University of St. Thomas Multipurpose Arena

Environmental Assessment Worksheet Update

September 2024

Prepared for:

SAINT PAUL
MINNESOTA

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Table of Contents

List of Tables

List of Figures

List of Appendices

Introduction

The University of St. Thomas (UST), as the project proposer, has proposed to redevelop an approximately 6-acre site located on the UST South Campus in Saint Paul, Ramsey County, Minnesota. The Lee and Penny Anderson Arena (Arena) consists of one building that will house a dual-purpose competition venue for the University's hockey and basketball programs, with capacity for approximately 4,000 to 5,500 spectators. The Arena also includes coaching offices, locker rooms, and student athlete support services including sports medicine, strength and conditioning, nutrition, and equipment. Additionally, two basketball practice facilities and an auxiliary ice sheet are included. It is anticipated that the Arena will host other university events such as commencement ceremonies, academic convocations, speakers, and career fairs.

The City of Saint Paul (City) is the Responsible Governmental Unit (RGU). An Environmental Assessment Worksheet (EAW) was prepared in accordance with Minnesota Rules, part 4410.4300, subpart 34: sports or entertainment facilities and was published for public comment in July 2023 (2023 EAW). A negative declaration on the need for an Environmental Impact Statement (EIS) was issued by the City on September 26, 2023 (2023 Findings of Fact).

An appeal of the negative declaration on the need for an EIS was filed in October 2023 with the Minnesota Court of Appeals. An opinion was issued by the Court of Appeals on July 8, 2024 (the COA Opinion), reversing and remanding the City's negative declaration on the need for an EIS. The COA Opinion requires the City to complete an updated EAW. The COA Opinion specifies that the updated EAW (2024 EAW Update) should include an analysis of environmental effects associated with the Schoenecker Center, a new academic building that is also located on UST's South Campus that opened for academic use in February of 2024. The Court of Appeals determined that the Schoenecker Center and the Arena are "phased actions" as defined by Minnesota Rules. The COA Opinion also noted that the EAW should provide mitigation measures that are "specific, targeted and certain" and include an analysis of greenhouse gas emissions related to spectator vehicles.

The City, in coordination with UST, is providing this 2024 EAW Update to include the additional analysis noted in the COA Opinion: the Schoenecker Center and greenhouse gas emissions related to spectator vehicles. The analysis of greenhouse gas emissions related to spectator vehicles can be found in the EAW under Item 18.b.iii.

In addition to the analysis noted in the COA Opinion, the 2024 EAW Update also includes an analysis of the environmental effects of two projects that are in the same geographic area as the Arena and are proposed to commence construction in the next year: an addition to the existing Owens Science Hall that will house an expansion of the Center for Microgrid Research on UST's campus (Microgrid Project) and a parking lot proposed by a neighboring landowner, the Saint Paul Seminary (SPS Parking Lot).

First, facilities for microgrid research were included as part of the 2023 EAW as the expansion of these facilities were initially intended to be housed in the Arena. These plans changed and clarification was made in the 2023 Findings of Fact through the public comment responses that the facilities for microgrid research were pulled out of the Arena project scope. As now proposed, the expansion of the microgrid research facilities will be located in Owens Science Hall, which is located just north and east of the Arena. The Microgrid Project was submitted to the City for site plan approval in July 2024, and if approved, is anticipated to be completed in summer of 2025 in advance of the Arena's opening.

Second, a neighboring landowner, the Saint Paul Seminary (SPS), is proposing to construct a surface parking lot on SPS land, located to the west of the UST property.[1] The SPS Parking Lot project was submitted to the City of St. Paul for site plan approval in July 2024, and if approved, is anticipated to begin construction in late 2024 or early 2025 and to be completed in advance of the Arena opening.

The 2024 EAW Update also includes an updated Transportation Analysis Addendum (September 2024 EAW Update Transportation Analysis Addendum). This addendum includes an analysis of the Schoenecker Center, Microgrid Project, and SPS Parking Lot projects. The addendum also includes technical clarifications or changes in Arena project conditions from the 2023 Traffic Impact Analysis (see Appendix D of the 2023 EAW included in Appendix E) such as the removal of the Anderson Parking Facility (APF) skyway connection, updated parking count information, a change in men's hockey conference for the 2026/27 season, and refined considerations regarding mitigation strategies.

Since the publication of the negative declaration on the need for an EIS on September 26, 2023, the size of the proposed Arena has decreased slightly. The total size of the Arena was reduced from 270,000 GSF as listed in the 2023 EAW to approximately 252,000 GSF. The maximum attendances for hockey and basketball events have changed from 4,000 and 5,500 to 4,005[(2)] and 5,324[(2)], respectively. Non-athletic events such as commencements could still be arranged for seating of approximately 5,500 seats, depending on the stage configuration. Seating for 4,523[(2)] could be provided in "end stage" configuration and 5,500[(2)] for a "center stage" configuration. For the purposes this 2024 EAW Update, the proposed size and/or capacity of the Arena used for the 2023

[1] UST and SPS are separate legal entities with distinct non-profit missions and separate boards of trustees. SPS owns the land upon which SPS is seeking to build additional parking. Although UST and SPS are independent of one another, they have entered into an affiliation agreement by which they cooperate in operating the Saint Paul Seminary School of Divinity (SPSSOD), which is a school of UST. SPSSOD offers programs in clergy and lay formation. SPSSOD operations take place both on land owned by UST and land owned by SPS. SPSSOD administrative and faculty offices, a residence for priests and seminarians and the St. Mary's Chapel are located on SPS land. SPSSOD students take classes on UST property and have use of the UST campus on the same basis as other UST students. Many SPSSOD students and some SPSSOD faculty and staff currently park on UST property.

[2] The seat counts listed are based on the latest Arena design plans dated July 24, 2024 and are subject to change as design continues to advance.

EAW will be used. However, where relevant, the 2024 EAW Update will note potential effects of the decreased project size and/or capacity.

Construction of the Arena began during the Court of Appeals process and the three pre-existing buildings on site have now been demolished, as have six pre-existing surface parking lots.

December 2022 Version

Environmental Assessment Worksheet

This most recent Environmental Assessment Worksheet (EAW) form and guidance documents are available at the Environmental Quality Board's (EQB's) website at: https://www.eqb.state.mn.us. The EAW form provides information about a project that may have the potential for significant environmental effects. Guidance documents provide additional detail and links to resources for completing the EAW form.

Cumulative potential effects can either be addressed under each applicable EAW Item or can be addressed collectively under EAW Item 21.

Note to reviewers: Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation, and the need for an EIS.

1. Project Title

University of St. Thomas Multipurpose Arena

2. Proposer

Proposer: University of St. Thomas
Contact Person: Anthony Adams, PE
Title: Senior Civil Engineer
Address: 533 South Third Street, Suite 100
City, State, ZIP: Minneapolis, MN 55415
Phone: 612-492-4741
Email: Anthony.Adams@ryancompanies.com

3. RGU

RGU: City of Saint Paul
Contact Person: Josh Williams
Title: Principal Planner
Address: 25 West Fourth Street
City, State, ZIP: Saint Paul, MN 55102
Phone: 651-266-6659
Email: josh.williams@ci.stpaul.mn.us

4. Reason for EAW Preparation

Check one:

Required:	Discretionary:
☐EIS Scoping	☐Citizen petition
☒Mandatory EAW[2]	☐RGU discretion
	☐Proposer initiated

If EAW or EIS is mandatory, give EQB rule category subpart number(s) and name(s):
Minnesota Rules, part 4410.4300, subpart 34 (sports or entertainment facilities)

5. Project Location

County: Ramsey
City/Township: Saint Paul
PLS Location (¼, ¼, Section, Township, Range): NW ¼, SE ¼, Section 5, Township 28N, Range 23W
Watershed (81 major watershed scale): Mississippi River – Twin Cities
GPS Coordinates: 44.9396077, -93.1946973
Tax Parcel Number: 052823420005, 052823420004
At a minimum, attach each of the following to the EAW:

- **County map showing the general location of the project** (see Figure 1)
- **US Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries** (see **Figure 2**)
- **Site plans showing all significant project and natural features. Pre-construction site plan and post-construction site plan.** (see **Figure 2** and Appendix A)
- **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).**

6. Project Description

a. Provide the brief project summary to be published in the *EQB Monitor* (approximately 50 words).

The proposed University of St. Thomas Lee and Penny Anderson Arena (Arena) will be a redevelopment of an approximately 6-acre site located on the University of St. Thomas (UST) South Campus in Saint Paul, Minnesota. Additional development on and near the UST South Campus has been incorporated into this analysis, including the completed Schoenecker Center, the proposed expansion of the Center for Microgrid Research (Microgrid Project), and the proposed St. Paul Seminary Parking Lot (SPS Parking Lot) for a total redevelopment area of approximately 11.7-acres.

[2] Updated per Minnesota COA Opinion

b. Give a complete description of the proposed project and related new construction, including infrastructure needs. If the project is an expansion, include a description of the existing facility. Emphasize 1) construction and operation methods and features that will cause physical manipulation of the environment or will produce wastes; 2) modifications to existing equipment or industrial processes; 3) significant demolition, removal, or remodeling of existing structures; and 4) timing and duration of construction activities.

The 2024 EAW Update covers approximately 11.7 acres located on the University of St. Thomas South Campus and St. Paul Seminary properties, bounded to the north by Summit Avenue, the east by Cretin Avenue, the south by Goodrich Avenue, and the west by Mississippi River Boulevard South. See Figure 1 and Figure 2 for project location and Figure 3 for existing site conditions.

The proposed Arena includes one building to house a dual-purpose competition venue for the University's hockey and basketball programs with capacity for approximately 4,000 to 5,500 spectators. The Arena also includes coaching offices, locker rooms, and student athlete support services including sports medicine, strength and conditioning, nutrition, and equipment. Additionally, two basketball practice facilities and an auxiliary ice sheet are included. It is anticipated that the Arena will host other university events such as commencement ceremonies, academic convocations, speakers, and career fairs. Existing utility tunnels connect the Arena to nearby facilities. The new facility will be designed to meet a LEED Silver rating[3].

Three pre-existing buildings on the site have been demolished to accommodate the Arena redevelopment: Cretin Hall, Service Center, and McCarthy Gymnasium. Pre-existing surface parking lots have been demolished to accommodate the redevelopment: Lot N, Lot P1 (partial demolition), Lot V, Lot X, Lot Y (14 spaces to remain after construction), and a portion of Lot O (46 spaces to remain after reconstruction). Utility relocations and extensions have been completed to accommodate facility construction. No onsite parking is expected to be constructed in the Arena redevelopment area, except the stalls noted as reconstructed above, as existing parking elsewhere within the University campus is to be used. Vehicular access to the facility includes spectator access from Cretin Ave through the private extension of Grand Ave, service vehicle access from Cretin Ave through a new access point near the southeast portion of the project area, and staff vehicle access through the existing western access from Summit Ave.

Construction methods are typical of new buildings on the UST campus and include poured in place concrete spread footing and concrete foundation walls with limited drilled piers adjacent to existing buildings. Arena construction began in spring 2024 and is anticipated to be complete by fall 2025.

To better understand the environmental effects of the Arena, the 2024 EAW Update also analyzes the environmental effects associated with the Schoenecker Center, a University of St.

[3] The USGBC's LEED green building program provides a framework for improving building performance and the responsible use of energy, water, and material resources through design, construction, and ongoing operations. Achieving certification demonstrates a project's verified implementation of these strategies and commitment to supporting a healthier, more sustainable community.

Thomas LEED Gold-certified building north of the Arena, which has been constructed and is now the University's central home for science, technology, engineering, arts, and math (STEAM) education. The Schoenecker Center was constructed to address a space deficit on campus to accommodate existing academic programs and included the construction of the South Campus Quadrangle outdoor plaza and greenspace area, two loading areas accessed off the western Summit Ave access drive, utility tunnels to service various buildings on South Campus, an art gallery, and choral and instrumental rehearsal and performance spaces. Construction of the Schoenecker Center was complete in 2024 and the building has since been opened. One building, Loras Hall, was demolished to construct the Schoenecker Center along with two surface parking lots in Lot M and Lot P1 (partial demolition). Construction methods were similar to those of typical new buildings on the UST campus as mentioned in the Arena description above.

The 2024 EAW Update also analyzes the environmental effects associated with an expansion of the Center for Microgrid Research (Microgrid Project) through a building addition to Owens Science Hall. The Microgrid Project is proposed to further expand the University's microgrid testing and research capabilities that exist on campus and will include mechanical equipment such as three 500 kW generators, an energy storage system, and a load bank. The Microgrid Project reconstructs the existing Owens Science Hall loading dock on the first level and provides a new greenhouse for the Biology department on the second level. Modifications to the existing curb and sidewalk on the north side of the private Grand Ave are anticipated. Construction of the Microgrid Project is anticipated to begin in 2024 and be complete prior to the Arena opening. A portion of Owens Science Hall and an existing greenhouse will be demolished to construct the Microgrid Project. Construction methods are proposed similar to those of typical new buildings on the UST campus as mentioned in the Arena's description above.

The St. Paul Seminary (SPS), located north and west of the UST South Campus, intends to construct a surface parking lot along Mississippi River Boulevard (SPS Parking Lot). The environmental effects of this project are analyzed in the 2024 EAW Update. The SPS Parking Lot is proposed by a different entity (the St. Paul Seminary) and on a different property (also owned by the St. Paul Seminary) than the UST projects listed above. SPS has proposed to construct approximately 73 surface parking stalls through a new surface parking lot along Mississippi River Boulevard and through parking along the existing SPS access drive from Mississippi River Boulevard. Construction of the SPS Parking Lot is anticipated to begin in late 2024 or early 2025 and is anticipated to be complete prior to the Arena opening. Demolition of some existing curb and asphalt are anticipated. Construction methods include the typical methods of pouring curb and pavement materials.

The site plans are included in Appendix A showing the site conditions prior to the demolition of Loras Hall (2020), the site conditions prior to the demolition of Cretin Hall, Service Center, and McCarthy Gymnasium (2023), and the proposed site conditions anticipated after completion of the projects discussed above (2025).

c. Project magnitude

Table 1: Project Magnitude

Measure	Magnitude
Total Project Acreage	11.7 acres
Institutional Building Area (square feet)	252,000 square feet (Arena) 131,000 square feet (Schoenecker Center) 10,000 square feet (Microgrid Project)
Structure Height(s)[4]	**Arena** 58 feet 3 inches (Main Arena) 66 feet (Basketball Practice Facilities) 74 feet 8 inches (Raised parapets for stair/elevator overruns and/or mechanical screening) **Schoenecker Center** 58 feet (Top of flat roof) 73 feet 10 inches (Top of sloped mechanical screening) 77 feet (Raised parapets for stair/elevator overruns and/or mechanical screening) **Microgrid Project** 29 feet (Top of second story) 31 feet 4 inches (Raised parapets stair/elevator overruns and/or mechanical screening) 37 feet (Top of Greenhouse)

d. Explain the project purpose. If the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The purpose of this project is to redevelop a portion of the University of St. Thomas South Campus into an Arena to house a competition venue for the University's hockey and basketball programs to meet Division I athletic program expectations.

The Schoenecker Center is an academic building constructed to address a space deficit on campus and to be the University's central home for STEAM education.

The Microgrid Project is an addition to an academic building to expand the University's Center for Microgrid Research.

The SPS Parking Lot is to expand the parking available for the St. Paul Seminary.

[4] Chapter 60 of the Saint Paul Legislative Code, part of Title VIII, the Zoning Code, describes methods for measuring building height based on roof type and for flat roofs, has been interpreted to exclude rooftop equipment, stairwells, elevator overruns, etc., as they generally occupy a small portion of the roof area.

e. Are future stages of this development, including development on any other property, planned or likely to happen? ☒ Yes ☐ No

If yes, briefly describe future stages, relationship to present project, timeline, and plans for environmental review.

The Microgrid Project is likely to start construction in 2024 and be completed in 2025. The use of the Microgrid Project does not have any direct relationship to the use of the Arena as they are proposed to address two different university needs. The Microgrid Project is not subject to environmental review under Minnesota Rules, part 4410.4300, as a standalone project; however, the 2024 EAW Update includes analysis of the Microgrid Project.

The SPS Parking Lot is likely to start construction in 2024 and be completed in 2025. The intended use of the SPS Parking Lot is to provide parking for seminarians and priests who live on SPS property. The Arena project would benefit from the SPS Parking Lot, if approved and constructed, as the SPS Parking Lot provides additional parking supply to St. Paul Seminary School of Divinity students who would otherwise park in/on UST parking facilities. The SPS Parking Lot is not subject to environmental review under Minnesota Rules, part 4410.4300, as a standalone project; however, the 2024 EAW Update includes analysis of the SPS Parking Lot.

The Anderson Parking Facility is an existing parking ramp, constructed in 2008, that was originally designed for a future expansion of two additional floors. The expansion is discussed as a potential improvement in the Traffic Impact Analysis (Appendix D) of the 2023 EAW (2023 EAW is included as Appendix A of the September 2023 Findings of Fact document, which is Appendix E of the September 2024 EAW Update); however, it is not currently planned or funded at this time. Due to the uncertainty as to any future expansion of the Anderson Parking Facility, this potential future expansion is not analyzed within the 2024 EAW Update. Any future expansion of the Anderson Parking Facility would not require standalone environmental review.

f. Is this project a subsequent stage of an earlier project? ☒ Yes ☐ No

If yes, briefly describe the past development, timeline, and past environmental review.

The Schoenecker Center was completed in 2024 and located directly to the north of the Arena. An EAW was not required or completed for that project prior to completion, but environmental factors were considered in the site plan review process and the project obtained the appropriate permits and approvals for construction. Environmental effects of the Schoenecker Center are considered in this 2024 EAW Update.

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 century.[5]

Temperature

The Minnesota Climate Explorer was used in the 2023 EAW to describe temperature trends. In June 2024, the EQB issued updated EAW guidance which included the use of the Minnesota Climate Mapping and Analysis Tool (CliMAT)[6] for analysis of temperature trends and was used in this 2024 EAW Update. According to the Minnesota CliMAT, the annual daily average temperature in the project site from 1995 to 2014 was 56.9°F. The annual daily average temperature in the project site is projected to increase to 60.4°F from 2040 to 2059 under an intermediate emissions pathway (SSP 245). In 2080-2099, annual daily average temperature is projected to further increase to 63.3°F and 65.6°F under an intermediate (SSP 245) and high emissions pathway (SSP 370), 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 urban heat island effect. According to the Metropolitan Council's Extreme Heat Map Tool, based on the land surface temperature at the project site during a heatwave in 2016, the site is susceptible to extreme heat.[7]

Precipitation

The Minnesota Climate Explorer was used in the 2023 EAW to describe precipitation trends. The EQB's June 2024 updated EAW guidance included the use of the EPA Climate Resilience Evaluation and Awareness Tool (CREAT) Climate Change Scenarios Projection Map which was used in the 2024 EAW Update. According to the EPA CREAT Climate Change Scenarios Projection Map, there is a projected 2.9% to 13.7% increase in 100-year storm intensity by 2035 and a projected 5.6% to 26.6% increase in 100-year storm intensity by 2060.[8]

Localized Flood Risk

The Metropolitan Council's Localized Flood Map Screening Tool[9] identifies localized flood hazards, referred to as Bluespots, which are broken into categories based on potential flood water depth. This tool shows several Bluespots within the project site. Multiple Primary and Shallow Bluespots are mapped in the Arena and Microgrid Project portions of the project

[5] Climate Explorer Metadata. Available at https://www.dnr.state.mn.us/climate/climate-explorer-metadata.html.
[6] Minnesota CliMAT. University of Minnesota. Available at https://app.climate.umn.edu/?output_type=modelVal&scenario=ssp370_2080-2099&model=ensemble&variable=tmax-degF&time_frame=yearly&aoi=none#intro_pane
[7] Extreme Heat Map Tool. Metropolitan Council. Available at https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/CVA/Tools-Resources.aspx.
[8] CREAT Climate Change Scenarios Projection Map. US EPA. Available at https://www.arcgis.com/home/item.html?id=3805293158d54846a29f750d63c6890e
[9] Localized Flood Map Screening Tool. Metropolitan Council. Available at https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/CVA/Tools-Resources.aspx.

site, primarily along Grand Avenue and with maximum depths ranging from 0.28 feet to 1.74 feet. Primary, Secondary, Tertiary, and Shallow Bluespots are mapped in the Schoenecker Center portion of the project site, with a maximum depth of 5.15 feet. Shallow Bluespots are mapped in the SPS Parking Lot portion of the project site with a maximum depth of 0.56 feet. Primary Bluespots are the first areas to fill with water and are generally considered higher risk, while Shallow Bluespots are separate, isolated low areas generally considered low risk.

Cooling Degree Days

As defined by the National Weather Service, Cooling degree days, which are often used as a proxy to estimate cooling needs for buildings, can be examined as a baseline and projected exposure indicator under the RCP 4.5 and RCP 8.5 scenarios. Cooling degree days are indexed units, not actual days, which roughly describe the demand to heat or cool a building. Cooling degree days accumulate on days warmer than 65°F when cooling is required. For example, if a weather station recorded an average daily temperature of 78°F, cooling degree days for that station would be 13[10]. Cooling degree days are used as a proxy to estimate cooling needs for buildings.

According to Heat Vulnerability in Minnesota,[11] the number of cooling degree days in 2019 for Ramsey County was 374. The number of cooling degree days in 2050 for Ramsey County is projected to be 450 and 593 for RCP 4.5 and RCP 8.5, 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.

Climate considerations and adaptations for the proposed project are described in Table 2.

[10] Heat Vulnerability in Minnesota. Available at: https://maps.umn.edu/climatehealthtool/heat_app/
[11] Heat Vulnerability in Minnesota. Minnesota Department of Health and the University of Minnesota. Available at https://maps.umn.edu/climatehealthtool/heat_app/.

Table 2: Climate Considerations and Adaptations

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	**Adaptations**
Project Design	Aspects of the 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.	The site is located in an area that experiences urban heat island effect[12]. Additionally, projected climate trends include increased temperature and precipitation, and increased frequency of freeze/thaw cycles.	• University of St. Thomas has designed landscaping (via shade trees) and stormwater management systems to reduce stormwater runoff and mitigate for the urban heat island effect. Additionally, these stormwater facilities improve water quality and stormwater runoff in the project vicinity through using minimal turfgrass, which will reduce irrigation needs, reusing stormwater runoff for irrigation purposes, as well as the use of native pollinating perennials, which after 2-3 years generally do not require irrigation. Plantings around the building perimeter are salt-tolerant and tolerant of harsh sites, urban settings. St. Paul Seminary will design landscaping (via shade trees) and stormwater management systems (via pervious pavers) to reduce stormwater runoff and mitigate for the urban heat island effect. For more information on this topic, see Section 12. • University of St. Thomas has committed to building LEED-certified facilities that can be designed to use less energy and water. The Arena project is seeking LEED Silver

[12] Defined by the Environmental Protection Agency as "urbanized areas that experience higher temperatures than outlying areas. Structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies. Urban areas, where these structures are highly concentrated and greenery is limited, become "islands" of higher temperatures relative to outlying areas." Source: https://www.epa.gov/heatislands

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptations
			accreditation and is seeking a LEED credit for Heat Island Reduction by using high-reflectance roof materials on the flat roofs of the building. The Schoenecker Center building received LEED Gold certification. • The following measures provide increased reliability and energy efficiency in the Arena to reduce emissions: o Redundant chiller design and incorporation of glycol into supply loop for all cooling coils will protect from freezing conditions and ensure systems remain operational. o Chillers will use next-generation refrigerants with low global warming potential. o The boiler system will include n+1 redundancy and freeze protection. o The project is being considered for connection to the campus microgrid for back-up power during outages or emergency events. o The Arena HVAC-R, lighting, irrigation, and building enclosure systems will also be extensively commissioned by third-party experts to maximum efficiency as designed. o These efficiencies reduce heat emitted from the buildings and their HVAC systems and reduces indoor and

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptations
			outdoor exposure to heat, which is one of the impacts of the heat island effect.[13] • The following measures provided increased reliability and energy efficiency in the Schoenecker Center: o Recycled 80% of waste during construction. o Reduced indoor water use by 38% using low-flow fixtures. o Reduced 100% of outdoor water use. Rainwater is being collected in a 241,000-gallon underground cistern and reused for irrigation. o Building HVAC systems are 27% more efficient than required by ASHRAE 90.1-2010. o Use of LED light fixtures with an integrated lighting control system. o Exterior fixtures are designed to reduce light pollution. • The Center for Microgrid Research is dedicated to improving the reliability and resiliency of the St. Thomas electric grid. A microgrid is a local version of a traditional electrical grid. It can integrate multiple renewable energy sources into one reliable

[13] Source: https://www.sciencedirect.com/science/article/pii/S2666278722000083

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	**Adaptations**
			power source. Renewable energy sources can include: o Solar Photovoltaic (PV) System o Simulated Wind Generation o Battery Storage o Electrical Generators Through the St. Thomas educational programs, research, and partnerships that will take place in the new space, they are building the human and operational capacity to develop distributed energy resources and microgrids, enabling a secure, resilient, and carbon-free electric grid for the 21st century.
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, and the study area has a low risk of localized flooding.	The proposed development is in an area with low flood risk.	University of St. Thomas designed the stormwater management facilities to minimize standing water and reduce the risk of flooding on the Project site. Emergency overflows are designed into both the stormwater management systems and the general site design grading to ensure that during intense rainfall events, the stormwater runoff is directed towards the appropriate location without negatively impacting adjacent buildings or properties. St. Paul Seminary will design the stormwater management facilities to minimize standing water and reduce the risk of flooding on the project site.
Water Resources	Changes in land cover caused by the project could affect site surface hydrology, resulting in	• Changes in weather patterns may cause a higher frequency of freeze/thaw cycles,	• The stormwater systems are sized for the additional impervious areas and changes in stormwater requirements. This includes both the water quality treatment of the stormwater

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptations
	more stormwater runoff and nutrient loading.	resulting in the need for increased salting. • Chlorides from salting degrade nearby water quality and impact aquatic life.	runoff and ensuring that the rate at which stormwater runs off the site does not exceed the existing runoff rates. • The snow and ice management system at the University of St. Thomas includes a multi-step process to reduce the use of chemicals for salting which includes pretreatment, removal, de-icing, and clean up. For more information on this topic, see Section 12.
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.	Increased moisture added to waste material or debris, which will in turn increase methane gas production and add to greenhouse gases.	Any hazardous waste products generated or stored within the proposed development will be registered and kept in accordance with Minnesota Pollution Control Agency (MPCA) requirements. For more information on this topic, see Section 13.
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 local species and suitable habitat.	Suitable habitat for local species may become unsuitable due to land use changes, increased temperature, and increased runoff.	University of St. Thomas has minimized tree removals, replaced trees in landscaped areas, and included non-invasive native plants, resulting in a net gain of suitable habitat for local species including small mammals, insects, and birds. St. Paul Seminary has minimized tree removals by locating their project in an area that would impact the least amount of trees. For more information on this topic, see Section 14.

8. Cover Types

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

Estimated cover type acreages within the project site before and after development are provided in Table 3. Green infrastructure and tree canopy acreages before and after site development are provided in Table 4 and Table 5.

