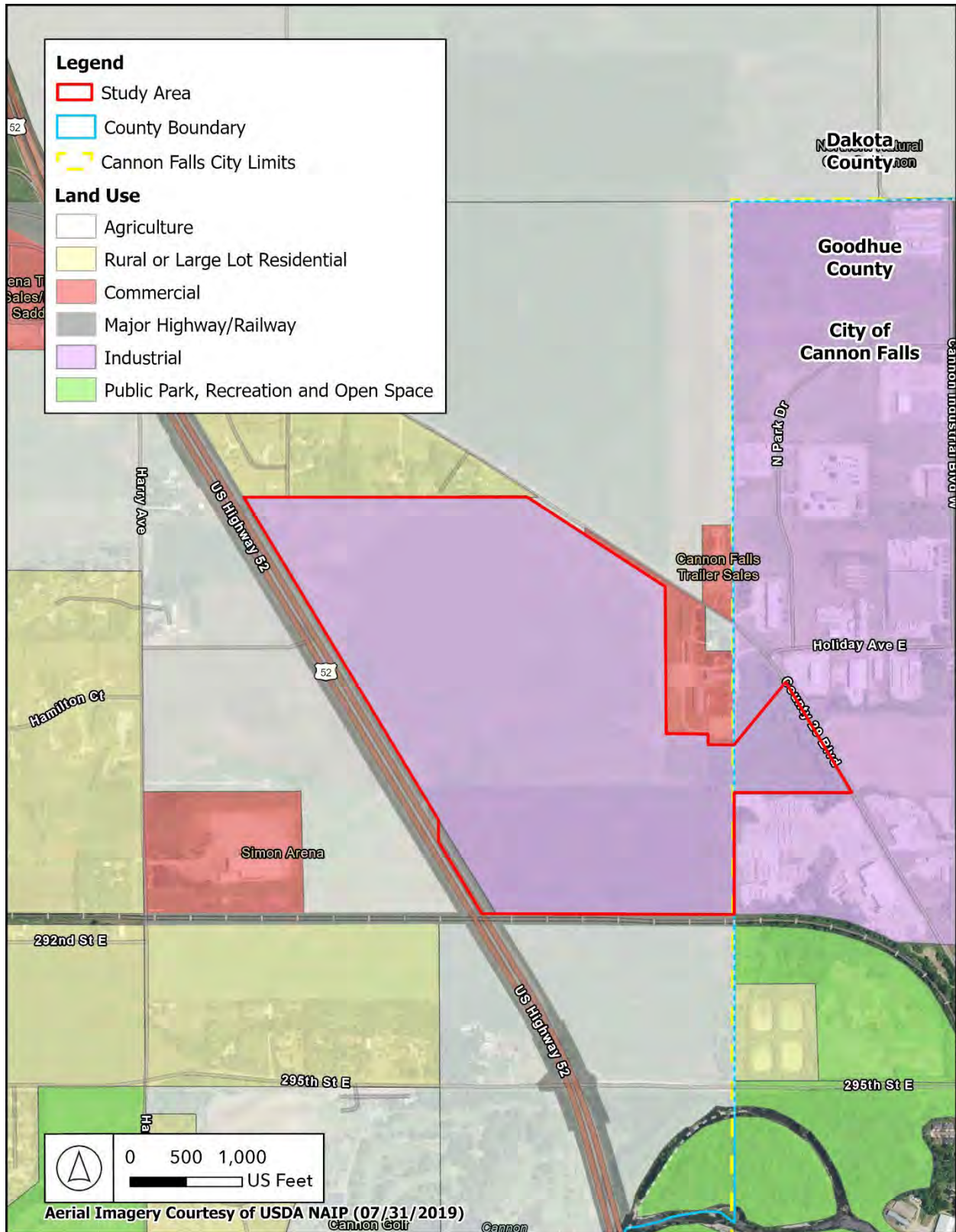
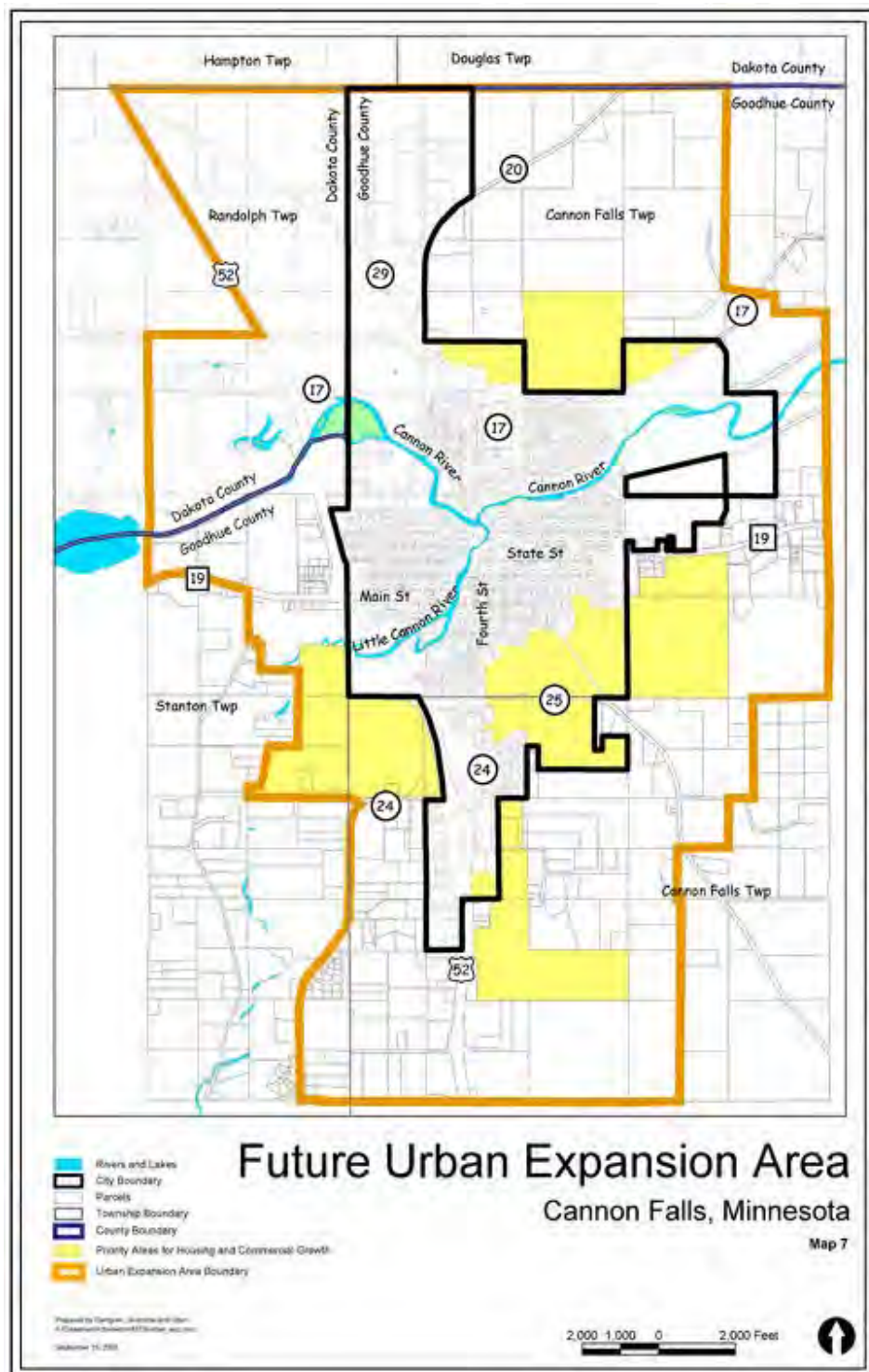
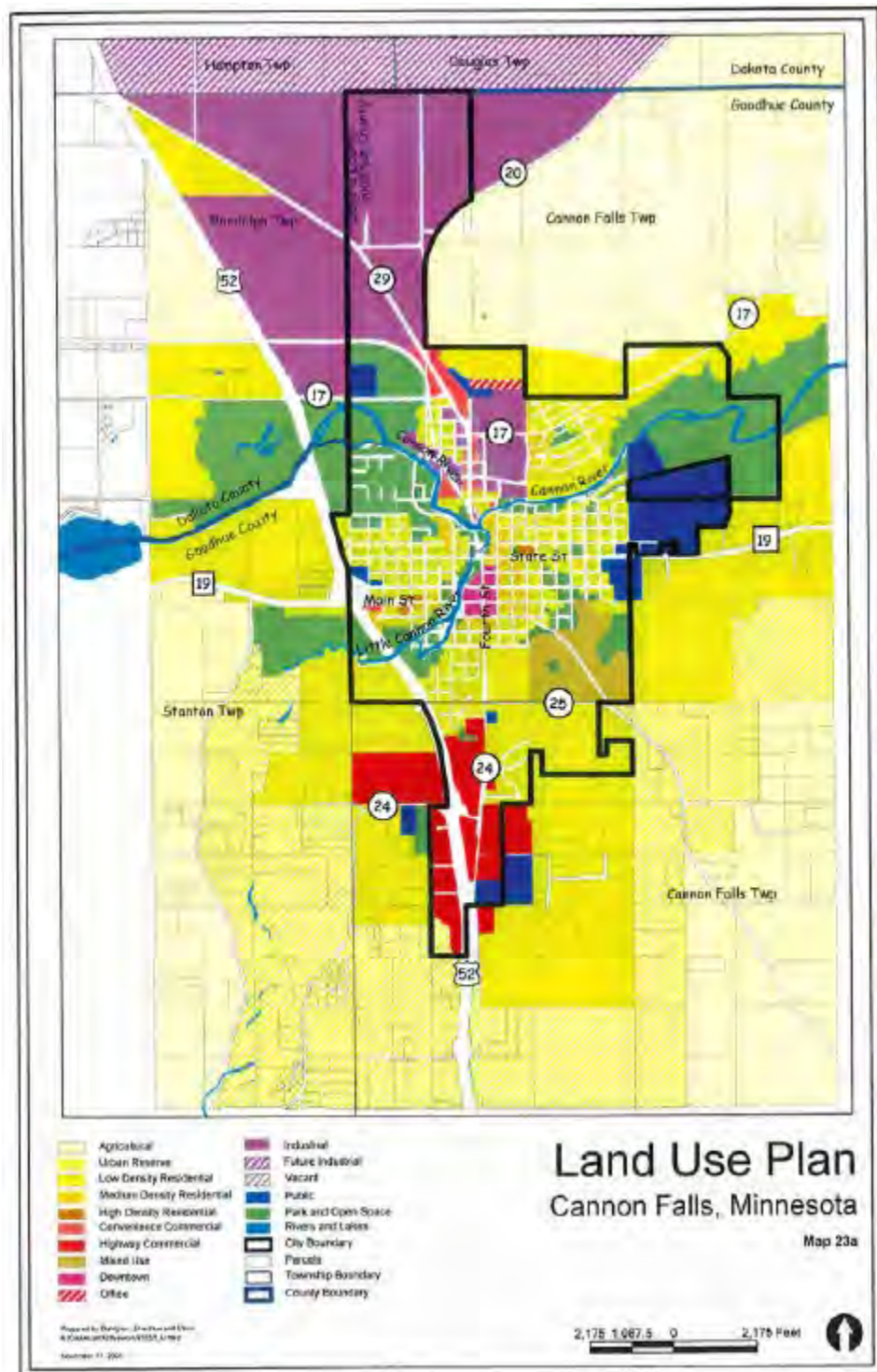


Figure 10: City of Cannon Falls Future Urban Expansion Area⁹



⁹ Exhibit courtesy of the Cannon Falls Comprehensive Plan 2003 - <https://www.cannonfallsmn.gov/economicdevelopment>

Figure 11: City of Cannon Falls Land Use Plan



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 majority of the AUAR study area is underlain by Paleozoic bedrocks. The two types of Paleozoic rocks are characterized by relatively thick widespread layers of sandstone, shale, and carbonate deposited in shallow seas during the Cambrian and Ordovician Periods. The St. Peter Sandstone, from the Middle to Upper Ordovician, is mostly a white to tan, fine- to medium-grained, friable quartzose sandstone and referred to as the Tonti Member and is present in two small areas in the northern portion of the study area. The majority of the study area is dominated by the *Shakopee Formation*, a heterolithic unit composed of tan- to orangish-brown dolostone, sand dolostone, sandstone, and shale, which sits beneath the St. Peter Sandstone.^{10 11}

There are no known sinkholes or unconfined/shallow aquifers located within the AUAR study area. Additionally, there are currently no mapped karst conditions located within or adjacent to the study area¹²; however, there are known karst features located in southeastern Minnesota. According to the Minnesota Pollution Control Agency (MPCA), karst is a landscape formed by the dissolution of a layer or layers of soluble bedrock, such as limestone, dolomite, or gypsum. One of the distinctive features of karst landscapes is the potential presence of caves and sinkholes. Cracks and fissures form and grow in the bedrock as runoff passes through the ground, forming passages, caves, and possibly even sinkholes. Prior to development, the study area will be investigated to identify subsurface voids, cavities, fractures, or other discontinuities which could pose an environmental concern or a construction hazard to future development. If karst conditions are found to be present, the project proposer will follow City of Cannon Falls and MPCA design guidelines. Karst landscapes provide conditions where runoff and potential contaminants can flow more easily into groundwater.

According to the Geologic Atlas' of Dakota County and Goodhue County groundwater is present at approximately 20 feet below grade, excluding the wetlands located within the study area. With the proposed stormwater BMPs and proposed construction, no adverse impacts to groundwater are anticipated as a result of the project.

¹⁰ University of Minnesota. 2023. *Bedrock Geology* (Dakota County). Available at: <https://conservancy.umn.edu/server/api/core/bitstreams/699a0e2d-0666-491d-89d9-ffda1c6b2ed0/content>.

¹¹ University of Minnesota. 1998. *Bedrock Geology* (Goodhue County). Available at: <https://conservancy.umn.edu/server/api/core/bitstreams/1aec21d9-0b5d-41e7-b7a8-9d70ecb1b4dc/content>.

¹² Minnesota Department of Natural Resources. 2025. *Karst Feature Inventory Points*. Available at: <https://arcgis.dnr.state.mn.us/portal/apps/webappviewer/index.html?id=9df792d8f86546f2aafc98b3e31adb62>

- 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 12.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.

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 **Figure 12** and locations within the study area are shown in **Table 6**. 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.

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.

Soils across the AUAR study area generally consist of hydraulic groups A and B, and are well-suited for infiltration, and more specifically, bioinfiltration. Soil infiltration and stormwater management are discussed further in Section 12.

Scenarios 1 and 2

Scenario 1 and Scenario 2 are generally balanced over the site area. Where appropriate, slope stabilization will be provided by means of vegetation establishment, erosion control blankets, or other standard methods of erosion and sediment control. Scenario 1 and Scenario 2 will require compliance with the City of Cannon Fall’s erosion and sediment control standards.

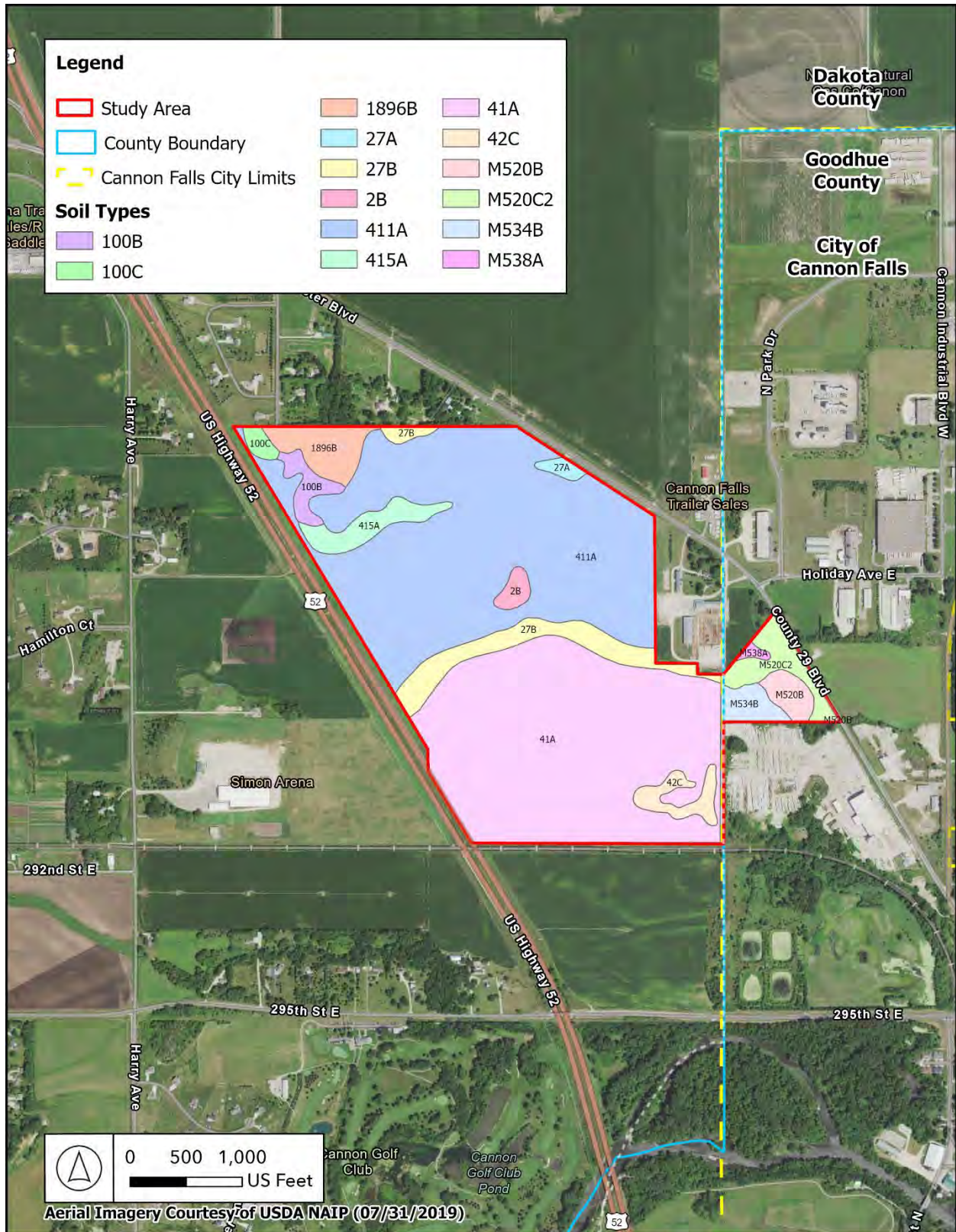
A National Pollutant Discharge Elimination System (NPDES) and Stormwater Pollution Program Construction Stormwater Permit (SWPPP) will be obtained prior to any earthwork or grading activities within the AUAR study area.

Table 6: Soil Types

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	Farmland Rating	Hydric Rating	Hydrologic Soil Group	Erosion Hazard Rating
2B	Ostrander loam, 1 to 6 percent slopes	1.8	0.7%	All areas are prime farmland	0	B	Slight
27A	Dickinson sandy loam, 0 to 2 percent slopes	1.3	0.5%	All areas are prime farmland	0	A	Slight
27B	Dickinson sandy loam, 2 to 6 percent slopes	12.1	5.0%	All areas are prime farmland	1	A	Slight
41A	Estherville sandy loam, 0 to 2 percent slopes	89.6	36.8%	Farmland of statewide importance	0	A	Slight
42C	Alida gravelly coarse sandy loam, 2 to 12 percent slopes	4.2	1.7%	Not prime farmland	0	A	Slight
100B	Copaston loam, 2 to 6 percent slopes	3.5	1.4%	Farmland of statewide importance	0	D	Slight
100C	Copaston loam, 6 to 12 percent slopes	1.4	0.6%	Farmland of statewide importance	0	D	Moderate
411A	Waukegan silt loam, 0 to 1 percent slopes	107.6	44.2%	All areas are prime farmland	0	B	Slight
415A	Kanaranzi loam, 0 to 2 percent slopes	5.8	2.4%	Farmland of statewide importance	0	B	Slight
1896B	Ostrander-carmi loams, 2 to 6 percent slopes	7.1	2.9%	All areas are prime farmland	0	B	Slight
M520B	Rasset sandy loam, 0 to 6 percent slopes	2.9	1.2%	All areas are prime farmland	0	A	Slight

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	Farmland Rating	Hydric Rating	Hydrologic Soil Group	Erosion Hazard Rating
M520C2	Rasset sand loam, 6 to 12 percent slopes, moderately eroded	1.7	0.7%	Farmland of statewide importance	0	A	Moderate
M534B	Estherville-Ridgeport complex, 0 to 6 percent slopes	4.5	1.9%	Farmland of statewide importance	0	A	Slight

Figure 12: Soil Types



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, shoreland classification and floodplain/floodway, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include the presence of aquatic invasive species and the water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within 1 mile of the project. Include DNR Public Waters Inventory number(s), if any.**

The field wetland delineation conducted by Kimley-Horn on October 10, 2024 identified two wetlands within the study area, described in **Table 7** and **Figure 13**. A formal wetland approval process will be initiated with Dakota County and Goodhue County to review the delineated wetland boundaries and types; a NOD's has not yet been issued.

As shown in **Figure 14**, 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 Additional water resources identified during the wetland delineation are outlined in **Table 7**.

The study area is located within the North Cannon River Watershed Management Organization and Cannon River Watershed Joint Powers Organization areas. Proposed compatibility will be acknowledged in the final design plan. Runoff from the study area generally drains southeast.

¹³ Minnesota Pollution Control Agency. 2024. *Impaired Waters: final 2024*. Available at: <https://mpca.maps.arcgis.com/apps/webappviewer/index.html?id=fcc5a12d2fd4b16bc95bb535d09ae82>.

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>.

Table 7: Wetland Delineation Summary

Resource ID	Wetland Plant Community	HGM	Cowardin Classification	Size (acres/linear feet)
Wetland 1	Seasonally Flooded Basin/Scrub Shrub	Depression	PEM1A	0.10
Wetland 2	Seasonally Flooded Basin/ Scrub Shrub	Depression	PEM1A	0.06
Intermittent Stream 1	-	-	PEMG	302 ln ft
Intermittent Stream 2	-	-	PEMG	264 ln ft

Figure 13: Wetland Delineation Summary

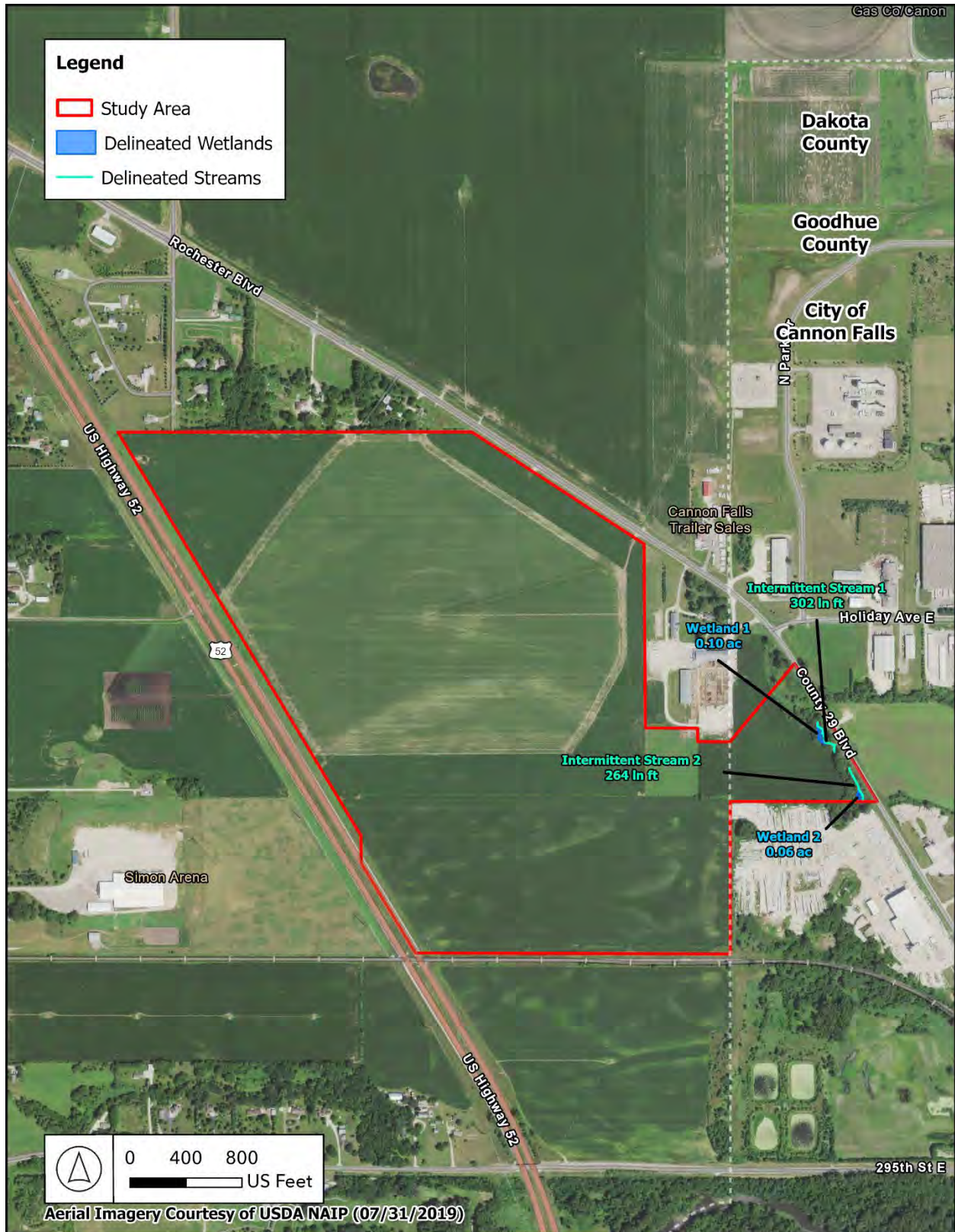
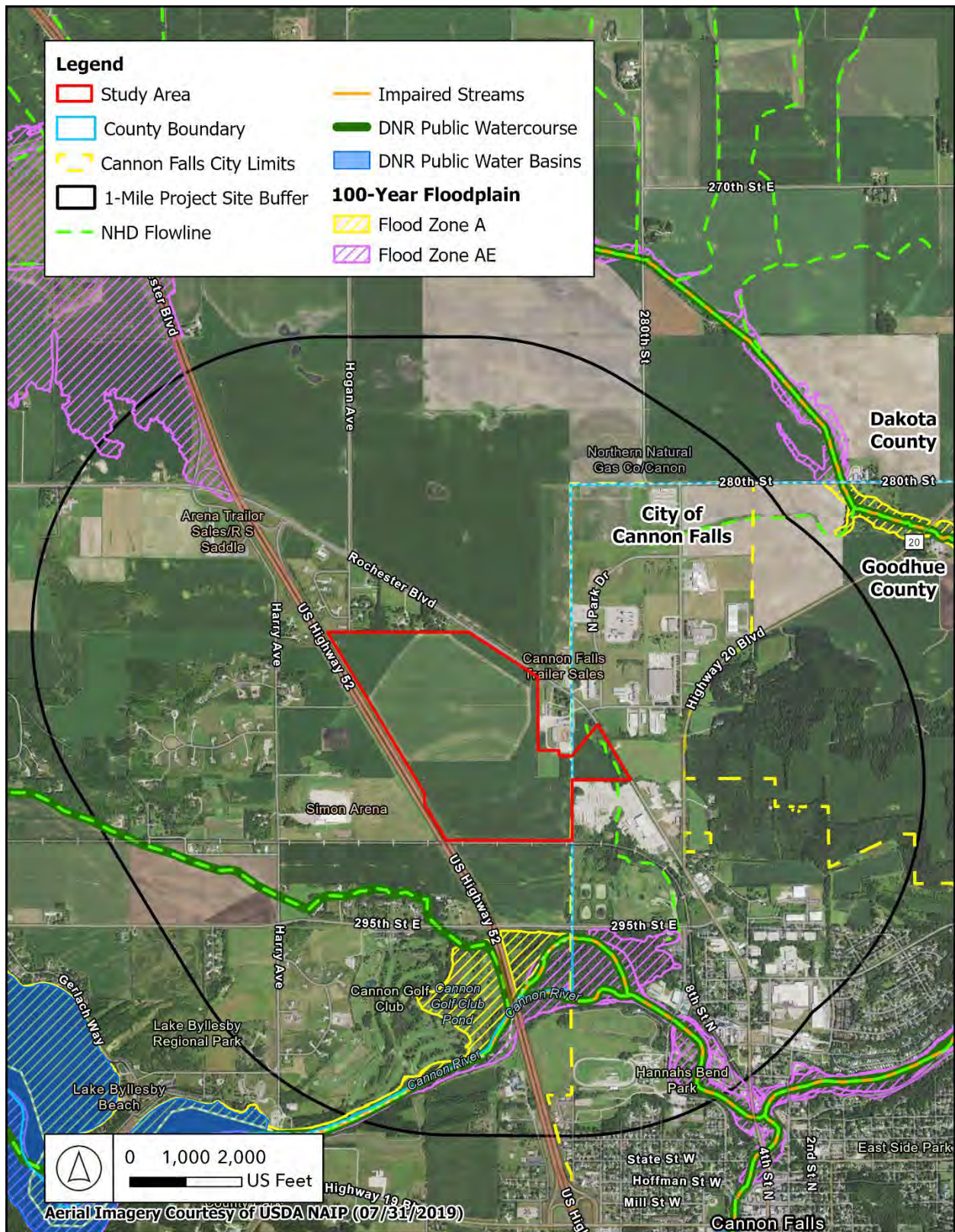


Figure 14: Surface Water Resources



- ii. **Groundwater – aquifers, springs, and seeps. Include 1) depth to groundwater; 2) if project is within a MDH wellhead 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 and Goodhue County, the groundwater is present at greater than 20 feet for the entire study area; however, based on the well data provided by Dakota County, the depth to groundwater for the well onsite is 18 feet below the ground surface. The well log for the onsite well provided by Dakota County is included in Appendix F.

The MNDNR has a network of observation wells throughout the state, there are three wells in proximity to the proposed project, well 806094, 120158, and 121846 are the closest to the site. In looking at the data provided from these wells; the ground water elevations in well 806094 fluctuated from 888.55 to 891.16 in 2024 and typically fluctuate from under 1 ft to 2.6 feet throughout the season. The lowest recorded water table elevation in well 806094 was 877.87 in September of 2015. Well 120158 see season fluctuations from 3.75 feet to almost 15 feet during the season, and ground water elevations from 833.66 to 843.27 in 2024. The lowest recorded elevation in well 120158 was 824.79 in May of 1991. Based on this information the aquifer should be around an elevation of 824 to 890 for this property.

According to the Minnesota Department of Health, there is one well located within the AUAR study area, see **Table 8** and **Figure 15**. This well has a MNDNR appropriation permit for 40.3 million Gallons per Year (GPY). The water appropriations for the well will need to be transferred to the new owner, and the appropriations would also need to be classified as a municipal water source or industrial water source for the project to be able to use the water other than for irrigation purposes. Irrigation wells are constructed to a different standard than municipal wells.

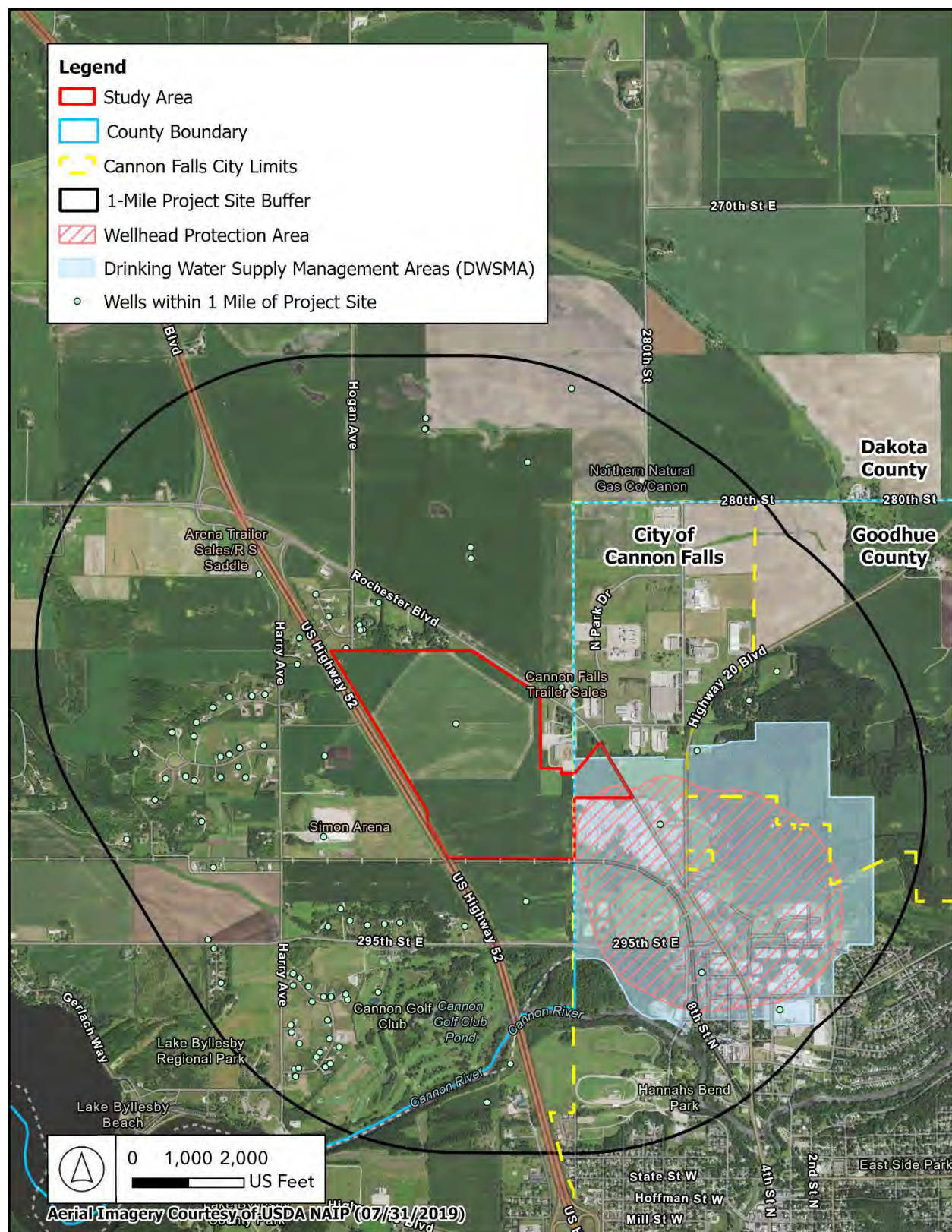
The well on the property will be sealed by a licensed well contractor, if needed. If any unidentified wells are found, the Minnesota Department of Health must be contacted to determine the course of action, which may include sealing, relocating, or preserving by a licensed well contractor according to Minnesota Rules Chapter 4725.

The eastern portion of the AUAR study area is located within a wellhead protection area (Cannon Falls) and a Drinking Water Supply Management Area (DWSMA) (Cannon Falls, moderate vulnerability). Any infiltration of the cooling water or stormwater will need to occur outside DWSMA and will be required to be designed to the MPCA and MDH standards for protecting the drinking water supply. Coordination with the city would be required to verify suitability of stormwater infiltration on site due to the DWSMA requirements.

Table 8: Wells within the AUAR Study Area

Well ID Number	Index Status	Well Use	Well Depth (feet)	Permitted Water Appropriations
751667	Active	Irrigation	265	40.3 million gallons/year
Source: Minnesota Department of Health. <i>Minnesota Well Index</i> . Available at: https://mnwellindex.web.health.state.mn.us/ ; https://mnwellindex.web.health.state.mn.us/mwi/index.xhtml?wellId=0000751667				

Figure 15: 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 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 and (for metro area AUARs) to Metropolitan Council regional systems plans, 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.

The sanitary sewer service will be extended north to the AUAR study area from the City of Cannons Falls sanitary sewer collection system for domestic-strength waste, and potentially industrial process water, if feasible. **Table 9** below provides the estimated wastewater flows for each scenario, and the industrial process water for Scenario 2. Flows for Scenario 1 are based on the standard usage for an industrial warehouse with 30 % office space under the Metropolitan Council of Environmental Services (MCES) published Sewer Access Charge (SAC) guidance document. The City of Cannon Falls Comprehensive plan indicates the proposed site will require a trunk extension along the county road to the site. Further analysis of the system may be required in the future; however, the minimum pipe grade and cover will determine the sewer capacity for this area.

Table 9: Daily Wastewater Flows

Scenario	Domestic Strength Waste	Industrial Process Water
1. Industrial Park	72,500 GPD	-
2. Technology Park	15,000 GPD	57,000 GPD – 3,300,000 GDP

Under Scenario 1 and for the domestic strength waste of Scenario 2, the wastewater would be treated by the City of Cannon Falls Wastewater Treatment Plant.

Data centers can have a wide range of cooling options which impact the wastewater discharges depending on either the use of a non-water cooled or a water-cooled system. For Scenario 2, it is anticipated that a water-cooled system will be utilized. It is anticipated that Scenario 2 will generate a peak day wastewater discharge of a range between 57,000 to 3,300,000 gallons per day (GPD) during a peak day demand. The peak day demand is weather dependent and the chance of a peak day demand happening is approximately less than 1 % of the time over the course of a six-month period. The total system operates over approximately a 6-month period. Of the total daily flow rate, approximately 15,000 GPD would be domestic strength waste, and the remaining flow would be non-contact cooling water. Domestic wastewater is anticipated to be directed to the City of Cannon Falls Wastewater Treatment Plant. The industrial process water quality under Scenario 2 would contain little to no BOD or TSS and would have slightly higher concentrations of minerals found naturally occurring in the ground water. Industrial process non-contact cooling water would be discharged either to the City's system (pending study results and necessary system improvements), in rapid infiltration basins (RIBs) or through other methods of spray irrigation or attenuation, or a combination thereof. Infiltration would provide some recharge of water to the aquifer, while irrigation for the crops can provide another use of the water verses using ground water to directly irrigate the crops. If it is determined the industrial process water is to be discharged the city system, it will be discharged at a slower rate using attenuation tanks or equalization basins.

The area does have the potential for karst formation based on local mapping and will be investigated further prior to permitting the RIBs system. Preliminary geotechnical borings do not show a high probability of karst features within the AUAR study area.

The infiltration or crop land irrigation would need to be permitted by the MPCA. The creation and use of RIBs to infiltrate industrial non-contact cooling water will also require a permit from the MPCA.

- 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. If septic systems are part of the project, describe the availability of septage disposal options within the region to handle the ongoing amounts generated as a result of the project. Consider the effects of current Minnesota climate trends and anticipated changes in rainfall frequency, intensity, and amount with this discussion.

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

- 3) If the wastewater discharge is to surface water, identify the wastewater treatment methods and identify discharge points and proposed effluent limitations to mitigate impacts. Discuss any effects to surface or groundwater from wastewater discharges, taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects.**

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

- 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.*

The site will be annexed into the City of Cannon Falls and is subject to the City's stormwater management guidelines and stormwater drainage facilities will comply with all federal, state and local requirements. There are no existing on-site stormwater ponds. Any development within the AUAR study area must comply with the post-construction stormwater standards set forth by the North Canon River Watershed Management Organization (NCRWMO), the City of Cannon Falls, and the NPDES Construction Stormwater Permit. Compliance with these stormwater regulations will prevent negative impacts downstream.

The AUAR study area ultimately discharges to the Cannon River to the south. As identified in the preliminary geotechnical report, the site consists of mainly graded sand with pockets of silty sand, lean clay and sandy lean clay. Infiltration within the AUAR study area may be possible based on preliminary soils information and lack of currently identified karst features. Infiltration basins would need to be located outside of the DWSMA. If infiltration is possible, it would aid in groundwater recharge and reducing downstream runoff volumes from development within the AUAR study area.

The city follows the NPDES Stormwater Construction Permit stormwater requirements. New developments proposing 1-acre or more of new impervious area must provide water quality volume of 1-inch times the sum of the new and fully reconstructed impervious surface. Proposed developments within the City of Cannon Falls are required to control stormwater runoff to equal or reduce the pre-development conditions. All pipe conveyance shall be ten-year design return frequency, and all ponding, detention or retention shall be designed for the 100-year storm condition via the TR55 Method. For sites that are not able to infiltrate, BMPs must be implemented to remove 90% total suspended solids (TSS) and 60% total phosphorus (TP). BMPs can include biofiltration and wet sediment ponds. All infiltration and filtration facilities must be constructed with a pretreatment device to remove pollutants prior to stormwater out-letting into the facilities.

Formations of Decorah Shale are present in southeastern MN up to the Cannon Falls area. The Decorah Edge is a protected rock formation in MN and prohibits infiltration due to increased risks of karst features potentially causing sink holes. Preliminary geotechnical reports had not encountered any signs of Decorah Shale, however additional geotechnical investigations may be needed to ensure no presence on-site.

The site is partially within a Drinking Water Supply Management Area (DWSMA) of moderate vulnerability and a Wellhead Protection Area. The DWSMA is located on a small sliver of the site to the east. If infiltration is proposed for future stormwater management, the DWSMA and Wellhead Protection Area will be avoided as possible, however the site is not required to limit infiltration as the DWSMA vulnerability is only listed as moderate.

- 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 in both Scenarios, however, in Scenario 2, the industrial water could be supplied from the onsite irrigation well that would be reconstructed to municipal standards. 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.¹⁶ The City of Cannon Falls currently has a water appropriation capacity of 250 MGY and is currently utilizing between 151 to 165 MGY over a four-year period from 2019 to 2024. The city is currently reviewing how the existing appropriations and well could work within the city to help shave some peak demand from the City's water system.

¹⁶ 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.

For Scenario 1, the onsite well would be capped with the water appropriations permit being terminated. The anticipated average annual daily water demand for Scenario 1 would be approximately 259,860 GPD, which does not include a peak factor. Should a peaking factor be applied, peak day water demands could be up to 3 or 4 times the demand listed in Table 12 below.

The proposed AUAR area contains an onsite irrigation well with water appropriations through the Minnesota Department of Natural Resources for 40.3 MGY drawing water from the Prairie du Chien aquifer. Capping the existing well would remove the 40.3 MGY of appropriations from the Prairie Du Chien aquifer and would reduce the potential demand on the aquifer; however, this may require the city to increase their appropriations. A proposed solution would be to plat an area of land where the new well could be constructed and owned by the city. This would allow the city to remain in control of the water appropriations for the aquifer in the area and provide another water source to the City's system. If the City were to take ownership of the well, onsite chlorination and fluoridation of the water would need to occur. Additional treatment for drinking water standards is not anticipated as the City wells are located in the same aquifer; however, this will need to be verified with further testing.

Under Scenario 2, the onsite well could alternatively be reconstructed to meet industrial standards and utilized for industrial process water, reducing the demand from the development on the city water supply system.

Data centers can have a wide range of cooling options which impact the water demand depending on either the use of a non-water cooled or a water-cooled system. It is assumed that Scenario 2 is a water-cooled system and could have an annual peak water demand of 49 MGY with a peak day of 4.66 million gallons per day when temperatures exceed 100 plus degrees Fahrenheit during the day. Annual average daily water demands are anticipated to be approximately 0.135 MGD for the development, including both domestic and cooling water.

The MNDNR has monitoring wells throughout the state that detects groundwater levels in the aquifer. DNR Observation Well Number 19062 is the closest monitoring well to the site and has a depth of approximately 395 feet above sea level. This well has fluctuated between an elevation of 824 feet in 1994, to a high of 867 feet in 2013. In the last few years, the well has gone from 835 feet in May of 2023, to an elevation of 837 feet in March of 2025. This fluctuation does show the variation of the aquifer with the rain and other seasonal events, but the last 30 years of data shows the aquifer maintains a consistent groundwater elevation within this range. This demonstrates that the aquifer is a reliable and resilient water source with the seasons and does recharge over time.

A Water Use Appropriation Permit would be obtained if temporary dewatering is determined to be necessary for design of development in Scenario 1 or Scenario 2. A Water Use Appropriation Permit is required for temporary water appropriations and limits withdraw to 50 million gallons per year.

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.**

The development proposed in Scenario 1 and Scenario 2 may impact the wetlands in the AUAR study area (approximately 0.16 acres). The wetlands are small wetland located along the channel along the county roadway. It is anticipated that impacts to the watershed would be minimal. The project proposer would be required to comply with all federal, state, and local wetland requirements including avoidance, minimization, and wetland mitigation requirements through the purchase of wetland banking credits.

- 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 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. Wetland Delineation Summary Surface Water alterations would occur as a result of the installation of a site access road and culvert over Intermittent Stream 1 for Scenarios 1 and 2. Impacts to Intermittent Stream 2, Wetland 1, and Wetland 2 are not anticipated in either Scenario 1 or Scenario 2.

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.**

A Phase I Environmental Site Assessment (ESA) was completed in November 2024 for the Project study area. Regulatory database information pertaining to the study area and surrounding area was obtained. Overhead power transmission lines, distribution lines, and associated electrical components transect the southern portion of the study area. The site has been used for agricultural purposes since before 1940. Agrichemicals have the potential to be located in soil and groundwater within the study area. The application of herbicides for easement vegetation management can result in localized impacts to soil and/or groundwater quality over time. A Phase II Environmental Site Assessment will be completed prior to development within 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.

According to Dakota County Ordinances 110 and 111, and Goodhue County Waste Management Ordinance Section III, Dakota and Goodhue Counties will ensure compliance with applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes, section 473.811.

Construction Generated Solid Waste

Construction of Scenarios 1 and 2 would generate construction-related waste materials such as wood, packaging, excess materials, and other waste, which would either be recycled or disposed of in the proper facilities in accordance with state regulations and guidelines.

Operation Generated Solid Waste

Recycling for industrial buildings in the AUAR study area will be conducted in accordance with the 2016 Recycling Law (Minnesota Statutes Chapter 115A, Section 115A.151 and Section 115A.552). Additionally, Dakota County Ordinance 15.08 requires all solid waste haulers to offer source separated recycling services and curbside pick-up within the county.

Scenario 1 and Scenario 2 would generate new demands on solid waste management and sanitation services provided in the project area as summarized in **Table 10**.

Table 10. Estimated Solid Waste Generation

	Existing Conditions	Scenario 1	Scenario 2
Non-Residential Area (square feet)	10,592,337	1,750,000	1,750,000
Non-Residential Waste (tons per year)	0	26,250	22,500
Total Waste (tons per year)	0	26,250	22,500

- 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 new above or below ground tanks to store petroleum or other materials. Indicate the number, location, size, and age of existing tanks on the property that the project will use. 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).

Scenario 1 is proposed light industrial and does not anticipate the use of diesel-powered backup generators.

Scenario 2 could include diesel-powered backup generators for emergency use. Each of these generators would have diesel belly tanks or utilize larger consolidated storage tanks serving multiple generators that will be installed and maintained in compliance with applicable regulations for above-ground storage tanks, including:

- New Tanks and piping that would be designed to applicable industry standards and guidance.
- Tank upgrades and repairs would follow industry standards.
- Tank Owners would clearly label all tanks and piping.
- Spill prevention and cleanup plan.

- 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 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.

Habitats that can be found within the study area include minimal grassland, woodland, and wetland. Wildlife that can be found within the study area include birds, insects, small mammals, and the potential for deer or other large mammals, like raccoons or possums. There are no areas of biodiversity significance or areas of ecological significance within one mile of the study area.

Both Scenario 1 and Scenario 2 propose to develop the entirety of the site with natural buffers along the project lines. Minimal tree clearing is anticipated for development. Minimal wetland impacts are anticipated for this project. Grasslands surrounding the boundary of the study area are anticipated to be impacted for the construction of access roads and parking areas.

- b. Describe rare features such as state-listed (endangered, threatened, or special concern) species, native plant communities, Minnesota Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number (LA-____) and/or correspondence number (MCE____) from which the data were obtained and attach the Natural Heritage Review letter from the DNR. Indicate if any 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 Minnesota DNR (MnDNR) Natural Heritage Information System (NHIS) review for the study area and surrounding landscape within one mile of the study area for state-listed threatened, endangered, and special concern species. MnDNR determined

that state-listed species are within the vicinity of the study area. Listed species include the loggerhead shrike (*Lanius ludovicianus*), lark sparrow (*Chondestes grammacus*), northern long-eared bat ([NLEB] *Myotis septentrionalis*), and the North American racer (*Coluber constrictor*). Tree clearing will take place between November 1st and March 31st to avoid potential impacts to roosting bat species and breeding migratory birds.

Federally Listed Species

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) tool was used to identify federally listed species with the potential to occur in the vicinity of the study area. The review identified northern long-eared bat (NLEB), monarch butterfly (*Danaus plexippus*), whooping crane (*Grus americana*), dwarf trout lily (*Erythronium propullans*), and prairie bush-clover (*Lespedeza leptostachya*).

Northern Long-eared Bat (NLEB)

A record for NLEB is located in Dakota County. NLEB was designated as a federally endangered species by USFWS in May 2015.¹⁷ 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.¹⁸ 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. Should tree clearing be needed for development of Scenario 1 or Scenario 2, tree clearing activities will be conducted between November 1st and March 31st to avoid potential impacts to NLEB.

Monarch Butterfly

The monarch butterfly is designated as a candidate species for official listing by the USFWS. The preferred habitat for this species is prairie with milkweed and other native forbs. According to the USFWS, there are many potential reasons for the decline in monarch numbers across North America, including overwintering and breeding habitat loss, logging at overwintering sites, disease, pesticides, and climate change. The monarch is currently proposed for official listing as endangered by the USFWS.

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 marshes and adjacent, open grasslands.¹⁹ The project will not occur on federal land; therefore, consultation with USFWS is not required for the species.

¹⁷ USFWS. Northern Long-Eared Bat. Available at: <https://ecos.fws.gov/ecp/species/9045>

¹⁸ Minnesota DNR. *Rare Species Guide*. Available at: <https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=AMACC01150>

¹⁹ USFWS. Whooping Crane. Available at: <https://ecos.fws.gov/ecp/species/758>

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.²⁰ Given that the study area has been cultivated for agricultural use, the potential for the Minnesota dwarf trout lily to occur onsite is low.

Prairie Bush-clover

Prairie bush-clover is designated threatened by the USFWS. The preferred habitat for the species includes upland prairies and rock outcrops.²¹ Given that the study area has been cultivated for agricultural use, the potential for the prairie bush-clover to occur onsite is low.

- c. **Discuss how the identified fish, wildlife, plant communities, rare features, and ecosystems may be affected by the project, including how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. 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.**

Federally Listed Species

Invasive species are a major cause of biodiversity loss and are considered biological pollutants by the DNR. Invasive species can be spread through construction equipment, landscaping equipment, and other debris.

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 for stormwater runoff is included in Section 12.

Tree Removal

The AUAR study area contains approximately 1.33 acres of forested area. Forests and forested areas provide an important natural resource in Minnesota. Forest clearing and tree removal creates a variety of environmental impacts including habitat destruction, biodiversity impairment, soil erosion, and loss of carbon sinks. Although some tree removal will be necessary, the scope of the removal will be limited to the extent practicable to support the proposed development. Tree removal will adhere to the City of Cannon Falls's tree preservation requirements. The City of Cannon Falls regulates tree preservation and requires developers to submit a tree preservation plan prior to construction if the proposed build area contains significant forest or woods. City staff review these plans and attempt to identify and save as many significant trees as possible. The developer will coordinate with USFWS to determine tree removal commitments with regard to NLEB and loggerhead shrike.

²⁰ Minnesota Department of Natural Resources. 2024. *Rare Species Guide*. Available at: <https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=PMLIL0U0D0>.

²¹ Minnesota Department of Natural Resources. 2024. *Rare Species Guide*. Available at: <https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=PDFAB27090>.

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

State Listed Species

Loggerhead Shrike

To prevent impact to loggerhead shrike individuals, tree trimming or removal should occur during the winter months (November 1 – March 31).

Northern Long-eared Bat

To prevent impact to NLEB individuals, tree trimming or removal should occur during the winter months (November 1 – March 31).

Lark Sparrow

No mitigation measures are anticipated to be required.

North American Racer

No mitigation measures are anticipated to be required.

Federally Listed Species

Northern Long-eared Bat

To prevent impact to NLEB individuals, tree trimming or removal should occur during the winter months (November 1 – March 31).

Monarch Butterfly

The use of seed mixes composed of native plants may be used in project landscape designs to promote pollinator-friendly habitat within the study area.

Whooping Crane

No mitigation measures are anticipated to be required as this is an experimental, non-essential species.

Dwarf Trout Lily

No mitigation measures are anticipated to be required as there are no floodplain forests or river terraces within or adjacent to the study area.

Prairie Bush-clover

No mitigation measures are anticipated to be required as there is no native upland dry prairie within or adjacent to the study area.

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 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 Minnesota State Historic Preservation Office (SHPO), no above-ground historic resources are identified within the study area on the available public map.²² No identified archaeological resources are located within the study area, per the Minnesota Office of the State Archaeologist (OSA). The closest archaeological sites are located adjacent to the southeastern boundary of the study area, and one located approximately 0.5 mile to the west of the study area.²³ An unanticipated discoveries plan will be prepared prior to construction within the AUAR Study Area.

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.

The AUAR study area consists of existing agricultural land that is not in the vicinity of any unique designated scenic views or vistas. Any development of agricultural land would have an impact on the visual appearance of a property. Future development is anticipated to meet city ordinance building form, landscape screening, and lighting to avoid impacts to neighboring properties and species, unless otherwise approved through the City's rezoning process. Natural buffers will be maintained around the AUAR study area as feasible to minimize visual impacts to the adjacent properties. No significant visual impacts are anticipated. As building and site designs advance, lighting practices will be selected to address known ecological concerns and prevent avoidable impacts to wildlife, insects, rare plant species, and adjacent natural areas. Guidance from the USFWS to minimize blue light, uplight, and backlight will be adhered to the extent practicable.

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 and criteria pollutants. 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**

²² MnDOA. Minnesota's Statewide Historic Inventory. Available at: <https://mnship.gisdata.mn.gov/>

²³ MnOSA. MN OSA Public Viewer. Available at: <https://osaportal.gisdata.mn.gov/OSAViewer>.

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. If a project exceeds any of the thresholds as identified in MN Rules 4410.4300, Subpart 15, the project would be required to complete a separate environmental review through the MPCA. The MPCA would be considered the responsible government unit.

- 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 20 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 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 to cause 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.

- 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 17a). 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.

Scenario 1 and Scenario 2 may generate temporary fugitive dust emissions during construction. The City Cannon Falls regulates dust in accordance with the standards set by the MPCA. Dust emissions can be controlled by sweeping, watering, sprinkling, as appropriate or as prevailing weather and soil conditions allow. Dust emissions are not anticipated during operations as all ground surfaces will either be impervious or vegetated.

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 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 (CO₂), methane (CH₄), and nitrous oxide (N₂O). 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 (SF₆), and nitrogen trifluoride (NF₃); 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.

Project-related GHG Emissions

This section describes the GHG emissions from the existing buildings within the study area and includes an estimated quantification of the following GHG emissions associated with the proposed scenarios.

- Carbon dioxide (CO₂)
- Nitrous oxide (N₂O)
- Methane (CH₄)

The projected GHG emissions are provided on an average annual basis using the CO₂ equivalent (CO₂e) and include the proposer's best estimate of average annual emissions over the proposed life/design service life of future development. The estimates also include emissions from the construction and operating phases of the scenario. Emissions were estimated using the US Environmental Protection Agency's Simplified GHG Emissions Calculator (SGEC) (Version 7 June 2021) and are summarized in **Table 11** and **Table 12** by project phase (i.e., construction and operations) and source type (e.g., combustion from mobile equipment, off-site electricity). Construction emissions for the two proposed scenarios are based on length of construction and are from mobile equipment including passenger cars, light-duty trucks, and medium and heavy-duty trucks, and construction equipment (both gasoline and diesel).

Table 11. Construction Emissions

Scope	Emission Type	Emission Sub-Type	Emission	Existing CO _{2e} Emissions (total)	Scenario 1 Project-Related CO _{2e} Emissions (total)	Scenario 2 Project-Related CO _{2e} Emissions (total)
Scope 1	Combustion	Mobile equipment	CO ₂ , N ₂ O, CH ₄	n/a	15,500	13,286
Total				n/a	15,500	13,286

Table 12. Operational Emissions

Scope	Emission Type	Emission Sub-Type	Emission	Existing CO _{2e} Emissions (tons/year)	Scenario 1 Proposed CO _{2e} Emissions (tons/year)	Scenario 2 Proposed CO _{2e} Emissions (tons/year)
Scope 1	Combustion	Stationary equipment	CO ₂ , N ₂ O, CH ₄	0	1,803	4,557
Scope 2	Off-site electricity	Grid-based	CO ₂ , N ₂ O, CH ₄	0	5,797	15,207
Scope 3	Off-site waste management	Area	CO ₂ , CH ₄	0	6,289	425
Total				0	13,889	20,189

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

Unless otherwise noted differently, the following are potential design strategies and sustainability measures that are under consideration for Scenario 1 and Scenario 2 to reduce emissions:

- Use energy efficient appliances, equipment, lighting, and building shells.
- Implement waste best management practices and recycle and compost appropriate materials when applicable.
- Trees and additional landscaping will be implemented as part of the new development.
- Provide electric vehicle-ready charging infrastructure.
- Purchase grid-based wind and solar power.

Implementation of the listed strategies will be evaluated on a case-by-case basis based on code requirements, feasibility, availability of materials, schedule, and tenant considerations. The project proposer will work with the City of Cannon Falls to

identify additional mitigation strategies that could be implemented to reduce greenhouse gas emissions or offset the carbon footprint of the proposed scenarios.

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

- Each scenario would require new appliances, equipment, and lighting during operations. The use of energy efficient technologies would reduce the amount of electricity used per product. Collectively, the implementation of these technologies would reduce overall energy use and in turn, greenhouse GHG emissions.
- Each scenario would require heating and cooling during operation. One of the highest sources of energy use is energy spent heating and cooling buildings. The use of energy efficient building shells reduces the amount of energy needed for the heating and cooling, therefore reducing energy use and GHG emissions.
- Waste would be generated during operation of both scenarios. By implementing waste best management practices and recycle and compost appropriate material when applicable, GHG emitted from waste during operations can be reduced.
- Trees and additional landscaping can reduce the GHG footprint of the project by absorbing the GHG emissions. For both scenarios, tree replacement will occur per City of Cannon Falls requirements.

The potential mitigation listed in Item 18.b.i. was selected to comply with best management practices for new construction and reduce GHG emissions where practicable during operations.

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.

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 efficient and supplementing other renewable energy standards in Minnesota. The MPCA's biennial GHG emissions reduction report from 2021 identifies strategies for reducing emissions in the three economic sectors with the highest emissions – transportation, electricity generation, and agriculture, forestry, and land use.

The current AUAR study area currently generates 280 CO₂e metric tons per year. Under Scenario 1, the amount will increase to 13,889 CO₂e metric tons per year. Under Scenario 2, the amount will increase to 20,189 CO₂e metric tons per year.

The expected lifespan of the project of 50 years, this equates to a total estimated 709,950 CO₂e metric tons over the lifetime of the development under Scenario 1, and 1,022,736 CO₂e metric tons over the lifetime of the development under Scenario 2,

including both construction and operation phases. The proposer will evaluate implementing the sustainability measures listed in Item 18.b.i. to reduce operational emissions to the extent practicable. The proposed project will be built in compliance with state regulations and City of Cannon Falls building codes.

The City will continue to encourage any project proposer within the AUAR study area to implement efficient building designs with efficient energy use and other sustainability measures to minimize their carbon footprint and greenhouse gas emissions to help the state of Minnesota meet their Next Generation Energy Act goals.

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 20.

According to Minnesota Rules 7030, maximum permissible sound pressure levels (dBA)²⁴ for noise area classifications (NAC) are defined below.

NAC	Common Land Uses associated with NAC	Daytime/Nighttime	
		L10	L50
1	Residential, religious activities, camping and picnicking areas, health services, hotels, educational services	65/55	60/50
2	Retail, business and government services, recreational activities, transit passenger terminals	70/70	65/55
3	Manufacturing, fairgrounds and amusement parks, agricultural and forestry activities	80/80	75/75

***L10:** Means the sound level, expressed in dB(A), which is exceeded ten percent of the time for a one-hour survey (six minutes), as measured by test procedures approved by the commissioner.

***L50:** Means the sound level, expressed in dB(A), which is exceeded fifty percent of the time for a one-hour survey thirty minutes), as measured by test procedures approved by the commissioner.

²⁴ **Maximum Permissible Sound Pressure Level:** Maximum allowable noise levels (dBA) as measured from the receiving property land use category are detailed in the table above.

***Daytime:** Means those hours from 7:00 a.m. to 10:00 p.m.

***Nighttime:** Means those hours from 10:00 p.m. to 7:00 a.m.

Existing Noise

The AUAR study area is currently agricultural land. The existing noise sources at the study area consist mainly of the surrounding roadways; Hwy 52 is adjacent to the west boundary of the study area. The existing agricultural use also contributes to the noise in the project vicinity with the use of farm equipment and the use of the irrigation center pivot. Sensitive receptors within the project site vicinity include adjacent residential houses to the north of the AUAR study area, and businesses to the east of the AUAR study area.

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. Construction of the proposed project would comply with the City of Cannon Falls Noise Ordinance ²⁵.

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. If traffic increases by a factor of 10, the resulting sound level will increase by about 10 dBA and be heard twice as loud. The traffic levels attributable to the proposed development scenarios are well below the amount that would generate a sound increase that could be noticeable considering the AUAR study area is adjacent to a state highway that generates significant traffic. The change in traffic noise levels attributable to the development scenarios is not anticipated to be readily perceptible to the sensitive receptors within the AUAR study area vicinity.

Operational Noise

For Scenario 1, the main source of noise will be additional truck and vehicular traffic, mechanical equipment, and ventilation systems associated with the proposed industrial park use.

Noise attenuation measures will be incorporated into project design to ensure that the state noise standards as defined above and the City noise ordinances are followed.

For Scenario 2, the main sources of noise include mechanical equipment, ventilation systems, additional truck and vehicular traffic associated with a technology park. There is potential for the use of emergency backup generators in the case of a total power failure within the AUAR study area.

A noise study has not been completed for the AUAR due to the multiple uses being studied in the proposed AUAR scenarios. It is anticipated that any project within the AUAR will be required to meet the state noise standards outlined above.

²⁵ https://codelibrary.amlegal.com/codes/cannonfalls/latest/cannonfalls_mn/0-0-0-1864

Further noise studies and evaluation will be completed as design progresses and best practices to reduce noise will be implemented for the technology park to ensure compliance with local and state noise regulations. These measures could include setbacks from property lines, construction of berms, noise louvers and enclosures, installation of vegetation, placement of mechanical equipment or design of the truck courts for the industrial park. Noise attenuation measures will be incorporated into project design to ensure that MPCA noise rules and City noise ordinances are followed.

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.**

Parking

There are currently no off-street parking spaces on the site as the site is agricultural land.

Off-Street parking requirements listed in Section 152.259 of the City of Cannon Falls code of ordinances will be adhered to for future development. For the Technology Building Use, in lieu of a standard parking requirement, a Parking Analysis Memo as agreed to by the staff will determine an appropriate amount of parking required for the Campus as part of site plan approval.

Existing Conditions

The existing roadway network within the study area includes Rochester Boulevard, US Highway 52, Hogan Avenue, County Road 29, MN 20, and County Road 17. The roadway network is described below:

Rochester Boulevard (Dakota County 86) is currently a two-lane, undivided minor collector with a posted speed limit of 55 miles per hour (mph) in the vicinity of the proposed development. Rochester Boulevard carries an annual average daily traffic (AADT) volume of 2,100 vehicles per day (vpd) west of and 2,700 vpd east of Highway 52 based on 2021 MnDOT AADT data, respectively.

US Highway 52 is a four-lane, divided principal roadway with a posted speed limit of 65 mph in the vicinity of the proposed development. Highway 52 carries an AADT volume of 21,800 vpd south of and 23,600 vpd north of Rochester Boulevard based on 2023 MnDOT AADT data, respectively.

Hogan Avenue (Dakota County 85) is a two-lane, undivided major collector with a posted speed limit of 55 mph north of Rochester Boulevard and 30 mph south of Rochester Boulevard. Hogan Avenue carries an AADT volume 400 vpd north of Rochester Boulevard based on 2022 MnDOT AADT data, respectively. MnDOT Traffic Mapping Application has no traffic data for the roadway south of Rochester Boulevard.

Goodhue County 29 is currently a two-lane, undivided minor collector with a posted speed limit of 40 mph in the vicinity of the proposed development. County 29 Boulevard carries an AADT

volume of 2,700 vpd north of Cannon Falls Boulevard (MN 20) based on 2019 MnDOT AADT data, respectively.

Cannon Falls Boulevard (MN 20) is a two-lane, undivided major collector with a posted speed limit of 55 mph in the vicinity of the proposed development. Cannon Falls Boulevard (MN 20) carries an AADT volume of 2,200 vpd east of County 29 Boulevard based on 2022 MnDOT AADT data. MN 20 continues south of Goodhue County 29 and has 5,600 vpd.

Goodhue County 17 is a two-lane, undivided major collector with a posted speed limit of 30 mph in the vicinity of the proposed development. County 17 Boulevard carries an AADT volume of 1,600 vpd west of County 29 Boulevard based on 2019 MnDOT AADT data, respectively.

The adjacent roadways are rural by nature and do not have pedestrian infrastructure.

Traffic Generation

The trip generation of the previously described development scenarios were estimated based on data from the Institute of Transportation Engineer's Trip Generation Manual, 11th Edition. The trip generation of Scenario 1 was estimated using LUC 130 (Industrial Park) and Scenario 2 was estimated using Land Use Code (LUC) 160 (Data Center), while the trip generation of, see **Table 13**.

Table 13. Trip Generation Forecast

Scenario	AM Peak Hour			PM Peak Hour			Daily
	Total	In	Out	Total	In	Out	
Scenario 1	595	482	113	595	131	464	5,898
Scenario 2	165	91	74	135	41	94	1,485

Transit

There are no public transit services available near the site.

- 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 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 17 and 19.

A Traffic Impact Analysis was completed in January 2025 for the Cannon Falls Industrial site. Based on the findings of the Cannon Falls Industrial TIA, the area's transportation network is expected to support the development within the AUAR study area with mitigation, see **Table 14**. The TIA identified improvements that could be constructed to mitigate possible future

traffic impacts associated with development within the AUAR study area. Metrics for traffic analysis include intersection delay as measured by Level of Service (LOS) and queue lengths.

Table 14. Existing and Projected Intersection LOS

Intersection	Existing LOS	No-Build LOS		Scenario 1 LOS		Scenario 2 LOS	
	2024	2029	2044	2029	2044	2029	2044
AM Peak Hour							
Rochester Blvd & US 52 SB Ramps	A	A	A	A	A	A	A
Rochester Blvd & US 52 NB Ramps	A	A	A	C	C	A	A
Rochester Blvd & Hogan Ave	A	A	A	A	B	A	A
County 29 & MN 20	A	A	A	A	A	A	A
MN 20 & County 17 Blvd	A	A	A	A	C	B	A
CSAH 88 & Harry Ave	A	A	A	A	A	B	B
Rochester Blvd & Access 1	-	-	-	A	B	A	A
County 29 Blvd & Access 2	-	-	-	A	A	A	A
PM Peak Hour							
Rochester Blvd & US 52 SB Ramps	A	A	A	A	A	A	A
Rochester Blvd & US 52 NB Ramps	A	A	A	C	D	A	B
Rochester Blvd & Hogan Ave	A	A	A	C	C	A	B
County 29 & MN 20	A	A	A	B	B	A	A
MN 20 & County 17 Blvd	C	B	B	B	B	B	B
CSAH 88 & Harry Ave	A	A	A	A	A	B	B
Rochester Blvd & Access 1	-	-	-	A	A	A	A
County 29 Blvd & Access 2	-	-	-	B	B	A	A

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

Based on the results of the capacity analysis and turn lane warrant analysis, the following mitigation measures are recommended for the proposed scenarios:

Existing (2024) Conditions

- No recommended mitigation

Opening Year (2029) No-Build Conditions

- No recommended mitigation

Opening Year (2029) Scenario 1 Conditions

- Install side street stop control at the site access points
- Install a westbound left-turn lane at Access 1 along Rochester Boulevard
- Install an eastbound right-turn lane at Access 1 along Rochester Boulevard
- Install a southbound right-turn lane at Access 2 along County 29 Boulevard

Opening Year (2029) Scenario 2 Conditions

- Install side street stop control at the site access points

Design Year (2044) No-Build Conditions

- No recommended mitigation

Design Year (2044) Scenario 1 Conditions

- All Opening Year (2029) Scenario 1 mitigations

Design Year (2044) Scenario 2 Conditions

- All Opening Year (2029) Scenario 2 mitigations

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 a future projects actually planned or for which a basis of expectations has been laid, regardless of what person undertakes the other projects or what jurisdictions have authority over the projects.” 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.

- 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.**

Future private development projects may result in impacts to transportation, water resources, and utilities. These impacts will be addressed via the regulatory permitting and approval processes and will be individually mitigated to ensure minimal cumulative impacts occur.

- 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.**

Not applicable.

22. Other Potential Environmental Effects

If the project may cause any additional environmental effects not addressed by Items 1 to 21, 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.

There are no other potential environmental effects that have not been addressed in preceding sections.

Draft Mitigation Plan

This Mitigation Plan is submitted as part of the Draft AUAR to provide reviewers and regulators with an understanding of the actions that are advisable, recommended, or necessary to protect the environment and minimize potential impacts by the proposed development scenarios. This Draft Mitigation Plan will be revised and updated based on comments received during the Draft AUAR comment period.

This Mitigation Plan is intended to satisfy the AUAR rules that require the preparation of a mitigation plan that specifies measures or procedures that will be used to avoid, minimize, or mitigate the potential impacts of development within the AUAR study area. Although mitigation strategies are discussed throughout the AUAR document, this plan will be formally adopted by the RGU as their action plan to prevent potentially significant environmental impacts.

The primary mechanism for mitigation of environmental impacts is the effective use of ordinances, rules, and regulations. The plan does not modify the regulatory agencies' responsibilities for implementing their respective regulatory programs nor create additional regulatory requirements. The plan specifies the legal and institutional arrangements that will assure that the adopted mitigation measures are implemented.

In addition to the anticipated permits and approvals listed, the mitigation measures developed in the AUAR process are outlined in Table 15. The remaining AUAR items have identified regulatory requirements and/or mitigation measures that reduce the level of potential impact of development within the study area. The plan is formatted consistent with the sections of the AUAR for ease of reference.

Table 15: Final Mitigation Plan

Resource Area	Mitigation
Land Use	Scenario 1 and 2: Any zoning inconsistencies will be addressed through a re-zoning.
Geology, Soils, and Topography	Scenario 1 and 2: Erosion prevention and sediment control practices will be implemented on-site per the NPDES General Stormwater Permit requirements.
	Scenario 1 and 2: Site specific subsurface investigations should be completed prior to work commencement. If karst conditions are found to be present, follow City of Cannon Falls and the MPCA design guidelines.
Water Resources	Scenario 1 and 2: Infrastructure will be built within the AUAR study area to convey stormwater to stormwater management areas to help achieve the appropriate water quality treatment. As required by the City, the quantity and rate of stormwater runoff from the 1-, 10-, and 100-year, 24-hour rainfall events in post-development conditions will be managed to not exceed the existing conditions.

Resource Area	Mitigation
	Scenario 1 and 2: Maintenance and monitoring of the stormwater management areas will be performed to ensure long term effectiveness of the facilities.
	Scenario 1 and 2: Obtain a permit from the MPCA for a sewer extension and permit to connect.
	Scenarios 1 and 2: Watermain extension along Goodhue County Road 29 to extend services to the AUAR Study Area.
	Scenario 1 and 2: Water Appropriations Permit amendment.
	Scenarios 1 and 2: If needed, groundwater wells will be properly sealed by a licensed well contractor prior to redevelopment within the AUAR study area per MPCA and MDH well sealing requirements if needed. If any unverified wells are identified during construction, they will be examined by a licensed contractor or a Dakota County well inspector to determine the status.
	Scenario 2: If determined feasible, the onsite irrigation well will be reconstructed to meet either municipal or industrial standards and will be used to supply non-contact cooling water. A permit from MDH would be required.
	Scenario 2: If determined feasible, the RIBS or irrigation system will be constructed to meet MPCA guidelines and will be permitted through the MPCA for the non-contact cooling water disposal.
	Scenario 1 and 2: Obtain a permit from MDH for a watermain installation
	Scenarios 1 and 2: A chloride management plan will be implemented, which will meet state and local requirements.
	Scenarios 1 and 2: Best management practices pertaining to stormwater management will be adhered to during construction.
	Scenarios 1 and 2: Avoidance measures will be taken to avoid impacts to the wetlands and intermittent streams within the AUAR study area. If proposed design plans change and impacts to wetlands are necessary, the project proposer will purchase wetland banking credits from the wetland bank within the same Major Watershed if available. Buffers will be installed around wetlands to protect water quality from adjacent development.

Resource Area	Mitigation
Contamination/ Hazardous Waste	<p>Scenarios 1 and 2: Development would both generate construction-related waste materials such as wood, packaging, excess materials, and other wastes, which would be either recycled or disposed in the proper facilities; Products will be kept in their original containers unless they cannot be resealed. Original labels and Material Safety Data Sheets will be made available. Surplus materials will be properly removed from the property upon completion of use.</p>
	<p>Scenarios 1 and 2: Ensure compliance with applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes 2020, section 473.811, subdivision 5c.</p>
	<p>Scenarios 1 and 2: Coordinate with the MPCA regarding the required plans, material handling, and disposal.</p>
Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources	<p>Scenarios 1 and 2: Wildlife-friendly erosion control methods will be utilized within the study area to minimize impacts to wildlife using the site during construction.</p>
	<p>Scenarios 1 and 2: Invasive species will be controlled during site construction. Additionally, appropriate measures will be taken to control the spread of invasive species will be controlled during construction and landscaping:</p> <ul style="list-style-type: none"> • Inspecting construction equipment and removing any visible plant, seeds, mud, dirt clods, and animals when arriving and leaving a site. • Using certified weed-free products such as weed-free seed or hay whenever possible. • Using mulch, soil, gravel, etc., that is free of invasive species whenever possible. • Inspecting soil and plant material during planting for signs of invasive species and removing or destroying the invasive species or the plant and associated soil if the invasive species cannot be separated out. • Native and drought-tolerant species will be utilized in landscaped areas.

Resource Area	Mitigation
	<p>Scenarios 1 and 2: Tree and shrub clearing activities will be restricted to winter months when NLEB and migratory birds are not likely to be present (November 1 - March 31). If winter tree clearing is not feasible, technical assistance from the USFWS and Minnesota DNR is required. A specific tree replacement plan will be created and approved by the city prior to development.</p>
Visual	<p>Scenarios 1 and 2: Lighting practices will be selected to address known ecological concerns and prevent avoidable impacts to insects, wildlife, rare plants, and adjacent natural areas. Guidance from the USFWS that recommends a lighting system that minimizes uplight and backlight would be adhered to the extent practicable.</p>
Air	<p>Scenarios 1 and 2: Construction will generate temporary fugitive dust emissions during construction. These emissions will be controlled by sweeping, watering, sprinkling, as appropriate or as prevailing weather and soil conditions dictate. The City of Cannon Falls regulates dust in accordance with the standards set by the state and federal government.</p>
	<p>Scenario 2: Additional coordination, permitting, and a potential environmental review may be needed for stationary source emissions.</p>
GHG Emissions/Carbon Footprint	<p>Scenarios 1 and 2: Unless otherwise noted differently, the following are potential design strategies and sustainability measures that are under consideration for Scenario 1 and Scenario 2 to reduce emissions as calculated in Appendix C:</p> <ul style="list-style-type: none"> • Use energy efficient appliances, equipment, and lighting • Energy efficient building shells • Implement waste best management practices and recycle and compost appropriate material when applicable • Trees and additional landscaping will be planted as part of the new development <p>The City will continue to encourage any project proposers within the AUAR study area to incorporate design elements to reduce their carbon footprint and greenhouse gas emissions to help the state meet their Next Generation Energy Act goals.</p>

Resource Area	Mitigation
Noise	<p>Scenarios 1 and 2: Construction activities may result in temporarily elevated noise levels. To the extent possible, construction activities will be conducted to minimize noise levels and nighttime construction activities. Permits related to construction noise must be obtained from the City of Cannon Falls at least 7 working days prior to the start of construction.</p> <p>Scenarios 1 and 2: Further noise evaluation will be completed as design progresses and best practices to reduce noise will be implemented.</p> <p>Scenarios 1 and 2: Noise attenuation measures will be incorporated into project design to ensure that MPCA noise rules and City noise ordinances are followed.</p>
Transportation	<p>Short-Term (2029) Scenario 1 Conditions</p> <ul style="list-style-type: none"> • Install side street stop control at the site access points. • Install a westbound left-turn lane at Access 1 along Rochester Boulevard. • Install an eastbound right-turn lane at Access 1 along Rochester Boulevard. • Install a southbound right-turn lane at Access 2 along County 29 Boulevard.
	<p>Short-Term (2029) Scenario 2 Conditions</p> <ul style="list-style-type: none"> • Install side street stop control at the site access points.
	<p>Long-Term (2040) Scenario 1 Conditions</p> <ul style="list-style-type: none"> • All Opening Year (2029) Scenario 1 mitigations.
	<p>Long-Term (2040) Scenario 2 Conditions</p> <ul style="list-style-type: none"> • All Opening Year (2029) Scenario 2 mitigations.

Appendix A



Wetland Delineation Report

Cannon Falls Technology Park

Randolph Township and the City of Cannon Falls
Dakota and Goodhue County, Minnesota

Prepared for:

Tract Management Company, LP
3300 E 1st Ave #600
Denver, CO 80206

Prepared by:

Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100
Saint Paul, MN 55114

November 2024

Kimley»Horn

Table of Contents

Executive Summary	1
1 Introduction	1
2 Project Description.....	1
3 Statement of Qualifications.....	1
4 Regulatory Requirements.....	2
5 Mapping and Background Information	3
5.1 Topographic Map.....	3
5.2 National Wetlands Inventory.....	3
5.3 National Hydrography Dataset	3
5.4 DNR Public Waters Inventory	4
5.5 Soil Survey.....	4
5.6 Precipitation	4
5.7 Aerial Photography Review	4
6 Field Investigation.....	4
7 Summary of Results	6
8 Report Preparation	8
9 Conclusion	8
10 Disclaimer	8
References.....	9

List of Tables

Table 1: Parcel IDs.....	1
Table 2: Delineation Summary.....	6

List of Figures

- Figure 1: Project Location Map
- Figure 2: USGS Topographic Map
- Figure 3: Delineation Summary Map

Appendices

Appendix A: National Wetlands Inventory/DNR Public Waters Inventory/National Hydrography Dataset/2-ft Contours

Appendix B: Historic Aerial Review

Appendix C: Hydric Soils Information

Appendix D: Precipitation Data

Appendix E: Field Data Sheets

Appendix F: Photos

Executive Summary

Wetland scientists, Keegan Sansone and Cat Maroney with Kimley-Horn and Associates, Inc. conducted a wetland investigation and field delineation for Tract Management Company, LP and the Cannon Falls Technology Park in Randolph Township and the City of Cannon Falls, in Dakota and Goodhue County, Minnesota. In total 2 wetlands and 2 intermittent streams were delineated and are described in **Table 2**. The wetland investigation and delineation included portions of six parcels which are listed in **Table 1** (the “study area”). A routine level 2 (onsite) wetland delineation, as outlined in the *1987 Corps of Engineers Wetlands Delineation Manual* (January 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (August 2010) occurred on October 10, 2024.

Table 1: Parcel IDs

Parcel IDs within Study Area
310010051010
310010085010
310010090011
310010090012
310120001012
525100100

1 Introduction

Wetland scientists, Keegan Sansone and Cat Maroney with Kimley-Horn and Associates, Inc. conducted a wetland investigation and field delineation for Tract Management Company, LP and the Cannon Falls Technology Park in Randolph Township and the City of Cannon Falls, Dakota and Goodhue County, Minnesota. The wetland investigation and delineation included portions of six parcels which are listed in **Table 1** (the “study area”). The study area is shown in **Figure 1**. The study area consists of undeveloped agricultural and forested land with a farmstead and two intermittent streams along the eastern portion of the site. Cover types within the study area include cropland, woodland, impervious surface, and surface water.

A routine level 2 (onsite) wetland delineation, as outlined in the *1987 Corps of Engineers Wetlands Delineation Manual* (January 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (August 2010) occurred on October 10, 2024. The purpose of this delineation was to identify the extent of wetlands within the study area. The information will be used to facilitate project design and determine if aquatic resource impacts are avoidable and/or if minimization of impacts can result from design modifications.

2 Project Description

Tract Management Company, LP is proposing to develop/reconstruct the parcel.