Table 3: Cover Types

Cover Type	Before (Acres)	After (Acres)
Wetlands and Shallow Lakes (less than 2 meters deep)	0.0	0.0
Deep Lakes (more than 2 meters deep)	0.0	0.0
Rivers/Streams	0.0	0.0
Wooded/Forest	0.0	0.0
Brush/Grassland	0.0	0.0
Cropland	0.0	0.0
Livestock Rangeland/Pastureland	0.0	0.0
Lawn/Landscaping	5.1	3.5
Green Infrastructure (total from Table 4)	0.0	0.0
Impervious Surface	6.6	8.2
Stormwater Pond (wet sedimentation basin)	0.0	0.0
Other (describe)	0.0	0.0
Total	11.7	11.7

Table 4: Green Infrastructure

Green Infrastructure	Before (Acres)	After (Acres)
Constructed Infiltration Systems (infiltration basins, infiltration trenches, rainwater gardens, bioretention areas without underdrains, swales with impermeable check dams)	0.0	0.0
Constructed Tree Trenches and Tree Boxes	0.0	0.0
Constructed Wetlands	0.0	0.0
Constructed Green Roofs	0.0	0.0
Constructed Permeable Pavements	0.0	0.1
Other (describe)	0.0	0.0
Total	0.0	0.1

Table 5: Trees

Trees	Number
Number of Mature Trees Removed During Development	69 (Arena) 109 (Schoenecker Center) 7 (Microgrid Project) 8 (SPS Parking Lot) 193 (Total)

Trees	Number
Number of New Trees Planted	71 (Arena) 36 (Schoenecker Center) 8 (Microgrid Project) 12 (SPS Parking Lot) 127 (Total)

9. Permits and Approvals Required

List all known local, state, and federal permits, approvals, certifications, and financial assistance for the project. Include modifications of any existing permits, governmental review of plans, and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing, and infrastructure. *All of these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules Chapter 4410.3100.*

Table 6: Permits and Approvals Required

Unit of Government	Type of Application	Status
Federal		
Federal Aviation Administration	Notice of Proposed Construction or Alteration	Received: Arena, Schoenecker Center To be applied for, if applicable: Microgrid Project N/A: SPS Parking Lot
US Army Engineer Research and Development Center Grant	Financial Assistance	Received: Microgrid Project N/A: Arena, Schoenecker Center, SPS Parking Lot
State		
Minnesota Department of Health	Water Main Installation Permit	To be applied for, if applicable
	Well Sealing Notification	Received: Arena N/A: Schoenecker Center, Microgrid Project, SPS Parking Lot
	Food Service Permit	Received: Schoenecker Center To be applied for: Arena N/A: Microgrid Project, SPS Parking Lot
	Pool & Spa Plan Review	To be applied for: Arena N/A: Schoenecker Center, Microgrid Project, SPS Parking Lot
Minnesota Department of Natural Resources	Water Appropriation Permit	To be applied for, if applicable

Unit of Government	Type of Application	Status
Minnesota Pollution Control Agency	Construction Contingency Plan and Response Action Plan Approval	To be applied for, if applicable
	Disturbance Permit	To be applied for, if applicable
	Notice of Intent of Demolition	Received: Arena, Schoenecker Center To be applied for: Microgrid Project N/A: SPS Parking Lot
	National Pollutant Discharge Elimination System Permit	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
	Sanitary Sewer Extension Permit	To be applied for, if applicable
Minnesota Department of Commerce	Minnesota Renewable Development Account Financial Assistance	Received: Microgrid Project N/A: Arena, Schoenecker Center, SPS Parking Lot
Minnesota Department of Labor and Industry	Elevator Permit	Received: Schoenecker Center To be applied for: Arena N/A: Microgrid Project, SPS Parking Lot
Regional		
Metropolitan Council	Sewer Connection Permit	To be applied for, if applicable
Capitol Region Watershed District	Permit for Stormwater Management	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
	Permit for Erosion and Sediment Control	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
Local		
Ramsey County	Right-of-Way Permit	To be applied for, if applicable
	Road Access Permit	To be applied for, if applicable
	Demolition Permit and Pre-Demolition Inspection	Received: Arena, Schoenecker Center To be applied for: Microgrid Project N/A: SPS Parking Lot

Unit of Government	Type of Application	Status
City of Saint Paul	Building Permit	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
	Certificate of Occupancy	Received: Schoenecker Center To be applied for: Arena, Microgrid Project N/A: SPS Parking Lot
	Demolition Permit	Received: Arena, Schoenecker Center To be applied for: Microgrid Project N/A: SPS Parking Lot
	Electrical Permits and Inspections	Received: Arena, Schoenecker Center To be applied for: Microgrid Project N/A: SPS Parking Lot
	Excavation Permit	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
	Fire Engineering Permits and Inspections	Received: Schoenecker Center To be applied for: Arena, Microgrid Project N/A: SPS Parking Lot
	Grading/Fill Permit and Inspections	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
	Heritage Preservation Commission Design Review	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
	Mechanical Permits and Inspections	Received: Arena, Schoenecker Center To be applied for: Microgrid Project N/A: SPS Parking Lot

Unit of Government	Type of Application	Status
	Obstruction Permit	Received: Arena To be applied for, if applicable: Microgrid Project, SPS Parking Lot N/A: Schoenecker Center
	Plumbing/Gas Permits and Inspections	Received: Arena, Schoenecker Center To be applied for: Microgrid Project N/A: SPS Parking Lot
	Right-of-Way Plan Review	To be applied for, if applicable
	Sewer Permits	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
	Sidewalk Permit	To be applied for, if applicable
	Sign Permit	To be applied for, if applicable
	Site Plan Review	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
	Tank Permit	Received: Schoenecker Center N/A: Arena, Schoenecker Center, SPS Parking Lot
	Plumbing Permit	Received: Arena, Schoenecker Center To be applied for: Microgrid Project N/A: SPS Parking Lot
	Transportation Demand Management Plan	Received: Arena, Schoenecker Center To be applied for: Microgrid Project, SPS Parking Lot
Saint Paul Regional Water Services	Hydrant Permit	Received: Arena, Schoenecker Center To be applied for, if applicable: Microgrid Project N/A: SPS Parking Lot
	Backflow Preventer Permit (and Testing)	To be applied for, if applicable

Unit of Government	Type of Application	Status
	Water Main Installation	Received: Arena, Schoenecker Center To be applied for, if applicable: Microgrid Project N/A: SPS Parking Lot

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 existing Arena site is part of the University of St. Thomas South Campus and included several buildings (Cretin Hall, Service Center, McCarthy Gymnasium), surface parking lots (Lots N, O, P1, V, X, and Y), and sidewalks (see Appendix A, 2023 Site Plan) that have been demolished. The existing Schoenecker Center site is part of the University of St. Thomas South Campus and included Loras Hall, surface parking lots (Lots M and P1), and sidewalks (see Appendix A, 2020 Site Plan) that were demolished. The existing Microgrid Project site is part of the University of St. Thomas South Campus and will be an expansion to the south of Owens Science Hall in the location of the existing greenhouse proposed to be demolished (see Appendix A, 2023 Site Plan). The existing SPS Parking Lot site is part of the St. Paul Seminary campus and includes existing lawn/landscaping space (see Appendix A, 2023 Site Plan). Adjacent existing land use is institutional in all directions (the University of St. Thomas and St. Paul Seminary campuses). Beyond campus to the north lies park/recreational and residential land, to the east lies residential and mixed-use land, to the south lies residential properties, and to the west lies park/recreational/preserve and open water (see Figure 4).

There are two parks within ¼ mile of the project site: Mississippi Gorge Regional Park to the west and Shadow Falls Park to the northwest. The Mississippi Gorge East River Parkway Trail extends through both parks. Summit Ave directly to the north of the project site is a parkway.

There are no cemeteries or prime or unique farmland within or adjacent to the project site.

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.

In 2020, the City of Saint Paul adopted the *2040 Comprehensive Plan* to guide development in the city over the next 20 years.

The *2040 Comprehensive Plan* Future Land Use map designates the project site as Civic and Institutional, which includes building and open space for major institutional campuses. Three policies apply to the Civic and Institutional land use category;

however, one is specific to the Capitol Area and is not applicable to the project site. Policy LU-53 encourages partnerships with colleges and universities to strengthen connections with the community and adjacent neighborhoods, and support workforce development, business creation and innovation, and retention of youth and young professionals. Policy LU-54 aims to ensure that campuses are compatible with surrounding neighborhoods by managing parking demand and supply, maintaining institution-owned housing stock, minimizing traffic congestion, and providing for safe pedestrian and bicycle access.

The project site is located in the Mississippi River Corridor Critical Area (MRCCA). The MRCCA is designated in Minnesota state law and applies to land areas on both sides of the Mississippi River in the Minneapolis-Saint Paul-Bloomington metropolitan area along a roughly 72-mile stretch of the river between Coon Rapids and Hastings, MN. The intent of the MRCCA is to protect and preserve the natural, scenic, recreational, and transportation resources along the corridor, which is done through additional planning requirements and development standards, implemented by communities located in the MRCCA.

The MRCCA was established by Governor's Executive Order 79-19. In 2017, the Minnesota Department of Natural Resources promulgated new MN Rules Sec, 6106 in place of the original executive order. Among the new features of MN Rules 6106 is that all municipalities within the MRCCA were required to include an MRCCA-specific chapter in their 2040 comprehensive plans. Saint Paul's plan includes Policy CA-1, stating that the City guide land use and development activities consistent with the management purpose of each of the MRCCA Districts. The project site is located within the River Towns and Crossings District (CA-RTC) of the MRCCA. The CA-RTC District includes historic downtown areas and limited nodes of intense development at specific river crossings. Institutional campuses that predate designation of the Mississippi River, such as the project site, are also included in this District. Priorities of the MRCCA include minimizing erosion, minimizing untreated stormwater runoff into the river, maintaining public access to and public views of the river, and restoring natural vegetation in riparian corridors and tree canopy. While comprehensive plan policy language has been adopted and still applies, it should be noted that MN Rules 6106 also require all municipalities to adopt zoning regulations consistent with the rules for all areas within the MRCCA. Saint Paul is in the process of formal adoption of new ordinance language consistent with MN Rules 6106 but has not yet completed the adoption. Per the Rules, Saint Paul's existing MRCCA ordinance, which refers to the area where the project is located as the RC3 River Corridor Urban Open (an overlay zoning district), must remain in effect until new MRCCA zoning is formally adopted by the City.

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

The project site is currently zoned H2. The H2 district allows residential uses as well as some civic and institutional uses. In the H2 district, up to six units per lot are allowed subject to requirements for minimum lot area per unit and density bonuses. Colleges, universities, and seminaries are allowed in H2 subject to a conditional use

permit. The CUP for campuses defines campus boundaries and regulates building heights and setback requirements, among other things. There is an existing CUP in place for the University of St Thomas campus. The CUP specifies building height limits of 75′ for the western portion of the project site and 60′ for the northern and eastern portions.

In addition to the underlying zoning and CUP, the project site is covered by two overlay zoning districts: the SH Student Housing Neighborhood Overlay District and overlay zoning for the MRCCA. The Student Housing overlay district only applies to non-owner-occupied single family and homes and duplexes, and does not apply to the proposed Arena. The project is also within the RC3 River Corridor Urban Open Overlay District (MRCCA, see Figure 6). The RC3 River Corridor Urban Open Overlay District limits building heights to 40 feet. Once formally adopted, Saint Paul's new MRCCA zoning will conform MN Rules 6106, which will allow for heights of 48′ and up to 65′ with a conditional use permit for the project site.

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, and the project site is not located within a FEMA 100-year floodplain area.

b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 10a above, concentrating on implications for environmental effects.

The proposed Arena, Schoenecker Center, Microgrid Project, and SPS Parking Lot projects are generally compatible with surrounding campus land uses on each campus and with the H2 zoning of the site and the RM2 and H2 zoning in the adjacent areas. The H2 and RM2 districts allow residential uses as well as some civic and institutional uses. In the H2 district, up to six units per lot are allowed subject to requirements for minimum lot area per unit and density bonuses. Colleges, universities, and seminaries are allowed in H2 subject to a conditional use permit.

The Arena building is designed as a four-story building to a structure height for the main Arena section proposed at 58 feet 3 inches. The portion of the Arena to house basketball practice facilities is designed to a structure height of 66 feet. Prominent corners of the building are designed as raised parapets for stair or elevator overruns and/or mechanical screening at a height of 74 feet 8 inches. All measurements are as defined by the City of Saint Paul building height calculations, which measure from the average grade at the base of the building to various points near the top of the building depending on the type of roof system utilized. Parapets, stair or elevator overruns, and mechanical screening are not calculated towards the building height per the City's zoning regulations. For sloped roofs, the midpoint of the roof is used for structure height calculations.

The Schoenecker Center is designed as a four-story building to a structure height of 58 feet, with the top of roof designed to a height of 73 feet 10 inches. Raised parapets for stair or elevator overruns and/or mechanical screening are designed at a height of 77 feet.

The Microgrid project is designed as a two-story addition to Owens Science Hall, with a structure height of 29 feet. Raised parapets for stair or elevator overruns and/or mechanical screening are designed at a height of 31 feet 4 inches. The top of the relocated greenhouse is designed to a structure height of 37 feet.

The proposed structure heights of the Arena and the Schoenecker Center exceed the maximum height allowed in the RC3 River Corridor Urban Open Overlay District of 40 feet. However, the more specific height requirements of the University of St. Thomas CUP, 75' feet in the western portion of the project site and 60' in the northern and eastern, are controlling for purposes of height regulation per a long-standing City interpretation. The facility's structure heights do not exceed the maximum height allowance as defined by the University of St. Thomas' Conditional Use Permit using the City of Saint Paul building height calculations. Note that the basketball practice facilities portion of the Arena building, which is designed to a height of 66 feet, is located within the portion of the site with a building height restriction of 75 feet. There is a portion of the basketball practice facility that is intentionally stepped down to a lower elevation where it crosses over into the 60-foot height zone to comply with this requirement.

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

As noted above in Item 10b, no land use or zoning incompatibilities were identified.

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.

According to the Geologic Atlas of Ramsey County (1992),[14] bedrock geology of the project site consists of Decorah Shale – green, calcareous shale with thin limestone interbeds. In April 2023, American Engineering Testing prepared a draft Report of Geotechnical Exploration for the Arena portion of the project site. American Engineering Testing completed subsurface exploration which consisted of 12 penetration test borings throughout the project site. Bedrock was encountered at depths of 8 feet to 12 feet below ground surface. Groundwater was encountered in penetration test borings at depths of 6 feet to 12 feet below ground surface. Groundwater was also encountered in limestone seams within the bedrock formation. Surficial geology of the project consists of stream sediment of Glacial River Warren. The existing soil and bedrock stability provide adequate support for the use of spread footings for the building. The majority of the building will sit above the existing bedrock elevation, therefore avoiding the perched groundwater layer that sits atop the shale bedrock. The existing buildings that were removed were replaced with well-draining sands to allow perched groundwater to flow more easily along its intended path, both further into the

[14] Geologic Atlas of Ramsey County, Minnesota. Minnesota Geological Survey. Available at https://conservancy.umn.edu/handle/11299/58233.

earth to lower groundwater levels and towards the Mississippi River. The portion of the Arena that extends into the bedrock layer will allow perched groundwater to migrate deeper into the earth to reach the lower groundwater elevation and the use of draintile at the building foundations will also allow the groundwater to continue to drain downstream towards its ultimate outfall at the Mississippi River.

In January 2021, American Engineering Testing prepared a Report of Geotechnical Exploration for the Schoenecker Center portion of the project site. American Engineering Testing completed surface exploration which consisted of eight penetration test borings throughout the location of the Schoenecker Center. One of the eight penetration test borings was cored 20 feet into the shale bedrock in an effort to obtain information regarding the consistency of the shale, weathering of bedrock, and the presence and thickness of limestone stringers. Bedrock was encountered at depths of 6 feet to 12 feet below ground surface. Groundwater was encountered in penetration test borings at depths of 10 feet to 12 feet below ground surface and was also encountered in limestone seams within the bedrock formation. The Schoenecker Center was constructed with conventional spread footings over the existing stable soil and bedrock found on that portion of the site. Foundation and below slab draintile for the basement level of the building were used to capture groundwater and direct it to the underground cistern located on the north side of the building. Water collected and stored in the underground cistern is reused for irrigation or discharged to the storm sewer.

In August 1995, American Engineering Testing prepared a Soil Borings and Engineering Analysis Report for the Owens Science Hall and O'Shaughnessy Science Hall buildings. Since the location of the proposed Microgrid Project is where the south side of Owens Science Hall exists, this soils report is utilized for assessment of the soil conditions in that portion of the site. The report included soil borings from a June 1995 report from GME Consultants, Inc. and two soil borings completed by American Engineering Testing from July 1995, one of which was cored into the existing bedrock. Bedrock was encountered at depths of 9 feet to 12 feet below ground surface. Groundwater was encountered at depths of 9 feet to 15 feet below ground surface. The Microgrid Project is designed with conventional spread footings over the existing stable soil and bedrock found on that portion of the site. Foundation draintile is proposed for the basement level foundations to continue the path of groundwater as described in the Arena section above.

In July 2024, American Engineering Testing prepared a Report of Geotechnical Exploration for the SPS Parking Lot portion of the project site. American Engineering Testing completed surface exploration which consisted of two penetration test borings throughout the location of the SPS Parking Lot. Bedrock was encountered at a depth of 4 feet below ground surface. Groundwater was encountered in penetration test borings at a depth of 6 feet below ground surface. The SPS Parking Lot is designed as a typical pavement section with asphalt over an aggregate base. Pervious pavers, with the addition of stone columns below ground down to bedrock, are used at the surface level to infiltrate stormwater runoff.

No sinkholes or karst conditions were identified at the project site.

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.

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, there are four soil types within the site: the Urban land-Chetek complex, 3 to 15 percent slopes and the Urban land-Waukegan complex, 0 to 3 percent slopes, which cover the majority of the project site, and Brill silt loam and Chetek sandy loam, 12 to 15 percent slopes, which cover the Saint Paul Seminary Parking Lot portion of the project site. Due to the location of the site and the classification of the Urban land-Waukegan and Urban land-Chetek complexes, the soil types are not rated for an erosion hazard rating, meaning that there is not enough information to make a determination regarding soil erodibility. The Brill silt loam and Chetek sandy loam units are mapped with slight and severe soil erodibility ratings, respectively.

In April 2023, American Engineering Testing prepared a draft Report of Geotechnical Exploration for the Arena portion of the project site. American Engineering Testing completed subsurface exploration which consisted of 12 penetration test borings throughout the project site. Fill, consisting of a mixture of sandy lean clays, lean clays, clayey sands, and silty sands, was encountered at all boring locations to depths of 3 feet to 9.5 feet below ground surface. American Engineering Testing concluded that the fill material has variable strength and compressibility, are mostly slow draining and are susceptible to freeze-thaw movements. Soils documented below fill included coarse alluvial soil and till, determined to be moderate to slow draining and susceptible to freeze thaw movements.

Site grading for the proposed Arena will occur, with approximately 60,000 cubic yards of excavation proposed for site grading and development. Grading activities within the site began in spring 2024. Where required, slope stabilization will be provided by means of vegetation establishment, erosion control blankets, or other standard methods of erosion and sediment control. The proposed development within the site will require compliance with the Capitol Region Watershed District's and the City of Saint Paul's erosion and sediment control standards.

In January 2021, American Engineering Testing prepared a Report of Geotechnical Exploration for the Schoenecker Center portion of the project site. American Engineering Testing completed surface exploration which consisted of eight penetration test borings throughout the location of the Schoenecker Center. One of the eight penetration test borings was cored 20 feet into the shale bedrock in an effort to obtain information regarding the consistency of the shale, weathering of bedrock, and the presence and thickness of limestone stringers. Fill, consisting of a mixture of sandy lean clays, lean clays, clayey sands, and silty sands, was encountered at all boring locations to depths of 2 feet to 4 feet below ground surface, with some deeper fill to a depth of 7 feet at one boring location. American Engineering Testing concluded that the fill material has variable strength and compressibility, are mostly slow draining, and are susceptible to freeze thaw movements.

Site grading for the Schoenecker Center portion of the project occurred in 2022 with approximately 50,000 cubic yards of excavation for site grading and development. All vegetation has been established and the site is permanently stabilized.

In August 1995, American Engineering Testing prepared a Soil Borings and Engineering Analysis Report for the proposed Owens Science Hall and O'Shaughnessy Science Hall buildings. Since the location of the proposed Microgrid Project is where the south side of Owens Science Hall exists, this soils report is utilized for assessment of the soil conditions in that portion of the site. The report included soil borings from a June 1995 report from GME Consultants, Inc. and two soil borings completed by American Engineering Testing from July 1995, one of which was cored into the existing bedrock. The soils encountered were generally topsoil, silty and sandy clay, and some silty sand over existing bedrock.

Site grading for the proposed Microgrid Project is anticipated to begin in 2025 with approximately 6,000 cubic yards of excavation for site grading and development. Where required, slope stabilization will be provided by means of vegetation establishment, erosion control blankets, or other standard methods of erosion and sediment control.

In July 2024, American Engineering Testing prepared a Report of Geotechnical Exploration for the SPS Parking Lot portion of the project site. American Engineering Testing completed surface exploration which consisted of two penetration test borings throughout the location of the SPS Parking Lot. Fill, consisting of organic clay overlying sands and silty sands with gravel, was encountered at all boring locations to a depth of 4 feet below ground surface. American Engineering Testing concluded that the organic clay and silty sand fill material has variable strength and compressibility, are mostly slow draining, and are susceptible to freeze thaw movements. The sand fill is fast draining and are not susceptible to frost related movements.

Site grading for the SPS Parking Lot portion of the project is anticipated to begin in 2025 with approximately 500 cubic yards of excavation for site grading and development. Where required, slope stabilization will be provided by means of vegetation establishment, erosion control blankets, or other standard methods of erosion and sediment control.

12. Water Resources

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.

There are no surface waters located within the project site (see Figure 7). No trout streams or lakes, wildlife lakes, migratory waterfowl feeding and resting lakes, or outstanding resource value waters are located within the project site or within one mile of the project site.

The National Wetlands Inventory identifies 12 wetland and water features within 1 mile of the project site, including the Mississippi River which is located less than ¼ mile west of the project site (see Figure 7). This segment of the Mississippi River is also identified as a Minnesota Department of Natural Resources (DNR) Public Watercourse and Public Water Basin (U.S. Lock & Dam #1 Pool).

The Mississippi River is listed as impaired on the Minnesota Pollution Control Agency's (MPCA's) Part 303d Impaired Waters List (ID Number 07010206-814). This stretch of the river, from Upper St. Anthony Falls to the St. Croix River, is listed as impaired for mercury, PCBs, PFOS, aluminum, nutrients, total suspended solids, and fecal coliform. Total Maximum Daily Load (TMDL) plans have been approved for mercury in fish tissue and water column, nutrients, and total suspended solids.

The National Hydrography Dataset from the U.S. Geological Survey identifies nine flowline features within 1 mile of the project site, including the Mississippi River. The nearest NHD-mapped flowline is a stream approximately 140 feet west of the project site, in alignment with the Grotto. The Grotto is a known feature within the campus. The Grotto is a linear aquatic feature that conveys stormwater run-off from the impervious surfaces within the project site. The next nearest NHD-mapped flowline is approximately 540 feet away to the north with Summit Ave and existing residential properties are between the project site and that flow line.

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 Minnesota Department of Natural Resources' (DNR's) Minnesota Hydrogeology Atlas,[15] depth to groundwater is mapped as greater than 50 feet across the site. In April 2023, American Engineering Testing prepared a draft Report of Geotechnical Exploration for the Arena portion of the project site. American Engineering Testing completed subsurface exploration which consisted of 12 penetration test borings throughout the project site. Groundwater was encountered in penetration test borings at depths of 6 feet to 12 feet below ground surface. Groundwater was also encountered in limestone seams within the bedrock formation.

In January 2021, American Engineering Testing prepared a Report of Geotechnical Exploration for the Schoenecker Center portion of the project site. American Engineering Testing completed surface exploration which consisted of eight penetration test borings throughout the Schoenecker Center portion of the project site. Groundwater was encountered in penetration test borings at depths of 10 feet to 12 feet below ground surface. Groundwater was also encountered in limestone seams within the bedrock formation.

In August 1995, American Engineering Testing prepared a Soil Borings and Engineering Analysis Report for the proposed Owens Science Hall and

[15] Minnesota Department of Natural Resources. Minnesota Hydrogeology Atlas. Available at https://www.dnr.state.mn.us/waters/groundwater_section/mapping/mn-hydro-atlas.html.

O'Shaughnessy Science Hall buildings. Since the location of the proposed Microgrid Project is where the south side of Owens Science Hall exists, this soils report is utilized for assessment of the soil conditions in that portion of the site. The report included soil borings from a June 1995 report from GME Consultants, Inc. and two soil borings completed by American Engineering Testing from July 1995, one of which was cored into the existing bedrock. Groundwater was encountered at depths of 9 feet to 15 feet below ground surface.

In July 2024, American Engineering Testing prepared a Report of Geotechnical Exploration for the SPS Parking Lot portion of the project site. American Engineering Testing completed surface exploration which consisted of two penetration test borings throughout the location of the SPS Parking Lot. Groundwater was encountered in penetration test borings at a depth of 6 feet below ground surface.

According to the Minnesota Department of Health's (MDH's) Minnesota Well Index,[16] one active irrigation well is mapped south of McCarthy Gymnasium; however, this well was removed in January 2024. In March 2023, American Engineering Testing installed a temporary piezometer to measure groundwater levels. The well has not been updated on MDH's Well Index. This temporary piezometer was removed in February of 2024. According to MDH's Source Water Protection Web Map Viewer,[17] the project site is not within a wellhead protection area or drinking water supply management area.

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.

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.

Wastewater pretreatment measures to be installed at the Arena portion of the project site include a commercial kitchen grease trap. Existing sanitary sewers to serve the project site are located along Summit Avenue, Cretin Avenue, and Grand Avenue. The Arena site design includes a new sanitary sewer connection up to the south side of Summit Avenue and connection near the southeast corner of the site to an existing sanitary sewer within the site. These convey wastewater via city sanitary sewers to the Metropolitan Council interceptor system and eventually to the Metropolitan Council Wastewater Treatment Plant. The Metropolitan Council Wastewater Treatment Plant is an advanced secondary treatment plant with ultraviolet disinfection. The plant currently treats approximately 178 million gallons per day (GPD), with a capacity of up to 314

[16] Minnesota Department of Health. Minnesota Well Index. Available at https://mnwellindex.web.health.state.mn.us/.
[17] Minnesota Department of Health. Source Water Protection Web Map Viewer. Available at https://mdh.maps.arcgis.com/apps/View/index.html?appid=8b0db73d3c95452fb45231900e977be4.

million GPD according to the Metropolitan Council Environmental Services (MCES) Plant Inflow Summary Report for the period ending September 30, 2014. A SAC Determination was received for the Arena in December 2023 which indicated 116 SAC for the building. SAC Determinations were received for the Service Center, McCarthy Gymnasium, and Cretin Hall in October and November 2023 which indicated 5, 21, and 23 SAC Credits respectively when those buildings were demolished. Therefore, the net SAC increase for the Arena project is 67 SAC. This equates to an estimated daily flow of 0.018 (MGD). Using the Metropolitan Council's hourly peaking factor of 3.2, the estimated peak flow generated is 0.059 MGD (0.02 percent of existing capacity).

The Schoenecker Center project included a new sanitary sewer connection up to the south side of Summit Avenue, the same city sanitary sewer pipe previously mentioned. A SAC Determination was received for the Schoenecker Center project in January 2022 which indicated 94 SAC for the building. A SAC Determination was received for Loras Hall in January 2021 which indicated 9 SAC Credits when that building was demolished resulting in a net increase of 85 SAC for the Schoenecker Center building. This equates to an estimated daily flow of 0.023 (MGD). Using the Metropolitan Council's hourly peaking factor of 3.2, the estimated peak flow generated is 0.074 MGD (0.02 percent of existing capacity).

The Microgrid Project will be served by sanitary sewer interior to the existing building it is connected to. Based on the MCES SAC criteria calculator, the Microgrid Project would have an estimated value of 9 SAC, which equates to an estimated daily flow of 0.002 (MGD). Using the Metropolitan Council's hourly peaking factor of 3.2, the estimated peak flow generated is 0.008 MGD (less than 0.01 percent of existing capacity).

There is no sanitary flow anticipated for the SPS Parking Lot project.

Thus, the existing municipal wastewater infrastructure is capable of handling the new demand generated by the redevelopment.

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.**

   Not applicable.

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.**

Not applicable.

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.**

The existing project site, prior to the demolition of Loras Hall in preparation for the Schoenecker Center project construction, consisted of approximately 6.6 acres of impervious surfaces, including approximately 1.7 acres of impervious surfaces which drained via topography west towards the Grotto. The Grotto lies on the University of St. Thomas campus, west of the project site and follows a drainage channel west towards the Mississippi River based on a review of topography. A National Hydrography Dataset (NHD) stream is mapped in this area. The stormwater flow draining directly to the Grotto was untreated and uncontrolled runoff. The remaining approximately 4.9 acres of impervious surfaces drained towards the southeast to an existing storm sewer tunnel within the St. Thomas parcel, or to the adjacent Summit Avenue, Mississippi River Boulevard, and Goodrich Avenue storm sewer systems, all which discharge to the Mississippi River. There were two existing stormwater treatment systems that treated some of the stormwater runoff before leaving the site into the existing storm sewer tunnel, one east of the Anderson Parking Facility and the other beneath the South Athletic Fields.

After construction is complete, approximately 8.2 acres of impervious surfaces are expected within the project site, 1.1 acres of which will drain towards the Grotto. The remaining approximately 7.1 acres of impervious surface within the project site will drain to the Mississippi River through either the southeastern storm sewer tunnel or the Summit Avenue, Mississippi River Boulevard, or Goodrich Avenue storm sewer systems. A change in drainage patterns with the Arena construction directs 1.0 acres of impervious surface in the form of building roof water from Owens Science Hall and O'Shaughnessy Science Hall towards the Grotto. This additional drainage is outside of the project site, but when added to the impervious area above draining to the Grotto within the project site, this results in an increase of 0.4 ac impervious draining to the

Grotto. However, the increase in impervious surfaces draining to the Grotto will now be treated per both water quality and runoff control requirements through underground filtration devices, thus improving the water quality and flow conditions. Post-construction quality of stormwater runoff from the project site overall will be improved by best management practices (BMPs) to meet MPCA and Capitol Region Watershed District treatment requirements. To accomplish this, two stormwater filtration systems were added for the Arena project, one water reuse for irrigation system was added for the Schoenecker Center project, and pervious pavers are proposed for the SPS Parking Lot project, all to avoid increasing the runoff rate of stormwater and to improve the water quality of the stormwater runoff. The Microgrid Project will utilize the existing Anderson Parking Facility stormwater treatment system.

A Stormwater Pollution Prevention Plan (SWPPP) will be developed for the proposed projects in accordance with the National Pollutant Discharge Elimination System (NPDES) permit administered by the MPCA. SWPPPs and NPDES Permits were developed and received for the Schoenecker Center and Arena projects. The SWPPP will cover temporary measures to prevent pollution during construction (erosion and sediment control as well as controls to minimize spills, leaks, or other discharges of pollutants) and permanent measures to prevent stormwater pollution after construction. These BMPs may include one or more of the following: silt fencing, inlet sediment filters, sediment traps, diversion ditches, grit chambers, temporary ditch checks, rock filter dikes, fiber logs, turf reinforcement mats, temporary seeding, riprap and erosion control blankets for disturbed areas, and seeding or placement of sod or other plant material for final restoration. An Erosion Control Plan checklist will be followed by the design teams to meet city and state requirements, minimize drainage problems and soil erosion, and prevent sediment from entering curb and gutter systems and storm sewer inlets.

The project will comply with all city, watershed district, county, and state rules for stormwater management, which will be addressed in the Stormwater Management Plan that will be reviewed by the city for compliance.

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.

Construction dewatering may be required for the remaining development within the project site. Construction dewatering did occur for the Schoenecker Center project. Construction activities associated with dewatering will include discharging into temporary sedimentation basins to reduce the rate of water discharged from the site, as well as discharging to temporary stormwater BMPs. Any temporary dewatering will require a DNR Temporary Water Appropriations General Permit 1997-0005 if less than 50 million gallons per year and less than one year in duration. It is anticipated that the temporary dewatering would only occur during utility installations and if needed construction of building footings.

The water supply will be obtained from the municipal water supply system operated by Saint Paul Regional Water Services (SPRWS). SPRWS obtains water from the Mississippi River, which is filtered through a chain of lakes and drawn into the treatment plant from Vadnais Lake. The system also has 10 water supply wells, which obtain water from the Prairie du Chien and Jordan aquifers. These wells are typically only used for emergency backup or are run at limited volumes to help control temperature and odor from the surface water intakes. By only running the wells at these limited times, SPRWS is reducing the potential impact to the available groundwater supplies, relying instead on the available surface water supplies.

Two eight-inch water mains will serve the Arena for the domestic water use. Peak demand for domestic water is projected at approximately 380 GPM. Water use will include water closets, sinks, showers, HVAC makeup water, and ice making which will serve toilet rooms, commercial kitchens, locker rooms, ice making equipment, and HVAC makeup water. The project site is currently part of the University of St. Thomas campus and existing infrastructure will be modified.

An 8-inch fire service water main and a 4-inch domestic service water main were extended from an existing 8-inch water main within the project area to service the Schoenecker Center project. Peak demand for domestic water was projected at 205 GMP during the design process.

The Microgrid Project will be served by a water main interior to the existing building the project is connected to. Peak demand is undetermined at the current level of project design; however, project expectations on duration include average usage during the academic year and light to medium usage in the summer.

No wells will be used as a water source for the projects within the project site. One existing well was located at the southern edge of McCarthy Gymnasium and was removed in January 2024. One temporary piezometer was installed at the project site to document groundwater levels and was removed in February 2024. If unidentified wells are found during construction, the MPCA and MDH 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.

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.**

   No wetlands are located within the project site; therefore, no impacts are anticipated.

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.**

   The intent of the site design will be to allow hydrology to be maintained as it exists today to the Grotto. Measures that are planned to avoid, minimize, or mitigate environmental impacts include:

   - Connecting relocated storm sewer pipes into the existing storm sewer pipe upstream of the Grotto outlet to avoid disturbing the outlet connection and the existing vegetation within the channel.
   - Matching existing drainage areas to maintain a consistent volume of stormwater to the Grotto. Reducing volume to the Grotto may cause the existing channel to dry up and increasing volume to the Grotto may cause erosion of the existing channel and areas downstream.
   - Discharging building roof water to the Grotto in lieu of surface parking lot, since building roof water is relatively clean compared to site water which often contains salts and sediments.

No other surface waters are located within the project site; therefore, no additional impacts to surface waters are anticipated.

13. Contamination/Hazardous Materials/Wastes

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

The MPCA's What's in My Neighborhood database was reviewed to determine if any known contaminated properties or potential environmental hazards are located within or adjacent to the site. Four sites were identified within the project site, and one site was identified adjacent to the site (see Figure 8 and Table 7).

Table 7: What's in My Neighborhood Sites

Site ID	Site Name	Active	Activity	Program
105494	University of Saint Thomas	Yes	Petroleum Remediation, Leak Site, Underground Tanks	Investigation and Cleanup
145996	UST South Campus Facilities Bldg	No	Construction Stormwater	Stormwater
251021	University of St. Thomas Schoenecker Center	No	Construction Stormwater	Stormwater
257789	Lee & Penny Anderson Multipurpose Arena	Yes	Construction Stormwater	Stormwater
143128	Soccer/Softball Field Improvements	No	Construction Stormwater	Stormwater

The Schoenecker Center project removed an existing 20,000 gallon underground fuel tank located within the Owens Science Hall loading dock driveway. The Arena project removed an existing 20,000 gallon underground fuel tank located underneath a parking lot drive lane near the northwest corner of the Service Center.

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.

According to the Ramsey County Solid Waste Management Master Plan 2018-2038, Ramsey County 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.

Waste Generated During Construction

Demolition debris and earth materials will be generated during demolition of the existing facilities. Demolition debris is inert material such as concrete, brick, bituminous, and rock. The solid wastes generated during demolition will be recycled or disposed of at a state-permitted landfill. The project will target a 50 percent to 75 percent diversion rate for construction-produced waste as part of the LEED approach.

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

According to the University of St. Thomas Conditional Use Permit, a demolition survey of each building to be removed must be completed prior to demolition of buildings. The survey will identify asbestos-containing materials for the structures, if present. If asbestos-containing materials are present, they will be removed in accordance with MPCA and MDH regulations. A demolition survey was completed prior to demolition of the buildings for the Arena project and asbestos-containing materials were removed in accordance with MPCA and MDH regulations.

During construction of the Schoenecker Center, 1,782 tons of contaminated soil was excavated, removed from the project site, and properly disposed of off-site. During construction of the Arena project through July 2024, approximately 2,300 tons of contaminated soil were excavated, removed from the project site, and property disposed of off-site in accordance with state and federal regulations. The Microgrid Project is not anticipated to encounter contaminated soils; however, contaminated soils will be properly disposed of off-site in accordance with state and federal regulations if encountered.

Waste Generated During Operation

Operation of the Arena will generate solid wastes such as food waste, beverage containers, packaging, and paper. In total, it is estimated that the proposed Arena, the Schoenecker Center, and the Microgrid Project will generate approximately 5,895 tons of solid waste per year. A source recycling/separation plan will be implemented for additional waste and waste that cannot be recycled will be managed in accordance with state regulations and guidelines. Waste sorting at the University of St. Thomas currently includes a co-mingled recycling program and a composting program for food waste and other compostable wastes.

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.

No existing above ground storage tanks have been identified within the project site. The Schoenecker Center project removed an existing 20,000 gallon underground fuel tank located within the Owens Science Hall loading dock driveway. The Arena project removed an existing 20,000 gallon underground fuel tank located underneath a parking lot drive lane near the northwest corner of the Service Center.

During construction of the Schoenecker Center, the University of St. Thomas installed one 40,000 gallon underground storage tank which contains fuel oil #2 (light). The tank is a fiberglass, double-wall tank with a leak monitoring system and used only for heating purposes when natural gas is curtailed by Xcel Energy. Natural gas curtailment occurs during periods of peak gas demands, typically during very cold winter days, when gas customers may require more natural gas than is normally available. St. Thomas participates in Xcel Energy's Interruptible Gas program, which reduces gas usage during periods of peak demand at the request of Xcel Energy, to help ensure enough natural gas is available to heat homes and businesses in the community. The University of St. Thomas has notified the Minnesota Pollution Control Agency of the tank installation. The Schoenecker Center project installed one 750 kW generator run on fuel oil #2 with a 275 gallon day tank for fuel storage.

The Arena project will have a 750 kW generator located within the auxiliary ice sheet to provide backup power to the building with a 300-gallon day tank for fuel storage. The chilled water system for the building will have two chillers, one 500 ton and one 112 ton, located within the sublevel mechanical room of the building. The 500 ton chiller will hold approximately 800 pounds of refrigerant, the 112 ton chiller will hold approximately 137 pounds of refrigerant, and the chilled water piping system will have approximately 4,000 gallons of a fluid that is 30% ethylene glycol and 70% water within the system piping. For the ice rink cooling system, there is anticipated to be approximately 1,200 pounds of ammonia and approximately 6,000 gallons of a fluid that is 40% glycol and 60% water. The project proposer will obtain the appropriate permits from the MPCA.

Any hazardous waste materials used or stored during construction and/or operation of the Arena will be disposed of in the manner specified by local or state regulation or by the manufacturer. The Arena project includes preventative measures, such as a subfloor heating system to help reduce the risk of subfloor permafrost, which is a common cause for failure of ice systems and liquid spills, a sealant will be used over the concrete floor for any rooms storing potentially hazardous materials, and a zero permeable vapor barrier is provided below the floor as well. An emergency exhaust system will be installed that is initiated by a refrigerant monitoring system in compliance with MN mechanical codes and the recommendations of ASHRAE Standard 15 and IAAR. A spill prevention plan provides that proper spill prevention controls will be in place for any vehicle refueling or maintenance that occurs on site during construction. St. Thomas will have an Ammonia Plant Safety Program which includes preventative maintenance and response protocols, training for operators of the systems, continuous monitoring, dedicated exhaust systems, and integration with the building alarm system. St. Thomas does employ trained professionals with experience in operating and maintaining ethylene glycol systems within their current heating and cooling systems on campus.

The Microgrid Project will have three 500kW generators to provide backup power for the microgrid, each with a 100 gallon day tank for fuel storage. These generators are anticipated to have fuel oil #2 (light) storage tanks at each generator or utilize one fuel storage tank for fuel supply.

As a university with science and engineering labs, St. Thomas is licensed as a hazardous waste generator through Ramsey County, sized as a Small Quantity Generator (SQG). Small Quantity Generators generate between 220 pounds and 2,200 pounds of hazardous waste per month. There will be no change required in this licensure as a result of the Arena, Schoenecker Center, or Microgrid Projects.

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.

Removal of the existing structures within the site is not expected to generate new hazardous waste. Toxic or hazardous waste to be stored within the site during construction will include fuel and oil necessary to operate heavy construction equipment and during operations may include commercial cleaning supplies. Regulated material and/or waste generated or stored during construction and operations will be managed in accordance with state and local requirements.
The University has been licensed as a small quantity hazardous waste generator by Ramsey County since 1984. There will be no change required in this licensure as a result of the Arena, Schoenecker Center, or Microgrid project.

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.

The project site, prior to the demolition of Loras Hall in preparation for the Schoenecker Center project construction, was primarily impervious surfaces with minimal landscaping. The SPS Parking Lot portion of the project site currently consists of landscaped green space. There are no above ground streams, rivers, lakes or ponds located within the project site; therefore, the site provides no fish habitat. The site provides minimal wildlife habitat due to the extent of impervious surfaces and low coverage of natural vegetation. However, wildlife that can be found within the project site may include songbirds and small mammals that have adapted to an urban environment.

Fish and wildlife habitat within the vicinity of the project site includes the Mississippi River, Mississippi Gorge Regional Park, and Shadow Falls Park, all located within ¼ mile of the project site to the west and northwest.

Based on information from the U.S. Fish and Wildlife Service, the project site is located within a high potential zone of the rusty patched bumble bee; however, the disturbed nature of the site is not likely to provide suitable habitat.

The project site is not located within any regionally significant ecological areas (RSEA), Minnesota Biological Survey (MBS) Sites of Biodiversity Significance, or native plant communities. However, as described under Item 14b, one RSEA, two MBS Sites of Biodiversity Significance, and eight native plant communities are located within one mile of the project site.

The project site is located within the Mississippi River Twin Cities Important Bird Area (IBA)[18]. The Mississippi River IBA includes the Mississippi River and its adjacent floodplain forest and upland areas extending for 38 river miles through 4 counties from Minneapolis to Hastings.

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-2024-006) 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.

State-Listed Threatened and Endangered Species

A review of the DNR's Natural Heritage Inventory System (NHIS) was conducted per license agreement LA-2024-006 for the project site and the area within approximately one mile of the project site. The database includes known occurrences of any state endangered, threatened, or special concern species. The review identified 141 records of 9 species that may be found near this area (see Table 8).

[18] netapp.audubon.org/iba/Reports/2421

Table 8: State-Listed Threatened and Endangered Species

Species	Group	Status	Location	Habitat
Handsome Sedge (*Carex formosa*)	Vascular Plant	Endangered	One record is located within the project site and one record is located within one mile of the project site.	Preferred habitat within Ramsey County includes forested slopes along the Mississippi River.
Higgins Eye (*Lampsilis higginsii*)	Mussel	Federally and State Endangered	One record is located within one mile of the project site.	Preferred habitat is stable substrates of the Mississippi River and the lower portion of some large tributaries.
Kentucky Coffee Table (*Gymnocladus dioica*)	Vascular Plant	Special Concern	One record is located within the project site.	Preferred habitat includes mesic hardwood forest on terraces of the Mississippi River.
Leadplant Flower Moth (*Schinia lucens*)	Insect	Special Concern	One record is located within one mile of the project site.	Preferred habitat includes mesic to dry native prairie and savanna communities where leadplant occurs.
Mudpuppy (*Necturus maculosus*)	Amphibian	Special Concern	One record is located within one mile of the project site.	Preferred habitat includes rivers, lakes, reservoirs, and sluggish streams.
Round Pigtoe (*Pleurobema sintoxia*)	Mussel	Special Concern	One record is located within one mile of the project site.	Preferred habitat includes fast current areas dominated by coarse sand and gravel substrate in medium to large rivers.
Rusty patched Bumble Bee (*Bombus affinis*)	Insect	Federally Endangered	Eleven records are located within the project site and 110 records are located within one mile of the project site.	Preferred habitat includes semi-natural upland grassland, shrubland, woodlands, and forests. The entire project site is within a High Potential Zone.
Swamp White Oak (*Quercus bicolor*)	Vascular Plant	Special Concern	One record is located within the project site and two records are located within one mile of the project site.	Preferred habitat includes floodplain forest along the Mississippi River.
Wartyback (*Quadrula nodulata*)	Mussel	Threatened	Ten records are located within one mile of the project site.	Preferred habitat includes large rivers with fine or coarse substrates in areas with slow to moderate current.

Other Sensitive Ecological Resources

The Mississippi River is located within ¼ mile of the project site and is identified as an RSEA. RSEAs are given a score of 1, 2, or 3 based on how well continuous natural areas meet standards for size, shape, connectivity, adjacent land use, and species diversity, with 3 being the highest possible score. The section of the Mississippi River near the project site has a score of 1. Areas ranked as 1 tend to be small and have less diversity in vegetative cover. They also typically have adjacent land cover types or uses that could adversely affect the RSEA.

Two MBS Sites of Biodiversity Significance, St. Paul Bluffs W and West Bank Mississippi River, are located approximately 0.15 mile and 0.30 mile west of the project site. Each MBS Site is ranked based on rare species populations, native plant communities, and landscape context. Both St. Paul Bluffs W and West Bank Mississippi River have been assigned a moderate rank. Moderate sites contain occurrences of rare species, moderately disturbed native plant communities, and/or landscapes that have strong potential for recover of native plant communities.

Eight native plant communities were identified within one mile of the project site, and approximately align with the St. Paul Bluffs W and West Bank Mississippi River MBS Sites of Biodiversity Significance. The plant communities include one Mesic Prairie (Southern), one Red Oak-White Oak-(Sugar Maple) Forest, three Red Oak-Sugar Maple-Basswood-(Bitternut Hickory) Forests, and three Silver Maple-(Virginia Creeper) Floodplain Forests.

As noted above in Item 14a, these sites and native plant communities are not located within the project site.

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.

Wildlife Habitat and Threatened and Endangered Species

No impacts to fish, wildlife, plant communities, rare features, or ecosystems are anticipated due to the lack of suitable wildlife habitat. No impacts to the state-listed and federally-listed mussels species are expected, as there is no suitable habitat within the project site and no impacts to the nearby Mississippi River are expected. The DNR completed a Natural Heritage Review for the 2023 EAW proposed project site (see Appendix B of the 2023 EAW included in Appendix E). The NHIS review indicated that although no bat records are listed in the NHIS in the vicinity of the project site, all seven of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. To minimize impacts to bat species, the MN DNR recommends that tree removal be avoided from June 1 through August 15, during the active bat season.

The NHIS review indicated that the project site is located within a high potential zone of federally endangered rusty patched bumble bee. According to the DNR, the rusty patched bumble bee is likely to be present in suitable habitat within high potential zones. From April

through October, the rusty patched bumble bee uses underground nests in upland grasslands, shrublands, and forest edges, and forages where nectar and pollen are available. From October through April, the species overwinters under tree litter in upland forests and woodlands. The disturbed nature of the project site is not likely to provide suitable habitat. If applicable, the DNR recommended reseeding disturbed soils with native species of grasses and forbs using Board of Water and Soil Resources (BWSR) or Minnesota Department of Transportation (MnDOT) seed mixes. To ensure compliance with federal law, the DNR recommended that the project conduct a federal review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Based on recommendations from the DNR, a review of federally listed threatened, endangered, and proposed species which may occur within the proximity of the project site was completed through the UWSFWS IPaC tool. A resource list generated for the project site identified nine species which should be considered.

Two bat species were identified in the USFWS resource list: the northern long-eared bat and tricolored bat (*Perimyotis subflavus*). As noted above, the DNR recommends that tree removal be avoided from June 1 through August 15 to minimize impacts to bat species. Four mussel species were identified in the USFWS resource list: Higgins eye, salamander mussel (*Simpsonaias ambigua*), snuffbox mussel (*Epioblasma triquetra*), and winged mapleleaf (*Quadrula fragosa*). As noted above, there is no suitable habitat for mussel species within the project site and no impacts to the nearby Mississippi River are expected.

Two insect species were identified in the USFWS resource list: the rusty patched bumble bee and the monarch butterfly (*Danaus plexippus*). The rusty patched bumble bee is listed as federally endangered, and the monarch butterfly is a candidate species. Candidate status does not provide species protection under the Endangered Species Act listing process. Recommendations from the DNR described above to reseed disturbed soils with native species of grasses and forbs to benefit the rusty patched bumble bee is a best management practice that also applies to the monarch butterfly.

The whooping crane (*Grus americana*) was also identified in the USFWS resource list. This species is classified as an experimental population, non-essential. Experimental population, non-essential status does not provide species protection under the Endangered Species Act listing process outside of federal lands. The project site located outside of federal National Wildlife Refuges and National Parks.

Invasive Species

Invasive species are plants and animals that are not native to an area and are capable of causing harm. Certain measures can be taken to limit the likelihood of introducing invasive species, such as securing local materials to avoid the long-range movement of goods or washing vehicles prior to accessing the project site. Additionally, as landscape designs are finalized, they will consider including native, non-invasive plants.

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

Invasive species will be controlled on site during construction, and proposed landscaping will not include any DNR-identified invasive species. Additionally, best management practices will be followed when relocating construction equipment from other sites.

As noted above in Item 14a, the project site is located within the Mississippi River IBA. According to the DNR, IBAs are voluntary and non-regulatory part of an international conservation effort to bird populations.[19] The constructed Schoenecker Center and planned Arena will be to scale in comparison with other buildings located on the University of St. Thomas South Campus. The Arena will be required to comply with applicable City of Saint Paul lighting and bird-safe glass ordinance language. Fixture modeling and photometric analysis will be completed for all building lighting to analyze light levels for the project.

University of St. Thomas is has incorporated shade trees and increased the landscaped areas with a blend of biodiverse, native, drought tolerant plant species that provide pollinator habitat. The University's existing Pollinator Path is a series of gardens on campus that provide food and habitat for a wide variety of pollinator species and is considered a "living laboratory" for students and community members. No adverse impacts are expected to state-listed and federally-listed species.

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.

In March 2023, a search of the Minnesota State Historic Preservation Office's (SHPO) Statewide Inventory was requested to identify known historic properties and archaeological sites in the vicinity of the 2023 EAW project site. The database search identified no archaeological records in the project site. Within Township 28N, Range 23W, Section 5, the database search identified 221 records. Of the 221 records, 35 properties are listed in the National Register of Historic Places (NRHP) and 5 properties that are considered eligible for the NRHP. "Considered eligible" means that a federal agency has recommended that the property is eligible for listing in the NRHP and SHPO has accepted the recommendation for the purposes of the environmental review process. However, these properties need to be further assessed before they are officially listed in the NRHP. The remaining 181 records identified in the database search have no designation and may not have been evaluated; therefore, no assumption to their eligibility can be made. Three of the properties identified via the database search are located within the project site, and an additional 14 properties are located within 500 feet of the project site (see Table 9 and Figure 9). Two of the three properties located within the project site were listed as considered eligible and one had no designation; however, these buildings are not considered locally significant for historic preservation. Given the lack of a federal nexus or formal listing on the NRHP and the lack of local

[19] https://www.dnr.state.mn.us/iba/index.html

designation no further evaluation or assessment is required. The City of Saint Paul Heritage Preservation staff has also reviewed the project and project site and has determined no further evaluation is needed for demolition of the existing buildings within the project site.

Table 9: Historic Properties within 500 feet of the 2023 EAW Project Site

Property Name	Location Relative to Project	Status
Almendinger Apartments	Within 500 feet of Project Site	No designation
Apartment (2171 Grand Ave. W)	Within 500 feet of Project Site	No designation
Binz Refectory – St. Paul Seminary (University of St. Thomas)	Within 500 feet of Project Site	No designation
Brady Education Center – St. Paul Seminary (University of St. Thomas)	Within 500 feet of Project Site	No designation
Cretin Court Apartments	Within 500 feet of Project Site	No designation
Grace Residence (University of St. Thomas)	Within 500 feet of Project Site	Considered eligible
Grand Student Apartments	Within 500 feet of Project Site	No designation
Grotto and Woodland Walk – St. Paul Seminary	Within 500 feet of Project Site	No designation
McCarthy Recreation Building – St. Paul Seminary (University of St. Thomas)	Project Site	No designation
Mills, H.S., House	Within 500 feet of Project Site	Listed in the NRHP
Nilson Apartments	Within 500 feet of Project Site	No designation
O'Shaughnessy Hall – University of St. Thomas	Within 500 feet of Project Site	No designation
St. Mary's Chapel (St. Paul Seminary)	Within 500 feet of Project Site	Listed in the NRHP
St. Paul Seminary Gymnasium/Heating Plant (Service Center Building) (University of St. Thomas)	Project Site	Considered eligible
St. Paul Seminary South Dormitory/Cretin Hall (University of St. Thomas)	Project Site	Considered eligible
Tierney, S., House	Within 500 feet of Project Site	Listed in the NRHP

The Minnesota Statewide Historic Inventory Portal (MnSHIP) was reviewed to identify historic resources within the 2024 EAW Update projects site and within 500 feet of the project site. MnSHIP identifies resources as National Register Listed or Eligible, and as Inventoried. Within the 2024 EAW Update project site, four properties were identified including one which is identified as National Register Listed or Eligible and three which are identified as Inventoried. Within 500 feet of the project site, an additional 20 properties were identified as National Register Listed or Eligible and 24 properties were identified as Inventoried.

The northern portion of the project site is located within the Summit Avenue West Heritage Preservation District. In January 2021, the Saint Paul City Council approved the demolition of Loras Hall. In August of 2021, the HPC approved the construction of the Schoenecker Center

building. In November of 2023, the HPC approved the construction of the Arena building. The Microgrid Project and SPS Parking Lot projects require review and approval from the Heritage Preservation Commission (HPC). Review will be complete when detailed project designs are provided to the HPC.

It is not anticipated that unknown archaeological sites will be uncovered during the construction of this project as the site has been previously disturbed. However, if cultural materials are encountered during construction, unanticipated discovery protocols will be followed.

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.

The project site includes existing institutional land, and no unique designated scenic views or vistas are located within the site. The City of Saint Paul *2040 Comprehensive Plan* identifies Public River Corridor Views (PRCV) within the Mississippi River Corridor Critical Area (MRCCA) on public property, including parks and trails, historic properties, and bridge overlooks. Views towards bluffs from the opposite side of the shore are also noted. View #3 – Shadow Falls Overlook is located within ¼ mile of the project site; however, the view direction is towards the Mississippi River and away from the project site. Considering the set back from Mississippi Gorge Regional Park, views of the project site from the western bank of the Mississippi River will be minimal.

Policy CA-11 as outlined in the MRCCA plan is intended to protect and minimize impacts to PRCV from public development activities. According to the PRCV map, the project site is not located within the view range of any identified view locations. Therefore, the project will not have an impact on identified significant public views, which is consistent with Policy CA-11.

Generally, views from the surrounding area would be similar to those experienced currently, as current and future land use is within an institutional facility and there are buildings of similar massing already in the area. Changes in views that have occurred for the Schoenecker Center portion of the project site included the removal of an older building and the construction of a building in similar appearance to O-Shaughnessy Science Hall to the east for consistency in materials and building scale. Changes in views for the Arena would be most noticeable from portions of Goodrich Avenue, and from the Grand Avenue right of way. The massing of the Arena building matches that of the surrounding buildings including similar height on the north side to that of the Schoenecker Center, a second and third story step back on the west side adjacent to the lower profiles St. Paul Seminary buildings, and a south and east façade that resembles the heights of the adjacent Grace Hall and Anderson Parking Facility. Changes in views for the Microgrid Project would be most noticeable from portions of the Grand Avenue right of way, namely in the shift of the greenhouse up to the second story instead of the current view of it at the ground level. Changes in views for the SPS Parking Lot would be most noticeable from Mississippi River Boulevard but would similarly match the existing parking that exists on the west side of the roadway. The proposed project will conform with the City's regulations for building height, building form, landscape screening, and lighting. Adverse visual effects are not anticipated.

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 that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

Minimal stationary source air emissions are anticipated from natural gas use and #2 fuel oil for the boiler system. See Table 12: Proposed Operational Emissions for more information.

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.

Motor vehicles emit a variety of air pollutants including carbon monoxide (CO), hydrocarbons, nitrogen oxides, and particulates. The primary pollutant of concern is CO, which is a byproduct of the combustion process of motor vehicles. CO concentrations are highest where vehicles idle for extended periods of time. For this reason, CO concentrations are generally highest in the vicinity of signalized intersections where vehicles are delayed and emitting CO. Generally, concentrations approaching state air quality standards are found within about 100 feet of a roadway source. Further from the road, the CO in the air is dispersed by the wind such that concentrations rapidly decrease.

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 in the 10 highest traffic volume intersections in the Twin Cities do not experience CO impacts. Therefore, intersections with traffic volumes lower than these 10 highest intersections will not cause a CO impact above state standards. MnDOT's screening method demonstrates that intersections with total daily approaching traffic volumes below 82,300 vehicles per day will not have the potential for causing CO air pollution problems. The 10 highest traffic volumes in the Twin Cities include: Cedar Avenue at County Road 42, Hwy 252 at 66th Avenue, Hwy 252 at 85th Avenue, County Road 42 at Nicollet Avenue, Hwy 252 at Brookdale Drive, Hwy 7 at County Road 101, Hwy 7 at Williston Road, University Avenue at Lexington Avenue, University Avenue at Snelling Avenue, and Hennepin Avenue at Lake Street. None of the intersections in the vicinity of the project site 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.

The project may generate temporary fugitive dust emissions during construction. These emissions would be controlled by sweeping, watering, or sprinkling, as appropriate or as

prevailing weather and soil conditions dictate. Dust emissions are not anticipated during operations as all surfaces will either be impervious or vegetated.

The construction and operation of the project are not expected to generate objectionable odors.

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.

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 towards 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 (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming.[20]

This section includes an estimated quantification of the following GHG emissions associated with the proposed project:

- Carbon Dioxide (CO_2)
- Nitrous Oxide (N_2O)
- Methane (CH_4)

The projected GHG emissions are provided on an average annual basis using the CO_2 equivalent (CO_2e) and include the proposer's best estimate of average annual emissions over the proposed life/design service life of the project. Emissions were estimated using the US

[20] Summarized from U.S. EPA, Overview of Greenhouse Gases: https://www.epa.gov/ghgemissions/overview-greenhouse-gases

Environmental Protection Agency's Simplified GHG Emissions Calculator (August 2022)[21] and are summarized by project phase (i.e., construction and operations) and source type (e.g., combustion from mobile equipment, off-site electricity) (see Appendix C of the 2023 EAW included in Appendix E for background analysis). Estimated existing emissions are summarized in Table 10 and estimated proposed emissions are summarized in Table 11 and Table 12 .