3 Statement of Qualifications

Kimley-Horn has extensive experience completing wetland investigations and delineations across the United States. Kimley-Horn’s personnel has been trained to use the *1987 Corps of Engineers Wetlands Delineation Manual* (USACE, 1987) along with the applicable regional supplements. Kimley-Horn has

experience completing off-site hydrology analysis, historic aerial reviews, and difficult or atypical situation delineations.

Ashley Payne earned a Bachelor of Arts Degree in Environmental Biology from Saint Mary's University of Minnesota. She is an environmental scientist with 16 years of experience specializing in wetland services environmental documentation and assessments, and geographic information systems mapping and data collection. During the last 16 years, she has successfully completed hundreds of delineations for various types of projects. In the last seven years, Ashley's primary focus has been the delineation of agricultural fields for future development. She is familiar with completing historic aerial reviews and off-site hydrology determinations which are required for delineation of farmed wetlands. Ashley has also obtained environmental permits for clients through efficient and thorough preparation of permit applications, and by coordinating with agency personnel. Ashley is a certified delineator in the state of Minnesota and her primary focus is environmental work in the Midwest. She has extensive experience working in Minnesota, Illinois, Wisconsin, Michigan, Iowa, and South Dakota.

Keller Leet-Otley earned a Bachelor of Arts Degree in Environmental Science from Colby College. He is an environmental scientist who specializes in wetland delineation and permitting, geographic information systems mapping, and threatened and endangered species due diligence. He has led the delineation of agricultural fields, roadway corridors, and undeveloped areas for future development and transit projects. He is proficient using ArcGIS to produce client specific exhibits for various project types. Keller has prepared environmental permit applications and documentation for public and private sector clients. He is a certified delineator in the state of Minnesota and his focus is environmental work in the upper Midwest.

Keegan Sansone holds a Bachelor of Science Degree in Environmental Science from the University of St. Thomas. He brings over 2 years of professional experience in environmental consulting. He specializes in wetland delineation, environmental due diligence, and geographic information systems. He has lead field teams in the delineation of hundreds of aquatic resources in agricultural fields, herbaceous land, and unmanaged forested areas for private sector clients throughout the Midwest. Keegan has completed Phase I Environmental Site Assessments for over 40 projects including cellular tower projects, community and utility scale solar projects, and private land developments in Minnesota, Illinois, Indiana, Michigan, Colorado, South Dakota, Missouri, and Alaska. He has experience in GIS data management, research, development, and optimization for client deliverables and visualization.

Cat Maroney earned both a Bachelor of Science and a Master of Science in Environmental Science from the University of Arizona. She is an environmental scientist who has experience in biological, hazmat, and permit report writing and geographic information systems mapping. She has assisted with wetland delineations in Arizona, Kansas, and Minnesota.

4 Regulatory Requirements

A summary of the permit requirements that may pertain to the project is provided below. Any activity planned within areas identified as wetland must be coordinated with and approved by the appropriate agencies prior to commencement of such activities.

Agencies in Minnesota that regulate activities that affect lakes, rivers, streams, and wetlands include:

- U.S. Army Corps of Engineers (USACE)
 - Section 404 of the Clean Water Act
- Minnesota Department of Natural Resources (DNR)
 - Public Waters Work Permit Program
- Local Governmental Units (LGUs)
 - Wetland Conservation Act (WCA)

The LGU for this project is the Goodhue and Dakota County Soil and Water Conservation District. The WCA applies to nearly all wetlands not regulated by the DNR.

The regulatory authority of the U.S. Army Corps of Engineers (USACE) covers Waters of the United States (WOTUS) in accordance with Section 404 of the Clean Water Act. Generally, the USACE reviews delineations to determine whether wetlands are jurisdictional (i.e., WOTUS). On December 30, 2022, the U.S. Environmental Protection Agency and Department of the Army (“the agencies”) announced the final “Revised Definition of ‘Waters of the United States’” rule. The rule took effect on March 20, 2023. Based on a preliminary federal injunction on April 12, 2023, the Revised Definition was revoked and the pre-2015 regulatory regime is in effect for 27 states. In Minnesota, the 2023 Revised Definition of the Waters of the United States is in effect as of the date of this report. As of September 8, 2023, the EPA and the Department of the Army amended the WOTUS rule to conform to the 2023 Supreme Court decision in *Sackett v. EPA*.

Based on the May 25, 2023 ruling of *Sackett v. EPA* (2023), the Clean Waters Act’s use of “waters” encompasses only relatively permanent, standing, or continuously flowing bodies, ordinarily called streams, oceans, rivers, and lakes. Wetlands qualify as WOTUS only if “indistinguishable from waters of the United States,” having a continuous surface connection to bodies that are waters of the United States in their own right, with no clear division between waters and wetlands.

In Minnesota, a joint application process has been developed for projects with anticipated wetland impacts. Applications are coordinated between the USACE, DNR, and LGU.

5 Mapping and Background Information

Prior to field reconnaissance, potential wetland areas within the project study areas were identified through a desktop review of United States Geological Survey (USGS) Topographic maps, National Wetlands Inventory (NWI), National Hydrography Dataset (NHD), Department of Natural Resources (DNR) Public Waters Inventory (PWI), LiDAR, the soil survey for Dakota and Goodhue County, aerial photography (2024), and antecedent precipitation for a location near the study area. The selected resources are described below:

5.1 Topographic Map

The Cannon Falls, MN 7.5-minute United States Geological Survey (USGS) topographic map and LiDAR data from USGS were reviewed for the study area. According to the USGS topographic map (see **Figure 2**), the study area is depicted as undeveloped. The LiDAR map depicts the study area sloping southeast with water draining southeast along the eastern border towards an unnamed intermittent stream.. The study area ranges from 842 feet (above mean sea level) to 894 feet, see Appendix A.

5.2 National Wetlands Inventory

NWI mapping, available from the Minnesota DNR (updated in 2022), depicts potential wetland areas and waterbodies based on stereoscopic analysis of high altitude and aerial photographs and was reviewed for the study area. According to the NWI, there is one wetland feature mapped along the eastern border of the study area (R4SBC), see Appendix A.

5.3 National Hydrography Dataset

The National Hydrography Dataset (NHD), available from USGS, depicts drainage networks and related features, including rivers, streams, canals, lakes, and ponds. The NHD is not field verified. According to the NHD, there is one NHD waterbody mapped along the eastern border of the study area, see Appendix A.

5.4 DNR Public Waters Inventory

The Department of Natural Resources (DNR) Public Waters Inventory (PWI) depicts DNR Public Waterways and Waterbodies. No PWI features are depicted within a mile of the study area.

5.5 Soil Survey

The Natural Resources Conservation Service's (NRCS) *Web Soil Survey* for Dakota and Goodhue County was reviewed for the study area. According to the survey, there are 14 soil mapping units within the study area which are mainly complexes and sandy loams with some loam and silt loam soils. The study area was mapped with soils with non-hydric soil rating of 0%. Maps and information obtained from the NRCS online web soil survey are included in Appendix C.

5.6 Precipitation

Precipitation data for the study area was obtained using Minnesota State Climatology Data. Minnesota State Climatology Office data were reviewed for climate stations within the vicinity of the study area to determine the current hydrologic conditions for the site and if those conditions are typical for this time of year. Ninety-day rolling precipitation levels leading up to the field review were compared to historical data. In the 90 days leading up to the field delineation, precipitation conditions were normal. This information is included in Appendix D.

5.7 Aerial Photography Review

Aerial photography, acquired from Google Earth, was reviewed to identify the potential for wetlands across the site. Seven photos were reviewed between 1991 and 2024, available in Appendix B. These photos were used to determine the presence of wetland hydrology using industry accepted offsite hydrology analysis for areas showing crop stress or other potential wetland signatures. Each image was interpreted for the presence or lack of hydrologic indicators.

Six Areas of Investigation (AOIs) were identified in the study area. AOIs 1-6 lacked either hydrophytic vegetation, hydric soil, or hydrology indicators during the field delineation and thus were not delineated as wetland even if 30% of historic aerials showed wetland signatures during normal precipitation conditions. The AOIs are shown in Appendix B.

6 Field Investigation

A routine level 2 (onsite) wetland delineation, as outlined in the *1987 Corps of Engineers Wetlands Delineation Manual* (January 1987) along with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (August 2010) occurred on October 10, 2024.

During the onsite delineation, vegetation, soils, and current hydrologic characteristics were evaluated at each wetland area and area of investigation identified within the study area. The sample point locations, wetland boundaries, and aquatic features were surveyed with a Geode GPS for all wetlands, see **Figure 3**.

In addition to wetlands that were investigated and delineated, non-wetland aquatic features were sought but none were delineated. Non-wetland aquatic features are defined based on the observation of the following characteristics:

- Flow
 - Perennial: contains water at all times of the year except during extreme drought
 - Intermittent: contains water occasionally or seasonally
 - Ephemeral: contains water only during and immediately after periods of rainfall or snowmelt

- Ordinary High Water Mark (OHWM): The limit line on the shore established by the fluctuation of the water surface. It is shown by such things as a clear line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, the presence of litter and debris, or other features influenced by the surrounding area
- Bank Shape
 - Undercut: banks that overhang the stream channel
 - Steep: bank slope of approximately greater than 30 degrees
 - Gradual: bank slope of approximately 30 degrees or less

Sample points were completed for all observed wetlands. Historic aerials were reviewed for sample points taken in agricultural fields, see **Appendix B**. The field data sheets are included in **Appendix E**. Site photos and a photo locations map can be found in **Appendix F**

7 Summary of Results

Table 2: Delineation Summary

Resource ID	Wetland Plant Community	HGM	Cowardin Classification ¹	Size (acres/linear feet) ²	NWI?	Hydric Soils? ³	Photo ID	Associated Sample Points	NOTES	Regulatory Status ⁴
Wetlands										
Wetland 1	Seasonally Flooded Basin/Scrub Shrub	Depression	PEM1A	0.10	-	No	7	SP-3 (Wet), SP-4 (Up)	Wetland 1 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	8	SP-5 (Wet), SP-6 (Up)	Wetland 2 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

¹ The Cowardin Classification System codes are found here: <https://www.fws.gov/wetlands/documents/Wetlands-and-Deepwater-Habitats-Classification-chart.pdf>

² Size of wetland features and additional areas investigated provided in acres and size of non-wetland, linear features provided in linear feet.

³ Areas identified as hydric contain partially hydric soils (equal to or greater than 33% of soil component) mapped within the resource area.

⁴ Regulatory Status is based on best professional judgment and has not been verified with agency staff.

Non-Wetland Aquatic Resources										
Intermittent Stream 1	-	-	PEMG	302 In ft	R4SBC	No	6	-	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 In ft	R4SBC	No	9	-	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).

8 Report Preparation

The procedures followed for this wetland delineation are in accordance with the *Corps of Engineers Wetlands Delineation Manual* and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (August 2010).

This report describes site conditions for a specific date in time and is generally valid for a period of five years from the date of the final field investigation and delineation, which was October 10, 2024.

9 Conclusion

The field delineation identified two wetlands and two intermittent streams within the study area. Each of the delineated resources is described in Table 2. Wetlands 1 and 2 are anticipated to be USACE-jurisdictional. All wetlands are anticipated to be WCA regulated. Intermittent Stream 1 and 2 are anticipated to be USACE-Jurisdictional.

10 Disclaimer

Kimley-Horn has prepared this document based on limited field observations and our interpretation, as scientists, of applicable regulations and agency guidance. While Kimley-Horn believes our interpretation to be accurate, final authority to interpret the regulations lies with the appropriate regulatory agencies. Regulatory agencies occasionally issue guidance that changes the interpretation of published regulations. Guidance issued after the date of this report has the potential to invalidate our conclusions and/or recommendations and may cause a need to reevaluate our conclusions and/or recommendations.

Because Kimley-Horn has no regulatory authority, the Client understands that proceeding based solely upon this document does not protect the Client from potential sanction or fines from the applicable regulatory agencies. The Client acknowledges that they have the opportunity to submit documentation to the regulatory agencies for concurrence prior to proceeding with any work. If the Client elects not to do so, then the Client proceeds at their sole risk.

References

- Minnesota Climatology Working Group. *Historical Climate Data Retrieval: Wetland Delineation Monthly Precipitation Data Retrieval from Gridded Database*. Available at http://climate.umn.edu/gridded_data/precip/wetland/wetland.asp, accessed November 2024.
- Minnesota Board of Water and Soil Resources. Information regarding Minnesota wetland regulations (includes links to other regulatory websites). Available at <http://www.bwsr.state.mn.us/wetlands/index.html>, accessed November 2024.
- Minnesota Department of Natural Resources. *MnTOPO* (November 2024). Shapefiles available at <http://arcgis.dnr.state.mn.us/maps/mntopo/>.
- Minnesota Department of Natural Resources. *Public Waters Basin and Watercourse Delineations (June 2020)*. Shapefiles available at <https://gisdata.mn.gov/dataset/water-mn-public-waters>.
- Natural Resources Conservation Service, U.S. Department of Agriculture. *National Water and Climate Center*. Available at https://www.wcc.nrcs.usda.gov/climate/navigate_wets.html, accessed November 2024.
- Natural Resources Conservation Service, U.S. Department of Agriculture. *Web Soil Survey*. Available at <http://websoilsurvey.nrcs.usda.gov>, accessed November 2024.
- NearMap US Inc., MapBrowser. Available at <https://www.nearmap.com/us/en>, accessed November 2024.
- U.S. Army Corps of Engineers. *Antecedent Precipitation Tool*. Available at <https://www.epa.gov/wotus/antecedent-precipitation-tool-apt>, accessed November 2021.
- U.S. Army Corps of Engineers. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. January 1987. Available at <http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RegulatoryDocs/1987%20Manual.pdf>.
- U.S. Army Corps of Engineers. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (August 2010)*. Available at http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/.
- U.S. Fish and Wildlife Service. *Wetlands Online Mapper*. National Wetland Inventory mapping. Available at <http://www.fws.gov/wetlands/Data/Mapper.html>, accessed November 2024.
- U.S. Geological Survey. *National Hydrography Dataset*. Shapefiles available at <https://nhd.usgs.gov/>, accessed November 2024.
- U.S. Geological Survey. *Topographical Map*. Accessed via ESRI at <http://www.arcgis.com/home/item.html?id=30e5fe3149c34df1ba922e6f5bbf808f> and via Topo View at <https://ngmdb.usgs.gov/topoview/viewer/#4/40.01/-100.06>, accessed November 2024.

Figures



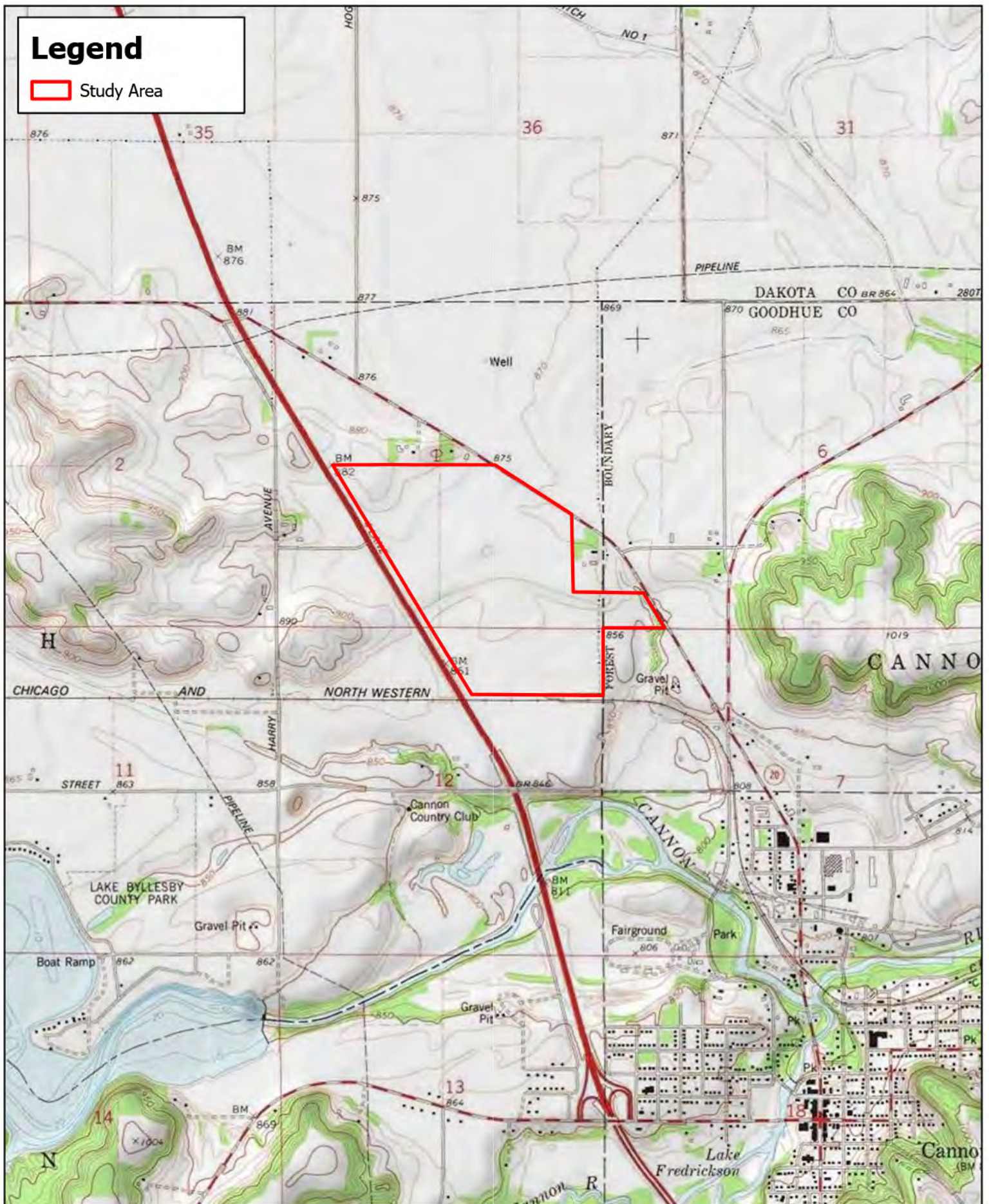


Figure 2. USGS Topographic Map
Tract Management Company, LP
Cannon Falls, MN

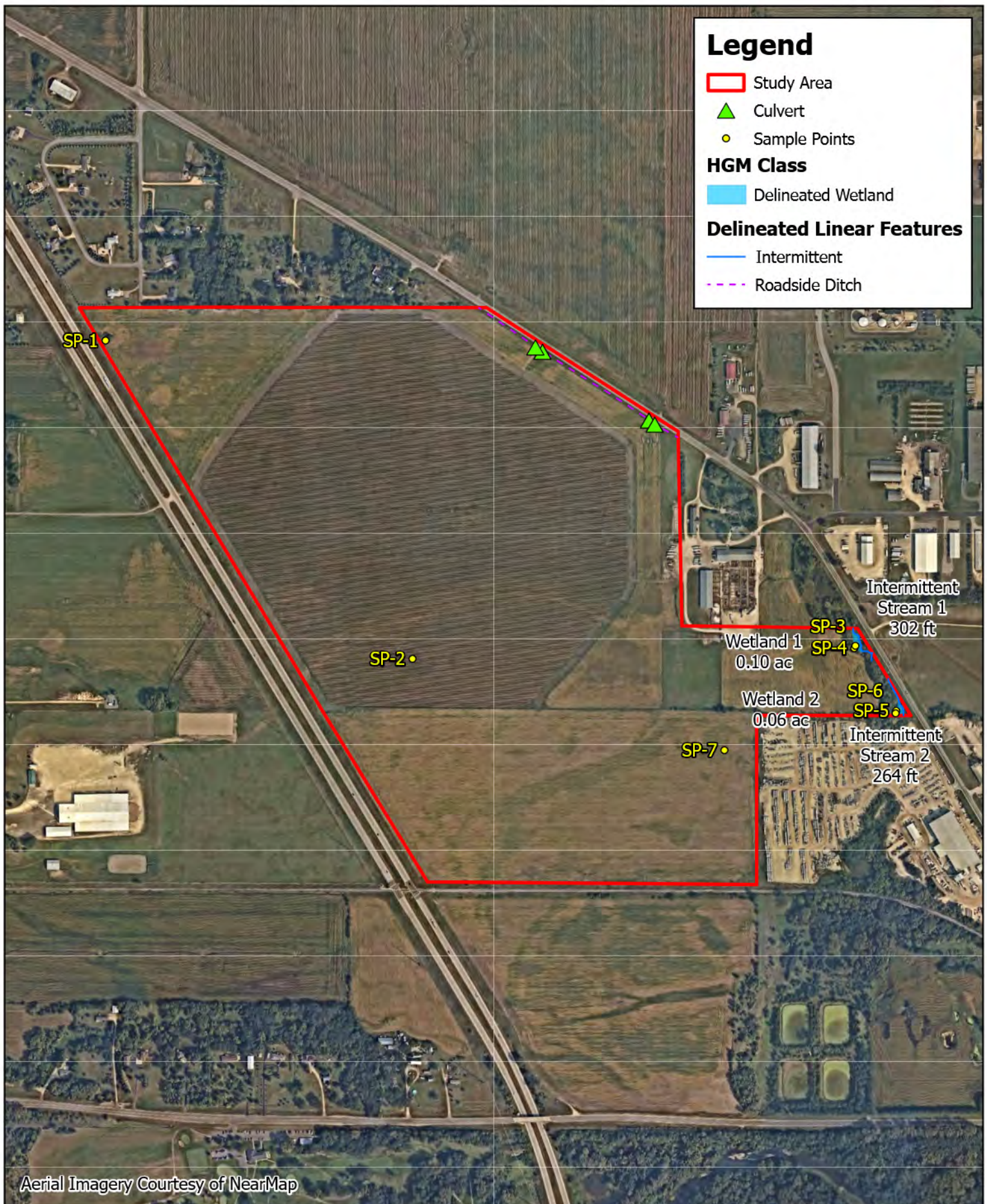


Figure 3. Delineated Resources Map
 Tract Management Company, LP
 Cannon Falls, MN

Appendix A: National Wetlands Inventory/DNR Public Waters Inventory/National Hydrography Dataset/2-ft Contours

Appendix B: Historic Aerial Review

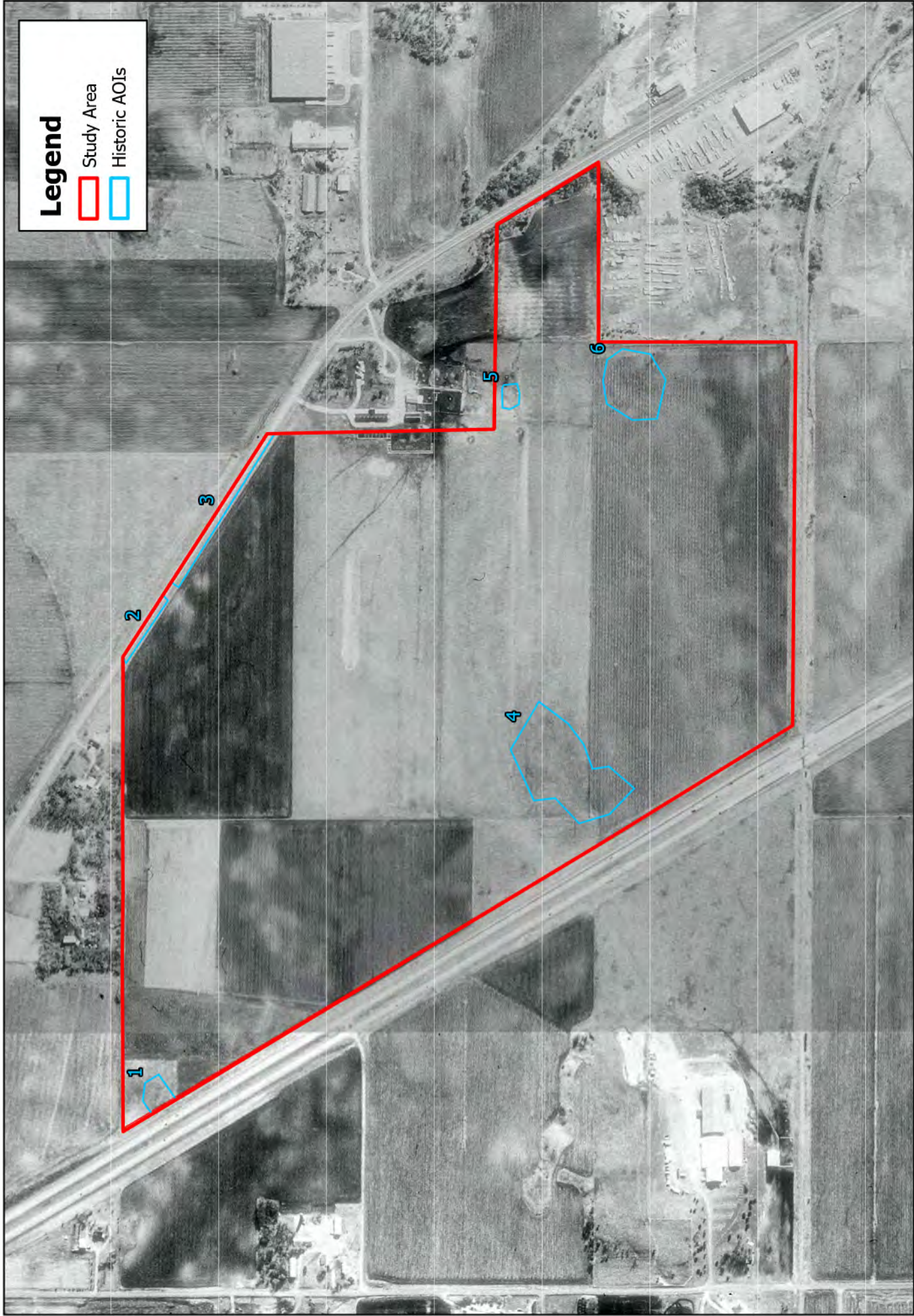
Appendix B. Historic Aerial Review*

Date Image Taken	Climate Condition ***	Image Interpretation ** (Area of Investigation)					
		1	2	3	4	5	6
4/16/1991 Normal	Climate Condition ***	NV	NV	NV	NV/SS	SS	NV
5/31/2003 Normal		NC/SS	NV	NV	NV/SS	SS	NV
6/2/2009 Drier than normal		SS	NV	NV	NV	SS	NV
4/26/2015 Drier than normal		NV	NV	NV	CS/SS	SS	CS/SS
5/31/2017 Normal		NV	SS	SS	AP/CS	AP/SS	NV
10/25/2019 Wetter than normal		AP	SS	SS	CS/SS	SS	NV
5/4/2024 Normal	Climate Condition ***	SS	SS	SS	NV	SS	SS
Number of normal years		4	4	4	4	4	4
Number of normal years with wet signatures		2	4	4	1	3	1
Percent of normal years with wet signatures		50%	100%	100%	25%	75%	25%
Hydric Soils present		No	No	No	No	No	No
Identified on NWI		No	No	No	No	No	No
Hydrology indicators observed during field review?	Climate Condition ***	No	No	No	No	No	No
Has wetland signature in 30% or more in normal years?		Yes	Yes	Yes	No	Yes	No
Wetland Present?		No	No	No	No	No	No
Wetland Number		-	-	-	-	-	-

*Methodology for determining the presence of wetland explained in Guidance for Offsite Hydrology/ Wetland Determinations from Minnesota Board of Water and Soil Resources (BWSR) and St Paul District Corps of Engineers (July 1, 2016)

**CS = Crop Stress, NC = Not Cropped, SS = Soil Wetness Signature, SW = Standing Water, AP = Altered Pattern, NV = Normal Vegetative Cover, DO= Drowned Out

***Climate condition based on USACE APT 90-day rolling precipitation total for wetland hydrology determination for the given photo date. Methodology is described in report.



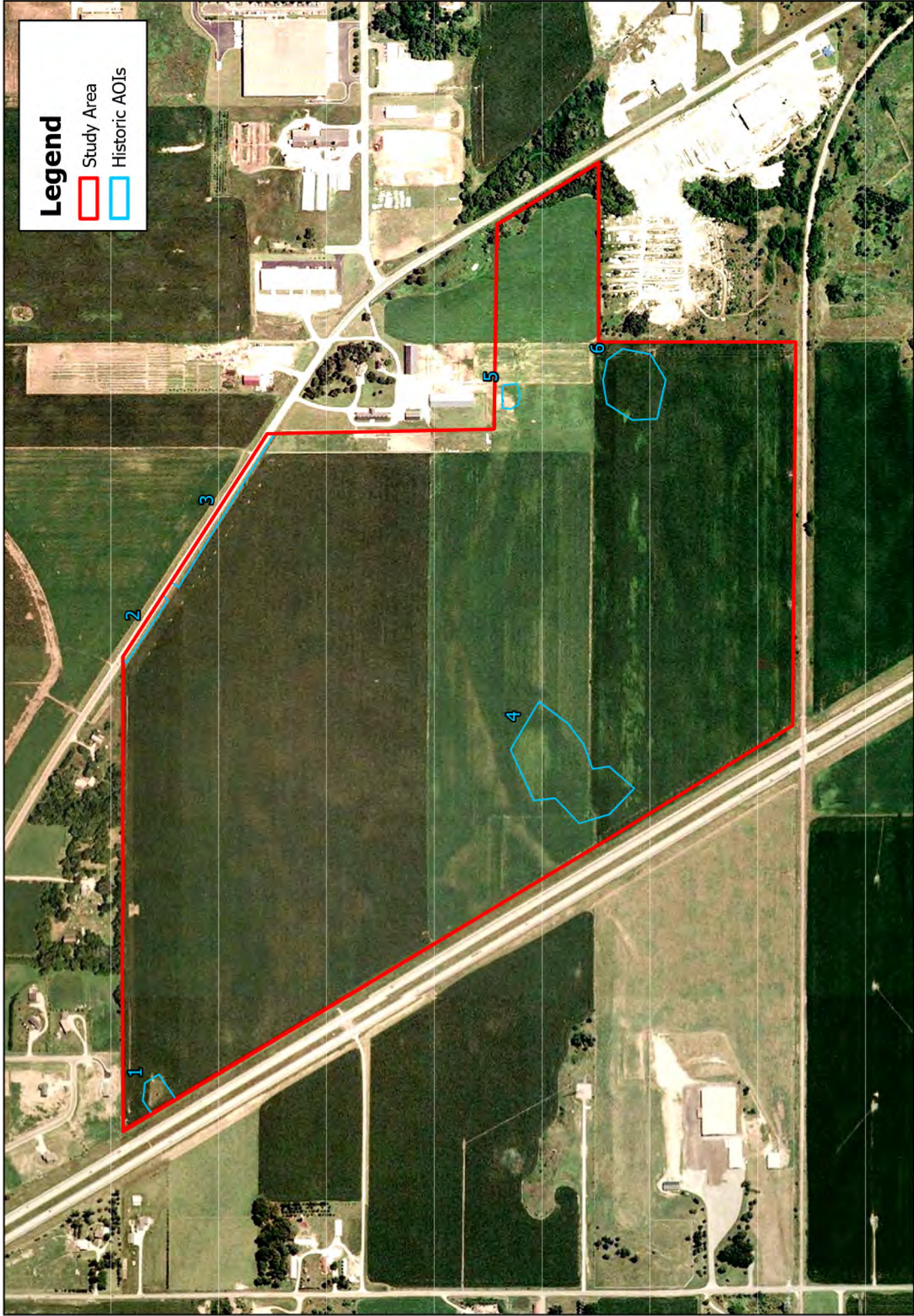
Legend

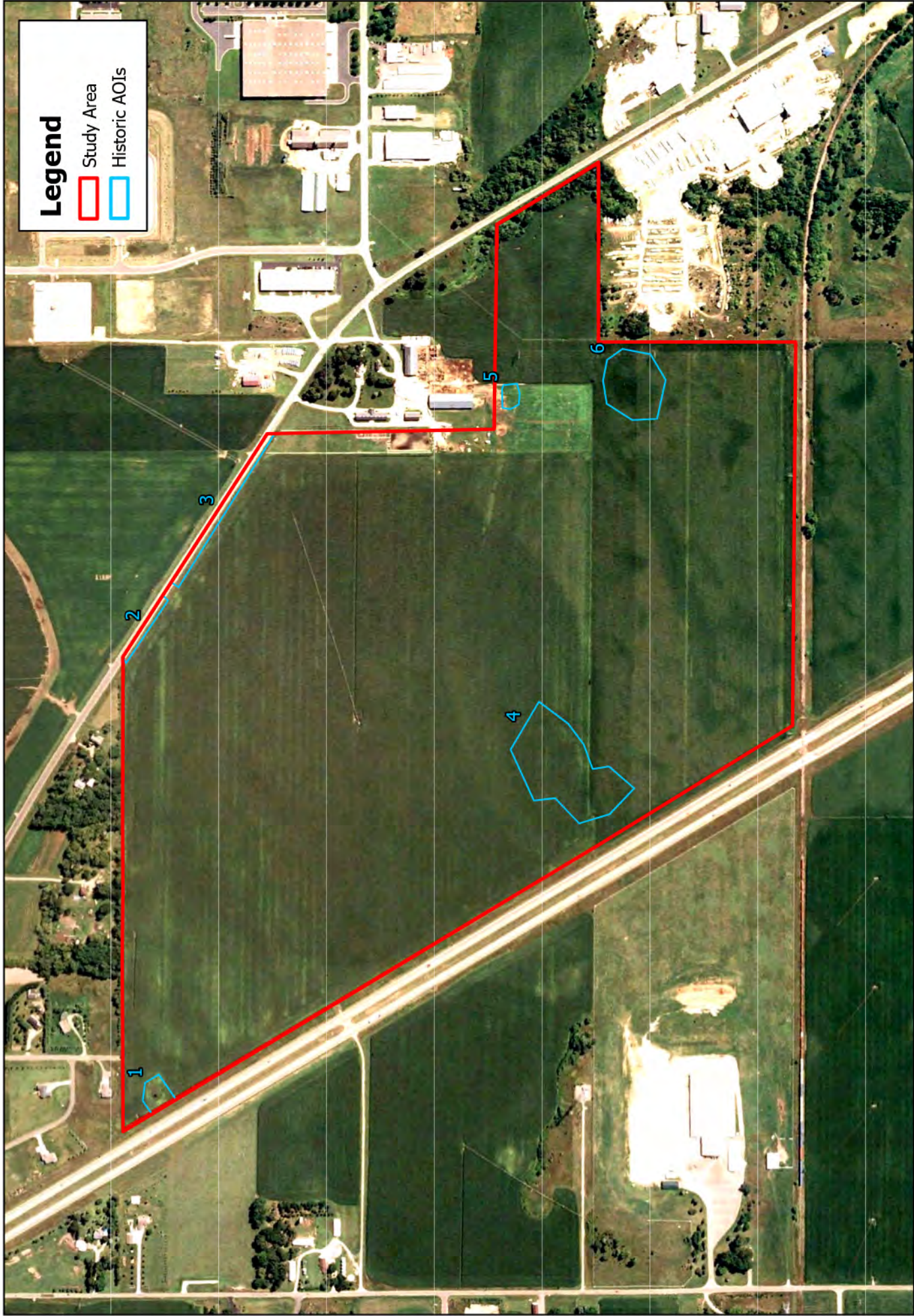
Study Area

Historic AOIs



0 350 700 Feet





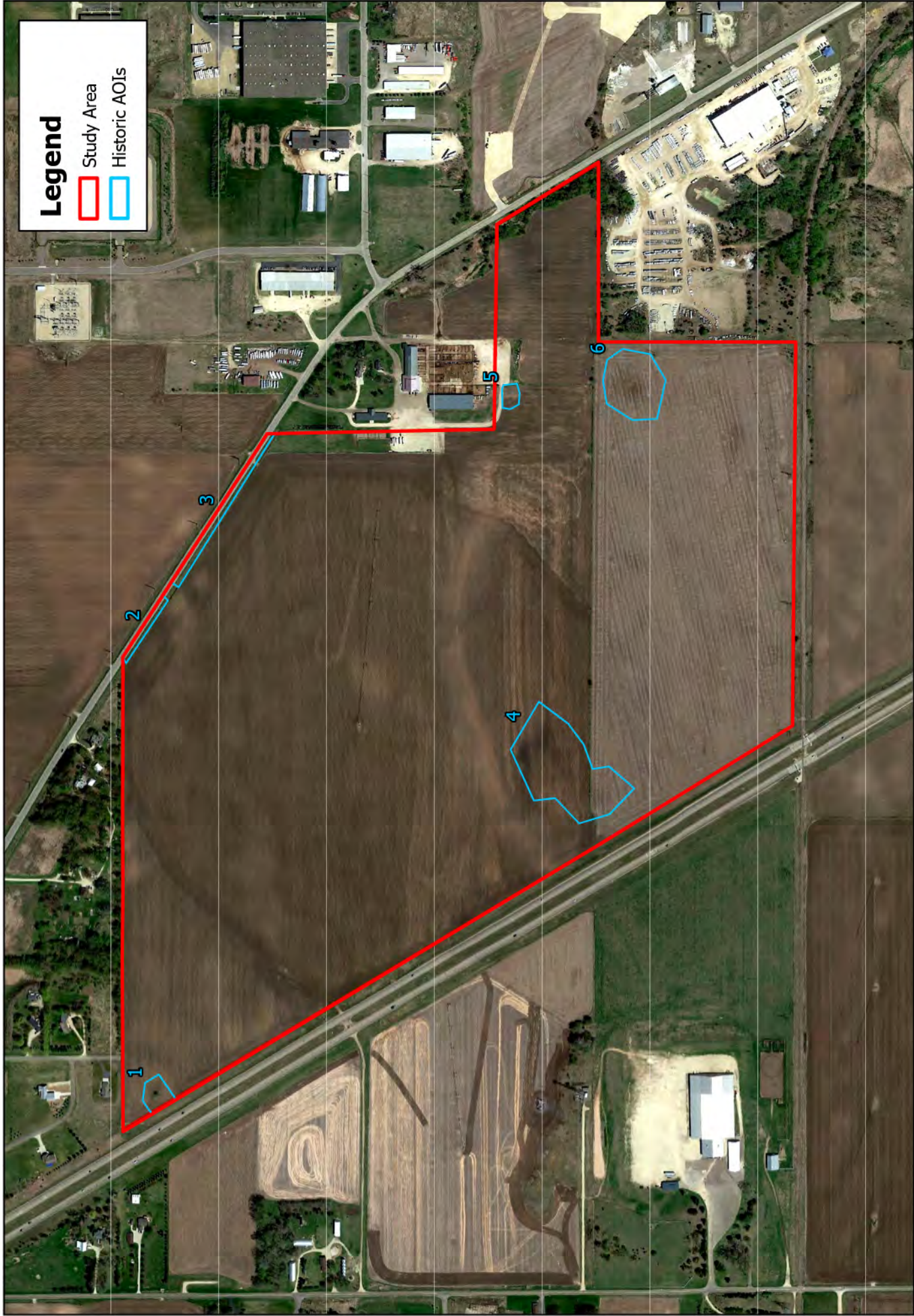
Legend

Study Area

Historic AOIs



0 350 700 Feet







N

0 350 700 Feet

Appendix B. Historic Aerial (October 2019)
Tract Management Company, LP
Cannon Falls, MN



Legend

Study Area

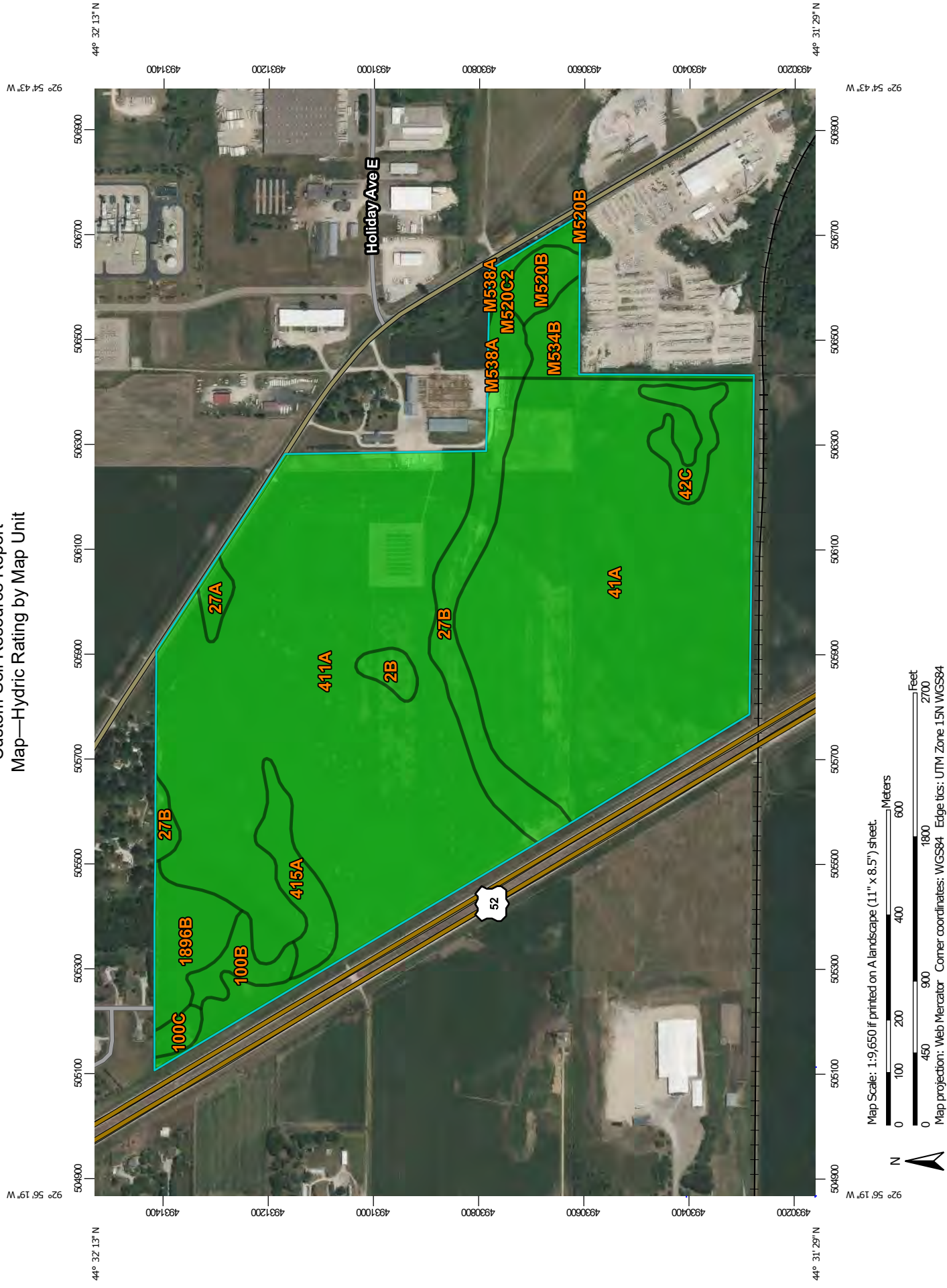
Historic AOIs



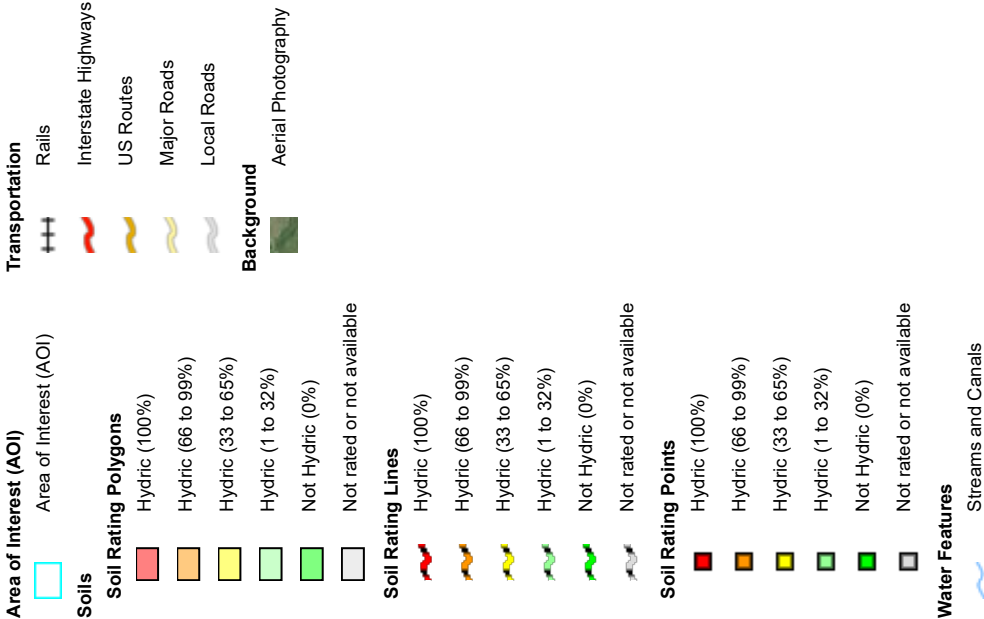
0 350 700 Feet

Appendix C: Hydric Soils Information

Custom Soil Resource Report Map—Hydric Rating by Map Unit



MAP LEGEND



MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:12,000 to 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dakota County, Minnesota
Survey Area Data: Version 20, Sep 7, 2024

Soil Survey Area: Goodhue County, Minnesota
Survey Area Data: Version 20, Sep 7, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 29, 2023—Sep 13, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
2B	Ostrander loam, 1 to 6 percent slopes	0	1.8	0.7%
27A	Dickinson sandy loam, 0 to 2 percent slopes	0	1.6	0.6%
27B	Dickinson sandy loam, 2 to 6 percent slopes	0	14.4	5.7%
41A	Estherville sandy loam, 0 to 2 percent slopes	0	89.9	35.4%
42C	Salida gravelly coarse sandy loam, 2 to 12 percent slopes	0	4.2	1.6%
100B	Copaston loam, 2 to 6 percent slopes	0	3.5	1.4%
100C	Copaston loam, 6 to 12 percent slopes	0	1.4	0.6%
411A	Waukegan silt loam, 0 to 1 percent slopes	0	112.2	44.2%
415A	Kanaranzi loam, 0 to 2 percent slopes	0	5.8	2.3%
1896B	Ostrander-Carmi loams, 2 to 6 percent slopes	0	7.1	2.8%
Subtotals for Soil Survey Area			241.8	95.4%
Totals for Area of Interest			253.6	100.0%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
M520B	Rasset sandy loam, 0 to 6 percent slopes	0	3.3	1.3%
M520C2	Rasset sandy loam, 6 to 12 percent slopes, moderately eroded	0	3.9	1.5%
M534B	Estherville-Ridgeport complex, 0 to 6 percent slopes	0	4.4	1.7%
M538A	Waukegan silt loam, 0 to 2 percent slopes	0	0.2	0.1%
Subtotals for Soil Survey Area			11.8	4.6%
Totals for Area of Interest			253.6	100.0%

Rating Options—Hydric Rating by Map Unit

Aggregation Method: Percent Present

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Percent Present" returns the cumulative percent composition of all components of a map unit for which a certain condition is true. For example, attribute "Hydric Rating by Map Unit" returns the cumulative percent composition of all components of a map unit where the corresponding hydric rating is "Yes". Conditions may be simple or complex. At runtime, the user may be able to specify all, some or none of the conditions in question.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Appendix D: Precipitation Data

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:
county: **Dakota** township number: **112N**
township name: **Randolph** range number: **18W**
nearest community: **Cannon Falls** section number: **1**

Aerial photograph or site visit date:
Tuesday, April 16, 1991

Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: March 1991	second prior month: February 1991	third prior month: January 1991
estimated precipitation total for this location:	2.73	1.01	0.28
there is a 30% chance this location will have less than:	1.11	0.53	0.57
there is a 30% chance this location will have more than:	2.25	1.15	1.04
type of month: dry normal wet	wet	normal	dry
monthly score	3 * 3 = 9	2 * 2 = 4	1 * 1 = 1
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	14 (Normal)		

- Other Resources:
- retrieve daily precipitation data
 - view radar-based precipitation estimates
 - view weekly precipitation maps
 - Evaluating Antecedent Precipitation Conditions (BWSR)

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:
county: **Dakota** township number: **112N**
township name: **Randolph** range number: **18W**
nearest community: **Cannon Falls** section number: **1**

Aerial photograph or site visit date:
Saturday, May 31, 2003

Score using 1991-2020 normal period

values are in inches	first prior month:	second prior month:	third prior month:
A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	April 2003	March 2003	February 2003
estimated precipitation total for this location:	2.98	1.31	0.69
there is a 30% chance this location will have less than:	1.96	1.11	0.53
there is a 30% chance this location will have more than:	3.86	2.25	1.15
type of month: dry normal wet	normal	normal	normal
monthly score	3 * 2 = 6	2 * 2 = 4	1 * 2 = 2
multi-month score:	12 (Normal)		
6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)			

- Other Resources:
- [retrieve daily precipitation data](#)
 - [view radar-based precipitation estimates](#)
 - [view weekly precipitation maps](#)
 - [Evaluating Antecedent Precipitation Conditions](#) (BWSR)

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:
county: **Dakota** township number: **112N**
township name: **Randolph** range number: **18W**
nearest community: **Cannon Falls** section number: **1**

Aerial photograph or site visit date:
Tuesday, June 2, 2009

Score using 1991-2020 normal period

values are in inches	first prior month:	second prior month:	third prior month:
A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	May 2009	April 2009	March 2009
estimated precipitation total for this location:	1.35	1.89	1.10
there is a 30% chance this location will have less than:	3.09	1.96	1.11
there is a 30% chance this location will have more than:	5.78	3.86	2.25
type of month: dry normal wet	dry	dry	dry
monthly score	3 * 1 = 3	2 * 1 = 2	1 * 1 = 1
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	6 (Dry)		

- Other Resources:
- retrieve daily precipitation data
 - view radar-based precipitation estimates
 - view weekly precipitation maps
 - Evaluating Antecedent Precipitation Conditions (BWSR)

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:
county: **Dakota** township number: **112N**
township name: **Randolph** range number: **18W**
nearest community: **Cannon Falls** section number: **1**

Aerial photograph or site visit date:
Sunday, April 26, 2015

Score using 1991-2020 normal period

values are in inches	first prior month:	second prior month:	third prior month:
A/R following a monthly total indicates a provisional value derived from radar-based estimates .	March 2015	February 2015	January 2015
estimated precipitation total for this location:	1.02	0.54	0.44
there is a 30% chance this location will have less than:	1.11	0.53	0.57
there is a 30% chance this location will have more than:	2.25	1.15	1.04
type of month: dry normal wet	dry	normal	dry
monthly score	3 * 1 = 3	2 * 2 = 4	1 * 1 = 1
multi-month score:			
6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	8 (Dry)		

- Other Resources:
- retrieve daily precipitation data
 - view radar-based precipitation estimates
 - view weekly precipitation maps
 - [Evaluating Antecedent Precipitation Conditions](#) (BWSR)

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:
county: **Dakota** township number: **112N**
township name: **Randolph** range number: **18W**
nearest community: **Cannon Falls** section number: **1**

Aerial photograph or site visit date:
Wednesday, May 31, 2017

Score using 1991-2020 normal period

values are in inches	first prior month	second prior month	third prior month
A "C" following a monthly total indicates a provisional value derived from radar-based estimates.	April 2017	March 2017	February 2017
estimated precipitation total for this location:	4.05	0.93	1.17
there is a 30% chance this location will have less than:	1.96	1.11	0.53
there is a 30% chance this location will have more than:	3.06	2.25	1.15
type of month: dry normal wet	wet	dry	wet
monthly score	3 * 3 = 9	2 * 1 = 2	1 * 3 = 3
multi-month score:	14 (Normal)		
6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)			

- Other Resources:
- retrieve daily precipitation data
 - view radar-based precipitation estimates
 - view weekly precipitation maps
 - Evaluating Antecedent Precipitation Conditions (BWSR)

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:
county: **Dakota** township number: **112N**
township name: **Randolph** range number: **18W**
nearest community: **Cannon Falls** section number: **1**

Aerial photograph or site visit date:
Friday, October 25, 2019

Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: September 2019	second prior month: August 2019	third prior month: July 2019
estimated precipitation total for this location:	5.63	3.55	7.08
there is a 30% chance this location will have less than:	1.59	3.44	2.63
there is a 30% chance this location will have more than:	5.14	5.66	4.47
type of month: dry normal wet	wet	normal	wet
monthly score	3 * 3 = 9	2 * 2 = 4	1 * 3 = 3
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	16 (Wet)		

- Other Resources:
- retrieve daily precipitation data
 - view radar-based precipitation estimates
 - view weekly precipitation maps
 - Evaluating Antecedent Precipitation Conditions (BWSR)

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:
county: **Dakota** township number: **112N**
township name: **Randolph** range number: **18W**
nearest community: **Cannon Falls** section number: **1**

Aerial photograph or site visit date:
Saturday, May 4, 2024

Score using 1991-2020 normal period

values are in inches	first prior month:	second prior month:	third prior month:
A 'R' following a monthly total indicates a provisional value derived from radar-based estimates .	April 2024	March 2024	February 2024
estimated precipitation total for this location:	2.78	2.41	0.49
there is a 30% chance this location will have less than:	1.96	1.11	0.53
there is a 30% chance this location will have more than:	3.86	2.25	1.15
type of month: dry normal wet	normal	wet	dry
monthly score	3 * 2 = 6	2 * 3 = 6	1 * 1 = 1
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	13 (Normal)		

Other Resources:

- retrieve daily precipitation data
- view radar-based precipitation estimates
- view weekly precipitation maps
- [Evaluating Antecedent Precipitation Conditions](#) (BWSR)

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:
county: **Dakota** township number: **112N**
township name: **Randolph** range number: **18W**
nearest community: **Cannon Falls** section number: **1**

Aerial photograph or site visit date:
Thursday, October 10, 2024

Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: September 2024	second prior month: August 2024	third prior month: July 2024
estimated precipitation total for this location:	missing	4.34	3.67
there is a 30% chance this location will have less than:	1.59	3.45	2.64
there is a 30% chance this location will have more than:	5.14	5.67	4.47
type of month: dry normal wet	missing	normal	normal
monthly score	missing	2 * 2 = 4	1 * 2 = 2
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	missing		

- Other Resources:
- retrieve daily precipitation data
 - view radar-based precipitation estimates
 - view weekly precipitation maps
 - Evaluating Antecedent Precipitation Conditions (BWSR)

Appendix E: Field Data Sheets

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Cannon Falls City/County: Dakota and Goodhue Sampling Date: 2024-10-10
 Applicant/Owner: Tract Management State: Minnesota Sampling Point: SP-1
 Investigator(s): Keegan Sansone and Cat Maroney Section, Township, Range: S25 T113N R18W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave
 Slope (%): 3 Lat: 44.5354739 Long: -92.9350868 Datum: WGS 84
 Soil Map Unit Name: 100C - Copaston loam, 6 to 12 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: On hillslope (see pictures)	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>60</u></td> <td>x 4 = <u>240</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>305</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.38</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>60</u>	x 4 = <u>240</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>305</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>60</u>	x 4 = <u>240</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>90</u> (A)	<u>305</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Ulmus americana</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Erigeron canadensis</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. <u>Bromus inermis</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Rudbeckia hirta</u>	<u>5</u>	_____	<u>FACU</u>															
4. <u>Setaria pumila</u>	<u>5</u>	_____	<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
_____ = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
_____ = Total Cover																		
Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)																		
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																		
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>																		
Remarks: (Include photo numbers here or on a separate sheet.) 30% dead plants appeared FACU.																		

SOIL

Sampling Point: SP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
-								
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)
---	--

Restrictive Layer (if observed): Type: <u>Compact/rock</u> Depth (inches): <u>0</u>	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
--	---

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Hydric Soil Present? Yes ☐ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

On hillslope (see pictures)

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Cannon Falls City/County: Dakota and Goodhue Sampling Date: 2024-10-10
 Applicant/Owner: Tract Management State: Minnesota Sampling Point: SP-2
 Investigator(s): Keegan Sansone and Cat Maroney Section, Township, Range: S01 T112N R18W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 1 Lat: 44.5298067 Long: -92.9275177 Datum: WGS 84
 Soil Map Unit Name: 41A - Estherville sandy loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No _____	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>40</u> (A)</td> <td><u>180</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.50</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>40</u> (A)	<u>180</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>20</u>	x 4 = <u>80</u>																	
UPL species <u>20</u>	x 5 = <u>100</u>																	
Column Totals: <u>40</u> (A)	<u>180</u> (B)																	
_____ = Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Zea mays</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>UPL</u>															
2. <u>Amaranthus palmeri</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
_____ = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
_____ = Total Cover																		
Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)																		
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																		
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
The rest is bare ground.																		

SOIL

Sampling Point: **SP-2**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 15	10YR 2/1	100					Sandy Loam	
15 - 30	10YR 4/2	92	10YR 3/3	8	C	M	Sandy Clay Loam	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
---	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5)	

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Corn crops stunted in depression.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Cannon Falls City/County: Goodhue County Sampling Date: 2024-10-10
 Applicant/Owner: Tract Management State: Minnesota Sampling Point: SP-3
 Investigator(s): Keegan Sansone and Cat Maroney Section, Township, Range: S06 T112N R17W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 1 Lat: 44.5300005 Long: -92.9165411 Datum: WGS 84
 Soil Map Unit Name: M520C2 - Rasset sandy loam, 6 to 12 percent slopes, moderately eroded NWI classification: R4SBC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Phalaris arundinacea</u>	<u>70</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>Impatiens capensis</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
3. <u>Urtica dioica</u>	<u>5</u>		<u>FACW</u>
4. _____			
5. _____			
<u>95</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
_____ = Total Cover			
Herb Stratum (Plot size: <u>5 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
_____ = Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
_____ = Total Cover			

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>95</u>	x 2 = <u>190</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>95</u> (A)	<u>190</u> (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:
☒ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---------------------------------	---

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: **SP-3**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	10YR 2/1	100					Sandy Loam	
8 - 18	10YR 4/1	90	10YR 4/4	10	C	M	Sandy Loam	
18 - 26	10YR 6/4	80	10YR 6/2	10	C	M	Sandy Loam	
-			10YR 2/1	10	C	M	Sandy Loam	Water table at 20
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Type: _____ Depth (inches): _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)

Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 20	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 18	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Water table at 20 inches, sampling point is on rim 1 foot above standing water.

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Cannon Falls City/County: Goodhue County Sampling Date: 2024-10-10
 Applicant/Owner: Tract Management State: Minnesota Sampling Point: SP-4
 Investigator(s): Keegan Sansone and Cat Maroney Section, Township, Range: S06 T112N R17W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): _____
 Slope (%): _____ Lat: 44.5299571 Long: -92.9165699 Datum: WGS 84
 Soil Map Unit Name: M520C2 - Rasset sandy loam, 6 to 12 percent slopes, moderately eroded NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.00</u> (A/B)														
1. <u>Juniperus virginiana</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>70</u></td> <td>x 4 = <u>280</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>370</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.52</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>70</u>	x 4 = <u>280</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u> (A)	<u>370</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>15</u>	x 2 = <u>30</u>																	
FAC species <u>20</u>	x 3 = <u>60</u>																	
FACU species <u>70</u>	x 4 = <u>280</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>105</u> (A)	<u>370</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Rhamnus cathartica</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Fraxinus pennsylvanica</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Ribes oxycanthoides</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. <u>Rubus idaeus</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Leonurus cardiaca</u>	<u>5</u>	_____	<u>FAC</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>														
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____	Woody Vine Stratum (Plot size: <u>30 ft r</u>)														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____	Remarks: (Include photo numbers here or on a separate sheet.)														
_____	_____	_____	_____															

SOIL

Sampling Point: **SP-4**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	10YR /	100					Sand	
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
---	---

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>Compact/Sandy</u> Depth (inches): <u>8</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

On hillslope

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Cannon Falls City/County: Goodhue County Sampling Date: 2024-10-10
 Applicant/Owner: Tract Management State: Minnesota Sampling Point: SP-5
 Investigator(s): Keegan Sansone and Cat Maroney Section, Township, Range: S06 T112N R17W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____
 Slope (%): _____ Lat: 44.5288455 Long: -92.9155381 Datum: WGS 84
 Soil Map Unit Name: M520C2 - Rasset sandy loam, 6 to 12 percent slopes, moderately eroded NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No _____	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
1. <u>Fraxinus pennsylvanica</u>	<u>60</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>200</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.00</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>200</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>100</u>	x 2 = <u>200</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>200</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover																		
Herb Stratum (Plot size: <u>5 ft r</u>) 1. <u>Impatiens capensis</u> <u>20</u> <input checked="" type="checkbox"/> <u>FACW</u> 2. <u>Phalaris arundinacea</u> <u>20</u> <input checked="" type="checkbox"/> <u>FACW</u> 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ _____ = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ _____ = Total Cover																		
Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																		
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: **SP-5**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 12	10YR 2/1	100					Sandy Loam	
12 - 20	10YR 4/1	100					Sand	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 2 cm Muck (A10)	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):	Hydric Soil Present?
Type: _____	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Depth (inches): _____	

Remarks:

Best professional judgement.

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 4	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Saturated at 4 inches on slope off of stream. Very soft soil. Dominated by wet plants.

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Cannon Falls City/County: Goodhue County Sampling Date: 2024-10-10
 Applicant/Owner: Tract Management State: Minnesota Sampling Point: SP-6
 Investigator(s): Keegan Sansone and Cat Maroney Section, Township, Range: S07 T112N R17W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None
 Slope (%): 1 Lat: 44.5287996 Long: -92.9155517 Datum: WGS 84
 Soil Map Unit Name: M520C2 - Rasset sandy loam, 6 to 12 percent slopes, moderately eroded NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)
1. <u>Rhamnus cathartica</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>80</u> x 3 = <u>240</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>15</u> x 5 = <u>75</u> Column Totals: <u>115</u> (A) <u>395</u> (B) Prevalence Index = B/A = <u>3.43</u>
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: **SP-6**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 15	10YR 3/2	100					Sand	
15 - 20	10YR 4/2	100					Sandy Loam	
20 - 25	10YR 5/2	100					Sandy Loam	
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
---	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5)	

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

On slope. Four feet above wetland point, surrounded by upland plants. Soil is compact.

Project/Site: Cannon Falls City/County: Dakota County Sampling Date: 2024-10-10
Applicant/Owner: Tract Management State: Minnesota Sampling Point: SP-7
Investigator(s): Keegan Sansone and Cat Maroney Section, Township, Range: S12 T112N R18W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
Slope (%): 1 Lat: 44.5281613 Long: -92.9197988 Datum: WGS 84
Soil Map Unit Name: 41A - Estherville sandy loam, 0 to 2 percent slopes NWI classification: _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>✓</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>✓</u>
Hydric Soil Present?	Yes _____	No <u>✓</u>			
Wetland Hydrology Present?	Yes _____	No <u>✓</u>			
Remarks:					

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	_____ = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	_____ = Total Cover			
Herb Stratum (Plot size: <u>5 ft r</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
	_____ = Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft r</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____ = Total Cover			

Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A)
Total Number of Dominant Species Across All Strata:	<u>0</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0.00</u> (A/B)
Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)
Prevalence Index = B/A = <u>0</u>	
Hydrophytic Vegetation Indicators:	
<u> </u> 1 - Rapid Test for Hydrophytic Vegetation	
<u> </u> 2 - Dominance Test is >50%	
<u> </u> 3 - Prevalence Index is ≤3.0 ¹	
<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)	
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Hydrophytic Vegetation Present? Yes <u> </u> No <u> </u> ✓	

Harvested soybean field.

SOIL

Sampling Point: **SP-7**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 18	10YR 2/2	100					Sandy Loam	
18 - 24	10YR 3/2	100					Loam	No Redox
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

In a harvested agricultural field with a slight depression.

Remarks:

Problematic vegetation.

Appendix F: Photos





Photo 1: Upland area at SP-1 within AOI 1, facing south.



Photo 2: Roadside ditch, facing northwest towards AOI 2.



Photo 3: Roadside ditch, facing southeast towards AOI 3.

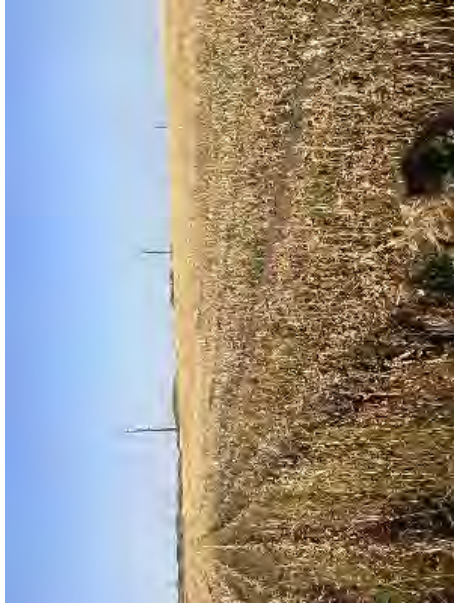


Photo 4: Upland area at SP-2 within AOI 4, facing west.

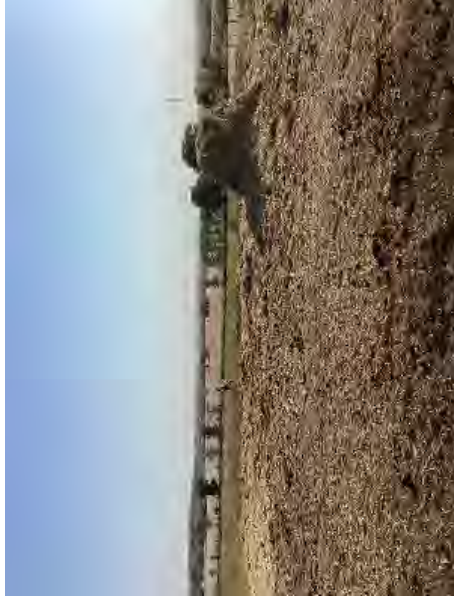


Photo 5: AOI 5, facing south.



Photo 6: Intermittent Stream 1, facing south.



Photo 7: Wetland 1 at SP-4, facing east.



Photo 8: Wetland 1 at SP-5, facing east.



Photo 9: Intermittent Stream 2, facing north.

Appendix B



TRAFFIC IMPACT ANALYSIS

CANNON FALLS TECHNOLOGY PARK

CANNON FALLS, MINNESOTA

Prepared for:

Tract Management Company

Prepared By:

Kimley-Horn and Associates, Inc.

11995 Single Tree Lane, Suite 225
Eden Prairie, MN 55344

MAY 2025

Kimley»Horn

TRAFFIC IMPACT ANALYSIS

CANNON FALLS TECHNOLOGY PARK

CANNON FALLS, MINNESOTA

REPORT CERTIFICATION

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.



Jacob Rojer, P.E., PTOE

License No. 56767

May 16, 2025

Date

TABLE OF CONTENTS

INTRODUCTION.....4

EXISTING ROADWAY CONDITIONS4

Existing Roadways5

Existing Traffic Volumes6

Future Background Growth.....6

Pedestrians And Bicycles6

PROPOSED DEVELOPMENT.....7

Site Access Points.....7

Site Trip Generation.....7

Site Trip Distribution8

CAPACITY ANALYSIS8

Existing Year (2024) Conditions.....9

Opening Year (2029) No-Build Conditions.....12

Design Year (2044) No-Build Conditions.....14

Opening Year (2029) Scenario 2 Conditions16

Design Year (2044) Scenario 2 Conditions.....19

Opening Year (2029) Scenario 1 Conditions16

Design Year (2044) Scenario 1 Conditions.....25

TURN LANE WARRANT ANALYSIS28

CONCLUSIONS AND RECOMMENDATIONS29

APPENDIX.....30

APPENDIX

- A. Exhibits
- B. Turning Movement Counts
- C. Site Layout Exhibit
- D. SimTraffic Analysis Results

INTRODUCTION

Kimley-Horn and Associates, Inc., (Kimley-Horn) was retained to prepare a traffic impact study for the two development scenarios proposed by Tract Management Company. Tract Management Company is proposing two development scenarios at the southeast corner of the intersection of Highway 52 and Rochester Boulevard in Cannon Falls, Minnesota. Scenario 2 consists of a 1,500,000 Square Foot (SF) technology park, and Scenario 1 consists of a 1,750,000 SF industrial park. **Exhibit 1** shows the proposed project location. All exhibits are included in **Appendix A**.

As part of this study, the existing roadway network was analyzed to determine the current operations at the study intersections. In order to assess the potential impact of the development scenarios on the area roadway network, site-generated trips were established and added to the background traffic volumes. Background traffic volumes included the other major development projects in the vicinity. Future traffic conditions were evaluated for the approximate Opening Year of the proposed development (2029) and a long term “Design Year” (2044).

This report presents and documents data collection, summarizes the evaluation of existing and projected future traffic conditions on the surrounding roadways, and identifies recommendations to address the potential impact of site-generated traffic on the adjacent roadway network.

EXISTING ROADWAY CONDITIONS

The proposed development would be located at the southeast corner of the intersection of Highway 52 and Rochester Boulevard in Cannon Falls, Minnesota. The following intersections are included in the traffic analysis:

- 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
- County State Aid Highway (CSAH) 88 & Harry Avenue

The study intersections listed above are shown in **Exhibit 1**. Note that Rochester Boulevard is assumed to have an east-west orientation throughout the study area and then transition to County 29 Boulevard with a north-south orientation at its intersection with Holiday Avenue.

EXISTING ROADWAYS

Access to the development will be provided via two access points, with one on Rochester Boulevard and one on County 29 Boulevard. The following provides a detailed description of the surrounding roadways.

Rochester Boulevard is currently a two-lane, undivided minor collector with a posted speed limit of 55 miles per hour (mph) in the vicinity of the proposed development. Rochester Boulevard carries an annual average daily traffic (AADT) volume of 2,100 vehicles per day (vpd) west of and 2,700 vpd east of Highway 52 based on 2021 MnDOT AADT data, respectively.

Highway 52 is a four-lane, divided principal roadway with a posted speed limit of 65 mph in the vicinity of the proposed development. Highway 52 carries an AADT volume of 21,800 vpd south of and 23,600 vpd north of Rochester Boulevard based on 2023 MnDOT AADT data, respectively.

Hogan Avenue is a two-lane, undivided major collector with a posted speed limit of 55 mph north of Rochester Boulevard and 30 mph south of Rochester Boulevard. Hogan Avenue carries an AADT volume 400 vpd north of Rochester Boulevard based on 2022 MnDOT AADT data, respectively. MnDOT Traffic Mapping Application has no traffic data for the roadway south of Rochester Boulevard.

County 29 Boulevard is currently a two-lane, undivided minor collector with a posted speed limit of 40 mph in the vicinity of the proposed development. County 29 Boulevard carries an AADT volume of 2,700 vpd north of and 5,600 vpd south of Cannon Falls Boulevard (MN 20) based on 2019 MnDOT AADT data, respectively.

Cannon Falls Boulevard (MN 20) is a two-lane, undivided major collector with a posted speed limit of 55 mph in the vicinity of the proposed development. Cannon Falls Boulevard (MN 20) carries an AADT volume of 2,200 vpd east of County 29 Boulevard based on 2022 MnDOT AADT data, respectively.

County 17 Boulevard is a two-lane, undivided major collector with a posted speed limit of 30 mph in the vicinity of the proposed development. County 17 Boulevard carries an AADT volume of 1,600 vpd west of County 29 Boulevard based on 2019 MnDOT AADT data, respectively.

CSAH 88 is a two-lane, undivided major collector with a posted speed limit of 30 mph in the vicinity of the proposed development. CSAH 88 carries an AADT of 1,400 vpd based on 2021 MnDOT AADT data, respectively.

Harry Avenue is a two-lane, undivided local roadway with a posted speed limit of 30 mph in the vicinity of the proposed development.

Exhibit 2 provides the existing intersection geometry and intersection control for the study intersections.

EXISTING TRAFFIC VOLUMES

To analyze the traffic operations at the study intersection, weekday peak period turning movement counts were collected at the five existing study intersections.

Peak hour turning movements counts (TMCs) were collected on Wednesday, October 30, 2024. The intersection of CSAH 88 & Harry Avenue was counted in April 2025. **Exhibit 3** provides a summary of the weekday AM and PM peak hour turning traffic volumes. The turning movement count data is provided in **Appendix B**.

The network AM peak hour was determined to be 6:45 AM to 7:45 AM and the network PM peak hour was determined to be 3:00 PM to 4:00 PM.

FUTURE BACKGROUND GROWTH

Growth rates of the surrounding roadways were calculated using the projected 2040 Traffic Volumes shown in the Dakota County 2040 Transportation Plan. The Transportation Plan projected the volumes using a travel demand model, based on the most recent AADT data available at the time (2019). The Existing AADT at the time of the report and the forecasted 2040 AADTs included in the report are shown in **Table 1**.

Table 1 – Background Growth

Roadway	Location Description	Existing Year	Existing AADT	Grown Year	Grown AADT	Growth
Rochester Blvd	West of Hwy 52	2019	1,800	2040	2,900	2.3%
Rochester Blvd	East of Hwy 52	2019	2,400	2040	2,600	0.4%
Hogan Avenue	North of Rochester Blvd	2019	600	2040	800	1.4%
County 17 Blvd	West of County 29 Blvd	2019	1,500	2040	1,600	0.3%
Average						1.1%

Based on the data shown in **Table 1**, growth rates are relatively consistent for the surrounding roadways and a growth rate of 1.1% was therefore selected for all roadways within the network.

Exhibit 4 shows the Opening Year No-Build (2029) turning movement volumes and **Exhibit 5** shows the Design Year No-Build (2044) turning movement volumes.

PEDESTRIANS AND BICYCLES

Currently there is no sidewalk or bike lanes along any of the roadways in the vicinity of the proposed site. However, per the Dakota County Existing Pedestrian and Bicycle Network map, there is county rural shoulder along Rochester Boulevard/County 29 Boulevard and County 17 Boulevard which supports bicycling.

PROPOSED DEVELOPMENT

SITE ACCESS POINTS

The proposed development will consist of one parcel, with one access point on Rochester Boulevard and one access point on County 29 Boulevard. The northern access point is referred to as “Access 1” while the southern access point is referred to as “Access 2”.

The site plan for the proposed Scenarios 1 and 2 is included in **Appendix C**.

SITE TRIP GENERATION

The trip-generating potential of the proposed development was calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, Eleventh Edition*. Standard ITE trip rates were used to develop the anticipated total trips generated by the site. For this analysis, it was assumed that all site trips will be vehicle trips. It was assumed that all site trips would be new trips and no mode split reductions for trips via transit, bike or walking were used.

To determine the trip generation of Scenario 2, the average rate for ITE Land Use Code (LUC) 160 (Data Center) was used to calculate the trip generation potential of the site. Average rate was applied based on guidance given in the ITE Trip Generation Handbook. **Table 3** provides a summary of the number of trips anticipated to be generated during the weekday AM and PM peak hours. As shown, Scenario 2 is anticipated to generate 165 new trips during the AM peak hour (91 entering, 74 exiting) and 135 new trips during the PM peak hour (41 entering, 94 exiting). Scenario 2 is anticipated to generate 1,485 daily trips.

Table 3 – Scenario 2 Trip Generation

Land Use Description	Intensity / Units	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Data Center - LUC 160	1,500 kSF	1,485	91	74	165	41	94	135
Total Site Trips		1,485	91	74	165	41	94	135

To determine the trip generation of Scenario 1, the average rates for, LUC 130 (Industrial Park) was used to calculate the trip generation potential of the site. Average rate was applied for each as it results in a higher (more conservative) trip generation estimate than the fitted curve does for these land uses. **Table 2** provides a summary of the number of trips anticipated to be generated during the weekday AM and PM peak hours. As shown, Scenario 1 is anticipated to generate 595 new trips during the AM peak hour (482 entering, 113 exiting) and 595 new trips during the PM peak hour (131 entering, 464 exiting). Scenario 1 is anticipated to generate 5,898 weekday daily trips.

Table 2 – Scenario 1 Trip Generation

Land Use Description	Intensity / Units	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Industrial Park - LUC 130	1,750 kSF	5,898	482	113	595	131	464	595
Total Site Trips		5,898	482	113	595	131	464	595

SITE TRIP DISTRIBUTION

The site trips were distributed to the adjacent roadways based on the current traffic patterns in the area and a general assessment of the major regional roadways surrounding the study area. Given the similarities in land uses and their anticipated traffic patterns, the same distribution was utilized for both scenarios. The following global trip distribution was assumed for both Scenarios 1 and 2:

- 50% to/from the north on Highway 52
- 25% to/from the south on Highway 52
- 10% to/from the south on County 29 Boulevard
- 5% to/from the west on Rochester Boulevard
- 5% to/from the east on Cannon Falls Boulevard (MN 20)
- 5% to/from the west on County 17 Boulevard

The trip distribution for Scenario 2 is shown in **Exhibit 6** and the site traffic is shown in **Exhibit 7**.

The Opening Year (2029) Scenario 2 traffic volumes (shown in **Exhibit 8**) were developed by adding the site Traffic in **Exhibit 7** to the Opening Year (2029) No-Build Traffic volumes in **Exhibit 4**. The Design Year (2044) Scenario 2 traffic volumes (shown in **Exhibit 9**) were developed by adding the site Traffic in **Exhibit 7** to the Design Year (2044) No-Build Traffic volumes in **Exhibit 5**.

The trip distribution for Scenario 1 site is shown in **Exhibit 10** and the site traffic is shown in **Exhibit 11**. The Opening Year (2029) Scenario 1 traffic volumes (shown in **Exhibit 12**) were developed by adding the site Traffic in **Exhibit 11** to the Opening Year (2029) No-Build Traffic volumes in **Exhibit 4**. The Design Year (2044) Scenario 1 traffic volumes (shown in **Exhibit 13**) were developed by adding the site Traffic in **Exhibit 11** to the Design Year (2044) No-Build Traffic volumes in **Exhibit 5**.

CAPACITY ANALYSIS

A capacity analysis was performed to quantify the delay and level of service at the study intersections during the weekday AM and PM peak hours. The capacity analysis was performed using Synchro/SimTraffic.

The capacity of an intersection quantifies its ability to accommodate traffic volumes and is measured in average delay per vehicle. It is expressed in terms of level of service (LOS) which ranges from A to F, with LOS A as the highest (best traffic flow and least delay), LOS E as saturated or at-capacity conditions, and LOS F as the lowest (oversaturated conditions). The LOS grades shown below, which are provided in the Transportation Research Board's Highway Capacity Manual (HCM), quantify and categorize the driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control

and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 4**. The range of control delay for each rating (as detailed in the HCM) is also shown in **Table 4**.

Table 4 – Level of Service Information

Level of Service	Average Control Delay (seconds/vehicle)	Description
A	0-10 (Unsignalized)	Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream.
B	>10-15 (Unsignalized)	Minor control delay at signalized intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream.
C	>15-25 (Unsignalized)	Moderate control delay; movement within traffic stream more restricted than at LOS B; formation of queues contributes to lower average travel speeds.
D	>25-35 (Unsignalized)	Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease.
E	>35-50 (Unsignalized)	High control delay; average travel speed no more than 33 percent of free flow speed.
F	>50 (Unsignalized)	Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flow.

Traffic models for each scenario were developed using Synchro/SimTraffic, and the delay and queuing were evaluated for each scenario. The scenarios that were analyzed are as follows:

- Existing Year (2024)
- Opening Year (2029) No-Build Conditions
- Opening Year (2029) Build Conditions
- Design Year (2044) No-Build Conditions
- Design Year (2044) Build Conditions

EXISTING YEAR (2024) CONDITIONS

A capacity analysis was performed for Existing Year (2024) conditions in order to develop baseline operating conditions for the current year. The analysis was performed using Synchro/SimTraffic. The five (5) study intersections were modeled with the existing geometry and intersection control as summarized in **Exhibit 2**. The traffic volumes are provided in **Exhibit 3**.

The results of the analysis are provided in **Table 5**.