Construction emissions are based on length of construction, size of site, and are from mobile equipment including passenger cars, light-duty trucks, medium and heavy-duty trucks, and construction equipment (both gasoline and diesel).

Emissions from cooling and refrigeration systems are not accounted for in this operational emissions analysis as GHGs from refrigerants are approximately less than 5 percent of the total GHG emissions of a building.[22] The project will incorporate an ammonia (NH3)-based refrigerant plant for the ice rinks; however, annual usage will be limited for maintenance needs only and therefore not included in the GHG analysis. Ammonia is considered an acceptable non-ozone depleting alternative for ice rinks compared to other hydrochlorofluorocarbons substances under EPA's Significant New Alternatives Policy program.[23] There will be safety plans in place to handle the ammonia use appropriately. The project will include the use of Zambonis to service the ice rink and a forklift to service the facility and both are planned to be electric and not included in the GHG analysis. The project does not plan to purchase gases during operation or land use conversions.

Table 10: Existing Operational Emissions

Scope	Emission Type	Emission Sub-Type	CO_{2e} Emissions (tons/year)
Scope 1	Combustion	Stationary equipment	161
Scope 2	Off-site electricity	Grid-based	523
Scope 3	Off-site waste management[24]	Area	294
Total			**978**

Table 11: Construction Emissions

Scope[25]	Emission Type	Emission Sub-Type	CO_{2e} Emissions (tons)
Scope 1	Combustion (Arena and Microgrid)	Mobile equipment	1,328

[21] Source: https://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator
[22] Source: https://practicegreenhealth.org/sites/default/files/2019-06/PracticeGreenhealth_GHG_Toolkit_0.pdf
[23] Source: https://www.epa.gov/sites/default/files/2015-07/documents/ice_rinks_and_the_phaseout_of_hcfc-22.pdf
[24] Based on calculations from CalRecycle's website titled "Estimated Solid Waste Generation Rates," available at https://www2.calrecycle.ca.gov/wastecharacterization/general/rates.
[25] Emissions are categorized as either direct or indirect. Scope 1 emissions are direct emissions that are released directly from properties owned or under the control of the project proposer. This includes, for example, the use of mobile equipment during construction. Scope 2 and 3 emissions are indirect emissions. Scope 2 emissions are associated with the offsite generation of purchased electricity and/or steam. Scope 3 emissions are from the offsite provision of waste management services, including land disposal (landfilling), recycling, and solid waste composting.

Scope[25]	Emission Type	Emission Sub-Type	CO_{2e} Emissions (tons)
Total			**1,328**

Table 12: Proposed Operational Emissions

Scope	Emission Type	Emission Sub-Type	CO_{2e} Emissions (tons/year)
Scope 1	Combustion (Arena and Microgrid)	Stationary equipment	929
Scope 2	Off-site electricity	Grid-based	1,586
Scope 3	Off-site waste management	Area	570
Scope 1, 2, 3	Schoenecker Facility	Area, Grid-based, Stationary equipment	1,323
Total			**4,408**

b. GHG Assessment

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

The following design strategies and other sustainability measures are being considered for the proposed development to reduce emissions:

- Use energy efficient lighting.
- Occupancy/vacancy and daylight sensor controls on lighting.
- Energy efficient building envelope, including continuous insulation for all roof and wall surfaces and high-performance aluminum glazing systems.
- The Arena will be designed to meet LEED Silver rating.
- The Schoenecker Center has been certified with a LEED Gold rating.
- Install low-flow indoor plumbing fixtures.
- Use high-efficiency boilers for domestic hot water.
- Lower carbon structure and materials selection through incorporation of products with recycled content and/or sustainable manufacturing methods. UST is targeting a 20% GWP reduction from concrete alone and total building reductions of 10% or greater in GWP, eutrophication, acidification, and ozone depletion potential.
- Use low global warming potential refrigerants for the building cooling system.

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

The proposed mitigation listed in Item 18.b.i includes best management practices for new construction and reducing 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 efficiency, and supplementing other renewable energy standards in Minnesota. The MPCA's biennial GHG emissions reduction act report from 2023[26] identifies strategies for reducing emissions in the three economic sectors with the highest emissions – transportation, electricity generation, and agriculture, forestry, and land use.

The expected lifespan of the project is 50 years, which equates to an estimated 154,250 CO_2e metric tons over the lifetime of the building (including both construction and operations phases). The proposer is committed to 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 (State of Minnesota Statutes Chapter 326.89) and City of Saint Paul building code (Saint Paul Legislative Code Chapter 326).

The University of St. Thomas has had a 53 percent reduction in carbon emissions since 2008, and 20 percent of building square footage on campus are LEED-certified. Additionally, the University has committed to a goal of carbon neutrality by 2035.

In 2007, the Minnesota Legislature passed the Next Generation Energy Act (Minn. Stat. § 216H) into law, which requires the tracking of certain greenhouse gas (GHG) emissions. The statute also includes statewide GHG emission reduction goals, from a 2005 baseline. It is important that environmental documents required by the Minnesota Environmental Policy Act (MEPA) include usable information about the potential effects of a proposed project on GHG emissions and climate change. Estimation of GHG emissions is a useful way to measure the potential climate impacts of a proposed project. It also helps track progress in meeting state and local GHG reduction goals and supports efforts to reduce emissions, mitigate, and adapt to the impacts of climate change.[27]

Per the EQB's guidance, vehicle GHG emissions are not reviewed or analyzed for an EAW, outside of understanding the potential carbon footprint of any fleet vehicles owned by the project proposer or during construction, and therefore was not originally included in the 2023 EAW. In order to address vehicle GHG emissions for the anticipated project, as noted in the COA Opinion, an evaluation using the University of New Hampshire methodology[28] was utilized for the 2024 EAW Update to understand the potential metric tons of carbon emissions for the anticipated vehicles coming to the site for events held within the Arena. The Schoenecker Center, Microgrid Project, and SPS Parking Lot projects were not included in the

[26] Available at https://www.pca.state.mn.us/air-water-land-climate/climate-change-initiatives
[27] Revised Environmental Assessment Worksheet (EAW) Guidance (state.mn.us)
[28] Carbon & Nitrogen Accounting | Sustainability (unh.edu)

vehicle GHG emissions analysis as those projects are all to address space deficits for existing programs/functions within the UST and SPS properties, therefore not increasing the number of vehicles coming to and from the properties. It should be noted that the GHG vehicle emissions analysis is for reporting purposes and there are no city, state, or federal regulations for vehicle emissions for a private development.

The anticipated number of vehicles and vehicle miles traveled for the redevelopment were based on the trip generation and modes of transportation described in Section 20 below. As discussed in the 2024 EAW Update Transportation Study Addendum, the addition of the Schoenecker Center and Microgrid Projects to campus do not correlate to additional students, faculty, or vehicle trips (see the 2024 EAW Update Transportation Study Addendum for a detailed explanation). The SPS Parking Lot project is not adding vehicle trips either, as the users of the new parking lot were previously parking on UST's campus and the parking lot project will simply shift the location where those vehicles are parking. Therefore, vehicle emissions were only analyzed for the Arena project. The number of vehicles analyzed was based on the event parking demand analysis table shown in Section 20 (Table 13) and the average round trip miles for each vehicle was analyzed based on UST's past season ticket holder zip code data and extrapolated for each attendance metric. The estimated metric tons of eCO_2 is 341.85 metric tons per year. A spreadsheet of analysis is included in Appendix C.

Vehicular traffic for visiting teams and fans, including charter buses and air travel, currently travel to and from the campus or other areas of the Twin Cities Metro area for basketball and hockey games; therefore, they were not analyzed as there would not be a resultant increase in vehicle emissions from the present day condition. It should also be noted that many of the event attendees currently travel to and from the Campus or the ice arena at St. Thomas Academy. The attendees already traveling to watch events could be subtracted from the quantity above in order to truly identify a net increase in vehicle emissions from present day conditions, but for a conservative estimate, these existing trips were accounted for in the analysis.

With the implementation of a smart parking system, which the University anticipates implementing prior to the Arena opening, higher concentrations of vehicle emissions from idling vehicles are not anticipated as the vehicles traveling to and from South Campus for the Arena project, Schoenecker Center, and Microgrid projects will not be stationary, and these vehicles will be traveling through the area and know where they need to park. Passenger vehicles also continue to become more efficient with less emissions.

Overall, GHG emissions from vehicles associated with the three projects are not anticipated to be significant.

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.

Existing Noise

The project site is located at institutional campuses (University of St. Thomas and St. Paul Seminary campuses) in an urban area, and existing noise at the site is largely from the surrounding roadways. Nearby sensitive receptors include residences approximately 50 feet east, 300 feet south, and 200 feet north of the project site.

Construction Noise

Typical construction noise will be temporarily generated by construction activities. The Saint Paul Code of Ordinances regulates both the hours of operation for construction equipment and allowable noise levels. Construction of the project will adhere to requirements identified in Saint Paul Code of Ordinance Chapter 293 Section 07, which limits construction noise in residentially zoned districts to 65 decibels A (dBA) between the hours of 7:00 am and 10:00 pm, and 55 dBA between the hours of 10:00 pm and 7:00 am.

Operational Noise

The City of Saint Paul and Minnesota Pollution Control Agency regulate noise. The proposed projects will potentially contribute to the existing campus noise. Further noise evaluation will be completed as design progresses and best practices to reduce noise spill will be considered. For the Arena, this includes placement of speakers and other sound systems within the building and the design of the building wall systems. Rooftop equipment placed adjacent to masonry screen walls wherever possible to use the building mass to absorb air vibration around them. Equipment sized to avoid exceeding its operational limit, thus allowing the equipment to be quieter. For the Microgrid Project, this includes the building wall systems and screen walls around exterior mechanical equipment. The facilities will be required to comply with local and state noise regulations. If the facilities exceed noise regulations, the project proposer will work with the city to identify potential mitigation options. As with any other entity, it is also possible for the project proposer to seek noise-level variances for special events, which would be reviewed by the Saint Paul City Council through existing procedures.

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.

In June 2023, SRF Consulting Group, Inc. (SRF) prepared a Transportation Study for the project site (*2023 EAW Transportation Analysis*; see Appendix D of the 2023 EAW, which is included in Appendix E of this EAW Update). An Addendum (*2024 EAW Update Transportation Analysis Addendum*) to the 2023 EAW Transportation Analysis is included in Appendix D of this 2024 EAW Update to update and supplement the 2023 EAW Transportation Analysis. The combination of the 2023 EAW Transportation Analysis and the

2024 EAW Update Transportation Analysis Addendum are herein referred to as the Traffic Analysis.

Parking

Two surface parking lots (Lots M and P1) were either fully or partially removed during the Schoenecker Center project construction, resulting in a loss of approximately 129 parking spaces. Eleven parking spaces were reconstructed as a part of the Schoenecker Center project, resulting in a net loss of 118 parking spaces. Several surface parking lots (Lots N, O, P1, V, X, and Y) were either fully or partially removed during the Arena project construction, resulting in a loss of approximately 307 parking spaces. Lot O is expected to be reconstructed during the Arena project implementation to provide 46 surface parking spaces and Lot Y is expected to be reconstructed to provide 14 surface parking spaces, resulting in a total net loss of 247 surface parking spaces. Between the Arena and Schoenecker Center projects, a total of 365 parking spaces were removed from the UST South Campus. The Microgrid Project will not displace or add any parking spaces. If the SPS Parking Lot project is completed, it is anticipated to add approximately 73 surface parking spaces to the SPS property.

The proposed developments require the creation of a Transportation Demand Management Plan under Saint Paul Zoning Code Sec. 63.122. The TDM process was followed for the Schoenecker Center and Arena projects and were included in the final site plan approvals for each project.

Traffic Generation

An existing pre-event and post-event peak hour trip generation was estimated for a maximum capacity event at the project site, which would be an event held in the Arena, based on assumptions that were discussed and reviewed by UST and City of St. Paul throughout the study process. Total pre-event peak hour generates approximately 1,498 trips and post-event peak generates approximately 1,581 trips.

Pedestrians and Bicycles

The project site is currently served with sidewalks and all signalized intersections surrounding the University of St. Thomas campus are programmed with leading pedestrian interval timing, which helps improve pedestrian safety. A sidewalk gap existed on the north side of Goodrich Avenue adjacent to the University of St. Thomas property at the time of the 2023 EAW. This sidewalk gap has since been filled between Cretin Avenue and the UST Binz access drive, but a gap still exists between the UST Binz access drive and Mississippi River Boulevard. Sidewalk does not exist along the east side of Mississippi River Boulevard adjacent to the west edges of the UST and SPS properties.

An off-street bicycle trail is located along Mississippi River Boulevard, west of the project site. On-street bicycle lanes are located along Summit Avenue and Cleveland Avenue to the north and east of the project site.

Transit Service

Several Metro Transit stops are located on or near the University of St. Thomas campus. Metro Transit Bus Routes 21, 63, and 87 serve the vicinity of the project site.

Route 21 provides service between the Uptown Transit Station and downtown Saint Paul, and Route 63 provides service between western Saint Paul and downtown Saint Paul. Both Routes 21 and 63 operate seven days a week and are part of Metro Transit's High Frequency Network, with approximately 15-minute headways during peak hours on the weekdays and Saturdays. Service during nights and on Sundays provides 15 to 30 minute headways. Route 87 is a local bus route between Saint Paul and Roseville. It operates seven days a week with 30-minute headways during peak hours on the weekdays and 1-hour headways during nights and on the weekends.

Additionally, the University of St. Thomas provides a shuttle bus between the Saint Paul campus and the Minneapolis campus, is free for staff and students, and runs every 20-30 minutes on weekdays from 6:00 am to 5:30 pm. A shuttle bus is run in the evenings starting at 6:00 pm and stops once per hour at each campus. Shuttle service is reduced during the January Term (J-Term) and summer months. There is no shuttle service on weekends and holidays.

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.***

The 2023 EAW Transportation Analysis found that the Arena project was expected to displace approximately 173 vehicles during peak non-event times at the University of St. Thomas. It is important to note that the loss of the parking spaces as a result of the Schoenecker Center construction project was already accounted for in the existing parking counts, as these counts were collected after the parking lots had been removed. Despite this, the other non-resident parking lots and on-street parking (no permits required) were expected to accommodate the displaced vehicles and have a surplus of 86 parking spaces. As part of the 2024 EAW Transportation Analysis Update Addendum, recent parking counts collected by UST were reviewed to assess parking changes on campus. Since on-street parking utilization was not collected for the 2024 EAW Transportation Analysis Update Addendum, the review was focused on the visitor parking facilities, as these are the facilities expected to be used for events held in the Arena. The results indicate a greater parking supply in the visitor facilities than previously expected, during both non-event and event times. Given that the parking permits have remained relatively unchanged, the discrepancy in parking supply is likely due to the reopening of Lot A, which was previously closed for a construction project, and increased telecommuting and online class availability.

An event parking demand analysis was completed that maintains the assumptions, available parking supply, and parking demand estimates from the 2023 EAW Transportation Analysis, while incorporating two key updates: correcting a previously inaccurate recording of available adjacent on-street parking supply and accounting for the reduced student seating in the current Arena design from 22 to 20 percent. The tables below include detailed breakdowns for both men's and women's sporting events as well as by attendance intervals,

reflecting current attendance and frequency projections. Key findings indicate that approximately 54 of the 66 anticipated sporting events are expected to have a parking surplus, without any mitigation measures. Of the 12 games where a parking deficit is expected, 9 are expected to only have a deficit of 35 spaces. Those 9 events would no longer be expected to have a parking deficit if the SPS Parking Lot project is constructed, as the seminary users that are parking within University parking areas would be able to park within the SPS Parking Lot and free up University parking spaces for event parking. Events with parking deficits of over 100 vehicles are only expected to occur 1-3 times per year, if at all. Overall, without further mitigation, campus and nearby on-street parking adjacent to campus can generally accommodate events up to 2,600 attendees on weeknights and 3,900 attendees on weekends (Friday through Sunday). See Tables 4 and 5 from the 2024 EAW Transportation Analysis Update Addendum included in Appendix D, copied below as Tables 13 and 14, for further information on assumptions used to derive expected parking demand.

Table 13: Event Parking Demand Analysis by Event Type (No Mitigation)

	Estimated Attendance	Estimated Parking Surplus/Deficit (1) (2) (3)		
		Thursday/Weekday Night	Friday Night	Saturday Night
Average Attendance				
M Hockey	3,600	-- (4)	70	209
W Hockey	550	533	873	1,012
M Basketball (5)	1,800	204	544	683
W Basketball (5)	1,175	369	709	848
Maximum Attendance				
M Hockey	4,000	-- (4)	-35	104
M Basketball	5,500	-770	-430	-291
W Basketball	3,000	-112	228	367

Table 14: Event Parking Demand Analysis by Attendance (No Mitigation)[(1)(2)(3)]

Attendance		Thursday/Weekday Night		Friday Night		Saturday Night	
Range	For Parking Analysis	Estimated Number of Games [(6)]	Parking Surplus/ Deficit	Estimated Number of Games [(6)]	Parking Surplus/ Deficit	Estimated Number of Games [(6)]	Parking Surplus/ Deficit
5,500 - 4,500	5,500	1	-770	0	-430	1	-291
	5,000		-639		-299		-160
	4,500		-507		-167		-28
4,499 - 3,500	4,000	0	-375	9	-35	10	104
	3,500		-244		96		235
3,499 - 2,500	3,000	1	-112	0	228	1	367
	2,500		20		360		499
2,499 - 1,000	2,000	8	151	0	491	9	630
	1,500		283		623		762
	1,000		415		755		894
Less than 1,000		5	>415	9	>755	12	>894
Attendance Threshold/ # Games with Deficit		**2**	**2,575**	**9**	**3,870**	**1**	**4,395**

(1) UST players and coaches and event/vendor staff are expected to park in reconstructed Lot O or other commuter and faculty/staff lots within campus, and not in parking facilities used for event patrons.

(2) As mentioned previously, the current designs indicate a capacity for men's basketball of 5,324. This reduction in capacity is expected to reduce parking demand by approximately 45-60 vehicles, which is not reflected in these numbers.

(3) If the SPS Parking Lot is completed, available parking supply is expected to increase by approximately 40 to 70 spaces, depending on the night, which is not reflected in these numbers.

(4) Men's Hockey games are expected to occur on Friday and Saturday nights only.

(5) Note average attendance men's and women's basketball games are already occurring on campus.

(6) Based on expected Hockey and Basketball attendance projections and schedules published within the *2023 EAW Transportation Analysis* and this addendum.

An intersection capacity analysis was conducted to determine how traffic is expected to operate during pre-event peak hour and post-event peak hour times. Capacity analysis results identify a level of service (LOS) which indicates how well an intersection is operating. Intersections are graded from LOS A (indicates best traffic operation) through LOS F (indicates an intersection where demand exceeds capacity) and are based on average delay per vehicle. Overall intersection LOS A through LOS D is generally considered acceptable in the Twin Cities Metropolitan Area, although longer delays for short periods of time and/or for specific movements are often considered acceptable as well.

Based on the intersection capacity analysis, multiple areas were identified for further consideration. Mitigation strategies for traffic congestion and event management are further discussed in Section 20.c. below. Existing conditions of intersection capacity, 2025 maximum capacity pre-event and post-event intersection capacity, and 2025 maximum capacity pre- and post-event capacity with mitigation strategies are provided in Table 15 below.

Table 15: LOS Summary

Intersection	Existing Conditions				2025 Build Maximum Capacity Event Conditions			
	AM Peak Hour		PM Peak Hour		Pre-Event		Post-Event	
	LOS	Delay s/veh (typ)	LOS	Delay s/veh (typ)	No Mitigation	Mitigation	No Mitigation	Mitigation
Cretin Ave S / Marshall Ave	C	26	D	53	C	D	C	C
Cretin Ave S / Selby Ave	A/A	10	A/B	11	A/E	B/F	A/C	A/C
Cretin Ave S / Mississippi River Blvd	A/A	5	A/A	6	A/D	A/D	A/A	A/D
Cretin Ave S / Summit Ave	A	8	B	14	D	D	D	C
Cretin Ave S / Grand Ave	B	10	B	14	E	D	F	D
Cretin Ave S / Goodrich Ave	A/A	9	A/C	16	B/F	A/F	A/C	A/C
Cleveland Ave S / Selby Ave	A/A	6	A/B	12	A/A	A/A	A/A	A/A
Cleveland Ave S / Summit Ave	B	13	B	19	B	B	B	B
Cleveland Ave S / Grand Ave	B	15	B	15	B	B	B	B
Mississippi River Blvd / Summit Ave	A/A	4	A/A	5	A/A	A/A	A/A	A/A
Mississippi River Blvd / Goodrich Ave	A	4	A	4	A	A	A	A

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

UST understands that a certificate of occupancy for the Arena will not be issued until such time as there is substantial conformance with implementation of or documented plans for the following mitigation measures have been submitted and accepted.

Infrastructure

UST submitted a site plan application for the Arena on September 6, 2023, which received final approval on April 4, 2024. As part of this process, SRF prepared the "APF Access Addendum" to address changes in pedestrian access assumptions since the 2023 EAW Transportation Analysis and provided additional recommendations. A summary of the infrastructure requirements as part of the site plan approval process, some of which may be considered mitigation for the project, are shown below:

- Construct a new traffic signal at the Cretin Avenue/Grand Avenue intersection. As part of construction, the signal cabinet will be relocated, and the pedestrian facilities will be widened on the northwest quadrant and along the north side of the private portion of Grand Avenue to accommodate event pedestrian demand.
- Construct curb extensions at the Cretin Avenue/Grand Avenue intersection to improve pedestrian safety.
- Construct a southeast Cretin Avenue access into south campus, with gate arm protection, for service vehicles, emergency vehicles, and potential shuttle/bus services.

Event Management Plan

An event management plan continues to be a recommended mitigation measure through the 2024 EAW Transportation Analysis Addendum. An event management plan (EMP) is a comprehensive plan designed to minimize transportation impacts and enhance safety and efficiency during events, incorporating input from stakeholders to finalize and adjust mitigation strategies. It is continuously updated based on real-world experiences and feedback, with UST planning to collaborate with city partners and actively engage neighborhood associations to ensure effective community communication and build consensus. The analysis completed for an EAW typically analyzes the maximum event to consider the worst-case conditions, but an EMP looks at multiple levels of events in order to fit mitigation measures to each scale of event.

Traffic Management/Safety

Several event management recommendations, which are summarized below, are proposed to minimize pedestrian/vehicular conflicts, enhance pedestrian safety, and reduce event-related congestion. These strategies are expected to be updated within the event management plan to align specific mitigation measures with corresponding attendance levels and will be refined based on actual event operations and experiences.

- Employ Traffic Control Officers at Cretin Avenue/Grand Avenue and/or Cretin Avenue/Summit Avenue
- Implement event-specific signal timing plans at strategies signalized intersections
- Assign parking attendants at designated event parking facilities
- Designate pedestrian routes and provide wayfinding campus-wide
- Implement sidewalk closures and provide pedestrian wayfinding along Grand Avenue (near the arena and APF)
- Implement an alternative access solution to the Arena from APF (i.e. skyway or vertical circulation element) if event operations/pedestrian conflicts are determined to be problematic by the city

Parking

Despite an expected parking surplus for most Arena events without mitigation, parking mitigation strategies are recommended for events over the attendance thresholds identified within the Traffic Analysis (i.e., 2,575 on a weeknight, 3,870 on a Friday, 4,395 on a Saturday).

These strategies are expected to reduce parking demand on campus, improve mobility, and minimize community impact. Each recommendation is expected to be tied to a specific attendance level and refined as part of the event management plan and as actual events occur at the Arena.

- **Pre-Paid Event Tickets & Parking Assignment:** Continue to use (UST already uses for athletic events) and further encourage online ticket purchases with options for designated parking passes or alternative transportation information. This minimizes the need to circle campus lots and serves as a platform to inform users about potential alternative transportation options and incentives such as free transit, discounted rideshare, and alternative shuttle services, which are discussed below. If event patrons are aware that all lots are full in advance, they may be more inclined to utilize transit/rideshare or carpool rather than look for parking and/or walking further distances.
- **Permit Modifications & Parking Ramp Restrictions:** Implement time-of-day restrictions and/or "no park" days at visitor parking facilities to ensure event patrons have reserved spaces in their designated ramps. Additionally, the University plans to reduce resident parking permits in Morrison Hall, reallocating those spaces so they can be cleared during events and weekends. The combination of these strategies is expected to increase parking availability by 150 to 405 spaces, depending on the night. The number of parking facilities cleared will be dependent on the expected attendance at each event and will be further defined as part of the event management plan. This strategy has been used successfully by UST in the past for athletic and other campus events. To avoid shifting students/staff parking to the public streets, the strategy should be paired with early communications and clear notification prior to enforcing the event parking restrictions in UST facilities. Online classes/telecommuting should also be promoted simultaneously to ensure that the strategy is effective. One of the visitor ramps is expected to remain available for commuting students/staff under all event scenarios, ensuring at least one parking option is available while event activities are underway.
- **Free Transit Passes:** Work with Metro Transit to offer free transit pass options with the purchase of event tickets, which is estimated to reduce demand by 10 to 30 vehicles. UST has had preliminary discussions with Metro Transit which has suggested that distributing free pass options through the online ticketing system appears to be feasible, although further evaluation of the details is needed through the event management plan.
- **Discounted Rideshare:** Partner with a rideshare company to provide discounted rates for ticket holders, which is estimated to reduce demand by 25 to 50 vehicles. Preliminary discussions with two rideshare companies have indicated that discounted rates can be easily implemented, although further evaluation of the details is needed through the event management plan.
- **Restaurant/Bar Shuttle Service:** Collaborate with local establishments to offer shuttle services, which is estimated to reduce demand by 25 to 75 vehicles. UST has had preliminary discussions with potential locations who have an interest in

establishing a partnership, although further evaluation of the details is needed through the event management plan.

- **Avoid Other On-Campus Events:** Avoid scheduling other on campus events during larger arena events to prevent increased parking demand/impacts. This should be done for sporting events with attendances of 2,100 or greater.

With these strategies, parking supply/demand is expected to improve as follows, with the improvements summarized in Table 16 as well:

- **Thursday/Weeknight:** 465 to 560 additional parking spaces/vehicle reduction
- **Friday Night:** 240 to 335 additional parking spaces/vehicle reduction
- **Saturday Night:** 210 to 305 additional parking spaces/vehicles reduction

Table 16: Event Parking Demand Analysis for Maximum Events (With Mitigation)

	Estimated Frequency	Deficit/Surplus (2)		
		No Mitigation	With Mitigation	
			Low	High
Thursday/Weekday Night Event				
Max Men's Basketball (5,500) (1)	1	-770	-305	-210
Max Women's Basketball (3,000)	0	-112	353	448
Friday Night Event				
Max Men's Hockey (4,000)	9	-35	205	300
Saturday Night Event				
Max Men's Basketball (5,500) (1)	1	-291	-81	14
Max Men's Hockey (4,000)	9	104	314	409
Max Women's Basketball (3,000)	1	367	577	672

(1) As mentioned previously, the current designs indicate a capacity for men's basketball of 5,324. This reduction in capacity is expected to reduce parking demand by approximately 45-60 vehicles, which is not reflected in these numbers.
(2) If the SPS Parking Lot is completed, available parking supply is expected to increase by approximately 40 to 70 spaces, depending on the night, which is not reflected in these numbers.

Even with the mitigation measures, maximum basketball events are expected to have a parking deficit of 200 to 300 vehicles on a weeknight. Note these games are expected to only occur once or twice a year, if at all. For attendances over 4,350 on a weeknight, 4,775 on a Friday night, or 5,200 on a weekend (when deficits are expected with mitigation), it is recommended that UST provides off-site parking and shuttle services to address the parking deficit. UST has had preliminary discussions with Allianz Field to utilize their parking lot for shuttle services, which has sufficient available parking to accommodate the deficits, although further evaluation of the details is needed through the event management plan.

Table 17: Attendance Thresholds (With Mitigation)

Day/Night	Attendance Thresholds		
	No Mitigation	With Mitigation	
		Low	High

Thursday/Weeknight Event	2,575	4,350	4,700
Friday Night Event	3,870	4,775	5,125
Saturday Night Event	4,395	5,200	5,550

= To be conservative, use the low effectiveness threshold for determining when off-site parking/shuttle services should be provided.

21. Cumulative Potential Effects

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 potential effects are defined as "the effect on the environment that results from the incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid, regardless of what person undertakes the other projects or what jurisdictions have authority over the projects."[29] The geographic areas considered for cumulative potential effects are those near the project site (within approximately one-half mile), and the timeframe considered includes projects that would be constructed in the past and 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.

According to the City of Saint Paul Downtown Projects Map interactive viewer,[30] there are three reasonably foreseeable projects within approximately one-half mile of the project site in addition to the projects already discussed throughout the document above. A sidewalk project along Cleveland Avenue from Summit Avenue to Marshall Avenue is scheduled for 2024. A traffic signal project is scheduled at the intersection of Cretin Avenue and St. Clair Avenue for 2024. Lastly, the B Line bus rapid transit alignment is planned along Marshall Avenue.

The St. Paul Seminary intends to construct a surface parking lot along Mississippi River Boulevard to the west of the University of St. Thomas South Campus in 2024 or 2025. The SPS Parking Lot is addressed throughout this document.

St. Thomas may be required to close the service drive into the South Campus parcel from Goodrich Avenue, which is located south of the Arena project site and primarily used for service deliveries and emergency access to Binz Refectory, Grace Hall and Brady Education Center. In May 2024, a complaint was filed with the City alleging that St. Thomas violated its conditional use permit (CUP) by not closing the service drive from Goodrich Avenue when it remodeled the Binz Refectory in 2022 and 2023. City staff issued an enforcement notice that

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

[30] Available at https://experience.arcgis.com/experience/99bea6f90c4a409a8a64fff81dee30e7/page/Overview/?data_id=dataSource_5-17cc347089c-layer-15%3A238

the CUP required St. Thomas to close the drive. This matter will be scheduled for a hearing before the Planning Commission to determine next steps, including whether the drive should be closed or the CUP should be modified; enforcement is stayed at this time. If required, closing the Goodrich service drive will have minimal cumulative impacts. It will have no change in access, parking, or operations for the Arena, Schoenecker Center, Microgrid Project, or SPS Parking Lot projects. Service and emergency vehicle access to Binz Refectory, Grace Hall, and Brady Education Center would occur through the Arena site from the southeast Cretin Ave access point with modifications needed between the southwest turnaround area and the existing service area south of Binz. However, such use is minimal with an estimate of 0-2 outside deliveries per week and occasional use by St. Thomas as part of general campus operation activities, such as facilities maintenance work. If the service drive is required to be closed, it is not expected to have any other environmental impacts.

The University of St. Thomas does not have any board approved plans for new building construction at the Saint Paul campus, other than the Owens Science Hall addition for the Microgrid Project already discussed throughout the document. The University of St. Thomas completed construction of the Schoenecker Center in 2024, which is already addressed throughout this document. While future development of the University is indicated by historic and forecasted trends, there is not sufficiently detailed information about any other future building projects to contribute to the understanding of cumulative potential effects.

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

The identified reasonably foreseeable future projects may result in impacts to transportation, utilities, or other resources. However, potential impacts of future projects will be addressed as required by regulatory permitting and approval processes, minimizing the potential for cumulative effects.

Cumulative potential effects for the Schoenecker Center, Microgrid project and the Saint Paul Seminary parking lot have been addressed in each section of the EAW as required by EQB guidance. Updated analysis to include the Schoenecker Center, Microgrid project, and the Saint Paul Seminary parking lot is located in Item 6 through Item 16, and Item 18 through Item 20.

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.

All anticipated potentially adverse environmental effects are addressed in the preceding EAW items.

RGU Certification

*The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.*

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages, or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9c and 60, respectively,
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature Jacob Goodman Date Oct 2, 2024