Table 5 – Existing Year (2024) Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.5	A	0.6	A	0.1	A	6.6	A
		WB	0.8	A	0.9	A	0.2	A		
		NB	3.4	A	6.3	A	1.7	A		
		SB	5.1	A	6.6	A	2.7	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.1	A	0.8	A	6.4	A
		WB	1.6	A	0.7	A	-	-		
		NB	6.4	A	-	-	2.3	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	0.8	A	0.4	A	0.0	A	6.0	A
		WB	0.0	A	2.0	A	1.9	A		
		NB	6.0	A	0.0	A	2.1	A		
		SB	3.6	A	0.0	A	1.3	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	5.3	A
		WB	5.3	A	-	-	4.7	A		
		NB	-	-	0.6	A	0.7	A		
		SB	0.9	A	1.7	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	9.3	A	2.3	A	5.7	A	9.3	A
		WB	0.0	A	0.0	A	0.0	A		
		NB	2.2	A	1.0	A	0.1	A		
		SB	0.0	A	1.0	A	0.6	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	3.9	A	1.0	A	0.5	A	7.5	A
		WB	2.7	A	2.0	A	2.1	A		
		NB	2.8	A	7.5	A	1.2	A		
		SB	4.2	A	5.5	A	1.6	A		

Table 5 – Existing Year (2024) Intersection Analysis (Continued)

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.7	A	0.7	A	0.1	A	7.7	A
		WB	0.7	A	1.1	A	0.6	A		
		NB	4.1	A	7.7	A	2.5	A		
		SB	5.9	A	6.4	A	2.4	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.0	A	0.6	A	5.9	A
		WB	1.6	A	0.7	A	-	-		
		NB	5.9	A	-	-	2.2	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	0.4	A	0.5	A	0.4	A	7.4	A
		WB	0.2	A	1.5	A	1.4	A		
		NB	7.4	A	0.0	A	0.0	A		
		SB	3.6	A	0.0	A	1.5	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	6.6	A
		WB	6.6	A	-	-	3.6	A		
		NB	-	-	0.7	A	0.9	A		
		SB	5.6	A	2.7	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	10.9	B	3.3	A	7.1	A	11.8	B
		WB	11.8	B	6.9	A	3.5	A		
		NB	2.9	A	1.3	A	0.4	A		
		SB	3.2	A	1.2	A	0.8	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	1.9	A	0.6	A	0.1	A	6.8	A
		WB	5.6	A	2.2	A	1.5	A		
		NB	2.7	A	6.8	A	1.2	A		
		SB	6.0	A	3.3	A	3.7	A		

Based on the Existing Year (2024) capacity analysis, the study intersections and all individual movements currently operate at LOS B or better during the AM and PM peak hours.

All 95th percentile queues are anticipated to remain within their respective storage bays. The SimTraffic reports are provided in **Appendix D**.

OPENING YEAR (2029) NO-BUILD CONDITIONS

A capacity analysis was performed for Opening Year (2029) No-Build conditions in order to develop baseline operating conditions for the opening year. The analysis was performed using Synchro/SimTraffic. The five study intersections were modeled with the existing geometry and intersection control as summarized in **Exhibit 2**. The traffic volumes are provided in **Exhibit 4**. The results are provided in **Table 6**.

Table 6 – Opening Year (2029) No-Build Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.2	A	0.5	A	0.0	A	5.5	A
		WB	0.0	A	0.9	A	0.3	A		
		NB	5.5	A	0.0	A	1.8	A		
		SB	4.8	A	4.7	A	0.0	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	0.8	A	0.8	A	6.8	A
		WB	1.5	A	0.5	A	-	-		
		NB	6.8	A	-	-	2.4	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	0.0	A	0.3	A	0.0	A	5.5	A
		WB	0.0	A	2.1	A	0.7	A		
		NB	5.5	A	0.0	A	0.0	A		
		SB	4.2	A	0.0	A	1.6	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	5.0	A
		WB	5.0	A	-	-	4.3	A		
		NB	-	-	0.5	A	0.6	A		
		SB	0.00	A	1.5	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	10.4	B	0.0	A	5.1	A	10.4	B
		WB	0.0	A	0.0	A	0.0	A		
		NB	1.4	A	0.7	A	0.2	A		
		SB	0.0	A	1.0	A	0.9	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	7.1	A	1.3	A	0.0	A	7.1	A
		WB	0.0	A	1.4	A	0.1	A		
		NB	0.0	A	0.0	A	0.0	A		
		SB	0.0	A	0.0	A	1.0	A		

Table 6 – Opening Year (2029) No-Build Intersection Analysis (Continued)

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.7	A	0.7	A	0.0	A	8.4	A
		WB	0.9	A	1.1	A	0.5	A		
		NB	5.0	A	8.4	A	2.1	A		
		SB	5.4	A	6.6	A	2.5	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	0.9	A	0.8	A	6.4	A
		WB	1.5	A	0.7	A	-	-		
		NB	6.4	A	-	-	2.5	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	0.8	A	0.5	A	0.3	A	6.4	A
		WB	1.5	A	1.5	A	1.0	A		
		NB	6.4	A	0.0	A	0.0	A		
		SB	4.0	A	0.0	A	1.4	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	6.8	A
		WB	6.8	A	-	-	3.2	A		
		NB	-	-	0.6	A	0.9	A		
		SB	6.1	A	2.4	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	12.0	B	13.4	B	8.3	A	13.4	B
		WB	9.1	A	8.1	A	2.5	A		
		NB	2.4	A	1.1	A	0.4	A		
		SB	3.7	A	1.1	A	0.9	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	2.2	A	0.9	A	0.6	A	9.0	A
		WB	4.0	A	2.7	A	1.8	A		
		NB	3.0	A	9.0	A	1.0	A		
		SB	4.6	A	4.4	A	2.5	A		

With the addition of background traffic growth, the study area intersections are projected to experience minimal change in delay with the majority of movements and approaches projected to operate at the same LOS as compared to existing conditions. All intersections and all individual movements are anticipated to operate at LOS B or better during the AM and PM peak hours.

All 95th percentile queues are anticipated to remain within their respective storage bays. The SimTraffic reports are provided in **Appendix D**

DESIGN YEAR (2044) NO-BUILD CONDITIONS

A capacity analysis was performed for Design Year (2044) No-Build conditions in order to develop baseline operating conditions for the design year. The five study intersections were modeled with the existing geometry and intersection control as summarized in **Exhibit 2**. The traffic volumes are provided in **Exhibit 5**. The results of the analysis are provided in **Table 7**.

Table 7 – Design Year (2044) No-Build Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.7	A	0.6	A	0.0	A	7.0	A
		WB	0.6	A	1.1	A	0.0	A		
		NB	4.3	A	7.0	A	2.6	A		
		SB	5.7	A	6.3	A	2.7	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.1	A	0.7	A	7.4	A
		WB	1.7	A	0.8	A	-	-		
		NB	7.4	A	-	-	2.2	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	0.7	A	0.5	A	0.0	A	6.2	A
		WB	0.0	A	2.2	A	1.7	A		
		NB	6.2	A	0.0	A	2.4	A		
		SB	3.8	A	0.0	A	2.1	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	6.6	A
		WB	6.6	A	-	-	3.2	A		
		NB	-	-	0.7	A	0.8	A		
		SB	5.7	A	1.9	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	14.1	B	2.2	A	8.9	A	14.1	B
		WB	10.3	B	0.0	A	0.0	A		
		NB	2.2	A	1.1	A	0.4	A		
		SB	0.0	A	1.1	A	0.8	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	3.3	A	1.2	A	1.4	A	7.8	A
		WB	2.3	A	2.7	A	1.6	A		
		NB	2.5	A	7.8	A	1.5	A		
		SB	4.0	A	6.2	A	1.9	A		

Table 7 – Design Year (2044) No-Build Intersection Analysis (Continued)

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.7	A	0.8	A	0.1	A	8.3	A
		WB	1.1	A	1.0	A	0.5	A		
		NB	4.1	A	8.3	A	2.2	A		
		SB	6.0	A	7.1	A	2.8	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.1	A	0.7	A	8.1	A
		WB	1.9	A	0.9	A	-	-		
		NB	8.1	A	-	-	2.7	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	0.3	A	0.5	A	0.6	A	8.2	A
		WB	3.1	A	2.0	A	1.3	A		
		NB	8.2	A	0.0	A	0.0	A		
		SB	4.8	A	0.0	A	2.2	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	8.3	A
		WB	8.3	A	-	-	5.1	A		
		NB	-	-	0.8	A	1.1	A		
		SB	6.0	A	2.7	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	15.2	C	15.1	C	8.9	A	15.2	C
		WB	9.2	A	10.8	B	4.3	A		
		NB	2.9	A	1.4	A	0.5	A		
		SB	4.9	A	1.3	A	0.9	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	2.0	A	1.0	A	0.7	A	8.0	A
		WB	4.7	A	2.6	A	3.1	A		
		NB	3.9	A	5.7	A	1.1	A		
		SB	8.0	A	5.2	A	3.7	A		

With additional background traffic growth, the study area intersections are projected to experience minimal change in delay, with the majority of movements projected to operate at the same LOS as compared to Opening Year (2029) No-Build Conditions. All intersections and individual movements are anticipated to operate at LOS C or better during the AM and PM peak hours.

The SimTraffic reports are provided in **Appendix D**. All 95th percentile queues are anticipated to remain within their respective storage bays.

OPENING YEAR (2029) SCENARIO 2 CONDITIONS

Opening Year (2029) Scenario 2 conditions were analyzed to determine any traffic impacts from the addition of the site traffic to the study intersections. The five study intersections were modeled with the existing geometry and intersection control as summarized in **Exhibit 2**. The site accesses were modeled as side street stop control and no turn lanes were initially assumed for the analysis. Opening Year (2029) Scenario 2 turning movement volumes are shown in **Exhibit 8**. The results of the analysis are provided in **Table 10**.

Table 10 – Opening Year (2029) Scenario 2 Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.6	A	1.0	A	0.1	A	8.7	A
		WB	0.4	A	1.1	A	0.4	A		
		NB	4.3	A	8.7	A	2.3	A		
		SB	6.0	A	6.0	A	2.3	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.4	A	0.9	A	7.4	A
		WB	2.2	A	0.8	A	-	-		
		NB	7.2	A	-	-	2.9	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	0.9	A	0.7	A	0.0	A	7.4	A
		WB	0.0	A	1.3	A	0.8	A		
		NB	7.4	A	0.0	A	2.4	A		
		SB	5.0	A	0.0	A	1.5	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	6.0	A
		WB	6.0	A	-	-	3.3	A		
		NB	-	-	0.5	A	0.6	A		
		SB	3.4	A	1.4	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	10.4	B	3.2	A	8.8	A	10.4	B
		WB	5.0	A	0.0	A	0.0	A		
		NB	2.2	A	0.8	A	0.3	A		
		SB	0.0	A	0.9	A	0.5	A		
Rochester Blvd & Access 1	Side Street Stop	EB	-	-	1.6	A	0.9	A	5.8	A
		WB	1.5	A	0.8	A	-	-		
		NB	5.8	A	-	-	3.3	A		
		SB	-	-	-	-	-	-		
County 29 Blvd & Access 2	Side Street Stop	EB	5.4	A	-	-	2.2	A	5.4	A
		WB	-	-	-	-	-	-		
		NB	1.9	A	0.8	A	-	-		
		SB	-	-	1.2	A	0.7	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	3.0	A	1.7	A	1.0	A	10.1	B
		WB	3.6	A	1.4	A	2.3	A		
		NB	2.3	A	8.7	A	1.3	A		
		SB	3.8	A	10.1	B	1.9	A		

Table 10 – Opening Year (2029) Scenario 2 Intersection Analysis (Continued)

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.9	A	0.9	A	0.1	A	8.0	A
		WB	1.2	A	1.1	A	0.6	A		
		NB	4.2	A	8.0	A	2.2	A		
		SB	6.2	A	6.5	A	2.2	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.2	A	0.9	A	8.5	A
		WB	2.1	A	0.8	A	-	-		
		NB	8.5	A	-	-	2.5	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	1.1	A	0.5	A	0.9	A	5.9	A
		WB	2.8	A	1.6	A	1.0	A		
		NB	5.9	A	0.0	A	0.0	A		
		SB	5.8	A	0.0	A	1.8	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	6.9	A
		WB	6.9	A	-	-	4.9	A		
		NB	-	-	0.8	A	1.0	A		
		SB	4.0	A	1.6	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	11.7	B	6.5	A	6.9	A	11.7	B
		WB	8.9	A	9.3	A	4.7	A		
		NB	2.8	A	1.5	A	0.6	A		
		SB	2.4	A	1.1	A	0.9	A		
Rochester Blvd & Access 1	Side Street Stop	EB	-	-	10.8	B	3.7	A	10.8	B
		WB	0.0	A	0.8	A	-	-		
		NB	0.9	A	-	-	0.1	A		
		SB	-	-	-	-	-	-		
County 29 Blvd & Access 2	Side Street Stop	EB	5.3	A	-	-	2.0	A	5.3	A
		WB	-	-	-	-	-	-		
		NB	1.8	A	0.8	A	-	-		
		SB	-	-	0.7	A	0.3	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	11.1	B	1.6	A	0.0	A	11.1	B
		WB	5.4	A	2.5	A	2.2	A		
		NB	2.9	A	8.5	A	1.1	A		
		SB	4.9	A	5.5	A	3.2	A		

With the addition of site-generated traffic, the study area intersections are projected to have minimal change in delay with the majority of movements and approaches projected to operate at the same LOS as compared to Opening Year (2029) No-Build Conditions. All intersections and individual movements are anticipated to operate at LOS B or better during the AM and PM peak hours.

The SimTraffic reports are provided in **Appendix D**. All 95th percentile queues are anticipated to remain within their respective storage bays.

DESIGN YEAR (2044) SCENARIO 2 CONDITIONS

Design Year (2044) Scenario 2 conditions were analyzed to determine any traffic impacts from the addition of the site traffic to the study intersections in the long-term. The five study intersections were modeled with the existing geometry and intersection control as summarized in **Exhibit 2**. The site accesses were modeled as side street stop control and no turn lanes were initially assumed for the analysis.

Design Year (2044) Scenario 2 traffic volumes were developed from the addition of the Design Year (2044) No-Build volumes in **Exhibit 5** and the Scenario 2 site trips in **Exhibits 7**. The Design Year (2044) Scenario 2 turning movement volumes are shown in **Exhibit 9**. The results of the analysis are provided in **Table 11**.

Table 11 – Design Year (2044) Scenario 2 Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.6	A	1.1	A	0.0	A	8.2	A
		WB	1.9	A	1.3	A	0.7	A		
		NB	4.6	A	8.2	A	2.5	A		
		SB	6.2	A	7.1	A	2.9	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.4	A	0.9	A	9.5	A
		WB	2.6	A	1.0	A	-	-		
		NB	9.5	A	-	-	2.7	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	0.7	A	0.7	A	0.0	A	7.5	A
		WB	0.0	A	1.8	A	1.3	A		
		NB	7.0	A	0.0	A	7.5	A		
		SB	4.7	A	0.0	A	2.0	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	7.3	A
		WB	7.3	A	-	-	4.4	A		
		NB	-	-	0.6	A	0.7	A		
		SB	4.4	A	1.7	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	14.8	B	3.4	A	8.6	A	14.8	B
		WB	0.0	A	0.0	A	0.0	A		
		NB	2.2	A	1.1	A	0.2	A		
		SB	0.0	A	0.9	A	0.6	A		
Rochester Blvd & Access 1	Side Street Stop	EB	-	-	1.6	A	0.8	A	6.4	A
		WB	1.6	A	1.2	A	-	-		
		NB	6.4	A	-	-	3.3	A		
		SB	-	-	-	-	-	-		
County 29 Blvd & Access 2	Side Street Stop	EB	5.1	A	-	-	2.9	A	5.1	A
		WB	-	-	-	-	-	-		
		NB	2.1	A	1.0	A	-	-		
		SB	-	-	1.1	A	0.7	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	10.7	B	7.3	A	1.0	A	10.7	B
		WB	4.4	A	8.5	A	3.3	A		
		NB	4.1	A	5.7	A	2.0	A		
		SB	6.8	A	9.8	A	2.5	A		

Table 11 – Design Year (2044) Scenario 2 Intersection Analysis (Continued)

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	1.0	A	1.1	A	0.1	A	7.5	A
		WB	1.4	A	1.3	A	0.6	A		
		NB	4.7	A	7.5	A	1.8	A		
		SB	6.4	A	6.9	A	2.3	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.3	A	0.7	A	8.9	A
		WB	2.5	A	1.0	A	-	-		
		NB	8.9	B	-	-	2.8	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	1.4	A	0.6	A	0.7	A	9.6	A
		WB	0.9	A	1.7	A	1.1	A		
		NB	9.6	A	0.0	A	0.0	A		
		SB	5.3	A	0.0	A	2.2	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	9.2	A
		WB	9.2	A	-	-	5.7	A		
		NB	-	-	0.9	A	1.0	A		
		SB	4.1	A	1.9	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	14.5	B	32.5	D	8.6	A	32.5	D
		WB	8.8	A	15.0	B	3.4	A		
		NB	3.4	A	1.8	A	0.4	A		
		SB	1.9	A	1.2	A	0.9	A		
Rochester Blvd & Access 1	Side Street Stop	EB	-	-	11.5	B	3.5	A	11.5	B
		WB	1.3	A	1.0	A	-	-		
		NB	1.2	A	-	-	0.1	A		
		SB	-	-	-	-	-	-		
County 29 Blvd & Access 2	Side Street Stop	EB	5.9	A	-	-	3.1	A	5.9	A
		WB	-	-	-	-	-	-		
		NB	2.6	A	0.8	A	-	-		
		SB	-	-	0.7	A	0.2	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	6.5	A	6.8	A	1.8	A	11.1	B
		WB	11.1	B	8.9	A	3.9	A		
		NB	6.0	A	3.1	A	1.8	A		
		SB	9.9	A	4.0	A	4.0	A		

With additional site traffic and background traffic growth, the study area intersections are projected to experience minimal change in delay, with most of movements projected to operate at the same LOS as the Opening Year (2029) Build Conditions. All intersections and individual movements are anticipated to operate at LOS D or better during the AM and PM peak hours.

The SimTraffic reports are provided in **Appendix D**. All 95th percentile queues are anticipated to remain within their respective storage bays.

OPENING YEAR (2029) SCENARIO 1 CONDITIONS

Opening Year (2029) Scenario 1 conditions were analyzed to determine any traffic impacts from the addition of the site traffic to the study intersections. The five study intersections were modeled with the existing geometry and intersection control as summarized in **Exhibit 2**. The site accesses were modeled as side street stop control with one approach lane and no turn lanes were initially assumed for the analysis.

Opening Year (2029) Scenario 1 turning movement volumes were developed by adding the site trips in **Exhibit 11** to the Opening Year (2029) No-Build turning movement volumes in **Exhibit 4**. The Opening Year (2029) Scenario 1 turning movement volumes are shown in **Exhibit 12**. The results of the analysis are provided in **Table 8**.

Table 8 – Opening Year (2029) Scenario 1 Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.5	A	1.7	A	0.1	A	8.6	A
		WB	0.3	A	1.3	A	0.6	A		
		NB	4.3	A	8.6	A	3.0	A		
		SB	8.4	A	8.4	A	2.0	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	2.6	A	1.1	A	13.3	B
		WB	4.3	A	1.0	A	-	-		
		NB	13.3	B	-	-	4.9	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	1.6	A	1.5	A	2.0	A	15.2	C
		WB	0.0	A	2.0	A	1.4	A		
		NB	15.2	C	0.0	A	4.5	A		
		SB	9.3	A	0.0	A	5.5	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	7.5	A
		WB	7.5	A	-	-	4.5	A		
		NB	-	-	0.8	A	0.8	A		
		SB	5.1	A	1.8	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	15.7	C	2.6	A	9.7	A	15.7	C
		WB	3.9	A	0.0	A	0.0	A		
		NB	2.2	A	1.1	A	0.2	A		
		SB	0.0	A	0.8	A	0.5	A		
Rochester Blvd & Access 1	Side Street Stop	EB	-	-	4.7	A	2.1	A	8.7	A
		WB	3.9	A	1.8	A	-	-		
		NB	8.7	A	-	-	4.6	A		
		SB	-	-	-	-	-	-		
County 29 Blvd & Access 2	Side Street Stop	EB	9.9	A	-	-	3.4	A	9.9	A
		WB	-	-	-	-	-	-		
		NB	5.7	A	2.8	A	-	-		
		SB	-	-	2.9	A	1.7	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	3.1	A	0.7	A	0.0	A	8.1	A
		WB	2.0	A	2.6	A	2.8	A		
		NB	3.7	A	8.1	A	1.1	A		
		SB	4.7	A	6.4	A	1.8	A		

Table 8 – Opening Year (2029) Scenario 1 Intersection Analysis (Continued)

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	1.3	A	0.9	A	0.0	A	8.0	A
		WB	1.6	A	1.3	A	0.8	A		
		NB	3.6	A	8.0	A	2.0	A		
		SB	6.6	A	7.0	A	3.4	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.8	A	0.9	A	24.2	D
		WB	4.8	A	1.6	A	-	-		
		NB	24.2	D	-	-	2.9	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	1.7	A	0.8	A	0.4	A	17.8	C
		WB	2.4	A	2.7	A	1.8	A		
		NB	17.8	C	0.0	A	0.0	A		
		SB	10.9	B	0.0	A	4.7	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	9.8	A
		WB	9.8	A	-	-	5.4	A		
		NB	-	-	0.9	A	1.0	A		
		SB	4.4	A	2.1	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	13.1	B	15.5	C	9.1	A	15.5	C
		WB	10.1	B	12.4	B	0.0	A		
		NB	3.1	A	1.3	A	0.2	A		
		SB	3.1	A	1.2	A	0.9	A		
Rochester Blvd & Access 1	Side Street Stop	EB	-	-	15.8	B	6.4	A	15.8	C
		WB	0.8	A	1.9	A	-	-		
		NB	3.0	A	-	-	1.1	A		
		SB	-	-	-	-	-	-		
County 29 Blvd & Access 2	Side Street Stop	EB	10.0	A	-	-	6.9	A	10.0	A
		WB	-	-	-	-	-	-		
		NB	2.6	A	1.5	A	-	-		
		SB	-	-	1.4	A	0.5	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	2.9	A	0.6	A	0.0	A	7.6	A
		WB	4.7	A	3.6	A	3.4	A		
		NB	4.4	A	7.6	A	1.4	A		
		SB	6.1	A	3.7	A	2.7	A		

With the addition of Scenario 1 traffic, the study area intersections are projected to have some change in delay. All intersections and movements are anticipated to operate at LOS D or better during the AM and PM peak hours.

The 95th percentile queueing results were reviewed at the intersections and all queues are anticipated to remain within their respective storage bays. The SimTraffic reports are provided in **Appendix D**.

DESIGN YEAR (2044) SCENARIO 1 CONDITIONS

Design Year (2044) Scenario 1 conditions were analyzed to determine any traffic impacts from the addition of the site traffic to the study intersections in the long-term. The five study intersections were modeled with the existing geometry and intersection control as summarized in **Exhibit 2**. The site accesses were modeled as side street stop control with one approach lane and no turn lanes were initially assumed for the analysis.

The Design Year (2044) Scenario 1 traffic volumes were developed from the addition of the Design Year (2044) No-Build volumes in **Exhibit 5** and the Scenario 1 Site Trips in **Exhibit 11**. The Design Year (2044) Scenario 1 turning movement volumes are shown in **Exhibit 13**. The site accesses were modeled as side street stop control. The results of the analysis are provided in **Table 9**.

Table 9 – Design Year (2044) Scenario 1 Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	0.7	A	2.0	A	0.2	A	9.7	A
		WB	0.9	A	1.4	A	0.7	A		
		NB	5.0	A	8.2	A	3.4	A		
		SB	9.7	A	7.3	A	2.7	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	2.6	A	1.2	A	16.2	C
		WB	4.7	A	1.0	A	-	-		
		NB	16.2	C	-	-	5.4	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	2.0	A	1.5	A	0.0	A	13.4	B
		WB	0.0	A	2.0	A	1.3	A		
		NB	8.8	A	0.0	A	4.5	A		
		SB	13.4	B	0.0	A	2.3	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	8.6	A
		WB	8.6	A	-	-	5.4	A		
		NB	-	-	0.8	A	0.8	A		
		SB	5.2	A	2.2	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	13.7	B	3.6	A	9.4	A	13.7	B
		WB	8.5	A	0.0	A	0.0	A		
		NB	2.9	A	1.2	A	0.6	A		
		SB	0.0	A	1.0	A	0.6	A		
Rochester Blvd & Access 1	Side Street Stop	EB	-	-	4.6	A	2.4	A	10.3	B
		WB	4.1	A	1.7	A	-	-		
		NB	10.3	B	-	-	5.6	A		
		SB	-	-	-	-	-	-		
County 29 Blvd & Access 2	Side Street Stop	EB	10.1	B	-	-	4.0	A	10.1	B
		WB	-	-	-	-	-	-		
		NB	5.4	A	3.0	A	-	-		
		SB	-	-	3.0	A	1.7	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	2.6	A	1.1	A	2.6	A	8.4	A
		WB	6.4	A	3.1	A	2.7	A		
		NB	3.0	A	8.4	A	1.4	A		
		SB	4.4	A	7.3	A	2.0	A		

Table 9 – Design Year (2044) Scenario 1 Intersection Analysis (Continued)

Intersection	Control	Approach	Operations by Movement						Overall Intersection/ Worst Side Street Movement	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
Rochester Blvd & Harry Ave/Hwy 52	Side Street Stop	EB	1.1	A	1.1	A	0.1	A	8.5	A
		WB	1.3	A	1.3	A	0.7	A		
		NB	4.7	A	8.5	A	2.1	A		
		SB	6.7	A	7.2	A	2.7	A		
Rochester Blvd & Hwy 52 NB Ramp	Side Street Stop	EB	-	-	1.9	A	0.8	A	27.3	D
		WB	5.1	A	1.6	A	-	-		
		NB	27.3	D	-	-	3.0	A		
		SB	-	-	-	-	-	-		
Rochester Blvd & Hogan Avenue	Side Street Stop	EB	2.3	A	0.9	A	0.9	A	11.8	B
		WB	2.8	A	2.8	A	1.8	A		
		NB	11.8	B	0.0	A	0.0	A		
		SB	9.1	A	0.0	A	3.6	A		
County 29 Blvd & Cannon Falls Blvd	Side Street Stop	EB	-	-	-	-	-	-	12.2	B
		WB	12.2	B	-	-	9.6	A		
		NB	-	-	1.1	A	1.3	A		
		SB	4.5	A	2.2	A	-	-		
County 29 Blvd & County 17 Blvd	Side Street Stop	EB	18.3	C	0.0	A	10.0	A	25.9	D
		WB	25.9	D	14.0	B	3.3	A		
		NB	4.8	A	2.0	A	0.3	A		
		SB	5.8	A	1.3	A	0.9	A		
Rochester Blvd & Access 1	Side Street Stop	EB	-	-	15.2	C	8.1	A	15.2	C
		WB	1.2	A	2.0	A	-	-		
		NB	3.3	A	-	-	1.5	A		
		SB	-	-	-	-	-	-		
County 29 Blvd & Access 2	Side Street Stop	EB	10.6	B	-	-	7.4	A	10.6	B
		WB	-	-	-	-	-	-		
		NB	3.5	A	1.7	A	-	-		
		SB	-	-	1.5	A	0.4	A		
CSAH 88 & Harry Ave	Side Street Stop	EB	3.9	A	0.5	A	1.3	A	6.7	A
		WB	5.7	A	4.2	A	3.5	A		
		NB	3.9	A	6.7	A	1.3	A		
		SB	5.0	A	4.3	A	3.5	A		

With additional site traffic and background traffic growth, the study area intersections are projected to operate at acceptably, with all intersections and individual movements anticipated to operate at LOS D or better during the AM and PM peak hours.

The SimTraffic reports are provided in **Appendix D**. The 95th percentile queues are anticipated to remain within their respective storage bays.

TURN LANE WARRANT ANALYSIS

A turn lane warrant analysis was conducted at the site's access points for the Opening Year (2029) build conditions and the Design Year (2044) build conditions to determine the anticipated need for turn lanes in the future build conditions. The turn lane warrant analysis was conducted using the methodology outlined in the National Cooperative Highway Research Program (NCHRP) Report 457 regarding the need for major road turn lanes at side street stop-controlled intersections. Results of the analysis are summarized below in **Tables 12 and 13**.

Based on the methodologies from *NCHRP Report 457*, the results of the warrants for left and right-turn lanes under Scenario 2: Opening Year (2029) and Design Year (2044) conditions indicate that turn lanes are not warranted at the proposed site access points along Rochester Boulevard and County 29 Boulevard. Under Scenario 1 conditions, a westbound left and an eastbound right turn movement at the northern access are expected to meet the warrant for left and right turn lanes under Opening Year (2029) build conditions and Design Year (2044) build conditions. A southbound right turn movement at the southern access (Access 2) is expected to meet the warrant for a right turn lane under Opening Year (2029) build conditions and Design Year (2044) build conditions.

Table 12 – Scenario 2: Opening Year (2029) and Design Year (2044) Turn Lane Warrants

Intersection	Movement	Turn Lane Warrant Result	
		Build	
		2029	2044
Rochester Boulevard & Access 1 (northern access)	WBL	Not Met	Not Met
	EBR	Not Met	Not Met
County 29 Boulevard & Access 2 (southern access)	NBL	Not Met	Not Met
	SBR	Not Met	Not Met

Table 13 – Scenario 1: Opening Year (2029) and Design Year (2044) Turn Lane Warrants

Intersection	Movement	Turn Lane Warrant Result	
		Build	
		2029	2044
Rochester Boulevard & Access 1 (northern access)	WBL	Met	Met
	EBR	Met	Met
County 29 Boulevard & Access 2 (southern access)	NBL	Not Met	Not Met
	SBR	Met	Met

It should be noted that while a northbound left-turn lane is not warranted at the southern access under Scenario 1, both Dakota County and Goodhue County may require additional turn lanes at the access to limit the impacts of site traffic along the county roads. Likewise, though turn lanes were not found to be warranted under Scenario 2 conditions, Dakota County or Goodhue county may require turn lanes to be installed for policy or safety reasons.

CONCLUSIONS AND RECOMMENDATIONS

Tract Management Company is proposing two development scenarios at the southeast corner of the intersection of Highway 52 and Rochester Boulevard in Cannon Falls, Minnesota. Scenario 2 consists of a 1,500,000 SF technology park, and Scenario 1 consists of a 1,750,000 SF industrial park.

The proposed development will consist of one parcel, with one access point on Rochester Boulevard and one access point on County 29 Boulevard. The northern portion of the site would have its primary access located along Rochester Boulevard (“Access 1”). The southern portion of the site would have its primary access point located along County 29 Boulevard, approximately 1,300’ south of Holiday Avenue (“Access 2”).

The trip generation of Scenario 2 was evaluated based on data from the ITE Trip Generation Manual, 11th Edition by applying ITE Land Use Code 160 (Data Center). Scenario 2 is anticipated to generate 165 new trips during the AM peak hour (91 entering, 74 exiting) and 135 new trips during the PM peak hour (41 entering, 94 exiting). Scenario 2 is anticipated to generate 1,485 daily trips.

The trip generation of Scenario 1 was evaluated based on data from the ITE Trip Generation Manual, 11th Edition by applying LUC 130 (Industrial Park). Scenario 1 is anticipated to generate 595 new trips during the AM peak hour (482 entering, 113 exiting) and 595 new trips during the PM peak hour (131 entering, 464 exiting). Scenario 1 is anticipated to generate 5,898 weekday daily trips.

A capacity analysis was performed for Existing Year (2024), Opening Year (2029) No-Build, Opening Year (2029) Scenario 2, Opening Year (2029) Scenario 1, Design Year (2044) No-Build, Design Year (2044) Scenario 2, and Design Year (2044) Scenario 1. In all conditions the study intersections are anticipated to operate acceptably.

Turn lane warrants were analyzed at the proposed access points along Rochester Boulevard and County 29 Boulevard. It was found that no turn lanes were warranted at the proposed access points under Scenario 2: Opening Year (2029) Build and Design year (2044) Build Conditions. Under Scenario 1: Opening Year (2029) Build and Design year (2044) Build Conditions, a westbound left and an eastbound right-turn lane were warranted at the site access along Rochester Boulevard (northern access). A south bound right-turn lane was warranted at the access point along County 29 Boulevard (southern access) under Scenario 1: 2029 Opening Year (2029) Build and Design Year (2044) Build Conditions.

The recommended mitigation measures under Scenario 2 conditions (as shown in **Exhibit 14**) are:

- Install side street stop control at the site accesses.

The recommended mitigation measures under Scenario 1 conditions (as shown in **Exhibit 15**) are:

- Install side street stop control at the site accesses.
- Install a westbound left-turn lane at Access 1 (northern access) along Rochester Boulevard.
- Install an eastbound right-turn lane at Access 1 (northern access) along Rochester Boulevard.
- Install a southbound right-turn lane at Access 2 (southern access) along County 29 Boulevard.

APPENDIX

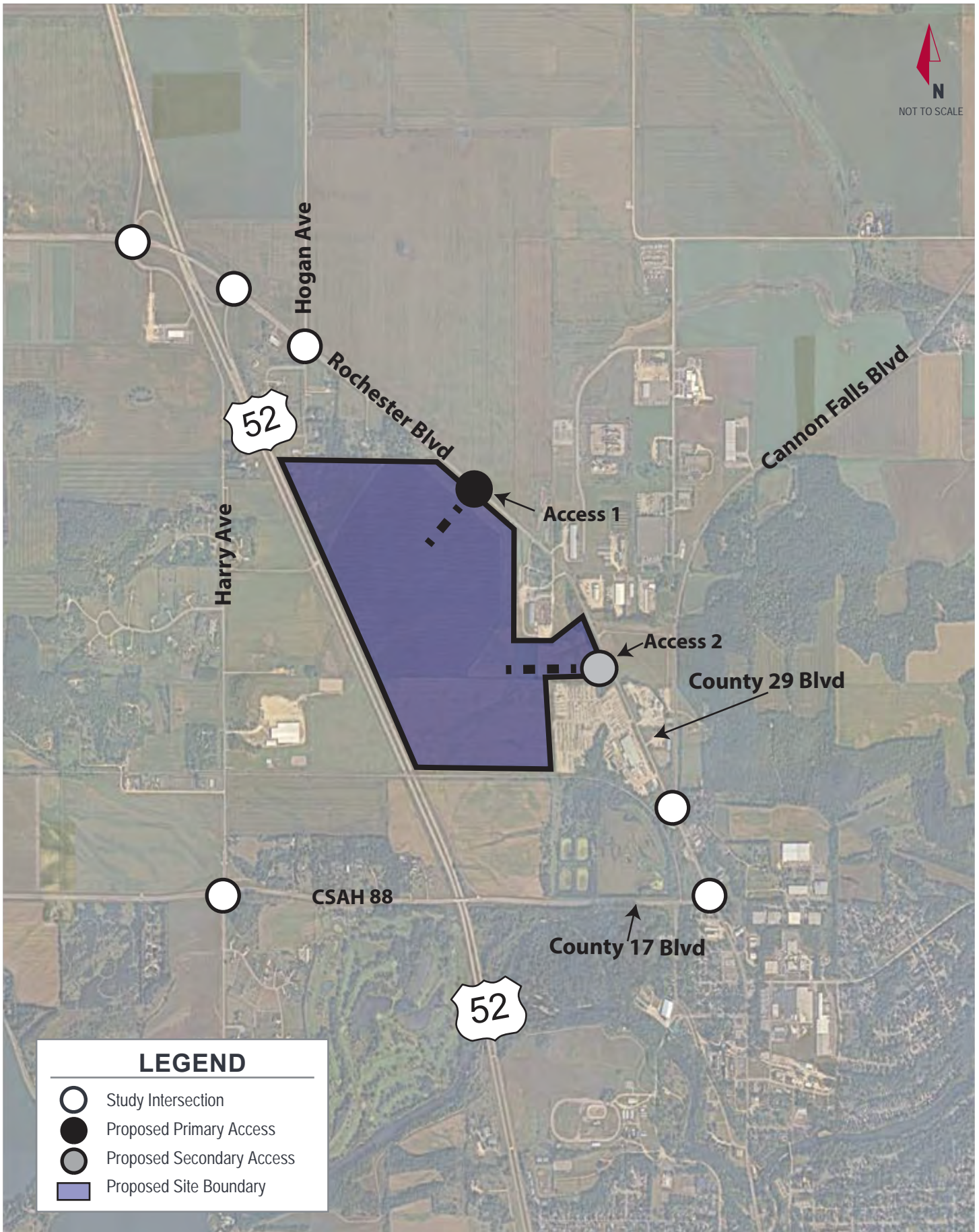
A. Exhibits

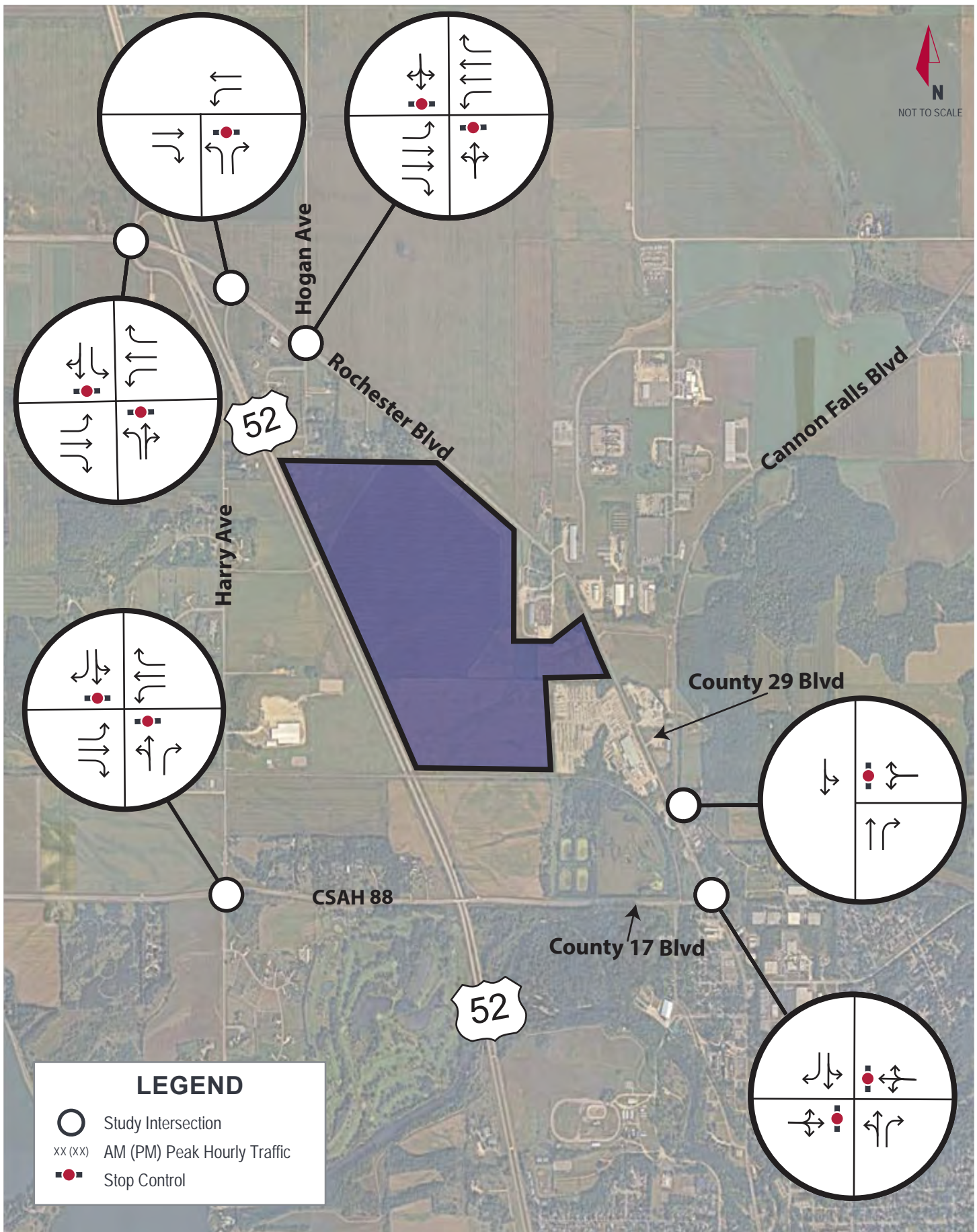
B. Turning Movement Counts

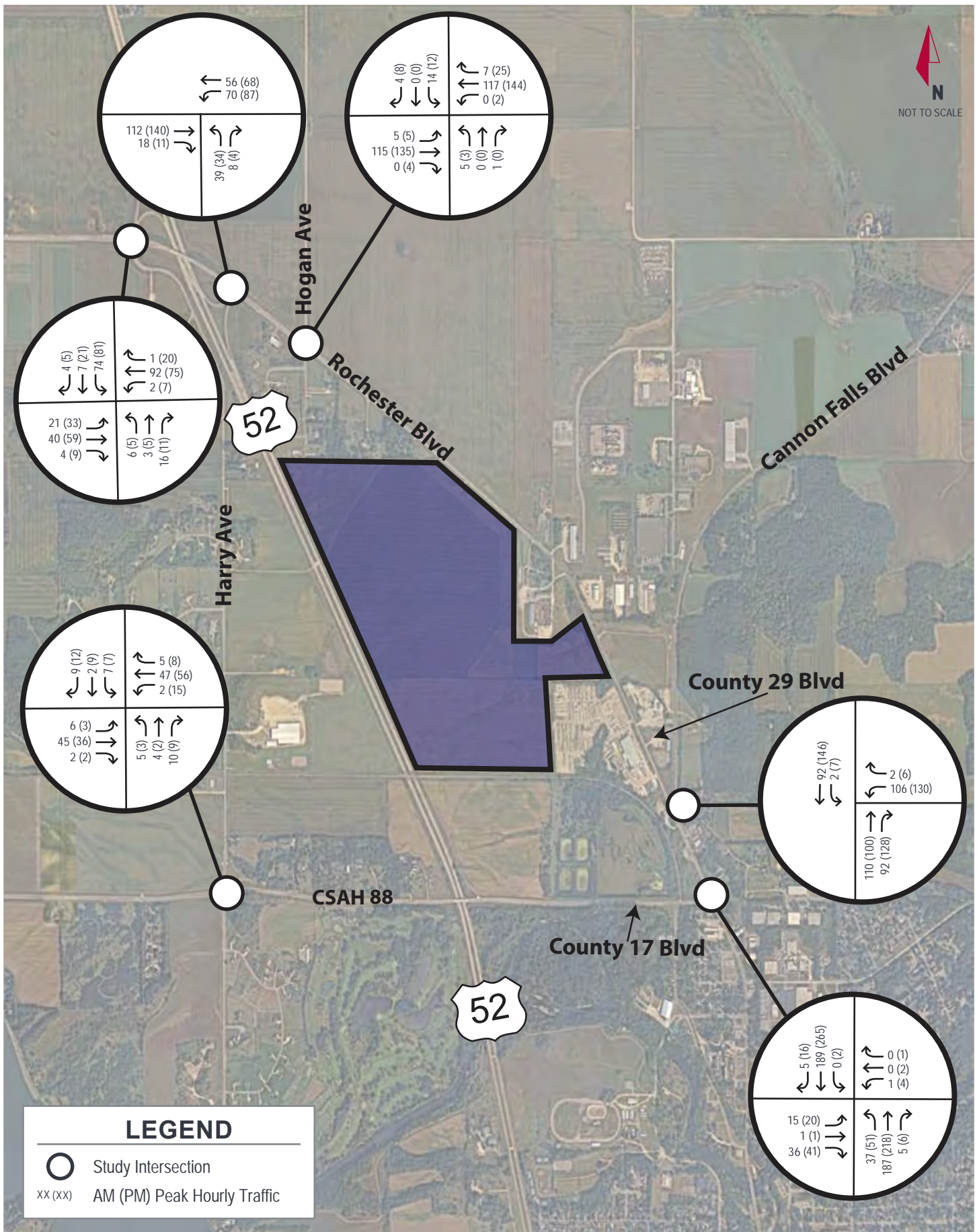
C. Site Layout Exhibit

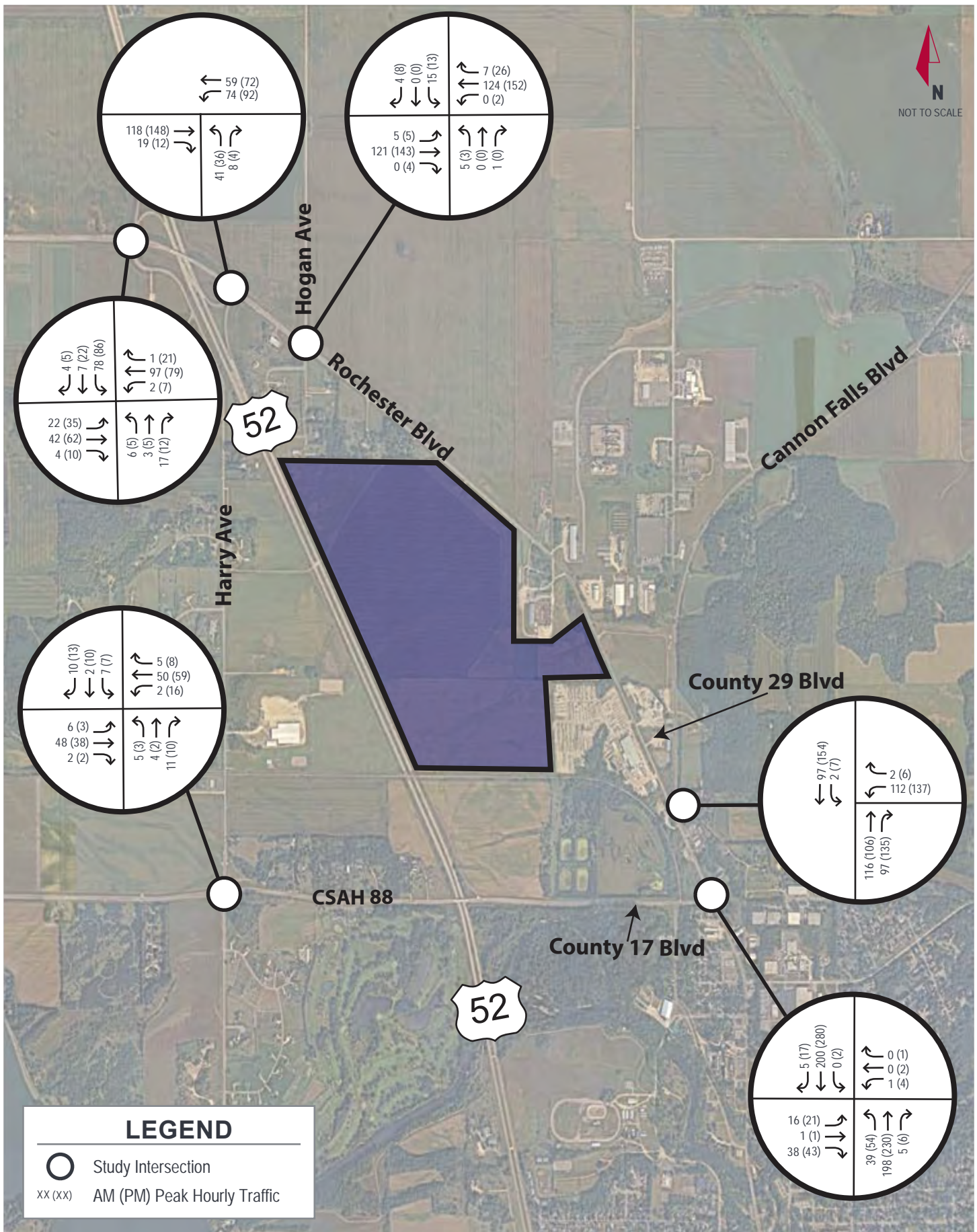
D. SimTraffic Analysis Results

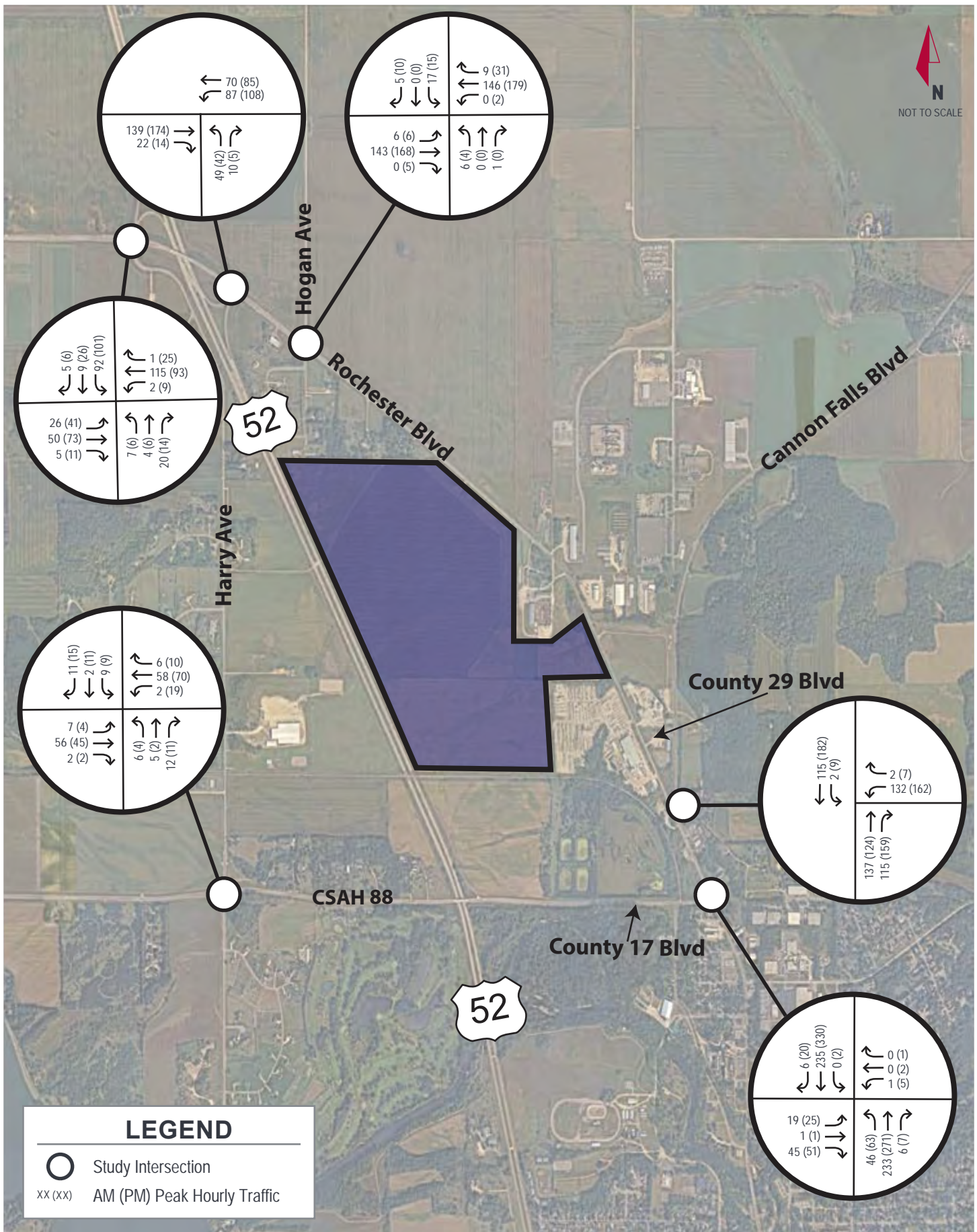
A. Exhibits

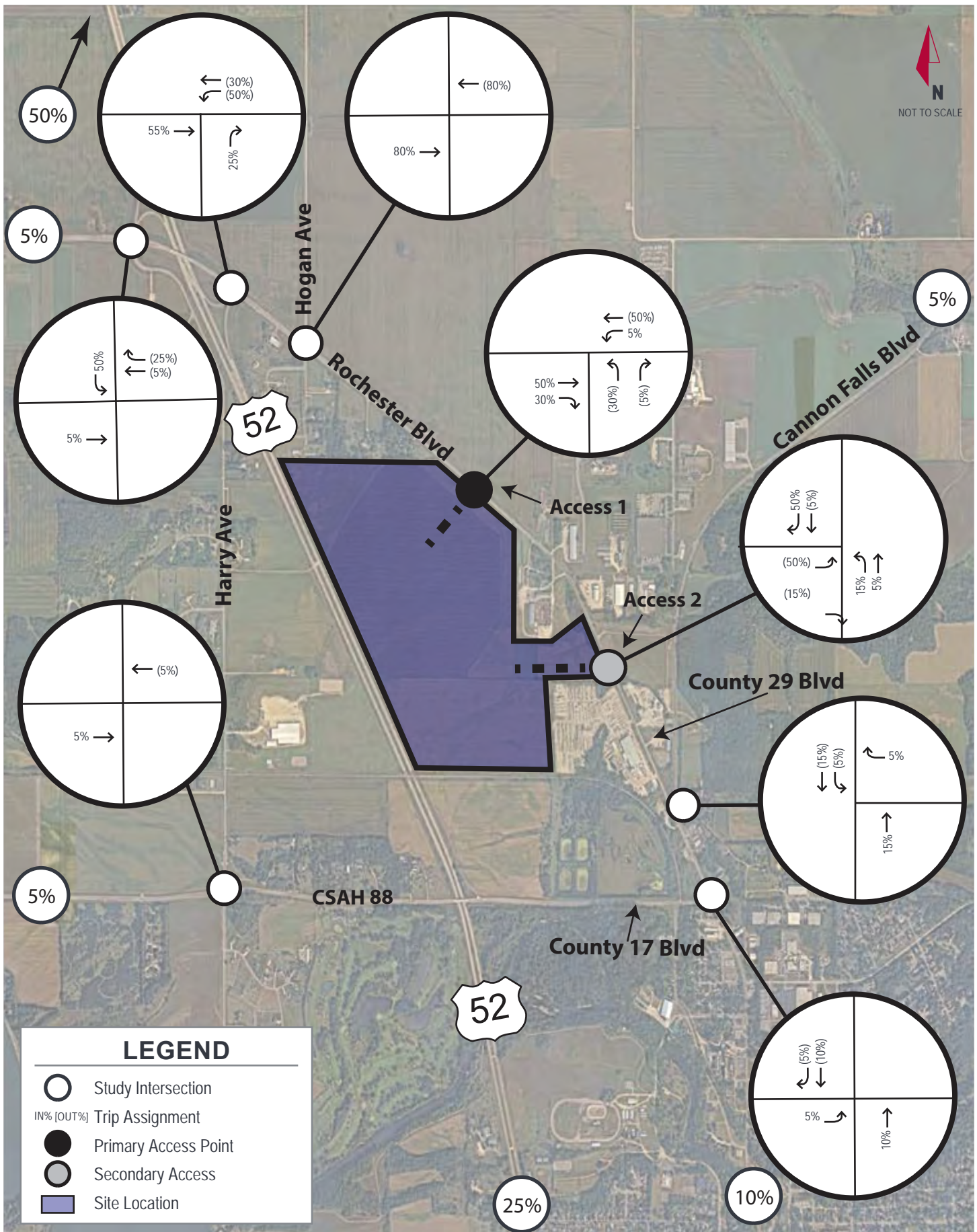


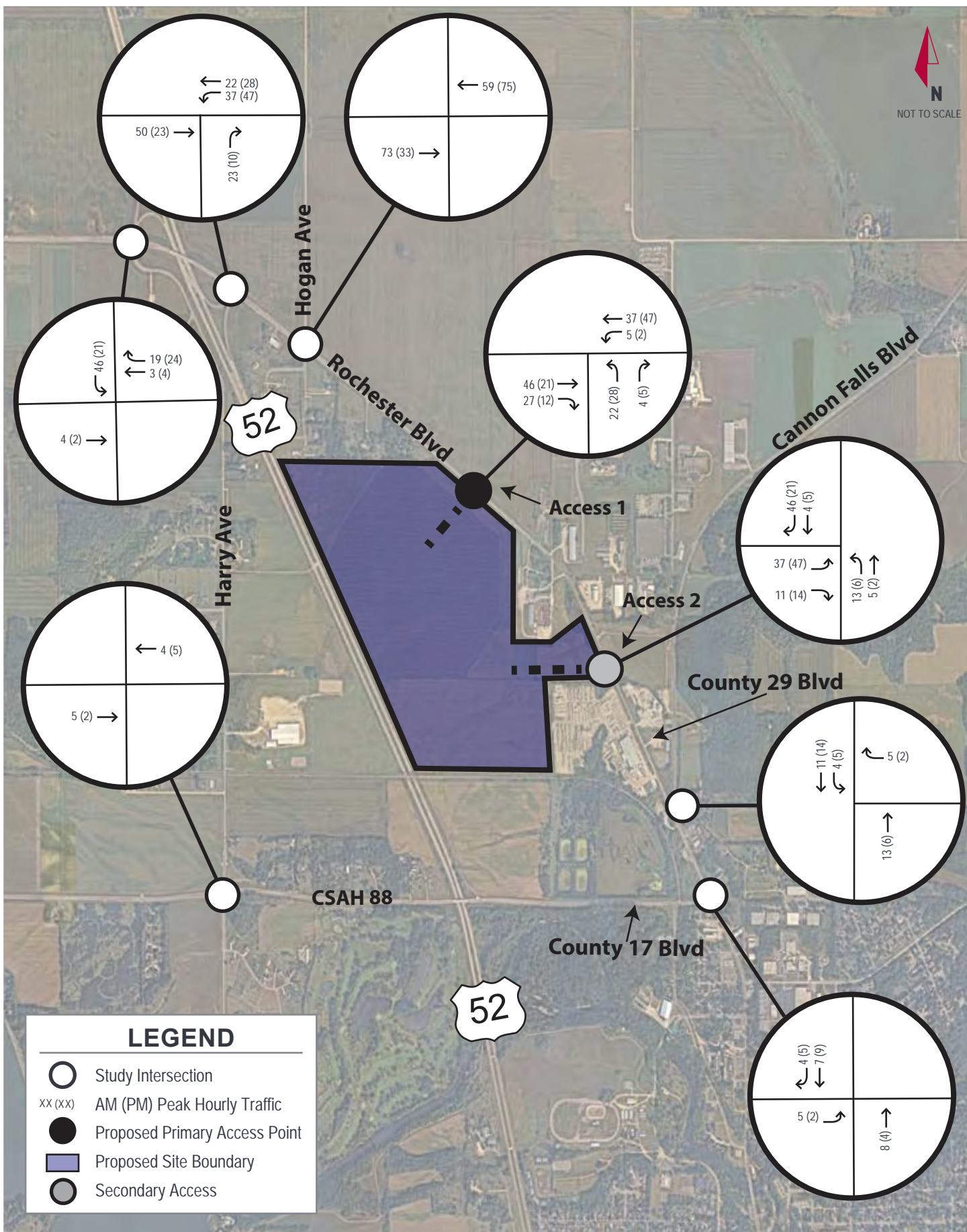


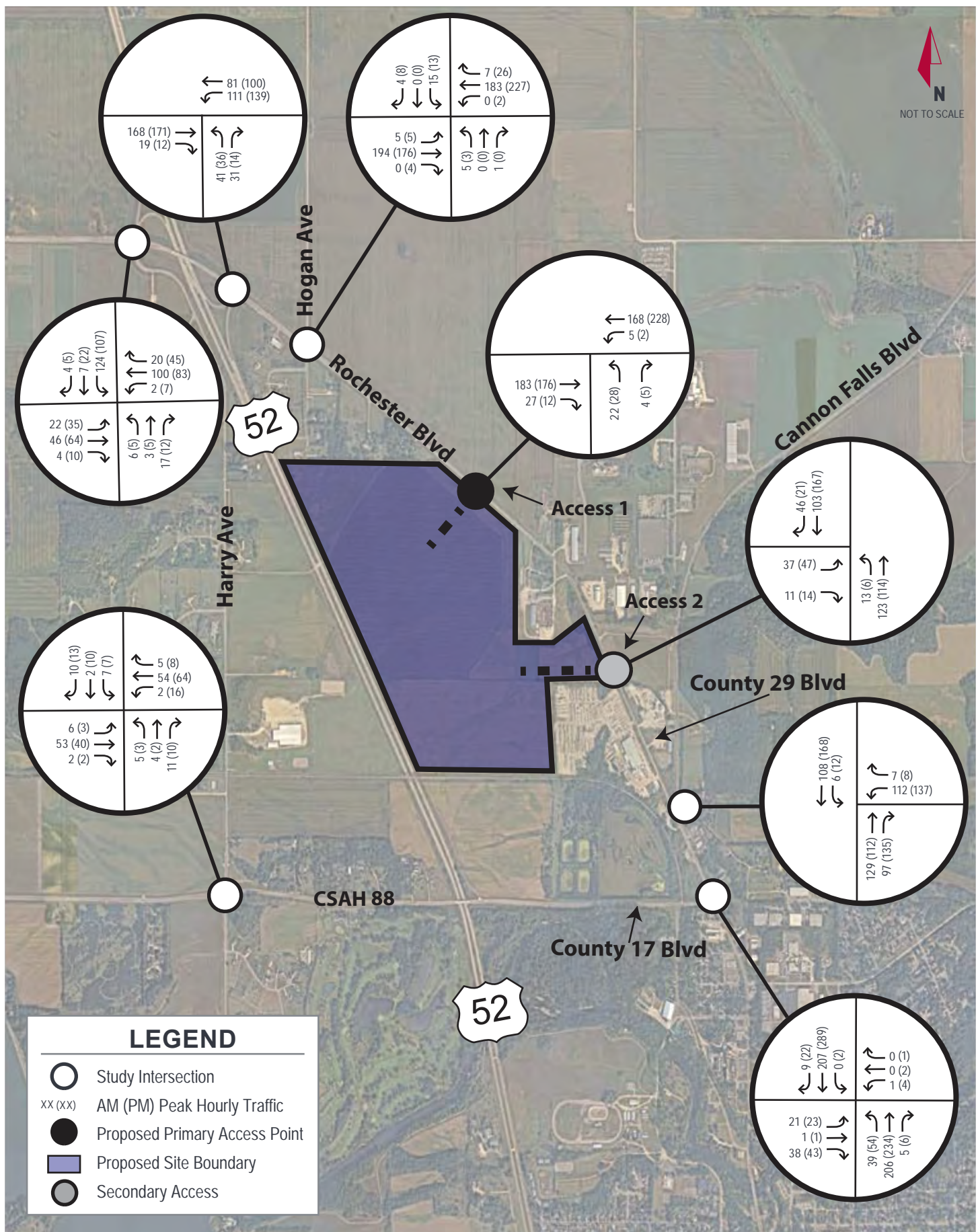


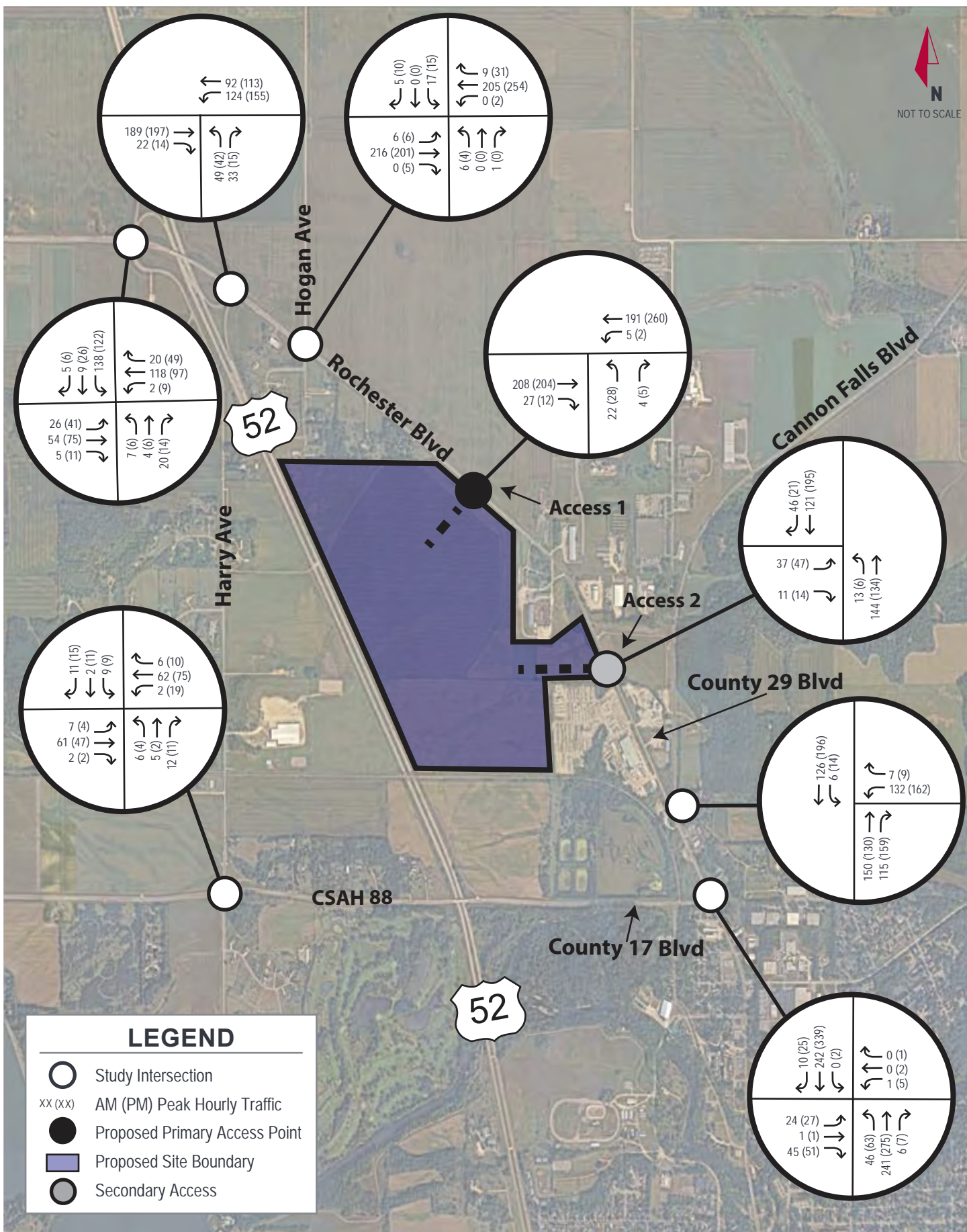


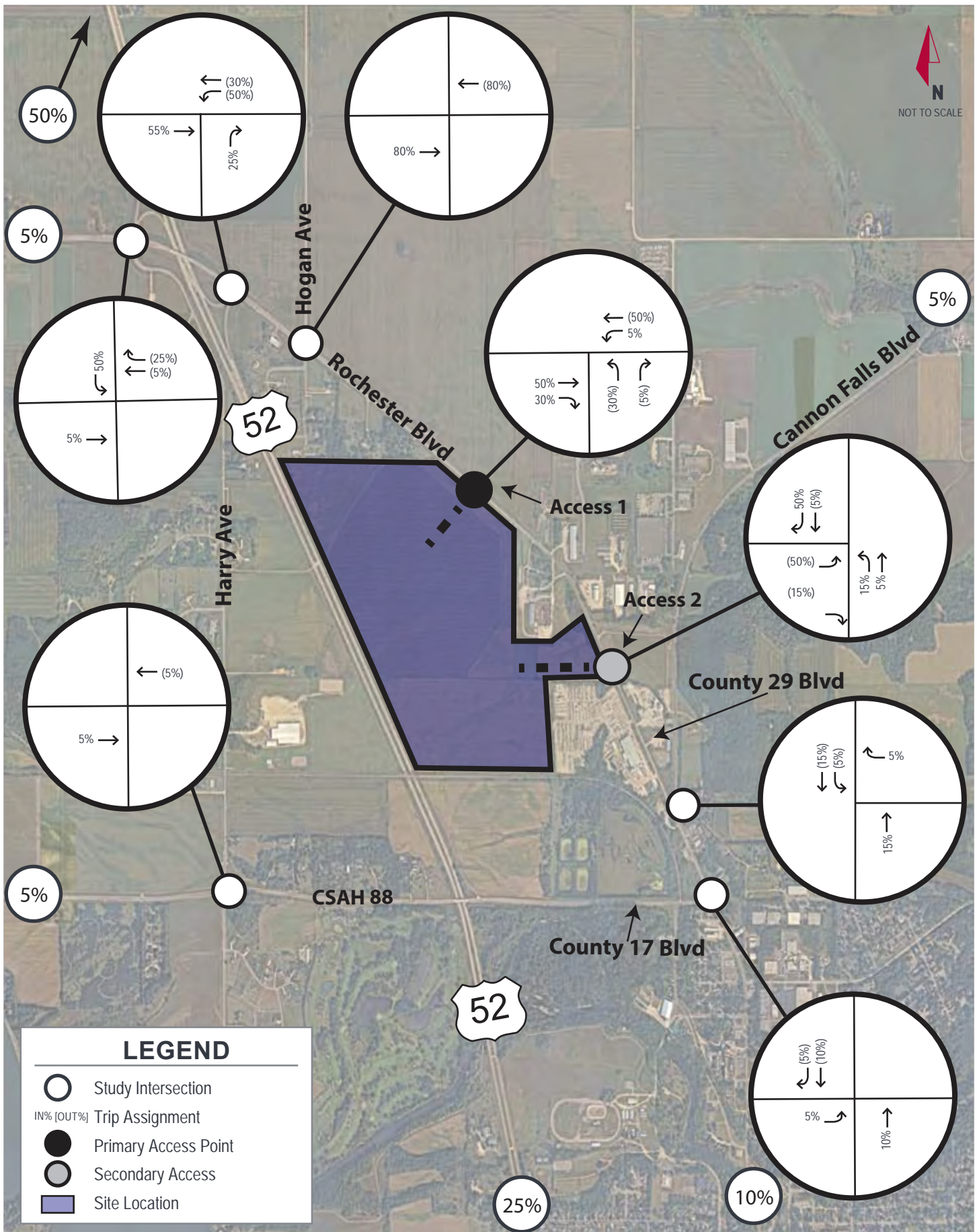


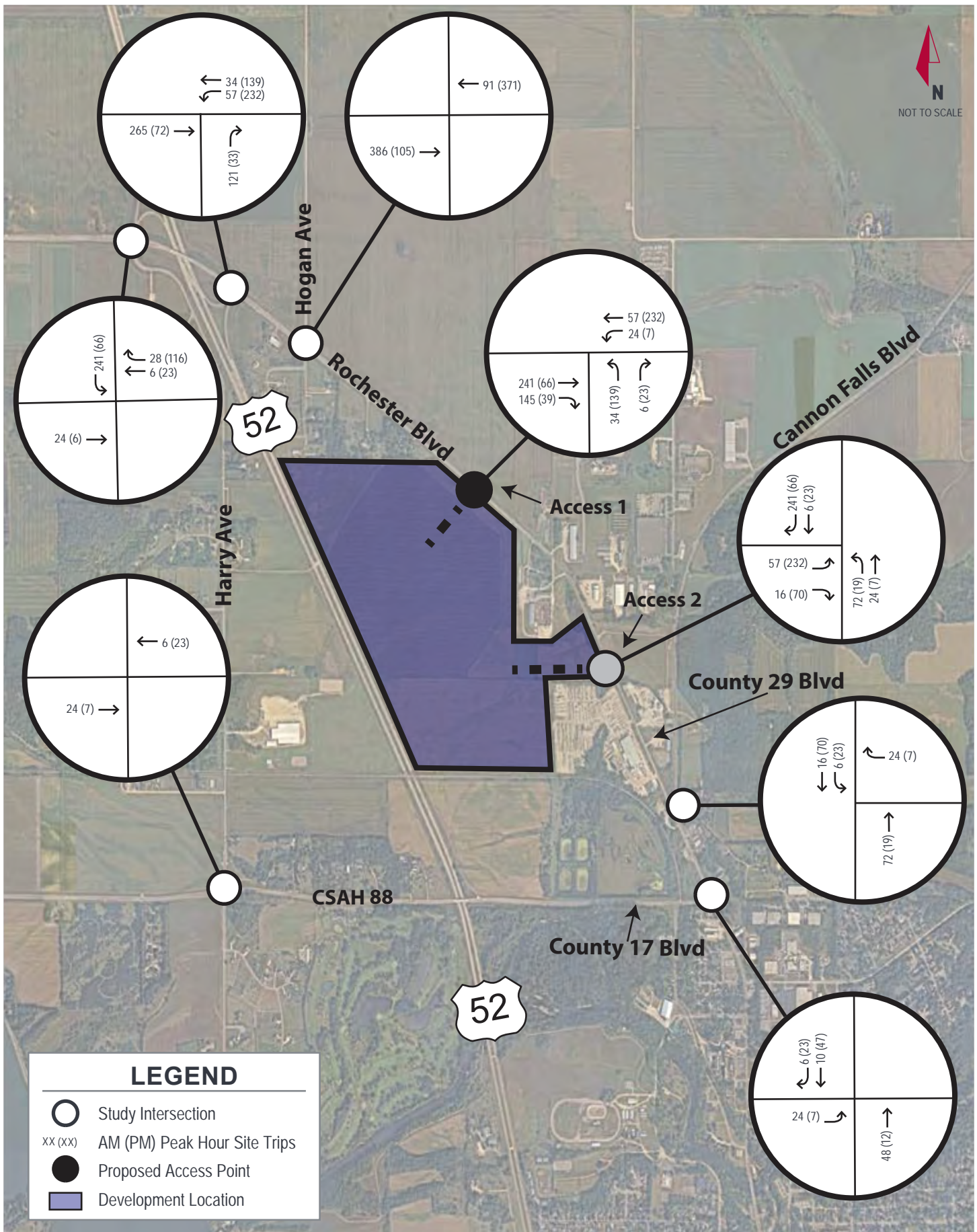


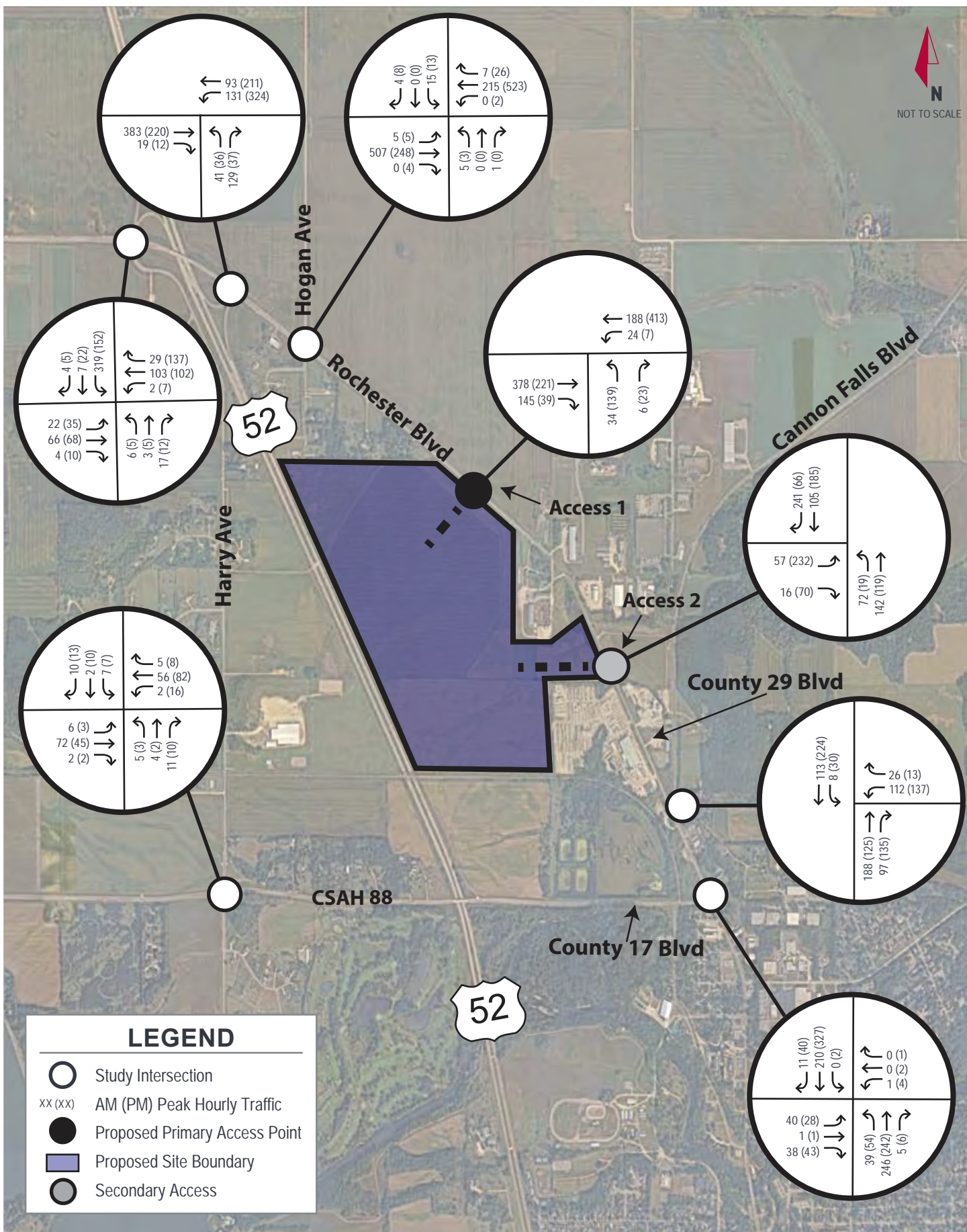


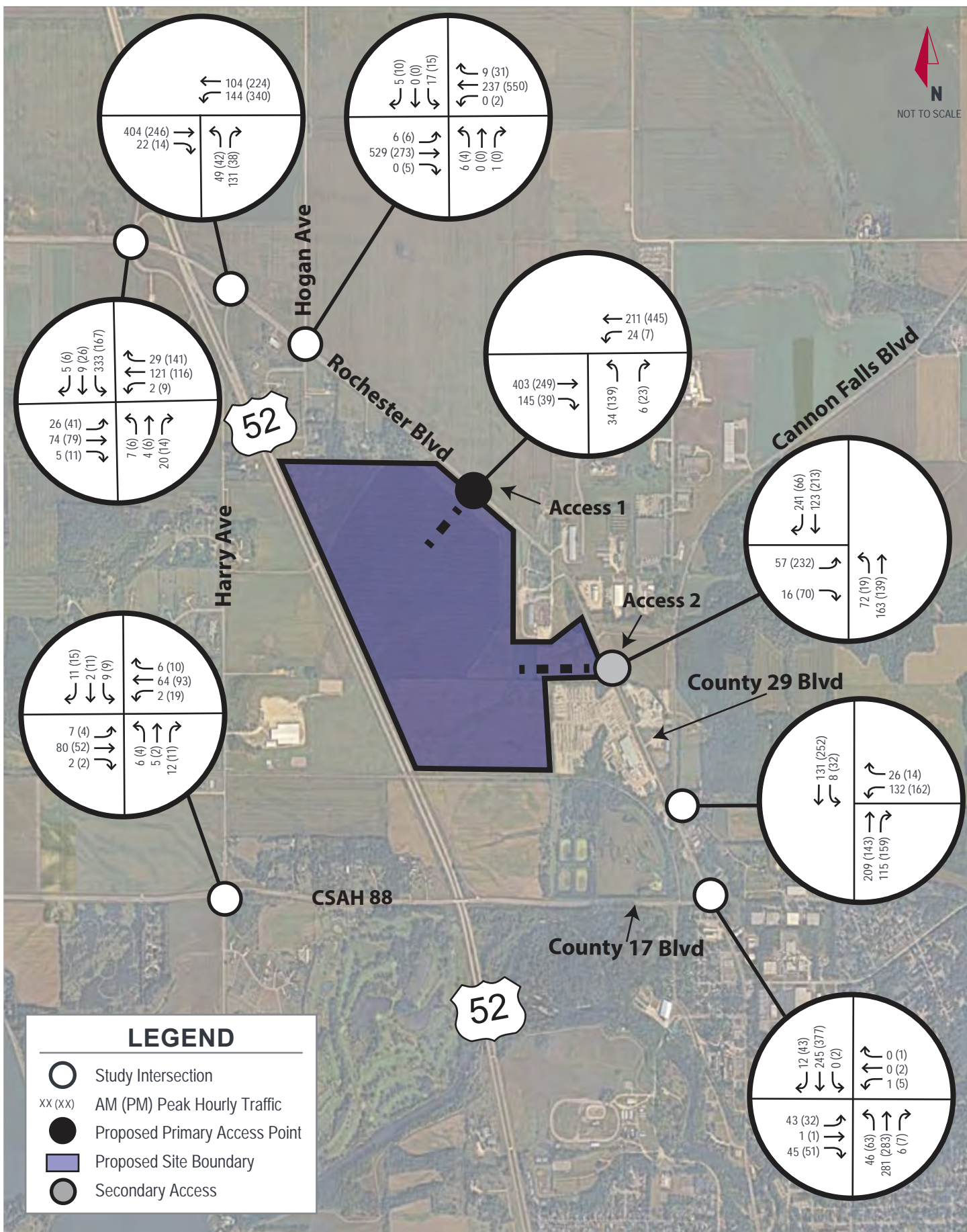


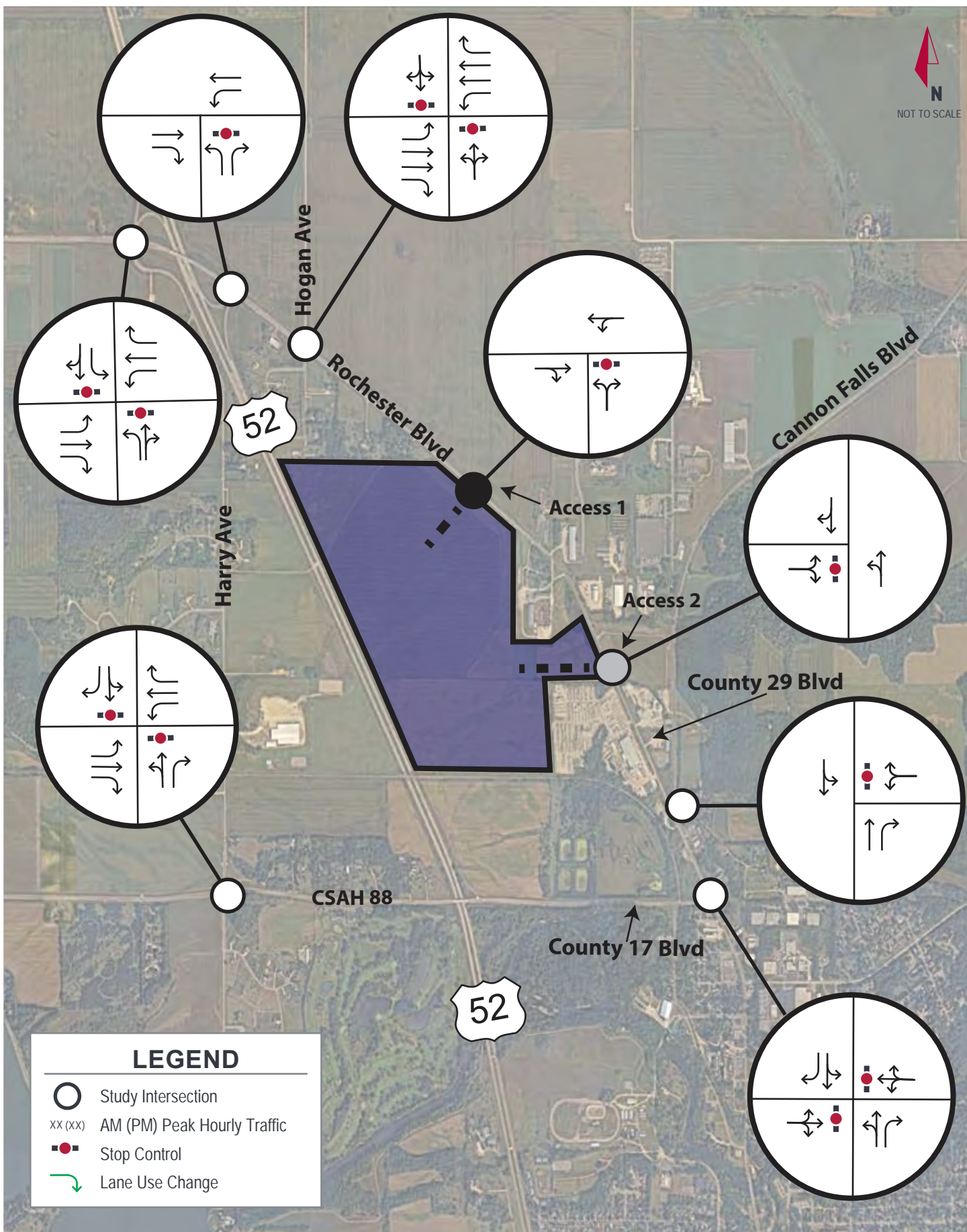


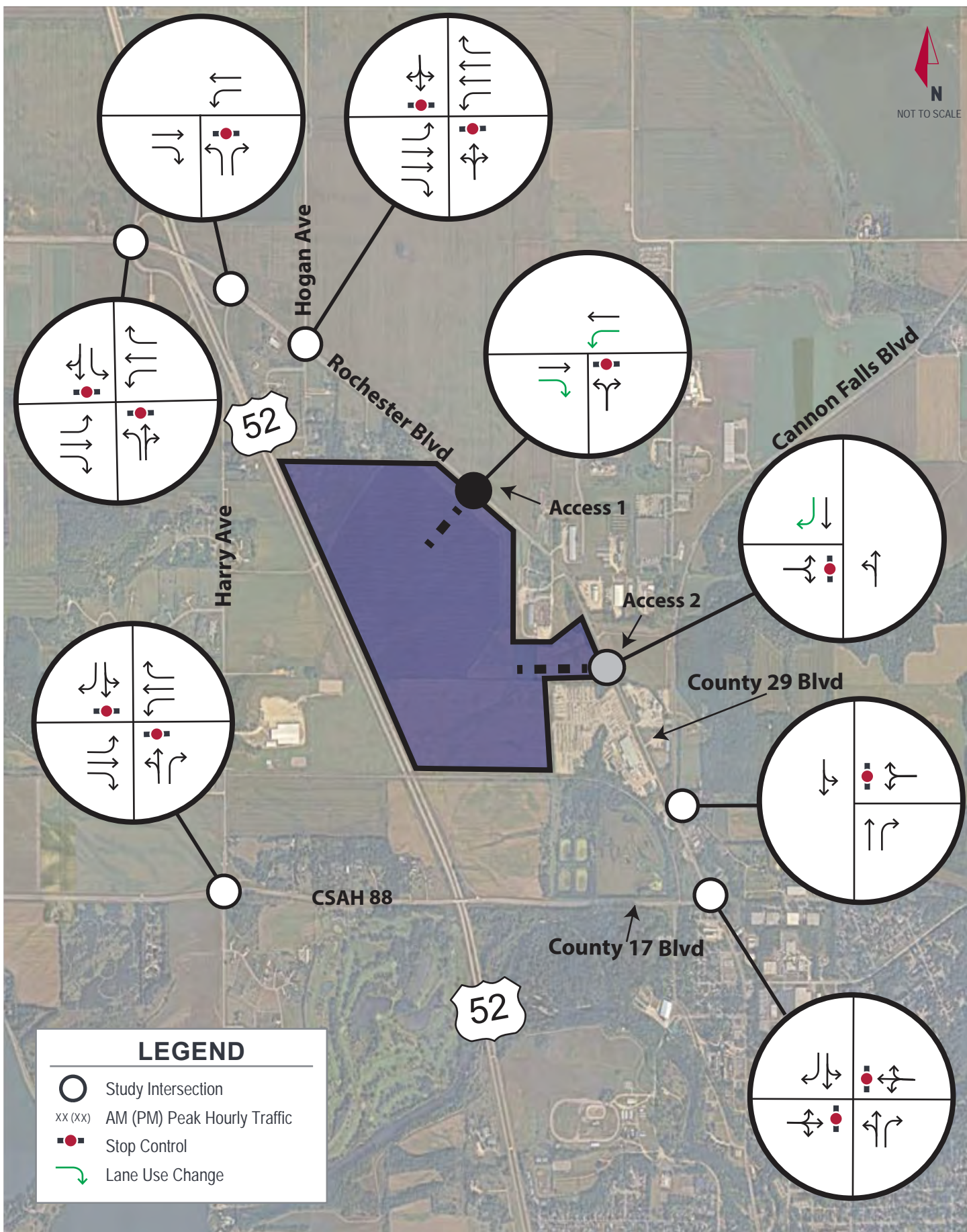












B. Turning Movement Counts





Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Hwy 52 SB & Rochester
Blvd/Harry Ave
Site Code:
Start Date: 10/30/2024
Page No: 1