Title Director

Figures

Figure 1: County Map

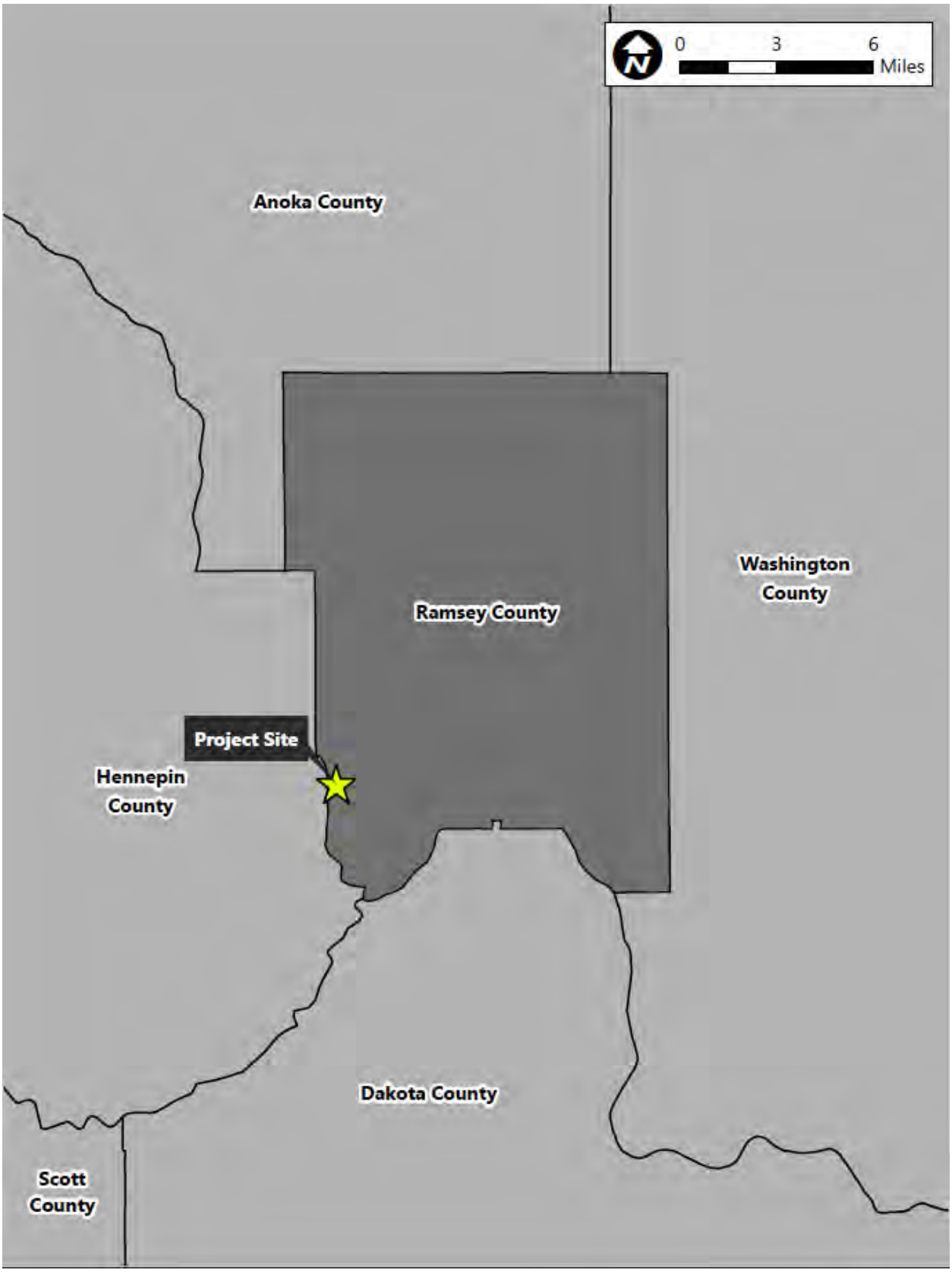

Figure 2: USGS Map

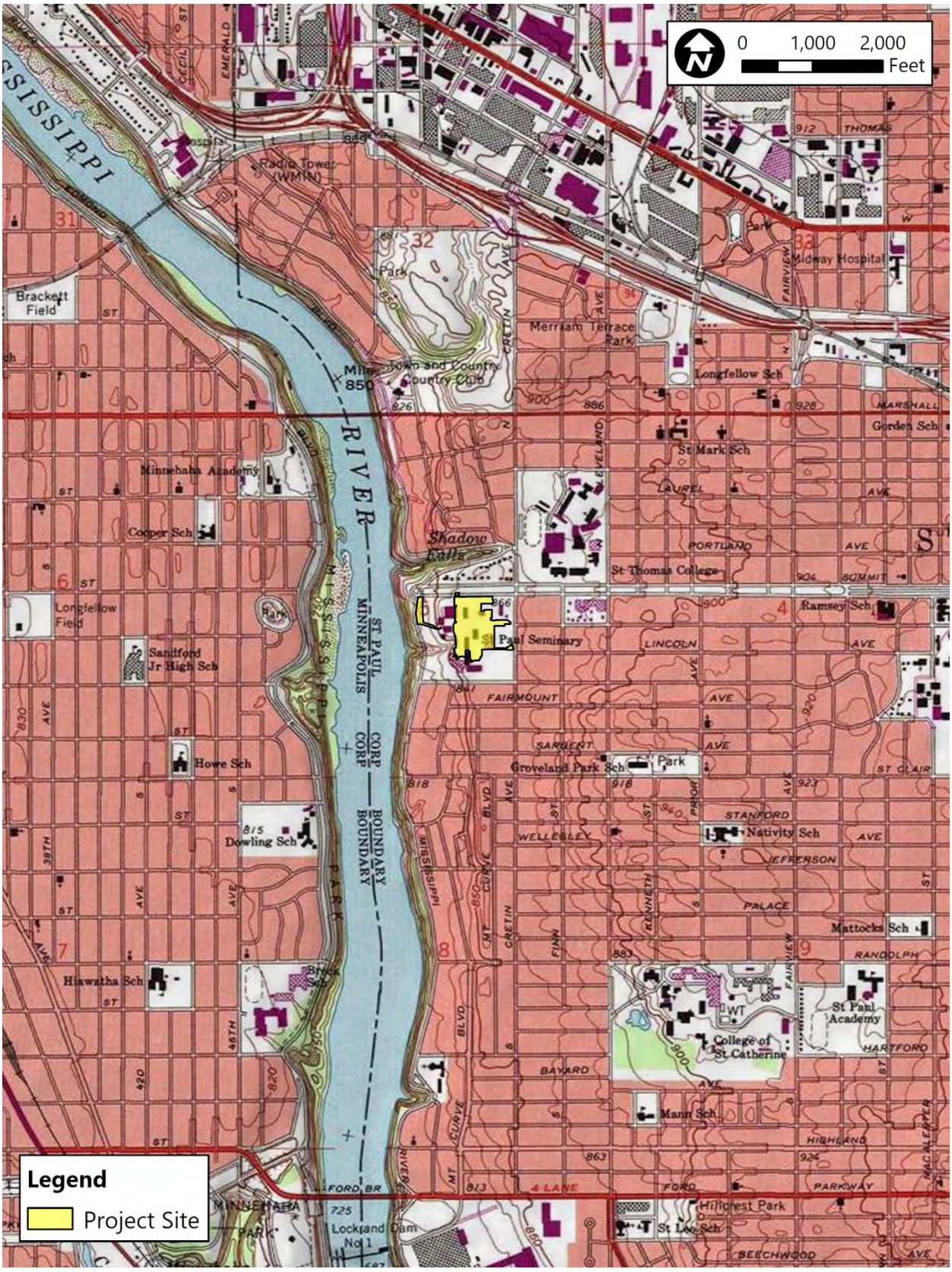

Figure 3: Existing Conditions

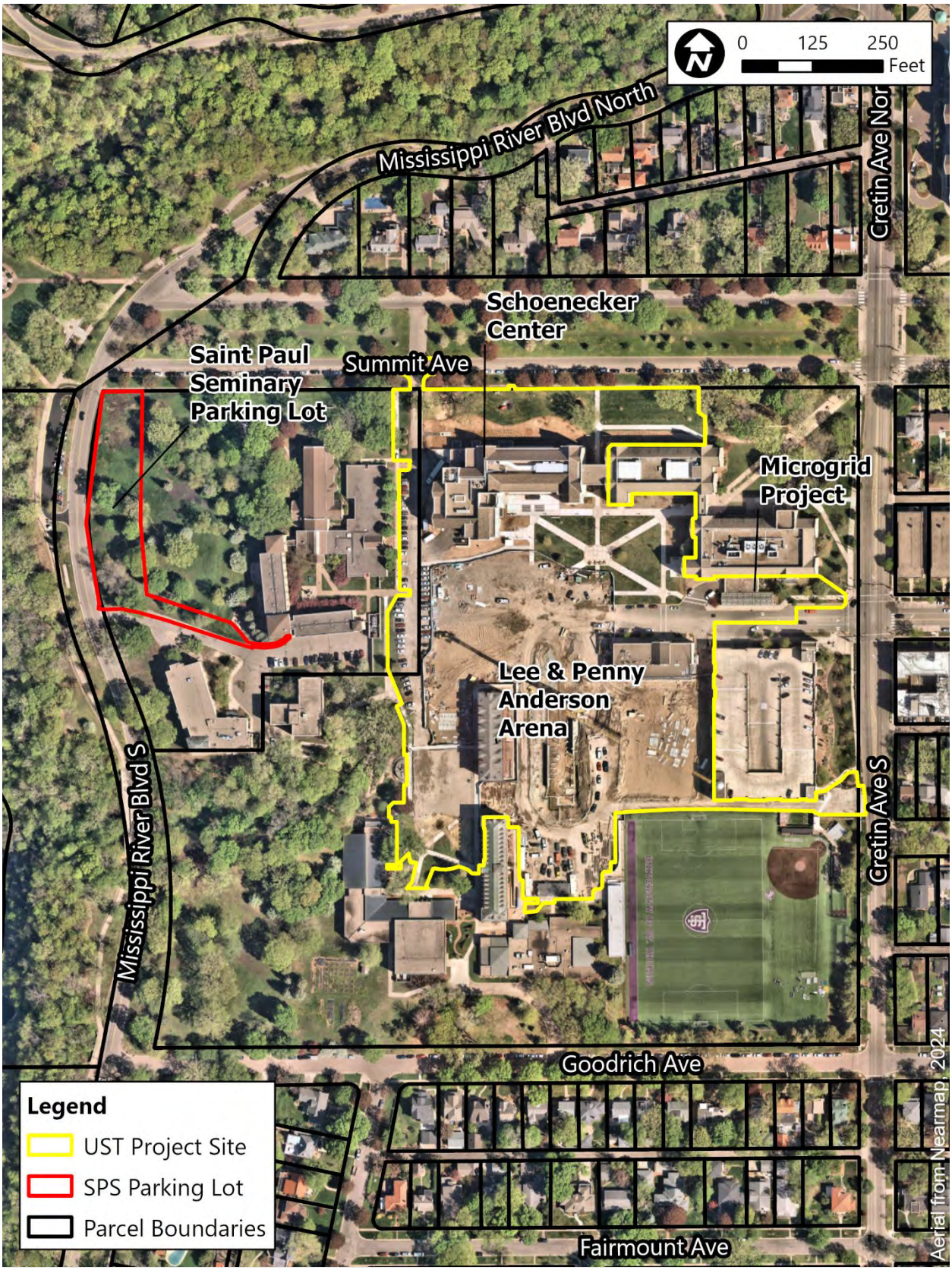

Figure 4: Existing Land Use

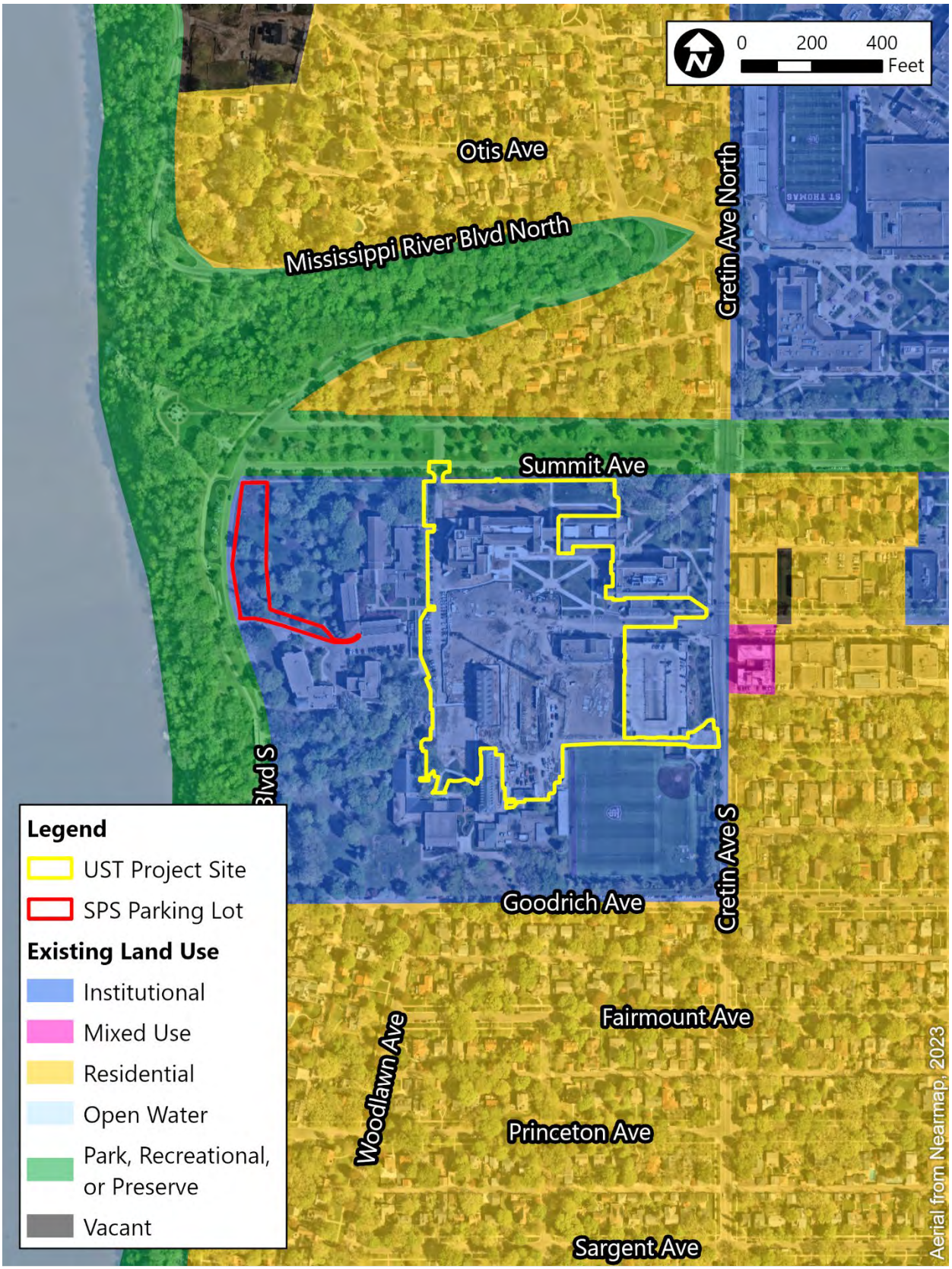

Figure 5: Existing Zoning

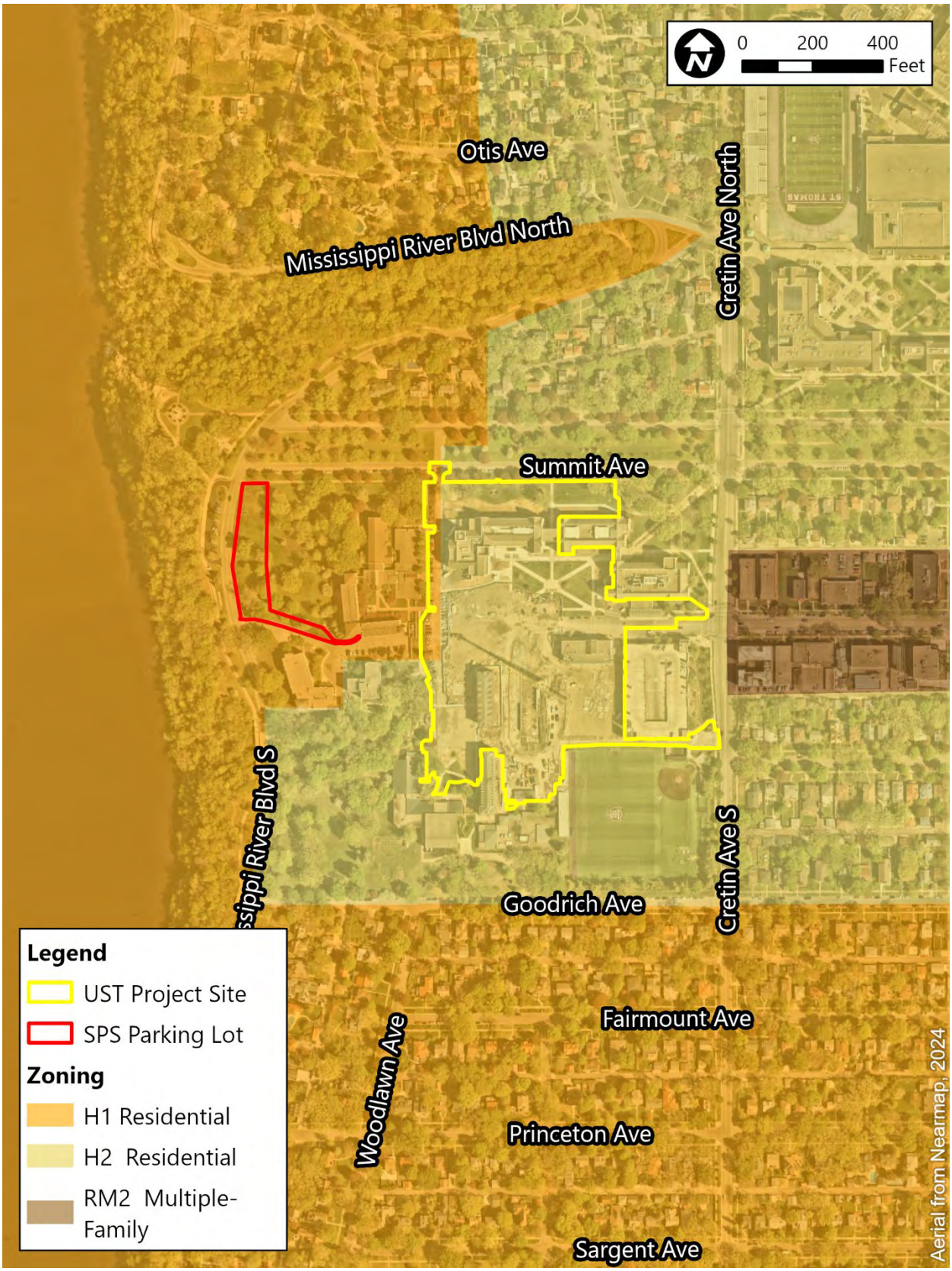

Figure 6: Zoning Overlay Districts

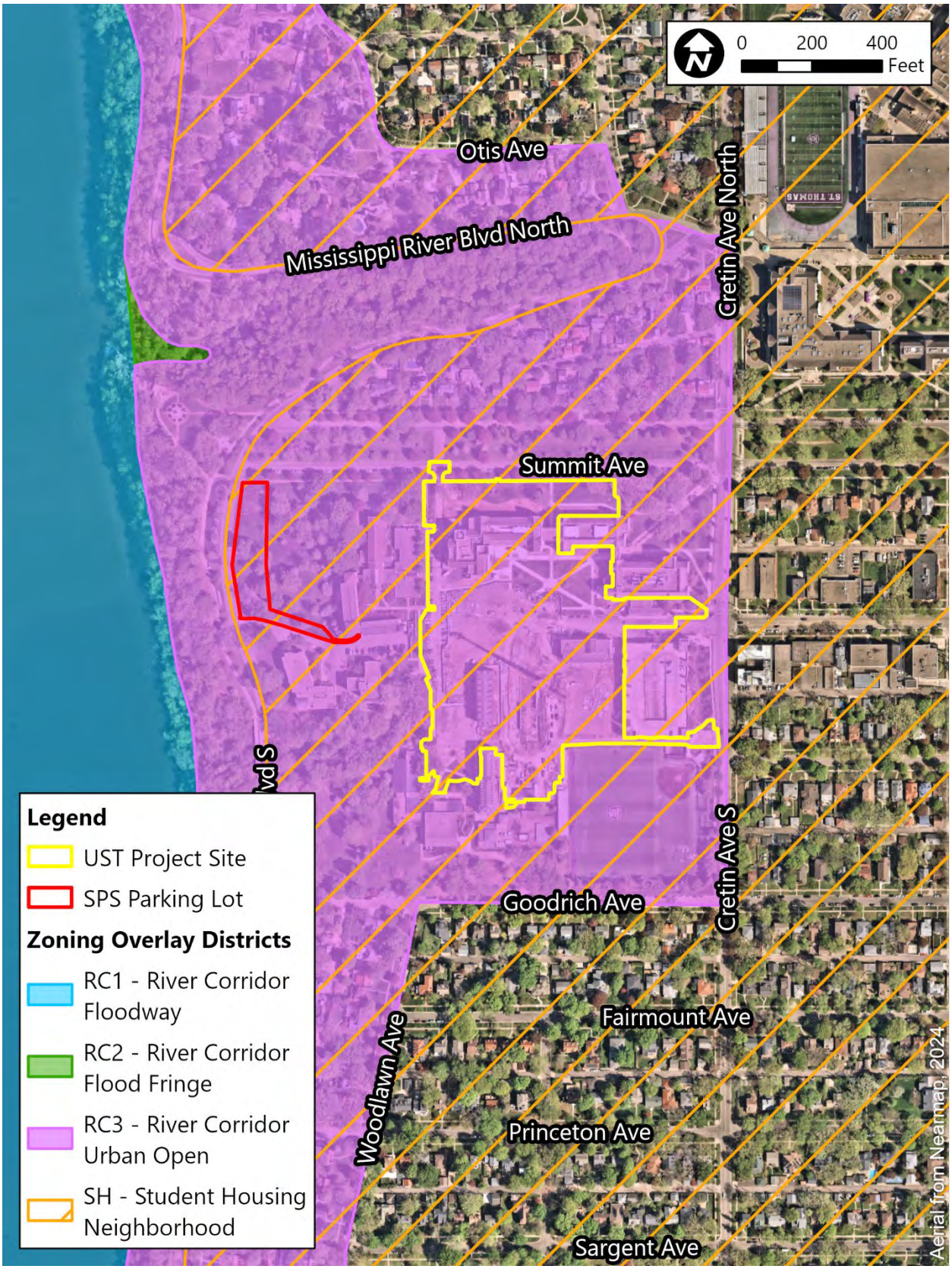

Figure 7: Water Resources

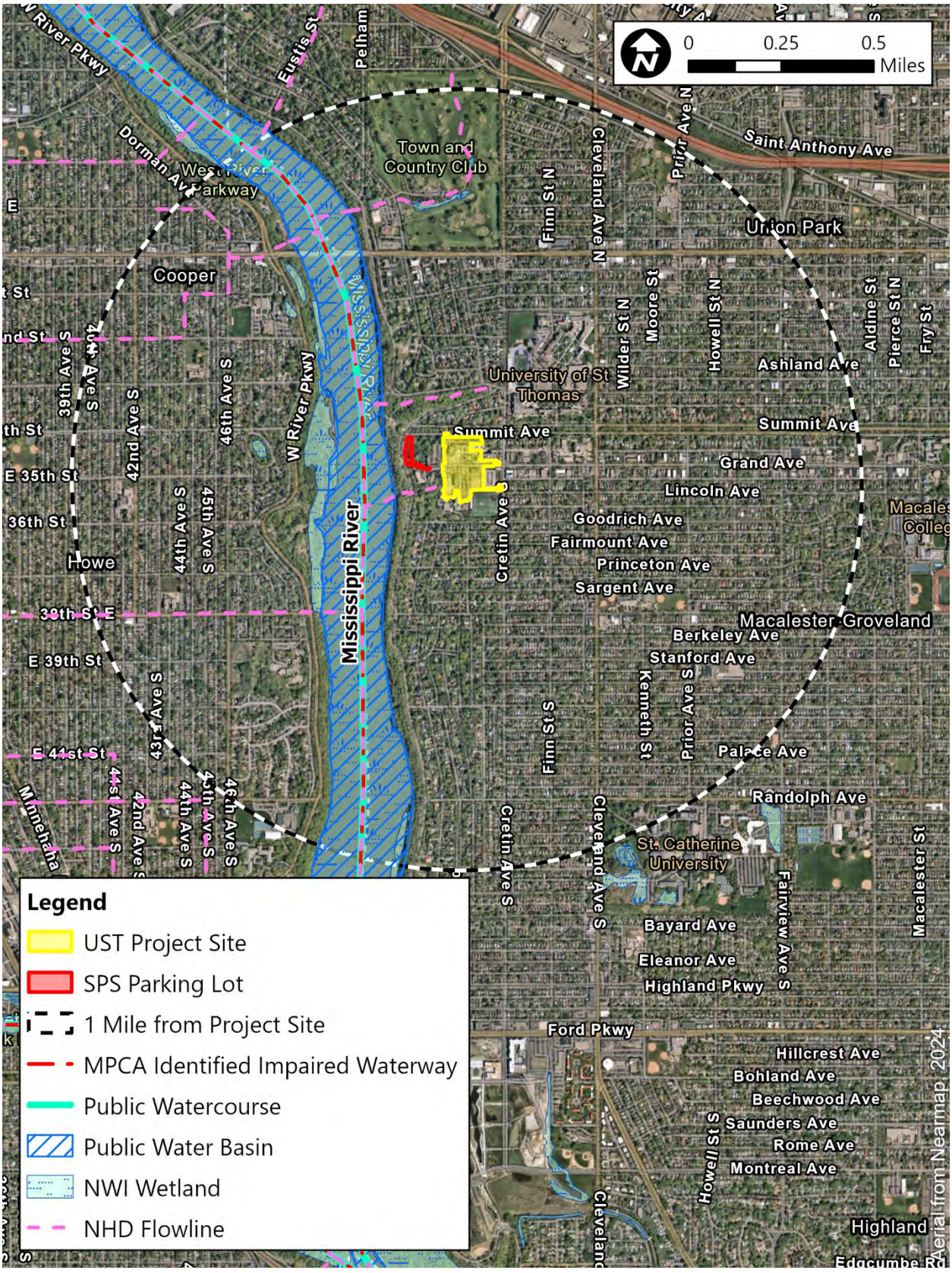

Figure 8: What's In My Neighborhood Sites Within 200 feet of the Project Site

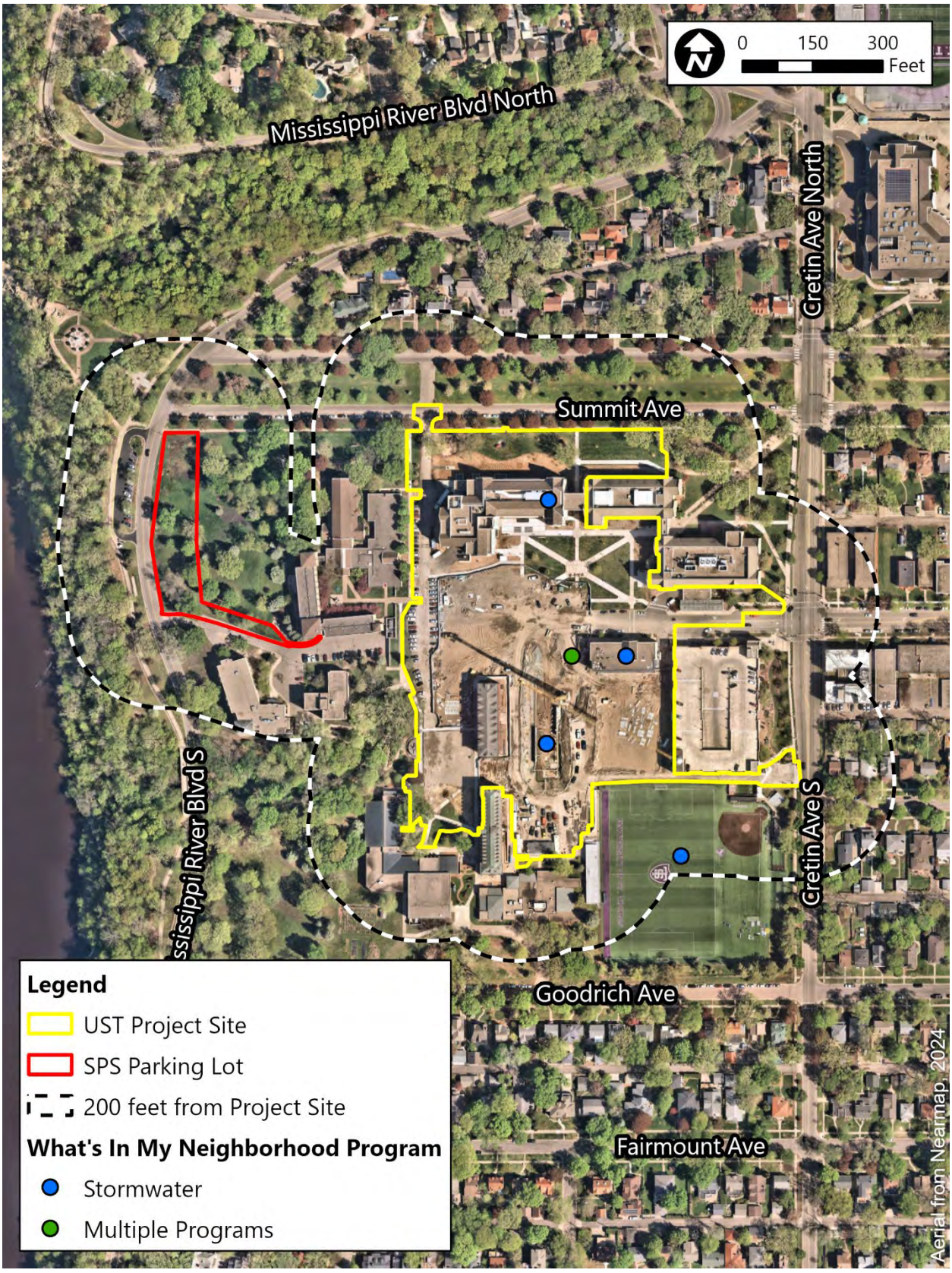

Figure 9: Historic Resources Within 500 feet of the Project Site

Appendix A

September 2024 Site Plans (2020, 2023, 2025)

SUMMIT AVENUE

MISSISSIPPI RIVER BOULEVARD

ST MARYS CHAPEL (SMC)

SCHOOL OF DIVINITY (SOD)

SEMINARY RESIDENCE (SEM)

BYRNE RESIDENCE HALL (BYR)

ARCHBISHOP IRELAND MEMORIAL LIBRARY (IRL)

LOFAS HALL (LOR)

O'SHAUGHNESSY SCIENCE HALL (OSS)

OWENS SCIENCE HALL (OWS)

SERVICE CENTER (SER)

FACILITIES & DESIGN CENTER (FDC)

MCCARTHY GYMNASIUM (MCG)

ANDERSON PARKING FACILITY (APF)

CRETIN HALL (CRE)

BRADY EDUCATION CENTER (BEC)

GRACE HALL (GRA)

BINZ REFECTORY (BIN)

SOUTH ATHLETIC FIELDS (SAF)

CRETIN AVENUE

ALLEY

GRAND AVENUE

LINCOLN AVENUE

N

0 60 120

SCALE IN FEET

RYAN

UST Arena • 2020 Conditions Plan • 08.09.2024

SUMMIT AVENUE

MISSISSIPPI RIVER BOULEVARD

MISSISSIPPI RIVER BOULEVARD

ST MARYS CHAPEL (SMC)

SCHOOL OF DIVINITY (SOD)

SEMINARY RESIDENCE (SEM)

BYRNE RESIDENCE (BYR)

ARCHBISHOP MEDEIROS MEMORIAL LIBRARY (IRL)

SCHOENECKER CENTER (SCC)

O'SHAUGHNESSY SCIENCE HALL (OSS)

OWENS SCIENCE HALL (OWS)

FACILITIES & DESIGN CENTER (FDC)

SERVICE CENTER (SER)

MCCARTHY GYMNASIUM (MCG)

ANDERSON PARKING FACILITY (APF)

CRETIN HALL (CRE)

GRADY EDUCATION CENTER (BEC)

GRACE HALL (GRA)

BINZ REFECTORY (BIN)

SOUTH ATHLETIC FIELDS (SAF)

CRETIN AVENUE

ALLEY

CRETIN AVENUE

GRAND AVENUE

CRETIN AVENUE

LINCOLN AVENUE

N

0 60 120

SCALE IN FEET

RYAN

UST Arena • 2023 Conditions Plan • 08.09.2024

SUMMIT AVENUE

MISSISSIPPI RIVER BOULEVARD

ST MARYS CHAPEL (SMC)

SCHOOL OF DIVINITY (SOD)

SEMINARY RESIDENCE (SEM)

ARCHBISHOP IRELAND MEMORIAL LIBRARY (IRL)

BYRNE RESIDENCE (BYR)

SCHOENECKER CENTER (SCC)

O'SHAUGHNESSY SCIENCE HALL (OSS)

OWENS SCIENCE HALL (OWS)

MICROGRID PROJECT

FACILITIES & DESIGN CENTER (FDC)

LEE & PENNY ANDERSON ARENA

ANDERSON PARKING FACILITY (APF)

BRADY EDUCATION CENTER (BEC)

GRACE HALL (GRA)

BINZ REFECTORY (BIN)

SOUTH ATHLETIC FIELDS (SAF)

CRETIN AVENUE

ALLEY

GRAND AVENUE

LINCOLN AVENUE

N

0 60 120

SCALE IN FEET

RYAN

UST Arena • 2025 Conditions Plan • 08.09.2024

Appendix B

September 2024 Greenhouse Gas (GHG) Analysis

Back to Intro

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

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* (.xls) as this calculator only quantifies one year of emissions at a time.

https://www.epa.gov/climateleadership/target-setting

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 its inventory.

(B) The "Go To Sheet" buttons can be used to navigate to the data entry sheets.

Organizational Information:

Organization Name:	University of St. Thomas
Organization Address:	2115 Summit Ave, St Paul, MN 55105
Inventory Reporting Period:	*Proposed Scenario*
Start:	*Jan-24*
End:	*Dec-24*
Name of Preparer:	Kimley-Horn
Phone Number of Preparer:	763-251-1015
Date Prepared:	Aug-24

Summary of Organization's Emissions:

	Scope 1 Emissions		
Go To Sheet	Stationary Combustion	929	CO_2-e (metric tons)
Go To Sheet	Mobile Sources	1,328	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	1,586	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	1,586	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	3,843	CO_2-e (metric tons)
	Total Scope 1 & Market-Based Scope 2	3,843	CO_2-e (metric tons)
	Reductions		
Go To Sheet	Offsets	0	CO_2-e (metric tons)
	Net Scope 1 and 2 Location-Based Emissions	3,843	CO_2-e (metric tons)
	Net Scope 1 and 2 Market-Based Emissions	3,843	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	Upstream Transportation and Distribution	0	CO_2-e (metric tons)
Go To Sheet	Waste	570	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)

Scope 1 Emissions from Stationary Combustion Sources

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

Guidance

(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 CO_2 emissions are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Stationary Source Fuel Combustion

Source ID	Source Description	Source Area (sq ft)	Fuel Combusted	Quantity Combusted	Units
BLR-012	*East Power Plant*	*12,517*	*Natural Gas*	*10,000*	*MMBtu*
Arena	Natural gas and #2 fuel oil for boiler systen	138,150	Natural Gas	17,200	MMBtu
MicroGrid	Natural gas and #2 fuel oil for boiler systen	10,000	Natural Gas	298	MMBtu

GHG Emissions

Total Organization-Wide Stationary Source Combustion by Fuel Type

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	17,054,581	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

Total Organization-Wide CO_2, CH_4 and N_2O Emissions from Stationary Source Fuel Combustion

Fuel Type	CO_2 (kg)	CH_4 (g)	N_2O (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	928,451.4	17,566.2	1,705.5
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	**928,451.4**	**17,566.2**	**1,705.5**
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	**928,451.4**	**17,566.2**	**1,705.5**

Total CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**929.4**
Total Biomass CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**0.0**

Back to Intro | Back to Summary | Help

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U.S. Environmental Protection Agency

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. **Must select before picking vehicle type.**
- 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 equiment.

(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 CO_2 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 Travelec

Source ID	Source Description	On-Road or Non-Road?	Vehicle Type	Vehicle Year	Fuel Usage	Units	Miles Traveled
Fleet-012	*HQ Fleet*	*OnRoad*	*Passenger Cars - Gasoline*	*2019*	*500*	*gal*	*12,065*
Construction Equipment (non-road c	Construction Equipment	NonRoad	Construction/Mining Equipment - Gasoline (2 stroke)	2007	28,368	gal	0
Passenger Cars	Construction Equipment	OnRoad	Passenger Cars - Gasoline	2007	96	gal	4,368
Construction Equipment (non-road c	Construction Equipment	NonRoad	Construction/Mining Equipment - Diesel	2007	101,315	gal	0
Medium- and Heavy- Duty Trucks	Construction Equipment	OnRoad	Medium- and Heavy-Duty Vehicles - Diesel	2007	203	gal	1,560
Light Trucks	Construction Equipment	OnRoad	Light-Duty Trucks - Gasoline	2007	189	gal	1,560

Back to Intro | Back to Summary | Help | Help - Market-Based Method

Scope 2 Emissions from Purchase of Electricity

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U.S. Environmental Protection Agency

Guidance

The Indirect Emissions from Purchased Electricity Guidance document provides guidance for quantifying two scope 2 emissions totals, usi
a **location-based method** and a **market-based method**. The organization should quantify and report both totals in its GHG inventory. Th
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 in **Table 1**.
(B) If electricity consumption data are not available for a facility, an estimate should be made for completeness.
See the "Items to Note" 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 fro
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 Subregio

					Market-Based *Use these cells to enter applicable market-based emission factors*						Location-Based		
					Emission Factors			Emissions			Emissions		
Source ID	Source Description	Source Area (sq ft)	eGRID Subregion *where electricity is consumed*	Electricity Purchased (kWh)	CO_2 Emissions (lb/MWh)	CH_4 Emissions (lb/MWh)	N_2O Emissions (lb/MWh)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)
Bldg-012	*East Power Plant*	*12,517*	*HIMS (HICC Miscellaneous)*	*200,000*	*0*	*0*	*0*	*0.0*	*0.0*	*0.0*	*228,640.0*	*22.0*	*3.4*
	Arena	138,150	MROW (MRO West)	3,440,000	<enter factor>	<enter factor>	<enter factor>	3,369,480.0	357.8	51.6	3,369,480.0	357.8	51.6
	MicroGrid	10,000	MROW (MRO West)	103,000	<enter factor>	<enter factor>	<enter factor>	100,888.5	10.7	1.5	100,888.5	10.7	1.5
					<enter factor>	<enter factor>	<enter factor>						
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					<enter factor>	<enter factor>	<enter factor>						
Total Emissions for All Sources				3,543,000				3,470,368.5	368.5	53.1	3,470,368.5	368.5	53.1

GHG Emissions

CO_2 Equivalent Emissions (metric tons)	
Location-Based Electricity Emissions	**1,585.5**
Market-Based Electricity Emissions	**1,585.5**

Notes:

Back to Intro | Back to Summary | Help

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U.S. Environmental Protection Agency

Scope 3 Emissions from Waste

Guidance

(A) Enter annual waste data in ORANGE cells. Example entry is shown in first row (*GREEN Italics*).

(B) First, choose the appropriate material then the 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 (CO_2, CH_4 and N_2O)

Source ID	Source Description	Waste Material	Disposal Method	Weight	Unit	CO_2e Emissions (kg)
Bldg-012	*East Power Plant Finished Goods*	*Copper Wire*	*Landfilled*	*1,000*	*metric ton*	*22,040*
Arena and MicroGrid		Mixed MSW municipal solid waste	Combusted	933	metric ton	*442,111*
Arena and MicroGrid		Mixed Recyclables	Recycled	1,289	metric ton	*127,843*

GHG Emissions

Total Emissions by Disposal Method

Waste Material	CO_2e (kg)
Recycled	127,843
Landfilled	-
Combusted	442,111
Composted	-
Anaerobically Digested (Dry Digestate with Curing)	-
Anaerobically Digested (Wet Digestate with Curing)	-

EPA Climate Leaders Simplified GHG Emissions Calculator (Optional 3.0)

Total CO_2 Equivalent Emissions (metric tons) - Waste **570.0**

Appendix C

September 2024 Greenhouse Gas Vehicle Emissions

Modes	Event	# of vehicles/game	# of home games	Average RT miles/game**	Total Miles Driven - Cars	Conversion Factor mileage to Kg eCO2	Estimated MTeCO2
Cars (Non Student)	Max Men's Basketball	1,560	2	28	86,346	0.329552133	28.46
	Max Women's Basketball	851	1	28	23,549	0.329552133	7.76
	Max Men's Hockey	1,135	9	28	282,587	0.329552133	93.13
	Average Men's Basketball	511	13	28	183,681	0.329552133	60.53
	Average Women's Basketball	333	14	28	129,127	0.329552133	42.55
	Average Men's Hockey	1,021	9	28	254,328	0.329552133	83.81
	Average Women's Hockey	156	18	28	77,711	0.329552133	25.61
		Total	66			Total	341.85

**Average vehicle miles travelled are based on density of the season ticket holders based on zip

West: Avg distance x 2 (both directions of travel) x 7.5% (directional distribution)	46miles *0.075	3.45
North: Avg distance x 2 (both directions of travel) x 45% (directional distribution)	12miles *0.45	5.4
East: Avg distance x 2 (both directions of travel) x 17.5% (directional distribution)	39miles *0.175	6.825
South: Avg distance x 2 (both directions of travel) x 30% (directional distribution)	40miles *0.30	12
	Total	28

Appendix D

September 2024 EAW Update Transportation Analysis Addendum

Memorandum

SRF No. 16489

To: Randy Newton, PE, PTOE
City of Saint Paul

From: Brent Clark, PE, Project Manager
Pat Corkle, PE, Senior Director

Date: September 23, 2024

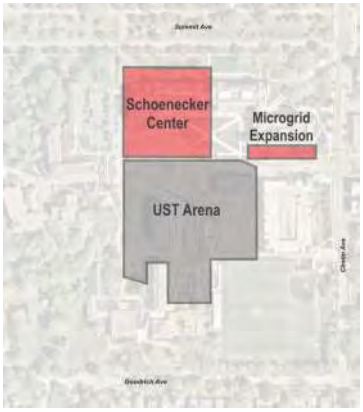
Subject: *UST Multipurpose Arena EAW Transportation Analysis* – 2024 EAW Update Transportation Analysis Addendum

Introduction

The *UST Multipurpose Arena EAW Transportation Analysis* (hereon referred to as the *2023 EAW Transportation Analysis*) was developed by SRF Consulting Group, Inc. (SRF) in June of 2023. The opinion *"In re City of St. Paul's Decision on the Need for an Environmental Impact Statement for the Proposed University of St. Thomas Multipurpose Arena"* filed on July 8, 2024, by the State of Minnesota Court of Appeals (COA), directed the City to develop a revised EAW that considers the Lee and Penny Anderson Arena (Arena or Project) and the Schoenecker Center to be phased actions. Therefore, the objectives of this 2024 EAW Update Transportation Analysis Addendum are to address the issues raised by the COA during the EAW court review process and to address project updates that have occurred since completion of the *2023 EAW Transportation Analysis*. This 2024 EAW Update Transportation Analysis Addendum updates and supplements the *2023 EAW Transportation Analysis*. The following information provides the assumptions, analysis, and recommendations offered for consideration to the project team and RGU.

Schoenecker Center & MicroGrid Expansion Projects

Project Information



The Schoenecker Center, located to the north of the Arena, is now the University's central home for science, technology, engineering, arts, and math (STEAM) education. The Schoenecker Center was constructed to address a space deficit on campus to accommodate existing academic programs and included the South Campus Quadrangle outdoor plaza and greenspace area, two loading areas accessed off the western Summit Avenue access drive, utility tunnels to service various buildings on South Campus, an art gallery, and choral and instrumental rehearsal and performance spaces. Construction of the Schoenecker Center began in 2022, was completed in 2024, and the building has since been opened. One building, Loras Hall, was demolished to construct the Schoenecker Center along with two surface parking lots in Lot M and Lot P1 (partial demolition).

In addition, the University has proposed a building addition to Owens Science Hall, located northeast of the Arena, to provide new and expanded space for the Center for Microgrid Research. The Microgrid Project is proposed to further expand the University's microgrid testing and research capabilities that exist on campus. The Microgrid Project reconstructs the existing Owens Science Hall loading dock on the first level and reconstructs the University's greenhouse on the second level. Construction of the Microgrid Project is anticipated to begin in 2024 and be complete prior to the Arena opening. A portion of Owens Science Hall and an existing greenhouse will be demolished to construct the Microgrid Project.

Traffic/Parking Operations

The Schoenecker Center and the expansion of the Center for Microgrid Research are both academic building projects that accommodate existing academic programs. While both projects result in an increase in lab, classroom, office, and collaboration space, they do not necessarily correlate to additional vehicular trips or parking demand. The *ITE Trip Generation Manual, 11th Edition* and *ITE Parking Generation Manual, 5th Edition* (industry standards typically used for traffic and parking studies), only provide data linking enrollment or school population (students, faculty, and staff) to vehicular trips and parking demand on college campuses. Therefore, enrollment data at the University's St. Paul campus was the focus for assessing the traffic and parking operations of the projects, rather than changes in building square footage.

Enrollment at the University's St. Paul Campus has seen a decline over the past decade but has stabilized and been largely consistent over the last three (3) years, with enrollment in courses physically held on the St. Paul campus ranging from approximately 6,220 students in Spring 2022 to 6,290 students in Spring 2024. Since the pandemic, there have been significant advancements and opportunities for online classes and telecommuting at the University which has helped keep the enrollment in classes held on campus lower than pre-pandemic numbers. While the University aims for gradual expansion going forward, enrollment in classes held on campus is expected to remain relatively consistent through the analysis period (2025), therefore, vehicular demand is expected to remain similar to existing conditions. In addition, considering the permitted parking system on campus and the expected Arena event times (i.e. Arena events are generally held at night (~7 pm) on weekdays and not during peak times for classes, which are generally around 1 pm), any potential increase in enrollment is anticipated to have minimal impacts on event parking/operations at the proposed Arena.

Visitor Parking Data Comparison

To assess whether the opening of the Schoenecker Center has had any impact on parking, parking utilization counts collected by UST in Spring 2023 were compared to the counts collected by UST in Spring 2024. The comparison was based on occupancy of the campus visitor parking lots, as these are the facilities that are expected to be utilized for events at the Arena (refer to Figure 1 for a summary of the locations of each visitor lot). A summary of the development, construction, and parking conditions pre- and post-Schoenecker Center construction is summarized below:

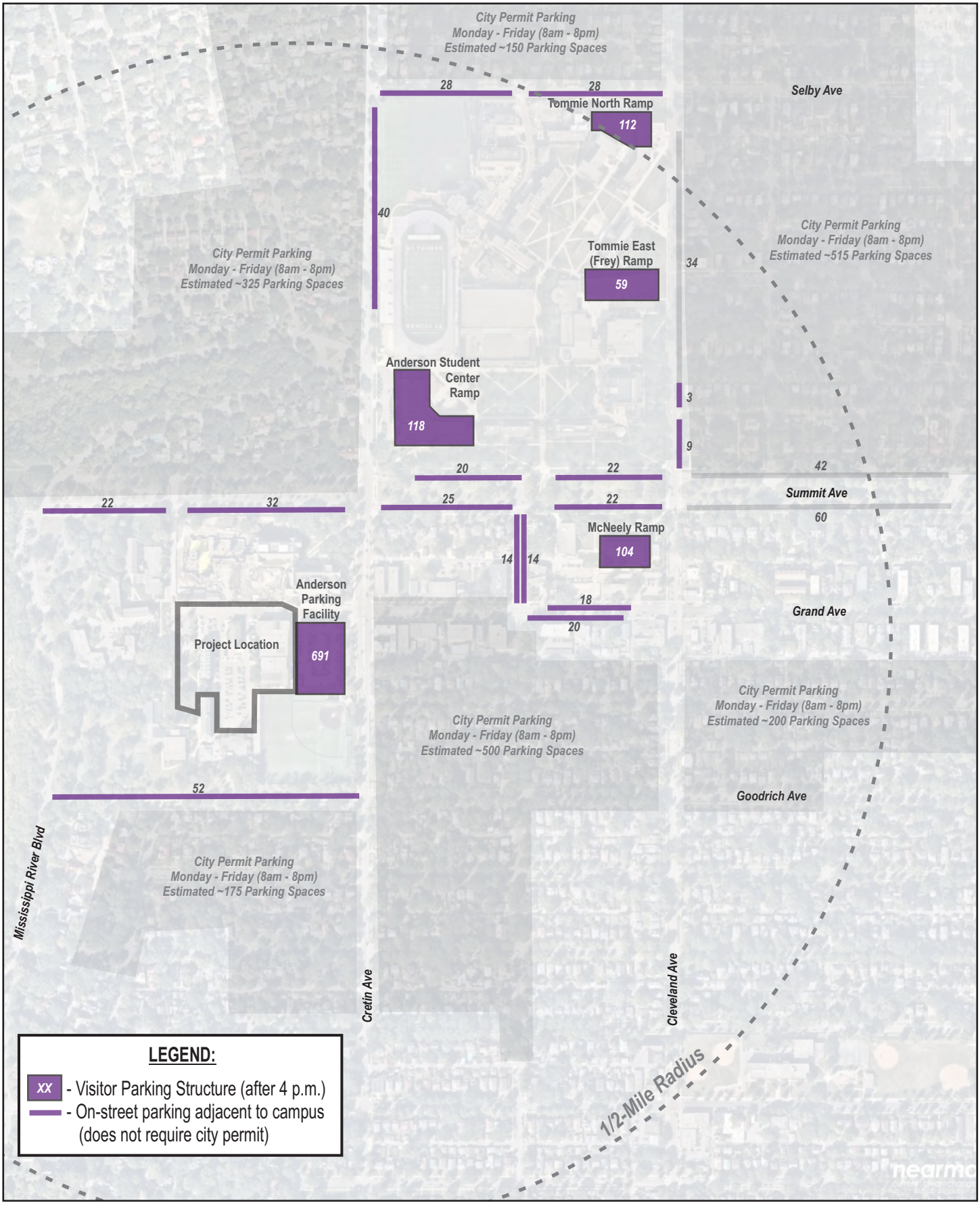
- **Spring 2023 Counts:** Schoenecker Center was under construction and surface parking within the Schoenecker Center construction footprint (a non-visitor parking lot) had been demolished.
- **Spring 2024 Counts:** Schoenecker Center was open, the Arena was under construction, and the surface parking within the Arena construction footprint (non-visitor parking lots) had been demolished.

Note that with the removal of the non-visitor parking lots, it was anticipated that some of the displaced users would utilize the visitor parking facilities. Results of the comparison, shown in Table 1, indicate that parking utilization within the visitor lots has remained relatively consistent, despite the removal of the non-visitor parking lots, the Schoenecker Center being open, and the construction of the Arena being underway. In general, the available parking supply at the visitor parking facilities has decreased by approximately five (5) percent during the weekday peak (1:00 p.m.), whereas the available parking supply has actually increased by approximately three (3) percent during weekday evenings (6:00 p.m.), when event traffic is expected to arrive. Given that the Spring 2023 counts (which were utilized within the *2023 EAW Transportation Analysis*) showed less available parking supply during weeknight events than the latest counts (Spring 2024), the Spring 2023 counts were continued to be utilized within the updated event parking demand analysis to provide a conservative estimate. It should be noted that, unlike the Schoenecker Center and Arena projects, the Microgrid Project is not expected to displace or remove any campus parking.

Table 1. Available Parking Supply Comparison

Lot ID	Total Unrestricted Parking Spaces	Available Parking Supply			
		Weekday (1:00 pm)		Thursday/Weeknight (6:00 pm)	
		Spring 2023	Spring 2024	Spring 2023	Spring 2024
APF	691	78	54	383	417
ASC	118	24	17	96	89
McNeely	104	53	25	86	93
Tommie East	59	28	19	50	46
Tommie North	112	25	40	60	72
Total	**1084**	**208**	**155**	**675**	**717**

(1) Refer to the bullets above for a summary of the development, construction, and parking conditions during each parking count.



SRF

Event Parking Supply

2024 EAW Update Transportation Analysis Addendum

City of St. Paul

Figure 1

02416489
September 2024

Performance Hall Events

While the Schoenecker Center is an academic building, it does have a small performance hall (195-person capacity) that is expected to attract outside visitors. It is projected to host approximately 35 to 40 events annually, with attendances typically ranging from 50 to 150 individuals, the majority of which are expected to occur on weeknights. It should be noted that these events generally are not new to campus; they were previously held at various other campus buildings, such as the Brady Education Center Auditorium on South Campus (which has a larger capacity) and are now being relocated to the new performance hall. Depending on the event size, the performance hall could draw an additional 25 to 100 vehicles to campus compared to a typical day/night. While the campus parking supply and adjacent roadway network can accommodate these users on typical weeknights and weekends, simultaneous events at the performance hall alongside larger events at the Arena are expected to further increase congestion and potential parking deficits on campus. Therefore, it is **recommended to avoid scheduling other on-campus events that would attract non-student/staff visitors (who require on-site parking) during higher attendance sporting events held at the Arena.** Note this recommendation and the anticipated level of attendance at which other on-campus events should be avoided is discussed further in the "Recommended Parking Mitigation" section of this addendum.

Key Findings

- Given the Spring 2023 counts (which were utilized within the *2023 EAW Transportation Analysis*) showed less available parking supply during weeknight events than the latest counts (Spring 2024), the Spring 2023 counts were continued to be utilized within the updated event parking analysis to provide a conservative estimate.
- The Schoenecker Center and Microgrid Projects are expected to have minimal impacts on campus traffic and parking.
- Given the Schoenecker Center performance hall hosts events that will attract outside visitors, it is recommended that UST avoid scheduling other on-campus events that would attract non-student/staff visitors (who require on-site parking) during higher attendance sporting events held at the Arena.