Turning Movement Data

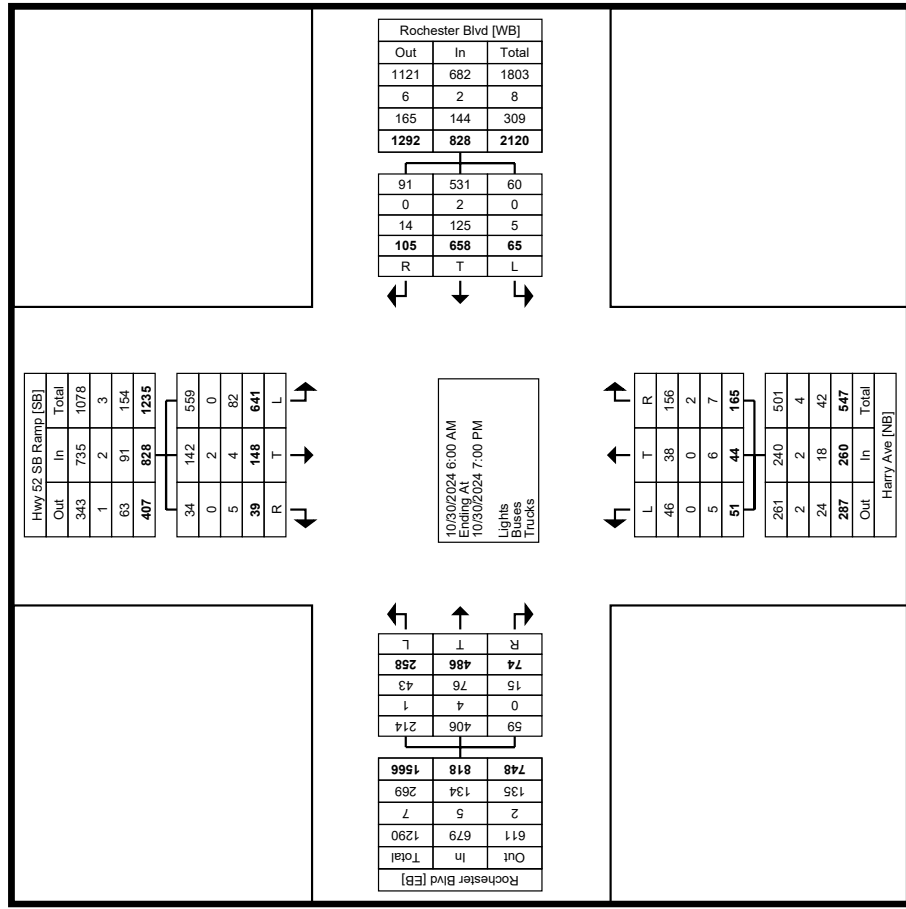
Start Time	Rochester Blvd Eastbound				Rochester Blvd Westbound				Harry Ave Northbound				Hwy 52 SB Ramp Southbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
6:00 AM	4	5	0	9	0	11	1	12	0	0	2	2	9	0	0	9
6:15 AM	4	8	0	12	0	12	1	13	1	0	7	8	15	0	0	15
6:30 AM	6	9	0	15	0	12	1	13	2	0	5	7	8	1	0	9
6:45 AM	4	17	0	21	1	17	0	18	0	0	3	3	34	4	0	38
Hourly Total	18	39	0	57	1	52	3	56	3	0	17	20	66	5	0	71
7:00 AM	3	9	2	14	0	21	0	21	0	1	4	5	11	0	1	12
7:15 AM	6	6	1	13	1	18	1	20	4	0	4	8	15	1	2	18
7:30 AM	8	8	1	17	0	36	0	36	2	2	5	9	14	2	1	17
7:45 AM	7	15	2	24	1	19	1	21	1	0	4	5	10	1	0	11
Hourly Total	24	38	6	68	2	94	2	98	7	3	17	27	50	4	4	58
8:00 AM	11	15	0	26	6	9	0	15	1	3	1	5	10	4	0	14
8:15 AM	5	14	1	20	1	11	3	15	0	0	3	3	9	0	0	9
8:30 AM	2	8	0	10	2	11	2	15	0	0	0	0	8	5	3	16
8:45 AM	1	7	0	8	0	12	1	13	0	0	2	2	17	3	2	22
Hourly Total	19	44	1	64	9	43	6	58	1	3	6	10	44	12	5	61
9:00 AM	4	11	1	16	1	7	2	10	1	1	2	4	9	4	1	14
9:15 AM	3	6	2	11	2	10	1	13	1	0	2	3	6	5	0	11
9:30 AM	6	5	3	14	1	9	3	13	0	1	3	4	16	1	1	18
9:45 AM	6	4	2	12	1	17	1	19	0	0	1	1	4	3	0	7
Hourly Total	19	26	8	53	5	43	7	55	2	2	8	12	35	13	2	50
10:00 AM	2	8	0	10	1	5	2	8	0	0	1	1	8	2	2	12
10:15 AM	3	5	1	9	1	7	0	8	0	0	2	2	11	0	1	12
10:30 AM	3	4	2	9	0	8	1	9	1	1	1	3	9	3	0	12
10:45 AM	3	11	5	19	2	9	4	15	1	0	3	4	8	4	0	12
Hourly Total	11	28	8	47	4	29	7	40	2	1	7	10	36	9	3	48
11:00 AM	8	6	2	16	4	9	2	15	0	0	6	6	8	4	0	12
11:15 AM	5	6	2	13	0	11	3	14	0	0	3	3	9	1	2	12
11:30 AM	5	3	1	9	3	9	2	14	1	1	2	4	7	3	4	14
11:45 AM	3	8	1	12	1	9	1	11	0	1	2	3	9	2	1	12
Hourly Total	21	23	6	50	8	38	8	54	1	2	13	16	33	10	7	50
12:00 PM	2	6	2	10	2	11	2	15	0	1	7	8	8	2	0	10
12:15 PM	1	7	2	10	0	7	1	8	0	0	4	4	7	5	2	14
12:30 PM	5	5	5	15	0	8	1	9	1	1	6	8	14	2	1	17
12:45 PM	4	8	2	14	3	9	4	16	2	0	5	7	7	6	1	14
Hourly Total	12	26	11	49	5	35	8	48	3	2	22	27	36	15	4	55
1:00 PM	6	10	2	18	1	6	1	8	3	0	4	7	12	1	0	13

1:15 PM	2	10	2	14	3	21	2	26	0	0	0	0	8	1	0	9	49
1:30 PM	10	9	0	19	3	11	2	16	1	1	0	2	7	4	0	11	48
1:45 PM	3	5	0	8	3	14	2	19	1	2	2	5	14	3	0	17	49
Hourly Total	21	34	4	59	10	52	7	69	5	3	6	14	41	9	0	50	192
2:00 PM	3	12	1	16	0	11	1	12	2	1	5	8	9	3	1	13	49
2:15 PM	4	6	1	11	1	13	6	20	0	1	4	5	8	3	1	12	48
2:30 PM	7	15	0	22	1	21	4	26	2	1	0	3	17	4	0	21	72
2:45 PM	3	8	0	11	2	11	4	17	0	5	3	8	19	4	0	23	59
Hourly Total	17	41	2	60	4	56	15	75	4	8	12	24	53	14	2	69	228
3:00 PM	10	29	1	40	2	13	2	17	2	2	5	9	15	2	1	18	84
3:15 PM	10	7	3	20	1	18	2	21	0	0	2	2	14	8	0	22	65
3:30 PM	4	13	6	23	1	17	3	21	0	0	4	4	16	4	1	21	69
3:45 PM	9	15	2	26	2	17	12	31	0	2	3	5	18	4	3	25	87
Hourly Total	33	64	12	109	6	65	19	90	2	4	14	20	63	18	5	86	305
4:00 PM	11	13	2	26	2	17	3	22	1	2	3	6	15	7	0	22	76
4:15 PM	10	10	4	24	3	16	3	22	3	1	3	7	19	4	2	25	78
4:30 PM	3	13	1	17	0	25	2	27	1	0	1	2	18	6	0	24	70
4:45 PM	3	16	2	21	1	15	0	16	4	1	2	7	27	2	1	30	74
Hourly Total	27	52	9	88	6	73	8	87	9	4	9	22	79	19	3	101	298
5:00 PM	8	10	1	19	2	10	5	17	1	6	7	14	24	4	0	28	78
5:15 PM	6	9	1	16	0	14	1	15	0	2	7	9	13	3	0	16	56
5:30 PM	3	8	0	11	1	17	3	21	2	0	8	10	18	3	1	22	64
5:45 PM	9	9	0	18	2	6	1	9	4	2	4	10	16	3	0	19	56
Hourly Total	26	36	2	64	5	47	10	62	7	10	26	43	71	13	1	85	254
6:00 PM	4	12	1	17	0	9	0	9	4	1	2	7	11	2	0	13	46
6:15 PM	3	13	1	17	0	11	0	11	0	1	1	2	10	3	1	14	44
6:30 PM	1	6	2	9	0	5	3	8	1	0	3	4	4	1	0	5	26
6:45 PM	2	4	1	7	0	6	2	8	0	0	2	2	9	1	2	12	29
Hourly Total	10	35	5	50	0	31	5	36	5	2	8	15	34	7	3	44	145
Grand Total	258	486	74	818	65	658	105	828	51	44	165	260	641	148	39	828	2734
Approach %	31.5	59.4	9.0	-	7.9	79.5	12.7	-	19.6	16.9	63.5	-	77.4	17.9	4.7	-	-
Total %	9.4	17.8	2.7	29.9	2.4	24.1	3.8	30.3	1.9	1.6	6.0	9.5	23.4	5.4	1.4	30.3	-
Lights	214	406	59	679	60	531	91	682	46	38	156	240	559	142	34	735	2336
% Lights	82.9	83.5	79.7	83.0	92.3	80.7	86.7	82.4	90.2	86.4	94.5	92.3	87.2	95.9	87.2	88.8	85.4
Buses	1	4	0	5	0	2	0	2	0	0	2	2	0	2	0	2	11
% Buses	0.4	0.8	0.0	0.6	0.0	0.3	0.0	0.2	0.0	0.0	1.2	0.8	0.0	1.4	0.0	0.2	0.4
Trucks	43	76	15	134	5	125	14	144	5	6	7	18	82	4	5	91	387
% Trucks	16.7	15.6	20.3	16.4	7.7	19.0	13.3	17.4	9.8	13.6	4.2	6.9	12.8	2.7	12.8	11.0	14.2



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: Hwy 52 SB & Rochester
Blvd/Harry Ave
Site Code:
Start Date: 10/30/2024
Page No: 3



Turning Movement Data Plot



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Hwy 52 SB & Rochester
Bld/Harry Ave
Site Code:
Start Date: 10/30/2024
Page No: 4

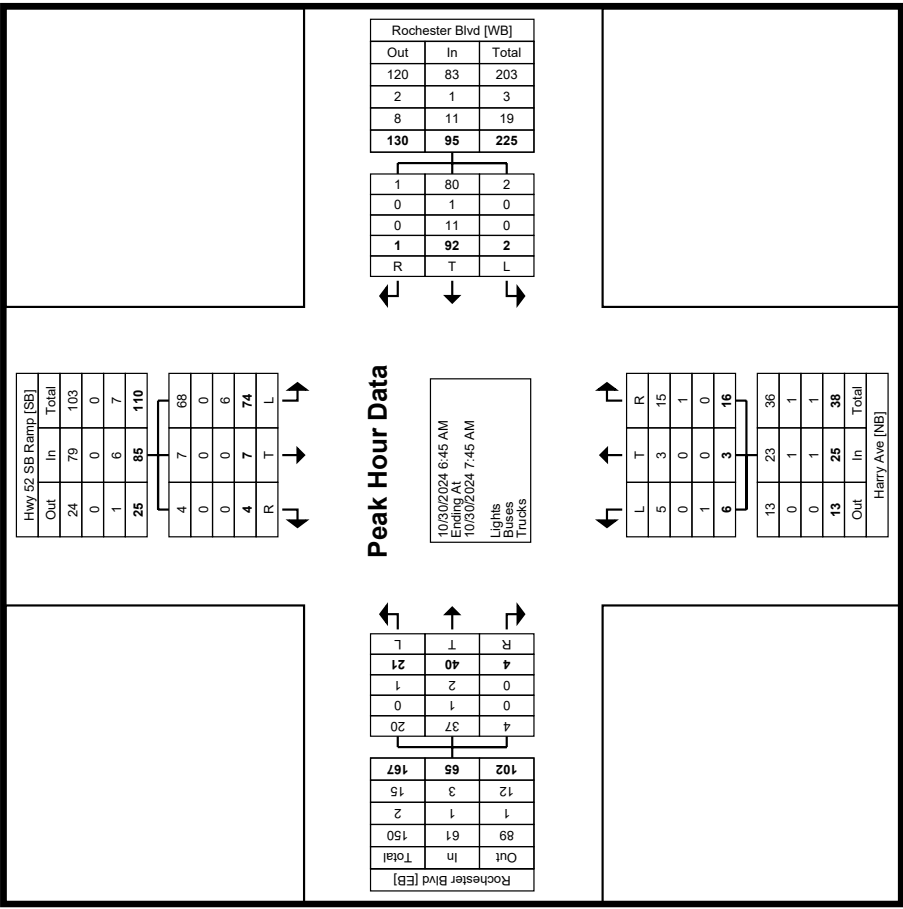
Turning Movement Peak Hour Data (6:45 AM)

Start Time	Rochester Blvd Eastbound				Rochester Blvd Westbound				Harry Ave Northbound				Hwy 52 SB Ramp Southbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
6:45 AM	4	17	0	21	1	17	0	18	0	1	4	3	34	4	0	38
7:00 AM	3	9	2	14	0	21	0	21	0	1	4	5	11	0	1	12
7:15 AM	6	6	1	13	1	18	1	20	4	0	4	8	15	1	2	18
7:30 AM	8	8	1	17	0	36	0	36	2	2	5	9	14	2	1	17
Total	21	40	4	65	2	92	1	95	6	3	16	25	74	7	4	85
Approach %	32.3	61.5	6.2	-	2.1	96.8	1.1	-	24.0	12.0	64.0	-	87.1	8.2	4.7	-
Total %	7.8	14.8	1.5	24.1	0.7	34.1	0.4	35.2	2.2	1.1	5.9	9.3	27.4	2.6	1.5	31.5
PHF	0.656	0.588	0.500	0.774	0.500	0.639	0.250	0.660	0.375	0.375	0.900	0.694	0.544	0.438	0.500	0.559
% Lights	95.2	92.5	100.0	93.8	100.0	87.0	100.0	87.4	83.3	100.0	93.8	92.0	91.9	100.0	100.0	92.9
Buses	0	1	0	1	0	1	0	1	0	0	1	1	0	0	0	0
% Buses	0.0	2.5	0.0	1.5	0.0	1.1	0.0	1.1	0.0	0.0	6.3	4.0	0.0	0.0	0.0	0.0
Trucks	1	2	0	3	0	11	0	11	1	0	0	1	6	0	0	6
% Trucks	4.8	5.0	0.0	4.6	0.0	12.0	0.0	11.6	16.7	0.0	0.0	4.0	8.1	0.0	0.0	7.1



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: Hwy 52 SB & Rochester
Blvd/Harry Ave
Site Code:
Start Date: 10/30/2024
Page No: 5



Peak Hour Data

10/30/2024 6:45 AM
Ending At
10/30/2024 7:45 AM
Lights
Buses
Trucks

Turning Movement Peak Hour Data Plot (6:45 AM)



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Hwy 52 SB & Rochester
Blvd/Harry Ave
Site Code:
Start Date: 10/30/2024
Page No: 6

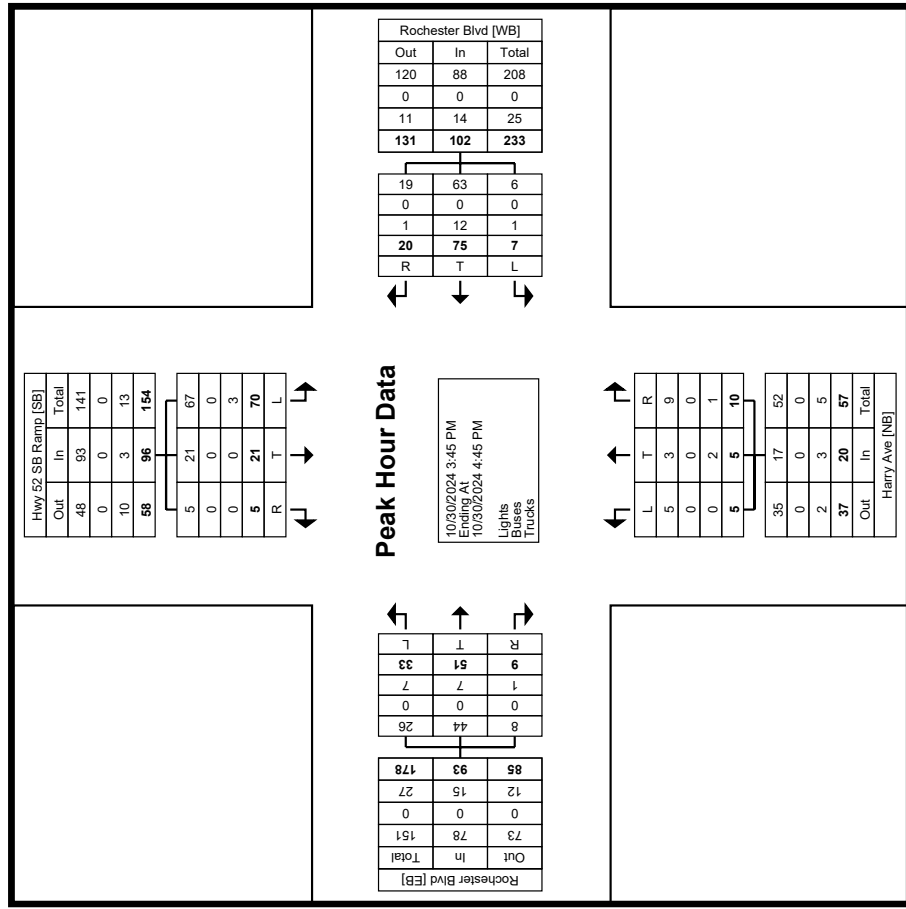
Turning Movement Peak Hour Data (3:45 PM)

Start Time	Rochester Blvd Eastbound				Rochester Blvd Westbound				Harry Ave Northbound				Hwy 52 SB Ramp Southbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
3:45 PM	9	15	2	26	2	17	12	31	0	2	3	5	18	4	3	25
4:00 PM	11	13	2	26	2	17	3	22	1	2	3	6	15	7	0	22
4:15 PM	10	10	4	24	3	16	3	22	3	1	3	7	19	4	2	25
4:30 PM	3	13	1	17	0	25	2	27	1	0	1	2	18	6	0	24
Total	33	51	9	93	7	75	20	102	5	5	10	20	70	21	5	96
Approach %	35.5	54.8	9.7	-	6.9	73.5	19.6	-	25.0	25.0	50.0	-	72.9	21.9	5.2	-
Total %	10.6	16.4	2.9	29.9	2.3	24.1	6.4	32.8	1.6	1.6	3.2	6.4	22.5	6.8	1.6	30.9
PHF	0.750	0.850	0.563	0.894	0.583	0.750	0.417	0.823	0.417	0.625	0.833	0.714	0.921	0.750	0.417	0.980
% Lights	78.8	86.3	88.9	83.9	85.7	84.0	95.0	86.3	100.0	60.0	90.0	85.0	95.7	100.0	100.0	96.9
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Trucks	7	7	1	15	1	12	1	14	0	2	1	3	3	0	0	3
% Trucks	21.2	13.7	11.1	16.1	14.3	16.0	5.0	13.7	0.0	40.0	10.0	15.0	4.3	0.0	0.0	3.1



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: Hwy 52 SB & Rochester
Blvd/Harry Ave
Site Code:
Start Date: 10/30/2024
Page No: 7



Turning Movement Peak Hour Data Plot (3:45 PM)



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Hwy 52 NB & Rochester Blvd
Site Code:
Start Date: 10/30/2024
Page No: 1

Turning Movement Data

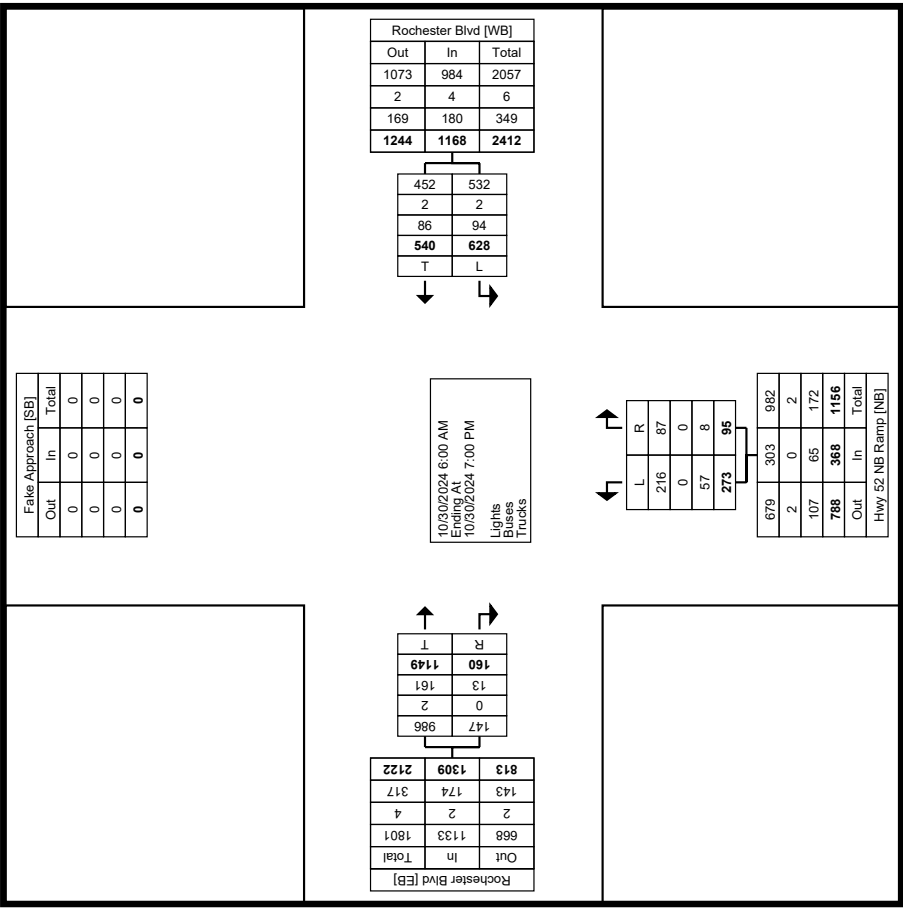
Start Time	Rochester Blvd Eastbound				Rochester Blvd Westbound				Hwy 52 NB Ramp Northbound			
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Left	Right	Int. Total
6:00 AM	16	1	17	15	8	23	6	3	9	6	3	49
6:15 AM	21	9	30	27	9	36	3	3	6	6	3	72
6:30 AM	17	7	24	22	8	30	2	3	5	5	3	59
6:45 AM	47	3	50	15	10	25	7	3	10	10	3	85
Hourly Total	101	20	121	79	35	114	18	12	30	30	12	265
7:00 AM	24	3	27	20	11	31	7	2	9	9	2	67
7:15 AM	19	4	23	19	15	34	7	1	8	8	1	65
7:30 AM	19	8	27	16	20	36	18	2	20	20	2	83
7:45 AM	26	3	29	15	10	25	10	2	12	12	2	66
Hourly Total	88	18	106	70	56	126	42	7	49	49	7	281
8:00 AM	23	3	26	16	8	24	3	1	4	4	1	54
8:15 AM	24	2	26	10	8	18	8	1	9	9	1	53
8:30 AM	17	0	17	8	8	16	7	4	11	11	4	44
8:45 AM	21	2	23	10	10	20	3	1	4	4	1	47
Hourly Total	85	7	92	44	34	78	21	7	28	28	7	198
9:00 AM	21	2	23	6	5	11	6	1	7	7	1	41
9:15 AM	15	1	16	13	7	20	3	1	4	4	1	40
9:30 AM	24	2	26	7	7	14	7	1	8	8	1	48
9:45 AM	10	2	12	5	12	17	7	0	7	7	0	36
Hourly Total	70	7	77	31	31	62	23	3	26	26	3	165
10:00 AM	16	2	18	8	5	13	1	1	2	2	1	33
10:15 AM	19	2	21	11	5	16	4	1	5	5	1	42
10:30 AM	13	1	14	7	5	12	5	3	8	8	3	34
10:45 AM	18	5	23	10	8	18	3	3	6	6	3	47
Hourly Total	66	10	76	36	23	59	13	8	21	21	8	156
11:00 AM	15	4	19	5	11	16	3	1	4	4	1	39
11:15 AM	13	4	17	14	10	24	3	2	5	5	2	46
11:30 AM	9	3	12	11	12	23	3	2	5	5	2	40
11:45 AM	18	2	20	8	7	15	5	1	6	6	1	41
Hourly Total	55	13	68	38	40	78	14	6	20	20	6	166
12:00 PM	15	5	20	11	10	21	2	1	3	3	1	44
12:15 PM	16	3	19	9	4	13	4	2	6	6	2	38
12:30 PM	19	4	23	9	9	18	3	2	5	5	2	46
12:45 PM	16	6	22	14	11	25	2	4	6	6	4	53
Hourly Total	66	18	84	43	34	77	11	9	20	20	9	181
1:00 PM	21	3	24	10	7	17	3	3	6	6	3	47

1:15 PM	19	1	20	7	16	23	8	3	11	54
1:30 PM	13	2	15	8	12	20	5	0	5	40
1:45 PM	18	2	20	7	9	16	10	1	11	47
Hourly Total	71	8	79	32	44	76	26	7	33	188
2:00 PM	23	2	25	11	9	20	5	2	7	52
2:15 PM	16	3	19	7	13	20	4	5	9	48
2:30 PM	30	2	32	15	21	36	7	1	8	76
2:45 PM	31	1	32	10	10	20	6	2	8	60
Hourly Total	100	8	108	43	53	96	22	10	32	236
3:00 PM	47	2	49	25	11	36	7	1	8	93
3:15 PM	22	1	23	19	11	30	8	0	8	61
3:30 PM	33	5	38	30	14	44	8	1	9	91
3:45 PM	30	3	33	13	25	38	8	2	10	81
Hourly Total	132	11	143	87	61	148	31	4	35	326
4:00 PM	27	4	31	11	12	23	8	1	9	63
4:15 PM	29	3	32	19	18	37	4	1	5	74
4:30 PM	33	1	34	17	15	32	10	5	15	81
4:45 PM	42	2	44	6	9	15	7	3	10	69
Hourly Total	131	10	141	53	54	107	29	10	39	287
5:00 PM	33	6	39	20	12	32	5	3	8	79
5:15 PM	24	6	30	14	11	25	4	0	4	59
5:30 PM	28	6	34	13	17	30	4	1	5	69
5:45 PM	28	3	31	4	6	10	3	3	6	47
Hourly Total	113	21	134	51	46	97	16	7	23	254
6:00 PM	25	2	27	8	7	15	3	0	3	45
6:15 PM	22	2	24	8	7	15	2	2	4	43
6:30 PM	11	3	14	3	7	10	1	1	2	26
6:45 PM	13	2	15	2	8	10	1	2	3	28
Hourly Total	71	9	80	21	29	50	7	5	12	142
Grand Total	1149	160	1309	628	540	1168	273	95	368	2845
Approach %	87.8	12.2	-	53.8	46.2	-	74.2	25.8	-	-
Total %	40.4	5.6	46.0	22.1	19.0	41.1	9.6	3.3	12.9	-
Lights	986	147	1133	532	452	984	216	87	303	2420
% Lights	85.8	91.9	86.6	84.7	83.7	84.2	79.1	91.6	82.3	85.1
Buses	2	0	2	2	2	4	0	0	0	6
% Buses	0.2	0.0	0.2	0.3	0.4	0.3	0.0	0.0	0.0	0.2
Trucks	161	13	174	94	86	180	57	8	65	419
% Trucks	14.0	8.1	13.3	15.0	15.9	15.4	20.9	8.4	17.7	14.7



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: Hwy 52 NB & Rochester Blvd
Site Code:
Start Date: 10/30/2024
Page No: 3



Turning Movement Data Plot



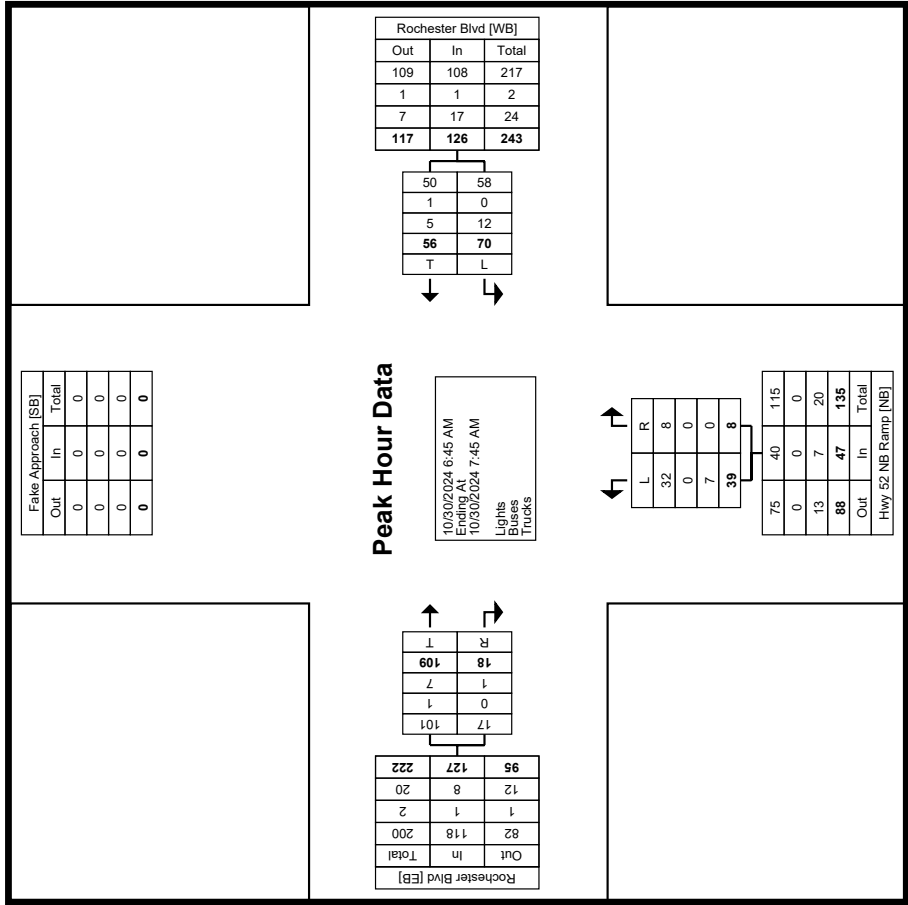
Turning Movement Peak Hour Data (6:45 AM)

Start Time	Rochester Blvd Eastbound			Rochester Blvd Westbound			Hwy 52 NB Ramp			
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
6:45 AM	47	3	50	15	10	25	7	3	10	85
7:00 AM	24	3	27	20	11	31	7	2	9	67
7:15 AM	19	4	23	19	15	34	7	1	8	65
7:30 AM	19	8	27	16	20	36	18	2	20	83
Total	109	18	127	70	56	126	39	8	47	300
Approach %	85.8	14.2	-	55.6	44.4	-	83.0	17.0	-	-
Total %	36.3	6.0	42.3	23.3	18.7	42.0	13.0	2.7	15.7	-
PHF	0.580	0.563	0.635	0.875	0.700	0.875	0.542	0.667	0.588	0.882
Lights	101	17	118	58	50	108	32	8	40	266
% Lights	92.7	94.4	92.9	82.9	89.3	85.7	82.1	100.0	85.1	88.7
Buses	1	0	1	0	1	1	0	0	0	2
% Buses	0.9	0.0	0.8	0.0	1.8	0.8	0.0	0.0	0.0	0.7
Trucks	7	1	8	12	5	17	7	0	7	32
% Trucks	6.4	5.6	6.3	17.1	8.9	13.5	17.9	0.0	14.9	10.7



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: Hwy 52 NB & Rochester Blvd
Site Code:
Start Date: 10/30/2024
Page No: 5



Turning Movement Peak Hour Data Plot (6:45 AM)



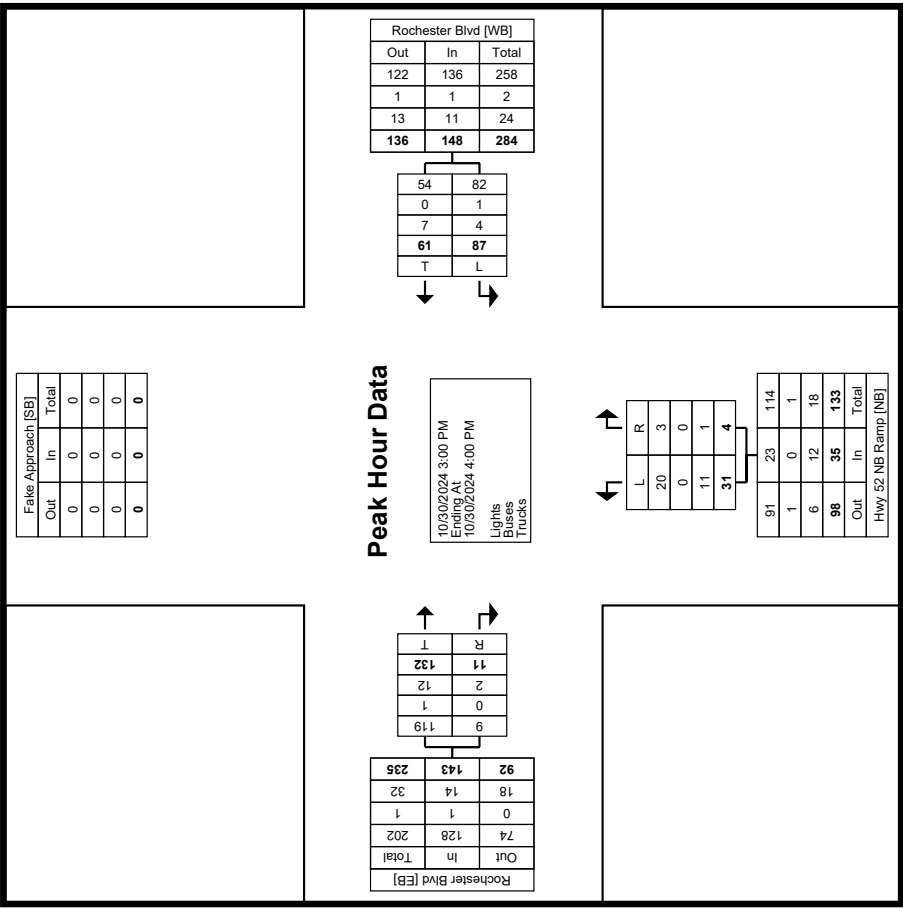
Turning Movement Peak Hour Data (3:00 PM)

Start Time	Rochester Blvd Eastbound			Rochester Blvd Westbound			Hwy 52 NB Ramp Northbound			
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
3:00 PM	47	2	49	25	11	36	7	1	8	93
3:15 PM	22	1	23	19	11	30	8	0	8	61
3:30 PM	33	5	38	30	14	44	8	1	9	91
3:45 PM	30	3	33	13	25	38	8	2	10	81
Total	132	11	143	87	61	148	31	4	35	326
Approach %	92.3	7.7	-	58.8	41.2	-	88.6	11.4	-	-
Total %	40.5	3.4	43.9	26.7	18.7	45.4	9.5	1.2	10.7	-
PHF	0.702	0.550	0.730	0.725	0.610	0.841	0.969	0.500	0.875	0.876
Lights	119	9	128	82	54	136	20	3	23	287
% Lights	90.2	81.8	89.5	94.3	88.5	91.9	64.5	75.0	65.7	88.0
Buses	1	0	1	1	0	1	0	0	0	2
% Buses	0.8	0.0	0.7	1.1	0.0	0.7	0.0	0.0	0.0	0.6
Trucks	12	2	14	4	7	11	11	1	12	37
% Trucks	9.1	18.2	9.8	4.6	11.5	7.4	35.5	25.0	34.3	11.3



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: Hwy 52 NB & Rochester Blvd
Site Code:
Start Date: 10/30/2024
Page No: 7



Turning Movement Peak Hour Data Plot (3:00 PM)



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Rochester Blvd & Hogan Ave
Site Code:
Start Date: 10/30/2024
Page No: 1

Turning Movement Data

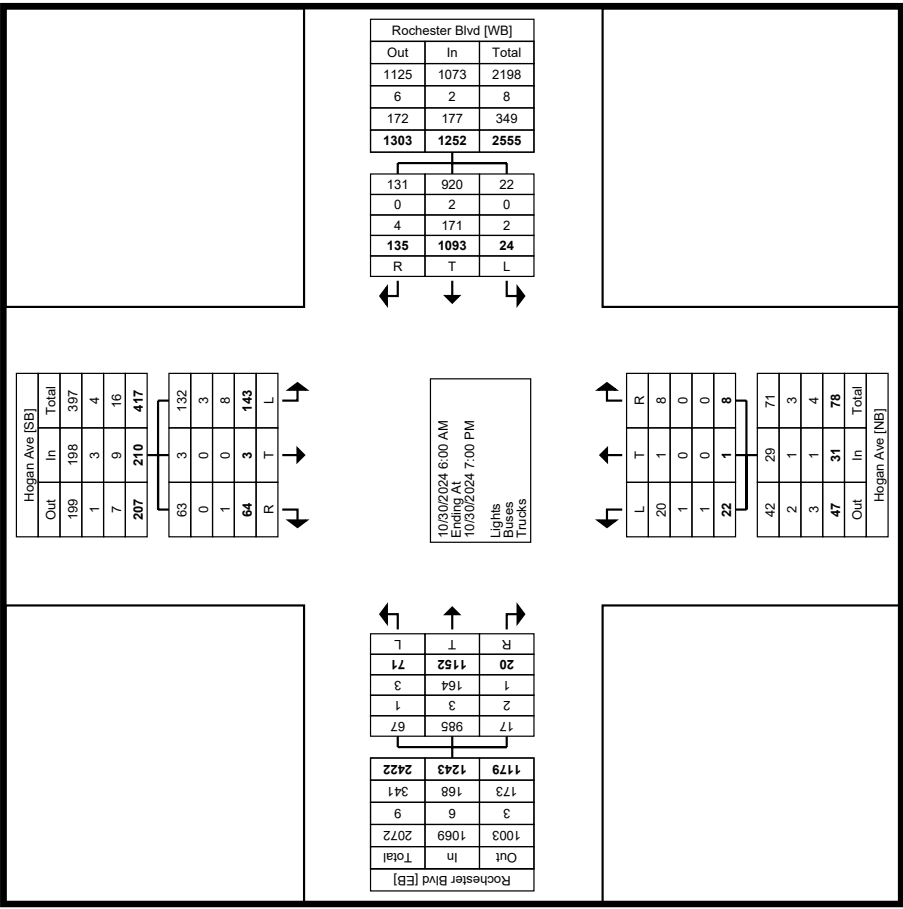
Start Time	Rochester Blvd Eastbound				Rochester Blvd Westbound				Hogan Ave Northbound				Hogan Ave Southbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
6:00 AM	1	18	0	19	0	25	1	26	0	0	0	0	1	0	0	1
6:15 AM	3	21	0	24	0	30	3	33	1	0	0	1	4	0	3	7
6:30 AM	0	18	0	18	0	32	2	34	0	0	0	0	3	0	2	5
6:45 AM	2	48	0	50	0	23	0	23	1	0	0	1	4	0	2	6
Hourly Total	6	105	0	111	0	110	6	116	2	0	0	2	12	0	7	19
7:00 AM	3	21	0	24	0	29	3	32	2	0	0	2	3	0	0	3
7:15 AM	0	22	0	22	0	33	3	36	0	0	0	0	4	0	1	5
7:30 AM	0	21	0	21	0	32	1	33	2	0	1	3	3	0	1	4
7:45 AM	2	25	0	27	0	20	1	21	1	0	0	1	4	0	5	9
Hourly Total	5	89	0	94	0	114	8	122	5	0	1	6	14	0	7	21
8:00 AM	1	23	1	25	2	24	3	29	0	0	0	0	2	0	0	2
8:15 AM	1	24	0	25	0	13	0	13	1	0	0	1	1	0	2	3
8:30 AM	0	20	1	21	0	17	1	18	1	0	0	1	0	0	0	0
8:45 AM	1	22	0	23	0	19	1	20	0	0	0	0	4	0	3	7
Hourly Total	3	89	2	94	2	73	5	80	2	0	0	2	7	0	5	12
9:00 AM	0	20	1	21	2	11	3	16	0	0	1	1	4	0	0	4
9:15 AM	0	15	0	15	0	21	2	23	0	0	0	0	0	0	1	1
9:30 AM	0	25	0	25	0	12	0	12	0	0	0	0	1	0	1	2
9:45 AM	0	10	0	10	0	15	0	15	0	0	0	0	3	0	2	5
Hourly Total	0	70	1	71	2	59	5	66	0	0	1	1	8	0	4	12
10:00 AM	3	15	0	18	4	15	1	20	0	0	0	0	1	0	0	1
10:15 AM	0	21	0	21	1	14	2	17	0	0	0	0	1	0	2	3
10:30 AM	0	18	0	18	0	13	3	16	1	0	0	1	1	0	0	1
10:45 AM	4	18	0	22	1	16	2	19	0	0	0	0	1	0	2	3
Hourly Total	7	72	0	79	6	58	8	72	1	0	0	1	4	0	4	8
11:00 AM	1	14	0	15	0	15	2	17	0	0	0	0	4	0	2	6
11:15 AM	1	14	0	15	0	22	4	26	0	0	0	0	4	0	1	5
11:30 AM	1	11	0	12	0	24	1	25	0	0	0	0	3	0	0	3
11:45 AM	1	14	0	15	1	13	1	15	0	0	0	0	0	0	4	4
Hourly Total	4	53	0	57	1	74	8	83	0	0	0	0	11	0	7	18
12:00 PM	0	14	1	15	0	19	2	21	0	1	0	1	5	0	1	6
12:15 PM	0	18	0	18	0	11	3	14	1	0	0	1	2	0	1	3
12:30 PM	0	23	0	23	0	17	2	19	0	0	0	0	2	0	0	2
12:45 PM	1	16	1	18	0	22	2	24	0	0	0	0	3	0	2	5
Hourly Total	1	71	2	74	0	69	9	78	1	1	0	2	12	0	4	16
1:00 PM	2	22	0	24	2	17	1	20	0	0	0	0	0	0	0	0

1:15 PM	4	17	1	22	0	21	3	24	0	0	0	0	0	5	0	2	7	53
1:30 PM	1	15	0	16	1	18	0	19	2	0	0	0	2	5	1	1	7	44
1:45 PM	0	18	0	18	0	17	2	19	0	0	0	0	0	2	0	1	3	40
Hourly Total	7	72	1	80	3	73	6	82	2	0	0	0	2	12	1	4	17	181
2:00 PM	2	23	0	25	1	18	4	23	0	0	1	1	1	0	0	1	1	50
2:15 PM	4	16	1	21	1	18	6	25	1	0	0	1	1	3	0	0	3	50
2:30 PM	2	29	0	31	0	36	3	39	0	0	0	0	0	3	0	0	3	73
2:45 PM	2	29	1	32	0	18	4	22	0	0	0	0	0	7	0	2	9	63
Hourly Total	10	97	2	109	2	90	17	109	1	0	1	2	2	13	0	3	16	236
3:00 PM	3	47	3	53	0	39	5	44	1	0	0	0	1	3	0	0	3	101
3:15 PM	0	23	0	23	1	24	6	31	1	0	0	0	1	3	0	1	4	59
3:30 PM	1	32	0	33	0	46	7	53	0	0	0	0	0	1	0	1	2	88
3:45 PM	1	33	1	35	1	28	7	36	1	0	0	1	1	5	0	6	11	83
Hourly Total	5	135	4	144	2	137	25	164	3	0	0	0	3	12	0	8	20	331
4:00 PM	0	26	1	27	0	24	6	30	0	0	0	0	0	7	0	0	7	64
4:15 PM	0	29	1	30	0	34	7	41	1	0	0	0	1	1	0	2	3	75
4:30 PM	4	32	0	36	0	29	2	31	1	0	0	0	1	3	1	0	4	72
4:45 PM	2	38	2	42	1	15	3	19	1	0	0	0	1	2	0	0	2	64
Hourly Total	6	125	4	135	1	102	18	121	3	0	0	0	3	13	1	2	16	275
5:00 PM	4	32	2	38	0	29	3	32	0	0	1	1	1	4	0	3	7	78
5:15 PM	1	21	1	23	1	25	2	28	0	0	0	0	0	8	0	0	8	59
5:30 PM	2	28	0	30	0	27	3	30	1	0	0	0	1	2	0	2	4	65
5:45 PM	1	27	0	28	0	10	2	12	0	0	0	0	0	4	1	1	6	46
Hourly Total	8	108	3	119	1	91	10	102	1	0	1	2	2	18	1	6	25	248
6:00 PM	4	21	0	25	1	11	2	14	0	0	2	2	2	2	0	2	4	45
6:15 PM	1	22	1	24	1	14	5	20	0	0	1	1	1	1	0	0	1	46
6:30 PM	1	10	0	11	2	11	3	16	0	0	1	1	1	3	0	1	4	32
6:45 PM	3	13	0	16	0	7	0	7	1	0	0	0	1	1	0	0	1	25
Hourly Total	9	66	1	76	4	43	10	57	1	0	4	5	5	7	0	3	10	148
Grand Total	71	1152	20	1243	24	1093	135	1252	22	1	8	31	31	143	3	64	210	2736
Approach %	5.7	92.7	1.6	-	1.9	87.3	10.8	-	71.0	3.2	25.8	-	-	68.1	1.4	30.5	-	-
Total %	2.6	42.1	0.7	45.4	0.9	39.9	4.9	45.8	0.8	0.0	0.3	1.1	1.1	5.2	0.1	2.3	7.7	-
Lights	67	985	17	1069	22	920	131	1073	20	1	8	29	29	132	3	63	198	2369
% Lights	94.4	85.5	85.0	86.0	91.7	84.2	97.0	85.7	90.9	100.0	100.0	93.5	93.5	92.3	100.0	98.4	94.3	86.6
Buses	1	3	2	6	0	2	0	2	1	0	0	1	1	3	0	0	3	12
% Buses	1.4	0.3	10.0	0.5	0.0	0.2	0.0	0.2	4.5	0.0	0.0	3.2	3.2	2.1	0.0	0.0	1.4	0.4
Trucks	3	164	1	168	2	171	4	177	1	0	0	1	1	8	0	1	9	355
% Trucks	4.2	14.2	5.0	13.5	8.3	15.6	3.0	14.1	4.5	0.0	0.0	3.2	3.2	5.6	0.0	1.6	4.3	13.0



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: Rochester Blvd & Hogan Ave
Site Code:
Start Date: 10/30/2024
Page No: 3



Turning Movement Data Plot



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Rochester Blvd & Hogan Ave
Site Code:
Start Date: 10/30/2024
Page No: 4

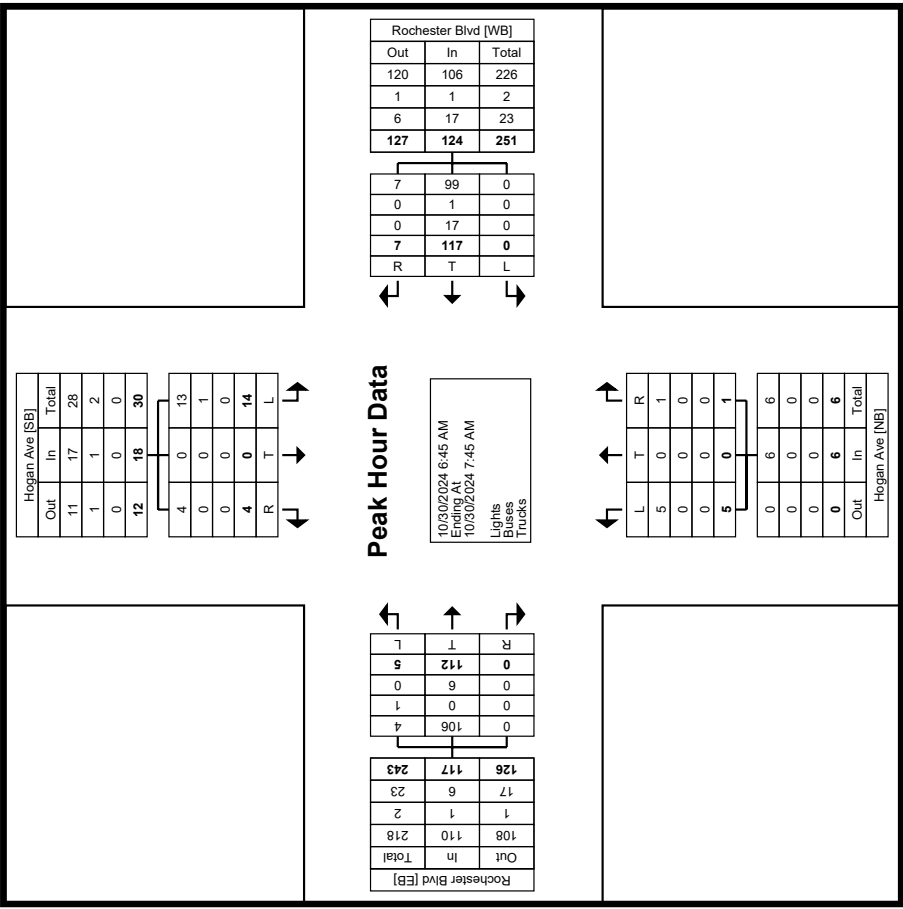
Turning Movement Peak Hour Data (6:45 AM)

Start Time	Rochester Blvd Eastbound				Rochester Blvd Westbound				Hogan Ave Northbound				Hogan Ave Southbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
6:45 AM	2	48	0	50	0	23	0	23	1	0	0	1	4	0	2	6
7:00 AM	3	21	0	24	0	29	3	32	2	0	0	2	3	0	0	3
7:15 AM	0	22	0	22	0	33	3	36	0	0	0	0	4	0	1	5
7:30 AM	0	21	0	21	0	32	1	33	2	0	1	3	3	0	1	4
Total	5	112	0	117	0	117	7	124	5	0	1	6	14	0	4	18
Approach %	4.3	95.7	0.0	-	0.0	94.4	5.6	-	83.3	0.0	16.7	-	77.8	0.0	22.2	-
Total %	1.9	42.3	0.0	44.2	0.0	44.2	2.6	46.8	1.9	0.0	0.4	2.3	5.3	0.0	1.5	6.8
PHF	0.417	0.583	0.000	0.585	0.000	0.886	0.583	0.861	0.625	0.000	0.250	0.500	0.875	0.000	0.500	0.750
Lights	4	106	0	110	0	99	7	106	5	0	1	6	13	0	4	17
% Lights	80.0	94.6	-	94.0	-	84.6	100.0	85.5	100.0	-	100.0	100.0	92.9	-	100.0	94.4
Buses	1	0	0	1	0	1	0	1	0	0	0	0	1	0	0	1
% Buses	20.0	0.0	-	0.9	-	0.9	0.0	0.8	0.0	-	0.0	0.0	7.1	-	0.0	5.6
Trucks	0	6	0	6	0	17	0	17	0	0	0	0	0	0	0	0
% Trucks	0.0	5.4	-	5.1	-	14.5	0.0	13.7	0.0	-	0.0	0.0	0.0	-	0.0	0.0



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: Rochester Blvd & Hogan Ave
Site Code:
Start Date: 10/30/2024
Page No: 5



Turning Movement Peak Hour Data Plot (6:45 AM)



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Rochester Blvd & Hogan Ave
Site Code:
Start Date: 10/30/2024
Page No: 6

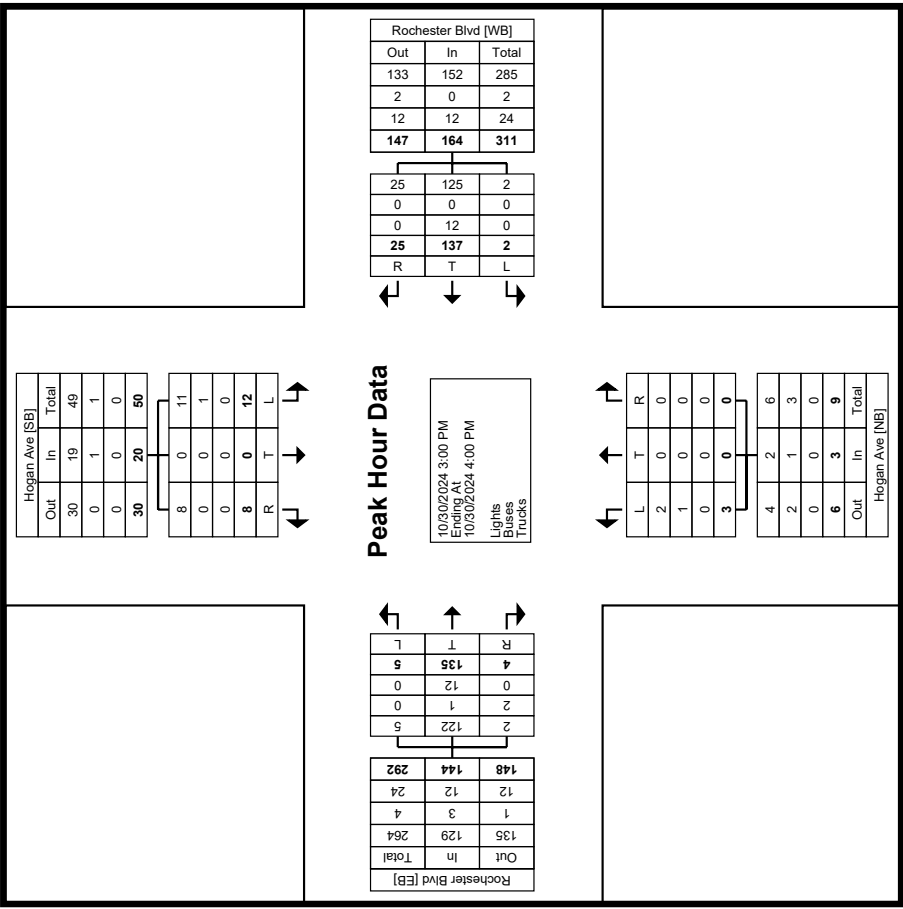
Turning Movement Peak Hour Data (3:00 PM)

Start Time	Rochester Blvd Eastbound				Rochester Blvd Westbound				Hogan Ave Northbound				Hogan Ave Southbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
3:00 PM	3	47	3	53	0	39	5	44	1	0	0	1	3	0	0	3
3:15 PM	0	23	0	23	1	24	6	31	1	0	0	1	3	0	1	4
3:30 PM	1	32	0	33	0	46	7	53	0	0	0	0	1	0	1	2
3:45 PM	1	33	1	35	1	28	7	36	1	0	0	1	5	0	6	11
Total	5	135	4	144	2	137	25	164	3	0	0	3	12	0	8	20
Approach %	3.5	93.8	2.8	-	1.2	83.5	15.2	-	100.0	0.0	0.0	-	60.0	0.0	40.0	-
Total %	1.5	40.8	1.2	43.5	0.6	41.4	7.6	49.5	0.9	0.0	0.0	0.9	3.6	0.0	2.4	6.0
PHF	0.417	0.718	0.333	0.679	0.500	0.745	0.893	0.774	0.750	0.000	0.000	0.750	0.600	0.000	0.333	0.455
% Lights	100.0	90.4	50.0	89.6	100.0	91.2	100.0	92.7	66.7	-	-	66.7	91.7	-	100.0	95.0
Buses	0	1	2	3	0	0	0	0	1	0	0	1	1	0	0	1
% Buses	0.0	0.7	50.0	2.1	0.0	0.0	0.0	0.0	33.3	-	-	33.3	8.3	-	0.0	5.0
Trucks	0	12	0	12	0	12	0	12	0	0	0	0	0	0	0	0
% Trucks	0.0	8.9	0.0	8.3	0.0	8.8	0.0	7.3	0.0	-	-	0.0	0.0	-	0.0	0.0



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: Rochester Blvd & Hogan Ave
Site Code:
Start Date: 10/30/2024
Page No: 7



Turning Movement Peak Hour Data Plot (3:00 PM)



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: CR 29 & MN 20
Site Code: 10/30/2024
Start Date: 10/30/2024
Page No: 1

Turning Movement Data

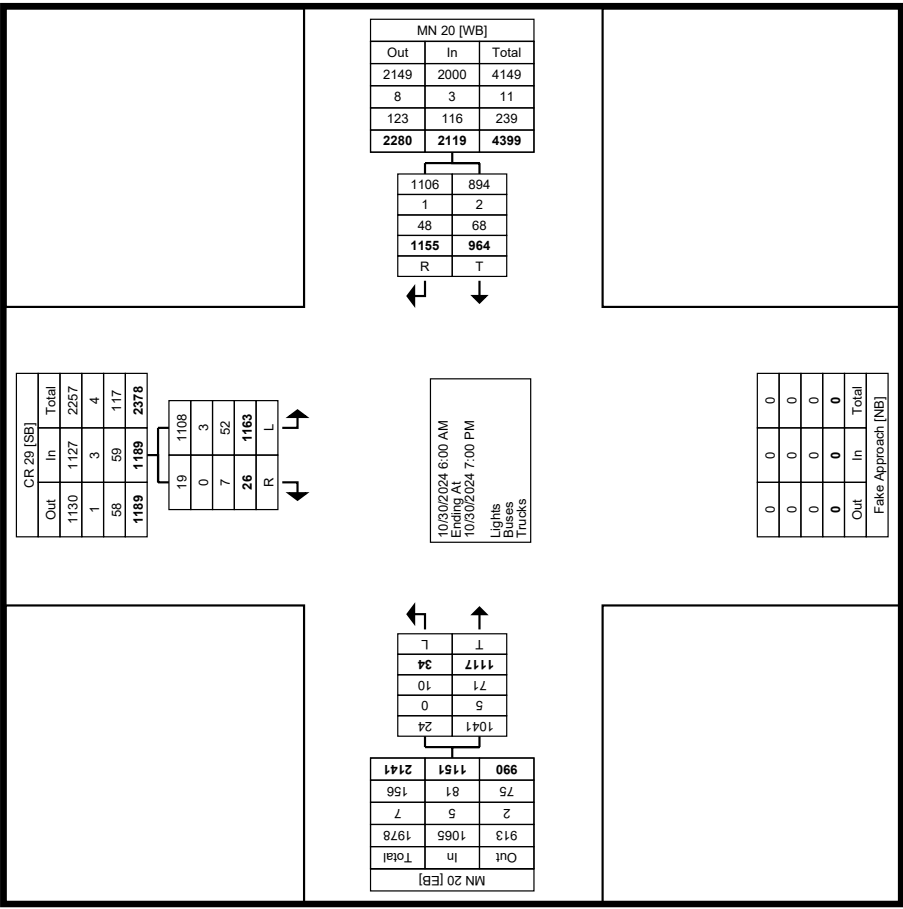
Start Time	MN 20 Eastbound				MN 20 Westbound				CR 29 Southbound			
	Left	Thru	App. Total	Thru	Right	App. Total	Left	App. Total	Right	App. Total	Left	Int. Total
6:00 AM	0	7	7	26	24	50	17	50	0	17	17	74
6:15 AM	1	20	21	26	35	61	15	61	0	15	15	97
6:30 AM	1	5	6	28	32	60	20	60	1	21	21	87
6:45 AM	0	23	23	25	21	46	27	46	1	28	28	97
Hourly Total	2	55	57	105	112	217	79	217	2	81	81	355
7:00 AM	1	18	19	33	23	56	19	56	1	20	20	95
7:15 AM	0	21	21	26	22	48	28	48	0	28	28	97
7:30 AM	1	30	31	26	26	52	32	52	0	32	32	115
7:45 AM	0	20	20	20	24	44	32	44	1	33	33	97
Hourly Total	2	89	91	105	95	200	111	200	2	113	113	404
8:00 AM	0	21	21	28	20	48	14	48	0	14	14	83
8:15 AM	0	20	20	10	16	26	12	26	0	12	12	58
8:30 AM	1	13	14	20	18	38	20	38	0	20	20	72
8:45 AM	0	20	20	14	15	29	25	29	0	25	25	74
Hourly Total	1	74	75	72	69	141	71	141	0	71	71	287
9:00 AM	1	24	25	17	15	32	14	32	0	14	14	71
9:15 AM	0	9	9	21	15	36	5	36	0	5	5	50
9:30 AM	1	12	13	14	10	24	14	24	0	14	14	51
9:45 AM	0	18	18	11	20	31	15	31	0	15	15	64
Hourly Total	2	63	65	63	60	123	48	123	0	48	48	236
10:00 AM	0	11	11	17	23	40	15	40	1	16	16	67
10:15 AM	2	17	19	13	12	25	12	25	0	12	12	56
10:30 AM	2	13	15	14	21	35	13	35	0	13	13	63
10:45 AM	1	11	12	10	15	25	14	25	0	14	14	51
Hourly Total	5	52	57	54	71	125	54	125	1	55	55	237
11:00 AM	0	15	15	11	21	32	15	32	2	17	17	64
11:15 AM	0	16	16	23	15	38	23	38	0	23	23	77
11:30 AM	1	13	14	10	23	33	23	33	0	23	23	70
11:45 AM	0	16	16	14	11	25	21	25	0	21	21	62
Hourly Total	1	60	61	58	70	128	82	128	2	84	84	273
12:00 PM	0	19	19	13	28	41	29	41	0	29	29	89
12:15 PM	0	15	15	19	15	34	16	34	1	17	17	66
12:30 PM	2	21	23	16	21	37	21	37	0	21	21	81
12:45 PM	1	19	20	15	17	32	29	32	0	29	29	81
Hourly Total	3	74	77	63	81	144	95	144	1	96	96	317
1:00 PM	1	21	22	16	28	44	27	44	0	27	27	93

1:15 PM	3	24	27	23	19	42	26	0	26	95
1:30 PM	2	18	20	12	19	31	21	1	22	73
1:45 PM	0	17	17	23	27	50	17	0	17	84
Hourly Total	6	80	86	74	93	167	91	1	92	345
2:00 PM	0	24	24	25	32	57	9	1	10	91
2:15 PM	1	19	20	19	16	35	23	0	23	78
2:30 PM	0	29	29	23	16	39	25	1	26	94
2:45 PM	2	29	31	13	27	40	28	1	29	100
Hourly Total	3	101	104	80	91	171	85	3	88	363
3:00 PM	2	44	46	37	35	72	34	2	36	154
3:15 PM	2	29	31	23	30	53	34	1	35	119
3:30 PM	0	33	33	22	33	55	28	1	29	117
3:45 PM	3	40	43	18	30	48	34	2	36	127
Hourly Total	7	146	153	100	128	228	130	6	136	517
4:00 PM	0	47	47	21	30	51	29	1	30	128
4:15 PM	1	24	25	26	28	54	26	2	28	107
4:30 PM	0	28	28	22	39	61	31	1	32	121
4:45 PM	1	37	38	14	32	46	25	1	26	110
Hourly Total	2	136	138	83	129	212	111	5	116	466
5:00 PM	0	37	37	21	34	55	28	0	28	120
5:15 PM	0	30	30	19	25	44	41	0	41	115
5:30 PM	0	27	27	20	24	44	30	1	31	102
5:45 PM	0	26	26	6	17	23	25	1	26	75
Hourly Total	0	120	120	66	100	166	124	2	126	412
6:00 PM	0	24	24	11	14	25	14	0	14	63
6:15 PM	0	21	21	16	12	28	29	0	29	78
6:30 PM	0	9	9	10	16	26	23	1	24	59
6:45 PM	0	13	13	4	14	18	16	0	16	47
Hourly Total	0	67	67	41	56	97	82	1	83	247
Grand Total	34	1117	1151	964	1155	2119	1163	26	1189	4459
Approach %	3.0	97.0	-	45.5	54.5	-	97.8	2.2	-	-
Total %	0.8	25.1	25.8	21.6	25.9	47.5	26.1	0.6	26.7	-
Lights	24	1041	1065	894	1106	2000	1108	19	1127	4192
% Lights	70.6	93.2	92.5	92.7	95.8	94.4	95.3	73.1	94.8	94.0
Buses	0	5	5	2	1	3	3	0	3	11
% Buses	0.0	0.4	0.4	0.2	0.1	0.1	0.3	0.0	0.3	0.2
Trucks	10	71	81	68	48	116	52	7	59	256
% Trucks	29.4	6.4	7.0	7.1	4.2	5.5	4.5	26.9	5.0	5.7



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: CR 29 & MN 20
Site Code:
Start Date: 10/30/2024
Page No: 3



Turning Movement Data Plot



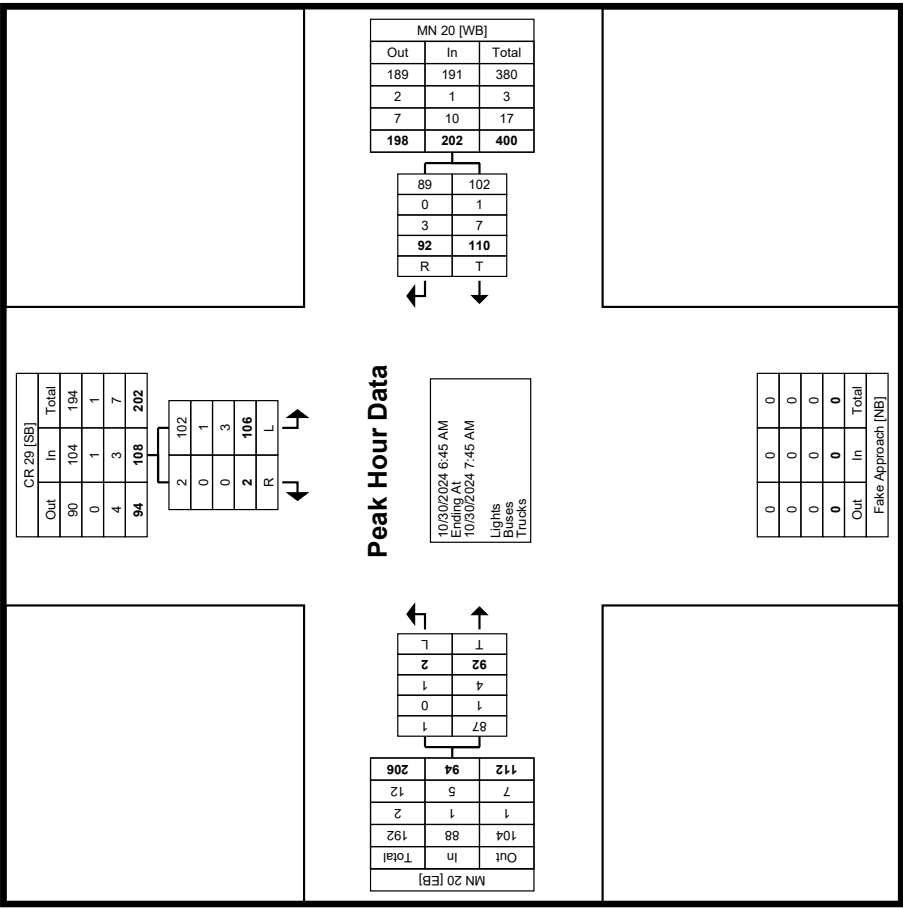
Turning Movement Peak Hour Data (6:45 AM)

Start Time	MN 20 Eastbound			MN 20 Westbound			CR 29 Southbound			
	Left	Thru	App. Total	Thru	Right	App. Total	Left	Right	App. Total	Int. Total
6:45 AM	0	23	23	25	21	46	27	1	28	97
7:00 AM	1	18	19	33	23	56	19	1	20	95
7:15 AM	0	21	21	26	22	48	28	0	28	97
7:30 AM	1	30	31	26	26	52	32	0	32	115
Total	2	92	94	110	92	202	106	2	108	404
Approach %	2.1	97.9	-	54.5	45.5	-	98.1	1.9	-	-
Total %	0.5	22.8	23.3	27.2	22.8	50.0	26.2	0.5	26.7	-
PHF	0.500	0.767	0.758	0.833	0.885	0.902	0.828	0.500	0.844	0.878
Lights	1	87	88	102	89	191	102	2	104	383
% Lights	50.0	94.6	93.6	92.7	96.7	94.6	96.2	100.0	96.3	94.8
Buses	0	1	1	1	0	1	1	0	1	3
% Buses	0.0	1.1	1.1	0.9	0.0	0.5	0.9	0.0	0.9	0.7
Trucks	1	4	5	7	3	10	3	0	3	18
% Trucks	50.0	4.3	5.3	6.4	3.3	5.0	2.8	0.0	2.8	4.5



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: CR 29 & MN 20
Site Code: 10/30/2024
Page No: 5



Turning Movement Peak Hour Data Plot (6:45 AM)



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: CR 29 & MN 20
Site Code: 10/30/2024
Start Date: 10/30/2024
Page No: 6

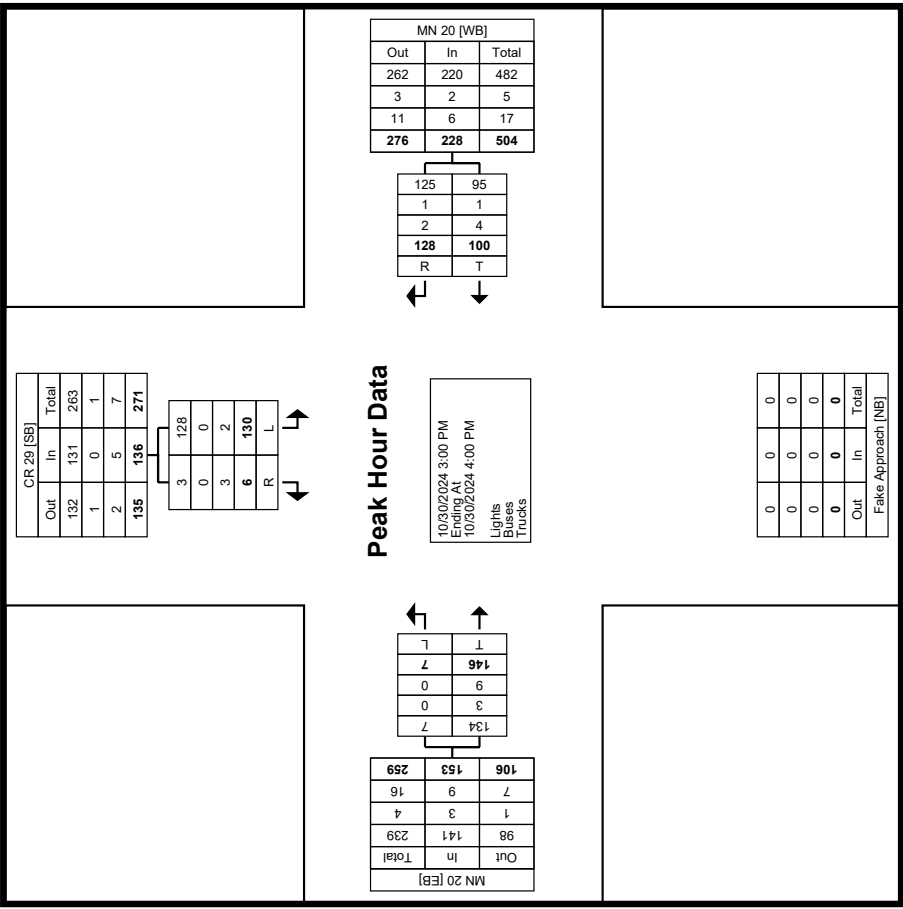
Turning Movement Peak Hour Data (3:00 PM)

Start Time	MN 20 Eastbound			MN 20 Westbound			CR 29 Southbound		
	Left	Thru	App. Total	Thru	Right	App. Total	Left	Right	App. Total
3:00 PM	2	44	46	37	35	72	34	2	36
3:15 PM	2	29	31	23	30	53	34	1	35
3:30 PM	0	33	33	22	33	55	28	1	29
3:45 PM	3	40	43	18	30	48	34	2	36
Total	7	146	153	100	128	228	130	6	136
Approach %	4.6	95.4	-	43.9	56.1	-	95.6	4.4	-
Total %	1.4	28.2	29.6	19.3	24.8	44.1	25.1	1.2	26.3
PHF	0.583	0.830	0.832	0.676	0.914	0.792	0.956	0.750	0.944
Lights	7	134	141	95	125	220	128	3	131
% Lights	100.0	91.8	92.2	95.0	97.7	96.5	98.5	50.0	96.3
Buses	0	3	3	1	1	2	0	0	0
% Buses	0.0	2.1	2.0	1.0	0.8	0.9	0.0	0.0	0.0
Trucks	0	9	9	4	2	6	2	3	5
% Trucks	0.0	6.2	5.9	4.0	1.6	2.6	1.5	50.0	3.7



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: CR 29 & MN 20
Site Code:
Start Date: 10/30/2024
Page No: 7



Turning Movement Peak Hour Data Plot (3:00 PM)



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: MN 20 & County 17 Blvd
Site Code:
Start Date: 10/30/2024
Page No: 1

Turning Movement Data

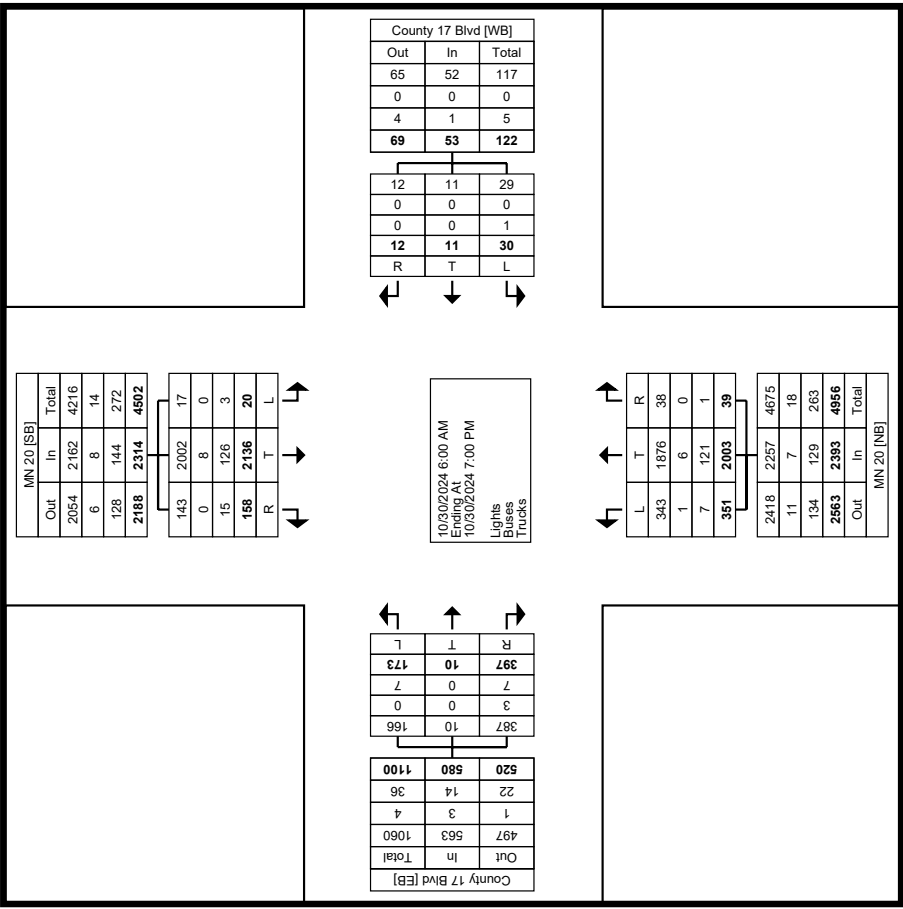
Start Time	County 17 Blvd Eastbound				County 17 Blvd Westbound				MN 20 Northbound				MN 20 Southbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	Int. Total
6:00 AM	1	0	1	2	0	0	0	0	1	52	0	53	0	22	1	78
6:15 AM	4	0	4	8	0	0	0	0	4	59	0	63	0	36	1	108
6:30 AM	6	0	6	12	0	0	0	0	4	56	0	60	0	24	1	97
6:45 AM	2	0	10	12	0	0	0	0	2	45	0	47	0	48	2	109
Hourly Total	13	0	21	34	0	0	0	0	11	212	0	223	0	130	5	392
7:00 AM	1	0	5	6	0	0	0	0	8	54	1	63	0	39	0	108
7:15 AM	8	1	13	22	0	0	0	0	11	41	1	53	0	47	1	123
7:30 AM	5	0	7	12	0	0	0	0	9	46	1	56	0	57	1	126
7:45 AM	1	0	11	12	1	0	0	1	9	46	2	57	0	46	3	119
Hourly Total	15	1	36	52	1	0	0	1	37	187	5	229	0	189	5	476
8:00 AM	5	0	11	16	0	0	0	0	4	45	0	49	2	29	2	98
8:15 AM	2	2	4	8	0	0	0	0	5	27	0	32	0	30	2	72
8:30 AM	5	0	4	9	0	0	0	0	5	34	1	40	3	30	2	84
8:45 AM	7	2	12	21	0	0	1	1	3	21	0	24	1	37	3	87
Hourly Total	19	4	31	54	0	0	1	1	17	127	1	145	6	126	9	341
9:00 AM	3	0	3	6	0	0	0	0	5	30	0	35	2	33	5	81
9:15 AM	2	0	6	8	0	0	2	2	13	34	1	48	0	14	4	76
9:30 AM	2	0	2	4	0	0	0	0	2	25	1	28	0	25	0	57
9:45 AM	1	0	6	7	0	1	1	2	3	34	0	37	2	23	7	78
Hourly Total	8	0	17	25	0	1	3	4	23	123	2	148	4	95	16	292
10:00 AM	8	0	4	12	2	0	0	2	3	30	1	34	0	24	4	76
10:15 AM	2	1	3	6	1	0	0	1	2	28	0	30	1	27	3	68
10:30 AM	2	0	4	6	1	0	0	1	6	31	1	38	1	22	2	70
10:45 AM	3	0	9	12	1	0	0	1	10	24	2	36	1	24	0	74
Hourly Total	15	1	20	36	5	0	0	5	21	113	4	138	3	97	9	288
11:00 AM	2	0	11	13	1	0	0	1	10	31	0	41	0	26	3	84
11:15 AM	2	0	9	11	2	0	1	3	3	33	0	36	0	39	3	92
11:30 AM	2	0	8	10	2	1	0	3	8	35	2	45	0	30	3	91
11:45 AM	3	0	5	8	1	0	0	1	6	22	0	28	0	34	4	75
Hourly Total	9	0	33	42	6	1	1	8	27	121	2	150	0	129	13	342
12:00 PM	3	0	12	15	1	0	0	1	7	38	0	45	0	50	2	113
12:15 PM	5	0	13	18	0	0	0	0	5	32	2	39	0	29	4	90
12:30 PM	1	0	6	7	1	0	0	1	5	42	0	47	1	34	7	97
12:45 PM	4	1	9	14	0	0	1	1	6	32	1	39	1	41	4	100
Hourly Total	13	1	40	54	2	0	1	3	23	144	3	170	2	154	17	400
1:00 PM	4	0	9	13	0	1	0	1	9	41	1	51	0	44	5	114

1:15 PM	5	0	7	12	2	2	0	4	2	34	6	42	1	47	1	49	107
1:30 PM	3	0	9	12	1	0	0	1	6	32	1	39	0	37	5	42	94
1:45 PM	7	0	11	18	0	0	0	0	5	45	2	52	0	33	2	35	105
Hourly Total	19	0	36	55	3	3	0	6	22	152	10	184	1	161	13	175	420
2:00 PM	4	0	14	18	0	0	0	0	4	52	1	57	0	25	4	29	104
2:15 PM	3	1	4	8	1	0	1	2	6	31	2	39	0	38	1	39	88
2:30 PM	2	0	3	5	2	1	0	3	10	37	0	47	1	53	2	56	111
2:45 PM	5	0	8	13	0	1	1	2	4	39	0	43	1	59	2	62	120
Hourly Total	14	1	29	44	3	2	2	7	24	159	3	186	2	175	9	186	423
3:00 PM	7	1	14	22	0	2	0	2	17	70	1	88	0	76	3	79	191
3:15 PM	3	0	8	11	1	0	0	1	17	51	3	71	1	61	6	68	151
3:30 PM	6	0	9	15	3	0	1	4	8	53	2	63	0	56	6	62	144
3:45 PM	4	0	10	14	0	0	0	0	9	44	0	53	1	72	1	74	141
Hourly Total	20	1	41	62	4	2	1	7	51	218	6	275	2	265	16	283	627
4:00 PM	2	0	9	11	0	0	1	1	11	49	0	60	0	70	5	75	147
4:15 PM	4	0	11	15	1	0	0	1	11	53	0	64	0	52	2	54	134
4:30 PM	4	0	8	12	3	0	0	3	16	58	1	75	0	60	2	62	152
4:45 PM	1	0	9	10	0	0	1	1	7	43	0	50	0	56	8	64	125
Hourly Total	11	0	37	48	4	0	2	6	45	203	1	249	0	238	17	255	558
5:00 PM	3	1	5	9	2	2	0	4	6	49	1	56	0	64	4	68	137
5:15 PM	1	0	4	5	0	0	1	1	6	43	0	49	0	63	11	74	129
5:30 PM	3	0	10	13	0	0	0	0	7	41	0	48	0	58	1	59	120
5:45 PM	2	0	4	6	0	0	0	0	2	23	1	26	0	49	7	56	88
Hourly Total	9	1	23	33	2	2	1	5	21	156	2	179	0	234	23	257	474
6:00 PM	3	0	7	10	0	0	0	0	6	22	0	28	0	38	0	38	76
6:15 PM	2	0	8	10	0	0	0	0	4	27	0	31	0	46	2	48	89
6:30 PM	2	0	11	13	0	0	0	0	9	24	0	33	0	33	3	36	82
6:45 PM	1	0	7	8	0	0	0	0	10	15	0	25	0	26	1	27	60
Hourly Total	8	0	33	41	0	0	0	0	29	88	0	117	0	143	6	149	307
Grand Total	173	10	397	580	30	11	12	53	351	2003	39	2393	20	2136	158	2314	5340
Approach %	29.8	1.7	68.4	-	56.6	20.8	22.6	-	14.7	83.7	1.6	-	0.9	92.3	6.8	-	-
Total %	3.2	0.2	7.4	10.9	0.6	0.2	0.2	1.0	6.6	37.5	0.7	44.8	0.4	40.0	3.0	43.3	-
Lights	166	10	387	563	29	11	12	52	343	1876	38	2257	17	2002	143	2162	5034
% Lights	96.0	100.0	97.5	97.1	96.7	100.0	100.0	96.1	97.7	93.7	97.4	94.3	85.0	93.7	90.5	93.4	94.3
Buses	0	0	3	3	0	0	0	0	1	6	0	7	0	8	0	8	18
% Buses	0.0	0.0	0.8	0.5	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.0	0.4	0.0	0.3	0.3
Trucks	7	0	7	14	1	0	0	1	7	121	1	129	3	126	15	144	288
% Trucks	4.0	0.0	1.8	2.4	3.3	0.0	0.0	1.9	2.0	6.0	2.6	5.4	15.0	5.9	9.5	6.2	5.4



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: MN 20 & County 17 Blvd
Site Code:
Start Date: 10/30/2024
Page No: 3



Turning Movement Data Plot



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: MN 20 & County 17 Blvd
Site Code:
Start Date: 10/30/2024
Page No: 4

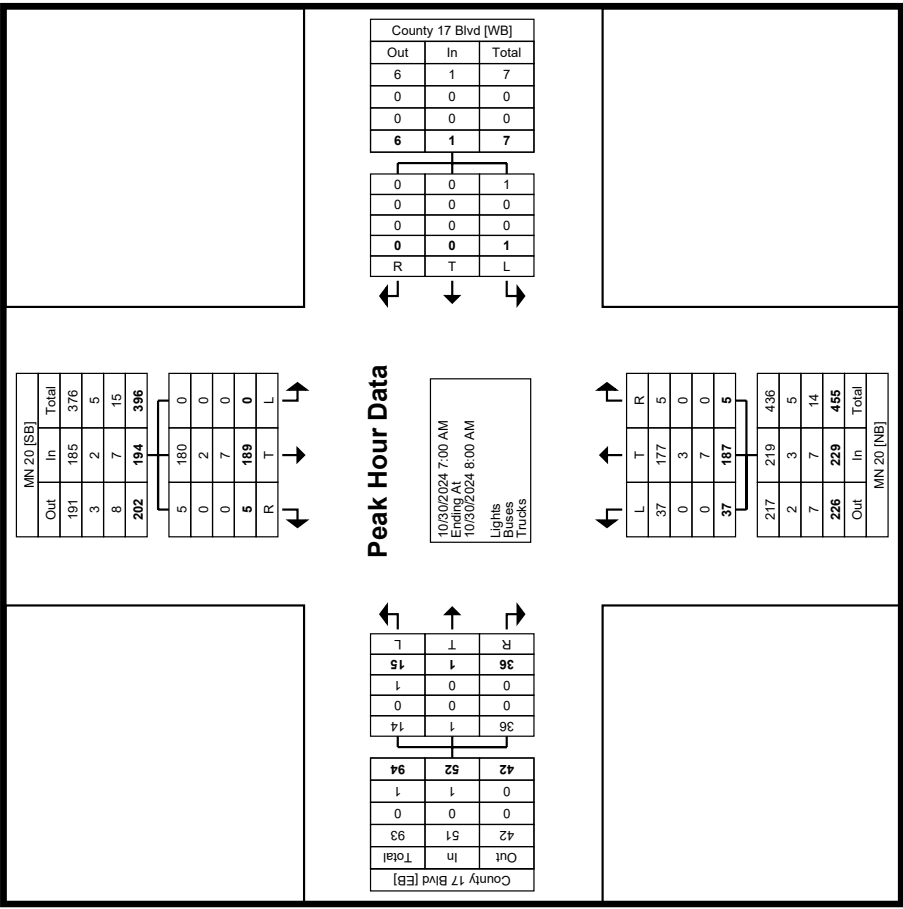
Turning Movement Peak Hour Data (7:00 AM)

Start Time	County 17 Blvd Eastbound				County 17 Blvd Westbound				MN 20 Northbound				MN 20 Southbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
7:00 AM	1	0	5	6	0	0	0	0	8	54	1	63	0	39	0	39
7:15 AM	8	1	13	22	0	0	0	0	11	41	1	53	0	47	1	48
7:30 AM	5	0	7	12	0	0	0	0	9	46	1	56	0	57	1	58
7:45 AM	1	0	11	12	1	0	0	1	9	46	2	57	0	46	3	49
Total	15	1	36	52	1	0	0	1	37	187	5	229	0	189	5	194
Approach %	28.8	1.9	69.2	-	100.0	0.0	0.0	-	16.2	81.7	2.2	-	0.0	97.4	2.6	-
Total %	3.2	0.2	7.6	10.9	0.2	0.0	0.0	0.2	7.8	39.3	1.1	48.1	0.0	39.7	1.1	40.8
PHF	0.469	0.250	0.692	0.591	0.250	0.000	0.000	0.250	0.841	0.866	0.625	0.909	0.000	0.829	0.417	0.836
Lights	14	1	36	51	1	0	0	1	37	177	5	219	0	180	5	185
% Lights	93.3	100.0	100.0	98.1	100.0	-	-	100.0	100.0	94.7	100.0	95.6	-	95.2	100.0	95.4
Buses	0	0	0	0	0	0	0	0	0	3	0	3	0	2	0	2
% Buses	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	1.6	0.0	1.3	-	1.1	0.0	1.0
Trucks	1	0	0	1	0	0	0	0	0	7	0	7	0	7	0	7
% Trucks	6.7	0.0	0.0	1.9	0.0	-	-	0.0	0.0	3.7	0.0	3.1	-	3.7	0.0	3.6



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: MN 20 & County 17 Blvd
Site Code:
Start Date: 10/30/2024
Page No: 5





Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: MN 20 & County 17 Blvd
Site Code:
Start Date: 10/30/2024
Page No: 6

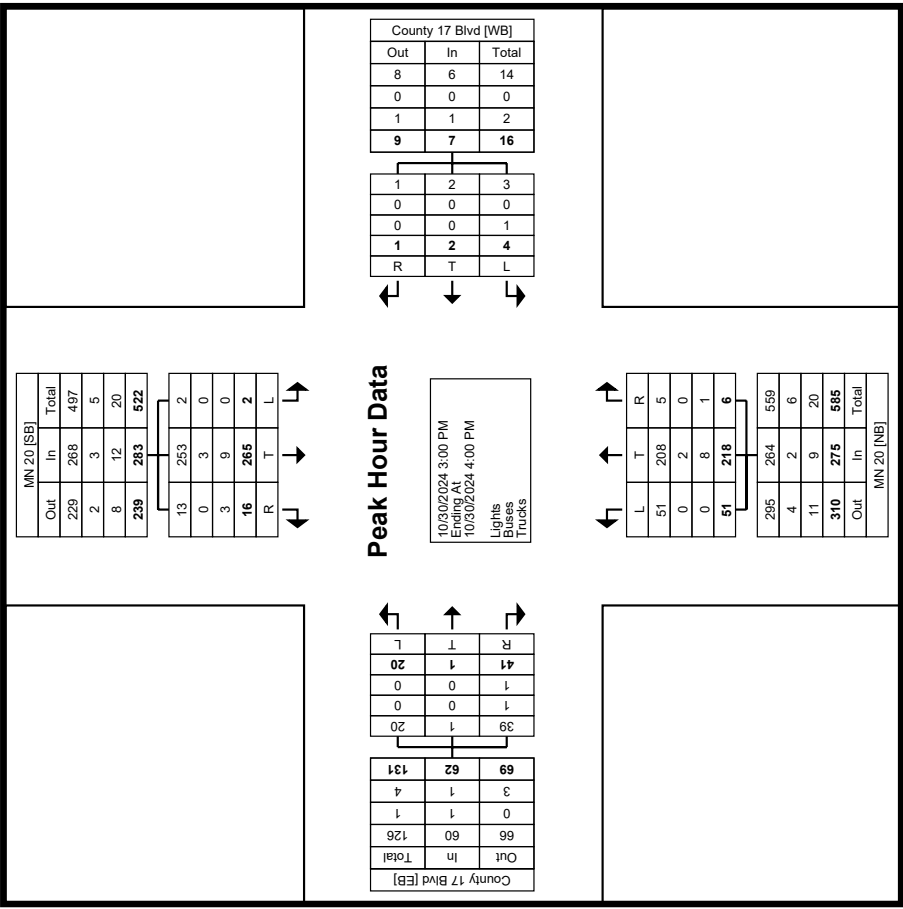
Turning Movement Peak Hour Data (3:00 PM)

Start Time	County 17 Blvd Eastbound				County 17 Blvd Westbound				MN 20 Northbound				MN 20 Southbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
3:00 PM	7	1	14	22	0	2	0	2	17	70	1	88	0	76	3	79
3:15 PM	3	0	8	11	1	0	0	1	17	51	3	71	1	61	6	68
3:30 PM	6	0	9	15	3	0	1	4	8	53	2	63	0	56	6	62
3:45 PM	4	0	10	14	0	0	0	0	9	44	0	53	1	72	1	74
Total	20	1	41	62	4	2	1	7	51	218	6	275	2	265	16	283
Approach %	32.3	1.6	66.1	-	57.1	28.6	14.3	-	18.5	79.3	2.2	-	0.7	93.6	5.7	-
Total %	3.2	0.2	6.5	9.9	0.6	0.3	0.2	1.1	8.1	34.8	1.0	43.9	0.3	42.3	2.6	45.1
PHF	0.714	0.250	0.732	0.705	0.333	0.250	0.250	0.438	0.750	0.779	0.500	0.781	0.500	0.872	0.667	0.896
Lights	20	1	39	60	3	2	1	6	51	208	5	264	2	253	13	268
% Lights	100.0	100.0	95.1	96.8	75.0	100.0	100.0	85.7	100.0	95.4	83.3	96.0	100.0	95.5	81.3	94.7
Buses	0	0	1	1	0	0	0	0	0	2	0	2	0	3	0	3
% Buses	0.0	0.0	2.4	1.6	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.7	0.0	1.1	0.0	1.1
Trucks	0	0	1	1	1	0	0	1	0	8	1	9	0	9	3	12
% Trucks	0.0	0.0	2.4	1.6	25.0	0.0	0.0	14.3	0.0	3.7	16.7	3.3	0.0	3.4	18.8	4.2



Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.sowcroft@kimley-horn.com

Count Name: MN 20 & County 17 Blvd
Site Code:
Start Date: 10/30/2024
Page No: 7



Turning Movement Peak Hour Data Plot (3:00 PM)



Kimley-Horn
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 kaelyn.lewis@kimley-horn.com

Count Name: CSAH 88 & Harry Avenue
Site Code:
Start Date: 04/29/2025
Page No: 1

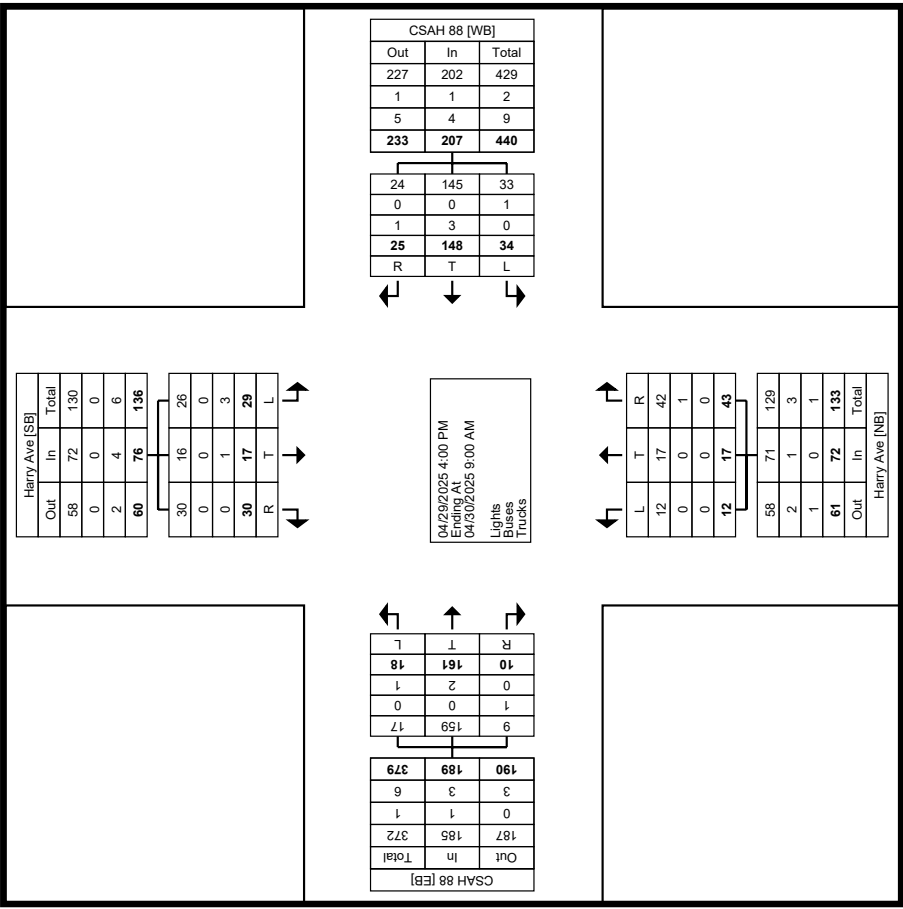
Turning Movement Data

Start Time	CSAH 88 Westbound				CSAH 88 Eastbound				Harry Ave Southbound				Harry Ave Northbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
4:00 PM	8	27	3	38	0	8	0	8	2	1	1	4	0	0	1	1
4:15 PM	1	15	1	17	2	6	0	8	2	3	5	10	2	1	1	4
4:30 PM	4	7	3	14	1	9	2	12	1	3	2	6	0	0	5	5
4:45 PM	2	8	1	11	1	13	0	14	2	2	4	8	1	1	2	4
Hourly Total	15	57	8	80	4	36	2	42	7	9	12	28	3	2	9	14
5:00 PM	4	9	3	16	1	6	1	8	2	1	0	3	0	5	8	13
5:15 PM	1	8	3	12	0	8	2	10	0	0	1	1	0	0	1	1
5:30 PM	4	7	1	12	1	17	0	18	4	1	0	5	0	0	3	3
5:45 PM	2	7	1	10	2	14	2	18	3	1	2	6	2	0	4	6
Hourly Total	11	31	8	50	4	45	5	54	9	3	3	15	2	5	16	23
***BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	1	8	1	10	1	11	0	12	0	0	1	1	1	0	2	3
7:15 AM	1	13	2	16	3	11	0	14	4	0	2	6	1	3	2	6
7:30 AM	0	14	1	15	2	9	0	11	4	0	4	8	2	1	1	4
7:45 AM	1	13	2	16	0	14	3	17	1	2	2	5	1	0	5	6
Hourly Total	3	48	6	57	6	45	3	54	9	2	9	20	5	4	10	19
8:00 AM	0	1	1	2	2	13	0	15	2	2	1	5	0	1	2	3
8:15 AM	2	2	0	4	0	7	0	7	1	1	3	5	0	0	2	2
8:30 AM	3	3	1	7	2	6	0	8	1	0	1	2	1	4	3	8
8:45 AM	0	6	1	7	0	9	0	9	0	0	1	1	1	1	1	3
Hourly Total	5	12	3	20	4	35	0	39	4	3	6	13	2	6	8	16
Grand Total	34	148	25	207	18	161	10	189	29	17	30	76	12	17	43	72
Approach %	16.4	71.5	12.1	-	9.5	85.2	5.3	-	38.2	22.4	39.5	-	16.7	23.6	59.7	-
Total %	6.3	27.2	4.6	38.1	3.3	29.6	1.8	34.7	5.3	3.1	5.5	14.0	2.2	3.1	7.9	13.2
Lights	33	145	24	202	17	159	9	185	26	16	30	72	12	17	42	71
% Lights	97.1	98.0	96.0	97.6	94.4	98.8	90.0	97.9	89.7	94.1	100.0	94.7	100.0	100.0	97.7	98.6
Buses	1	0	0	1	0	0	1	1	0	0	0	0	0	0	1	1
% Buses	2.9	0.0	0.0	0.5	0.0	0.0	10.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.4
Trucks	0	3	1	4	1	2	0	3	3	1	0	4	0	0	0	0
% Trucks	0.0	2.0	4.0	1.9	5.6	1.2	0.0	1.6	10.3	5.9	0.0	5.3	0.0	0.0	0.0	0.0



Kimley-Horn
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 kaelyn.lewis@kimley-horn.com

Count Name: CSAH 88 & Harry Avenue
Site Code:
Start Date: 04/29/2025
Page No: 2



Turning Movement Data Plot



Kimley-Horn
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 kaelyn.lewis@kimley-horn.com

Count Name: CSAH 88 & Harry Avenue
Site Code:
Start Date: 04/29/2025
Page No: 3

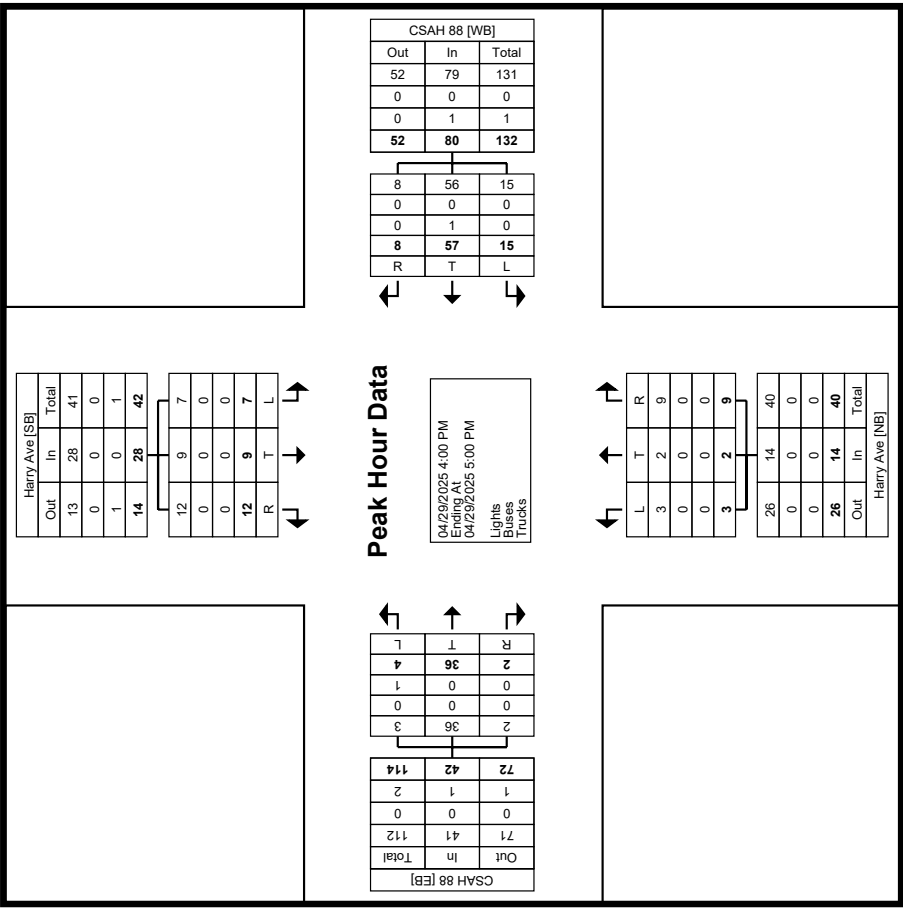
Turning Movement Peak Hour Data (4:00 PM)

Start Time	CSAH 88 Westbound				CSAH 88 Eastbound				Harry Ave Southbound				Harry Ave Northbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
4:00 PM	8	27	3	38	0	8	0	8	2	1	1	4	0	0	1	1
4:15 PM	1	15	1	17	2	6	0	8	2	3	5	10	2	1	1	4
4:30 PM	4	7	3	14	1	9	2	12	1	3	2	6	0	0	5	5
4:45 PM	2	8	1	11	1	13	0	14	2	2	4	8	1	1	2	4
Total	15	57	8	80	4	36	2	42	7	9	12	28	3	2	9	14
Approach %	18.8	71.3	10.0	-	9.5	85.7	4.8	-	25.0	32.1	42.9	-	21.4	14.3	64.3	-
Total %	9.1	34.8	4.9	48.8	2.4	22.0	1.2	25.6	4.3	5.5	7.3	17.1	1.8	1.2	5.5	8.5
PHF	0.469	0.528	0.667	0.526	0.500	0.692	0.250	0.750	0.875	0.750	0.600	0.700	0.375	0.500	0.450	0.700
Lights	15	56	8	79	3	36	2	41	7	9	12	28	3	2	9	14
% Lights	100.0	98.2	100.0	98.8	75.0	100.0	100.0	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trucks	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0
% Trucks	0.0	1.8	0.0	1.3	25.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Kimley-Horn
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 kaelyn.lewis@kimley-horn.com

Count Name: CSAH 88 & Harry Avenue
Site Code:
Start Date: 04/29/2025
Page No: 4



Turning Movement Peak Hour Data Plot (4:00 PM)



Kimley-Horn
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 kaelyn.lewis@kimley-horn.com

Count Name: CSAH 88 & Harry Avenue
Site Code:
Start Date: 04/29/2025
Page No.: 5

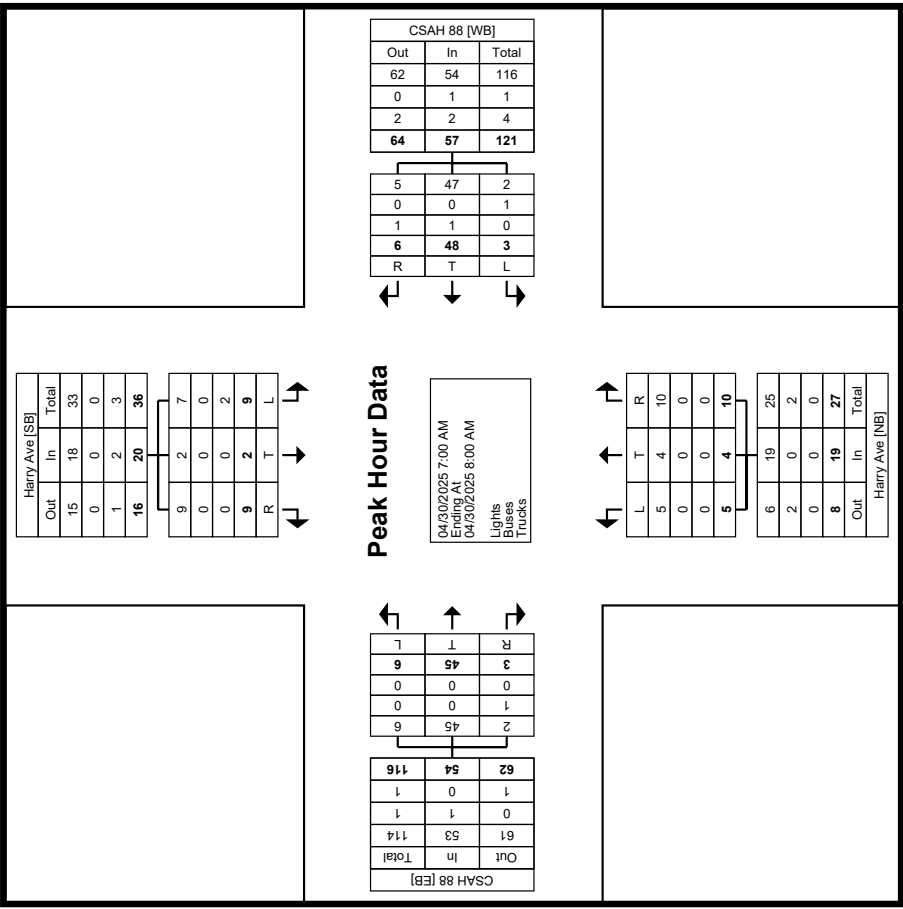
Turning Movement Peak Hour Data (7:00 AM)

Start Time	CSAH 88 Westbound				CSAH 88 Eastbound				Harry Ave Southbound				Harry Ave Northbound			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
7:00 AM	1	8	1	10	1	11	0	12	0	0	1	1	1	0	2	3
7:15 AM	1	13	2	16	3	11	0	14	4	0	2	6	1	3	2	6
7:30 AM	0	14	1	15	2	9	0	11	4	0	4	8	2	1	1	4
7:45 AM	1	13	2	16	0	14	3	17	1	2	2	5	1	0	5	6
Total	3	48	6	57	6	45	3	54	9	2	9	20	5	4	10	19
Approach %	5.3	84.2	10.5	-	11.1	83.3	5.6	-	45.0	10.0	45.0	-	26.3	21.1	52.6	-
Total %	2.0	32.0	4.0	38.0	4.0	30.0	2.0	36.0	6.0	1.3	6.0	13.3	3.3	2.7	6.7	12.7
PHF	0.750	0.857	0.750	0.891	0.500	0.804	0.250	0.794	0.563	0.250	0.563	0.625	0.625	0.333	0.500	0.792
% Lights	2	47	5	54	6	45	2	53	7	2	9	18	5	4	10	19
% Buses	66.7	97.9	83.3	94.7	100.0	100.0	66.7	98.1	77.8	100.0	100.0	90.0	100.0	100.0	100.0	100.0
% Trucks	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
% Trucks	33.3	0.0	0.0	1.8	0.0	0.0	33.3	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Trucks	0	1	1	2	0	0	0	0	2	0	0	2	0	0	0	0
% Trucks	0.0	2.1	16.7	3.5	0.0	0.0	0.0	0.0	22.2	0.0	0.0	10.0	0.0	0.0	0.0	0.0



Kimley-Horn
4201 Winfield Road Suite 600
Warrenville, Illinois, United States 60555
(630) 487-5550 kaelyn.lewis@kimley-horn.com

Count Name: CSAH 88 & Harry Avenue
Site Code:
Start Date: 04/29/2025
Page No: 6







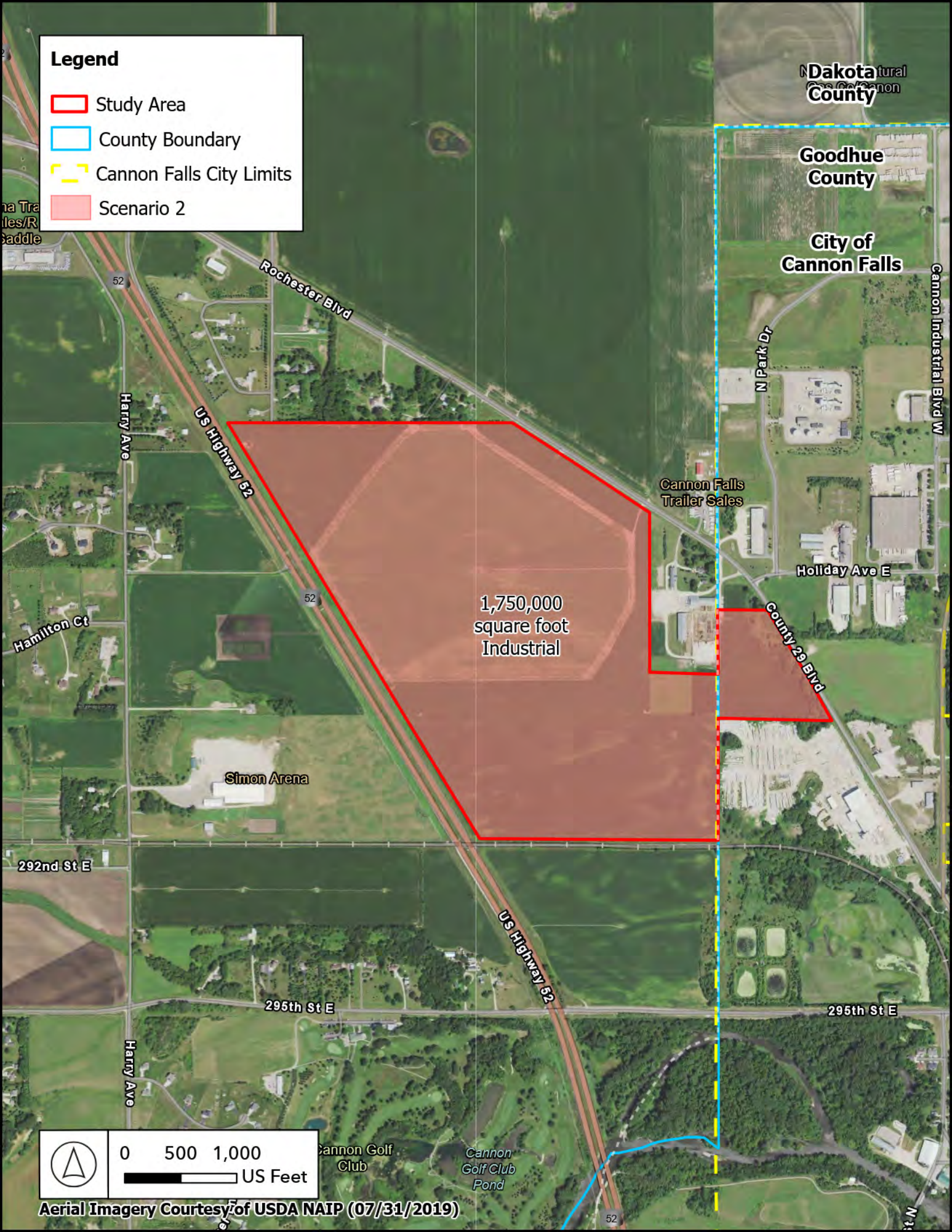
Turning Movement Peak Hour Data Plot (7:00 AM)

C. Site Layout Exhibit



Legend

-  Study Area
-  County Boundary
-  Cannon Falls City Limits
-  Scenario 2







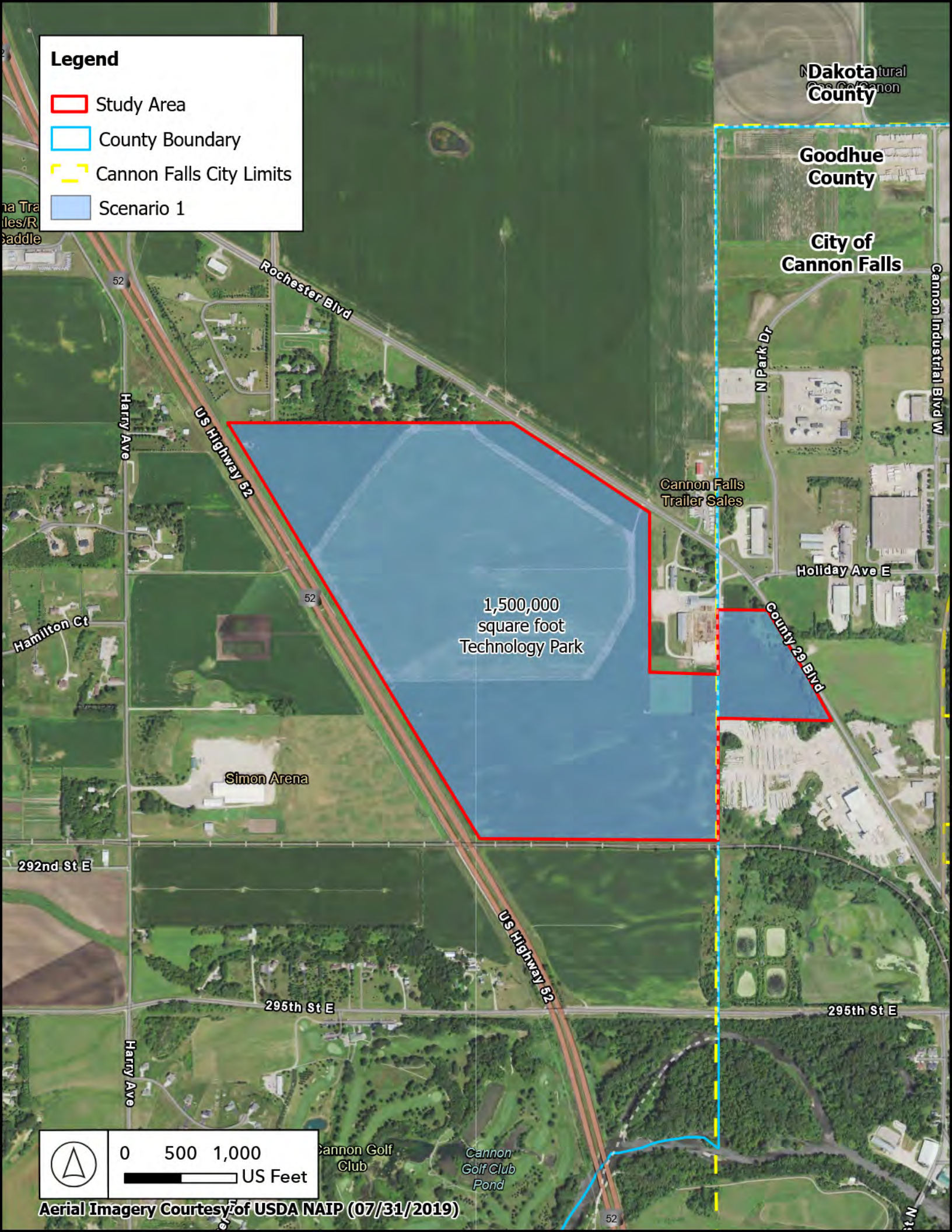
0 500 1,000

US Feet

Aerial Imagery Courtesy of USDA NAIP (07/31/2019)

Legend

-  Study Area
-  County Boundary
-  Cannon Falls City Limits
-  Scenario 1



0 500 1,000

US Feet

Aerial Imagery Courtesy of USDA NAIP (07/31/2019)

D. SimTraffic Analysis Results



1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.2	0.2	3.6	0.0	0.0	0.0	1.7	0.0	0.0	3.6	0.4	0.3
Total Del/Veh (s)	0.5	0.6	0.1	0.8	0.9	0.2	3.4	6.3	1.7	5.1	6.6	2.7

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.5
Total Del/Veh (s)	2.4

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.2	0.1	0.0	0.1	3.1	0.1
Total Del/Veh (s)	1.1	0.8	1.6	0.7	6.4	2.3	1.8

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	0.8	0.4	2.0	1.9	6.0	2.1	3.6	1.3	1.4

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.1	0.0	0.1	0.0	0.0	0.1
Total Del/Veh (s)	5.3	4.7	0.6	0.7	0.9	1.7	2.1

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.2	0.2	3.4	0.0	0.0	0.1
Total Del/Veh (s)	9.3	2.3	5.7		2.2	1.0	0.1	1.0	0.6	1.6

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	3.7	0.1	0.0	0.0
Total Del/Veh (s)	3.9	1.0	0.5	2.7	2.0	2.1	2.8	7.5	1.2	4.2	5.5	1.6

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	2.0

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	6.3

Queuing and Blocking Report
Existing AM Peak Hour

05/05/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR
Maximum Queue (ft)	19	4	32	43	72	25
Average Queue (ft)	1	0	3	11	31	7
95th Queue (ft)	8	3	17	34	58	23
Link Distance (ft)				1223		1017
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	325	325	300		250	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	64	78	26
Average Queue (ft)	11	27	4
95th Queue (ft)	39	61	19
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	13	33	40
Average Queue (ft)	0	7	12
95th Queue (ft)	6	27	32
Link Distance (ft)		1030	1034
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Existing AM Peak Hour

05/05/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB
Directions Served	LR
Maximum Queue (ft)	74
Average Queue (ft)	35
95th Queue (ft)	59
Link Distance (ft)	1008
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB
Directions Served	LTR	LTR	LT
Maximum Queue (ft)	47	9	51
Average Queue (ft)	17	0	7
95th Queue (ft)	40	3	29
Link Distance (ft)	7688	1122	1094
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	LT	R	LT	R
Maximum Queue (ft)	6	24	19	48	24
Average Queue (ft)	1	4	5	8	5
95th Queue (ft)	7	19	17	31	18
Link Distance (ft)		1875		7041	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375		250		250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.2	0.2	4.0	0.2	0.0	0.2	1.1	0.0	0.0	3.5	0.3	0.2
Total Del/Veh (s)	0.7	0.7	0.1	0.7	1.1	0.6	4.1	7.7	2.5	5.9	6.4	2.4

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.4
Total Del/Veh (s)	2.7

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0	0.1	3.0	0.1
Total Del/Veh (s)	1.0	0.6	1.6	0.7	5.9	2.2	1.5

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.2	0.9	0.1	0.7	0.1	0.1	0.1	0.1
Total Del/Veh (s)	0.4	0.4	0.4	0.2	1.5	1.4	7.4	3.6	1.5	1.1

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	6.6	3.6	0.7	0.9	5.6	2.7	2.8

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.3	3.7	0.0	0.0	0.1
Total Del/Veh (s)	10.9	3.3	7.1	11.8	6.9	3.5	2.9	1.3	0.4	3.2	1.2	0.8

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.3

8: Harry Avenue & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	3.2	0.0	0.0	0.0
Total Del/Veh (s)	1.9	0.6	0.1	5.6	2.2	1.5	2.7	6.8	1.2	6.0	3.3	3.7

8: Harry Avenue & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.6

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	7.0

Queuing and Blocking Report
Existing PM Peak Hour

05/05/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR
Maximum Queue (ft)	35	9	26	53	63	30
Average Queue (ft)	3	0	4	13	29	14
95th Queue (ft)	18	5	19	37	52	31
Link Distance (ft)				1223		1017
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	325	325	300		250	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	63	78	35
Average Queue (ft)	10	26	4
95th Queue (ft)	36	64	20
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	2	50	32
Average Queue (ft)	0	3	12
95th Queue (ft)	2	23	32
Link Distance (ft)		1030	1034
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Existing PM Peak Hour

05/05/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	80	75
Average Queue (ft)	38	4
95th Queue (ft)	66	37
Link Distance (ft)	1008	3164
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LT	LT	R
Maximum Queue (ft)	63	55	78	4	4
Average Queue (ft)	23	9	11	0	0
95th Queue (ft)	51	36	38	3	3
Link Distance (ft)	7688	1122	1094	972	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				250	
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 8: Harry Avenue & CSAH 88/County 17 Blvd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	LT	R	LT	R
Maximum Queue (ft)	11	20	25	18	30	33
Average Queue (ft)	0	1	4	5	11	6
95th Queue (ft)	6	9	19	17	32	22
Link Distance (ft)			1875		7041	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	325		250		250
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.1	0.3			0.0	0.0	0.8		0.2	3.6	0.1	
Total Del/Veh (s)	0.2	0.5			0.9	0.3	5.5		1.8	4.8	4.7	

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.5
Total Del/Veh (s)	2.3

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	2.3	0.1
Total Del/Veh (s)	0.8	0.8	1.5	0.5	6.8	2.4	1.8

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)		0.0	0.0	0.0	0.1		0.1	0.1	0.0
Total Del/Veh (s)		0.3	2.1	0.7	5.5		4.2	1.6	1.6

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBT	All
Denied Del/Veh (s)	0.1	0.4	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.0	4.3	0.5	0.6	1.5	1.9

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.0		0.0		0.2	0.3	5.4	0.0	0.0	0.2
Total Del/Veh (s)	10.4		5.1		1.4	0.7	0.2	1.0	0.9	1.4

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.2	0.2		0.0	0.0	0.1					0.0
Total Del/Veh (s)	7.1	1.3	0.0		1.4	0.1	1.6					1.0

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	1.7

Total Network Performance

Denied Del/Veh (s)	0.9
Total Del/Veh (s)	5.4

Queuing and Blocking Report
Opening Year (2029) No-Build - AM Peak Hour

05/05/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	L	TR	L	TR
Maximum Queue (ft)	5	20	21	42	12
Average Queue (ft)	1	4	10	29	5
95th Queue (ft)	9	19	27	45	19
Link Distance (ft)			1223		1017
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	325	300		250	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	20	45	15
Average Queue (ft)	8	23	7
95th Queue (ft)	31	57	22
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	17	24
Average Queue (ft)	7	12
95th Queue (ft)	27	31
Link Distance (ft)	1030	1034
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
Opening Year (2029) No-Build - AM Peak Hour

05/05/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB
Directions Served	LR
Maximum Queue (ft)	49
Average Queue (ft)	38
95th Queue (ft)	62
Link Distance (ft)	1008
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB
Directions Served	LTR	LTR	LT
Maximum Queue (ft)	33	5	15
Average Queue (ft)	17	1	4
95th Queue (ft)	42	9	18
Link Distance (ft)	7680	1122	1094
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	LT	R	LT	R
Maximum Queue (ft)	5	15	7	14	14
Average Queue (ft)	1	3	1	3	3
95th Queue (ft)	10	16	9	15	13
Link Distance (ft)		2572		7067	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375		250		250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	3.9	0.2	3.9	0.1	0.0	0.3	1.3	0.0	0.0	3.6	0.2	0.3
Total Del/Veh (s)	0.7	0.7	0.0	0.9	1.1	0.5	5.0	8.4	2.1	5.4	6.6	2.5

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.5
Total Del/Veh (s)	2.5

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.3	0.1	0.0	0.1	3.1	0.1
Total Del/Veh (s)	0.9	0.8	1.5	0.7	6.4	2.5	1.5

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	1.3	0.1	0.9	0.1	0.1	0.1	0.1
Total Del/Veh (s)	0.8	0.5	0.3	1.5	1.5	1.0	6.4	4.0	1.4	1.2

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.8	3.2	0.6	0.9	6.1	2.4	2.8

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0		0.0	0.1	0.1	0.1	0.3	0.3	3.4	0.0	0.0	0.2
Total Del/Veh (s)	12.0	13.4	8.3	9.1	8.1	2.5	2.4	1.1	0.4	3.7	1.1	0.9

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.2

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	2.1	0.0	0.0	0.0
Total Del/Veh (s)	2.2	0.9	0.6	4.0	2.7	1.8	3.0	9.0	1.0	4.6	4.4	2.5

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.6

Total Network Performance

Denied Del/Veh (s)	0.9
Total Del/Veh (s)	6.9

Queuing and Blocking Report
Opening Year (2029) No-Build - PM Peak Hour

05/05/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	R	L	TR	L	TR
Maximum Queue (ft)	36	9	3	27	53	74	43
Average Queue (ft)	4	0	0	3	10	28	13
95th Queue (ft)	21	5	3	17	34	52	33
Link Distance (ft)					1223		1017
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	325	325	325	300		250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	45	73	48
Average Queue (ft)	9	25	5
95th Queue (ft)	33	62	25
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	3	5	50	41
Average Queue (ft)	0	0	6	13
95th Queue (ft)	2	3	30	36
Link Distance (ft)			1030	1034
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	400	300		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
Opening Year (2029) No-Build - PM Peak Hour

05/05/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	86	38
Average Queue (ft)	38	2
95th Queue (ft)	63	17
Link Distance (ft)	1008	3164
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LT	LT
Maximum Queue (ft)	73	35	57	11
Average Queue (ft)	27	3	9	0
95th Queue (ft)	57	19	35	6
Link Distance (ft)	7680	1122	1094	986
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	WB	NB	NB	SB	SB
Directions Served	L	LT	R	LT	R
Maximum Queue (ft)	15	25	20	48	29
Average Queue (ft)	1	3	6	13	6
95th Queue (ft)	7	17	21	36	22
Link Distance (ft)		2572		7067	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	325		250		250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.0	0.2	3.8	0.0	0.0		2.0	0.0	0.1	3.7	0.3	0.3
Total Del/Veh (s)	0.7	0.6	0.0	0.6	1.1		4.3	7.0	2.6	5.7	6.3	2.7

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.4
Total Del/Veh (s)	2.7

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.2	0.1	0.0	0.2	3.4	0.1
Total Del/Veh (s)	1.1	0.7	1.7	0.8	7.4	2.2	2.0

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	0.7	0.5	2.2	1.7	6.2	2.4	3.8	2.1	1.5

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.1	0.0	0.0	0.1
Total Del/Veh (s)	6.6	3.2	0.7	0.8	5.7	1.9	2.5

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.3	0.3	3.4	0.0	0.0	0.1
Total Del/Veh (s)	14.1	2.2	8.9	10.3	2.2	1.1	0.4	1.1	0.8	2.1

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	2.0	0.0	0.0	0.0
Total Del/Veh (s)	3.3	1.2	1.4	2.3	2.7	1.6	2.5	7.8	1.5	4.0	6.2	1.9

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.3

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	7.4

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	L	TR	L	TR
Maximum Queue (ft)	34	29	50	79	26
Average Queue (ft)	3	4	14	33	8
95th Queue (ft)	18	20	37	61	25
Link Distance (ft)			1223		1017
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	325	300		250	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	60	86	26
Average Queue (ft)	12	29	7
95th Queue (ft)	42	66	23
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	2	30	40
Average Queue (ft)	0	6	13
95th Queue (ft)	2	24	35
Link Distance (ft)		1030	1034
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	86	26
Average Queue (ft)	39	1
95th Queue (ft)	66	12
Link Distance (ft)	1008	3164
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB
Directions Served	LTR	LTR	LT
Maximum Queue (ft)	74	19	45
Average Queue (ft)	30	1	8
95th Queue (ft)	62	8	32
Link Distance (ft)	7686	1122	1094
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	LT	R	LT	R
Maximum Queue (ft)	5	25	19	50	20
Average Queue (ft)	0	7	5	7	6
95th Queue (ft)	4	23	18	31	20
Link Distance (ft)		2632		7052	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375		250		250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.0	0.2	3.9	0.5	0.0	0.3	1.8	0.0	0.0	3.6	0.3	0.4
Total Del/Veh (s)	0.7	0.8	0.1	1.1	1.0	0.5	4.1	8.3	2.2	6.0	7.1	2.8

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.5
Total Del/Veh (s)	2.8

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.2	0.1	0.0	0.1	2.9	0.1
Total Del/Veh (s)	1.1	0.7	1.9	0.9	8.1	2.7	1.9

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.3	0.0	0.3	0.4	0.1	0.7	0.1	0.1	0.1	0.1
Total Del/Veh (s)	0.3	0.5	0.6	3.1	2.0	1.3	8.2	4.8	2.2	1.5

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.1	0.0	0.0
Total Del/Veh (s)	8.3	5.1	0.8	1.1	6.0	2.7	3.3

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	3.8	0.0	0.0	0.1
Total Del/Veh (s)	15.2	15.1	8.9	9.2	10.8	4.3	2.9	1.4	0.5	4.9	1.3	0.9

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.7

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2	1.8	0.0	0.0	0.0
Total Del/Veh (s)	2.0	1.0	0.7	4.7	2.6	3.1	3.9	5.7	1.1	8.0	5.2	3.7

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	3.0

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	8.2

Queuing and Blocking Report
Horizon Year (2044) No-Build - PM Peak Hour

05/05/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	R	L	TR	L	TR
Maximum Queue (ft)	51	9	4	26	60	68	55
Average Queue (ft)	5	0	0	4	15	32	17
95th Queue (ft)	25	5	3	20	44	58	40
Link Distance (ft)					1223		1017
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	325	325	325	300		250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	51	74	48
Average Queue (ft)	15	27	6
95th Queue (ft)	44	63	28
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	5	2	34	47
Average Queue (ft)	0	0	3	16
95th Queue (ft)	3	2	20	39
Link Distance (ft)			1030	1034
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	400	300		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
Horizon Year (2044) No-Build - PM Peak Hour

05/05/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	110	43
Average Queue (ft)	45	3
95th Queue (ft)	82	20
Link Distance (ft)	1008	3164
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LT	LT	R
Maximum Queue (ft)	92	60	69	10	4
Average Queue (ft)	40	9	14	0	0
95th Queue (ft)	74	34	46	5	3
Link Distance (ft)	7686	1122	1094	983	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				250	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	LT	R	LT	R
Maximum Queue (ft)	14	20	25	19	45	30
Average Queue (ft)	1	1	4	6	14	6
95th Queue (ft)	8	8	17	18	38	22
Link Distance (ft)			2632		7052	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	325		250		250
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.1	0.1	4.1	0.0	0.0	0.1	2.5	0.1	0.0	3.6	0.3	0.2
Total Del/Veh (s)	0.6	1.0	0.1	0.4	1.1	0.4	4.3	8.7	2.3	6.0	6.0	2.3

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.6
Total Del/Veh (s)	3.0

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	3.4	0.3
Total Del/Veh (s)	1.4	0.9	2.2	0.8	7.2	2.9	2.1

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	0.9	0.7	1.3	0.8	7.4	2.4	5.0	1.5	1.2

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.1	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	6.0	3.3	0.5	0.6	3.4	1.4	2.2

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.2	0.2	4.0	0.0	0.1	0.1
Total Del/Veh (s)	10.4	3.2	8.8	5.0	2.2	0.8	0.3	0.9	0.5	1.9

6: Access 1 & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.6	0.9	1.5	0.8	5.8	3.3	1.5

7: County 29 Blvd & Access 2 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.4	2.2	1.9	0.8	1.2	0.7	1.5

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.1	1.5	0.1	0.0	0.0
Total Del/Veh (s)	3.0	1.7	1.0	3.6	1.4	2.3	2.3	8.7	1.3	3.8	10.1	1.9

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.0

Total Network Performance

Denied Del/Veh (s)	0.9
Total Del/Veh (s)	7.6

Queuing and Blocking Report
Opening Year (2029) Build Scenario 2 - AM Peak

05/05/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	L	TR	L	TR
Maximum Queue (ft)	23	43	45	79	25
Average Queue (ft)	1	4	12	37	5
95th Queue (ft)	10	24	36	65	20
Link Distance (ft)			1235		1017
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	325	300		250	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	EB	WB	NB	NB
Directions Served	R	L	L	R
Maximum Queue (ft)	14	65	72	47
Average Queue (ft)	0	17	27	15
95th Queue (ft)	8	50	61	36
Link Distance (ft)			1085	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	325	400		350
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	7	29	41
Average Queue (ft)	0	5	12
95th Queue (ft)	3	22	33
Link Distance (ft)		1029	1034
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Opening Year (2029) Build Scenario 2 - AM Peak

05/05/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	78	33
Average Queue (ft)	36	2
95th Queue (ft)	63	13
Link Distance (ft)	1008	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB
Directions Served	LTR	LTR	LT
Maximum Queue (ft)	68	19	56
Average Queue (ft)	28	1	9
95th Queue (ft)	58	7	35
Link Distance (ft)	7688	1122	1094
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Access 1 & Rochester Blvd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	20	41
Average Queue (ft)	1	17
95th Queue (ft)	11	41
Link Distance (ft)	2010	1116
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: County 29 Blvd & Access 2

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	39	42
Average Queue (ft)	12	2
95th Queue (ft)	25	19
Link Distance (ft)	1096	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	LT	R	LT	R
Maximum Queue (ft)	5	23	19	46	31
Average Queue (ft)	0	5	5	6	6
95th Queue (ft)	4	19	18	28	22
Link Distance (ft)		2712		7030	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375		250		250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.0	0.2	3.9	0.1	0.0	0.3	2.2	0.1	0.1	3.5	0.3	0.3
Total Del/Veh (s)	0.9	0.9	0.1	1.2	1.1	0.6	4.2	8.0	2.2	6.2	6.5	2.2

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.5
Total Del/Veh (s)	2.8

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0	0.1	3.2	0.1
Total Del/Veh (s)	1.2	0.9	2.1	0.8	8.5	2.5	2.0

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.3	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Del/Veh (s)	1.1	0.5	0.9	2.8	1.6	1.0	5.9	5.8	1.8	1.3

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.9	4.9	0.8	1.0	4.0	1.6	2.6

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0		0.0	0.1	0.1	0.1	0.2	0.3	3.8	0.0	0.0	0.1
Total Del/Veh (s)	11.7	6.5	6.9	8.9	9.3	4.7	2.8	1.5	0.6	2.4	1.1	0.9

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.2

6: Access 1 & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0		0.1	0.1	0.1	0.0
Total Del/Veh (s)	10.8	3.7		0.8	0.9	0.1	4.9

7: County 29 Blvd & Access 2 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.3	2.0	1.8	0.8	0.7	0.3	1.4

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.3	1.3	0.0	0.0	0.0
Total Del/Veh (s)	11.1	1.6	0.0	5.4	2.5	2.2	2.9	8.5	1.1	4.9	5.5	3.2

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	3.0

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	10.3

Queuing and Blocking Report
Opening Year (2029) Build Scenario 2 - PM Peak

05/05/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	L	TR	L	TR
Maximum Queue (ft)	53	26	50	83	35
Average Queue (ft)	5	4	11	34	14
95th Queue (ft)	27	19	34	59	33
Link Distance (ft)			1235		1017
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	325	300		250	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	EB	WB	NB	NB
Directions Served	T	L	L	R
Maximum Queue (ft)	9	77	79	45
Average Queue (ft)	0	18	28	9
95th Queue (ft)	7	51	65	30
Link Distance (ft)	1657		1085	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		400		350
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	11	2	43	44
Average Queue (ft)	0	0	3	13
95th Queue (ft)	4	2	22	34
Link Distance (ft)			1029	1034
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	400	300		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
Opening Year (2029) Build Scenario 2 - PM Peak

05/05/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	80	44
Average Queue (ft)	40	4
95th Queue (ft)	66	25
Link Distance (ft)	1008	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LT	LT
Maximum Queue (ft)	80	37	76	21
Average Queue (ft)	34	6	14	1
95th Queue (ft)	67	27	46	11
Link Distance (ft)	7688	1122	1094	984
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Access 1 & Rochester Blvd

Movement	EB	NB
Directions Served	TR	LR
Maximum Queue (ft)	79	30
Average Queue (ft)	43	3
95th Queue (ft)	68	17
Link Distance (ft)	2993	508
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: County 29 Blvd & Access 2

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	48	27
Average Queue (ft)	14	1
95th Queue (ft)	32	10
Link Distance (ft)	1101	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	LT	R	LT	R
Maximum Queue (ft)	5	5	24	17	53	23
Average Queue (ft)	0	0	4	5	13	7
95th Queue (ft)	4	5	17	18	37	24
Link Distance (ft)			2712		7030	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	325		250		250
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.1	0.2	4.2	0.4	0.0	0.2	1.4	0.0	0.0	3.6	0.5	0.3
Total Del/Veh (s)	0.6	1.1	0.0	1.9	1.3	0.7	4.6	8.2	2.5	6.2	7.1	2.9

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.7
Total Del/Veh (s)	3.2

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.2	3.2	0.3
Total Del/Veh (s)	1.4	0.9	2.6	1.0	9.5	2.7	2.4

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	0.7	0.7	1.8	1.3	7.0	7.5	4.7	2.0	1.4

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.1	0.0	0.1	0.0	0.0	0.1
Total Del/Veh (s)	7.3	4.4	0.6	0.7	4.4	1.7	2.6

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.3	0.2	3.4	0.0	0.0	0.1
Total Del/Veh (s)	14.8	3.4	8.6		2.2	1.1	0.2	0.9	0.6	2.2

6: Access 1 & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.6	0.8	1.6	1.2	6.4	3.3	1.6

7: County 29 Blvd & Access 2 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.1	2.9	2.1	1.0	1.1	0.7	1.4

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1		0.0	0.0	0.2	0.1	2.3	0.0	0.0	0.0
Total Del/Veh (s)	10.7	7.3	1.0	4.4	8.5	3.3	4.1	5.7	2.0	6.8	9.8	2.5

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	6.9

Total Network Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	9.4

Queuing and Blocking Report
Horizon Year (2044) Build Scenario 2 - AM Peak

05/05/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR
Maximum Queue (ft)	20	9	34	39	77	26
Average Queue (ft)	2	0	5	12	37	8
95th Queue (ft)	12	6	24	34	63	25
Link Distance (ft)				1223		1017
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	325	325	300		250	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	76	102	39
Average Queue (ft)	22	31	16
95th Queue (ft)	57	72	34
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	7	29	50
Average Queue (ft)	0	6	14
95th Queue (ft)	3	26	37
Link Distance (ft)		1030	1034
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Horizon Year (2044) Build Scenario 2 - AM Peak

05/05/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	82	45
Average Queue (ft)	41	3
95th Queue (ft)	67	19
Link Distance (ft)	1008	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB
Directions Served	LTR	LTR	LT
Maximum Queue (ft)	72	10	40
Average Queue (ft)	30	0	10
95th Queue (ft)	62	5	33
Link Distance (ft)	7685	1122	1094
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Access 1 & Rochester Blvd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	20	51
Average Queue (ft)	1	18
95th Queue (ft)	9	44
Link Distance (ft)	2006	509
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: County 29 Blvd & Access 2

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	41	38
Average Queue (ft)	13	3
95th Queue (ft)	30	19
Link Distance (ft)	1096	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	LT	R	LT	R
Maximum Queue (ft)	30	58	19	11	71	21	29	24	46	27
Average Queue (ft)	4	16	1	0	18	2	3	3	6	4
95th Queue (ft)	18	43	9	7	49	11	15	15	26	19
Link Distance (ft)		3406			7685		2560		7003	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	375		375	325		325		250		250
Storage Blk Time (%)										
Queuing Penalty (veh)										

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.0	0.3	4.0	0.1	0.0	0.2	2.0	0.0	0.0	3.5	0.3	0.4
Total Del/Veh (s)	1.0	1.1	0.1	1.4	1.3	0.6	4.7	7.5	1.8	6.4	6.9	2.3

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.5
Total Del/Veh (s)	3.0

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.1	3.6	0.1
Total Del/Veh (s)	1.3	0.7	2.5	1.0	8.9	2.8	2.2

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	1.4	0.6	0.7	0.9	1.7	1.1	9.6	5.3	2.2	1.4

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	9.2	5.7	0.9	1.0	4.1	1.9	3.3

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	3.5	0.0	0.0	0.2
Total Del/Veh (s)	14.5	32.5	8.6	8.8	15.0	3.4	3.4	1.8	0.4	1.9	1.2	0.9

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.6

6: Access 1 & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.4	0.1	0.1	0.1	0.1
Total Del/Veh (s)	11.5	3.5	1.3	1.0	1.2	0.1	5.1

7: County 29 Blvd & Access 2 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.9	3.1	2.6	0.8	0.7	0.2	1.3

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	2.2	0.0	0.0	0.0
Total Del/Veh (s)	6.5	6.8	1.8	11.1	8.9	3.9	6.0	3.1	1.8	9.9	4.0	4.0

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	7.1

Total Network Performance

Denied Del/Veh (s)	0.9
Total Del/Veh (s)	12.0

Queuing and Blocking Report
Horizon Year (2044) Build Scenario 2 - PM Peak Hour

05/05/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	L	TR	L	TR
Maximum Queue (ft)	52	10	3	26	42	82	58
Average Queue (ft)	6	0	0	4	13	35	18
95th Queue (ft)	30	5	3	18	35	63	41
Link Distance (ft)			1657		1223		1017
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	325	325		300		250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	72	82	49
Average Queue (ft)	23	34	9
95th Queue (ft)	59	72	32
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	10	2	48	42
Average Queue (ft)	1	0	4	12
95th Queue (ft)	5	2	23	33
Link Distance (ft)			1030	1034
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	400	300		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
Horizon Year (2044) Build Scenario 2 - PM Peak Hour

05/05/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	92	65
Average Queue (ft)	45	6
95th Queue (ft)	77	31
Link Distance (ft)	1008	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LT	LT	R
Maximum Queue (ft)	94	41	62	11	8
Average Queue (ft)	37	8	17	0	0
95th Queue (ft)	75	30	48	5	4
Link Distance (ft)	7685	1122	1094	989	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				250	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Access 1 & Rochester Blvd

Movement	EB	NB
Directions Served	TR	LR
Maximum Queue (ft)	94	41
Average Queue (ft)	48	6
95th Queue (ft)	77	27
Link Distance (ft)	2994	1053
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: County 29 Blvd & Access 2

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	45	29
Average Queue (ft)	14	1
95th Queue (ft)	33	12
Link Distance (ft)	1101	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	LT	R	LT	R
Maximum Queue (ft)	20	59	15	34	85	20	17	17	36	32
Average Queue (ft)	1	14	1	8	20	2	2	2	8	6
95th Queue (ft)	8	41	8	28	54	11	12	12	28	23
Link Distance (ft)		3406			7685		2560		7003	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	375		375	325		325		250		250
Storage Blk Time (%)										
Queuing Penalty (veh)										

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.0	0.2	3.8	0.0	0.0	0.0	2.1	0.0	0.1	3.3	0.8	0.6
Total Del/Veh (s)	0.5	1.7	0.1	0.3	1.3	0.6	4.3	8.6	3.0	8.4	8.4	2.0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	2.1
Total Del/Veh (s)	5.4

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	3.2	0.5
Total Del/Veh (s)	2.6	1.1	4.3	1.0	13.3	4.9	3.6

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	1.6	1.5	2.0	1.4	15.2	4.5	9.3	5.5	1.9

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.5	4.5	0.8	0.8	5.1	1.8	2.6

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.2	0.3	3.6	0.0	0.0	0.1
Total Del/Veh (s)	15.7	2.6	9.7	3.9	2.2	1.1	0.2	0.8	0.5	2.7

6: Access 1 & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	4.7	2.1	3.9	1.8	8.7	4.6	3.7

7: County 29 Blvd & Access 2 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	9.9	3.4	5.7	2.8	2.9	1.7	3.3

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	1.7	0.0	0.0	0.0
Total Del/Veh (s)	3.1	0.7	0.0	2.0	2.6	2.8	3.7	8.1	1.1	4.7	6.4	1.8

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.0

Total Network Performance

Denied Del/Veh (s)	1.4
Total Del/Veh (s)	13.4

Queuing and Blocking Report
Opening Year (2029) Build Scenario 1 - AM Peak

05/06/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	L	TR	L	TR
Maximum Queue (ft)	16	31	43	135	21
Average Queue (ft)	1	4	11	66	6
95th Queue (ft)	11	21	32	110	21
Link Distance (ft)			1223		1017
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	325	300		250	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	EB	EB	WB	NB	NB
Directions Served	T	R	L	L	R
Maximum Queue (ft)	4	4	92	92	69
Average Queue (ft)	0	0	32	29	31
95th Queue (ft)	3	3	69	69	55
Link Distance (ft)	1657			1085	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		325	400		350
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	12	42	48
Average Queue (ft)	0	7	11
95th Queue (ft)	6	31	34
Link Distance (ft)		1030	1034
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Opening Year (2029) Build Scenario 1 - AM Peak

05/06/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	96	37
Average Queue (ft)	39	3
95th Queue (ft)	70	18
Link Distance (ft)	1008	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB
Directions Served	LTR	LTR	LT
Maximum Queue (ft)	95	10	48
Average Queue (ft)	40	1	8
95th Queue (ft)	75	6	31
Link Distance (ft)	7674	1122	1079
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Access 1 & Rochester Blvd

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	4	69	56
Average Queue (ft)	0	14	24
95th Queue (ft)	5	46	51
Link Distance (ft)	2994	2006	509
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Opening Year (2029) Build Scenario 1 - AM Peak

05/06/2025

Intersection: 7: County 29 Blvd & Access 2

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	57	108	22
Average Queue (ft)	18	30	1
95th Queue (ft)	40	78	10
Link Distance (ft)	1096	1963	1132
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	WB	NB	NB	SB	SB
Directions Served	L	LT	R	LT	R
Maximum Queue (ft)	9	23	16	49	21
Average Queue (ft)	0	5	4	8	5
95th Queue (ft)	7	19	15	31	19
Link Distance (ft)		2594		7073	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	325		250		250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.0	0.2	3.9	0.1	0.0	0.1	1.4	0.1	0.0	3.6	0.5	0.7
Total Del/Veh (s)	1.3	0.9	0.0	1.6	1.3	0.8	3.6	8.0	2.0	6.6	7.0	3.4

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.3
Total Del/Veh (s)	2.9

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.2	3.3	0.2
Total Del/Veh (s)	1.8	0.9	4.8	1.6	24.2	2.9	3.9

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.2	0.0	1.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Del/Veh (s)	1.7	0.8	0.4	2.4	2.7	1.8	17.8	10.9	4.7	2.3

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	9.8	5.4	0.9	1.0	4.4	2.1	3.3

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1		0.3	0.3	3.8	0.0	0.0	0.2
Total Del/Veh (s)	13.1	15.5	9.1	10.1	12.4		3.1	1.3	0.2	3.1	1.2	0.9

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.3

6: Access 1 & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.2	0.2	0.1
Total Del/Veh (s)	14.8	6.4	0.8	1.9	3.0	1.1	5.5

7: County 29 Blvd & Access 2 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	10.0	6.9	2.6	1.5	1.4	0.5	4.8

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	1.6	0.0	0.0	0.0
Total Del/Veh (s)	2.9	0.6	0.0	4.7	3.6	3.4	4.4	7.6	1.4	6.1	3.7	2.7

8: Harry Ave & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	3.0

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	14.4

Queuing and Blocking Report
Opening Year (2029) Build Scenario 1 - PM Peak

05/06/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	R	L	TR	L	TR
Maximum Queue (ft)	64	19	4	26	45	104	39
Average Queue (ft)	7	1	0	4	12	39	15
95th Queue (ft)	35	11	4	19	34	75	34
Link Distance (ft)					1223		1017
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	325	325	325	300		250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	EB	WB	NB	NB
Directions Served	R	L	L	R
Maximum Queue (ft)	4	102	138	56
Average Queue (ft)	0	42	34	18
95th Queue (ft)	3	83	91	40
Link Distance (ft)			1085	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	325	400		350
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	10	48	41
Average Queue (ft)	1	4	12
95th Queue (ft)	5	25	32
Link Distance (ft)		1030	1034
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Opening Year (2029) Build Scenario 1 - PM Peak

05/06/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	110	98
Average Queue (ft)	45	13
95th Queue (ft)	78	51
Link Distance (ft)	1008	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LT	LT
Maximum Queue (ft)	88	45	61	14
Average Queue (ft)	37	7	14	1
95th Queue (ft)	73	31	45	8
Link Distance (ft)	7676	1122	1088	990
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Access 1 & Rochester Blvd

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	168	19	69
Average Queue (ft)	62	1	25
95th Queue (ft)	109	10	60
Link Distance (ft)	2994	2007	1053
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Opening Year (2029) Build Scenario 1 - PM Peak

05/06/2025

Intersection: 7: County 29 Blvd & Access 2

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	151	43	4
Average Queue (ft)	57	5	0
95th Queue (ft)	112	26	3
Link Distance (ft)	1101	1963	1131
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Harry Ave & CSAH 88/County 17 Blvd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	LT	R	LT	R
Maximum Queue (ft)	24	21	19	18	36	27
Average Queue (ft)	1	1	3	5	12	8
95th Queue (ft)	10	8	15	16	34	25
Link Distance (ft)			2594		7073	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	325		250		250
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.1	0.2	3.7	0.0	0.0	0.1	1.3	0.0	0.0	3.3	0.8	0.8
Total Del/Veh (s)	0.7	2.0	0.2	0.9	1.4	0.7	5.0	8.2	3.4	9.7	7.3	2.7

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	2.0
Total Del/Veh (s)	6.0

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.4	3.2	0.5
Total Del/Veh (s)	2.6	1.2	4.7	1.0	16.2	5.4	3.9

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	2.0	1.5	2.0	1.3	8.8	4.5	13.4	2.3	1.9

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	8.6	5.4	0.8	0.8	5.2	2.2	2.9

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.3	0.3	3.0	0.0	0.0	0.2
Total Del/Veh (s)	13.7	3.6	9.4	8.5	2.9	1.2	0.6	1.0	0.6	2.5

6: Access 1 & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	4.6	2.4	4.1	1.7	10.3	5.6	3.6

7: County 29 Blvd & Access 2 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	10.1	4.0	5.4	3.0	3.0	1.7	3.4

8: Harry Blvd & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.5	0.1	0.1	0.1	0.1	0.1	1.7	0.1	0.0	0.0
Total Del/Veh (s)	2.6	1.1	2.6	6.4	3.1	2.7	3.0	8.4	1.4	4.4	7.3	2.0

8: Harry Blvd & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.5

Total Network Performance

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	13.9

Queuing and Blocking Report
Horizon Year (2044) Build Scenario 1 - AM Peak

05/06/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	L	TR	L	TR
Maximum Queue (ft)	20	35	52	180	25
Average Queue (ft)	2	5	14	70	8
95th Queue (ft)	14	23	38	128	25
Link Distance (ft)			1221		1017
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	325	300		250	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	92	97	73
Average Queue (ft)	38	32	33
95th Queue (ft)	78	70	60
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	12	37	61
Average Queue (ft)	1	7	15
95th Queue (ft)	6	28	42
Link Distance (ft)		1030	1034
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	90	42
Average Queue (ft)	43	4
95th Queue (ft)	75	22
Link Distance (ft)	1008	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LT	LTR
Maximum Queue (ft)	72	19	66	4
Average Queue (ft)	29	1	13	0
95th Queue (ft)	59	10	46	3
Link Distance (ft)	7671	1122	1094	975
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Access 1 & Rochester Blvd

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	12	68	56
Average Queue (ft)	0	13	21
95th Queue (ft)	5	48	47
Link Distance (ft)	2994	2006	509
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: County 29 Blvd & Access 2

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	58	112	22
Average Queue (ft)	19	29	2
95th Queue (ft)	43	76	13
Link Distance (ft)	1096	1963	1132
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Harry Blvd & CSAH 88/County 17 Blvd

Movement	EB	NB	NB	SB	SB
Directions Served	L	LT	R	LT	R
Maximum Queue (ft)	10	26	20	52	22
Average Queue (ft)	0	9	6	10	6
95th Queue (ft)	5	27	20	37	21
Link Distance (ft)		2562		7072	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375		250		250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	4.0	0.2	3.8	0.2	0.0	0.1	1.2	0.0	0.0	3.5	0.4	0.5
Total Del/Veh (s)	1.1	1.1	0.1	1.3	1.3	0.7	4.7	8.5	2.1	6.7	7.2	2.7

1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	1.4
Total Del/Veh (s)	3.0

2: Hwy 52 NB Ramp & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.3	0.1	0.0	0.2	3.0	0.2
Total Del/Veh (s)	1.9	0.8	5.1	1.6	27.3	3.0	4.2

3: Hogan Ave & Rochester Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Del/Veh (s)	2.3	0.9	0.9	2.8	2.8	1.8	11.8	9.1	3.6	2.3

4: County 29 Blvd & Cannon Falls Blvd Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	12.2	9.6	1.1	1.3	4.5	2.2	4.0

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0		0.0	0.1	0.1	0.1	0.3	0.3	3.1	0.0	0.0	0.1
Total Del/Veh (s)	18.3		10.0	25.9	14.0	3.3	4.8	2.0	0.3	5.8	1.3	0.9

5: County 29 Blvd & County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	3.2

6: Access 1 & Rochester Blvd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.2	0.2	0.1
Total Del/Veh (s)	15.2	8.1	1.2	2.0	3.3	1.5	6.0

7: County 29 Blvd & Access 2 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	10.6	7.4	3.5	1.7	1.5	0.4	4.9

8: Harry Blvd & CSAH 88/County 17 Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.1	1.9	0.0	0.0	0.0
Total Del/Veh (s)	3.9	0.5	1.3	5.7	4.2	3.5	3.9	6.7	1.3	5.0	4.3	3.5

8: Harry Blvd & CSAH 88/County 17 Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	3.4

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	15.5

Queuing and Blocking Report
Horizon Year (2044) Build Scenario 1 - PM Peak

05/06/2025

Intersection: 1: Harry Ave/Hwy 52 SB Ramp & Rochester Blvd

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	R	L	TR	L	TR
Maximum Queue (ft)	52	13	7	27	52	97	46
Average Queue (ft)	8	1	0	5	14	40	16
95th Queue (ft)	34	8	4	21	40	71	36
Link Distance (ft)					1221		1017
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	325	325	325	300		250	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: Hwy 52 NB Ramp & Rochester Blvd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	109	121	44
Average Queue (ft)	49	37	16
95th Queue (ft)	94	91	36
Link Distance (ft)		1085	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	400		350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Hogan Ave & Rochester Blvd

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	12	2	36	48
Average Queue (ft)	1	0	3	15
95th Queue (ft)	8	2	19	36
Link Distance (ft)			1030	1034
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	400	300		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
Horizon Year (2044) Build Scenario 1 - PM Peak

05/06/2025

Intersection: 4: County 29 Blvd & Cannon Falls Blvd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	129	70
Average Queue (ft)	55	14
95th Queue (ft)	102	50
Link Distance (ft)	1008	1963
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: County 29 Blvd & County 17 Blvd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LT	LT
Maximum Queue (ft)	96	62	115	17
Average Queue (ft)	31	10	26	1
95th Queue (ft)	72	40	74	8
Link Distance (ft)	7658	1122	1094	971
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 6: Access 1 & Rochester Blvd

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	170	15	84
Average Queue (ft)	65	1	28
95th Queue (ft)	117	10	64
Link Distance (ft)	2994	2007	1053
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: County 29 Blvd & Access 2

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	137	82	4
Average Queue (ft)	55	8	0
95th Queue (ft)	100	42	3
Link Distance (ft)	1101	1963	1131
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Harry Blvd & CSAH 88/County 17 Blvd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	L	L	LT	R	LT	R
Maximum Queue (ft)	5	24	24	24	40	27
Average Queue (ft)	0	1	4	6	13	9
95th Queue (ft)	4	12	19	20	35	26
Link Distance (ft)			2562		7072	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	325		250		250
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

Appendix C

Emissions Summary

Guidance

The total GHG emissions from each source category are provided below. You may also use this summary sheet to fill out the *Annual GHG Inventory Summary and Goal Tracking Form* as this calculator only quantifies one year of emissions at a time.