St. Paul Seminary Parking Lot Project

Project Information

The St. Paul Seminary ("SPS"), located north and west of the UST South Campus, intends to construct a surface parking lot along Mississippi River Boulevard (herein referred to as the "SPS Parking Lot"). The SPS Parking Lot is proposed to consist of approximately 73 surface parking stalls, with access to the new surface parking lot provided at the existing SPS access drive from Mississippi River Boulevard. The project was submitted to the City of St. Paul for site plan approval in July 2024, and

if approved, is anticipated to begin construction in late 2024/early 2025 and be completed by summer 2025.

Traffic/Parking Operations

Since students, faculty, and staff of SPS currently park at parking facilities located on UST's South Campus, the proposed SPS Parking Lot would free up more parking spaces for UST students, staff, and visitors. SPS users destined for the new parking lot would utilize the existing SPS access location along Mississippi River Boulevard. Based on the operations analysis completed in the *2023 EAW Transportation Analysis*, which indicates that the Summit Avenue and Goodrich Avenue intersections with Mississippi River Boulevard operate at an overall Level of Service (LOS) A (Table 3 of the *2023 EAW Transportation Analysis*), Mississippi River Boulevard has sufficient capacity to accommodate these vehicles.

It is important to recognize that event traffic and parking operations can often present conflicting challenges; while increased parking capacity benefits parking operations by accommodating more vehicles, it can worsen traffic congestion, whereas less parking can help spread out traffic, thus reducing congestion. To summarize the conservative approach for traffic and parking operations analysis and how the SPS Parking Lot might influence the analysis results, the following information is provided:

- **Traffic Operations:** Assuming the UST visitor parking ramps are fully occupied by Arena event patrons represents a worst-case scenario for traffic operations, as it maximizes the event traffic and congestion in the study area during pre- and post-event times (highest amount of cars driving to and from the visitor parking ramps).
    - All previous traffic modeling assumed the Anderson Parking Facility (APF) and other UST visitor ramps were fully occupied by event patrons to represent a worst-case traffic operations scenario, as it would have the largest amount of vehicles entering and exiting those visitor ramps during peak event times. Therefore, the SPS Parking Lot, which would free up more parking spaces for UST use, would have no impact on the previous event operations analysis since the *2023 EAW Transportation Analysis* assumed that SPS users were not using the visitor lots at the time of events.
- **Parking Operations:** Assuming that the parking ramps are not fully occupied by event patrons (i.e. the available parking supply is based on the parking counts collected during event times which includes UST and SPS non-event users) represents a worst-case scenario for parking operations, as there is less available supply to accommodate the event parking demand.
    - Given the SPS Parking Lot is currently going through the submittal process and is not approved by the City, it was not assumed within the updated parking analysis, therefore, the analysis assumes that SPS users are parking in the APF ramp, which is consistent with the 2023 EAW Transportation Analysis. However, if the project is completed, it would result in an increase in parking availability at UST visitor facilities, which could be used for events.

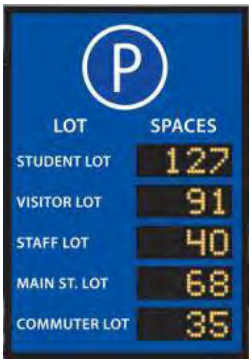
Technical Clarification

The following section clarifies a statement in the *2023 EAW Transportation Analysis* that may have been misinterpreted during the EAW process. The guidance, which is found on Page 17 in the "Non-Event Conditions" section of the report, is as follows:

- "Note it is generally good practice for the parking supply of a visitor parking facility to equal the peak parking demand plus an additional five (5) to 15 percent. This extra supply reduces the unnecessary circulation of vehicles looking for parking and the perception of inadequate parking."

While this statement holds true during daily non-event conditions, it does not apply to event conditions; during event conditions, common practice involves implementing strategies to fully utilize parking supply. Note the following strategies are planned and/or recommended to help reduce the circulation of vehicles in the project area.

- **UST plans to implement a smart parking system** to reduce congestion and circulation (see example in the inset). The system is expected to utilize real-time monitoring and campus signage (and may also include a phone application) to enable drivers to quickly find available parking spaces and minimize search times. This initiative aims to reduce driver frustration and emissions, enhance campus mobility, and improve the visitor/student experience. Although not identical, similar systems are operated at parking facilities throughout the metro, including the Mall of America, Minneapolis ABC ramps, and at the University of Minnesota. UST plans to implement this system prior to the Arena opening.



- As detailed later in this document, for event conditions it is recommended that **UST continue use of and further encourage pre-paid online event tickets and parking assignment.** UST currently uses an online ticketing system for athletic events which can be modified to provide additional information and parking assignments. When purchasing an event ticket, attendees must select their choice of transportation to the event, such as driving and utilizing parking on campus (as available) or choosing to use alternative transportation options. This process ensures attendees either have a designated parking spot if they choose to drive or are informed in advance that campus parking is unavailable, on-street parking is limited, and neighborhood parking restrictions are in place, with clear warnings about ticketing. This minimizes the need to circle campus lots and serves as a platform to inform users about alternative transportation options and incentives provided by the University.

Event Management Plan (EMP)

While the COA acknowledges the event traffic management mitigation, it also notes that the plan is "nonspecific, but presumably, it will include targeted mitigation measures". Therefore, to provide clarity, a brief overview of what an Event Management Plan (EMP) entails is summarized below:

An EMP is a comprehensive plan designed to minimize transportation impacts and improve safety and efficiency for all modes of transportation during events. Typically developed after project approvals but before the first event occurs within the venue, the EMP refines and finalizes the mitigation strategies and improvements identified in earlier planning stages. The EMP functions as an operations manual and is developed with input from multiple stakeholders to define roles, responsibilities, and specific mitigation measures for different types and sizes of events. As a "living document" the EMP is continually updated and refined based on real-world experiences and feedback, with periodic revisions through stakeholder meetings, usually held once or twice a year (once before the series of events and once after the series of events).

The EMP continues to be a recommended mitigation measure through the 2024 EAW Update Transportation Analysis Addendum and UST plans to collaborate with the City of St. Paul Traffic Department and the St. Paul Police Department in development of the EMP. The plan will detail traffic and parking management for all event attendances, both athletic and non-athletic, and provide a framework for community communication. Unique to the typical EMP process, UST is planning to actively engage with its local neighborhood associations and a dedicated community input group will be consulted throughout the process to share ideas, assure communications with neighbors, and build consensus among neighborhood residents about the EMP details and logistics.

Project Updates

The Environmental Assessment Worksheet (EAW) phase typically represents an initial, preliminary stage in project development, aimed at assessing potential environmental impacts. Several updates to the project have occurred since the 2023 EAW documentation and are detailed in the following sections.

Site Plan Approval/APF Access Addendum

UST submitted a Site Plan application for the Arena to the City on September 6, 2023, and received final approval on April 4, 2024. As part of the site plan approval process, SRF Consulting prepared an Addendum to the *2023 EAW Transportation Analysis* titled the "APF Access Addendum", which was completed in January 2024 and is included in this Appendix. The APF Access Addendum was completed to address changes in assumptions since the *2023 EAW Transportation Analysis*, primarily related to pedestrian access from the Anderson Parking Facility (APF) to the Arena. Originally, the west side of the APF was expected to be modified to provide a direct connection for APF users and the Arena. While an at-grade pedestrian access is still proposed on the west side of the APF, it no longer provides access to other levels of the ramp and is no longer intended for event use. The current proposal routes pedestrians to/from the APF using the northeast stair tower, thus crossing APF

vehicular traffic either at the APF entrance or the Cretin Avenue/Grand Avenue intersection. The APF Access Addendum evaluated event operations with the current APF access assumptions and recommended additional mitigation strategies to address issues, including to cross pedestrians at the Cretin Avenue/Grand Avenue intersection. Assuming off-site parking and shuttle services are provided for maximum capacity basketball events, the additional mitigation improvements and strategies are expected to enable these events to operate similarly to the mitigated operations outlined in the 2023 EAW. A graphical comparison of the anticipated operations is provided in this Appendix. The figure illustrates that while maximum queues may be slightly longer during pre-event conditions, the level of service is generally consistent, with overall congestion times still projected to be 20-30 minutes before an event. For post-event conditions, the total clearing times of the APF ramp are expected to increase from 15-30 minutes to 20-35 minutes. Note this represents the total ramp clearing time during post-event conditions, not the average delay per vehicle exiting the ramp.

As a result of the site plan approval process, the following infrastructure and management strategies were identified/required, some of which may be considered as mitigation for the project:

Infrastructure

- Construct a new traffic signal at the Cretin Avenue/Grand Avenue intersection.
  - As part of construction, the signal cabinet will be relocated, and the pedestrian facilities will be widened in the northwest quadrant and along the north side of the private portion of Grand Avenue to accommodate event pedestrian demand.
- Construct curb extensions at the Cretin Avenue/Goodrich Avenue intersection to improve pedestrian safety.
- Construct a southeast Cretin Avenue access into south campus, with gate arm protection, for service vehicles, emergency vehicles, and potential shuttle/bus services.

Management Strategies:

- Implement pedestrian wayfinding to cross pedestrians at the Cretin Avenue/Grand Avenue intersection.
- Provide traffic control officers at the Cretin Avenue/Grand Avenue intersection to improve operations and pedestrian safety.
- Implement an alternative access solution to the Arena from the APF (i.e. skyway or vertical circulation element) if event operations/pedestrian conflicts are determined to be problematic by the city.

Non-Athletic Events

The primary scheduled, reoccurring use of the Arena is for basketball and hockey events and therefore this use was selected as the focus of the EAW transportation analysis. While other event types could have similar capacities, due to the infrequency and unknown nature of these other events, they were not the focus of the EAW. To offer additional insight into potential events beyond UST athletics, the following summary provides an overview of other anticipated activities at the Arena:

- **UST Commencement:** Scheduled for May, with approximately six (6) sessions over Saturday and Sunday, accommodating 3,000 to 4,250 attendees each. Note commencements already occur on campus at the Anderson Athletic and Recreation Complex. Although the proposed Arena has the capacity to accommodate slightly more visitors (i.e. end stage configuration capacity of 4,523), current feedback from students and families indicates a preference for multiple smaller commencements. As a result, it is expected that the tradition of holding several smaller ceremonies will continue either in the Anderson Athletic and Recreation Complex or in the Arena. Historically the parking demand for commencement events has been able to be accommodated on/near campus, with demand expected to be similar to that of a higher attendance hockey event. Note additional parking is often available during commencement weekend as classes are not in session and on-campus residents have moved off campus.
- **High School Commencement:** Although no discussions have taken place with any school districts, UST is open to leasing the Arena for high school commencements. These events would likely occur in May or June, typically on weekdays from 6 to 8 p.m., with attendances and parking demand similar to UST's commencement.
- **External Events:** The feasibility and external demand for hosting concerts, comedians, and other non-academic events within the Arena are currently unknown. However, the university is open to the possibility of leasing the space for such activities. Should there be interest in scheduling these events, they are anticipated to occur during summer or other non-academic periods when campus activity is lower. Aside from a center stage configuration, which limits the capacity to 5,500 seats, these events are expected to have a lower capacity (i.e. end stage configuration capacity of 4,523) compared to maximum capacity basketball events. These events are anticipated to occur infrequently (similar to commencements) and any projections regarding their attendance and frequency remain speculative.
- **Career Fairs/Conventions:** UST anticipates hosting between one (1) to three (3) career fair events in the new facility, with a total expected attendance of approximately 1,000. It is important to note that career fairs/conventions are already conducted on campus, and the parking demand for outside visitors for these events has historically been accommodated in the visitor parking facilities.
- **Youth Sports Practices/Games:** Scheduled throughout the year, with varying numbers of participants, typically fewer than 50 youth participants and their families. It should be noted that there is only one auxiliary sheet of ice and two basketball courts, which limits the capacity of these facilities and the subsequent parking demand on campus.
- **Youth Sports Camps:** Expected to take place in the summer, accommodating around 400 participants. Similar to commencements and career fairs/conventions, youth sports camps already occur on campus. These camps generally occur during the summer months when campus activity is low, and parking has been largely available and easily accommodated.
- **Club Room Rentals:** Available year-round, with attendances varying up to 150.

Most events and activities are expected to have attendance levels manageable within the existing campus traffic and parking infrastructure. Several of these events, such as UST commencements, career fairs/conventions, and youth camps, are already held on campus and are often limited to a few days or weeks each year. However, as discussed for the Schoenecker Center Performance Hall, UST should be mindful of anticipated event sizes and avoid scheduling other events simultaneously with sporting events at the Arena that may result in a potential parking deficit on campus. Should UST decide to host an external event, it would likely be scheduled during summer or other non-academic periods. Aside from a center-stage configuration, a maximum capacity external event is expected to operate nearly identical to a maximum capacity basketball event and would likely adopt similar mitigation strategies identified in this report. Due to the considerable uncertainty surrounding the possibility of hosting large external events, it was not the primary focus of the EAW. It is expected to be further explored as part of the EMP, when the feasibility and demand for such events becomes more evident.

UST Basketball Seating Capacity

The maximum capacity for basketball games within the Arena has been revised since the *2023 EAW Transportation Analysis* assumptions. In the previous EAW, the seating capacity for a maximum basketball event was projected to be 5,500 event patrons. However, current designs indicate a capacity of 5,324, with student seating reduced from approximately 22 to 20 percent. Given a maximum basketball event represents the worst-case scenario for transportation (congestion and parking), the original capacity of 5,500 has been retained throughout this addendum and the student/non-student assumptions have been adjusted for 20% student seating to provide a conservative estimate.[1]

UST Men's Hockey Conference

The National Collegiate Hockey Conference (NCHC) announced in May 2024 that they would be expanding to 10 teams, with Arizona State University joining in 2024-25 and the University of St. Thomas becoming a full-time member beginning in the 2026-2027 season. As part of the *2023 EAW Transportation Analysis,* attendance data was collected for numerous similar programs within UST's current men's hockey conference, the Central Collegiate Hockey Conference (CCHA) (see Pages 19-22 of the *2023 EAW Transportation Analysis* for previous data collected). While the hockey Arena capacity and event schedules/times are expected to remain unchanged, attendance projections are expected to increase with the University entering the NCHC, given the conference is home to some of the more successful collegiate hockey programs in the country. Therefore, attendance data was collected for the NCHC and compared to the previous attendance data published within the EAW

[1] As noted in the *2023 EAW Transportation Analysis*, St. Thomas has held other on-campus campus events with more than 5,500 attendees, including football games. As noted in the 2024 EAW Update, the capacity for non-athletic events using a center stage configuration is 5,500, so continued use of this figure also helps in planning for any such events. More information on current UST athletic events held on campus can be found on Page 19 of the *2023 EAW Transportation Analysis.*

for the CCHA, as shown in Figure 2. Consistent with the *2023 EAW Transportation Analysis*, the data was collected from the 2022-2023 regular season and the top/bottom (North Dakota/Miami) capacity programs were removed to eliminate outliers.

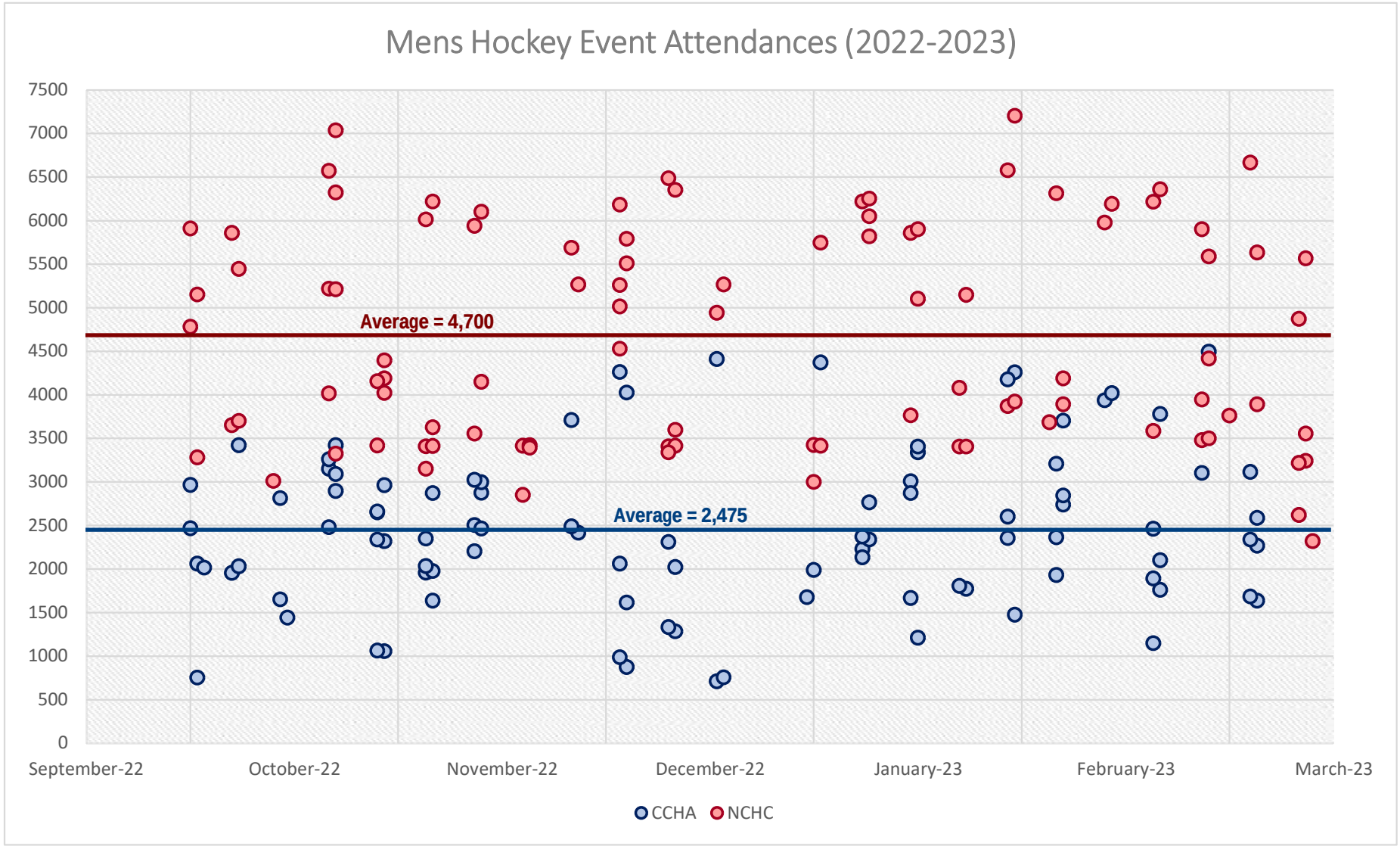
Based on the comparison between the NCHC and CCHA, average attendances within the NCHC are nearly double the attendances within the CCHA. Given that several programs within the NCHC have higher stadium capacities than both the CCHA stadiums (average capacity of 4,400) and the proposed Arena (i.e. 4,000 for hockey), the percentage occupied was utilized for NCHC programs to adjust attendance projections for UST, following the conference transition. The changes in attendance projections detailed in the *2023 EAW Transportation Analysis* are summarized in Table 2.

Table 2. UST Hockey Attendance Projection Changes

Conference Data	Average Attendance	Higher Attendance Games
CCHA (Current Conference, 2023 EAW Transportation Analysis)	2,475	2 to 4
NCHC (Future Conference, 2024 EAW Transportation Analysis Update Addendum)	3,600	6 to 9

Based on this data, the expected average attendance has increased from 2,475 to 3,600, while maximum capacity games are expected to increase from 2-4 to 6-9 times per year. It should be noted that the *2023 EAW Transportation Analysis* focused the transportation analysis on a maximum capacity basketball game (5,500) and a typical event (3,000) (see explanation on Page 21 of the *2023 EAW Transportation Analysis*). The typical event was intended to represent a conservative "average" for both men's hockey and men's basketball, as well as a maximum attendance women's sports game. However, due to the updated attendance projections for men's hockey surpassing the previous typical range, and the lower average attendances expected for men's and women's basketball games (1,800 and 1,175 respectively – see Figure 7 of the *2023 EAW Transportation Analysis*), the updated event parking analysis now reflects actual average attendances for each sport instead of the previous typical event of 3,000. For the purposes of this addendum and the event parking demand analysis, all men's hockey games are assumed to be maximum capacity events to take a conservative approach. It should be noted that a maximum capacity men's basketball game is still the worst-case scenario from a traffic operations and parking perspective, and the attendance projections and frequency for men's basketball games is expected to remain consistent with those outlined in the *2023 EAW Transportation Analysis*.

Figure 2 - Attendances per Men's Hockey Conference



Updated Event Parking Analysis (Issue Identification with No Mitigation)

The available parking supply for each event parking location (see Figure 1) is summarized in Table 3. Note the table is generally consistent with the available parking supply published within the *2023 EAW Transportation Analysis* (Page 26, Table 12), which was based on the Spring 2023 counts and adjustments for impacted lots/seminary users. The only update since the *2023 EAW Transportation Analysis* is a correction of an error in the table, where the correct available supply of adjacent on-street parking was not accurately recorded. When rectified, the available parking supply is increased by two (2) spaces on Fridays, and 67 spaces on Saturdays. It should be noted that if the SPS Parking Lot project is completed, the parking supply in the UST visitor lots is expected to increase by 40 to 70 spaces, depending on the night.

Table 3. Available Parking Supply Before Events

Lot ID	Total Unrestricted Parking Spaces	Available Parking Supply (1)		
		Thursday/Weeknight 6:00 pm	Friday 6:00 pm	Saturday 6:00 pm
APF	691	302	526	569
ASC	118	96	100	108
McNeely	104	86	96	96
Tommie East	59	50	48	44
Tommie North	112	60	61	59
On-Street (Adjacent)	369	84	187 (2)	281 (2)
Total	**1453**	**678**	**1,018**	**1,157**

(1) Includes parking supply adjustments to account for parking loss caused by the Arena footprint. If the SPS Parking Lot Project is completed, the available parking supply in the UST visitor lots is expected to increase by approximately 40 to 70 spaces, depending on the night.

(2) Note there was an error in the available parking supply published within the *2023 EAW Transportation Analysis,* where the correct supply for adjacent on-street parking near the Arena was not accurately recorded. When rectified, the available parking supply increases by two (2) and 67 spaces for Friday and Saturday night, respectively.

Using the same modal split assumptions outlined in the *2023 EAW Transportation Analysis* (Table 10, Page 24) and the available parking supply outlined in Table 3, an event parking demand analysis was completed and is summarized in Tables 4 and 5. While the modal split assumptions remain consistent, the distribution of students versus non-students has been updated based on changes to the basketball Arena's capacity and seating layout, which resulted in a slight increase in parking demand during events.

Table 4 details the anticipated parking demand by event/athletic type, utilizing both average and maximum events for men's and women's sports. Note this update provides a more accurate reflection of the events expected than the previous "typical" event, as the typical event of 3,000 no longer reflects a conservative estimate of all men's average attendances.

Conversely, Table 5 is focused on parking demand by attendance levels regardless of the type of athletic event and provides a comprehensive overview of all possible attendance levels at the Arena. The table details the number of games expected for each attendance range, identifies attendance thresholds where parking can no longer be accommodated on/near campus (i.e. campus visitor lots and on-street parking immediately adjacent to campus) without mitigation, and highlights the number of games expected to exceed these thresholds, thus indicating when a parking deficit may occur.

Note the estimated attendances and number of games in both tables are based on information published within the *2023 EAW Transportation Analysis* and the updates outlined within this addendum (men's hockey). The estimated attendances and number of games referenced in Table 5 are further detailed within this Appendix, which provides additional information on the expected attendance/games for each athletic team. As previously assumed, there is expected to be sufficient parking in separate commuter/staff lots to accommodate UST players, coaches, and event vendors/staff, therefore, they were not included in the parking demand analysis.

Key takeaways from the updated event parking demand analysis are as follows:

- Based on the attendance data at similar programs, approximately 54 of the 66 anticipated sporting events are expected to have adequate parking without the need for mitigation. Of the 12 games where a parking deficit is expected, nine (9) are expected to only have a deficit of 35 spaces.
    - Note that if the SPS Parking Lot project is completed, the nine (9) events with an anticipated deficit of 35 spaces are no longer expected to have a parking deficit.
- Events with parking deficits of over 100 vehicles are only expected to occur one (1) to three (3) times per year, if at all.
    - Note that the true capacity for men's basketball (5,324) and the completion of the SPS Parking Lot project would reduce the parking deficit for these potential events.
- With no mitigation, the available parking supply on campus and adjacent on-street parking can generally accommodate events up to approximately 2,600 attendees on weeknights and 3,900 attendees on weekends.

Table 4. Event Parking Demand Analysis by Event Type (No Mitigation)

	Estimated Attendance	Estimated Parking Surplus/Deficit (1) (2) (3)		
		Thursday/Weekday Night	Friday Night	Saturday Night
Average Attendance				
M Hockey	3,600	-- (4)	70	209
W Hockey	550	533	873	1,012
M Basketball (5)	1,800	204	544	683
W Basketball (5)	1,175	369	709	848
Maximum Attendance				
M Hockey	4,000	-- (4)	-35	104
M Basketball	5,500	-770	-430	-291
W Basketball	3,000	-112	228	367

Table 5. Event Parking Demand Analysis by Attendance (No Mitigation) (1)(2)(3)

Attendance		Thursday/Weekday Night		Friday Night		Saturday Night	
Range	For Parking Analysis	Estimated Number of Games (6)	Parking Surplus/ Deficit	Estimated Number of Games (6)	Parking Surplus/ Deficit	Estimated Number of Games (6)	Parking Surplus/ Deficit
5,500 - 4,500	5,500	1	-770	0	-430	1	-291
	5,000		-639		-299		-160
	4,500		-507		-167		-28
4,499 - 3,500	4,000	0	-375	9	-35	10	104
	3,500		-244		96		235
3,499 - 2,500	3,000	1	-112	0	228	1	367
	2,500		20		360		499
2,499 - 1,000	2,000	8	151	0	491	9	630
	1,500		283		623		762
	1,000		415		755		894
Less than 1,000		5	>415	9	>755	12	>894
Attendance Threshold/ # Games with Deficit		**2**	**2,575**	**9**	**3,870**	**1**	**4,395**

(1) UST players and coaches and event/vendor staff are expected to park in reconstructed Lot O or other commuter and faculty/staff lots within campus, and not in parking facilities used for event patrons.

(2) As mentioned previously, the current designs indicate a capacity for men's basketball of 5,324. This reduction in capacity is expected to reduce parking demand by approximately 45-60 vehicles, which is not reflected in these numbers.

(3) If the SPS Parking Lot is completed, available parking supply is expected to increase by approximately 40 to 70 spaces, depending on the night, which is not reflected in these numbers.

(4) Men's Hockey games are expected to occur on Friday and Saturday nights only.

(5) Note average attendance men's and women's basketball games are already occurring on campus.

(6) Based on expected Hockey and Basketball attendance projections and schedules published within the *2023 EAW Transportation Analysis* and this addendum.

Recommended Parking Mitigation

Despite the expected surplus in parking available without mitigation for most Arena events, the following parking mitigation strategies are recommended and detailed below. For the purpose of this 2024 EAW Update, these recommendations are assumed to apply to all sporting events over the attendance thresholds identified in Table 5 (i.e. 2,575 on a weeknight, 3,870 on a Friday, 4,395 on a Saturday). Note these are the approximate attendance thresholds at which UST can accommodate parking demand on/near campus without mitigation as mentioned above. The need for each recommendation is expected to be refined as part of the event management plan and as actual events occur at the Arena. These strategies are expected to reduce parking demand on campus, enhance overall mobility, and lessen the potential impact on the neighboring community. Each strategy includes an estimate of the reduction in parking demand it may achieve. Estimates are provided in ranges and can vary based on event characteristics, location, demographics, amongst other factors. The estimates are based on engineering judgement and discussion with the project team, reflecting anticipated changes in parking demand and capacity compared to the baseline modal assumptions outlined in the 2*023 EAW Transportation Analysis* (Table 10, Page 24).