<https://www.epa.gov/climateleadership/center-corporate-climate-leadership-annual-ghg-inventory-summary-and-goal-tracking>

By entering the data below into the appropriate cell of the *Annual GHG Inventory Summary and Goal Tracking Form*, you will be able to compare multiple years of data.

If you have multiple Calculator files covering sub-sets of your inventory for a particular reporting period, sum each of the emission categories (e.g. Stationary Combustion) to an organizational total, which then can be entered into the *Annual GHG Inventory Summary and Goal Tracking Form*.

(A) Enter organization information into the orange cells. Other cells on this sheet will be automatically calculated from the data entered in the sheets in this workbook. Blue cells indicate required emission sources if applicable. Green cells indicate scope 3 emission sources and offsets, which organizations may optionally include in their inventory.

(B) The "Go To Sheet" buttons can be used to navigate to the data entry sheets.

Organizational Information:

Organization Name:	Tract Management Company, LP		
Organization Address:	3300 E. 1st Ave, Suite 600 Denver, CO 80206		
Inventory Reporting Period:	Calendar Year 2025		
	Start:	1/20/2025	End: 1/24/2025
Name of Preparer:	Max Forsman		
Phone Number of Preparer:	952-905-2910		
Date Prepared:	1/24/2025		

Summary of Organization's Emissions:

Scope 1 Emissions

Go To Sheet	Stationary Combustion	1,803	CO ₂ -e (metric tons)
Go To Sheet	Mobile Sources	15,500	CO ₂ -e (metric tons)
Go To Sheet	Refrigeration / AC Equipment Use	0	CO ₂ -e (metric tons)
Go To Sheet	Fire Suppression	0	CO ₂ -e (metric tons)
Go To Sheet	Purchased Gases	0	CO ₂ -e (metric tons)

Location-Based Scope 2 Emissions

Go To Sheet	Purchased and Consumed Electricity	5,797	CO ₂ -e (metric tons)
Go To Sheet	Purchased and Consumed Steam	0	CO ₂ -e (metric tons)

Market-Based Scope 2 Emissions

Go To Sheet	Purchased and Consumed Electricity	5,797	CO ₂ -e (metric tons)
Go To Sheet	Purchased and Consumed Steam	0	CO ₂ -e (metric tons)

Total organization Emissions

Total Scope 1 & Location-Based Scope 2	23,100	CO ₂ -e (metric tons)
Total Scope 1 & Market-Based Scope 2	23,100	CO ₂ -e (metric tons)

Reductions

Go To Sheet	Offsets	0	CO ₂ -e (metric tons)
	Net Scope 1 and 2 Location-Based Emissions	23,100	CO ₂ -e (metric tons)
	Net Scope 1 and 2 Market-Based Emissions	23,100	CO ₂ -e (metric tons)

Scope 3 Emissions

Go To Sheet	Employee Business Travel	0	CO ₂ -e (metric tons)
Go To Sheet	Employee Commuting	0	CO ₂ -e (metric tons)
Go To Sheet	Product Transport	0	CO ₂ -e (metric tons)
Go To Sheet	Waste	6,289	CO ₂ -e (metric tons)

Required Supplemental Information

Go To Sheet	Biomass CO ₂ Emissions from Stationary Sources	0	CO ₂ -e (metric tons)
Go To Sheet	Biomass CO ₂ Emissions from Mobile Sources	0	CO ₂ -e (metric tons)

Operational Boundary Questions - Emissions Sources to Include

Guidance

Use the questions below to help you determine which emissions sources should be included in the inventory.

Emissions Source Questions

A typical office-based organization will likely have the following (scope 1 and scope 2) emissions sources:

- Stationary Combustion
- Refrigeration and AC
- Electricity

If you answer "yes" to a question below, that emissions source should be included in your inventory. For each facility within the defined organizational boundary, collect the necessary data for the selected time period. Use the corresponding Excel sheet to quantify these emissions.

Tip: you may need to ask your landlord about heating sources, steam purchased and refrigerants

Stationary Combustion	Yes or No?
Do you have facilities that burn fuels on-site (e.g., natural gas, propane, coal, fuel oil for heating, diesel fuel for backup generators, biomass fuels)?	N
Mobile Sources	
Do any vehicles fall within your organizational boundary? This can include cars, trucks, propane forklifts, aircraft, boats. Only vehicles owned or leased by your organization should be included here.	N
Refrigeration and Air Conditioning	
Do your facilities use refrigeration or air conditioning equipment?	N
Fire Suppression	
Do your facilities use chemical fire suppressants?	N
Purchased Gases	
Do you purchase any industrial gases for use in your business? These gases may be purchased for use in manufacturing, testing, or laboratories.	N
Waste Gases	
Are VOCs combusted in thermal oxidizers in your facilities?	N
Do you flare any gases on-site?	N
Electricity	
Does your inventory include facilities that use electricity?	Y
Steam	
Do you purchase steam for heating or cooling in your facilities?	N
Market-Based Emission Factors (entered on Electricity and or Steam tabs)	
Do you purchase renewable energy certificates (RECs) or green power products? Do you purchase electricity through a power purchase agreement (PPA)? Do you have supplier-specific emission factors?	N

The questions below refer to scope 3 emissions sources and offsets. If you answer "yes" you may choose whether or not to include these emissions sources in your inventory. Use the corresponding sheet to enter data.

Business Travel	Yes or No?
Do your employees travel for business using transportation other than owned or leased vehicles (e.g., commercial airline flights, rental cars, trains)?	N
Employee Commuting	
Do your employees commute to work in personal vehicles or use public transportation?	Y
Product Transport	
Do you hire another company to transport products or other materials to or from your facilities?	N
Waste Generated in Operations	
Do you generate waste that is disposed of in a facility owned by another organization?	N
Offsets	
Do you purchase greenhouse gas offsets?	N

Scope 1 Emissions from Mobile Sources

Guidance

(A) Enter annual data for each vehicle or group of vehicles (grouped by vehicle type, vehicle year, and fuel type) in ORANGE cells in

Table 1. Example entry is shown in first row (*GREEN Italics*). Only enter vehicles owned or leased by your organization on this sheet. All other vehicle use such as employee commuting or business travel is considered a scope 3 emissions source and should be reported in the corresponding scope 3 sheets.

- Select "On-Road" or "Non-Road" from drop down box to determine the Vehicle Types available.
 - Select "Vehicle Type" from drop down box (closest type available).
- Enter "Fuel Usage" in appropriate units (units appear when vehicle type is selected).

- If mileage or fuel usage is unknown, estimate using approximate fuel economy values (see **Reference Table** below).
- Vehicle year and Miles traveled are not necessary for non-road equipment.

(B) When using biofuels, typically the biofuel (biodiesel or ethanol) is mixed with a petroleum fuel (diesel or gasoline) for use in vehicles. Enter the biodiesel and ethanol percentages of the fuel if known, or leave default values.

Biodiesel Percent:	20 %
Ethanol Percent:	80 %

(C) Biomass CO₂ emissions from biodiesel and ethanol are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Mobile Source Fuel Combustion and Miles Traveled

[illegible]

Reference Table: Average Fuel Economy by Vehicle Type

Vehicle Type	Average Fuel Economy (mpg)
Passenger Cars	24.1
Motorcycles	44.0
Diesel Buses (Diesel Heavy-Duty Vehicles)	7.3
Other 2-axle, 4-Tire Vehicles	17.6
Single unit 2-Axle 6-Tire or More Trucks	7.5
Combination Trucks	6.1

GHG Emissions

Total Organization-Wide Mobile Source Fuel Usage and CO₂ Emissions (On-Road and Off-Road Vehicles)

Fuel Type	Fuel Usage	Units	CO ₂ (kg)
Motor Gasoline	338,469	gallons	2,971,760.7
Diesel Fuel	1,199,164	gallons	12,243,466.3
Residual Fuel Oil	0	gallons	0.0
Aviation Gasoline	0	gallons	0.0
Kerosene-Type Jet Fuel	0	gallons	0.0
Liquefied Petroleum Gas (LPG)	0	gallons	0.0
Ethanol	0	gallons	0.0
Biodiesel	0	gallons	0.0
Liquefied Natural Gas (LNG)	0	gallons	0.0
Compressed Natural Gas (CNG)	0	scf	0.0

Note: emissions here are only for the gasoline portion of the fuel, biogenic CO₂ emis
Note: emissions here are only for the diesel portion of the fuel, biogenic CO₂ emissio

Total Organization-Wide On-Road Gasoline Mobile Source Mileage and CH₄/N₂O Emissions

Vehicle Type	Vehicle Year	Mileage (miles)	CH ₄ (g)	N ₂ O (g)
Passenger Cars - Gasoline	1984-93	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	4,368	31.4	22.7
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0

Light-Duty Trucks - Gasoline (Vans, Pickup Trucks, SUVs)	1987-93		0	0.0	0.0
	1994		0	0.0	0.0
	1995		0	0.0	0.0
	1996		0	0.0	0.0
	1997		0	0.0	0.0
	1998		0	0.0	0.0
	1999		0	0.0	0.0
	2000		0	0.0	0.0
	2001		0	0.0	0.0
	2002		0	0.0	0.0
	2003		0	0.0	0.0
	2004		0	0.0	0.0
	2005		0	0.0	0.0
	2006		0	0.0	0.0
	2007	1,560	16.1	9.5	0.0
	2008		0	0.0	0.0
	2009		0	0.0	0.0
	2010		0	0.0	0.0
	2011		0	0.0	0.0
	2012		0	0.0	0.0
	2013		0	0.0	0.0
	2014		0	0.0	0.0
	2015		0	0.0	0.0
	2016		0	0.0	0.0
	2017		0	0.0	0.0
	2018		0	0.0	0.0
Heavy-Duty Vehicles - Gasoline	1985-86		0	0.0	0.0
	1987		0	0.0	0.0
	1988-1989		0	0.0	0.0
	1990-1995		0	0.0	0.0
	1996		0	0.0	0.0
	1997		0	0.0	0.0
	1998		0	0.0	0.0
	1999		0	0.0	0.0
	2000		0	0.0	0.0
	2001		0	0.0	0.0
	2002		0	0.0	0.0
	2003		0	0.0	0.0
	2004		0	0.0	0.0
	2005		0	0.0	0.0
	2006		0	0.0	0.0
	2007		0	0.0	0.0
	2008		0	0.0	0.0
	2009		0	0.0	0.0
	2010		0	0.0	0.0
	2011		0	0.0	0.0
	2012		0	0.0	0.0
	2013		0	0.0	0.0
	2014		0	0.0	0.0
	2015		0	0.0	0.0
	2016		0	0.0	0.0
	2017		0	0.0	0.0
	2018		0	0.0	0.0
Motorcycles - Gasoline	1960-1995		0	0.0	0.0
	1996-present		0	0.0	0.0

Total Organization-Wide On-Road Non-Gasoline Mobile Source Mileage and CH₄/N₂O Emissions

Vehicle Type	Fuel Type	Vehicle Year	Mileage (miles)	CH ₄ (g)	N ₂ O (g)
Passenger Cars - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-1995	0	0.0	0.0
		1996-2006	0	0.0	0.0
		2007-2018	0	0.0	0.0
Light-Duty Trucks - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-1995	0	0.0	0.0
		1996-2006	0	0.0	0.0
		2007-2018	0	0.0	0.0
Medium- and Heavy-Duty Vehicles - Diesel	Diesel	1960-2006	0	0.0	0.0
		2007-2018	1,560	14.8	67.2
Light-Duty Cars	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
Light-Duty Trucks	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
Medium-Duty Trucks	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
Heavy-Duty Trucks	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
Buses	Biodiesel		0	0.0	0.0
			0	0.0	0.0
			0	0.0	0.0
			0	0.0	0.0

Total Organization-Wide Non-Road Mobile Source Fuel Usage and CH₄/N₂O Emissions

Vehicle Type	Fuel Type	Fuel Usage (gallons)	CH ₄ (g)	N ₂ O (g)
Ships and Boats	Residual Fuel Oil	-	-	-
	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
Locomotives	Diesel	-	-	-
	Jet Fuel	-	-	-
Aircraft	Aviation Gasoline	-	-	-
	Gasoline (2 stroke)	-	-	-
Agricultural Equipment	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
	Gasoline	-	-	-
Agricultural Offroad Trucks	Diesel	-	-	-
	Gasoline (2 stroke)	335,096	4,161,890	23,457
Construction/Mining Equipment	Gasoline (4 stroke)	-	-	-
	Diesel	1,196,771	239,354	562,482
	LPG	-	-	-
Construction/Mining Offroad Trucks	Gasoline	-	-	-
	Diesel	-	-	-
Lawn and Garden Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Airport Equipment	Gasoline	-	-	-
	Diesel	-	-	-
Industrial/Commercial Equipment	LPG	-	-	-
	Gasoline (2 stroke)	-	-	-
Logging Equipment	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
Railroad Equipment	Gasoline	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Recreational Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-

Total CO₂ Equivalent Emissions (metric tons) - Mobile Sources	15,499.9
Total Biomass CO₂ Equivalent Emissions (metric tons) - Mobile Sources	0.0

Notes:
1. Average mpg values from the U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2019 (Nov 2020), Table VM-1.

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

The Indirect Emissions from Purchased Electricity Guidance document provides guidance for quantifying two scope 2 emissions totals, using a **location-based method** and a **market-based method**. The organization should quantify and report both totals in its GHG inventory. The location-based method considers average emission factors for the electricity grids that provide electricity. The market-based method considers contractual arrangements under which the organization procures electricity from specific sources, such as renewable energy.

- (A) Enter total annual electricity purchased in kWh and each eGRID subregion for each facility or site in ORANGE cells of **Table 1**.
- (B) If electricity consumption data are not available for a facility, an estimate should be made for completeness. See the "Electricity" section of the Help sheet for suggested estimation approaches.
- (C) Select "eGRID subregion" from drop box and enter "Electricity Purchased."
- Use map (Figure 1) at bottom of sheet to determine appropriate eGRID subregion. If subregion cannot be determined from the map, find the correct subregion by entering the location's zip code into EPA's Power Profiler:
<https://www.epa.gov/egrid/power-profiler/>
- (D) See the market-based emission factor hierarchy on the market-based method Help sheet. If any of the first four types of emission factors are applicable, enter the factors in the yellow cells marked as "<enter factor>". If not, leave the yellow cells as is, and eGRID subregion factors will be used for market-based emissions.
- Example entry is shown in first row (**GREEN Italics**) for a facility that purchases RECs for 100% of its consumption, and therefore has a market-based emission factor of 0.

Help - Market-Based Method

*Tips: Enter electricity usage by location and then look up the eGRID subregion for each location.
If you purchase renewable energy that is less than 100% of your site's electricity, see the example in the market-based method Help sheet.*

Table 1. Total Amount of Electricity Purchased by eGRID Subregion

[illegible]

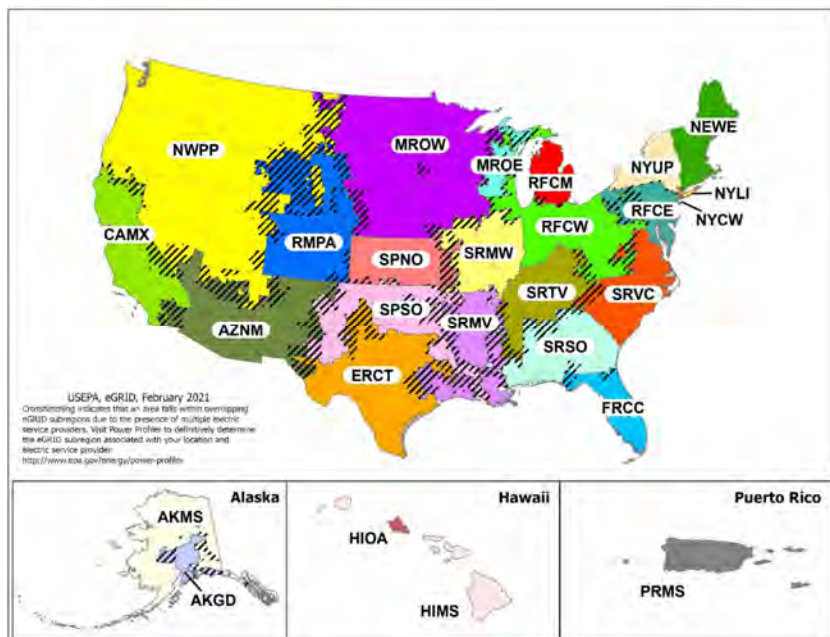
GHG Emissions

CO ₂ Equivalent Emissions (metric tons)	
Location-Based Electricity Emissions	5,796.7
Market-Based Electricity Emissions	5,796.7

Notes:

1. CO₂, CH₄ and N₂O emissions are estimated using methodology provided in EPA's Center for Corporate Climate Leadership Greenhouse Gas Inventory Guidance - Indirect Emissions from Purchased Electricity (January 2016).

Figure 1. EPA eGRID2019, February 2021.



Scope 3 Emissions from Waste

Guidance

(A) Enter annual waste data in ORANGE cells. Example entry is shown in first row (*GREEN Italics*).

(B) Choose the appropriate material and disposal method from the drop down options. For the average-data method, use one of the mixed material types, such as mixed MSW. If the exact waste material is not available, consider an appropriate proxy. For example, dimensional lumber can be used as a proxy for wood furniture.

(C) Choose an appropriate disposal method. Note that not all disposal methods are available for all materials. If there is a #NA or # Value error in the emissions column, you must pick a new material type or appropriate disposal method.

Table 1. Waste Disposal Weight by Waste Material and Disposal Method (CO₂, CH₄ and N₂O)

[illegible]

GHG Emissions

Total Emissions by Disposal Method

Waste Material	CO ₂ e (kg)
Recycled	1,562,085
Landfilled	-
Combusted	4,726,754
Composted	-
Anaerobically Digested (Dry Digestate with Curing)	-
Anaerobically Digested (Wet Digestate with Curing)	-

Total CO₂ Equivalent Emissions (metric tons) - Waste

6.288.8



EPA Simplified GHG Emissions Calculator (SGEC)

Version 7 June 2021

The EPA Simplified GHG Emissions Calculator ("the Calculator") is designed as a simplified calculation tool to help organizations estimate and inventory their annual greenhouse gas (GHG) emissions for US-based operations. All methodologies and default values provided are based on the most current Center for Corporate Climate Leadership Greenhouse *Gas Inventory Guidance Documents* and the *Emission Factors Hub*. The Calculator will quantify the direct and indirect emissions from sources at an organization when activity data are entered into the various sections of the workbook for one annual period.

Before entering data, please: 1) Enable Macros and 2) Familiarize yourself with the [Guide to Greenhouse Gas Management for Small Business & Low Emitters](#).

Download the guide: <https://www.epa.gov/climateleadership/center-corporate-climate-leadership-small-business-and-low-emitters-guide>

There are three primary steps in completing a GHG inventory. Each emissions source also has these three steps.

(1) **DEFINE:** The first step in completing a GHG inventory is to determine the boundaries and emissions sources included within those boundaries. After you have defined your organizational and operational boundaries, you can use the questions on the "Boundary Questions" worksheet to help you determine which emissions sources are relevant to your business.

[Go to Boundary Questions](#)

(2) **COLLECT:** The second step is to collect data for the defined annual period. This step is typically the most time consuming, since the data can be difficult to gather. This Calculator has help sheets with suggestions and guidance for each emissions source and a general help sheet for data management. **Click the drop down menu boxes below to navigate to these sheets.**

Help - Data Management

(3) **QUANTIFY:** The third step is to calculate emissions. This Calculator is designed to complete the emissions quantification step for you. Once the user enters data in this MS Excel spreadsheet, the emissions will be calculated and totaled on the "Summary" sheet.

Calculator Guidance - Important Information

- (A) Navigate to the data entry sheets using the drop down menu in the dark grey cell below and then clicking on the "Go To Data Entry Sheet" button. On the data entry sheets enter data in ORANGE cells only.
- (B) This Calculator has several "Tool Sheets" with useful reference data such as unit conversions, heat contents, and emission factors. Click on the buttons below to go to the appropriate Tool Sheet.
- (C) Data must be entered in the units specified on the data entry sheets. Use the "Unit Conversions" or "Heat Content" sheets if unit conversion is necessary prior to entering data into the Calculator.
- (D) If more guidance is needed, you can reference the emission factor data sources found on the "Emission Factors" sheet.

Tool Sheets	Quick Data Entry Navigation
Unit Conversions	Fire Suppression
Heat Content	
Emission Factors	

Calculator Notes

Emission sources of all seven major GHGs are accounted for in the inventory and in this Calculator: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). The Calculator allows the user to estimate GHG emissions from scope 1 (direct), scope 2 (indirect), and some scope 3 (other indirect) sources.

The Calculator uses U.S.-specific cross-sector emission factors from the *Emission Factors Hub*. Many industrial sectors also have process-related emissions sources that are specific to their sector. EPA's Greenhouse Gas Reporting Program provides guidance and tools that can aid in the calculation and reporting of these emissions:

<https://www.epa.gov/ghgreporting>

The GHG Protocol also provides guidance on calculating emissions from industrial processes.

Emissions Summary

Guidance

The total GHG emissions from each source category are provided below. You may also use this summary sheet to fill out the *Annual GHG Inventory Summary and Goal Tracking Form* as this calculator only quantifies one year of emissions at a time.

<https://www.epa.gov/climateleadership/center-corporate-climate-leadership-annual-ghg-inventory-summary-and-goal-tracking>

By entering the data below into the appropriate cell of the *Annual GHG Inventory Summary and Goal Tracking Form*, you will be able to compare multiple years of data.

If you have multiple Calculator files covering sub-sets of your inventory for a particular reporting period, sum each of the emission categories (e.g. Stationary Combustion) to an organizational total, which then can be entered into the *Annual GHG Inventory Summary and Goal Tracking Form*.

(A) Enter organization information into the orange cells. Other cells on this sheet will be automatically calculated from the data entered in the sheets in this workbook. Blue cells indicate required emission sources if applicable. Green cells indicate scope 3 emission sources and offsets, which organizations may optionally include in their inventory.

(B) The "Go To Sheet" buttons can be used to navigate to the data entry sheets.

Organizational Information:

Organization Name:	Tract Management Company, LP
Organization Address:	3300 E. 1st Ave, Suite 600 Denver, CO 80206
Inventory Reporting Period:	e.g., Calendar Year 2025, Fiscal Year 2025
	Start: 1/20/2025 End: 1/24/2025
Name of Preparer:	Max Forsman
Phone Number of Preparer:	952-905-2910
Date Prepared:	1/24/2025

Summary of Organization's Emissions:

Scope 1 Emissions

Go To Sheet	Stationary Combustion	4,557	CO ₂ -e (metric tons)
Go To Sheet	Mobile Sources	13,286	CO ₂ -e (metric tons)
Go To Sheet	Refrigeration / AC Equipment Use	0	CO ₂ -e (metric tons)
Go To Sheet	Fire Suppression	0	CO ₂ -e (metric tons)
Go To Sheet	Purchased Gases	0	CO ₂ -e (metric tons)

Location-Based Scope 2 Emissions

Go To Sheet	Purchased and Consumed Electricity	15,207	CO ₂ -e (metric tons)
Go To Sheet	Purchased and Consumed Steam	0	CO ₂ -e (metric tons)

Market-Based Scope 2 Emissions

Go To Sheet	Purchased and Consumed Electricity	15,207	CO ₂ -e (metric tons)
Go To Sheet	Purchased and Consumed Steam	0	CO ₂ -e (metric tons)

Total organization Emissions

Total Scope 1 & Location-Based Scope 2	33,050	CO ₂ -e (metric tons)
Total Scope 1 & Market-Based Scope 2	33,050	CO ₂ -e (metric tons)

Reductions

Go To Sheet	Offsets	0	CO ₂ -e (metric tons)
	Net Scope 1 and 2 Location-Based Emissions	33,050	CO ₂ -e (metric tons)
	Net Scope 1 and 2 Market-Based Emissions	33,050	CO ₂ -e (metric tons)

Scope 3 Emissions

Go To Sheet	Employee Business Travel	0	CO ₂ -e (metric tons)
Go To Sheet	Employee Commuting	0	CO ₂ -e (metric tons)
Go To Sheet	Product Transport	0	CO ₂ -e (metric tons)
Go To Sheet	Waste	425	CO ₂ -e (metric tons)

Required Supplemental Information

Go To Sheet	Biomass CO ₂ Emissions from Stationary Sources	0	CO ₂ -e (metric tons)
Go To Sheet	Biomass CO ₂ Emissions from Mobile Sources	0	CO ₂ -e (metric tons)

Operational Boundary Questions - Emissions Sources to Include

Guidance

Use the questions below to help you determine which emissions sources should be included in the inventory.

Emissions Source Questions

A typical office-based organization will likely have the following (scope 1 and scope 2) emissions sources:

- Stationary Combustion
- Refrigeration and AC
- Electricity

If you answer "yes" to a question below, that emissions source should be included in your inventory. For each facility within the defined organizational boundary, collect the necessary data for the selected time period. Use the corresponding Excel sheet to quantify these emissions.

Tip: you may need to ask your landlord about heating sources, steam purchased and refrigerants

Stationary Combustion	Yes or No?
Do you have facilities that burn fuels on-site (e.g., natural gas, propane, coal, fuel oil for heating, diesel fuel for backup generators, biomass fuels)?	N
Mobile Sources	
Do any vehicles fall within your organizational boundary? This can include cars, trucks, propane forklifts, aircraft, boats. Only vehicles owned or leased by your organization should be included here.	N
Refrigeration and Air Conditioning	
Do your facilities use refrigeration or air conditioning equipment?	N
Fire Suppression	
Do your facilities use chemical fire suppressants?	N
Purchased Gases	
Do you purchase any industrial gases for use in your business? These gases may be purchased for use in manufacturing, testing, or laboratories.	N
Waste Gases	
Are VOCs combusted in thermal oxidizers in your facilities?	N
Do you flare any gases on-site?	N
Electricity	
Does your inventory include facilities that use electricity?	Y
Steam	
Do you purchase steam for heating or cooling in your facilities?	N
Market-Based Emission Factors (entered on Electricity and or Steam tabs)	
Do you purchase renewable energy certificates (RECs) or green power products? Do you purchase electricity through a power purchase agreement (PPA)? Do you have supplier-specific emission factors?	N

The questions below refer to scope 3 emissions sources and offsets. If you answer "yes" you may choose whether or not to include these emissions sources in your inventory. Use the corresponding sheet to enter data.

Business Travel	Yes or No?
Do your employees travel for business using transportation other than owned or leased vehicles (e.g., commercial airline flights, rental cars, trains)?	N
Employee Commuting	
Do your employees commute to work in personal vehicles or use public transportation?	Y
Product Transport	
Do you hire another company to transport products or other materials to or from your facilities?	N
Waste Generated in Operations	
Do you generate waste that is disposed of in a facility owned by another organization?	N
Offsets	
Do you purchase greenhouse gas offsets?	N

**EPA CENTER FOR CORPORATE
CLIMATE LEADERSHIP**
U.S. Environmental Protection Agency

(A) Enter annual data for each combustion unit, facility, or site (by fuel type) in ORANGE cells on **Table 1**. Example entry is shown in first row (*GREEN Italics*).

- Select "Fuel Combusted" from drop down box.
- Enter "Quantity Combusted" and choose the appropriate units from the drop down box in the unit column. If it's necessary to convert units, common heat contents can be found on the "Heat Content" sheet and unit conversions on the "Unit Conversion" sheet.

(B) If fuel is consumed in a facility but stationary fuel consumption data are not available, an estimate should be made for completeness. See the "Items to Note" section of the Help sheet for suggested estimation approaches.

(C) Biomass CO₂ emissions are not reported in the total emissions, but are reported separately at the bottom of the sheet.

[illegible]

Fuel Type	Quantity Combusted	Units
Anthracite Coal		0 short tons
Bituminous Coal		0 short tons
Sub-bituminous Coal		0 short tons
Lignite Coal		0 short tons
Natural Gas	83,625,731	scf
Distillate Fuel Oil No. 2		0 gallons
Residual Fuel Oil No. 6		0 gallons
Kerosene		0 gallons
Liquefied Petroleum Gases (LPG)		0 gallons
Wood and Wood Residuals		0 short tons
Landfill Gas		0 scf

Fuel Type	CO ₂ (kg)	CH ₄ (g)	N ₂ O (g)
Anthracite Coal	0.0	0.0	0.0
Bituminous Coal	0.0	0.0	0.0
Sub-bituminous Coal	0.0	0.0	0.0
Lignite Coal	0.0	0.0	0.0
Natural Gas	4,552,584.8	86,134.5	8,362.6
Distillate Fuel Oil No. 2	0.0	0.0	0.0
Residual Fuel Oil No. 6	0.0	0.0	0.0
Kerosene	0.0	0.0	0.0
Liquefied Petroleum Gases (LPG)	0.0	0.0	0.0
Total Fossil Fuel Emissions	4,552,584.8	86,134.5	8,362.6
Wood and Wood Residuals	0.0	0.0	0.0
Landfill Gas	0.0	0.0	0.0
Total Non-Fossil Fuel Emissions	0.0	0.0	0.0
Total Emissions for all Fuels	4,552,584.8	86,134.5	8,362.6

Total Biomass CO₂ Equivalent Emissions (metric tons) - Stationary Combustion	0.0
--	------------

Scope 1 Emissions from Mobile Sources

Guidance

(A) Enter annual data for each vehicle or group of vehicles (grouped by vehicle type, vehicle year, and fuel type) in ORANGE cells in **Table 1**. Example entry is shown in first row (**GREEN Italics**). Only enter vehicles owned or leased by your organization on this sheet. All other vehicle use such as employee commuting or business travel is considered a scope 3 emissions source and should be reported in the corresponding scope 3 sheets.

Table 1. Example entry is shown in first row ([GREEN Italics](#)). Only enter vehicles owned or leased by your organization on this sheet. All other vehicle use such as employee commuting or business travel is considered a scope 3 emissions source and should be reported in the corresponding scope 3 sheets.

- Select "On-Road" or "Non-Road" from drop down box to determine the Vehicle Types available.
- Select "Vehicle Type" from drop down box (closest type available).
- Enter "Fuel Usage" in appropriate units (units appear when vehicle type is selected).

- If mileage or fuel usage is unknown, estimate using approximate fuel economy values (see **Reference Table** below).

- Vehicle year and Miles traveled are not necessary for non-road equipment.

(B) When using biofuels, typically the biofuel (biodiesel or ethanol) is mixed with a petroleum fuel (diesel or gasoline) for use in vehicles. Enter the biodiesel and ethanol percentages of the fuel if known, or leave default values.

Biodiesel Percent:	20 %
Ethanol Percent:	80 %

(C) Biomass CO₂ emissions from biodiesel and ethanol are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Mobile Source Fuel Combustion and Miles Traveled

[illegible]

Reference Table: Average Fuel Economy by Vehicle Type

Vehicle Type	Average Fuel Economy (mpg)
Passenger Cars	24.1
Motorcycles	44.0
Diesel Buses (Diesel Heavy-Duty Vehicles)	7.3
Other 2-axle, 4-Tire Vehicles	17.6
Single unit 2-Axle 6-Tire or More Trucks	7.5
Combination Trucks	6.1

GHG Emissions

Total Organization-Wide Mobile Source Fuel Usage and CO₂ Emissions (On-Road and Off-Road Vehicles)

Fuel Type	Fuel Usage	Units	CO ₂ (kg)
Motor Gasoline	290,117 gallons	0 gallons	2,547,223.4
Diesel Fuel	1,027,855 gallons	0 gallons	10,494,399.7
Residual Fuel Oil	0 gallons	0 gallons	0.0
Aviation Gasoline	0 gallons	0 gallons	0.0
Kerosene-Type Jet Fuel	0 gallons	0 gallons	0.0
Liquefied Petroleum Gas (LPG)	0 gallons	0 gallons	0.0
Ethanol	0 gallons	0 gallons	0.0
Biodiesel	0 gallons	0 gallons	0.0
Liquefied Natural Gas (LNG)	0 gallons	0 gallons	0.0
Compressed Natural Gas (CNG)	0 scf	0 scf	0.0

Total Organization-Wide On-Road Gasoline Mobile Source Mileage and CH₄/N₂O Emissions

Vehicle Type	Vehicle Year	Mileage (miles)	CH ₄ (g)	N ₂ O (g)
Passenger Cars - Gasoline	1984-93	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	4,368	31.4	22.7
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
Light-Duty Trucks - Gasoline (Vans, Pickup Trucks, SUVs)	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0
	1987-93	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0

	2007	1,560	16.1	9.5
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0
Heavy-Duty Vehicles - Gasoline	1985-86	0	0.0	0.0
	1987	0	0.0	0.0
	1988-1989	0	0.0	0.0
	1990-1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	0	0.0	0.0
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0
Motorcycles - Gasoline	1960-1995	0	0.0	0.0
	1996-present	0	0.0	0.0

Total Organization-Wide On-Road Non-Gasoline Mobile Source Mileage and CH₄/N₂O Emissions

Vehicle Type	Fuel Type	Vehicle Year	Mileage (miles)	CH ₄ (g)	N ₂ O (g)
Passenger Cars - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-1995	0	0.0	0.0
		1996-2006	0	0.0	0.0
		2007-2018	0	0.0	0.0
Light-Duty Trucks - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-1995	0	0.0	0.0
		1996-2006	0	0.0	0.0
		2007-2018	0	0.0	0.0
Medium- and Heavy-Duty Vehicles	Diesel	1960-2006	0	0.0	0.0
		2007-2018	1,560	14.8	67.2
Light-Duty Cars	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
Light-Duty Trucks	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
Medium-Duty Trucks	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0

Heavy-Duty Trucks	Methanol			0	0.0	0.0
	Ethanol			0	0.0	0.0
	CNG			0	0.0	0.0
	LPG			0	0.0	0.0
	LNG			0	0.0	0.0
Buses	Biodiesel			0	0.0	0.0
	Methanol			0	0.0	0.0
	Ethanol			0	0.0	0.0
	CNG			0	0.0	0.0
	LPG			0	0.0	0.0
	LNG			0	0.0	0.0
	Biodiesel			0	0.0	0.0

Total Organization-Wide Non-Road Mobile Source Fuel Usage and CH₄/N₂O Emissions

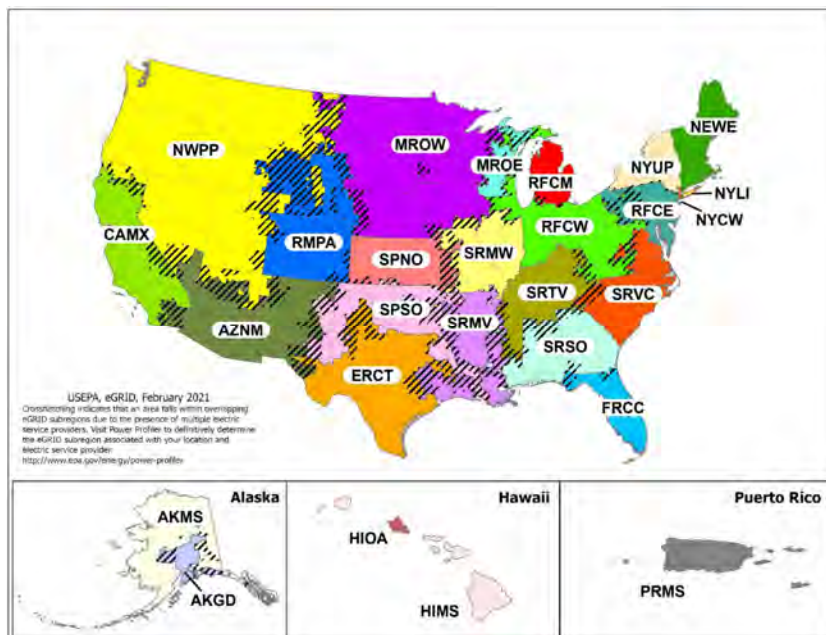
Vehicle Type	Fuel Type	Fuel Usage (gallons)	CH ₄ (g)	N ₂ O (g)
Ships and Boats	Residual Fuel Oil	-	-	-
	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
Locomotives	Diesel	-	-	-
	Jet Fuel	-	-	-
	Aviation Gasoline	-	-	-
	Gasoline (2 stroke)	-	-	-
Agricultural Equipment	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
	Gasoline	-	-	-
Agricultural Offroad Trucks	Diesel	-	-	-
	Gasoline (2 stroke)	287,225	3,567,334	20,106
	Gasoline (4 stroke)	-	-	-
	Diesel	1,025,803	205,161	482,128
Construction/Mining Equipment	LPG	-	-	-
	Gasoline	-	-	-
	Diesel	-	-	-
	Diesel	-	-	-
Lawn and Garden Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Airport Equipment	Gasoline	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
	Gasoline (2 stroke)	-	-	-
Industrial/Commercial Equipment	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
	Gasoline (2 stroke)	-	-	-
Logging Equipment	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	Gasoline	-	-	-
	Diesel	-	-	-
Railroad Equipment	Gasoline	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
	Gasoline (2 stroke)	-	-	-
Recreational Equipment	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
	Gasoline	-	-	-

Total CO ₂ Equivalent Emissions (metric tons) - Mobile Sources	13,285.6
Total Biomass CO ₂ Equivalent Emissions (metric tons) - Mobile Sources	0.0

Notes:
1. Average mpg values from the U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2019 (Nov 2020), Table VM-1.

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

Help - Market-Based Method



Scope 3 Emissions from Waste

Guidance

(A) Enter annual waste data in ORANGE cells. Example entry is shown in first row (*GREEN Italics*).

(B) Choose the appropriate material and disposal method from the drop down options. For the average-data method, use one of the mixed material types, such as mixed MSW. If the exact waste material is not available, consider an appropriate proxy. For example, dimensional lumber can be used as a proxy for wood furniture.

(C) Choose an appropriate disposal method. Note that not all disposal methods are available for all materials. If there is a #NA or # Value error in the emissions column, you must pick a new material type or appropriate disposal method.

Table 1. Waste Disposal Weight by Waste Material and Disposal Method (CO₂, CH₄ and N₂O)

[illegible]

GHG Emissions

Total Emissions by Disposal Method

Waste Material	CO ₂ e (kg)
Recycled	7,736
Landfilled	417,239
Combusted	-
Composted	-
Anaerobically Digested (Dry Digestate with Curing)	-
Anaerobically Digested (Wet Digestate with Curing)	-

Total CO₂ Equivalent Emissions (metric tons) - Waste

425.0

Appendix D



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793



In Reply Refer To:
Project Code: 2024-0114138
Project Name: Simon and McCooy Site

07/10/2024 17:51:33 UTC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance

Please refer to our [Section 7 website](#) for guidance and technical assistance, including [step-by-step instructions](#) for making effects determinations for each species that might be present and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, USDA Rural Development projects, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

We recommend running the project (if it qualifies) through our **Minnesota-Wisconsin Federal Endangered Species Determination Key (Minnesota-Wisconsin ("D-key"))**. A [demonstration video](#) showing how-to access and use the determination key is available. Please note that the Minnesota-Wisconsin D-key is the third option of 3 available d-keys. D-keys are tools to help Federal agencies and other project proponents determine if their proposed action has the potential to adversely affect federally listed species and designated critical habitat. The Minnesota-Wisconsin D-key includes a structured set of questions that assists a project proponent in determining whether a proposed project qualifies for a certain predetermined consultation outcome for all federally listed species found in Minnesota and Wisconsin (except for the northern long-eared bat- see below), which includes determinations of “no effect” or “may affect, not likely to adversely affect.” In each case, the Service has compiled and analyzed the best available information on the species’ biology and the impacts of certain activities to support these determinations.

If your completed d-key output letter shows a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act.

For Federal projects with a “Not Likely to Adversely Affect” (NLAA) determination, our concurrence becomes valid if you do not hear otherwise from us after a 30-day review period, as indicated in your letter.

If your d-key output letter indicates additional coordination with the Minnesota-Wisconsin Ecological Services Field Office is necessary (i.e., you get a “May Affect” determination), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of the key; ESA compliance cannot be concluded using the key for “May Affect” determinations unless otherwise indicated in your output letter.

Note: Once you obtain your official species list, you are not required to continue in IPaC with d-keys, although in most cases these tools should expedite your review. If you choose to make an effects determination on your own, you may do so. If the project is a Federal Action, you may want to review our section 7 step-by-step instructions before making your determinations.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **no effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain [Life History Information for Listed and Candidate Species](#) on our office website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **no effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

Northern Long-Eared Bats

Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

This species hibernates in caves or mines only during the winter. In Minnesota and Wisconsin, the hibernation season is considered to be November 15 to March 31. During the active season (April 1 to November 14) they roost in forest and woodland habitats. Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected.

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A monoculture stand of shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No**

Effect determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

If any of the above activities are proposed, and the northern long-eared bat appears on the user's species list, the federal project user will be directed to either the range-wide northern long-eared bat D-key or the Federal Highways Administration, Federal Railways Administration, and Federal Transit Administration Indiana bat/ Northern long-eared bat D-key, depending on the type of project and federal agency involvement. Similar to the Minnesota-Wisconsin D-key, these d-keys helps to determine if prohibited take might occur and, if not, will generate an automated verification letter. Additional information about available tools can be found on the Service's [northern long-eared bat website](#).

Whooping Crane

Whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, then you are not required to consult. For additional information on this designation and consultation requirements, please review "[Establishment of a Nonessential Experimental Population of Whooping Cranes in the Eastern United States](#)."

Other Trust Resources and Activities

Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a [permit](#). A [nest take permit](#) is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of [recommendations that minimize potential impacts to migratory birds](#). Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to

wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination

While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.

Minnesota

[Minnesota Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: Review.NHIS@state.mn.us

Wisconsin

[Wisconsin Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: DNRRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Minnesota-Wisconsin Ecological Services Field Office

3815 American Blvd East
Bloomington, MN 55425-1659
(952) 858-0793

PROJECT SUMMARY

Project Code: 2024-0114138
Project Name: Simon and McCoy Site
Project Type: Mixed-Use Construction
Project Description: Site investigation for industrial development.
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.531108700000004,-92.9243770061649,14z>



Counties: Dakota and Goodhue counties, Minnesota

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none">▪ This species only needs to be considered if the project includes wind turbine operations. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Minnesota Dwarf Trout Lily <i>Erythronium propullans</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/597	Endangered
Prairie Bush-clover <i>Lespedeza leptostachya</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4458	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper

Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

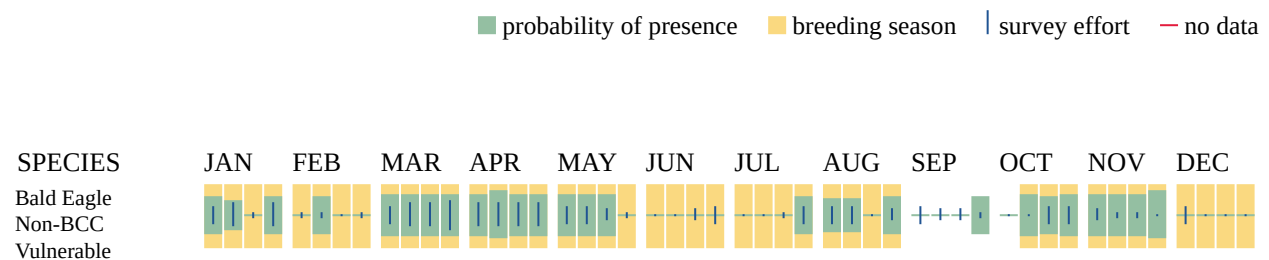
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10561	Breeds elsewhere
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Grasshopper Sparrow <i>Ammodramus savannarum perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Henslow's Sparrow <i>Centronyx henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Hudsonian Godwit <i>Limosa haemastica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9482	Breeds elsewhere

NAME	BREEDING SEASON
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper <i>Calidris melanotos</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prairie Loggerhead Shrike <i>Lanius ludovicianus excubitorides</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8833	Breeds Feb 1 to Jul 31
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10633	Breeds elsewhere
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

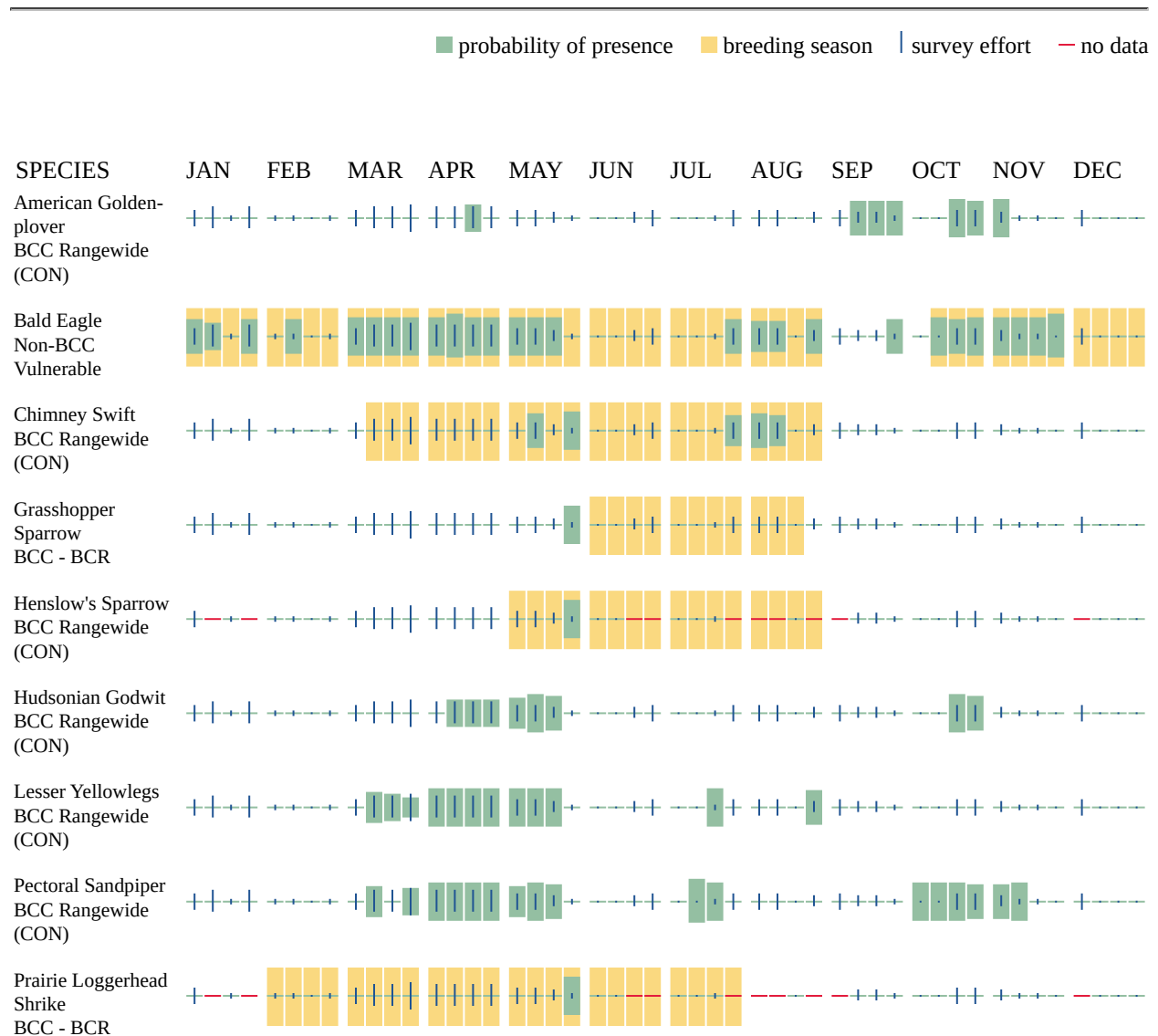
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

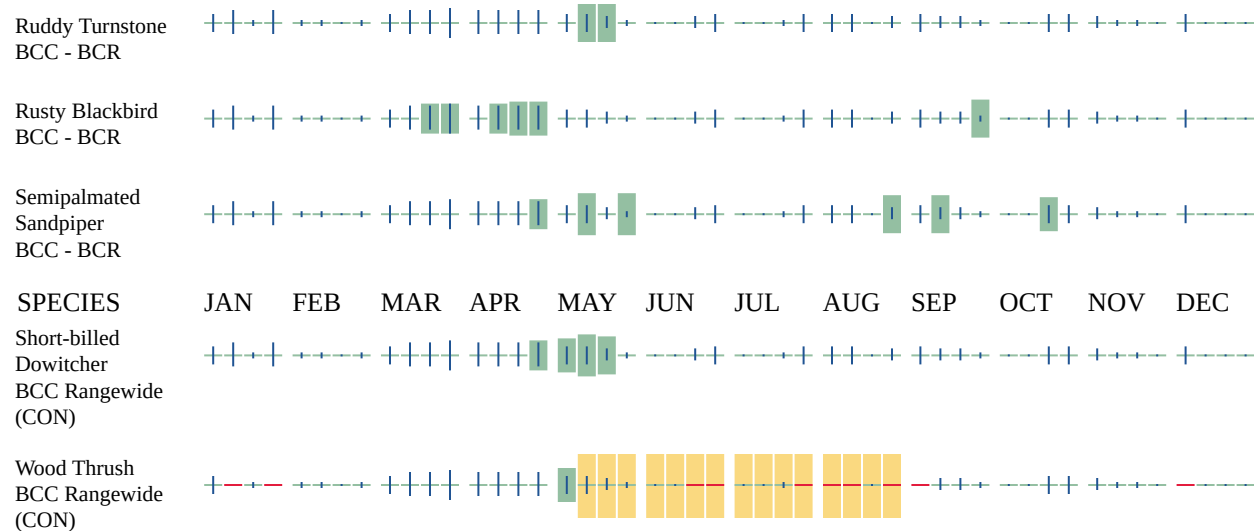
Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R4SBC

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Madeline Roess
Address: 767 Eustis Street
Address Line 2: #100
City: St. Paul
State: MN
Zip: 55114
Email: madeline.roess@kimley-horn.com
Phone: 6128456789



Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

July 30, 2024

Twin Cities - Environmental (Kimley-Horn)
Kimley-Horn and Associates, Inc.

RE: Natural Heritage Review of the proposed **Simon and McCoy**,
T112N R17W Sections 6 & 7, T112N R18W Sections 1 & 12; Dakota, Goodhue County

Dear Twin Cities - Environmental (Kimley-Horn),

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2024-00569** in the email subject line.

As requested, the [Minnesota Natural Heritage Information System](#) has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

State-listed Species

- [Loggerhead shrikes](#) (*Lanius ludovicianus*), a state-listed endangered bird, have been documented in the vicinity of the project site. Loggerhead shrikes use grasslands that contain short grass and scattered perching sites such as hedgerows, shrubs, or small trees. They can be found in native prairie, pastures, shelterbelts, old fields or orchards, cemeteries, grassy roadsides, and farmyards. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of endangered or threatened plants or animals, including their parts or seeds, without a permit. Given the potential for this species to be found in the vicinity of the project, **tree and shrub removal is required to be avoided during the breeding season, April through July.**

Please contact Review.NHIS@state.mn.us to confirm that the above avoidance measure will be implemented or to inform us that avoidance is not feasible. If avoidance is not feasible, a qualified surveyor needs to conduct a survey for active nests before any trees or shrubs will be removed. Requirements for surveys and lists of DNR certified lists of surveyors can be found at the [Natural Heritage Review website](#).

- [Lark sparrow](#) (*Chondestes grammacus*), a state-listed bird species of special concern, has been documented in the vicinity of the project. This bird species is found in open, dry grassland areas with scattered trees and shrubs. They build their nest on the ground, in a shrub or a small tree. **If feasible, avoid initial disturbance to grassland areas and tree/shrub removal from May 15th through August 15th to avoid disturbance of nesting birds.**
- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all of Minnesota's bats, including the federally endangered northern long-eared bat ([Myotis septentrionalis](#)), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, **the DNR recommends that tree removal be avoided from June 1 through August 15.**
- [North American racer](#) (*Coluber constrictor*), a state-listed species of special concern, has been documented in the vicinity of the proposed project and may be encountered on site. These snakes occupy a variety of habitats in the deciduous forest region including forested hillsides, bluff prairies, grasslands, and open woods. Woodland margins and field edges are the preferred summer habitat. During winter months, North American racers hibernate in mammal burrows, caves, rock crevices, gravel banks, stone foundations, and old wells. North American racers have relatively large home ranges, making long-distance movements to and from their hibernacula each year. The North American racer emerges from hibernation in late April. **Given the presence of these rare snakes, the DNR recommends that the use of erosion control mesh, if any, be limited to [wildlife-friendly materials](#).**
- Please visit the [DNR Rare Species Guide](#) for more information on the habitat use of these species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online [Information for Planning and Consultation \(IPaC\) tool](#).

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. **If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.**

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit the [Natural Heritage Review website](#) for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, you may contact your [DNR Regional Environmental Assessment Ecologist](#).

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

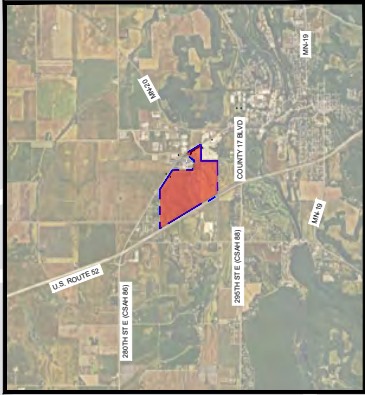
Molly Barrett

Natural Heritage Review Specialist

Molly.Barrett@state.mn.us

Cc: [Melissa Collins](#), Regional Environmental Assessment Ecologist, Central (Region 3)

Appendix E

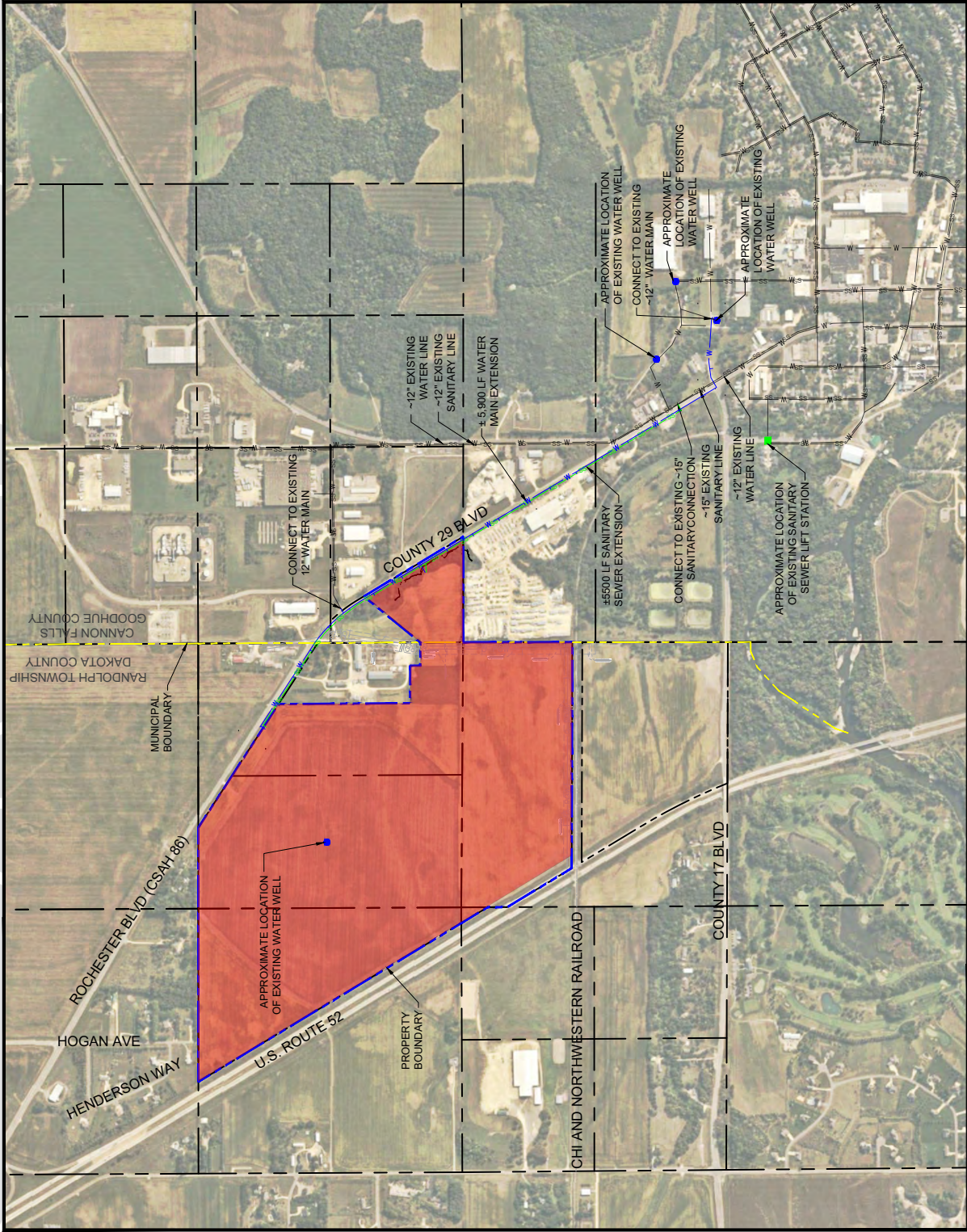


VICINITY MAP
NOT TO SCALE

- LEGEND**
- EXISTING PROPERTY LINE
 - EXISTING WATER MAIN
 - EXISTING SANITARY SEWER MAIN
 - PROPOSED WATER MAIN EXTENSION
 - PROPOSED SANITARY SEWER MAIN EXTENSION
 - PROPOSED SITE BOUNDARY



GRAPHIC SCALE IN FEET
0 250 500 1000



TRACT CANNON FALLS | Utility Offsite Improvements

Cannon Falls, MN

Project # 161278000 November 27, 2024

Appendix F

IC 140-0020

Appendix G

Introduction

Pursuant to Minnesota Rules, part 4410.3610, subpart 5c, the Responsible Governmental Unit (RGU) shall revise the environmental analysis document based on comments received during the comment period. The RGU shall include in the document a section specifically responding to each timely, substantive comment received that indicates in what way the comment has been addressed.

The 30-day AUAR comment period began May 27, 2025, and comments were accepted through June 26, 2025. Three (3) comment letters were received from government agencies, and multiple comments were received from the public. Responses to those comments are included in the following sections.

1. Dakota County

Comment	Response
Environmental Resources	
<p>General</p> <p>What is written in the draft AUAR report under the section 12.ii. Groundwater could be more clearly written for the future users of this report. As stated in the Dakota County comment letter on the AUAR, dated April 5, 2025, the water level in the onsite irrigation well (MN Unique Well Number 751667) was at 18 feet when the well was drilled in 2008. The depth to groundwater on the study area is shallow. The report is confusing by referencing water elevations, not depth to water (as required in the AUAR report directions), in three wells 2 to 3 miles from the study area. One well referenced; MN Unique Well Number 121846, was sealed 20 years ago in 2005. The report references the website where the well record for the onsite well, MN Unique Well Number 751667, is available. The AUAR report directions require the unique numbers and well logs to be provided, if available. None are included in this report even though the well record was provided with the comments dated April 5, 2025. As a reminder, there are at least two wells on the homestead adjacent to the project area, one in-use and one much older with an unknown status. Please refer to previous comments for information about existing wells. All the properties on report Figure 15 with habitation in Dakota County rely on private drinking water wells, no well records are provided in this report. Dakota County has a Delegated Well Program and authority over any unidentified wells found on the property, not the Minnesota Department of Health. A Dakota County well inspector can be reached at (952)891-7000.</p> <p>The Draft AUAR indicates a Phase I ESA was completed but provides limited information other than potential for agri-chemicals, a Phase II is proposed to be completed prior to development. The AUAR requires identifying measures to avoid, minimize or mitigate adverse effects from existing contamination and should include development of a Construction Contingency Plan or Response Action Plan as needed.</p>	<p>Comment noted. The well log provided by Dakota County has been referenced and attached to the AUAR. The AUAR has been updated.</p> <p>Coordination with the City, Dakota County, Minnesota Department of Natural Resources and Department of Health will be completed prior to development within the AUAR Study Area.</p>

Comment	Response
<p>Wastewater</p> <p>Rapid infiltration basins (RIBs) are proposed in the report as one method to dispose of the industrial process water. Stated in the report, "The area does have the potential for karst formation based on local mapping and will be instigated further prior to permitting the RIB system." The underlying dolostone is soluble. Geohazards can be created when water is redirected, or infiltration is concentrated like in the proposed RIB system leading to possible dissolution of the dolostone that could lead to catastrophic sinkhole formation. Paleokarst could already exist under the study area and collapse, or sinkhole formation could result from the weight of, or leaks from, the proposed RIBs and any stormwater basins.</p>	<p>Comment noted. A geotechnical survey and geophysical study will be completed prior to the design and construction of a wastewater treatment facility.</p>
<p>Stormwater</p> <p>The report states that, "The project area is designated as desirable location for infiltration by Dakota County". This area is not a desirable location for infiltration because of the potential for karst. As stated in the Dakota County comment letter on the AUAR, dated April 5, 2025, the Department of Natural Resources has mapped the project area near surface materials as highly vulnerable to pollution and the bedrock as highly sensitive to pollution. See enclosed map of Pollution Sensitivity of Near Surface Materials Map.</p> <p>The dimensions of proposed grading activities were not included in the report. Removal of the existing soil cover by grading can increase the risk of collapse of subsurface features by disrupting the support at the surface. Heavy precipitation events with decreased soil cover increases the risk of collapse and/or transport of contaminants if present, to the aquifer. A detailed site investigation of the study areas karst in order to characterize the impacts and to identify the risks involved utilizing subsurface geotechnical and geophysical techniques is strongly recommended. Consider using ASTM D8512-23 Standard Practice for Preliminary Karst Terrain Assessment for Site Development to guide the investigation.</p> <p>The report states that infiltration of the cooling water or stormwater will be outside of the DWSMA for Cannon Falls. This ignores the fact that infiltration will be occurring in the vicinity for private wells downgradient from where the infiltration will occur.</p>	<p>Comment noted. The AUAR has been updated. A geotechnical survey will be completed prior to the design of any stormwater management facilities to determine the most appropriate stormwater management approach. The proposed system design will be coordinated with the City and in accordance with MPCA State NPDES Permit Requirements and Minnesota Stormwater Manual.</p>

Comment	Response
<p>Water Appropriation</p> <p>The well on the property must be used for potable purposes. It was drilled incorrectly in 2008. A permit to reconstruct the well must be obtained from the Dakota County Delegated Well Program.</p>	<p>Comment noted. Further well investigation with the Minnesota Department of Health is ongoing to determine if the well was installed improperly.</p>
<p>Transportation</p> <p>Dakota County staff have no comment on the content of the draft AUAR. However, for ease of review of the final Traffic Impact Analysis of the AUAR, staff suggests the following formatting corrections.</p> <ul style="list-style-type: none"> • Include the exhibits in the actual report and not as a separate appendix. • Include site plan proposed scenarios in the Traffic Impact Analysis. • Please place the discussion of scenarios in proper order. Scenario 2 trip generation discussion, conditions and intersection analysis occurs before Scenario 1 within the document. • For the exhibits, please include the Rochester Boulevard label and associated County highway number on all maps. • Show the county boundary on all maps. • Exhibit 3 – Orient volume figures to be consistent to the actual direction in this and all maps. • Exhibit 10 – Explain why more trips are predicted to use the secondary access point in place of the primary access location. 	<p>Comment noted.</p>

2. Minnesota Department of Transportation (MnDOT)

Comment	Response
Water Resources	
<p>A MnDOT drainage permit may be required before development occurs. The permit applicant shall demonstrate that the off-site runoff entering MnDOT drainage system(s) and/or right of way will not increase. The drainage permit application, including the information below, should be submitted online to: https://olpa.dot.state.mn.us/OLPA/. Please upload this letter with the drainage permit application.</p> <p>The following information must be submitted with the drainage permit application:</p> <ol style="list-style-type: none"> 1. Grading plans, drainage plans, and hydraulic calculations demonstrating that proposed flows to MnDOT right of way remain the same as existing conditions or are reduced. 2. Existing and proposed drainage area maps with flow arrows and labeling that corresponds with the submitted calculations. 3. Hydro CAD model and PDF of output for the 2, 10, and 100-year Atlas 14 storm events. <p>Once a drainage permit application is submitted, a thorough review will be completed, and additional information may be requested. Please contact Jason Swenson, Water Resources Engineering, at jason.swenson@state.mn.us or 651-234-7539 with any questions.</p>	<p>Comment noted. The project proposer and city will coordinate with MnDOT as needed for a drainage permit.</p>
Permits	
<p>Any work that affects MnDOT right of way will require an appropriate permit. All permits are available and must be applied at: https://olpa.dot.state.mn.us/OLPA/. Upload this letter when applying for permits.</p> <p>For questions regarding permit submittal requirements, please contact Buck Craig of MnDOT's Metro District Permits Section at buck.craig@state.mn.us or 651-775-0405.</p>	<p>Comment noted.</p>

Comment	Response
Review Submittal Options	
<p>MnDOT's goal is to complete reviews within 30 calendar days. Review materials received electronically can be processed more rapidly. Do not submit files via a cloud service or SharePoint link. In order of preference, review materials may be submitted as:</p> <ol style="list-style-type: none"> 1. Email documents and plans to metrodevreviews.dot@state.mn.us. Attachments may not exceed 20 MB (megabytes) per email. Documents can be zipped as well. If multiple emails are necessary, number each email. 2. Files over 20 MB can also be uploaded to MnDOT's Web Transfer Client site: https://mft.dot.state.mn.us. Contact metrodevreviews.dot@state.mn.us, and staff will create a shared folder in which files can be uploaded to. Please send an accompanying email with a narrative for the development. 	<p>Comment noted.</p>

3. Minnesota Pollution Control Agency (MPCA)

Comment	Response
Noise	
<p>The EQB's AUAR Guidance states: [...] 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. [...].</p>	<p>Comment noted. The AUAR study area is surrounded by state highways, county roads, industrial and residential areas. The current noise in the AUAR study area consists of traffic noise including truck and vehicular traffic, noise from industrial, residential, and agricultural uses, and occasional train noise. As noted, the noise standards within the AUAR Study Area as based on the Noise Area Classification (NAC) for the receptors in the area. Any development within the AUAR study area will be required to comply with MN state noise standards as noted in MN Rules 7030.0040. Once a project design is identified for the AUAR study area, a noise analysis will be completed to understand the ambient noise and project noise for the proposed project. Mitigation measures as discussed in the AUAR will be implemented to minimize noise impacts for the adjacent properties.</p>

Comment	Response
<p>Section 19 does not indicate the anticipated sound level from noise sources during the "Operational" phase of the project and does not provide any analysis of the state noise standards in Minn. R. 7030.0040.</p>	<p>Comment noted. The AUAR study area is surrounded by state highways, county roads, industrial and residential areas. The current noise in the AUAR study area consists of traffic noise including truck and vehicular traffic, noise from industrial, residential, and agricultural uses, and occasional train noise. As noted, the noise standards within the AUAR Study Area as based on the Noise Area Classification (NAC) for the receptors in the area. Any development within the AUAR study area will be required to comply with MN state noise standards as noted in MN Rules 7030.0040. Once a project design is identified for the AUAR study area, a noise analysis will be complete to understand the ambient noise and project noise for the proposed project. Mitigation measures as discussed in the AUAR will be implemented to minimize noise impacts for the adjacent properties.</p>

Comment	Response
<p>Section 19 does not provide enough information to determine whether the project will conform with state noise standards. The state noise standards are evaluated based on the Noise Area Classification (NAC) of the receiver of the sound, which is based on land use activity. If there are residential dwellings nearby, the proposer and should evaluate whether the project will have impacts at those residential locations that would exceed the NAC 1 standards in Minn. R. 7030.0040.</p>	<p>Comment noted. The AUAR study area is surrounded by state highways, county roads, industrial and residential areas. The current noise in the AUAR study area consists of traffic noise including truck and vehicular traffic, noise from industrial, residential, and agricultural uses, and occasional train noise. As noted, the noise standards within the AUAR Study Area as based on the Noise Area Classification (NAC) for the receptors in the area. Any development within the AUAR study area will be required to comply with MN state noise standards as noted in MN Rules 7030.0040. Once a project design is identified for the AUAR study area, a noise analysis will be completed to understand the ambient noise and project noise for the proposed project. Mitigation measures as discussed in the AUAR will be implemented to minimize noise impacts for the adjacent properties.</p>

Comment	Response
<p>The RGU and any other land-use decision makers, should consider language in Minn. R. 7030.0030 that reads “[...] Any municipality having authority to regulate land use shall take all reasonable measures within its jurisdiction to prevent the establishment of land use activities listed in noise area classification noise section of the EA (NAC) 1, 2, or 3 in any location where the standards established in part 7030.0040 will be violated immediately upon establishment of the land use.” The W does not provide enough detail regarding current and anticipated sound levels in the project area to determine whether an immediate violation of the state noise standards would occur if the project were approved.</p>	<p>Comment noted. The AUAR study area is surrounded by state highways, county roads, industrial and residential areas. The current noise in the AUAR study area consists of traffic noise including truck and vehicular traffic, noise from industrial, residential, and agricultural uses, and occasional train noise. As noted, the noise standards within the AUAR Study Area as based on the Noise Area Classification (NAC) for the receptors in the area. Any development within the AUAR study area will be required to comply with MN state noise standards as noted in MN Rules 7030.0040. Once a project design is identified for the AUAR study area, a noise analysis will be completed to understand the ambient noise and project noise for the proposed project. Mitigation measures as discussed in the AUAR will be implemented to minimize noise impacts on adjacent properties.</p>
<p>MPCA strongly recommends the proposer conduct a noise study and potentially evaluate methods to mitigate noise impacts to any nearby residential locations.</p>	<p>Comment noted. A proposed development within the AUAR study area will complete a noise study to determine ambient and projected noise within the AUAR study area.</p>
<p>Wastewater</p>	
<p>12.b.i.1) Wastewater indicates that a sanitary sewer extension will be required for the project. A map showing the route to the existing sewer system connection showing the impacted area of construction should be included.</p>	<p>Comment noted. Exhibit added.</p>

Comment	Response
Stormwater Infiltration	
<p>A number of discharge options are identified for industrial wastewater generated from a water-cooled system under the proposed Scenario 2 including infiltration via rapid infiltration basins or irrigation. In addition to the high volume of cooling water discharged, there will be infiltration of onsite stormwater. A portion of the project site is also located within the city Drinking Water Supply Management Area (DWSMA). The impacts to the DWSMA, groundwater and surface waters from infiltrating large volumes of water and the temperature of the cooling water should be discussed in more detail. Impacts to area ground water elevations may impact surrounding properties and the potential areas for groundwater discharge to surface waters should be included. High temperature discharges may impact both underlying geology and surface water discharges and this should be discussed in more detail.</p>	<p>Comment noted. Further study and analysis will be completed to understand potential water discharge and infiltration options for cooling water and stormwater management once a specific project is proposed. The project proposer will work with the city and other regulatory agencies as needed.</p>
<p>More detail should be provided regarding capability of the soil and geology to infiltrate the large volume of water and include seasonal variations in flow and weather. Rapid infiltration typically requires storage of wastewater over winter to account for reduced infiltration capacity due to frozen ground conditions. The temperature of the cooling water infiltration may prevent freezing on the site, but down gradient ground may freeze and cause groundwater to mound and impact surrounding areas.</p>	<p>Comment noted. Discharge of non-contact cooling water will be minimal during the months of October through April. Most of the cooling of the systems will be during the months of May through September.</p> <p>Based on the preliminary geotechnical studies that have been completed for the site, soils are favorable for infiltration. Additionally, the preliminary geotechnical analysis has not currently identified any karst features within the AUAR study area. Further evaluation and design will be completed prior to development to understand potential constraints within the AUAR study area. Temperature control measures will be implemented to minimize impacts to the Cannon River.</p>

4. City of Cannon Falls/Hampton Township – Community Members Comments/Questions

Comment	Response
<p>Kari Lundin</p> <p>As a resident of Hampton Township, with a farm perched perfectly between two proposed data centers, I would like to register my grave concerns about the possible annexation of Simon's land currently in Randolph Township.</p> <p>Having done my best as a lay person to understand what I can of the AAUR, I would like to address the proposed water consumption by the Cannon Falls Data Center.</p> <p>On page 5, the report states the center would use 49 million gallons of water per year. The proposed data center in Hampton would draw another 12.5 million gallons. Combined, that's 61,500,000 gallons per year.</p> <p>The average American uses 82 gallons of water per day, and between 29,200 to 36,500 gallons of water per year. That means the two data centers water consumption would be the equivalent of adding 2106 people to the community.</p> <p>That sounds suspicious. Tract, the developer of the proposed data center in Farmington claims that center could use 12.5 million gallons of water per year. To a lay person, that suggests either one of the parties isn't being completely honest, or the center in Cannon Falls is going to be a giant monstrosity that will ultimately suck us all dry.</p> <p>The Cannon River is our most precious resource as a community. Not only does it add charm and bring a sense of peace to our community, it also draws over 100,000 visitors a year to paddle its waters or bike along its banks.</p> <p>The proposed data center will be just 1700 feet from its shore. That's just 1/3 of a mile. Pine Creek is 1.3 miles north; and fed in part by the spring that comes up from the ground on my neighbor's farm. Both of these bodies of water are essential to the survival of the abundant wildlife that lives near both. So too are my farmer neighbors who irrigate thirsty crops with water from the aquifer below.</p>	<p>Comment noted. The City has completed a water and wastewater analysis for the proposed development scenarios and have determined there is appropriate capacity for the development scenarios and future growth of Cannon Falls.</p> <p>However, the project proposer is evaluating the potential to utilize the existing water appropriations permit and well for non-contact cooling water.</p> <p>If additional water appropriations and a change to the existing well is needed, the city and project proposer will coordinate studies and applications with the Mn DNR, MDH, Dakota County and other agencies as needed.</p>

Comment	Response
<p>None of those who depend on that water can afford to sacrifice a single drop.</p> <p>I moved to Cannon Falls from Los Angeles 20 years ago for the quiet, serenity and equestrian community. Losing those qualities in exchange for a comparative handful of jobs for employees who will live elsewhere due to a lack of housing and better schools seems the wrong path forward.</p> <p>Surely we can find something better to grow our community and benefit ourselves rather than the tech oligarchs behind AI and its insatiable appetite for our natural resources.</p>	
<p>Megan Bauer</p> <p>Lack of Public Notice and Opportunity for Engagement</p> <p>The public has not had adequate opportunity to review and comment on the AUAR. While the draft was published in the Environmental Quality Board Monitor on May 27, only the scoping documents were available on the City of Cannon Falls website. There were no clear calls for public comment in the local newspaper or at recent city council or planning commission meetings. Without effective outreach, the community has been left unaware and unable to participate. I strongly urge that the AUAR comment period be extended and widely publicized to ensure transparency and informed community input.</p>	<p>Comment noted, The Draft AUAR was posted to the City's website prior to the publication in the Mn EQB Monitor. The Draft AUAR was also sent to the EQB Distribution list prior to publication in the EQB Monitor and was available through the EQB Monitor.</p> <p>A public meeting is not a required step in the AUAR process; however, the project proposer and consultants participated in City Council work sessions and a City Council meeting to discuss the AUAR process.</p>
<p>Megan Bauer</p> <p>Inadequate Level of Environmental Review</p> <p>Although the AUAR outlines two development scenarios (pg. 9), the Cannon Falls Technology Park website makes it clear that the goal is a data center or technology park. Given the significant and specific environmental risks posed by such a facility, an Environmental Impact Statement (EIS)—not just an AUAR—is warranted. An EIS would provide a more comprehensive and transparent evaluation of long-term and cumulative environmental consequences.</p>	<p>Comment noted. The AUAR process is an EIS level review for land uses and scenarios. Multiple scenarios were studied in the AUAR, and mitigation strategies have been outlined for impacts identified through the AUAR. As specific projects are identified within the AUAR study area and it is determined any components of the project exceed another threshold under Mn Rules 4410.4300, an Environmental Assessment Worksheet or other</p>

Comment	Response
	appropriate level of review would be completed.
<p>Megan Bauer</p> <p>Insufficient Analysis of Water Use and Cumulative Aquifer Impacts</p> <p>The AUAR does not sufficiently analyze the broader and cumulative water impacts of this development, especially when considered alongside other regional data centers. According to Star Tribune reporting, Tract is developing 500 MW data centers not just in Cannon Falls, but also in Farmington and Rosemount. These facilities are all located within the same general hydrological system and may draw from the Prairie du Chien–Jordan aquifer, which already supports municipalities, agriculture, and private well users.</p> <p>The AUAR estimates that the Cannon Falls facility alone may use up to 4.66 million gallons per day (pg. 52)—the daily water use of approximately 46,600 people, based on EPA data. When multiplied across Tract's multiple sites, this usage could easily exceed 10–15 million gallons per day. Such demand poses a serious threat to aquifer sustainability, especially during drought conditions.</p> <p>Historically, water-intensive developments have caused extensive regional harm. In Elko New Market, the proposed Niagara Bottling facility prompted a DNR-ordered 41-day pump test. The result: one residential well went dry, and others up to 20 miles away experienced geochemical changes, including dangerous manganese contamination—a neurotoxin that killed pets and destroyed water treatment systems. The city must now build a costly new water treatment plant and provide alternative water sources to residents.</p> <p>According to a study of EPA Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, and 37 Tribal nations), large-scale groundwater withdrawals—such as those from data centers—have lowered the water table by 400 to 600 feet in some areas. The AUAR must evaluate how cumulative withdrawals from multiple data centers in the region could cause permanent aquifer drawdown, affect surface water bodies, increase well</p>	<p>Comment noted. The City has completed a water and wastewater analysis for the proposed development scenarios and has determined there is appropriate capacity for the development scenarios and future growth of Cannon Falls.</p> <p>The City of Cannon Falls currently has a water appropriations permit for 250 Million Gallons per Year (MGY) and is currently pumping approximately 149 MGY.</p> <p>Additionally, the project proposer is evaluating the potential for utilizing the existing water appropriations permit and well for non-contact cooling water. If additional water appropriations and a change to the existing well is needed, the city and project proposer will coordinate with the Mn DNR, MDH, Dakota County and other agencies as needed.</p> <p>Minnesota State Statue 103G.271 does not allow “once-through cooling systems” and that the cooling water will need to go through multiple cycles of concentration.</p>

Comment	Response
<p>failures, and trigger costly public infrastructure crises.</p> <p>Additionally, the AUAR should require an evaluation of alternatives such as closed-loop geothermal cooling systems, which can significantly reduce water use compared to “pump-and-dump” systems.</p>	
<p>Megan Bauer</p> <p>Excessive Energy Use and Grid Strain</p> <p>The AUAR does not adequately address the energy consumption impacts of the proposed 500 MW data center (pg. 70). This facility could consume the equivalent of 250,000 to 500,000 households’ electricity every hour. Overburdening the grid risks blackouts, wildfires from sagging power lines, and increased pollution from diesel generators. These are not hypothetical risks—these are growing concerns wherever data centers are concentrated.</p>	<p>Comment noted. The AUAR does not study energy and power. Great River Energy is completing studies to understand capacity within the existing grid system, what improvements and permits would be triggered by a potential project. Great River Energy required to provide power to all customers in their territory as regulated by the Minnesota Public Utilities Commission.</p>
<p>Megan Bauer</p> <p>Inadequate Carbon Mitigation Measures</p> <p>The projected increase of 20,189 metric tons of CO₂ annually (pg. 64)—equivalent to emissions from 2,700+ homes—demands stronger mitigation. The current plan lacks the specificity and ambition necessary to address the serious climate consequences of this development. More aggressive carbon offset strategies, renewable energy sourcing, and on-site energy efficiency measures should be required.</p>	<p>Comment noted. The GHG emissions were calculated using EQB guidance and the recommended EPA calculation tool. The proposed project will implement energy efficient design and will be encouraged to use renewable energy for powering the buildings.</p>
<p>Megan Bauer</p> <p>Lack of Noise Impact Analysis and Mitigation</p> <p>Despite the close proximity to private residences, the AUAR fails to estimate the potential noise impacts from cooling systems or propose specific mitigation measures (pg. 66, 75). In Northern Virginia, Amazon Web Services data centers caused residents 600 feet away to suffer sleepless nights and chronic headaches. In Texas, cooling fan noise has been</p>	<p>Comment noted. The AUAR study area is surrounded by state highways, county roads, industrial and residential areas. The current noise in the AUAR study area consists of traffic noise including truck and vehicular traffic, noise from industrial, residential, and agricultural uses, and occasional train noise. As noted, the noise standards within the AUAR</p>

Comment	Response
<p>linked to migraines, nausea, and even emergency room visits—despite the facilities being across town. Fairfax County now requires at least 200 feet of separation from homes, mandatory noise studies, and sound barriers. Similar safeguards should be adopted here.</p> <p>In closing, I urge you to extend the public comment period, make additional efforts to inform and engage the public, and consider requiring a full Environmental Impact Statement. The scale and intensity of the proposed development present long-term risks to our environment, infrastructure, and quality of life that deserve a thorough and transparent review process.</p>	<p>Study Area as based on the Noise Area Classification (NAC) for the receptors in the area. Any development within the AUAR study area will be required to comply with MN state noise standards as noted in MN Rules 7030.0040. Once a project design is identified for the AUAR study area, a noise analysis will be completed to understand the ambient noise and project noise for the proposed project. Mitigation measures as discussed in the AUAR will be implemented to minimize noise impacts on adjacent properties.</p>
<p>Ann Buselmeier</p> <p>I would like to make a public comment for the record about the AUAR for the proposed Mega Data Center in Cannon Falls. Page 60, documents, "No significant visual impacts are anticipated." Has anyone doing this study ever driven by a data center at night? It looks like a huge dome of light reaching far up into the sky. And since Data centers operate 24/7, 365, this has the possibility and probability of greatly disturbing the migratory birds. Since Cannon Falls has a river system and lake, there are many different species of birds that migrate through our area. Minnesota as a state is part of the Mississippi flyway and supports high volumes of migratory birds and I have to believe based on our local waterways, high volumes of birds migrate through the Cannon Falls area. Migratory birds use the night sky for navigation and artificial lighting disorients the birds, causing the birds to circle the artificial lights and become weak and more susceptible to predators. Maybe this issue has already been addressed in the AUAR. But if not, I do feel it needs to, because this issue is significant, and visual impacts for migratory birds CAN BE anticipated.</p>	<p>Comment noted. The project proposer will be required to comply with city lighting requirements and any identified requirements in the Planned Unit Development (PUD) standards.</p>
<p>RJ Davisson</p> <p>Development Scenarios - Page 8 indicates a potential development scenario of "1,750,000 sq ft" of <u>light industrial use</u>. Again, on page 51 the developer's input states, "Scenario 1 is</p>	<p>Comment noted. The figure reference has been updated.</p>

Comment	Response
<p>proposed <u>light industrial</u>..." Earlier on page 51 the AUAR response states that the rezoning will be "...then rezoned to "I2 - General Industrial" ..."</p> <p>City of Cannon Falls zoning district I-1 Limited Industrial is the zoning district for "light industrial", not the I-2 zone. The I-2 General Industrial zone is written and intended for "heavier" industrial uses that <u>are</u> conditionally permitted (example: concrete product plants, building materials, crude oil, gas and liquid storage tanks, manufacturing of materials such as rubber, corrosive acids, petroleum and chemical products. which propose potential health and safety risks, etc.) These are "heavy" industrial uses. No such similar "heavy" industrial use is permitted or conditionally permitted in the I-1 zoning district.</p> <p>The City of Cannon Falls "Land Use Plan" map from the City's 2003 Comprehensive Plan (Map 23a - page 8.6; also Figure 11 in the AUAR, cited incorrectly as Figure 7 in the AUAR text) used to justify the proposed annexation land use merely shows the area as "industrial" and does not specify the land referenced in the AUAR study to be any specific industrial type. The I-1 and I-2 zones districts were not codified in City ordinance until 2006 and the Land Use Plan map, or any other map, was not updated to reference that it should be either general or light industrial zoning. The City can plan for either the I-2 or I-1 industrial. I-1 is more appropriate and conducive for the City to use for future control of the area — unless the City wants to be faced with the potential of a concrete plant, crude oil and gas storage, corrosive chemical or petroleum products, etc. Nowhere in the multiple possible scenarios of the Scenarios or an existing document is there indication that the developer will not develop the land to certain uses if the City grants the I-2 zone usage.</p>	
<p><i>RJ Davisson</i></p> <p>The AUAR states on page 10 "Land Use" that the "The study area is generally bound by...residential properties to the north..." and elsewhere, "Land uses adjacent to the study area include...single family residential, see Figure 7."</p> <p>The I-1 zoning district is approved and written "to provide for less intensive uses, which</p>	<p>Comment noted.</p>

Comment	Response
<p>because of their proximity to residential areas.....are less likely to impose objectionable influences such as noise, vibrations, dust, heat, smoke, odor and the like." It is specifically suited to the AUAR plan development scenarios. The I-1 zoning district allows many of but not all the uses listed in the I-2 zoning, but because the zone is written to specifically acknowledge the proximity to residential areas, and because the proposed land use may actually come to be industrial in nature (Scenario 1 Light Industrial) , and not a technology park (Scenario 2) , I-1 is a more appropriate zoning district with the stated guideline to consider "proximity to the [residential single family properties] that about the AUAR land that was studied. A technology park would also more appropriately be developed in an I-1 zoning district.</p>	
<p>RJ Davisson</p> <p>Table 2: Climate Considerations and Adaptations, page 16 — The table indicates: Resource Category - Climate Considerations and Adaptations "The proposed development scenarios are not anticipated to generate hazardous waste or materials." Adaptations - "Not applicable."</p> <p>age 55 (d). Project Related Generation/Storage of Hazardous Wastes</p> <p>The AUAR asks that hazard wastes during the operation of the project be described. The answer given was "Not applicable." Scenario 1 is for Industrial Development. In an industrial development not defined at this time the potential exists for hazardous waste byproduct in the industrial uses that might be permitted in the relevant zoning district. An answer other than 'not applicable' is required. An answer must be made because the possible scenarios for Scenario 1, at least, could include the hazardous materials or emissions from the types of uses conditionally allow in an I-2 zone, which the developer indicates it would prefer. To repeat, the I-2 zoning district may allow such uses as concrete product plants, building materials, crude oil, gas and liquid storage tanks, "manufacturing of materials such as rubber, corrosive acids, petroleum and chemical products. which propose potential health and safety risks," and others that are allowed in</p>	<p>Comment noted. Any development in the AUAR study area will be required to follow all local, state, and federal rules for contamination, hazardous waste storage and disposal.</p>

Comment	Response
<p>the developer's current proposal of an I-2 General Industrial zone usage.</p> <p>RJ Davisson</p> <p>Page 27 (c). The document says: "Scenarios 1 and 2 would require rezoning as the parcels will be annexed into the City with an agricultural use. The sites would be rezoned to "I-2 General Industrial District" ...</p> <p>Annexation of land by the City of Cannon Falls is not annexed with an agricultural use. The land would be annexed as an Urban Reserve (UR) zoning district. Per City Ordinance § 152.448 ANNEXATIONS. "All territory hereafter annexed to the city which is not shown on the zoning map shall automatically, upon annexation, be classified within the UR District and shall be subject to all regulations, notations, references and conditions as are applicable to the District until a time that a determination may be made as to the proper district classification for the territory and an amendment can be made to that effect."</p>	<p>Comment noted. This has been corrected.</p>
<p>RJ Davisson</p> <p>Wells - Figure 15, page 46</p> <p>* What impact will the project, both Scenario 1 and Scenario 2, have (Figure 15. Groundwater Resources, page 46 and following text on pages, especially pages 51, 52) on the multiple private wells that are in very close proximity to northern boundary of the AUAR study area? There are many residential private wells shown on the Figure map, some seemingly within yards of the proposed project land. These wells are the only source of water for the residents' use. There appears to be seven (7) wells to the north. Although these wells are not within the boundary of the AUAR study the impact of both Scenarios should be addressed as to the effect on the owners.</p> <p>* Are the residential wells producing water from the same aquifer as the current agricultural well on the study property (40.3 million gallons per year)?</p> <p>* Both Scenario 1 and Scenario 2 discuss the potential reconstruction of the existing</p>	<p>Comment noted. The City has completed a water and wastewater analysis for the proposed development scenarios and has determined there is appropriate capacity for the development scenarios and future growth of Cannon Falls.</p> <p>The City of Cannon Falls currently has a water appropriations permit for 250 Million Gallons per Year (MGY) and is currently pumping approximately 149 MGY.</p> <p>Additionally, the project proposer is evaluating the potential for utilizing the existing water appropriations permit and well for non-contact cooling water. If additional water appropriations and a change to the existing</p>

Comment	Response
<p>onsite agricultural well or using the well as is for the potential projects. There are at least four, and probably more, scenarios to the Scenarios - many combinations. What would be the effect on the abutting residential wells if the well is reconstructed and used for water supply for either of the project Scenarios - indicate lowest and highest water usages and the effect of each.</p> <p>* If the maximum volume of water is used for each Scenario - there are many numbers tossed around on pages 51 and 52 and elsewhere - what will be the effect on the residential wells?</p> <p>* If well water is used for any of possible uses of the AUAR studied land, in whatever volume is required, what assurances and guarantees will be made and legally binding for the developer to make to remediate any negative effects to the homeowners?</p>	<p>well is needed, the city and project proposer will coordinate with the Mn DNR, MDH, Dakota County and other agencies as needed. The Mn DNR is the regulatory agency that reviews and issues all water appropriation permits in the state of Minnesota and if a water appropriations permit amendment would be needed for any of the development scenarios, further coordination with the NDR is needed and the DNR may require further studies for the surrounding area.</p>
<p>RJ Davisson</p> <p>Figure 15. Groundwater Resources</p> <p><i>Old Castle-Hancock</i></p> <p>The map in Figure 15 is incomplete, perhaps because the Minnesota Well Index map that was used for the study is incomplete. There are no wells shown on Old Castle-Hancock property on the west side of County Road 29. There is a well in use on the Old Castle (ex-Hancock) property. Old Castle-Hancock is not connected to city water. Further research is needed and impact results considered and updated in the AUAR.</p> <p>Old Castle has at least one well on the property, registered and tagged, which was installed in the mid-1970s. Old Castle directly abuts the proposed project and the AUAR report area on the north side and the west side of the AUAR reported area. Further, Old Castle land directly abuts the wetlands that are indicated in the AUAR report. This is within the Cannon Falls wellhead protection area and Drinking Water Supply Management Area (DWSMA), as stated in the AUAR report.</p> <p>* What aquifer is used?</p>	<p>The wells shown in Figure 15 are based on publicly available data and identify residential wells within the AUAR study area vicinity.</p> <p>The City has completed a water and wastewater analysis for the proposed development scenarios and has determined there is appropriate capacity for the development scenarios and future growth of Cannon Falls.</p> <p>The project proposer is evaluating the potential for utilizing the existing water appropriations permit and well for non-contact cooling water. If additional water appropriations and a change to the existing well is needed, the city and project proposer will coordinate studies and applications with the Mn DNR, MDH, Dakota County and other agencies as needed.</p>

Comment	Response
<p>* What impact does the proposed project and potential well water volumes have on Old Castle's well water usage?</p> <p>* What is the project's impact on the Old Castle well and the impact of the well's location relative to the project's proposed over/through wetland entrance off County 29?</p> <p><i>Other Properties - their water comes from somewhere</i></p> <p>Since the map index used for the AUAR study is not accurate, further investigation is required using other available sources and reported, the AUAR should be updated and impacts of water usage on those wells included in the AUAR report. In addition to the Old Castle-Hancock well, there may be unreported wells on properties that directly about the study area:</p> <p>* What acquirer(s) are in play?</p> <p>* Residential homes to the east of the residential seven (7) wells on the properties directly north of the AUAR study land. No wells are shown, but the water is sourced from somewhere. These are all in Dakota County. Parcel IDs 310010025051, 310010025050, 310010005015, 3100010005014 (Dakota County)</p> <p>* The area known as Haas Livestock - surrounded on three sides by the AUAR report and directly across County 29 from Cannon Falls Trailer sales as County 29 curves west. This property is partially in Cannon Falls and partially in Dakota County. It is oddly carved out of the proposed annexation. Parcel ID: 525100100 (Goodhue County) and Parcel IDs 310010090012 and 310010090011 (Dakota County).</p> <p><i>Fire Protection</i></p> <p>If, as written, the existing well on the property is reconstructed and use solely for the industrial or technology park development — this is a potential that was floated in the AUAR — what impact would it have on the Cannon Falls Fire Department's and the Hampton Randolph Fire Department's capabilities for fire protection under Minnesota State Fire Code?</p>	<p>As noted in the AUAR, the city provides water to residents from the Jordan and Jordan-St. Lawrence aquifers.</p> <p>The water mains will be extended to the site and fire protection provided via the City's water distribution system.</p>

Comment	Response
<ul style="list-style-type: none"> * Would there be adequate, continuous pressure and volume in the required amounts for an extended time frame? * Would the fire departments be allowed to use the development's well water for a potential fire at the abutting residential homes and businesses? * What impact would there be on surrounding identified and yet-to-be identified wells 	
<p>RJ Davisson</p> <p>Page 48 — "Infiltration would provide some recharge of water to the aquifer, while irrigation for the crops can provide another use of the water verses (sic) using ground water to directly irrigate the crops."</p> <ul style="list-style-type: none"> * How would crop irrigation be this achieved and on what specific land-property would crop irrigation occur? 	<p>Comment noted. Infiltration and other ways to reuse or discharge non-contact cooling water or stormwater will be evaluated once a specific project is identified in the AUAR study area.</p>
<p>RJ Davisson</p> <p>Page 49 - "The industrial process water quality under Scenario 2 would contain little to no BOD or TSS and would have slightly higher concentrations of minerals found naturally occurring in the ground water. Industrial process non-contact cooling water would be discharged either to the City's system (pending study results and necessary system improvements), in rapid infiltration basins (RIBs) or through other methods of spray irrigation or attenuation, or a combination thereof."</p> <ul style="list-style-type: none"> * What effect would higher concentrations of minerals have on crops in a crop irrigation scenario? 	<p>Comment noted. Infiltration and other water ways to reuse, treat and/or discharge non-contact cooling water or stormwater will be evaluated once a specific project is identified in the AUAR study area</p>
<p>RJ Davisson</p> <p>Page 56 and Page 57— AUAR states, "Tree clearing will take place between November 1st and March 31st to avoid potential impacts to roosting bat species and breeding migratory birds." (page 56), and "Should tree clearing be needed for development of Scenario 1 or Scenario 2, tree clearing activities will be conducted</p>	<p>Comment noted. The mitigation strategies identified in the AUAR study area will be implemented by any projects proposed in the AUAR study area.</p>

Comment	Response
<p>between November 1st and March 31st to avoid potential impacts." (page 57) Similar statements were made on page 59.</p> <p>Page 2 of 3 (MNR letter dated July 30, 2024 states: "If feasible, avoid initial disturbance to grassland areas and tree/shrub removal from May 15th through August 15th to avoid disturbance of nesting birds." Further the MNR letter states: Tree and shrub removal is required to be avoided during the breeding season, april through July.</p> <p>With tree/brush and grassland disturbance and removal restrictions the soonest the project could begin in any year would be November 1st for tree removal. As required all grassland disturbance would have to be finished by May 15th of the following year. If all grassland work was not completed by May 15th the remaining undisturbed grassland would need to be left undisturbed until August 15th. "If feasible" is feasible and is a known even at this premature date and development plans can be scheduled around these dates.</p> <p>* Will these development restrictions be included in the development agreement between the City and the developer?</p>	
<p>RJ Davisson</p> <p>Page 66 - 20. Transportation. Parking — The report stated as fact: "For the Technology Building Use, in lieu of a standard parking requirement, a Parking Analysis Memo as agreed to by the staff will determine an appropriate amount of parking required for the Campus"</p> <p>Has the City of Cannon Falls already agreed to this statement in the AUAR or is it a point still open for discussion and negotiation?</p>	<p>Comment noted. Parking requirements and ratios will be discussed as part of future rezoning/PUD discussions and hearings with the city. The parking requirements will be approved by the City Council and will be documented in the PUD.</p>
<p>Julie Maidment</p> <p>I am a tax paying resident of Cannon Falls. My husband and I moved here in 2005. I am and have lived here and been employed here for 20 years.</p>	<p>Comment noted.</p>

Comment	Response
<p>I have just been made aware of a proposed Data Center to be built in Cannon Falls and I have many concerns regarding costs and quality of life. I demand an extension on any decisions regarding said proposal as well as demanding a full environmental impact statement.</p> <p>The demands on our community of this Data Center are enormous. Extreme water use, massive energy use, high carbon emissions, and noise emissions. And there is no information on how this Data Center will impact our taxes.</p> <p>Numbers I have been made aware of (today!) on the above are: The Data Center proposed would use the water of a population of 46,000! Energy/power usage of the equivalent of 250,000-500,000 homes! Carbon emissions of 20,189 metric tons per year with extremely week mitigation plans! Zero noise impact statements.</p> <p>As City Administrator your concerns are first and foremost for the quality of life to those who reside in our fine city. The quality of life here is, at present, excellent.</p> <p>Why has not this Data Center proposal been shouted from the rooftops?</p> <p>John Wiik</p> <p>The AUAR draft does not appear to differentiate between the light industrial scenario (scenario 1) and the technology park scenario (scenario 2). As noted in Section 10b on page 27, there is little or no difference between the permitted uses in the two proposed scenarios. The lack of detail makes it difficult to understand and determine the differences between the impacts of the two proposed scenarios, particularly in terms of traffic, noise, air quality, and water usage. Additionally, Section 10b does not address the impacts of either scenario on the existing adjacent land uses, specifically the residential area to the north.</p>	
	<p>Comment noted. The proposed AUAR studies multiple scenarios and uses. Impacts and mitigation strategies have been identified for both scenarios to mitigate impacts within the AUAR study area and to the adjacent properties.</p>

Comment	Response
<p>Ron Maidment</p> <p>I have recently been made aware of a proposed Data Center to be built here in Cannon Falls. I do have many concerns regarding costs and how this will impact the quality of life here in Cannon Falls. I demand an extension on any decisions regarding said proposal and I demand a full environmental impact statement.</p> <p>The demands of this Data Center are enormous on a community of this size. Extreme water usage, massive energy usage, high carbon emissions, and the impact of increased noise emissions. And no information on how this Data Center will impact our taxes.</p> <p>Numbers I have been made aware of on the above are, that the Data Center would use the water of a population of 46,000! Energy/power usage is the equivalent of 250,00-500,000 homes! Carbon emissions of 20,189 metric tons per year with extremely weak mitigation plans. Zero noise impact statements.</p>	<p>Comment noted. Impacts for multiple development scenarios have been identified, and mitigation strategies have been discussed in the AUAR. As specific projects are identified, further studies and analysis will be completed to comply with state, county and local required permits and regulations.</p>
<p>Jacob Kostorzewski</p> <p>First, I don't understand why we have not received an environmental impact statement rather than the AUAR given the data center is clearly the intent behind the report. Secondly, I don't feel that the residents of Cannon Falls were given appropriate notice or information, so we really need an extension to give the community more time to discover and discuss the implications of this project.</p> <p>On that note, the data center brings a lot of concerns to me, primarily in environmental impact in the form of carbon emissions, and potential waste in water used for cooling, not to mention the incredibly high amount of water projected to be used. We already have limited water on the planet, and this would be using an insane amount for a data center with dubious uses. The energy use is also extremely high, and I worry about the strain on the grid, without even mentioning the actual power consumption.</p> <p>On top of all this, this technology park will certainly be producing an excess of noise, and to top it all off, it isn't even clear who is benefiting from the tax revenue. Please reconsider</p>	<p>Comment noted.</p>

Comment	Response
<p>the approval of this technology park.</p> <p>Ginger Bauer</p> <p>I have some serious concerns about this project and the process you are following to gain its approval. First, neither of those meetings I attended provided much meaningful information to the public. Tract's Information Session was simply a set of large posters that was more marketing language than specific, concrete information and the proposal was not discussed at the recorded City Council meeting but instead was buried in the consent agenda.</p> <p>The only discussion I saw was at the joint May 20 meeting, and my key takeaways from that joint meeting on May 20, 2025 were:</p> <ol style="list-style-type: none"> 1. The May 20 work session was to inform city council members of the proposed data center timeline. The City Administrator, Mr. Radermacher, told City Council members that they will need to review a lot of information and make decisions quickly to meet the aggressive timeline. 2. The anticipated data center deal will not provide a tax benefit to Cannon Falls. City staff seem to be relying on the data center developer (Tract) and future end user (to be determined) to prioritize the best interests of the community. 3. According to the city administrator, the benefits to Cannon Falls will be Tract developing the land and the future end user (to be determined) hopefully providing jobs and charitable donations to foster community goodwill. Nothing has been guaranteed. 4. The city engineer stated that he assumes that Tract would not have approached Cannon Falls without confirming their water and power usage needs are feasible. 5. Per the city attorney, city staff will provide the city council with legally and factually supported information so they can make a rational decision. 6. City staff do not review data center issues outside their control, like electricity 	<p>Comment noted.</p>

Comment	Response
<p>usage or noise levels. There was no mention of possible impacts on the environment, electrical grid, or groundwater from this development at the meeting. The developer was attracted to Cannon Falls for our water and sewer infrastructure.</p> <p>7. It will be up to citizens to proactively voice concerns and influence city council members regarding the data center. Although Councilmember Chris Nobach asked many questions and asked city staff to be transparent with the public, no city council or planning commission member volunteered at that time when the city administrator asked someone to attend internal meetings with Tract and make sure any issues are reported and addressed.</p> <p>8. Mayor Matt Montgomery reminded everyone that no decisions would be made at the work session; it was designed to only be an introduction of the timeline and what information to expect to receive from city staff. The city administrator, city attorney and city engineer all stressed that they are working behind the scenes to gather the data and would be providing the city council with a lot of information which would be used to form their decision.</p>	
<p>Ginger Bauer</p> <p>I would like to highlight the statement that councilperson Chris Nobach made that evening. Mr. Nobach stressed that transparency to the public is key and asked that city staff make sure the information is available to the public and that the public is notified in a variety of ways. I have no idea if more information has been provided to the city council and where they are in the process nor have I seen notices provided to the public, but I've heard through the grapevine that you have a 335-page document, the AUAR (Alternative Urban Areawide Review) available for public review and have set a deadline of midnight, June 26, 2025 for the public to review the AUAR and comment. The city of Cannon Falls has NOT notified the public in the variety of ways that councilperson Nobach requested nor has the city council presented any kind of reason why Cannon Falls should even consider this proposal from Tract, other than the narrow marketing campaign Tract put together.</p>	<p>Comment noted. The Draft AUAR was posted to the City's website prior to the publication in the Mn EQB Monitor. The Draft AUAR was also sent to the EQB Distribution list prior to publication in the EQB Monitor and was available through the EQB Monitor.</p>

Comment	Response
<p>I understand that the timeline outlined for the city council on May 20, 2025 is aggressive and that city staff is urging the city council to be mindful of possible missed deadlines if decisions are not made quickly, but it seems to me that the deadlines on the timeline are designed to benefit Tract and, frankly, to rush the process so the serious issues that perhaps are not under the control of the city of Cannon Falls, are not carefully considered. Tract has merely hinted at possible benefits for the city but can't commit to any real benefits and city staff admitted at the May 20 joint meeting that they don't review factors that are out of their control. I contend that even if factors are not under the control of city staff or the city council, they are morally obligated to consider the factors that will affect not only residents of Cannon Falls, but also the surrounding region. In addition, the Cannon Falls City Council DOES have control over factors that city staff doesn't because they are the governing body that will ultimately make the decision.</p> <p>If this proposal was just about building a facility in the industrial park that might provide jobs, that's one thing, but the end-goal of the proposed technology park is to build data centers and those facilities pose significant and specific environmental risks that need more in-depth study. An AUAR is not sufficient to review those risks. An Environmental Impact Statement (EIS) is the type of study that would provide a more comprehensive evaluation of environmental consequences. Additionally, as noted by the Cannon Falls city engineer at the May 20 joint meeting, city staff does not review data center issues outside their control so they are only focusing on the capacity of our city water and sewer system. According to city staff, once capacity is determined it would be up to the developer to figure out how to deal with any additional capacity needed. The issue though is that we ALL draw from the same water source, the Prairie du Chien–Jordan aquifer, and we all benefit or are negatively affected by decisions affecting our environment. They may not be under the direct "control" of the city of Cannon Falls, but any negative impact on it DOES affect us all. These other factors outside the direct control of the city of Cannon Falls but that are affected by data centers and may consequently affect our residents include CO₂ emissions, strain on our energy grid, and noise levels. Again, the Cannon Falls City Council DOES have control because they have the power to vote yes or no. Not only do they have a moral obligation to ensure the Cannon Falls environment is protected, it is</p>	

Comment	Response
<p>also the moral obligation of the citizens who elected them to ensure we're provided with ample opportunity to be aware and informed of how decisions will affect our community.</p> <p>Which leads me to my point. I do not feel that the city of Cannon Falls has provided residents with adequate notification that the AUAR is available to review nor enough time and opportunity to ask questions about the timeline, the benefits and the possible harmful effects of the proposed project. Too many questions remain unanswered that, though not technically the job of city staff to pursue, present long-term risks to our community and quality of life. In closing, I am requesting that you extend the public comment period and make additional efforts to inform and engage the public. I also urge you to consider requiring a full Environmental Impact Statement.</p>	
<p>Lisa Anderson</p> <p>I understand and share the strong desire in Cannon Falls to attract more economic development, but the City must do so in a way that is smart and sustainable. 251 acres is a lot of real estate and will use a lot of power and water. The Kimberly Horn document is high on hopes and short on details. What kind of jobs will it create and, realistically, where will they hire from? Are we really willing to go all in on this? And how, exactly, does the City or the people that live here benefit? What proportion of the taxes they pay goes to local government? As someone who's done ROI analysis, I would love to see their data analysis that arrives at \$13:\$1; my guess is there are a lot of assumptions in that that tend toward optimistic.</p> <p>I am very concerned about the environmental impacts of a development like this, regardless of any remediation promises they make. I've been in the same rooms where taconite mines promise they won't contaminate water and later then spend years arguing their responsibility for doing so in court when a contamination happens. How would a data center behave differently? We have enough problems with water pollution--let alone energy use, air pollution, noise pollution, etc.</p> <p>We're learning a lot about the problems with data centers and the strict requirements Met Council has used. Should the city decide to allow this data center, I strongly encourage a</p>	<p>Comment noted.</p>

Comment	Response
<p>timeline that allows for authentic public engagement, thorough environmental review, rigorous economic analysis, and rigid remediation requirements.</p> <p>In sum, there are a lot of vague and concerning claims being made with little to back it up, and the fact that this is being fast-tracked only elevates those concerns.</p>	
<p>Alan Muller</p> <p>The City website has only one obvious link to the data center and that goes directly to the promoters' site. While other information can be found online, one gets the impression that the City is NOT making a good-faith effort to inform and involve residents.</p> <p>This impression is reinforced by the apparent lack of meaningful public notice and the inadequate time allowed for comments on the draft review document.</p> <p>Strong provisions for public involvement are basic elements of the MN Environmental Policy Act.</p> <p>The Minnesota Environmental Review program was established by the Legislature in 1973 (This wording is from the MN Department of Health)</p> <p>Minnesota Environmental Policy Act(MEPA) The Minnesota Environmental Policy Act of 1973 (MEPA) established the Environmental Quality Board (EQB), which oversees the formal environmental review process for the state of Minnesota.</p> <p>In Minnesota, environmental review consists most frequently of the completion of one or both of the following documents:</p> <p>Environmental Assessment Worksheet (EAW): A screening tool to determine whether a full environmental impact statement is needed. The worksheet is a six-page questionnaire about the project's environmental setting, the potential for environmental harm and plans to reduce the harm. Approximately 150 worksheets are completed each</p>	<p>Comment noted, The Draft AUAR was posted to the City's website prior to the publication in the Mn EQB Monitor. The Draft AUAR was also sent to the EQB Distribution list prior to publication in the EQB Monitor and was available through the EQB Monitor.</p> <p>A public meeting is not a required step in the AUAR process.</p> <p>The Scoping document and Draft Order was published in the EQB Monitor on March 4, 2025, and ran through April 3, 2025. The Final AUAR Order was approved by the City Council on April 15, 2025.</p> <p>The AUAR was published in the EQB Monitor on May 27, 2025, and comments were collected by the City through June 26, 2025.</p> <p>The Final AUAR and Mitigation Plan will be published for the 10-day agency objection period on July 22, 2025. It is anticipated that the Final AUAR and Mitigation Plan will be adopted by the City Council on August 5, 2025.</p>

Comment	Response
<p>year.</p> <p>Environmental Impact Statement (EIS): An in-depth analysis used for major development projects that will significantly change the environment. The EIS covers social and economic influences, as well as environmental impacts, and looks at alternate ways to proceed with the project.</p> <p>Note that there is no mention here of "Alternative Urban Area Review"</p> <p>This is something more recently grafted onto Minnesota's Environmental Review program, and, in my opinion, is not appropriate in this matter.</p> <p>Start working for area residents and stop working for the applicant (TRACT). Abandon the pretence that multiple projects are under real consideration. Restart the environmental review process with meaningful public engagement in scoping an EIS.</p> <p>Develop an EIS with extensive public engagement and consideration of what has been learned from data center projects elsewhere.</p> <p>Give priority to developing an ordinance with adequate provisions for controlling data center projects, being cognizant of experiences elsewhere.</p>	
<p>Emily Peterson</p> <p>My concerns about this AUAR are about what happens if, when or after the AUAR is approved.</p> <p>Given that Data Centers have set their sites on MN, and even though this AUAR lists two potential outcomes, a future data center appears to be the clear goal.</p> <p>With this in mind, my main concern is that the City of Cannon Falls protect its future development options by requiring (future) tenants of the Technology Park to conduct an</p>	<p>Comment noted. Impacts for multiple development scenarios have been identified, and mitigation strategies have been discussed in the AUAR. As specific projects are identified, further studies and analysis will be completed.</p> <p>The City has completed a water and wastewater analysis for the proposed development scenarios and has determined</p>

Comment	Response
<p>EIS (which are industry-specific) to address the following issues (citations are from the AUAR):</p> <p>Extreme water use: Up to 4.66 million gallons/day (p. 52) — more than 46,000 people worth of water. No real mitigation (pp. 71–72).</p> <p>Massive energy use: 500 MW according to the Star Tribune — power for 250,000–500,000 homes, unaddressed in the AUAR.</p> <p>High carbon emissions: 20,189 metric tons/year (p. 64) — equals 2,700+ homes, with weak mitigation plans.</p> <p>Noise impacts: No noise estimates provided (p. 66), despite homes nearby.</p> <p>Electronic Waste Disposal: not addressed in this AUAR</p> <p>The above AUAR citations are based primarily on TRACT's estimates for unspecified projects. But it is a fact, though not a widely publicized one, that some Data Centers, depending on their focus, require more resources than others. For example, Data Centers that focus on storing photos, emails, etc. have different water/cooling/electrical waste disposal/electrical needs than those that deal in AI and Crypto storage, which require even more of the above, especially water and electricity, and create more electronic waste as well.</p> <p>Basically, I'm worried that the City of Cannon Falls will look only at the purported short-term gains of this project and ignore the potential long-term consequences, not only for the environment, but for the Cannon Falls Community in general. Ultimately, either decision (short or long term) requires an assessment of resource allocation, recognizing that such allocations will impact future generations of Cannon Falls residents, perhaps positively, perhaps negatively. All impacts need to be weighed and considered with short and long term visions in mind.</p>	<p>there is appropriate capacity for the development scenarios and future growth of Cannon Falls.</p> <p>The City of Cannon Falls currently has a water appropriations permit for 250 Million Gallons per Year (MGY) and is currently pumping approximately 149 MGY.</p>

5. Legalelectric – Attorney Comments

Comment	Response
<p>There's NOTHING on the Cannon Falls AUAR page about availability of the Draft AUAR; there's no ID of the linked 5-20-2025 AUAR as the DRAFT available for comment; and there's nothing stating that the process includes commenting on the draft, when comments are due, and where to send them. This provides a good argument for inadequate notice. That info should be prominently stated. Under Minnesota Rule 4410.3610, there's 30 days from date of publication in the EQB Monitor, which was May 27, which means comments are due June 26, just over a week away. Again, notice provided by the RGU is inadequate. (There's also nothing stated about submission of comments on the EQB Monitor page: https://webapp.pca.state.mn.us/eqb-search/project-detail/262244?sild=262244-PROJ00000000001)</p>	<p>Comment noted, The Draft AUAR was posted to the City's website prior to the publication in the Mn EQB Monitor. The Draft AUAR was also sent to the EQB Distribution list prior to publication in the EQB Monitor and was available through the EQB Monitor.</p> <p>A public meeting is not a required step in the AUAR process.</p>
<p>It looks as though you're farming contacts to the consultants, or is it to TRACT? The whois is hidden. The City is the RGU for the AUAR and you are named as the City contact:</p> <div data-bbox="763 1127 987 1497"> <p>3. RGU</p> <p>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</p> </div>	<p>As noted in Mn Rules 410.3610, the local government unit is the RGU for an environmental review as noted in 4410.4400. The City administrator is the RGU.</p>
<p>There is no such thing as the "Minnesota Pollution Control Agency's Environmental Quality Board." It's the Environmental Quality Board, which is a separate agency. The website does filter through MPCA, but it is a separate entity. EQB rules for AUAR govern: https://www.revisor.mn.gov/rules/4410.3610/</p>	<p>Comment noted.</p>

Comment	Response
<p><u>USE OF AUAR IS DISENGENUOUS AND DECEPTIVE</u></p> <p>For the record, I am sending this Comment and attachments to the Environmental Quality Board because use of an AUAR in this manner, rather than preparation of an Environmental Impact Statement, is improper, contrary to the intent and black letter of the AUAR rule.</p> <p>At this time, I ask that an Environmental Impact Statement be prepared based on the project's need for permits triggering a mandatory EIS, i.e., use of numerous diesel generators and thus a need of an Air Permit from the MPCA, water appropriation and other permits from the DNR, and a Certificate of Need permit from the Public Utilities Commission. The project must also demonstrate through dB(A) and dB(C) noise modeling the ability to comply with the industrial noise standard at nearest receptor.</p>	<p>Comment noted. The AUAR process is an EIS level review for land uses and scenarios. Multiple scenarios were studied in the AUAR, and mitigation strategies have been outlined for impacts identified through the AUAR. As specific projects are identified within the AUAR study area and it is determined any components of the project exceed another threshold under Mn Rules 4410.4300, an Environmental Assessment Worksheet or other appropriate level of review would be completed.</p>
<p><u>INADEQUATE NOTICE OF DRAFT AUAR – EXTEND COMMENT DEADLINE</u></p> <p>Cannon Falls did not provide the notice that's required for an AUAR. I did not learn of it until this late date. There's no explanation of a comment period, how to comment, who to send it to, and nothing about the deadline. How are we to know?</p> <p>At this time, I ask that a Notice of Availability of AUAR for Comment be issued, with a comment period of 30 days from publication of Notice. The Notice, including deadline for Comments and a link to the Draft AUAR, should be published by the EQB Monitor; the Cannon Falls Beacon Notices section; prominently displayed on the City of Cannon Falls and Randolph Township home pages; and displayed on the Cannon Falls AUAR page together with a link to the Draft AUAR.</p>	<p>Comment noted, The Draft AUAR was posted to the City's website prior to the publication in the Mn EQB Monitor. The Draft AUAR was also sent to the EQB Distribution list prior to publication in the EQB Monitor and was available through the EQB Monitor.</p> <p>A public meeting is not a required step in the AUAR process.</p>

Comment	Response
<p><u>THE AUAR CONTENT IS DEFICIENT IN MANY RESPECTS</u></p> <p>The AUAR is inadequate as it does not provide basic information necessary to determine potential impacts.</p> <p>SCENARIO 2 IS A DATA CENTER</p> <p>The description of "Scenario 2" is misleading and should be corrected. "Scenario 2 represents proposed technology park development. Construction is anticipated to begin in 2026, see Figure 4." The AUAR Figure 4 shows only a blue blank area.</p> <p><u>ENERGY USE AND DIESEL GENERATORS MUST BE QUANTIFIED</u></p> <p>The AUAR is inadequate because the range of megawatts needed to operate such a project and the source of this energy has not been disclosed. There is a natural gas plant across the road from the site, intermediate natural gas generation which would generate CO2.</p> <p>The AUAR is inadequate because the number and output of diesel generators that would be required for this Tract data center in testing and in an external power outage and the air emissions have not been disclosed.</p> <p>The range of megawatts of energy needed to power the data center and the energy source(s) must be disclosed.</p> <p>The number of diesel generators, their output, and the air emission profile must be disclosed.</p> <p>Energy use and air emissions may be mitigated by amending the zoning ordinance to require the data center produce a significant percentage of its energy with solar and batteries and battery back-up power. Looking at the site plan, the many buildings and green space provide opportunities for solar generation and battery storage. The project could also be required to buy into local/community solar projects.</p>	<p>Comment noted. The AUAR studied two land use scenarios, a technology park and a light industrial park. An AUAR is a land use scenario based environmental review, and a building footprint or layout is not required. The study is to demonstrate the maximum density of development and identifies potential impacts and mitigation strategies for the proposed land use scenarios.</p>
	<p>Energy is not addressed in an AUAR or EAW. It is up to the utility provider to determine if there is capacity in the grid system for any proposed project in their service territory.</p> <p>It is not known at this time if diesel or other types of generators or other methods for emergency power will be needed for the proposed project.</p> <p>If a proposed project exceeds any thresholds or triggers any additional environmental review, it will be completed prior to construction. All permits will be obtained prior to construction.</p>

Comment	Response
<p><u>WATER SOURCE, CONSUMPTION, AND DISCHARGE SPECIFICS MUST BE DISCLOSED, CUMULATIVE IMPACTS BE DETERMINED</u></p> <p>Independent verification is needed of information about projected peak and average day water usage; projected wastewater discharge in the form of AWW, MWW, and PHWW; and projected wastewater discharge strength for BOD, TSS, P, Chlorides, Sulfates, Metals, TKN, and potentially others. The many data center projects that intend to draw from the same aquifer must be tallied, and resources be equitably and responsibly distributed in a sustainable manner. A pump test should be performed to determine sustainability of proposed water draw.</p>	<p>Comment noted. The City has completed a water and wastewater analysis for the proposed development scenarios and has determined there is appropriate capacity for the development scenarios and future growth of Cannon Falls.</p> <p>The City of Cannon Falls currently has a water appropriations permit for 250 Million Gallons per Year (MGY) and is currently pumping approximately 149 MGY.</p> <p>Additionally, the project proposer is evaluating the potential for utilizing the existing water appropriations permit and well for non-contact cooling water. If additional water appropriations and a change to the existing well is needed, the city and project proposer will coordinate with the Mn DNR, MDH, Dakota County and other agencies as needed.</p> <p>The Mn DNR is the regulatory agency that reviews and issues all water appropriation permits in the state of Minnesota and if a water appropriations permit amendment would be needed for any of the development scenarios, further coordination with the NDR is needed and the DNR may require further studies for the surrounding area.</p>

Comment	Response
<p><u>PROJECT SETBACKS ARE NOT EVEN MENTIONED IN THE AUAR!</u></p> <p>The AUAR must address setbacks, and setbacks that would be effective in mitigating expected impacts, particular to those residences/receptors along and up against the northern boundary of the area.</p>	<p>Comment noted. Setbacks are addressed during the Planned Unit Development (PUD) process with the City.</p>
<p><u>VISUAL IMPACTS OF A COMPLEX OF 80 FOOT TALL BUILDINGS IS NOT ADDRESSED</u></p> <p>The AUAR must describe in specificity and provide drawing the visual buffers that would mitigate visual impacts of the project.</p>	<p>Comment noted. The AUAR studies land use scenarios and not specific development proposals. Visual impacts will be addressed during the PUD process with the City. As previously discussed, construction of berms, installation of vegetation, and appropriate building materials will be used to minimize visual impacts.</p>
<p><u>AIR EMISSIONS AND NEED FOR AIR EMISSIONS PERMIT MUST BE DISCLOSED – AUAR MUST ALSO CREDIBLY ADDRESS GREENHOUSE GAS EMISSIONS</u></p> <p>The AUAR must disclose the type, sources, quantities, and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants and criteria pollutants. 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 to be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions, including air permit.</p> <p>The AUAR is incomplete in its discussion of unavoidable greenhouse gas emissions inherent in Scenario 2, with details about the diesel generators, expected emissions, and the rationale behind the calculations.</p>	<p>As noted in the EQB guidance for an AUAR, stationary air emissions is not addressed in an AUAR. GHG emissions have been addressed using EQB guidance and the EPA calculator tool. If a proposed project within the AUAR study area is at a threshold that requires an air permit for stationary air emissions, coordination with MPCA, including a potential environmental review, will be completed prior to construction.</p>
<p><u>SOCIOECONOMIC IMPACTS ARE NOT ADDRESSED IN THE AUAR</u></p> <p>The AUAR must address the range of likely socioeconomic impacts.</p>	<p>Socioeconomic impacts are not required in an AUAR.</p>

Comment	Response
<p><u>THE AUAR DOES NOT ADEQUATELY ADDRESS NOISE</u></p> <p>The AUAR must disclose with specificity the equipment generating noise, and must provide noise modeling showing dB(A) and dB(C) noise levels at distances necessary to reduce noise to 60, 55, 50, and 45 dB(A) and dB(C). Noise is a likely issue with significant impact that must be more thoroughly addressed in the AUAR.</p>	<p>Any development within the AUAR study area will be required to comply with MN state noise standards as noted in MN Rules 7030.0040. Once a project design is identified for the AUAR study area, a noise analysis will be completed to understand the ambient noise and project noise for the proposed project.</p>
<p><u>ORDINANCE AMENDMENT CAN PROVIDE SOME MITIGATION</u></p> <p>The project schedule anticipates zoning changes. The City should appoint an Advisory Committee to gather and provide information to the Planning Commission.</p>	<p>Comment noted.</p>

Comment	Response
<p><u>REVISE SCHEDULE TO FACILITATE CORRECTED AND SUPPLEMENTED ENVIRONMENTAL REVIEW</u></p> <p>Reschedule all steps to provide updating and correction of AUAR or commencement of mandatory Environmental Impact Statement.</p> <p>At this time, I ask that a Notice of Availability of AUAR for Comment be issued, with a comment period of 30 days from publication of Notice. The Notice, including deadline for Comments and a link to the Draft AUAR, should be published by the EQB Monitor; the Cannon Falls Beacon Notices section; prominently displayed on the City of Cannon Falls and Randolph Township home pages; and displayed on the Cannon Falls AUAR page together with a link to the Draft AUAR.</p> <p>At this time, I also ask that an Environmental Impact Statement be prepared based on the project's need for permits triggering a mandatory EIS, i.e., use of numerous diesel generators and thus a need of an Air Permit from the MPCA, water appropriation and other permits from the DNR, and a Certificate of Need permit from the Public Utilities Commission. The project must also demonstrate through dB(A) and dB(C) noise modeling the ability to comply with the industrial noise standard at nearest receptor.</p> <p>At this time, I request that drafting of Ordinance Amendments begin and that an advisory group be formed to assist the City in addressing the legitimate concerns surrounding this data center.</p> <p>Again, as RGU, the City must reschedule all steps to provide updating and correction of AUAR or commencement of mandatory Environmental Impact Statement.</p>	<p>Comment noted, The Draft AUAR was posted to the City's website prior to the publication in the Mn EQB Monitor. The Draft AUAR was also sent to the EQB Distribution list prior to publication in the EQB Monitor and was available through the EQB Monitor.</p> <p>The AUAR process is an EIS level review for land uses and scenarios. Multiple scenarios were studied in the AUAR, and mitigation strategies have been outlined for impacts identified through the AUAR. As specific projects are identified within the AUAR study area and it is determined any components of the project exceed another threshold under Mn Rules 4410.4300, an Environmental Assessment Worksheet or other appropriate level of review will be completed.</p> <p>It is not known at this time if diesel or other types of generators or other methods for emergency power will be needed for the proposed project.</p> <p>If a proposed project exceeds any thresholds or triggers any additional environmental review, it will be completed prior to construction. All permits will be obtained prior to construction.</p>

Comment	Response
<p>I forgot to add a simple but obvious error. It's Oxides of Nitrogen (NOx) and NOT Nitrous Oxide (N2O). See AUAR p. 62, and Appendix at 307 of 335.</p>	<p>Comment noted. It is true that Oxides of Nitrogen (NOx) encompasses all the Nitrogen greenhouse gases, however Nitrous Oxide (N2O) is deemed to be the more detrimental for air pollution and is the main Nitrogen gas of concern. The Greenhouse Gas Assessment tool provided through the EPA also notes Nitrous Oxide (N2O) in their calculations.</p>

Appendix H



June 23, 2025

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

Thank you for the opportunity to review the Draft Alternative Urban Area-wide Review (AUAR) for the proposed Cannon Falls Industrial Park to develop the study area from existing farmland to industrial or technology park uses. Dakota County Physical Development staff reviewed the document and offer the following comments for consideration.

Environmental Resources

What is written in the draft AUAR report under the section 12.ii. Groundwater could be more clearly written for the future users of this report. As stated in the Dakota County comment letter on the AUAR, dated April 5, 2025, the water level in the onsite irrigation well (MN Unique Well Number 751667) was at 18 feet when the well was drilled in 2008. The depth to groundwater on the study area is shallow. The report is confusing by referencing water elevations, not depth to water (as required in the AUAR report directions), in three wells 2 to 3 miles from the study area. One well referenced; MN Unique Well Number 121846, was sealed 20 years ago in 2005. The report references the website where the well record for the onsite well, MN Unique Well Number 751667, is available. The AUAR report directions require the unique numbers and well logs to be provided, if available. None are included in this report even though the well record was provided with the comments dated April 5, 2025. As a reminder, there are at least two wells on the homestead adjacent to the project area, one in-use and one much older with an unknown status. Please refer to previous comments for information about existing wells. All the properties on report Figure 15 with habitation in Dakota County rely on private drinking water wells, no well records are provided in this report. Dakota County has a Delegated Well Program and authority over any unidentified wells found on the property, not the Minnesota Department of Health. A Dakota County well inspector can be reached at (952)891-7000.

The Draft AUAR indicates a Phase I ESA was completed but provides limited information other than potential for agri-chemicals, a Phase II is proposed to be completed prior to development. The AUAR requires identifying measures to avoid, minimize or mitigate adverse effects from existing contamination and should include development of a Construction Contingency Plan or Response Action Plan as needed.

Physical Development Division

P 952-891-7000 **F** 952-891-7031 **W** www.dakotacounty.us
A Dakota County Western Service Center • 14955 Galaxie Ave. • Apple Valley • MN 55124

12.b.i. Wastewater

Rapid infiltration basins (RIBs) are proposed in the report as one method to dispose of the industrial process water. Stated in the report, “The area does have the potential for karst formation based on local mapping and will be instigated further prior to permitting the RIB system.” The underlying dolostone is soluble. Geohazards can be created when water is redirected, or infiltration is concentrated like in the proposed RIB system leading to possible dissolution of the dolostone that could lead to catastrophic sinkhole formation. Paleokarst could already exist under the study area and collapse, or sinkhole formation could result from the weight of, or leaks from, the proposed RIBs and any stormwater basins.

12.b.ii. Stormwater

The report states that, “The project area is designated as desirable location for infiltration by Dakota County”. This area is not a desirable location for infiltration because of the potential for karst. As stated in the Dakota County comment letter on the AUAR, dated April 5, 2025, the Department of Natural Resources has mapped the project area near surface materials as highly vulnerable to pollution and the bedrock as highly sensitive to pollution. See enclosed map of Pollution Sensitivity of Near Surface Materials Map.

The dimensions of proposed grading activities were not included in the report. Removal of the existing soil cover by grading can increase the risk of collapse of subsurface features by disrupting the support at the surface. Heavy precipitation events with decreased soil cover increases the risk of collapse and/or transport of contaminants if present, to the aquifer. A detailed site investigation of the study areas karst in order to characterize the impacts and to identify the risks involved utilizing subsurface geotechnical and geophysical techniques is strongly recommended. Consider using ASTM D8512-23 Standard Practice for Preliminary Karst Terrain Assessment for Site Development to guide the investigation.

The report states that infiltration of the cooling water or stormwater will be outside of the DWSMA for Cannon Falls. This ignores the fact that infiltration will be occurring in the vicinity for private wells downgradient from where the infiltration will occur.

12.b.iii. Water Appropriation

The well on the property must be used for potable purposes. It was drilled incorrectly in 2008. A permit to reconstruct the well must be obtained from the Dakota County Delegated Well Program.

Transportation

Dakota County staff have no comment on the content of the draft AUAR. However, for ease of review of the final Traffic Impact Analysis of the AUAR, staff suggests the following formatting corrections.

- Include the exhibits in the actual report and not as a separate appendix.
- Include site plan proposed scenarios in the Traffic Impact Analysis.
- Please place the discussion of scenarios in proper order. Scenario 2 trip generation discussion, conditions and intersection analysis occurs before Scenario 1 within the document.

Physical Development Division

P 952-891-7000 **F** 952-891-7031 **W** www.dakotacounty.us

A Dakota County Western Service Center • 14955 Galaxie Ave. • Apple Valley • MN 55124

- For the exhibits, please include the Rochester Boulevard label and associated County highway number on all maps.
- Show the county boundary on all maps.
- Exhibit 3 – Orient volume figures to be consistent to the actual direction in this and all maps.
- Exhibit 10 – Explain why more trips are predicted to use the secondary access point in place of the primary access location.

If you have any questions relating to these comments, please contact me at 952-891-7007 or Georg.Fischer@co.dakota.mn.us

Sincerely,

A handwritten signature in blue ink, appearing to read "Georg T. Fischer".

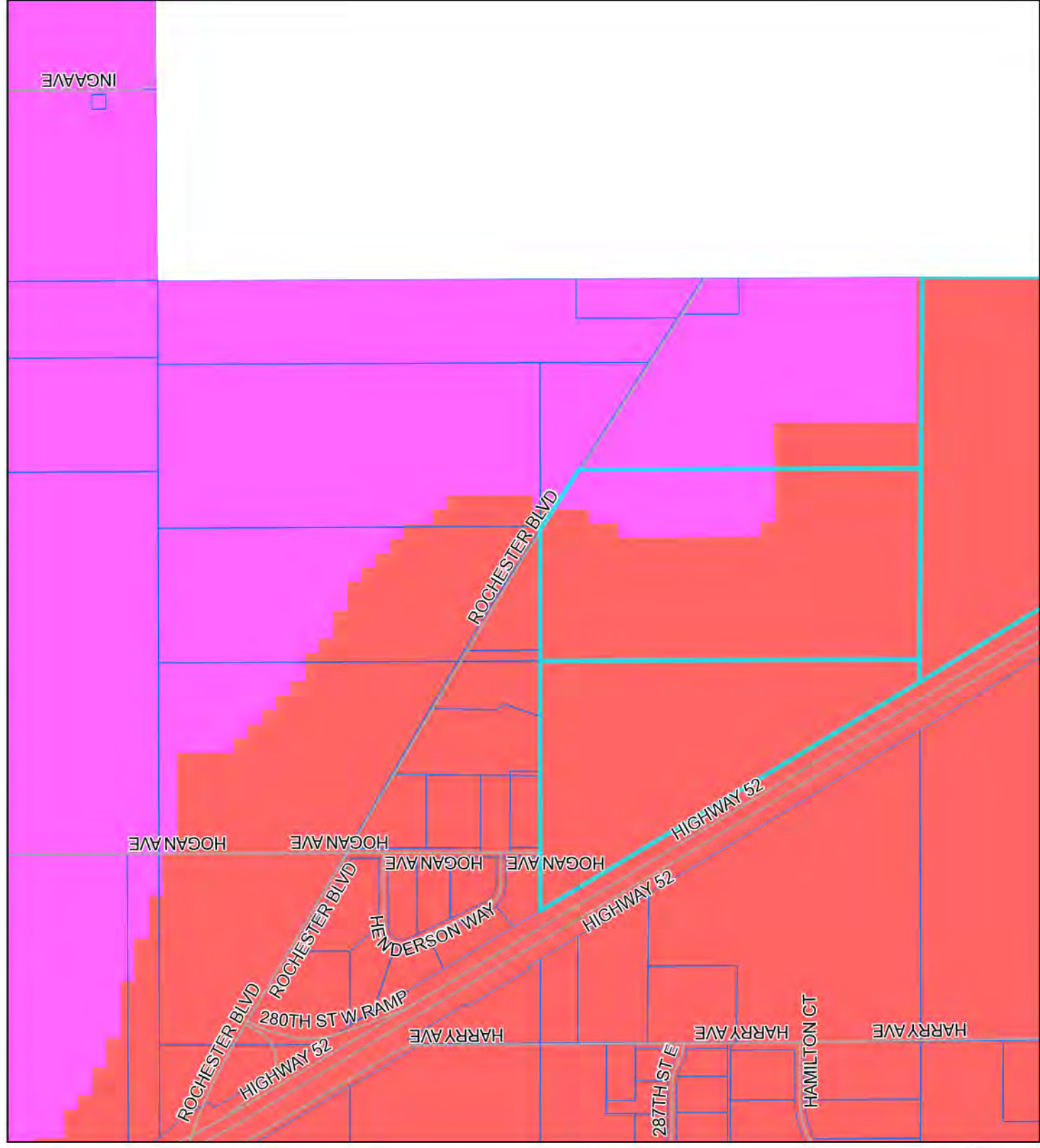
Georg T Fischer, Director
Physical Development Division

cc: Commissioner Mike Slavik, District 1
Heidi Welsch, County Manager

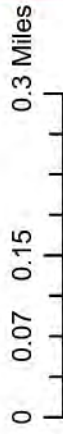
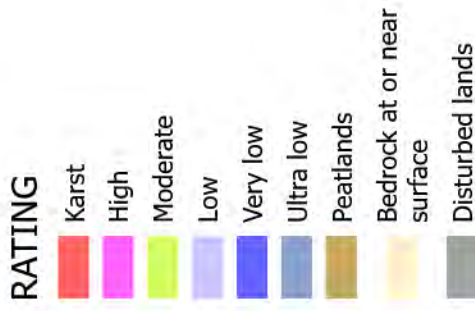
Physical Development Division

P 952-891-7000 **F** 952-891-7031 **W** www.dakotacounty.us
A Dakota County Western Service Center • 14955 Galaxie Ave. • Apple Valley • MN 55124

Pollution Sensitivity of Near-Surface Materials



Legend



IC 140-0020

June 24, 2025

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

SUBJECT: Cannon Falls Industrial Draft AUAR
MnDOT Review #**AUAR25-004**
Between US 52, CSAH 86/CSAH 29, and PGR RR
Cannon Falls, Dakota County

Dear Jon Radermacher,

Thank you for the opportunity to review the Cannon Falls Industrial Draft AUAR. Please note that MnDOT's review of this AUAR does not constitute approval of a regional traffic analysis and is not a specific approval for access or new roadway improvements. As plans are refined, we would like the opportunity to coordinate with our partners and to review the updated information. MnDOT's staff has reviewed the document and has the following comments:

Water Resources

A MnDOT drainage permit may be required before development occurs. The permit applicant shall demonstrate that the off-site runoff entering MnDOT drainage system(s) and/or right of way will not increase. The drainage permit application, including the information below, should be submitted online to: <https://olpa.dot.state.mn.us/OLPA/>. Please upload this letter with the drainage permit application.

The following information must be submitted with the drainage permit application:

1. Grading plans, drainage plans, and hydraulic calculations demonstrating that proposed flows to MnDOT right of way remain the same as existing conditions or are reduced.
2. Existing and proposed drainage area maps with flow arrows and labeling that corresponds with the submitted calculations.
3. Hydro CAD model and PDF of output for the 2, 10, and 100-year Atlas 14 storm events.

Once a drainage permit application is submitted, a thorough review will be completed, and additional information may be requested. Please contact Jason Swenson, Water Resources Engineering, at jason.swenson@state.mn.us or 651-234-7539 with any questions.

Permits

Any work that affects MnDOT right of way will require an appropriate permit. All permits are available and must be applied at: <https://olpa.dot.state.mn.us/OLPA/>. Upload this letter when applying for permits.

For questions regarding permit submittal requirements, please contact Buck Craig of MnDOT's Metro District Permits Section at buck.craig@state.mn.us or 651-775-0405.

Review Submittal Options

MnDOT's goal is to complete reviews within 30 calendar days. Review materials received electronically can be processed more rapidly. Do not submit files via a cloud service or SharePoint link. In order of preference, review materials may be submitted as:

1. Email documents and plans to metrodevreviews.dot@state.mn.us. Attachments may not exceed 20 MB (megabytes) per email. Documents can be zipped as well. If multiple emails are necessary, number each email.
2. Files over 20 MB can also be uploaded to MnDOT's Web Transfer Client site: <https://mft.dot.state.mn.us>. Contact metrodevreviews.dot@state.mn.us, and staff will create a shared folder in which files can be uploaded to. Please send an accompanying email with a narrative for the development.

You are welcome to contact me at regina.burstein@state.mn.us with any questions.

Sincerely,

Regina Burstein
Senior Planner

Copy sent via email:

Jason Swenson, Water Resources
Buck Craig, Permits
Mark Lundquist, Right of Way
Ashley Hansen, Traffic
Amrish Patel, Transit
Robert Jones, South Area Manager
Mohammad Dehdashti, Design

Michael Kowski, Maintenance
Molly McCormick, Ped/Bike/ADA Planning
Brandon Nelson, Surveying
Tod Sherman, Planning
Cameron Muhic, Planning
Scott Shaffer, Planning
Joseph Widing, Metropolitan Council

June 18, 2025

VIA EMAIL

Jon Radermacher
City of Cannon Falls
918 River Road
Cannon Falls, Minnesota 55009
cityadmin@cannonfallsmn.gov

RE: Cannon Falls Industrial – Urban Areawide Review

Dear: Jon Radermacher

Thank you for the opportunity to review and comment on the Alternative Urban Areawide Review (AUAR) for the Cannon Falls Industrial project (Project) located in Dakota and Goodhue County, Minnesota. The Project consists of an area totaling approximately 253 acres across 5 parcels in Randolph Township and the City of Cannon Falls, Dakota and Goodhue Counties, Minnesota. MNLCO Dakota County Two, LLC and MNLCO Dakota County Three, LLC are proposing to develop the study area from existing farmland to industrial or technology park uses. Prior to development, the portion of the study area currently in Randolph Township will be annexed into the City of Cannon Falls, rezoned first to “urban reserve,” then rezoned to “I2 - General Industrial” with a Planned Unit Development Overlay. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Noise

- The EQB’s AUAR Guidance states: [...] 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. [...].
- Section 19 does not indicate the anticipated sound level from noise sources during the “Operational” phase of the project and does not provide any analysis of the state noise standards in Minn. R. 7030.0040.
- Section 19 does not provide enough information to determine whether the project will conform with state noise standards. The state noise standards are evaluated based on the Noise Area Classification (NAC) of the receiver of the sound, which is based on land use activity. If there are residential dwellings nearby, the proposer and should evaluate whether the project will have impacts at those residential locations that would exceed the NAC 1 standards in Minn. R. 7030.0040.
- The RGU and any other land-use decision makers, should consider language in Minn. R. 7030.0030 that reads “[...] Any municipality having authority to regulate land use shall take all reasonable measures within its jurisdiction to prevent the establishment of land use activities listed in noise area classification (NAC) 1, 2, or 3 in any location where the standards established in part 7030.0040 will be violated immediately upon establishment of the land use.” The noise section of the EAW does not provide enough detail regarding current and anticipated

sound levels in the project area to determine whether an immediate violation of the state noise standards would occur if the project were approved.

- MPCA strongly recommends the proposer conduct a noise study and potentially evaluate methods to mitigate noise impacts to any nearby residential locations.

Wastewater

- 12.b.i.1) Wastewater indicates that a sanitary sewer extension will be required for the project. A map showing the route to the existing sewer system connection showing the impacted area of construction should be included.
- A number of discharge options are identified for industrial wastewater generated from a water-cooled system under the proposed Scenario 2 including infiltration via rapid infiltration basins or irrigation. In addition to the high volume of cooling water discharged, there will be infiltration of onsite stormwater. A portion of the project site is also located within the city Drinking Water Supply Management Area (DWSMA). The impacts to the DWSMA, groundwater and surface waters from infiltrating large volumes of water and the temperature of the cooling water should be discussed in more detail. Impacts to area ground water elevations may impact surrounding properties and the potential areas for groundwater discharge to surface waters should be included. High temperature discharges may impact both underlying geology and surface water discharges and this should be discussed in more detail.
- More detail should be provided regarding capability of the soil and geology to infiltrate the large volume of water and include seasonal variations in flow and weather. Rapid infiltration typically requires storage of wastewater over winter to account for reduced infiltration capacity due to frozen ground conditions. The temperature of the cooling water infiltration may prevent freezing on the site, but down gradient ground may freeze and cause groundwater to mound and impact surrounding areas.

We appreciate the opportunity to review this Project. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit actions by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this AUAR, please contact me by email at chris.green@state.mn.us or by telephone at 507-476-4258.

Sincerely,

Chris Green

This document has been electronically signed.

Chris Green, Project Manager

Environmental Review Unit

Resource Management and Assistance Division

CG:rs

Attachment

cc: Dan Card, MPCA

cc continued next page

Jon Radermacher

Page 3

June 18, 2025

Melinda Neville, MPCA
Nicole Peterson, MPCA
Matthew Moon, MPCA
Jeffrey Hedman, MPCA
Lauren Dickerson, MPCA
Deepa deAlwis, MPCA
Innocent Eyoh, MPCA
David Sahli, MPCA
Julie Henderson, MPCA

From: [Jon Rademacher](#)
To: [Payne, Ashley](#); [Bill Angerman](#)
Subject: Fw: Attn: Jon Rademacher re Data Center
Date: Wednesday, June 25, 2025 8:23:48 AM
Attachments: [Outlook-v1vj2x44.png](#)

AUAR comment

Jon Rademacher

City Administrator
City of Cannon Falls
cityadmin@cannonfallsmn.gov
507-263-9304

From: kari@duplexchick.com <kari@duplexchick.com>
Sent: Tuesday, June 24, 2025 3:57:49 PM
To: cityadmin@cannonfallsmn.gov <cityadmin@cannonfallsmn.gov>
Subject: Attn: Jon Rademacher re Data Center

Kari Lundin
9225 260th St E
Cannon Falls, MN 55009
612-290-5998
kari@duplexchick.com

Dear Jon,

As a resident of Hampton Township, with a farm perched perfectly between two proposed data centers, I would like to register my grave concerns about the possible annexation of Simon's land currently in Randolph Township.

Having done my best as a lay person to understand what I can of the AAUR, I would like to address the proposed water consumption by the Cannon Falls Data Center.

On page 5, the report states the center would use 49 million gallons of water per year. The proposed data center in Hampton would draw another 12.5 million gallons. Combined, that's 61,500,000 gallons per year.

The average American uses 82 gallons of water per day, and between 29,200 to 36,500 gallons of water per year. That means the two data

centers water consumption would be the equivalent of adding 2106 people to the community.

That sounds suspicious. Tract, the developer of the proposed data center in Farmington claims that center could use 12.5 million gallons of water per year. To a lay person, that suggests either one of the parties isn't being completely honest, or the center in Cannon Falls is going to be a giant monstrosity that will ultimately suck us all dry.

The Cannon River is our most precious resource as a community. Not only does it add charm and bring a sense of peace to our community, it also draws over 100,000 visitors a year to paddle its waters or bike along its banks.

The proposed data center will be just 1700 feet from its shore. That's just 1/3 of a mile. Pine Creek is 1.3 miles north; and fed in part by the spring that comes up from the ground on my neighbor's farm. Both of these bodies of water are essential to the survival of the abundant wildlife that lives near both. So too are my farmer neighbors who irrigate thirsty crops with water from the aquifer below.

None of those who depend on that water can afford to sacrifice a single drop.

I moved to Cannon Falls from Los Angeles 20 years ago for the quiet, serenity and equestrian community. Losing those qualities in exchange for a comparative handful of jobs for employees who will live elsewhere due to a lack of housing and better schools seems the wrong path forward.

Surely we can find something better to grow our community and benefit ourselves rather than the tech oligarchs behind AI and its insatiable appetite for our natural resources.

Kari Lundin

Kari Lundin

Keller Williams Realty Integrity - Edina

7401 Metro Blvd, Ste 350

Edina, MN 55439

612-290-5998

www.duplexchick.com

Download my app today for your own personalized national real estate search!

<https://app.kw.com/KW2MPUB3G>

Or text KW2MPUB3G to 87778



From: [Jon Radermacher](#)
To: [Payne, Ashley](#); [Bill Angerman](#)
Subject: Fw: Request for Extended Public Comment Period and Revisions to Cannon Falls Industrial AUAR
Date: Thursday, June 26, 2025 7:33:36 AM

Ashley,

This one has a request to extend the public comment period, please advise how to respond.

Jon Radermacher
City Administrator
City of Cannon Falls
cityadmin@cannonfallsmn.gov
507-263-9304

From: Megan Bauer <bauer.megan.r@gmail.com>
Sent: Wednesday, June 25, 2025 9:11:35 PM
To: info@cannonfallstechnologypark.com <info@cannonfallstechnologypark.com>; Jon Radermacher <cityadmin@cannonfallsmn.gov>
Subject: Request for Extended Public Comment Period and Revisions to Cannon Falls Industrial AUAR

Good evening,

I hope this message finds you well. My name is Megan Bauer, and I'm writing to share several serious concerns regarding the draft [Cannon Falls Industrial Alternative Urban Area Review \(AUAR\)](#). I respectfully urge you to consider these points and take action to strengthen the environmental review process and ensure meaningful public participation.

1. Lack of Public Notice and Opportunity for Engagement

The public has not had adequate opportunity to review and comment on the AUAR. While the draft was published in the Environmental Quality Board Monitor on May 27, only the scoping documents were available on the [City of Cannon Falls website](#). There were no clear calls for public comment in the local newspaper or at recent city council or planning commission meetings. Without effective outreach, the community has been left unaware and unable to participate. I strongly urge that the AUAR comment period be extended and widely publicized to ensure transparency and informed community input.

2. Inadequate Level of Environmental Review

Although the AUAR outlines two development scenarios (pg. 9), the [Cannon Falls Technology Park website](#) makes it clear that the goal is a data center or technology park. Given the significant and specific environmental risks posed by such a facility, an Environmental Impact Statement (EIS)—not just an AUAR—is warranted. An EIS would provide a more comprehensive and transparent evaluation of long-term and cumulative environmental consequences.

3. Insufficient Analysis of Water Use and Cumulative Aquifer Impacts

The AUAR does not sufficiently analyze the broader and cumulative water impacts of this development, especially when considered alongside other regional data centers. According to [Star Tribune reporting](#), Tract is developing 500 MW data centers not just in Cannon Falls, but also in Farmington and Rosemount. These facilities are all located within the same general hydrological system and may draw from the Prairie du Chien–Jordan aquifer, which already supports municipalities, agriculture, and private well users.

The AUAR estimates that the Cannon Falls facility alone may use up to 4.66 million gallons per day (pg. 52)—the daily water use of approximately 46,600 people, based on [EPA data](#). When multiplied across Tract's multiple sites, this usage could easily exceed 10–15 million gallons per day. Such demand poses a serious threat to aquifer sustainability, especially during drought conditions.

Historically, water-intensive developments have caused extensive regional harm. In Elko New Market, the proposed Niagara Bottling facility prompted a [DNR-ordered 41-day pump test](#). The result: one residential well went dry, and others up to 20 miles away experienced geochemical changes, including dangerous manganese contamination—a neurotoxin that killed pets and destroyed water treatment systems. The city must now build a costly new water treatment plant and provide alternative water sources to residents.

According to a [study of EPA Region 5](#) (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, and 37 Tribal nations), large-scale groundwater withdrawals—such as those from data centers—have lowered the water table by 400 to 600 feet in some areas. The AUAR must evaluate how cumulative withdrawals from multiple data centers in the region could cause permanent aquifer drawdown, affect surface water bodies, increase well failures, and trigger costly public infrastructure crises.

Additionally, the AUAR should require an evaluation of alternatives such as closed-loop geothermal cooling systems, which can significantly reduce water use compared to “pump-and-dump” systems.

4. Excessive Energy Use and Grid Strain

The AUAR does not adequately address the energy consumption impacts of the proposed 500 MW data center (pg. 70). This facility could consume the [equivalent of 250,000 to 500,000 households' electricity every hour](#). Overburdening the grid risks blackouts, wildfires from sagging power lines, and increased pollution from diesel generators. [These are not hypothetical risks](#)—these are growing concerns wherever data centers are concentrated.

5. Inadequate Carbon Mitigation Measures

The projected increase of 20,189 metric tons of CO₂ annually (pg. 64)—[equivalent to emissions from 2,700+ homes](#)—demands stronger mitigation. The current plan lacks the specificity and ambition necessary to address the serious climate consequences of this development. More aggressive carbon offset strategies, renewable energy sourcing, and on-site energy efficiency measures should be required.

6. Lack of Noise Impact Analysis and Mitigation

Despite the close proximity to private residences, the AUAR fails to estimate the potential noise impacts from cooling systems or propose specific mitigation measures (pg. 66, 75). In [Northern Virginia](#), Amazon Web Services data centers caused residents 600 feet away to suffer sleepless nights and chronic headaches. In [Texas](#), cooling fan noise has been linked to migraines, nausea, and even emergency room visits—despite the facilities being across town. [Fairfax County](#) now requires at least 200 feet of separation from homes, mandatory noise studies, and sound barriers. Similar safeguards should be adopted here.

In closing, I urge you to extend the public comment period, make additional efforts to inform and engage the public, and consider requiring a full Environmental Impact Statement. The scale and intensity of the proposed development present long-term risks to our environment, infrastructure, and quality of life that deserve a thorough and transparent review process.

Thank you for your time and attention. I look forward to your response and the opportunity for further public involvement.

Sincerely,
Megan Bauer

From: [Jon Radermacher](#)
To: [Payne, Ashley](#); [Bill Angerman](#)
Subject: Fw: Data Center
Date: Thursday, June 26, 2025 7:29:49 AM

Public comment for the AUAR

Jon Radermacher
City Administrator
City of Cannon Falls
cityadmin@cannonfallsmn.gov
507-263-9304

From: ann buselmeier <bezbusel@yahoo.com>
Sent: Wednesday, June 25, 2025 9:39:59 PM
To: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Subject: Re: Data Center

I would like to make a public comment for the record about the AUAR for the proposed Mega Data Center in Cannon Falls. Page 60, documents, "No significant visual impacts are anticipated." Has anyone doing this study ever driven by a data center at night? It looks like a huge dome of light reaching far up into the sky. And since Data centers operate 24/7, 365, this has the possibility and probability of greatly disturbing the migratory birds. Since Cannon Falls has a river system and lake, there are many different species of birds that migrate through our area. Minnesota as a state is part of the Mississippi flyway and supports high volumes of migratory birds and I have to believe based on our local waterways, high volumes of birds migrate through the Cannon Falls area. Migratory birds use the night sky for navigation and artificial lighting disorients the birds, causing the birds to circle the artificial lights and become weak and more susceptible to predators. Maybe this issue has already been addressed in the AUAR. But if not, I do feel it needs to, because this issue is significant, and visual impacts for migratory birds CAN BE anticipated. Ann Bezdichek Buselmeier

[Sent from Yahoo Mail for iPhone](#)

On Wednesday, June 25, 2025, 9:55 AM, Jon Radermacher <cityadmin@cannonfallsmn.gov> wrote:

Ann,

Thank you for sharing your feedback, and I'm sorry you felt like the information wasn't easy to find we will work on that. Hearing feedback helps us to know to make changes.

I will also pass along your feedback to the Tract representatives, they have asked and offered to find ways to engage with the community and answer questions. Additionally, we're just getting into the process with the Planning Commission and City Council where there will be Public Hearings as parts of the decision making process.

Finally, I want to make sure you know about the AUAR study,
https://www.cannonfallsmn.gov/sites/default/files/fileattachments/community/page/8079/cannon_falls_industrial_auar_20250520.pdf,
and that public comments for the record in the AUAR are due tomorrow.

Sincerely,

Jon Radermacher

City Administrator



cityadmin@cannonfallsmn.gov
507-263-9304

Peter Drucker: "Management is doing things right; leadership is doing the right things."

From: ann buselmeier <bezbusel@yahoo.com>
Sent: Wednesday, June 25, 2025 9:23 AM
To: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Subject: Data Center

Good morning. I was dedicating my morning to reading data center documents, so I went to the Cannon Falls City site. Nothing there that I could readily find. So I called the city, to find out it's under technology park. I'd like to suggest to put the data center on the home page of cannon falls, directing the user, with a link to the technology park. Make the info readily available, easy to search and find.

Also. I saw that tract had a luncheon meeting with the chamber of commerce. (I think it was the chamber). This type of meeting should be offered to the citizens of Cannon Falls and interested parties. A venue where a question can be asked,

and All attendees can hear the same answer. The open house held on 4/29, was, was, very very disjointed, cumbersome to wait in line to gain access to a representative from tract. And yes a public hearing was held, but I felt it was held in a small venue and discouraged attendees to really access the information. I'd like you to consider holding a town meeting, well advertised, in the gym at the high school. Give the citizens and interested parties, a chance to really hear and participate in an open dialogue with tract.

Thank you for your time and consideration

Ann Bezdichok Buselmeier
6658 296th Street East
Cannon Falls
6125087518

[Sent from Yahoo Mail for iPhone](#)

From: [Jon Radermacher](#)
To: bangerman@whks.com; [Payne, Ashley](#)
Subject: FW: Cannon Falls Alternative Urban Areawide Review AUAR comments and questions
Date: Tuesday, June 24, 2025 11:48:27 AM

Ashley,

Here are some comments on the AUAR that I received today.

Jon Radermacher

City Administrator



cityadmin@cannonfallsmn.gov
507-263-9304

Peter Drucker: "Management is doing things right; leadership is doing the right things."

From: RJ Davisson <davissonrj@verizon.net>
Sent: Tuesday, June 24, 2025 11:22 AM
To: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Subject: Cannon Falls Alternative Urban Areawide Review AUAR comments and questions

Jon,

Here are some comments and questions regarding the Cannon Falls Industrial Alternative Urban Areawide Review (AUAR) dated May 2025.

Development Scenarios - Page 8 indicates a potential development scenario of "1,750,000 sq ft" of light industrial use. Again, on page 51 the developer's input states, "Scenario 1 is proposed light industrial..." Earlier on page 51 the AUAR response states that the rezoning will be "...then rezoned to "I2 - General Industrial"..."

City of Cannon Falls zoning district I-1 Limited Industrial is the zoning district for "light industrial", not the I-2 zone. The I-2 General Industrial zone is written and intended for "heavier" industrial uses that are conditionally permitted (example: concrete product plants, building materials, crude oil, gas and liquid storage tanks, manufacturing of materials such as rubber, corrosive acids, petroleum and chemical products. which propose potential health and safety risks, etc.) These are "heavy" industrial uses. No such similar "heavy" industrial use is permitted or conditionally permitted in the I-1 zoning district.

The City of Cannon Falls "Land Use Plan" map from the City's 2003 Comprehensive Plan (Map 23a - page 8.6; also Figure 11 in the AUAR, cited incorrectly as Figure 7 in the AUAR text) used to justify the proposed annexation land use merely shows the area as "Industrial" and does not specify the land referenced in the AUAR study to be any specific industrial type. The I-1 and I-2 zones districts were not codified in City ordinance until 2006 and the Land Use Plan map, or any other map, was not updated to reference that it should be either general or light industrial zoning. The City can plan for either the I-2 or I-1 industrial. I-1 is more appropriate and conducive for the City to use for future control of the area — unless the City wants to be faced with the potential of a concrete plant, crude oil and gas storage, corrosive chemical or petroleum products, etc. Nowhere in the multiple possible scenarios of the Scenarios or an existing document is there indication that the developer will not develop the land to certain uses if the City grants the I-2 zone usage.

The AUAR states on page 10 "Land Use" that the "The study area is generally bound by...residential properties to the north..." and elsewhere, "Land uses adjacent to the study area include...single family residential, see Figure 7."

The I-1 zoning district is approved and written "to provide for less intensive uses, which because of their **proximity to residential areas**....are less likely to impose objectionable influences such as noise, vibrations, dust, heat, smoke, odor and the like." It is specifically suited to the AUAR plan development scenarios. The I-1 zoning district allows many of but not all the uses listed in the I-2 zoning, but because the zone is written to specifically acknowledge the proximity to residential areas, and because the proposed land use may actually come to be industrial in nature (Scenario 1 Light Industrial) , and not a technology park (Scenario 2) , I-1 is a more appropriate zoning district with the stated guideline to consider "proximity to the [residential single family properties] that about the AUAR land that was studied. A technology park would also more appropriately be developed in an I-1 zoning district.

Table 2: Climate Considerations and Adaptations, page 16 — The table indicates: Resource Category - Climate Considerations and Adaptations "The proposed development scenarios are not anticipated to generate hazardous waste or materials." Adaptations - "Not applicable."

Page 55 (d). Project Related Generation/Storage of Hazardous Wastes

The AUAR asks that hazard wastes during the operation of the project be described. The answer given was "Not applicable." Scenario 1 is for Industrial Development. In an industrial development not defined at this time the potential exists for hazardous waste byproduct in the industrial uses that might be permitted in the relevant zoning district.

An answer other than 'not applicable' is required. An answer must be made because the possible scenarios for Scenario 1, at least, could include the hazardous materials or emissions from the types of uses conditionally allowed in an I-2 zone, which the developer indicates it would prefer. To repeat, the I-2 zoning district may allow such uses as concrete product plants, building materials, crude oil, gas and liquid storage tanks, "manufacturing of materials such as rubber, corrosive acids, petroleum and chemical products, which propose potential health and safety risks," and others that are allowed in the developer's current proposal of an I-2 General Industrial zone usage.

Page 27 (c). The document says: "Scenarios 1 and 2 would require rezoning as the parcels will be annexed into the City with an agricultural use. The sites would be rezoned to "I-2 General Industrial District"..."

Annexation of land by the City of Cannon Falls is not annexed with an agricultural use. The land would be annexed as an Urban Reserve (UR) zoning district. Per City Ordinance **§ 152.448 ANNEXATIONS**. "All territory hereafter annexed to the city which is not shown on the zoning map shall automatically, upon annexation, be classified within the UR District and shall be subject to all regulations, notations, references and conditions as are applicable to the District until a time that a determination may be made as to the proper district classification for the territory and an amendment can be made to that effect."

Wells - Figure 15, page 46

- * What impact will the project, both Scenario 1 and Scenario 2, have (Figure 15. Groundwater Resources, page 46 and following text on pages, especially pages 51, 52) on the multiple private wells that are in very close proximity to northern boundary of the AUAR study area? There are many residential private wells shown on the Figure map, some seemingly within yards of the proposed project land. These wells are the only source of water for the residents' use. There appears to be seven (7) wells to the north. Although these wells are not within the boundary of the AUAR study the impact of both Scenarios should be addressed as to the effect on the owners.
- * Are the residential wells producing water from the same aquifer as the current agricultural well on the study property (40.3 million gallons per year)?
- * Both Scenario 1 and Scenario 2 discuss the potential reconstruction of the existing onsite agricultural well or using the well as is for the potential projects. There are at least four, and probably more, scenarios to the Scenarios - many combinations. What would be the effect on the abutting residential wells if the well is reconstructed and used for water supply for either of the project Scenarios - indicate lowest and highest water usages and the effect of each.
- * If the maximum volume of water is used for each Scenario - there are many numbers

tossed around on pages 51 and 52 and elsewhere - what will be the effect on the residential wells?

* If well water is used for any of possible uses of the AUAR studied land, in whatever volume is required, what assurances and guarantees will be made and legally binding for the developer to make to remediate any negative effects to the homeowners?

Figure 15. Groundwater Resources

Old Castle-Hancock

The map in Figure 15 is incomplete, perhaps because the Minnesota Well Index map that was used for the study is incomplete. There are no wells shown on Old Castle-Hancock property on the west side of County Road 29. There is a well in use on the Old Castle (ex-Hancock) property. Old Castle-Hancock is not connected to city water. Further research is needed and impact results considered and updated in the AUAR.

Old Castle has at least one well on the property, registered and tagged, which was installed in the mid-1970s. Old Castle directly abuts the proposed project and the AUAR report area on the north side and the west side of the AUAR reported area. Further, Old Castle land directly abuts the wetlands that are indicated in the AUAR report. This is within the Cannon Falls wellhead protection area and Drinking Water Supply Management Area (DWSMA), as stated in the AUAR report.

* What aquifer is used?

* What impact does the proposed project and potential well water volumes have on Old Castle's well water usage?

* What is the project's impact on the Old Castle well and the impact of the well's location relative to the project's proposed over/through wetland entrance off County 29?

Other Properties - their water comes from somewhere

Since the map index used for the AUAR study is not accurate, further investigation is required using other available sources and reported, the AUAR should be updated and impacts of water usage on those wells included in the AUAR report. In addition to the Old Castle-Hancock well, there may be unreported wells on properties that directly abut the study area:

* What aquifer(s) are in play?

* Residential homes to the east of the residential seven (7) wells on the properties directly north of the AUAR study land. No wells are shown, but the water is sourced from somewhere. These are all in Dakota County. Parcel IDs 310010025051, 310010025050,

310010005015, 3100010005014 (Dakota County)

* The area known as Haas Livestock - surrounded on three sides by the AUAR report and directly across County 29 from Cannon Falls Trailer sales as County 29 curves west.

This property is partially in Cannon Falls and partially in Dakota County. It is oddly carved out of the proposed annexation. Parcel ID: 525100100 (Goodhue County) and Parcel IDs 310010090012 and 310010090011 (Dakota County).

Fire Protection

If, as written, the existing well on the property is reconstructed and use solely for the industrial or technology park development — this is a potential that was floated in the AUAR — what impact would it have on the Cannon Falls Fire Department's and the Hampton Randolph Fire Department's capabilities for fire protection under Minnesota State Fire Code?

* Would there be adequate, continuous pressure and volume in the required amounts for an extended time frame?

* Would the fire departments be allowed to use the development's well water for a potential fire at the abutting residential homes and businesses?

* What impact would there be on surrounding identified and yet-to-be identified wells

Page 48 — "Infiltration would provide some recharge of water to the aquifer, while irrigation for the crops can provide another use of the water verses (sic) using ground water to directly irrigate the crops."

* How would crop irrigation be this achieved and on what specific land-property would crop irrigation occur?

Page 49 - "The industrial process water quality under Scenario 2 would contain little to no BOD or TSS and would have slightly higher concentrations of minerals found naturally occurring in the ground water. Industrial process non-contact cooling water would be discharged either to the City's system (pending study results and necessary system improvements), in rapid infiltration basins (RIBs) or through other methods of spray irrigation or attenuation, or a combination thereof."

* What effect would higher concentrations of minerals have on crops in a crop irrigation scenario?

Page 56 and Page 57— AUAR states, "Tree clearing will take place between November 1st and March 31st to avoid potential impacts to roosting bat species and breeding migratory birds." (page 56), and "Should tree clearing be needed for development of Scenario 1 or Scenario 2, tree clearing activities will be conducted

between November 1st and March 31st to avoid potential impacts." (page 57)
Similar statements were made on page 59.

Page 2 of 3 (MNR letter dated July 30, 2024 states: "If feasible, avoid initial disturbance to grassland areas and tree/shrub removal from May 15th through August 15th to avoid disturbance of nesting birds." Further the MNR letter states: Tree and shrub removal is required to be avoided during the breeding season, april through July.

With tree/brush and grassland disturbance and removal restrictions the soonest the project could begin in any year would be November 1st for tree removal. As required all grassland disturbance would have to be finished by May 15th of the following year. If all grassland work was not completed by May 15th the remaining undisturbed grassland would need to be left undisturbed until August 15th. "If feasible" is feasible and is a known even at this premature date and development plans can be scheduled around these dates.

* Will these development restrictions be included in the development agreement between the City and the developer?

Page 66 - 20. Transportation. Parking — The report stated as fact: "For the Technology Building Use, in lieu of a standard parking requirement, a Parking Analysis Memo as agreed to by the staff will determine an appropriate amount of parking required for the Campus"

Has the City of Cannon Falls already agreed to this statement in the AUAR or is it a point still open for discussion and negotiation?

>> RJ Davisson

From: [Payne, Ashley](#)
To: [Janso, Chelsey](#)
Subject: FW: Cannon Falls Data Center Proposal
Date: Thursday, June 26, 2025 1:02:12 PM

Ashley Payne

Kimley-Horn

Direct: 507 216 0763 | Mobile: 507 251 6096

From: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Sent: Thursday, June 26, 2025 12:46 PM
To: Payne, Ashley <Ashley.Payne@kimley-horn.com>; Bill Angerman <bangerman@whks.com>
Subject: Fw: Cannon Falls Data Center Proposal

Jon Radermacher

City Administrator

City of Cannon Falls

cityadmin@cannonfallsmn.gov

507-263-9304

From: Julie Maidment <jamrides76@gmail.com>
Sent: Thursday, June 26, 2025 12:17:17 PM
To: cityadmin@cannonfallsmn.gov <cityadmin@cannonfallsmn.gov>
Subject: Cannon Falls Data Center Proposal

Dear Mr. Radermacher,

I am a tax paying resident of Cannon Falls. My husband and I moved here in 2005. I am and have lived here and been employed here for 20 years.

I have just been made aware of a proposed Data Center to be built in Cannon Falls and I have many concerns regarding costs and quality of life. I demand an extension on any decisions regarding said proposal as well as demanding a full environmental impact statement.

The demands on our community of this Data Center are enormous. Extreme water use, massive energy use, high carbon emissions, and noise emissions. And there is no information on how this Data Center will impact our taxes.

Numbers I have been made aware of (today!) on the above are: The Data Center proposed would use the water of a population of 46,000! Energy/power usage of the equivalent of

250,000-500,000 homes! Carbon emissions of 20,189 metric tons per year with extremely week mitigation plans! Zero noise impact statements.

As City Administrator your concerns are first and foremost for the quality of life to those who reside in our fine city. The quality of life here is, at present, excellent.

Why has not this Data Center proposal been shouted from the rooftops?

Thank you,
Julie Maidment

From: [Jon Radermacher](#)
To: [Payne, Ashley](#); bangerman@whks.com
Subject: FW: Tract / Cannon Falls AUAR Comments
Date: Friday, June 6, 2025 11:22:42 AM

AUAR Comment from John Wiick

Jon Radermacher

City Administrator



cityadmin@cannonfallsmn.gov

507-263-9304

Peter Drucker: "Management is doing things right; leadership is doing the right things."

From: wiik@jlwdesignllc.com <wiik@jlwdesignllc.com>
Sent: Friday, June 6, 2025 10:51 AM
To: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Subject: Tract / Cannon Falls AUAR Comments

City of Cannon Falls
City Administrator
918 River Road
Cannon Falls, MN 55009

Mr. Radermacher,

I would like to submit the following comments for the Tract / Cannon Falls AUAR.

The AUAR draft does not appear to differentiate between the light industrial scenario (scenario 1) and the technology park scenario (scenario 2). As noted in Section 10b on page 27, there is little or no difference between the permitted uses in the two proposed scenarios. The lack of detail makes it difficult to understand and determine the differences between the impacts of the two proposed scenarios, particularly in terms of traffic, noise, air quality, and water usage. Additionally, Section 10b does not address the impacts of either scenario on the existing adjacent land uses, specifically the residential area to the north.

Sincerely,

John Wiik

28388 Henderson Way
Randolph, MN 55065

From: [Jon Radermacher](#)
To: [Payne, Ashley](#); [Bill Angerman](#)
Subject: Fw: Cannon Falls Data Center Proposal
Date: Thursday, June 26, 2025 6:29:17 PM

Jon Radermacher

City Administrator
City of Cannon Falls
cityadmin@cannonfallsmn.gov
507-263-9304

From: Ronald Maidment <ronaldmaidment279@gmail.com>
Sent: Thursday, June 26, 2025 5:14:23 PM
To: cityadmin@cannonfallsmn.gov <cityadmin@cannonfallsmn.gov>
Subject: Cannon Falls Data Center Proposal

Dear Mr. Radermacher,

I am a taxpaying resident of Cannon Falls. My wife and I moved here in 2005.

I have recently been made aware of a proposed Data Center to be built here in Cannon Falls. I do have many concerns regarding costs and how this will impact the quality of life here in Cannon Falls. I demand an extension on any decisions regarding said proposal and I demand a full environmental impact statement.

The demands of this Data Center are enormous on a community of this size. Extreme water usage, massive energy usage, high carbon emissions, and the impact of increased noise emissions. And no information on how this Data Center will impact our taxes.

Numbers I have been made aware of on the above are, that the Data Center would use the water of a population of 46,000! Energy/power usage is the equivalent of 250,00-500,000 homes! Carbon emissions of 20,189 metric tons per year with extremely weak mitigation plans. Zero noise impact statements.

As City Administrator your concerns are first and foremost for the quality of life to those who reside in Cannon Falls which at present is excellent.

Thank you,
Ron Maidment

From: [Jon Radermacher](#)
To: [Payne, Ashley](#); [Bill Angerman](#)
Subject: Fw: AUAR comments
Date: Thursday, June 26, 2025 6:29:06 PM

Jon Radermacher

City Administrator
City of Cannon Falls
cityadmin@cannonfallsmn.gov
507-263-9304

From: Jacob Kostrzewski <kostrzewski.jacob@gmail.com>
Sent: Thursday, June 26, 2025 5:47:58 PM
To: cityadmin@cannonfallsmn.gov <cityadmin@cannonfallsmn.gov>
Cc: info@cannonfallstechnologypark.com <info@cannonfallstechnologypark.com>
Subject: AUAR comments

Hello,

Please consider this email my comment on the AUAR and the related data center.

First, I don't understand why we have not received an environmental impact statement rather than the AUAR given the data center is clearly the intent behind the report. Secondly, I don't feel that the residents of Cannon Falls were given appropriate notice or information, so we really need an extension to give the community more time to discover and discuss the implications of this project.

On that note, the data center brings a lot of concerns to me, primarily in environmental impact in the form of carbon emissions, and potential waste in water used for cooling, not to mention the incredibly high amount of water projected to be used. We already have limited water on the planet, and this would be using an insane amount for a data center with dubious uses. The energy use is also extremely high, and I worry about the strain on the grid, without even mentioning the actual power consumption.

On top of all this, this technology park will certainly be producing an excess of noise, and to top it all off, it isn't even clear who is benefiting from the tax revenue. Please reconsider the approval of this technology park.

From: [Payne, Ashley](#)
To: [Janso, Chelsey](#)
Subject: Fw: Public Comment regarding Cannon Falls Industrial Alternative Urban Area Review (AUAR)
Date: Friday, June 27, 2025 9:02:27 AM

Get [Outlook for iOS](#)

From: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Sent: Friday, June 27, 2025 7:38:22 AM
To: Payne, Ashley <Ashley.Payne@kimley-horn.com>; Bill Angerman <bangerman@whks.com>
Subject: Fw: Public Comment regarding Cannon Falls Industrial Alternative Urban Area Review (AUAR)

Jon Radermacher
City Administrator
City of Cannon Falls
cityadmin@cannonfallsmn.gov
507-263-9304

From: Ginger Bauer - La Boutique Unique <bauer.ginger@gmail.com>
Sent: Thursday, June 26, 2025 10:26:57 PM
To: cityadmin@cannonfallsmn.gov <cityadmin@cannonfallsmn.gov>;
info@cannonfallstechnologypark.com <info@cannonfallstechnologypark.com>
Subject: Public Comment regarding Cannon Falls Industrial Alternative Urban Area Review (AUAR)

My name is Ginger Bauer. I am a resident of Cannon Falls. This letter is in regard to the Cannon Falls Industrial Alternative Urban Area Review (AUAR).

I attended the May 20, 2025 City of Cannon Falls Joint City Council & Planning Commission Work Session and the following City Council Meeting because I was interested in the discussion regarding the proposed technology park. I also attended the Information Session that the developer, Tract, hosted in April.

I have some serious concerns about this project and the process you are following to gain its approval. First, neither of those meetings I attended provided much meaningful information to the public. Tract's Information Session was simply a set of large posters that was more marketing language than specific, concrete information and the proposal was not discussed at the recorded City Council meeting but instead was buried in the consent agenda. The only discussion I saw was at the joint May 20 meeting, and my key takeaways from that joint meeting on May 20, 2025 were:

1. The May 20 work session was to inform city council members of the proposed data center timeline. The City Administrator, Mr. Radermacher, told City Council members that they will need to review a lot of information and make decisions

quickly to meet the aggressive timeline.

2. The anticipated data center deal will not provide a tax benefit to Cannon Falls. City staff seem to be relying on the data center developer (Tract) and future end user (to be determined) to prioritize the best interests of the community.
3. According to the city administrator, the benefits to Cannon Falls will be Tract developing the land and the future end user (to be determined) hopefully providing jobs and charitable donations to foster community goodwill. Nothing has been guaranteed.
4. The city engineer stated that he assumes that Tract would not have approached Cannon Falls without confirming their water and power usage needs are feasible.
5. Per the city attorney, city staff will provide the city council with legally and factually supported information so they can make a rational decision.
6. City staff do not review data center issues outside their control, like electricity usage or noise levels. There was no mention of possible impacts on the environment, electrical grid, or groundwater from this development at the meeting. The developer was attracted to Cannon Falls for our water and sewer infrastructure.
7. It will be up to citizens to proactively voice concerns and influence city council members regarding the data center. Although Councilmember Chris Nobach asked many questions and asked city staff to be transparent with the public, no city council or planning commission member volunteered at that time when the city administrator asked someone to attend internal meetings with Tract and make sure any issues are reported and addressed.
8. Mayor Matt Montgomery reminded everyone that no decisions would be made at the work session; it was designed to only be an introduction of the timeline and what information to expect to receive from city staff. The city administrator, city attorney and city engineer all stressed that they are working behind the scenes to gather the data and would be providing the city council with a lot of information which would be used to form their decision.

I would like to highlight the statement that councilperson Chris Nobach made that evening. Mr. Nobach stressed that transparency to the public is key and asked that city staff make sure the information is available to the public and that the public is notified in a variety of ways. I have no idea if more information has been provided to the city council and where they are in the process nor have I seen notices provided to the public, but I've heard through the grapevine that you have a 335-page document, the AUAR (Alternative Urban Areawide Review) available for public review and have set a deadline of midnight, June 26, 2025 for the public to review the AUAR and comment. The city of Cannon Falls has NOT notified the public in the variety of ways that councilperson Nobach requested nor has the city council presented any kind of reason why Cannon Falls should even consider this proposal from Tract, other than the narrow marketing campaign Tract put together.

I understand that the timeline outlined for the city council on May 20, 2025 is aggressive and that city staff is urging the city council to be mindful of possible missed deadlines if decisions are not made quickly, but it seems to me that the deadlines on the timeline are designed to

benefit Tract and, frankly, to rush the process so the serious issues that perhaps are not under the control of the city of Cannon Falls, are not carefully considered. Tract has merely hinted at possible benefits for the city but can't commit to any real benefits and city staff admitted at the May 20 joint meeting that they don't review factors that are out of their control. I contend that even if factors are not under the control of city staff or the city council, they are morally obligated to consider the factors that will affect not only residents of Cannon Falls, but also the surrounding region. In addition, the Cannon Falls City Council DOES have control over factors that city staff doesn't because they are the governing body that will ultimately make the decision.

If this proposal was just about building a facility in the industrial park that might provide jobs, that's one thing, but the end-goal of the proposed technology park is to build data centers and those facilities pose significant and specific environmental risks that need more in-depth study. An AUAR is not sufficient to review those risks. An Environmental Impact Statement (EIS) is the type of study that would provide a more comprehensive evaluation of environmental consequences. Additionally, as noted by the Cannon Falls city engineer at the May 20 joint meeting, city staff does not review data center issues outside their control so they are only focusing on the capacity of our city water and sewer system. According to city staff, once capacity is determined it would be up to the developer to figure out how to deal with any additional capacity needed. The issue though is that we ALL draw from the same water source, the Prairie du Chien–Jordan aquifer, and we all benefit or are negatively affected by decisions affecting our environment. They may not be under the direct "control" of the city of Cannon Falls, but any negative impact on it DOES affect us all. These other factors outside the direct control of the city of Cannon Falls but that are affected by data centers and may consequently affect our residents include CO₂ emissions, strain on our energy grid, and noise levels. Again, the Cannon Falls City Council DOES have control because they have the power to vote yes or no. Not only do *they* have a moral obligation to ensure the Cannon Falls environment is protected, it is also the moral obligation of the citizens who elected them to ensure we're provided with ample opportunity to be aware and informed of how decisions will affect our community.

Which leads me to my point. I do not feel that the city of Cannon Falls has provided residents with adequate notification that the AUAR is available to review nor enough time and opportunity to ask questions about the timeline, the benefits and the possible harmful effects of the proposed project. Too many questions remain unanswered that, though not technically the job of city staff to pursue, present long-term risks to our community and quality of life. **In closing, I am requesting that you extend the public comment period and make additional efforts to inform and engage the public. I also urge you to consider requiring a full Environmental Impact Statement.**

Thank you for your time and attention. I look forward to your response and the opportunity to be further involved.

Regards,
Ginger Bauer

From: [Payne, Ashley](#)
To: [Janso, Chelsey](#)
Subject: Fw: Data center public comment
Date: Friday, June 27, 2025 9:02:35 AM

Get [Outlook for iOS](#)

From: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Sent: Friday, June 27, 2025 7:37:20 AM
To: Payne, Ashley <Ashley.Payne@kimley-horn.com>; Bill Angerman <bangerman@whks.com>
Subject: Fw: Data center public comment

Jon Radermacher
City Administrator
City of Cannon Falls
cityadmin@cannonfallsmn.gov
507-263-9304

From: Lisa Anderson <lisa.hermanson@gmail.com>
Sent: Thursday, June 26, 2025 2:31:24 PM
To: cityadmin@cannonfallsmn.gov <cityadmin@cannonfallsmn.gov>;
info@cannonfallstechnologypark.com <info@cannonfallstechnologypark.com>
Subject: Data center public comment

Good afternoon,

I'm writing to voice my concern about the proposed data center. As a resident of Cannon Falls, I do not feel there has been sufficient information about the proposed data center made available, especially given the very quick timeline it seems to be on. I just today found out about the public comment period.

I understand and share the strong desire in Cannon Falls to attract more economic development, but the City must do so in a way that is smart and sustainable. 251 acres is a lot of real estate and will use a lot of power and water. The Kimberly Horn document is high on hopes and short on details. What kind of jobs will it create and, realistically, where will they hire from? Are we really willing to go all in on this? And how, exactly, does the City or the people that live here benefit? What proportion of the taxes they pay goes to local government? As someone who's done ROI analysis, I would love to see their data analysis that arrives at \$13:\$1; my guess is there are a lot of assumptions in that that tend toward optimistic.

I am very concerned about the environmental impacts of a development like this, regardless of any remediation promises they make. I've been in the same rooms where taconite mines promise they won't contaminate water and later then spend years arguing their responsibility for doing so in court when a contamination happens. How would a data center behave differently? We have enough problems with water pollution--let alone energy use, air

pollution, noise pollution, etc.

We're learning a lot about the problems with data centers and the strict requirements Met Council has used. Should the city decide to allow this data center, I strongly encourage a timeline that allows for authentic public engagement, thorough environmental review, rigorous economic analysis, and rigid remediation requirements.

In sum, there are a lot of vague and concerning claims being made with little to back it up, and the fact that this is being fast-tracked only elevates those concerns.

Thank you,

Lisa Anderson

Subject: Data center public comment

Good afternoon,

I'm writing to voice my concern about the proposed data center. As a resident of Cannon Falls, I do not feel there has been sufficient information about the proposed data center made available, especially given the very quick timeline it seems to be on. I just today found out about the public comment period.

I understand and share the strong desire in Cannon Falls to attract more economic development, but the City must do so in a way that is smart and sustainable. 251 acres is a lot of real estate and will use a lot of power and water. The Kimberly Horn document is high on hopes and short on details. What kind of jobs will it create and, realistically, where will they hire from? Are we really willing to go all in on this? And how, exactly, does the City or the people that live here benefit? What proportion of the taxes they pay goes to local government? As someone who's done ROI analysis, I would love to see their data analysis that arrives at \$13:\$1; my guess is there are a lot of assumptions in that that tend toward optimistic.

I am very concerned about the environmental impacts of a development like this, regardless of any remediation promises they make. I've been in the same rooms where taconite mines promise they won't contaminate water and later then spend years arguing their responsibility for doing so in court when a contamination happens. How would a data center behave differently? We have enough problems with water pollution--let alone energy use, air pollution, noise pollution, etc.

We're learning a lot about the problems with data centers and the strict requirements Met Council has used. Should the city decide to allow this data center, I strongly encourage a timeline that allows for authentic public engagement, thorough environmental review, rigorous economic analysis, and rigid remediation requirements.

In sum, there are a lot of vague and concerning claims being made with little to back it up, and the fact that this is being fast-tracked only elevates those concerns.

Thank you,

Lisa Anderson

From: [Payne, Ashley](#)
To: [Janso, Chelsey](#)
Subject: Fw: Public comment on data center environmental review
Date: Friday, June 27, 2025 9:02:46 AM

Get [Outlook for iOS](#)

From: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Sent: Friday, June 27, 2025 7:37:03 AM
To: Payne, Ashley <Ashley.Payne@kimley-horn.com>; Bill Angerman <bangerman@whks.com>
Subject: Fw: Public comment on data center environmental review

These comments were also received yesterday, and I just released them from our spam filter.

Jon Radermacher
City Administrator
City of Cannon Falls
cityadmin@cannonfallsmn.gov
507-263-9304

From: Alan Muller <amuller@dca.net>
Sent: Thursday, June 26, 2025 11:36:17 PM
To: mmontgomery@cannonfallsmn.gov <mmontgomery@cannonfallsmn.gov>;
cityadmin@cannonfallsmn.gov <cityadmin@cannonfallsmn.gov>
Subject: Public comment on data center environmental review

Alan Muller
1110 West Avenue
Red Wing, MN, 55066
302.299.6783
amuller@dca.net

June 26, 2025

Matt Montgomery, Mayor, mmontgomery@cannonfallsmn.gov
Jon Radermacher, City Administrator, cityadmin@cannonfallsmn.gov
City of Cannon Falls, Minnesota, 550091

Regarding: "Cannon Falls Technology Park"--(Alternative Urban Area Review)

Gentlemen:

Kindly accept these comments on the above matter.

Excellent comments have been submitted by Carol Overland and Megan Bauer. I endorse them without repeating them here.

The City website has only one obvious link to the data center and that goes directly to the promoters' site. While other information can be

found online, one gets the impression that the City is NOT making a good-faith effort to inform and involve residents.

This impression is reinforced by the apparent lack of meaningful public notice and the inadequate time allowed for comments on the draft review document.

Strong provisions for public involvement are basic elements of the MN Environmental Policy Act.

1

The Minnesota Environmental Review program was established by the Legislature in 1973 (This wording is from the MN Department of Health)

Minnesota Environmental Policy Act(MEPA)

The Minnesota Environmental Policy Act of 1973 (MEPA) established the Environmental Quality Board (EQB), which oversees the formal environmental review process for the state of Minnesota.

In Minnesota, environmental review consists most frequently of the completion of one or both of the following documents:

Environmental Assessment Worksheet (EAW): A screening tool to determine whether a full environmental impact statement is needed. The worksheet is a six-page questionnaire about the project's environmental setting, the potential for environmental harm and plans to reduce the harm. Approximately 150 worksheets are completed each year.

Environmental Impact Statement (EIS): An in-depth analysis used for major development projects that will significantly change the environment. The EIS covers social and economic influences, as well as environmental impacts, and looks at alternate ways to proceed with the project.

Note that there is no mention here of "Alternative Urban Area Review"

This is something more recently grafted onto Minnesota's Environmental Review program, and, in my opinion, is not appropriate in this matter.

Suggestions:

Start working for area residents and stop working for the applicant (TRACT).

Abandon the pretence that multiple projects are under real consideration.

Restart the environmental review process with meaningful public engagement in scoping an EIS.

Develop an EIS with extensive public engagement and consideration of what has been learned from data center projects elsewhere.

Give priority to developing an ordinance with adequate provisions for controlling data center projects, being cognizant of experiences elsewhere.

Respectfully submitted,

[signed]

Alan Muller

From: [Payne, Ashley](#)
To: [Janso, Chelsey](#)
Subject: Fw: Technology Park / Data Center Concerns
Date: Friday, June 27, 2025 9:02:54 AM

Get [Outlook for iOS](#)

From: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Sent: Friday, June 27, 2025 7:34:42 AM
To: Payne, Ashley <Ashley.Payne@kimley-horn.com>; Bill Angerman <bangerman@whks.com>
Subject: Fw: Technology Park / Data Center Concerns

This comment was submitted yesterday

Jon Radermacher
City Administrator
City of Cannon Falls
cityadmin@cannonfallsmn.gov
507-263-9304

From: Emily Peterson <petersemi59@gmail.com>
Sent: Thursday, June 26, 2025 9:30:56 PM
To: cityadmin@cannonfallsmn.gov <cityadmin@cannonfallsmn.gov>;
info@cannonfallstechnologypark.com <info@cannonfallstechnologypark.com>
Subject: Technology Park / Data Center Concerns

Dear Mr. Radermacher and Project Team:

I am writing to express my concerns about the AUAR for the proposed Technology Park.

My concerns about this AUAR are about what happens if, when or after the AUAR is approved.

Given that Data Centers have set their sites on MN, and even though this AUAR lists two potential outcomes, a future data center appears to be the clear goal.

With this in mind, my main concern is that the City of Cannon Falls protect its future development options by requiring (future) tenants of the Technology Park to conduct an EIS (which are industry-specific) to address the following issues (citations are from the AUAR):

Extreme water use: Up to 4.66 million gallons/day (p. 52) — more than 46,000 people worth of water. No real mitigation (pp. 71–72).

Massive energy use: 500 MW according to the Star Tribune — power for 250,000–500,000 homes, unaddressed in the AUAR.

High carbon emissions: 20,189 metric tons/year (p. 64) — equals 2,700+ homes, with weak mitigation plans.

Noise impacts: No noise estimates provided (p. 66), despite homes nearby.

Electronic Waste Disposal: not addressed in this AUAR

The above AUAR citations are based primarily on TRACT's estimates for unspecified projects. But it is a fact, though not a widely publicized one, that some Data Centers, depending on their focus, require more resources than others. For example, Data Centers that focus on storing photos, emails, etc. have different water/cooling/electrical waste disposal/electrical needs than those that deal in AI and Crypto storage, which require even more of the above, especially water and electricity, and create more electronic waste as well.

Basically, I'm worried that the City of Cannon Falls will look only at the purported short-term gains of this project and ignore the potential long-term consequences, not only for the environment, but for the Cannon Falls Community in general. Ultimately, either decision (short or long term) requires an assessment of resource allocation, recognizing that such allocations will impact future generations of Cannon Falls residents, perhaps positively, perhaps negatively. All impacts need to be weighed and considered with short and long term visions in mind.

Thank you for your consideration of these concerns.

Emily Peterson
32487 County 24 Blvd
Cannon Falls, MN 55009
612-325-3825



From: Jon Radermacher
To: Payne, Ashley; bangerman@whks.com; Daren Sikkink
Subject: FW: Comments on Draft AUAR - Initial Comments
Date: Wednesday, June 18, 2025 9:01:32 AM
Attachments: [image005.png](#)
[image006.png](#)

FYI, initial comments on AUAR

Ashley,

Will you be preparing a response for this comment? Can you share that with me, and is there something missing in terms of what should be on our website for review? The Draft AUAR?

Jon Radermacher
City Administrator



cityadmin@cannonfallsmn.gov
507-263-9304

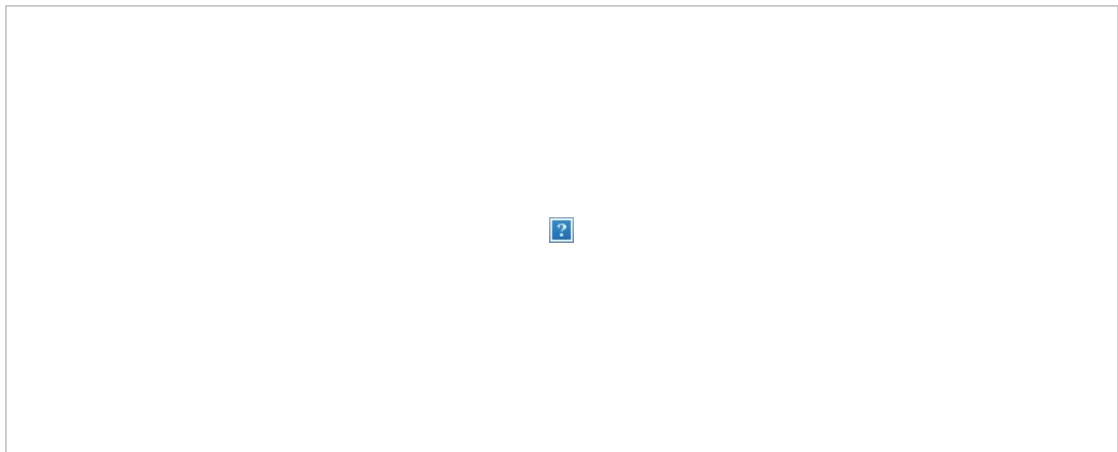
Peter Drucker: "Management is doing things right; leadership is doing the right things."

From: Carol A. Overland <overland@legalelectric.org>
Sent: Wednesday, June 18, 2025 8:20 AM
To: Jon Radermacher <cityadmin@cannonfallsmn.gov>
Subject: Comments on Draft AUAR - Initial Comments

Jon -

Please regard this as my Initial Comment on the AUAR.

While waiting for you to get it together on the late response to my earlier Data Practices Act Request, I'm taking a few minutes to look at the Draft AUAR. From the City's AUAR page, this is all that's there:

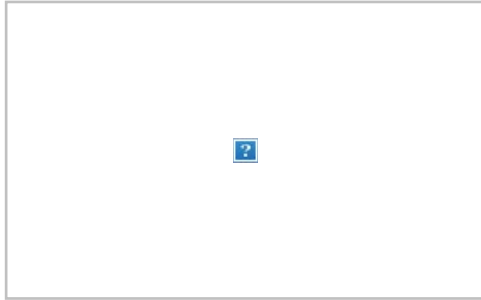


1) There's NOTHING on the Cannon Falls AUAR page about availability of the Draft AUAR; there's no ID of the linked 5-20-2025 AUAR as the DRAFT available for comment; and there's nothing stating that the process includes commenting on the draft, when comments are due, and where to send them.

This provides a good argument for inadequate notice. That info should be prominently stated. Under Minnesota Rule 4410.3610, there's 30 days from date of publication in the EQB Monitor, which was May 27, which means comments are due June 26, just over a week away. Again, notice provided by the RGU is inadequate. (There's also nothing stated about submission of comments on the EQB Monitor page: <https://webapp.pca.state.mn.us/eqb-search/project-detail/262244?sild=262244-PROJ0000000001>)

2) It looks as though you're farming contacts to the consultants, or is it to TRACT? The whois is hidden. The City is the

RGU for the AUAR and you are named as the City contact:



3) There is no such thing as the "Minnesota Pollution Control Agency's Environmental Quality Board." It's the **Environmental Quality Board**, which is a separate agency. The website does filter through MPCA, but it is a separate entity. EQB rules for AUAR govern: <https://www.revisor.mn.gov/rules/4410.3610/>

More to follow.

Carol A. Overland, as individual, and not in the course of representation of any client

--

"Our lives begin to end the day we become silent
about the things that matter." Dr. Martin Luther King, Jr.

Carol A. Overland
Attorney at Law
Legalelectric - Overland Law Office
1110 West Avenue
Red Wing, MN 55066

612-227-8638

overland@legalelectric.org

www.legalelectric.org

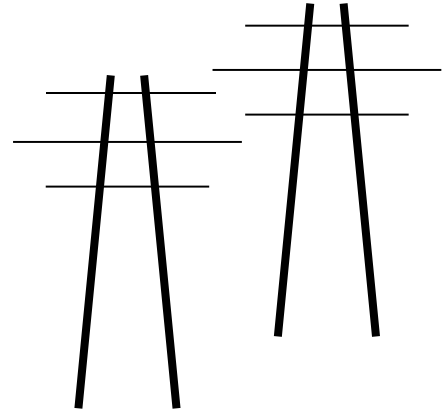
www.nocapx2020.info

www.not-so-great-northern-transmission-line.org

Legalelectric, Inc.

Carol Overland Attorney at Law, MN #254617
Energy Consultant—Transmission, Power Plants, Nuclear Waste
overland@legalelectric.org

1110 West Avenue
Red Wing, Minnesota 55066
612.227.8638



June 26, 2025

John Radermacher
City Administrator
918 River Road
Cannon Falls, MN 55009

via email: cityadmin@cannonfallsmn.gov

Randolph Township
P.O. Box 87
Randolph, MN 55065

via email: Clerk@randolph-township.com

Environmental Review Team
and
Environmental Quality Board Members
520 Lafayette Road
St. Paul, MN 55155

via email: info.eqb@state.mn.us

RE: Comments on Draft AUAR – TRACT Data Center

Dear Mr. Radermacher, EQB Environmental Review Team and EQB Board members:

Below are my comments. I am filing this as an individual, and not in the course of representing any client. Should that change, you will be immediately notified.

Information including data center site plans, survey, City/Township and Tract meeting agenda and minutes, emails, Tract PR handouts, etc., obtained Tuesday, June 24, 2025 in partial response to a Data Practices Act Request, may be found on my Legalelectric site: [Tract Data Center in Cannon Falls](#)¹. This information has previously not been disclosed to the public, with the exception of one proposed project schedule that was included in a Council/Planning Commission packet (though not a handout).

I. USE OF AUAR IS DISENGENUOUS AND DECEPTIVE

For the record, I am sending this Comment and attachments to the Environmental Quality Board

¹ If that link doesn't work: <https://legalelectric.org/weblog/29201/>

because use of an AUAR in this manner, rather than preparation of an Environmental Impact Statement, is improper, contrary to the intent and black letter of the AUAR rule. See Minn. R. 4410.3600. The project is for a data center, that is clear. Much known information that is necessary for an EIS is not disclosed in this “AUAR” and has been hidden from the public. It is impossible to determine and evaluate impacts without this information, information such as water use, energy use, air emissions from diesel generators, noise and setbacks necessary to reduce noise to comply with Minnesota’s industrial noise standards. It does not address the range of impacts based on known characteristics of the data center project, cumulative impacts, and it is dishonest to claim it is a comparison of 2 or more projects. Use of an AUAR in an attempt to avoid an EIS is not a legitimate use of an AUAR. The City of Cannon Falls and Tract have not provided full disclosure of known information, and the decision to use an AUAR was made on provision of incomplete information. Minn. R. 4410.3600, Subp. 1.

While AUARs were designed for “residential, commercial, warehousing, and light industrial development and associated infrastructure uses,” and technology centers, a/k/a data centers, were not an anticipated use for AUAR review. Minn. R. 4410.3610, Subp. 1. Further:

The procedures of this part may not be used to review any project meeting the requirements for a mandatory EAW in part [4410.4300](#), subparts 2 to 13, 15 to 17, 18, item C, D, or E, or 24, or a mandatory EIS in part [4410.4400](#), subparts 2 to 10, 12, 13, or 25.

Id. However, as noted by Minnesota Center for Environmental Advocacy (MCEA) in a letter to the legislature about HF28², regarding a proposed exemption for the Becker data center from Public Utilities Commission review:

... the AUAR process is being used instead to allow large data center developments to conceal their ownership and other information from the public during the environmental review process.

MCEA Letter to House Energy Committee.

Completion of an AUAR provides exemption for further environmental review only under specific conditions:

Upon completion of review under this part, residential, commercial, warehousing, and light industrial development projects and associated infrastructure within the boundaries established under subpart 3 that are consistent with development assumptions established under subpart 3 are exempt from review under parts [4410.1100](#) to [4410.1700](#) and [4410.2100](#) to [4410.3000](#) as long as the approval and construction of the project complies with the conditions of the plan for mitigation developed under subpart 5.

Id., Subp. 5(E). This situation is not one of those scenarios for exemption from environmental

² See <https://www.house.mn.gov/comm/docs/-TaXdzuaxkispYDJF2f5UQ.pdf> This was a scenario of 250 diesel generators that would produce 600MW, or ~ 2.4MW each.

review.

At this time, I ask that an Environmental Impact Statement be prepared based on the project's need for permits triggering a mandatory EIS, i.e., use of numerous diesel generators and thus a need of an Air Permit from the MPCA, water appropriation and other permits from the DNR, and a Certificate of Need permit from the Public Utilities Commission. The project must also demonstrate through dB(A) and dB(C) noise modeling the ability to comply with the industrial noise standard at nearest receptor.

II. INADEQUATE NOTICE OF DRAFT AUAR – EXTEND COMMENT DEADLINE

Cannon Falls did not provide the notice that's required for an AUAR. I did not learn of it until this late date. There's no explanation of a comment period, how to comment, who to send it to, and nothing about the deadline. How are we to know?

The City of Cannon Falls website's AUAR page³ says absolutely nothing about public comment and deadline for comments:

AUAR (Alternative Urban Area Review)

The Scoping Documents for the **Alternative Urban Area Review (AUAR)** have been posted to the Minnesota Pollution Control Agency's Environmental Quality Board which you can find [here](#).

We'd love to hear from you! Please contact our team at info@CannonFallsTechnologyPark.com or call 507.298.2864 with any questions.

Supporting Documents

-  Cannon Falls Industrial AUAR Final Order (5 MB)
-  Cannon Falls Industrial AUAR 05-20-2025 (18 MB)

On the other hand, Randolph Township shows this information front and center on its home page⁴ (and on yet another hand, there is nothing in the Board or Planning Commission minutes regarding the data center and pending annexation):



³ See <https://www.cannonfallsmn.gov/community/page/auar-alternative-urban-area-review>

⁴ See www.randolph-township.com

The **Draft AUAR** lists the City of Cannon Falls as the Responsible Governmental Unit, but gives no information of RGU responsibilities and no information on commenting – there is no information even stating that there is a comment period, nothing regarding the start and closing of the comment period, although perhaps one could presume the City Administrator should receive public comments. Draft AUAR, p. 4.

The word “comment” does not appear in the AUAR until p. 71, and this is the ONLY time that the word “comment” appears in the DRAFT AUAR!:

Draft Mitigation Plan

This Mitigation Plan is submitted as part of the Draft AUAR to provide reviewers and regulators with an understanding of the actions that are advisable, recommended, or necessary to protect the environment and minimize potential impacts by the proposed development scenarios. This Draft Mitigation Plan will be revised and updated based on comments received during the Draft AUAR comment period.

DRAFT AUAR, p. 71. There has been no good faith effort to provide notice to the public.

The public has this one opportunity to comment on the Draft AUAR, yet what’s visible is an abject failure of notice to the public. Notice needs a do-over, another 30 days to comment with **PROMINENT** info that there is a Draft AUAR available for public comment, and the date of the close of the comment period, accompanied with a link to the AUAR.

At this time, I ask that a Notice of Availability of AUAR for Comment be issued, with a comment period of 30 days from publication of Notice. The Notice, including deadline for Comments and a link to the Draft AUAR, should be published by the EQB Monitor; the Cannon Falls Beacon Notices section; prominently displayed on the City of Cannon Falls and Randolph Township home pages; and displayed on the Cannon Falls AUAR page together with a link to the Draft AUAR.

III. THE AUAR CONTENT IS DEFICIENT IN MANY RESPECTS

The AUAR is inadequate as it does not provide basic information necessary to determine potential impacts.

A. SCENARIO 2 IS A DATA CENTER

The description of “Scenario 2” is misleading and should be corrected. “Scenario 2 represents proposed technology park development. Construction is anticipated to begin in 2026, see **Figure 4.**” The AUAR Figure 4 shows only a blue blank area:



AUAR, p. 11.

This is the site plan found June 24, 2025 in the Data Practices Act Responses and it is NOT found in the AUAR:



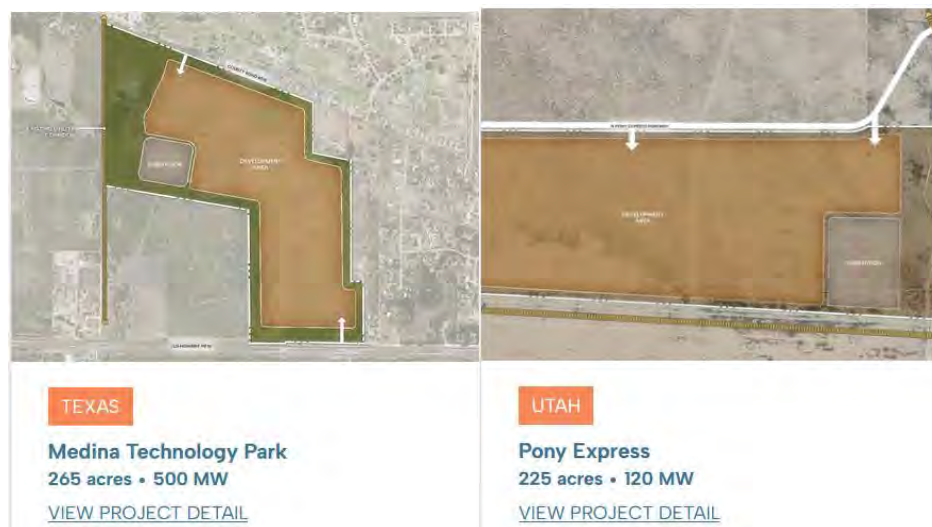
See Attachment A – Site Plan. Let's be honest here – this is the site plan for the Tract data center.

B. ENERGY USE AND DIESEL GENERATORS MUST BE QUANTIFIED

The AUAR is inadequate because the range of megawatts needed to operate such a project and the source of this energy has not been disclosed. There is a natural gas plant across the road from the site, intermediate natural gas generation which would generate CO₂.

The AUAR is inadequate because the number and output of diesel generators that would be required for this Tract data center in testing and in an external power outage and the air emissions have not been disclosed.

The Amazon data center in Becker anticipated use of 250 generators that would produce 600MW, or about 2.4 MW each.⁵ How many megawatts and diesel generators for Tract? A look at Tract's website shows two "small" projects covering acreage near that of the approximately 250 acres for the Cannon Falls project. These are the 500MW Medina project near San Antonio, and the 120MW Pony Express near Salt Lake City.



A logical estimate is that the Cannon Falls project would be in the range of 120MW to 500MW, above the Minnesota PUC's 50MW threshold for a Certificate of Need.⁶ Heightened environmental review appears attempted to be avoided by non-disclosure in this diversionary and improper use of AUAR.

The range of megawatts of energy needed to power the data center and the energy source(s) must be disclosed.

The number of diesel generators, their output, and the air emission profile must be disclosed.

⁵⁵ <https://www.msn.com/en-us/news/us/amazon-must-prove-it-needs-250-diesel-generators-at-becker-data-center-minnesota-utility-regulators-say/ar-AA1A0O8w>

⁶ See certificate of need (CN) requirements in Minn. Stat. § 216B.243 and Minn. R. Ch. 7849.

Energy use and air emissions may be mitigated by amending the zoning ordinance to require the data center produce a significant percentage of its energy with solar and batteries and battery back-up power. Looking at the site plan, the many buildings and green space provide opportunities for solar generation and battery storage. The project could also be required to buy into local/community solar projects.

C. WATER SOURCE, CONSUMPTION, AND DISCHARGE SPECIFICS MUST BE DISCLOSED, CUMULATIVE IMPACTS BE DETERMINED

The AUAR is inadequate because it discusses water resources, wastewater, stormwater, and gives short shift to water appropriation.:

The water supply for the study area will be obtained from the City of Cannon Falls in both Scenarios, however, in Scenario 2, the industrial water could be supplied from the onsite irrigation well that would be reconstructed to municipal standards. 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.¹⁶ The City of Cannon Falls currently has a water appropriation capacity of 250 MGY and is currently utilizing between 151 to 165 MGY over a four-year period from 2019 to 2024. The city is currently reviewing how the existing appropriations and well could work within the city to help shave some peak demand from the City's water system.

AUAR, p. 51. Water appropriation needs and sources must be disclosed beyond the scant "Scenario 2" information provided:

Under Scenario 2, the onsite well could alternatively be reconstructed to meet industrial standards and utilized for industrial process water, reducing the demand from the development on the City water supply system.

Data centers can have a wide range of cooling options which impact the water demand depending on either the use of a non-water cooled or a water-cooled system. It is assumed that Scenario 2 is a water-cooled system and could have an annual peak water demand of 49 MGY with a peak day of 4.66 million gallons per day when temperatures exceed 100 plus degrees Fahrenheit during the day. Annual average daily water demands are anticipated to be approximately 0.135 MGD for the development, including both domestic and cooling water.

The MNDNR has monitoring wells throughout the state that detects groundwater levels in the aquifer. DNR Observation Well Number 19062 is the closest monitoring well to the site and has a depth of approximately 395 feet above sea level. This well has fluctuated between an elevation of 824 feet in 1994, to a high of 867 feet in 2013. In the last few years, the well has gone from 835 feet in May of 2023, to an elevation of 837 feet in March of 2025. This fluctuation does show the variation of the aquifer with the rain and other seasonal events, but the last 30 years of data shows the aquifer maintains a consistent groundwater elevation within this range. This demonstrates that the aquifer is a reliable and resilient water source with the seasons and does recharge over time.

A Water Use Appropriation Permit would be obtained if temporary dewatering is determined to be necessary for design of development in Scenario 1 or Scenario 2. A Water Use Appropriation Permit is required for temporary water appropriations and limits withdraw to 50 million gallons per year.

Id., p. 52. Note claim of 49MGY where DNR Water Use Appropriation Permit has 50MGY limit!

There are several known projects proposed in the area. To address cumulative impacts, all projects drawing water out of the aquifer must be taken into account, and a sustainable manner of equitable allocation between the many projects be determined that can be flexible as need and availability changes. A wide range pump test should be utilized to determine sustainability of individual and the many projects.

An email from the Data Practices Act Request reveals details for this project that should all be included in the AUAR:

Neil and Laura – Per our previous discussions, following is a summary of City data and information. Much of this information will be incorporated into Tract's AUAR.

Water Supply and Storage

- Ground water appropriation, the City's authorized volume is 250 MGY. In 2023 the City used 157 MGY.
- Storage Capacity, City has two storage tanks; 500,000 gallon ground storage and 1,000,000 gallon elevated storage
 - o City needs storage equal to average day demand which was 430,000 gpd in 2023.
 - o City has approximately 1.07 MG available before more storage is needed.
- Well capacity, City has three wells with a firm (largest well out of service) capacity of 3.2 MGD.
 - o City needs well capacity equal to peak day demand. Peak day was approximately 930,000 in 2023
 - o City has approximately 2.3 MG available before more well capacity is needed.
- Water quality
 - o See water quality data that was previously provided to Tract. City feeds chlorine (disinfection), fluoride (health), and polyphosphate (iron sequestration)

Water Distribution System

- Pressure and fire flow
 - o City can provide static pressure near the site if requested.
 - o City can perform a fire flow test if requested.
 - o Water modeling of the distribution system may be required depending upon volumes requested.
 - o Tract will most likely need to loop watermain to the site from the south near Highway 20/County Road 29 and from the north at Holiday Ave. This will depend on water volume needed and fire flow requirements.
 - o Tract will need to evaluate if constructing water storage on site is warranted.

Wastewater Treatment

- Plants rated capacities are: AWW (1.09 MGD), MWW (2.18 MGD), PHWW (3.27 MGD)
- Current flows available based on 2022 data, AWW (0.7 MGD), MWW (1.2 MGD), PHWW (no data)
- A treatment plant plan (facilities plan) may be need to be prepared by the City depending upon requested flows.

Wastewater Collection System

- Sewer capacity along Highway 20 will need to be evaluated. Pipe sizes range from 8" to 18". Capacity available will depend upon flow requested. Suggestion is the City perform CCTV of all existing pipe to determine condition now.
- Lift Station capacity. All of the Tract Development land flows to the new lift station at the intersection of Cannon and 3rd. It has an ultimate firm capacity of 2,000 gpm or 2.88 MGD. Current capacity is 900 gpm or 1.3 MGD. This lift station is new so data is not available but assumption is lift station is about 25% utilized currently.

Attachment B, email from Angerman re: Tract Development Utilities, November 8, 2024.

The punchline is on the second page, the information needed from Tract, information that is not in the AUAR:

What we will need from Tract.

- Projected water usage. Peak day and average day.
- Projected wastewater discharge in the form of AWW, MWW, PHWW.
- Projected wastewater discharge strength for the following: BOD, TSS, P, Chlorides, Sulfates, Metals, TKN, and potentially others.

Id.

Independent verification is needed of information about projected peak and average day water usage; projected wastewater discharge in the form of AWW, MWW, and PHWW; and projected wastewater discharge strength for BOD, TSS, P. Chlorides, Sulfates, Metals, TKN, and potentially others. The many data center projects that intend to draw from the same aquifer must be tallied, and resources be equitably and responsibly distributed in a sustainable manner. A pump test should be performed to determine sustainability of proposed water draw.

D. PROJECT SETBACKS ARE NOT EVEN MENTIONED IN THE AUAR!

A search of the AUAR reveals that project setbacks are not even mentioned. Setbacks are a common means of environmental mitigation to address impacts that cannot be avoided. Setbacks are needed to prevent impacts of nuisance noise, lighting, air emissions, etc.

The site plan, again, NOT incorporated into the AUAR, reveals that Tract has proposed insufficient setbacks on the north side of the parcel up against a residential development. See Attachment A – Site Plan. That plan shows 200 – 300 foot setbacks from the property line and residences to the north, 300 foot setbacks for an 80 foot building.

The AUAR must address setbacks, and setbacks that would be effective in mitigating expected impacts, particular to those residences/receptors along and up against the northern boundary of the area.

E. VISUAL IMPACTS OF A COMPLEX OF 80 FOOT TALL BUILDINGS IS NOT ADDRESSED

The AUAR minimizes the visual impacts of 80 foot tall buildings. See Attachment A, Site Plan. These data center buildings would loom up against the residences on the north side of the building, and would be the visual greeting to anyone approaching on Highway 52. An example of the strong unwanted visual impact of industrial facilities in an agricultural land transition to a small city is the CapX 2020 transmission and subway gateway to Hampton on Highway 52 from the south.

The AUAR proposes “to develop the entirety of the site with natural buffers along the project lines. Minimal tree clearing is anticipated for development.” AUAR, p. 56. This notion of a buffer is also raised regarding visual impacts:

Natural buffers will be maintained around the AUAR study area as feasible to minimize visual impacts to the adjacent properties. No significant visual impacts are anticipated.

AUAR, p. 60.

The notion of a natural buffer that would somehow mitigate the visual impacts of 80' tall buildings just 300 feet from residences and along the Highway 52 corridor is not credible.

The AUAR must describe in specificity and provide drawing the visual buffers that would mitigate visual impacts of the project.

F. AIR EMISSIONS AND NEED FOR AIR EMISSIONS PERMIT MUST BE DISCLOSED – AUAR MUST ALSO CREDIBLY ADDRESS GREENHOUSE GAS EMISSIONS

The AUAR does correctly state that:

Not applicable to an AUAR. If a project exceeds any of the thresholds as identified in MN Rules 4410.4300, Subpart 15, the project would be required to complete a separate environmental review through the MPCA. The MPCA would be considered the responsible government unit.

AUAR, p. 60-61.

However, while the statement above, which avoids disclosure, may be technically true, a data center project with MANY diesel generators will need air permits. The estimates of air emissions, disclosing of the number of diesel generators and expected emissions, and the disclosure of the anticipated need for an air permit from the MPCA, is essential.

As above, diesel generators emit greenhouse gas. Disclosure of the number and energy capacity of the diesel generators and expected time running for operations and testing must be disclosed. While Table 11 does have some numbers for Operational Emissions, it must be more specific with the inputs used to achieve those numbers.

The AUAR must disclose the type, sources, quantities, and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants and criteria pollutants. 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 to be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions, including air permit.

The AUAR is incomplete in its discussion of unavoidable greenhouse gas emissions inherent in Scenario 2, with details about the diesel generators, expected emissions, and the rationale behind the calculations.

G. SOCIOECONOMIC IMPACTS ARE NOT ADDRESSED IN THE AUAR

The AUAR does not address socioeconomic impacts, such as impacts on the city, township, and school district tax revenues, costs to the city for infrastructure to facilitate the development, apportionment of development costs, impacts on tourism, impacts to property values and residential, commercial, and industrial property marketing impacts.

The AUAR must address the range of likely socioeconomic impacts.

H. THE AUAR DOES NOT ADEQUATELY ADDRESS NOISE

Data centers make a tremendous amount of noise, causing predictable livid local resident complaints and lawsuits. The AUAR must be proactive in addressing lowering noise levels pre-construction through choice of operational equipment including cooling. The AUAR should include a current noise monitoring study to establish ambient sound. It's impossible to address impacts without knowing what those impacts will be and it's impossible to know what noise impacts will be without disclosure.

The Minnesota Pollution Control Agency has an industrial noise standard, and the entity permitting a project is responsible for enforcement – in this case, it likely would be Cannon Falls responsible for enforcement of the noise standard.

7030.0040 NOISE STANDARDS.

Subpart 1. **Scope.** These standards describe the limiting levels of sound established on the basis of present knowledge for the preservation of public health and welfare. These standards are consistent with speech, sleep, annoyance, and hearing conservation requirements for receivers within areas grouped according to land activities by the noise area classification (NAC) system established in part 7030.0050. However, these standards do not, by themselves, identify the limiting levels of impulsive noise needed for the preservation of public health and welfare. Noise standards in subpart 2 apply to all sources.

Subp. 2. Noise standards.

Noise Area Classification	Daytime		Nighttime	
	L ₅₀	L ₁₀	L ₅₀	L ₁₀
1	60	65	50	55
2	65	70	65	70
3	75	80	75	80

Minn. R. 7030.0040.⁷

The AUAR is grossly misleading in its statement that about traffic noise generally depicting noise measurements and perceptions:

A sound increase of 3 dBA is barely noticeable by the human ear, a 5 dBA

⁷ This writer knows a fair amount about noise, having done radio, bar and concert sound for (almost) a living decades ago and having secured the first and only utility buyouts for Minnesota landowners living under a wind project. See Legalectric for Bent Tree noise studies [Bent+Tree+08+573+PostConstNoiseMonPhase+II+Report+2+7+18](#), [BentTree NoiseMonitoring 20179-135856-01](#); Settlements [What's going on with Bent Tree?](#) at <https://legalelectric.org/weblog/16950/> and [Bent Tree Order filed by PUC](#) at <https://legalelectric.org/weblog/17112/>.

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.:

AUAR, p. 65.

The problem of operational noise is ducked and no specific information is provided:

For Scenario 2, the main sources of noise include computers, ventilation systems, industrial traffic and the use of generators tested once a month and in the case of emergency. Sensitive receptors within the project site vicinity include adjacent residential houses, and businesses. Further noise evaluation will be completed as design progresses and best practices to reduce noise will be implemented for the technology park uses to ensure compliance with local and state noise regulations. Noise attenuation measures will be incorporated into project design to ensure that MPCA noise rules and City noise ordinances are followed.

AUAR, p. 66.

Noise of data centers is a frequent complaint, as noise does not respect property boundaries. Noise travels, particularly across the relatively flat land, and may well impact residences far beyond those immediately adjacent to the AUAR boundary. The AUAR should contain noise modeling showing distances from the project at which noise levels decrease to 55, 50, 45 and 40 dB(A). Because dB(C) travels further, noise modeling should also include a separate demonstration of dB(C) levels to distances needed for 55, 50, 45 and 40 dB(C). This is an example of the graphic demonstration of noise modeling results, complementing the noise modeling report (see Freeborn Wind post <https://legalelectric.org/weblog/16480/>).



Although local residents' noise complaints are typically based on their perception, receptor perception as laid out in the AUAR is not at all relevant to noise standard compliance. The MPCA's noise standard is based on measured dB(A), as above.

Some studies of data center noise have been completed, and these studies could predict material violations of Minnesota noise standards. For example, see the [Data Center Noise Study for Prince William, Fauquier, and King George Counties and the Town of Warrenton](#).⁸ Noise from the data center in that study was far above the thresholds of the Minnesota noise standard.

It's the City's job to regulate development and assure that landowners and residents have quiet enjoyment of their property. This is best achieved through precautionary regulation.

The AUAR must disclose with specificity the equipment generating noise, and must provide noise modeling showing dB(A) and dB(C) noise levels at distances necessary to reduce noise to 60, 55, 50, and 45 dB(A) and dB(C). Noise is a likely issue with significant impact that must be more thoroughly addressed in the AUAR.

I. ORDINANCE AMENDMENT CAN PROVIDE SOME MITIGATION

The project schedule anticipates zoning changes. The City should appoint an Advisory Committee to gather and provide information to the Planning Commission. Areas that should be considered in the ordinance, though NOT all inclusive:

- Require sound modeling in the permit application.
- Require conservative downward focused lighting, full cut-off lighting fixtures, with light modeling provided in the permit application. The AUAR opts out of guidelines for downward lighting, which is not acceptable. AUAR p. 74,
- Address water appropriations, i.e., use of City water, separate project well, and/or supplemental project well, and impacts on sustainability of City water supply.
- Address water treatment system and whether City, project, or combo.
- Requirements for vegetation and other visual mitigation.
- Noise modeling to be included in environmental review and application, setbacks from residences and businesses, particularly residences, to comply with state noise standard, and post-construction noise monitoring.

J. REVISE SCHEDULE TO FACILITATE CORRECTED AND SUPPLEMENTED ENVIRONMENTAL REVIEW

The project has set an aggressive schedule that is not feasible. Attachment D, Schedule from Cannon Falls Team Mtg #3; Attachment E, Various Schedules from Data Practices Act Response. Because many areas that must be updated, the information that needs to be included, and providing sufficient notice for public comment on the AUAR redo or the mandated EIS,

⁸ Online at <https://protectpwc.org/wp-content/uploads/2023/02/Lyver-Data-Center-Noise-Study-123122.pdf>

mandated due to data center project proposed and not disclosed in the AUAR or to the public)

Reschedule all steps to provide updating and correction of AUAR or commencement of mandatory Environmental Impact Statement.

+++++

The points above must be addressed in the Final/Revised AUAR prior to its release.

The AUAR is inadequate in so many ways, but most important is the failure of Cannon Falls, the RGU, to provide reasonable notice to the public of the release of the AUAR and the comment period. Cannon Falls released the AUAR on May 20, 2025 per its website, and a public meeting was held then, and no effort was made in meeting announcement PR or at that public meeting to notify the public of this opportunity for comments. Public participation is essential, and notice is a primary step. This is an impact that must be mitigated!!! A do-over of the comment period is needed.

At this time, I ask that a Notice of Availability of AUAR for Comment be issued, with a comment period of 30 days from publication of Notice. The Notice, including deadline for Comments and a link to the Draft AUAR, should be published by the EQB Monitor; the Cannon Falls Beacon Notices section; prominently displayed on the City of Cannon Falls and Randolph Township home pages; and displayed on the Cannon Falls AUAR page together with a link to the Draft AUAR.

From a review of the AUAR, the paucity of information available on the data center proposed, and the avoidance of disclosure that it is indeed a data center proposed and not “Scenario 1” v. “Scenario 2” or any other scenario, that the AUAR is the wrong environmental review document. This data center project requires an EIS. Some honesty about the plan is needed.

At this time, I also ask that an Environmental Impact Statement be prepared based on the project’s need for permits triggering a mandatory EIS, i.e., use of numerous diesel generators and thus a need of an Air Permit from the MPCA, water appropriation and other permits from the DNR, and a Certificate of Need permit from the Public Utilities Commission. The project must also demonstrate through dB(A) and dB(C) noise modeling the ability to comply with the industrial noise standard at nearest receptor.

The City of Cannon Falls will have to not only annex land from Randolph Township, but will have to update its zoning ordinance. See, for example, Attachment C, Amendment – Fairfax County, Virginia. Compliance with the amended ordinance will be a large part of mitigation of impacts, through setback, of noise, lighting, and should also address water use and treatment, visual impacts, and structuring of mitigation of socioeconomic impacts through development and

tax or payment in lieu of tax agreements. The draft AUAR, with the addition of the above information at the least, inform the record and guide development of the ordinance, which should then be a part of the final AUAR. In light of the need to determine and establish responsible setbacks, lighting and noise regulation, the Ordinance Amendment should be included in the AUAR.

At this time, I request that drafting of Ordinance Amendments begin and that an advisory group be formed to assist the City in addressing the legitimate concerns surrounding this data center.

Again, as RGU, the City must reschedule all steps to provide updating and correction of AUAR or commencement of mandatory Environmental Impact Statement.

Thank you for the opportunity to provide this AUAR Comment.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Carol A. Overland".

Carol A. Overland
Attorney at Law

Attachment A - Site Plan



Neil Jensen

From: Bill Angerman <bangerman@whks.com>
Sent: Friday, November 8, 2024 3:37 PM
To: Neil Jensen; 'Laura Qualey'
Cc: pw director; sryan@hoffbarry.com
Subject: RE: Tract Development Utilities

I received updated information from Jed – please see revised below

Neil and Laura – Per our previous discussions, following is a summary of City data and information. Much of this information will be incorporated into Tract's AUAR.

Water Supply and Storage

- Ground water appropriation, the City's authorized volume is 250 MGY. In 2023 the City used 157 MGY.
- Storage Capacity, City has two storage tanks: 500,000 gallon ground storage and 1,000,000 gallon elevated storage
 - o City needs storage equal to average day demand which was 430,000 gpd in 2023.
 - o City has approximately 1.07 MG available before more storage is needed.
- Well capacity, City has three wells with a firm (largest well out of service) capacity of 3.2 MGD.
 - o City needs well capacity equal to peak day demand. Peak day was approximately 930,000 in 2023
 - o City has approximately 2.3 MG available before more well capacity is needed.
- Water quality
 - o See water quality data that was previously provided to Tract. City feeds chlorine (disinfection), fluoride (health), and polyphosphate (iron sequestration)

Water Distribution System

- Pressure and fire flow
 - o City can provide static pressure near the site if requested.
 - o City can perform a fire flow test if requested.
 - o Water modeling of the distribution system may be required depending upon volumes requested.
 - o Tract will most likely need to loop watermain to the site from the south near Highway 20/County Road 29 and from the north at Holiday Ave. This will depend on water volume needed and fire flow requirements.
 - o Tract will need to evaluate if constructing water storage on site is warranted.

Wastewater Treatment

- Plants rated capacities are: AWW (1.09 MGD), MWW (2.18 MGD), PHWW (3.27 MGD)
- Current flows available based on 2022 data, AWW (0.7 MGD), MWW (1.2 MGD), PHWW (no data)
- A treatment plant plan (facilities plan) may be need to be prepared by the City depending upon requested flows.

Wastewater Collection System

- Sewer capacity along Highway 20 will need to be evaluated. Pipe sizes range from 8" to 18". Capacity available will depend upon flow requested. Suggestion is the City perform CCTV of all existing pipe to determine condition now.
- Lift Station capacity. All of the Tract Development land flows to the new lift station at the intersection of Cannon and 3rd. It has an ultimate firm capacity of 2,000 gpm or 2.88 MGD. Current capacity is 900 gpm or 1.3 MGD. This lift station is new so data is not available but assumption is lift station is about 25% utilized currently.

What we will need from Tract.

- Projected water usage. Peak day and average day.
- Projected wastewater discharge in the form of AWW, MWW, PHWW.
- Projected wastewater discharge strength for the following: BOD, TSS, P, Chlorides, Sulfates, Metals, TKN, and potentially others.

Please review and then we should discuss.

Thanks

Bill

William Angerman, P.E. | Executive Vice President, COO
Voice: 507.288.3923 | www.whks.com



ZO 112.1-2024-9
ZO 112.2-2024-8

ADOPTION OF AN AMENDMENT TO CHAPTERS 112.1 and 112.2
(ZONING)
OF THE 1976 CODE OF THE COUNTY OF
FAIRFAX, VIRGINIA

At a regular meeting of the Board of Supervisors of Fairfax County, Virginia, held in the Board Auditorium, Lobby Level, Government Center Building, 12000 Government Center Parkway, Fairfax, Virginia, on Tuesday, September 10, 2024, the Board after having first given notice of its intention so to do, in the manner prescribed by law, adopted an amendment to Chapters 112.1 and 112.2 (Zoning) of the 1976 Code of the County of Fairfax, Virginia, said amendment so adopted being in the words and figures following:

BE IT ORDAINED BY THE BOARD OF SUPERVISORS OF FAIRFAX COUNTY, VIRGINIA:

Amend Chapters 112.1 and 112.2 (Zoning Ordinance), as follows

In Table 4101.1, revise the permissions for Data Center from P to P or SE in I-4, I-5, I-6. In Table 4101.2, remove the permission for a data center in the PRC District, and change the PDC and PTC permissions to SE.

3. Use Table for Residential, Commercial, and Industrial Districts

TABLE 4101.1: Use Table for Residential, Commercial, and Industrial Districts

P = permitted; SE = special exception; SP = special permit; blank cell = not allowed

A = allowed as accessory use only; A+ = permitted as an associated service use; AP = allowed with approval of administrative permit

Use	Residential Districts														Commercial Districts								Industrial Districts						Use-Specific Standards NOTE: General Standards also apply	
	R-A	R-C	R-E	R-1	R-2	R-3	R-4	R-5	R-8	R-12	R-16	R-20	R-30	R-MHP	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	I-1	I-2	I-3	I-4	I-5	I-6		
Industrial Uses																														
Freight Movement, Warehousing, and Wholesale Distribution: uses involving the movement, storage, and distribution of goods. Goods are generally delivered to other firms or the final consumer.																														
Data Center																	P SE	P SE							P SE	P SE	P SE	P SE	P SE	4102.6.A

4. Use Table for Planned Development Districts

TABLE 4101.2: Use Table for Planned Development Districts

✓ = permitted if shown on final development plan/PRC development plan and PRC plan;

✓/SE = permitted if shown on final development plan/PRC development plan and PRC plan, or as special exception if not on plan(s)

SE = special exception; SP = special permit; blank cell = not allowed

A = allowed as accessory use only; A+ = permitted as an associated service use;

AP = allowed with approval of administrative permit

Use	PDH		PRC					PDC		PRM		PTC	PCC		Use-Specific Standards NOTE: General Standards also apply
	Principal	Secondary	Residential	Neighborhood Convenience Center	Village Center	Town Center	Convention/Conference Center	Principal	Secondary	Principal	Secondary		Principal	Secondary	
Industrial Uses															
Freight Movement, Warehousing, and Wholesale Distribution: uses involving the movement, storage, and distribution of goods. Goods are generally delivered to other firms or the final consumer.															
Data Center								SE				SE			4102.6.A

Revise the data center standards in subsection 4102.6.A as shown below.

6. Industrial Uses

Freight Movement, Warehousing, and Wholesale Distribution

A. Data Center

Standards applicable to all data centers:

- (1) To provide visual screening and reduce noise levels, any equipment necessary for cooling, ventilating, or otherwise operating the facility, including power generators or other power supply equipment, must be fully enclosed, except where determined by the Director not to be mechanically feasible based on the manufacturer specifications. If the Director determines it is not mechanically feasible to fully enclose the equipment, it must be screened by a wall or similar barrier. In addition, any equipment as referenced above that is located on the ground and any accessory electrical substation must be screened from view from abutting lots and from rights-of-way by a visually solid wall or a building. This standard does not apply to solar panels.
- (2) In the C-3 and C-4 Districts, the maximum building size is 40,000 square feet of gross floor area. However, this size limit may be exceeded with special exception approval in accordance with subsection 8100.3.
- (3) In the I-2, I-3, and I-4 Districts, the maximum building size is 80,000 square feet of gross floor area. However, this size limit may be exceeded with special exception approval in accordance with subsection 8100.3.
- (4) **Minimum Distance from Residential**
 - (a) Any data center building must be located at least 200 feet from the lot line of an R district or a property developed with a residential use.
 - (b) If located on the ground, any equipment for cooling, ventilating, or otherwise operating the facility, including any power generator or other power supply equipment, must be either:
 1. Located at least 300 feet from the lot line of an R district or a property developed with a residential use; or
 2. Separated from the lot line of an R district or a property developed with a residential use by the principal data center building.
 - (c) Lesser distances may be allowed with special exception approval in accordance with subsection 8100.3.
 - (d) For the purpose of this provision, an R district does not include an area within a public street right-of-way.
- (5) A data center building must be located at least one mile from a Metro station entrance. A lesser distance may be allowed with special exception approval in accordance with subsection 8100.3.
- (6) Prior to site plan approval, a noise study must be submitted demonstrating to the Zoning Administrator's satisfaction that the operation of the data center will comply with the Noise Ordinance, Chapter 108.1 of the County Code. In addition, prior to issuance of a

Nonresidential Use Permit, a post-construction noise study must be submitted demonstrating to the Zoning Administrator's satisfaction that the operation complies with the Noise Ordinance.

Standards when permitted by right:

- (7)** A data center building must include a main entrance feature that is differentiated from the remainder of the building façade by a change in building material, pattern, texture, color, or accent material. The entrance feature must also either project or recess from the adjoining building plane.
- (8)** All building façades must include:
 - (a)** A change in the façade surface for every 150 horizontal feet of at least one of the following: building material, pattern, texture, color, or accent material; and
 - (b)** Windows, doors, or similar fenestration design features such as faux windows, must be distributed horizontally and vertically across the façade and comprise a minimum of 30 percent of the individual façade.

Standards when permitted by development plan or special exception:

- (9)** A data center building must be designed to minimize adverse visual impacts on surrounding development as demonstrated by the submission of elevations, architectural sketches, or sight line studies. The building should have a high-quality design as evidenced by the use of materials, color, and texture. If the building is located less than 200 feet from an R district or a property developed with a residential use, it should include changes in building height or other design techniques to provide variation in building mass as viewed from the nearby residential district.

Add rezoning and special exception submission requirements for a data center. Renumber as needed.

8101. Submission Requirements

2. Zoning Map Amendments (Rezoning)

E. Supporting Reports and Studies

The following additional information must be submitted:

(12) Data Center

For a rezoning to allow a data center, the application requires the following additional information:

- (a)** A noise study demonstrating that the operation of the data center will comply with the Noise Ordinance, Chapter 108.1 of the County Code.
- (b)** Architectural depictions of the proposed building and associated equipment as viewed from all lot lines and street lines.

3. Special Exceptions, Special Permits, and Variances

D. Additional or Modified Submission Requirements for Specific Special Exception Applications

The following are additional or modified submission requirements for special exception applications for:

(8) Data Center

- (a) A noise study demonstrating that the operation of the data center will comply with the Noise Ordinance, Chapter 108.1 of the County Code.
- (b) Architectural depictions of the proposed building and associated equipment as viewed from all lot lines and street lines.

Add provisions for the Data Centers Zoning Ordinance Amendment to subsection 2.B of Appendix 1, Provisions Relating to Previous Approvals.

Data Centers

- (a) Any site plan for a data center accepted for review on or before July 16, 2024, will be reviewed based on the provisions of the Zoning Ordinance in effect on July 16, 2024, if:

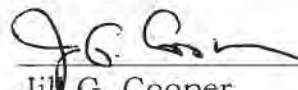
- 1. The site plan is approved by July 16, 2025;
- 2. The approval remains valid; and
- 3. The uses, features, and structures are established or constructed in accordance with approved plans and permits.

An approved plan may be revised notwithstanding this amendment if it does not aggravate conflicts with the amendment. Building permits and other related subsequent plan and permit submissions may be accepted and new approvals may be granted, consistent with the approved site plan. The applicant/owner may elect to have the above applications reviewed in their entirety under the provisions of this amendment.

- (b) For all applications for rezonings and related development plans, special exceptions, site plans, or building permits that include a data center approved on or before July 16, 2024, the applicant/owner may continue under their previous approval. Subsequent plan and permit submissions may be accepted and new approvals may be granted, consistent with those prior approvals. Revisions to such prior approvals may be approved if they do not aggravate conflicts with this amendment.

These amendments shall become effective on September 11, 2024, at 12:01 a.m.

GIVEN under my hand this 10th day of September, 2024.



Jill G. Cooper

Clerk for the Board of Supervisors

Timeline		Council/B								
		Start Date	Finish	oard Vote	April	May	June	July	August	Sept
AUAR		4/15/2025	4/15/2025	Y						
Adopt Final Order		4/15/2025	4/15/2025	Y						
City Staff AUAR Draft Review		4/16/2025	4/25/2025	N						
Tract Community Meeting		4/29/2025	4/29/2025	N						
30 Day Public Comment Period		5/27/2025	6/26/2025	N						
City Adopts Final AUAR		4/15/2025	8/19/2025	Y						
Annexation/Plat/Development Agreement										
Water and Wastewater Studies		4/1/2025	5/27/2025	N						
City Admin shares Council Update on the decision making process and timeline		5/6/2025	5/6/2025	N						
Joint Council Planning Comm. Work session to discuss decision making process		5/20/2025	5/20/2025	N						
Annexation application received - 60 day deadline possible 60 day extension		5/27/2025	7/26/2025	N						
Township Annexation agreement discussions		6/2/2025	6/13/2025	N						
Plat/Subdivision Application - need 120 days		6/6/2025	10/4/2025	N						
Council Work Session to discuss annexation, plat, development agreement		6/17/2025	6/17/2025	N						
Staff review, take stakeholder input		6/18/2025	7/9/2025	N						
Planning Commission Plat, PUD, Development Agreement - Public Hearings		7/14/2025	7/14/2025	N						
Annexation Resolution Approval - Council		7/15/2025	7/15/2025	Y						
Submit Annexation to Cannon <i>Duluth</i> County		7/16/2025	9/2/2025	N						
Council Public Hearings		8/5/2025	8/5/2025	N						
Final Joint Work Session on Plat, PUD Development Agreement		8/19/2025	8/19/2025	N						
Final Planning Commission Approval		9/8/2025	9/8/2025	Y						
Final City Council Approval		9/15/2025	9/15/2025	Y						

City Coordination Task	Start Date	Finish Date	2025	Jan	Feb	March	April	May	June	July	August	Sept
City/PLUHA Negotiation with Township for R331 Authority	11/19/2024	1/21/2025										
City Council Approval on AUAR RGU	1/21/2025	2/10/2025										
City/PLUHA Draft AUAR Order & Scoping EAW	1/17/2025	3/19/2025										
City/PLUHA Final Draft AUAR Order & Scoping EAW	4/8/2025	4/15/2025										
City Council Adopts Final Order	4/15/2025											
City Reviews Draft AUAR	4/7/2025	4/25/2025										
PLUHA Revises Draft AUAR Based on City Comments	4/25/2025	5/2/2025										
City Reviews Draft AUAR	5/5/2025	5/12/2025										
30-Day Public Comment Period	5/27/2025	6/26/2025										
City/PLUHA Review of Final AUAR	7/4/2025	7/14/2025										
10-Business Day Final AUAR Objection Period	7/29/2025	8/12/2025										
City Adopts Final AUAR at City Council	8/19/2025											
City Submits Notice of Adoption of Final AUAR to EQB	8/26/2025											
City Admins Solicitor Simon City Property (Submitted by Seller)	4/15/2025	5/15/2025										
Amended	4/15/2025	5/15/2025										
Draft Joint Resolution	4/15/2025	5/15/2025										
City Planning Commission	7/14/2025	9/9/2025										
City Council on Joint Resolution	9/19/2025											
City Pre-equivalent Meeting	3/4/2025											
Development Stage City Submittal (Prelim PUD, Prelim Plan ADUP)	4/20/2025	5/15/2025										
PLUHA Prepares City Development Stage Submittal	5/27/2025	6/23/2025										
Development Stage City Review	7/14/2025											
Development Stage Planning Commission	8/18/2025											
Development Stage City Council	9/18/2025											
Final Plan Submittal (Final PUD, Final Plat, Development Agreement)	8/4/2025	8/19/2025										
PLUHA Prepares City Final Plan Submittal	8/19/2025	8/23/2025										
Final Plan City Review	9/8/2025											
Final Plan Planning Commission	9/16/2025											
Final Plan City Council	9/16/2025											

DRAFT

CANNON FALLS INDUSTRIAL SCHEDULE					4/1/2028				
City Coordination Task		Start Date	Finish Date	April	May	June	July	August	Sept
AUAR									
City Council Adopts Final Order		4/15/2025							
Township Reviews Draft AUAR		4/4/2025	4/24/2025						
30-Day Public Comment Period		5/27/2025	6/26/2025						
City Adopts Final AUAR at City Council		8/19/2025							
Subdivisions									
McGow Township Subdivision - Planning Commission		4/1/2025							
McGow Township Subdivision - Township Board		4/15/2025							
Simon Township Subdivision - Planning Commission		5/6/2025							
Simon Township Subdivision - Township Board		5/20/2025							
Annexation		5/27/25							
Draft Joint Resolution		4/8/2025	6/5/2025						
Submit Annexation Application to Township		6/6/2025	5/21/25						
Township Planning Commission		7/1/2025							
City Planning Commission		7/14/2025							
Township Board		7/15/2025							
City Council		8/19/2025							

Red Items = Randolph Township Actions

DRAFT

City Coordination Task	2025											
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
City Council & Township Approval on AUAR/EGU	✓											
City Review Draft AUAR Order & Scoping EAW												
City Reviews Draft AUAR Order & Scoping EAW												
City Reviews Final AUAR Order & Scoping EAW												
City Council Adopts Final Order												
City Reviews Draft AUAR												
City Reviews Draft AUAR												
30 Day Public Comment Period												
City/Client Review of Final AUAR												
10-Business Day Final AUAR Objection Period												
City Adopts Final AUAR at City Council												
City Submits Notice of Adoption of Final AUAR to EQB												
City Admin Lot Split for Simon City Property												
Annexation												
Draft Joint Resolution												
City Council on Joint Resolution												
City Plat/PUD/Rezoning/DA & CUP												
City Pre-application Meeting												
Development Stage City Submittal (Prelim PUD, Prelim Plat, CUP)												
City Plat/PUD/Rezoning/DA & CUP												
City Pre-application Meeting												
Development Stage City Submittal												
City Prepare City Development Planning Commission												
Development Stage City Council												
Development Stage City Council												
Final Plan Submittal (Final PUD, Final Plat, Development Agreement)												
City Prepare City Final Plan Submittal												
Final Plan City Review												
Final Plan Planning Commission												
Final Plan City Council												

** = Contingent City Council Approvals

DRAFT

City Coordination Task	Approximate Submittal Date	Approximate Duration	2025	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
City Council Approval of Final AUP	1/21/2025	40 Days													
City Council Approval of Final AUP	1/21/2025	1 Day													
City Council Approval of Final AUP	1/21/2025	20 Days													
City Council Approval of Final AUP	1/21/2025	3 Days													
City Council Approval of Final AUP	1/21/2025	5 Days													
City Council Approval of Final AUP	1/21/2025	0 Days													
City Council Approval of Final AUP	1/21/2025	15 Days													
City Council Approval of Final AUP	1/21/2025	6 Days													
City Council Approval of Final AUP	1/21/2025	4.5 Weeks													
City Council Approval of Final AUP	1/21/2025	6 Days													
City Council Approval of Final AUP	1/21/2025	10 Days													
City Council Approval of Final AUP	1/21/2025	0 Days													
City Council Approval of Final AUP	1/21/2025	1 Day													
City Council Approval of Final AUP	1/21/2025	4.5 Days													
City Council Approval of Final AUP	1/21/2025	94 Days													
City Council Approval of Final AUP	1/21/2025	9 Days													
City Council Approval of Final AUP	1/21/2025	0 Days													
City Council Approval of Final AUP	1/21/2025	10 Days													
City Council Approval of Final AUP	1/21/2025	155 Days													
City Council Approval of Final AUP	1/21/2025	1 Day													
City Council Approval of Final AUP	1/21/2025	108 Days													
City Council Approval of Final AUP	1/21/2025	40 Days													
City Council Approval of Final AUP	1/21/2025	35 Days													
City Council Approval of Final AUP	1/21/2025	0 Days													
City Council Approval of Final AUP	1/21/2025	0 Days													
City Council Approval of Final AUP	1/21/2025	32 Days													
City Council Approval of Final AUP	1/21/2025	12 Days													
City Council Approval of Final AUP	1/21/2025	7 Days													
City Council Approval of Final AUP	1/21/2025	0 Days													
City Council Approval of Final AUP	1/21/2025	0 Days													

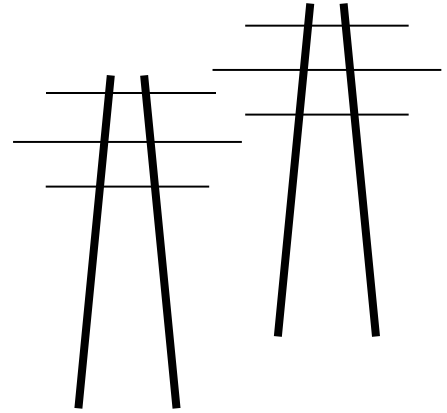
DRAFT

6/6

Legalelectric, Inc.

Carol Overland Attorney at Law, MN #254617
Energy Consultant—Transmission, Power Plants, Nuclear Waste
overland@legalelectric.org

1110 West Avenue
Red Wing, Minnesota 55066
612.227.8638



June 27, 2025

John Radermacher
City Administrator
918 River Road
Cannon Falls, MN 55009

via email: cityadmin@cannonfallsmn.gov

RE: Late-filed Supplemental Comment on Draft AUAR – TRACT Data Center

Dear Mr. Radermacher:

I forgot to add a simple but obvious error.

It's Oxides of Nitrogen (NO_x) and NOT Nitrous Oxide (N₂O). See AUAR p. 62, and Appendix at 307 of 335.

HA HA HA HA HA HA HA... oh... it's not a laughing matter if consultants and project proponents don't know the difference.

Very truly yours,

Carol A. Overland
Attorney at Law