Implement Pre-Paid Event Tickets & Specific Parking Instructions/Assignments (Mobile)

- Continue use of and further encourage pre-paid online event tickets. Note UST currently uses an online ticketing system for athletic events which can be modified to provide additional information and parking assignments. When purchasing an event ticket, attendees would also select their choice of transportation to the event. If driving, they would be provided a designated parking pass (as available) or would need to choose alternative transportation options. This process ensures attendees either have a designated parking spot if they choose to drive or are informed in advance that campus parking is unavailable, on-street parking is limited, and neighborhood parking restrictions are in place, with clear warnings about ticketing. This minimizes the need to circle campus lots and serves as a platform to inform users about potential alternative transportation options and incentives such as free transit, discounted rideshare, and alternative shuttle services, which are discussed below. Initial project discussions suggest that parking passes or assignments at visitor facilities are expected to be provided at no costs to event patrons, however, parking pricing is expected to be discussed/refined in collaboration with stakeholders as part of the event management plan.
- If event patrons are aware that all lots are full in advance, they may be more inclined to utilize transit/rideshare or carpool rather than look for parking and/or walking further distances.
- The smart parking system that UST plans to implement can also provide on-site wayfinding for users that visitor lots are full or limited to pre-assigned event parking only.
    - **This strategy plays a crucial role in communicating with event attendees and supports the implementation of the strategies outlined below.**

Implement Permit Modifications and Clear Visitor Parking Ramps Prior to Events

- Based on discussions with UST, the University is planning to reduce resident parking permits (for first- and second-year students) in Level 2 of the Morrison Hall parking ramp. UST anticipates that when these permits are reduced, students without permits will refrain from bringing their vehicles to campus; however, this will need to be monitored. By reallocating these permits to commuter and faculty use during weekdays, additional spaces could be cleared for events in the evenings and weekends. This permit modification could provide an additional 105 parking spaces for event use.
- Implement time-of-day restrictions and/or "no park" days/nights for the APF, four (4) of the five (5) visitor parking ramps, and/or Level 2 of the Morrison Hall parking ramp. Note the number of parking facilities cleared will be dependent on the expected attendance at each event, and will be further defined as part of the EMP. This strategy, which has been implemented successfully by UST in the past, clears spaces currently occupied by employees/commuters and ensures that event patrons with an assigned parking space have a space reserved in their designated ramp.
- By clearing/restricting these parking locations, it is estimated that between 150 to 405 additional parking spaces could be made available, depending on the night, beyond the available spaces shown in Table 3.
- To avoid essentially "shifting" student/staff parking to the public streets, the strategy should be paired with early communication and clear notification prior to enforcing the event parking restrictions in UST facilities. Online classes/telecommuting should also be promoted simultaneously, assuming multiple ramps are cleared, to ensure that the strategy is effective. Note that one of the visitor parking ramps is expected to remain available for commuting students/staff under all event scenarios, ensuring at least one (1) parking option is available while event activities are underway.
    - **Estimated Parking Supply Increase (beyond those shown in Table 3)**
        - **Weeknight/Thursday = 405 spaces**
        - **Friday Night = 180 spaces**
        - **Saturday Night = 150 spaces**

Provide Free Transit Pass Option with the Purchase of a Ticket

- Work with Metro Transit to include a free transit pass option with the purchase of a ticket. Note UST has had preliminary discussions with Metro Transit, and although further evaluation of the details is needed, initial discussions suggest that distributing free pass options through the online ticketing system appears to be feasible. Further details are expected to be finalized as part of the event management plan.
    - **Estimated Parking Demand Reduction = 10 to 30 vehicles**

Provide Discounted Rideshare

- Pursue a partnership with a rideshare company to provide discounted rates for event ticket holders. Preliminary discussions with two rideshare companies indicate that discounted rates can be easily implemented. Potential partnerships and discount pricing are expected to be discussed/refined in collaboration with stakeholders as part of the event management plan. It should be noted that while rideshare can help reduce parking demand, it also can contribute to increased traffic congestion in and around the study area. Further details regarding rideshare planning are expected as part of the event management plan.
    - **Estimated Parking Demand Reduction = 25 to 50 vehicles**

Provide Restaurant/Bar Shuttle Service

- Pursue a collaborative partnership with one (1) or two (2) restaurants and/or bars to offer shuttle services. While the focus of these services may initially be on higher attendance sporting events (noted above), providing consistency could enhance user familiarity and increase overall utilization. Note UST has had preliminary discussions with potential locations.
    - **Estimated Parking Demand Reduction = 25 to 75 vehicles**

Avoid Scheduling Other On-Campus Events

- UST should avoid scheduling other on-campus events that would attract outside non-student/staff visitors (who require on-site parking) during sporting events with attendances of 2,100 or greater.
    - **Reduces/eliminates simultaneous events and compounding impacts.**

Total Estimated Parking Supply/Demand Reduction

In summary, with the recommended mitigation strategies and incentives, the estimated parking supply/demand reductions are as follows. Note these initial mitigation strategies do not include off-site parking and shuttle services, which are considered only if/when needed and further discussed on the next page. A summary of the event parking demand analysis for maximum events with the proposed mitigation is summarized in Table 6, whereas a detailed breakdown for each attendance level with the proposed mitigation is provided in this Appendix. The attendance thresholds for which parking can be accommodated on/near campus with mitigation are summarized in Table 7. Since the estimated parking reductions were presented in ranges, the effectiveness of the mitigation is categorized as low or high.

- **Thursday/Weekday Night = 465 to 560 vehicles**
- **Friday Night = 240 to 335 vehicles**
- **Saturday Night = 210 to 305 vehicles**

Table 6. Event Parking Demand Analysis for Maximum Events (With Mitigation)

	Estimated Frequency	Deficit/Surplus (2)		
		No Mitigation	With Mitigation	
			Low	High
Thursday/Weekday Night Event				
Max Men's Basketball (5,500) (1)	1	-770	-305	-210
Max Women's Basketball (3,000)	0	-112	353	448
Friday Night Event				
Max Men's Hockey (4,000)	9	-35	205	300
Saturday Night Event				
Max Men's Basketball (5,500) (1)	1	-291	-81	14
Max Men's Hockey (4,000)	9	104	314	409
Max Women's Basketball (3,000)	1	367	577	672

(1) As mentioned previously, the current designs indicate a capacity for men's basketball of 5,324. This reduction in capacity is expected to reduce parking demand by approximately 45-60 vehicles, which is not reflected in these numbers.

(2) If the SPS Parking Lot is completed, available parking supply is expected to increase by approximately 40 to 70 spaces, depending on the night, which is not reflected in these numbers.

Table 7. Attendance Thresholds (With Mitigation)

Day/Night	Attendance Thresholds		
	No Mitigation	With Mitigation	
		Low	High
Thursday/Weeknight Event	2,575	4,350	4,700
Friday Night Event	3,870	4,775	5,125
Saturday Night Event	4,395	5,200	5,550

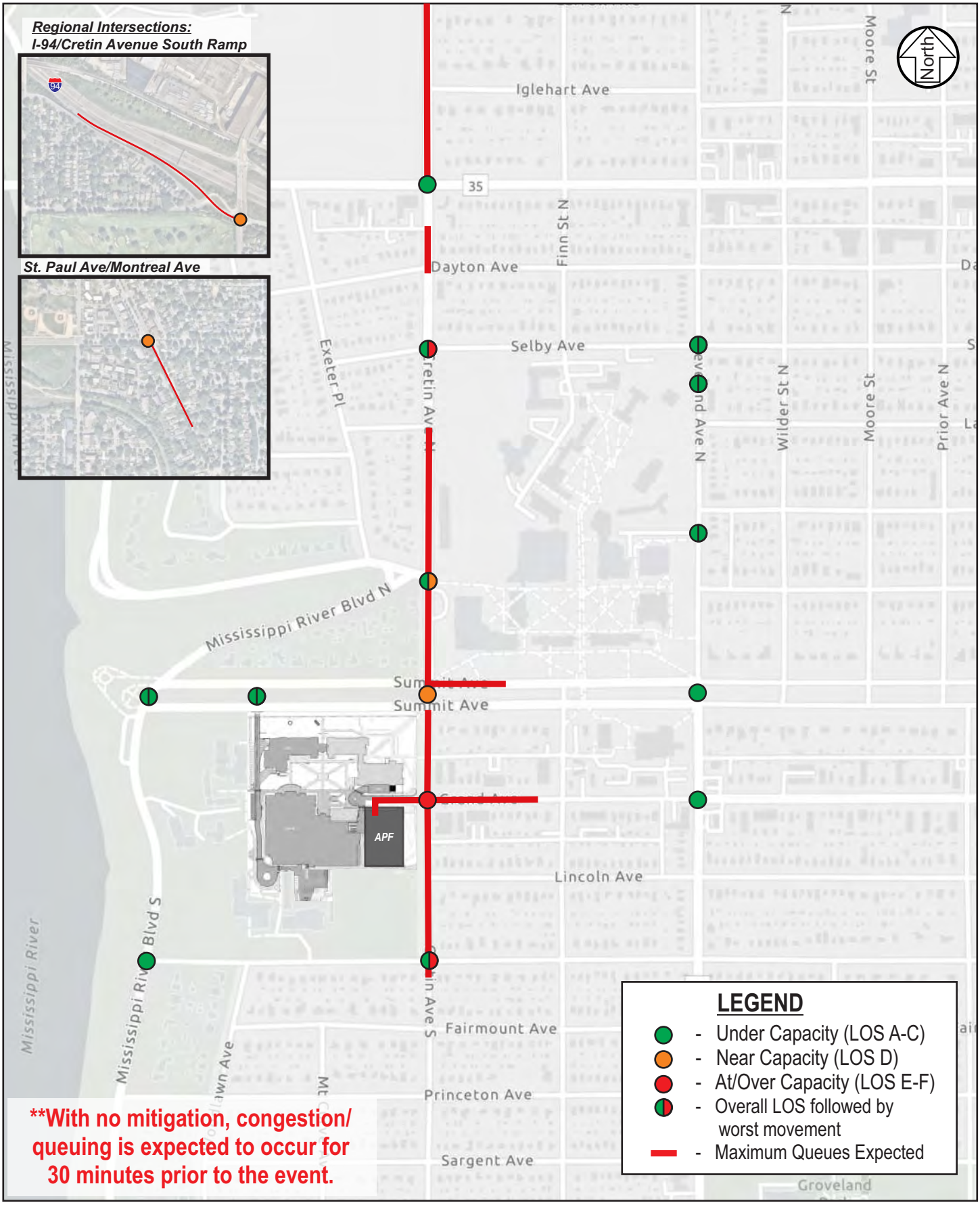
= To be conservative, use the low effectiveness threshold for determining when off-site parking/shuttle services should be provided.

With the recommended mitigation strategies and incentives, event parking is expected to be accommodated on/near campus for all games with attendances less than 4,350, regardless of the day of the week. Note this threshold covers all maximum capacity hockey events, and most, if not all, basketball events expected at the Arena. However, if a maximum capacity basketball event occurs on a weeknight, a parking deficit of 200 to 300 vehicles is expected. Therefore, basketball games with attendances exceeding the lower effectiveness attendance thresholds (such as 4,350 on a weeknight, 4,775 on a Friday night, or 5,200 on a Saturday night), it is recommended that UST **offers off-site parking and shuttle services**. It should be noted that UST has had preliminary discussions with Allianz Field to utilize their parking lot for shuttle services, which has sufficient available parking to accommodate the deficits. The objective is to provide enough off-site parking spaces to accommodate the potential parking deficit. This strategy could be implemented until real-world data indicates it is not needed or additional parking is constructed on campus.

Executive Summary

Event Operations (With and Without Mitigation)

An illustrative summary of the pre- and post-event operations with and without mitigation is shown in Figures 3 through 6. Recommended traffic management and safety strategies are summarized in this Appendix, and include, but are not limited to, deploying traffic control officers, implementing event-specific signal timing plans, assigning parking attendants to designated ramps, and establishing designated pedestrian routes and closures. Additionally, several event management strategies have been identified for potential future consideration if needed. Ongoing discussions and adjustments to these strategies are anticipated as part of the EMP, incorporating real-world experiences and feedback.



Max Capacity (5,500) - Pre-Event Operations (No Mitigation)

2024 EAW Update Transportation Analysis Addendum
City of St. Paul

Figure 3

02416489
September 2024

Max Capacity (5,500) - Post-Event Operations (No Mitigation)

2024 EAW Update Transportation Analysis Addendum

City of St. Paul

Figure 4

02416489
September 2024

SRF

Max Capacity (5,500) - Pre-Event Operations (With Mitigation)

2024 EAW Update Transportation Analysis Addendum
City of St. Paul

Figure 5

02416489
September 2024

SRF

Max Capacity (5,500) - Post-Event Operations (With Mitigation)

2024 EAW Update Transportation Analysis Addendum

City of St. Paul

Figure 6

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September 2024

Event Parking (With and Without Mitigation)

A summary of the event parking demand analysis for maximum events with and without mitigation is summarized in Tables 8 and 9 (matches Tables 6 & 7 within this Addendum). Given the estimated parking reductions were provided as ranges, the effectiveness of the mitigation is classified as either low or high. For basketball events exceeding the lower effectiveness attendance thresholds (when a deficit is expected with initial mitigation strategies), it is recommended that UST **offers off-site parking and shuttle services**. The parking mitigation strategies are expected to be refined as part of the event management plan, based on actual events at the Arena and a deeper understanding of event parking dynamics.

Table 8. Event Parking Demand Analysis for Maximum Events (With Mitigation)

	Estimated Frequency	Deficit/Surplus (2)		
		No Mitigation	With Mitigation	
			Low	High
Thursday/Weekday Night Event				
Max Men's Basketball (5,500) (1)	1	-770	-305	-210
Max Women's Basketball (3,000)	0	-112	353	448
Friday Night Event				
Max Men's Hockey (4,000)	9	-35	205	300
Saturday Night Event				
Max Men's Basketball (5,500) (1)	1	-291	-81	14
Max Men's Hockey (4,000)	9	104	314	409
Max Women's Basketball (3,000)	1	367	577	672

(1) As mentioned previously, the current designs indicate a capacity for men's basketball of 5,324. This reduction in capacity is expected to reduce parking demand by approximately 45-60 vehicles, which is not reflected in these numbers.

(2) If the SPS Parking Lot is completed, available parking supply is expected to increase by approximately 40 to 70 spaces, depending on the night, which is not reflected in these numbers.

Table 9. Attendance Thresholds (With Mitigation)

Day/Night	Attendance Thresholds		
	No Mitigation	With Mitigation	
		Low	High
Thursday/Weeknight Event	2,575	4,350	4,700
Friday Night Event	3,870	4,775	5,125
Saturday Night Event	4,395	5,200	5,550

= To be conservative, use the low effectiveness threshold for determining when off-site parking/shuttle services should be provided.

Mitigation Summary

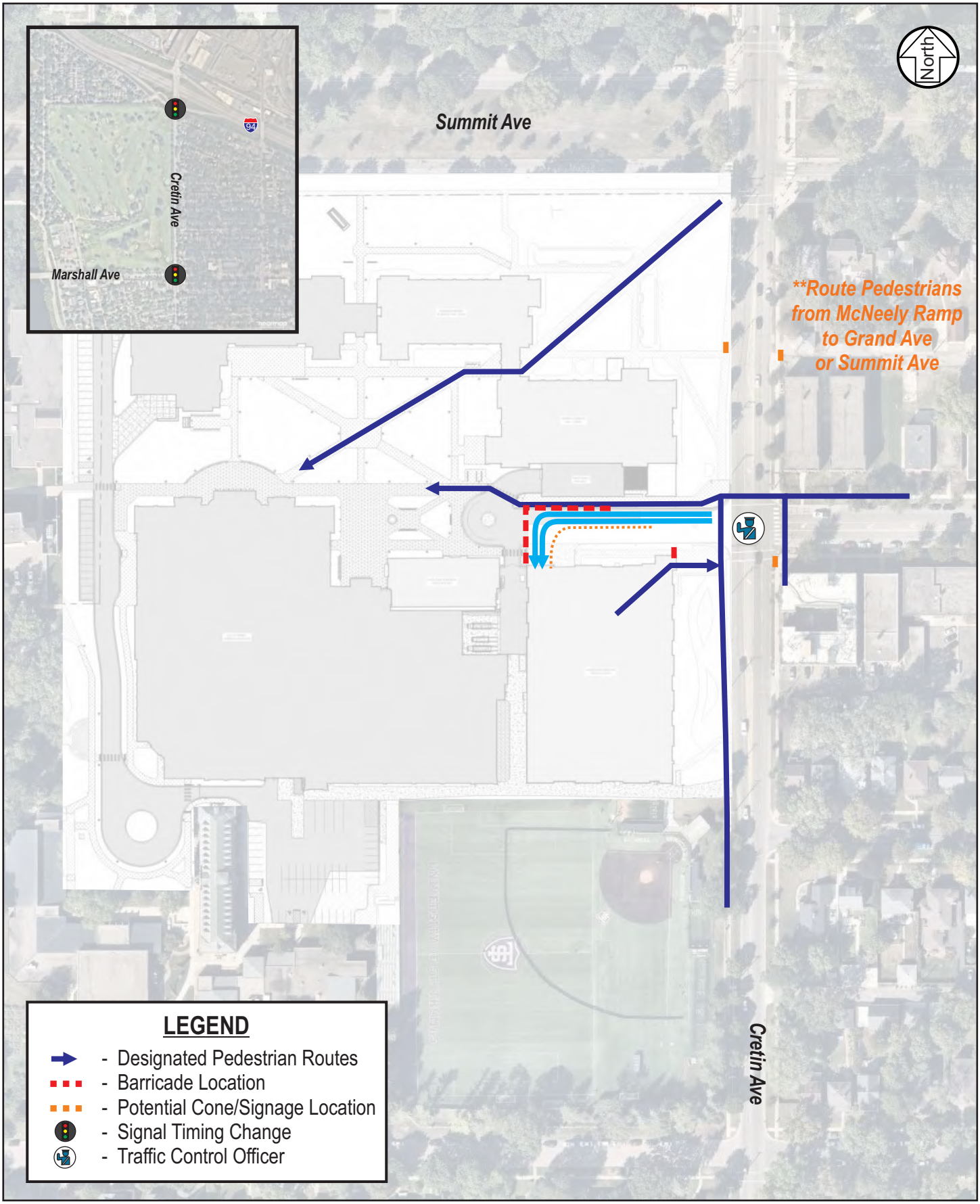
During the 2023 EAW process, Site Plan Review, and the early stages of the Event Management Plan, the project team has identified, assessed, discussed, and pursued various infrastructure improvements, parking mitigation strategies, and traffic management/safety enhancements. Due to the extensive range of mitigation measures considered, some may have been overlooked in the various documents and addendums. Therefore, to provide a comprehensive overview, Table 10 was developed to summarize all mitigation strategies and improvements that the University has either committed to or that have been recommended as part of this 2024 EAW Update Transportation Analysis Addendum. This table is expected to be updated as part of the event management plan to link specific mitigation measures to corresponding attendance levels at which they would be needed/required.

Table 10 - Proposed Mitigation Strategies and Improvements

Mitigation	Benefit
Infrastructure	
Construct New Traffic Signal at Cretin Avenue/Grand Avenue Intersection	Traffic/Pedestrian Operations & Safety
Construct Pedestrian Improvements (i.e. relocated cabinet, widened facilities) along Grand Avenue	Pedestrian Operations & Safety
Construct SE Cretin Avenue Access (with gate arm protection)	Service/Emergency/Shuttle Service Access
Construct Curb Extension at Cretin Avenue/Goodrich Avenue	Pedestrian Safety
Implement Smart Parking System	Traffic/Parking Operations
Implement Alternative Access Solution to Arena from APF if Deemed Necessary	Traffic/Pedestrian Operations & Safety
Event Management Plan (EMP)	
Developed to Monitor and Adjust Strategies below based on actual operations (living document)	Helps "right size" strategies based on real world conditions
Meetings with City, SPPD, and neighborhood engagement	Ensures constant communication with area stakeholders
Rideshare, Transit, Shuttle Plans	Plan developed for rideshare, transit, and shuttle services
Emergency Vehicle Plan	Plan developed with SPPD for emergency vehicles
Parking	
Continue Use of Pre-paid Online Event Tickets	Helps Facilitate Strategies Below
Provide Communication on Alternative Transportation Options with Online Ticket Sales	Helps Facilitate Strategies Below
Implement Pre-paid Online Event Parking Assignment	Assigned Parking Reduces Circulating & Looking for Parking
Reduce Resident Parking Permits to Increase Visitor Parking (Morrison L2)	Increases Available Parking Supply
Clear Parking Ramps (APF, ASC, McNeely, Frey, Morrison L2) Prior to Game	Increases Available Parking Supply
Provide Advanced Notice, Online Classes, and other Strategies with Parking Ramp Clearing	Ensures Parking in Ramps isn't Displaced to Network
Free Transit Pass Option with Purchase of Ticket	Reduces Event Traffic & Parking Demand
Discounted Rideshare	Reduces Parking Demand
Restaurant/Bar Shuttle Services	Reduces Event Traffic (in study area) & Parking Demand
Other events on campus will not be scheduled	Limits Compounding Parking Deficits
Provide Off-Site Parking and Shuttle Services	Reduces Event Traffic (in study area) & Parking Demand
Traffic Management & Safety	
Traffic Control Officers along Cretin Avenue	Traffic/Pedestrian Operations & Safety
Event Signal Timing Plans at Strategic Intersections	Traffic Operations
Parking Attendants at Designated Parking Ramps	Traffic/Pedestrian Operations & Safety
Designated Pedestrian Routes & Pedestrian Wayfinding Campus-Wide	Pedestrian Operations & Safety
Sidewalk Closures and Pedestrian Wayfinding along Grand Avenue (near entrance)	Traffic/Pedestrian Operations & Safety

Appendix A

Mitigation Strategies Graphics & Event Parking with Mitigation (Detailed)



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Max Capacity Pre-Event Mitigation Strategies

2024 EAW Update Transportation Analysis Addendum

City of St. Paul

Figure A1

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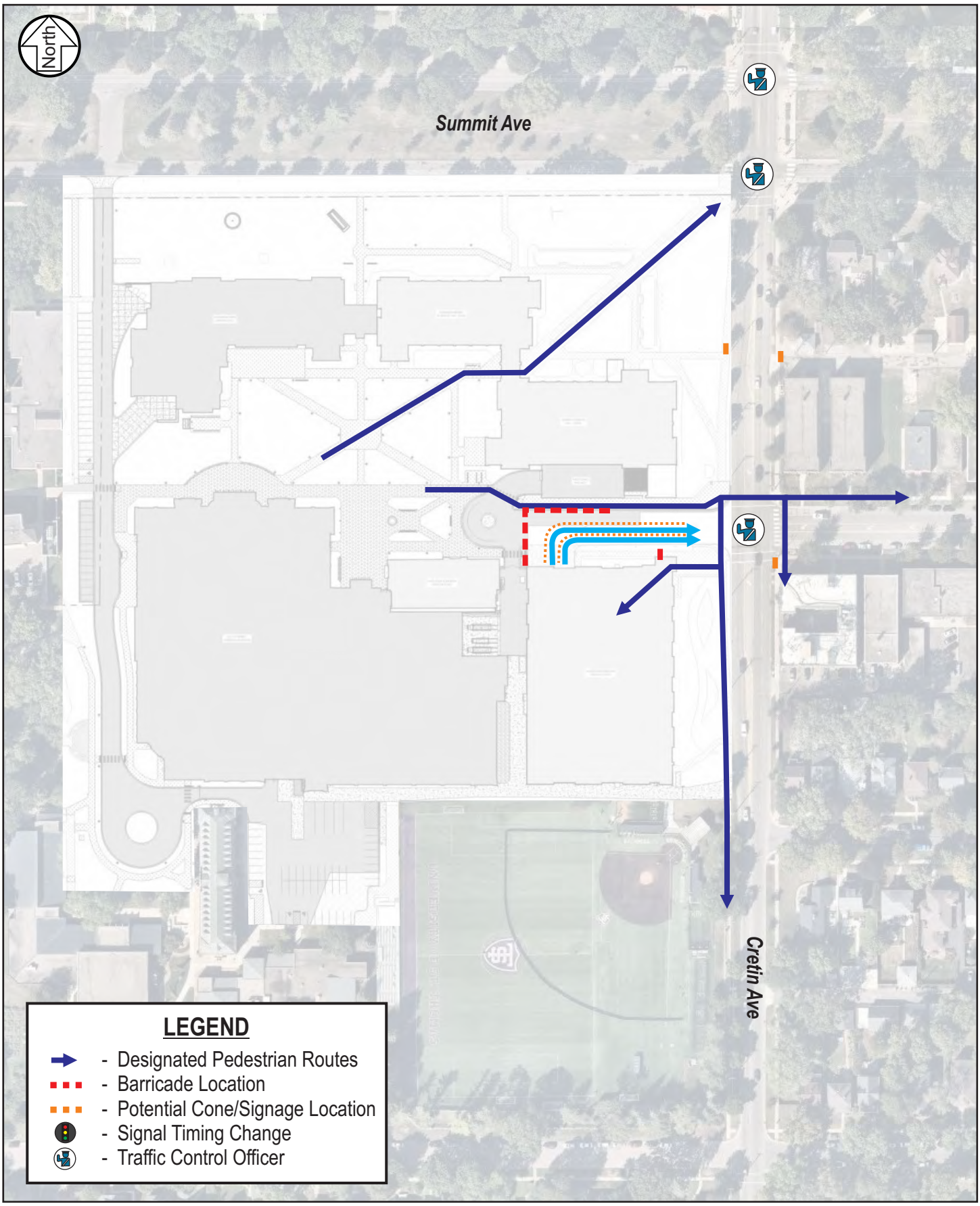
May 2023



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Max Capacity Post-Event Mitigation Strategies

2024 EAW Update Transportation Analysis Addendum

City of St. Paul

Figure A2

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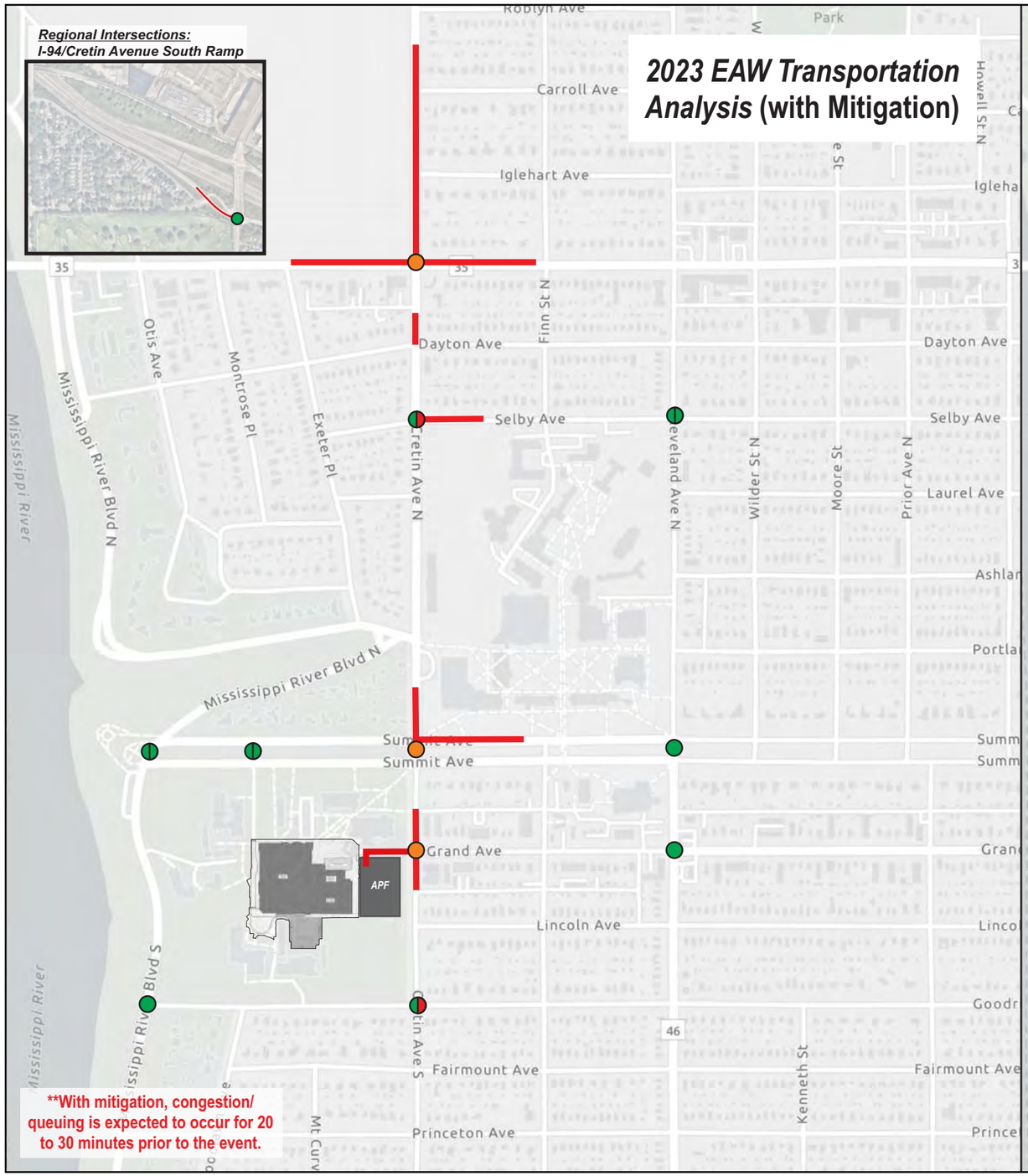

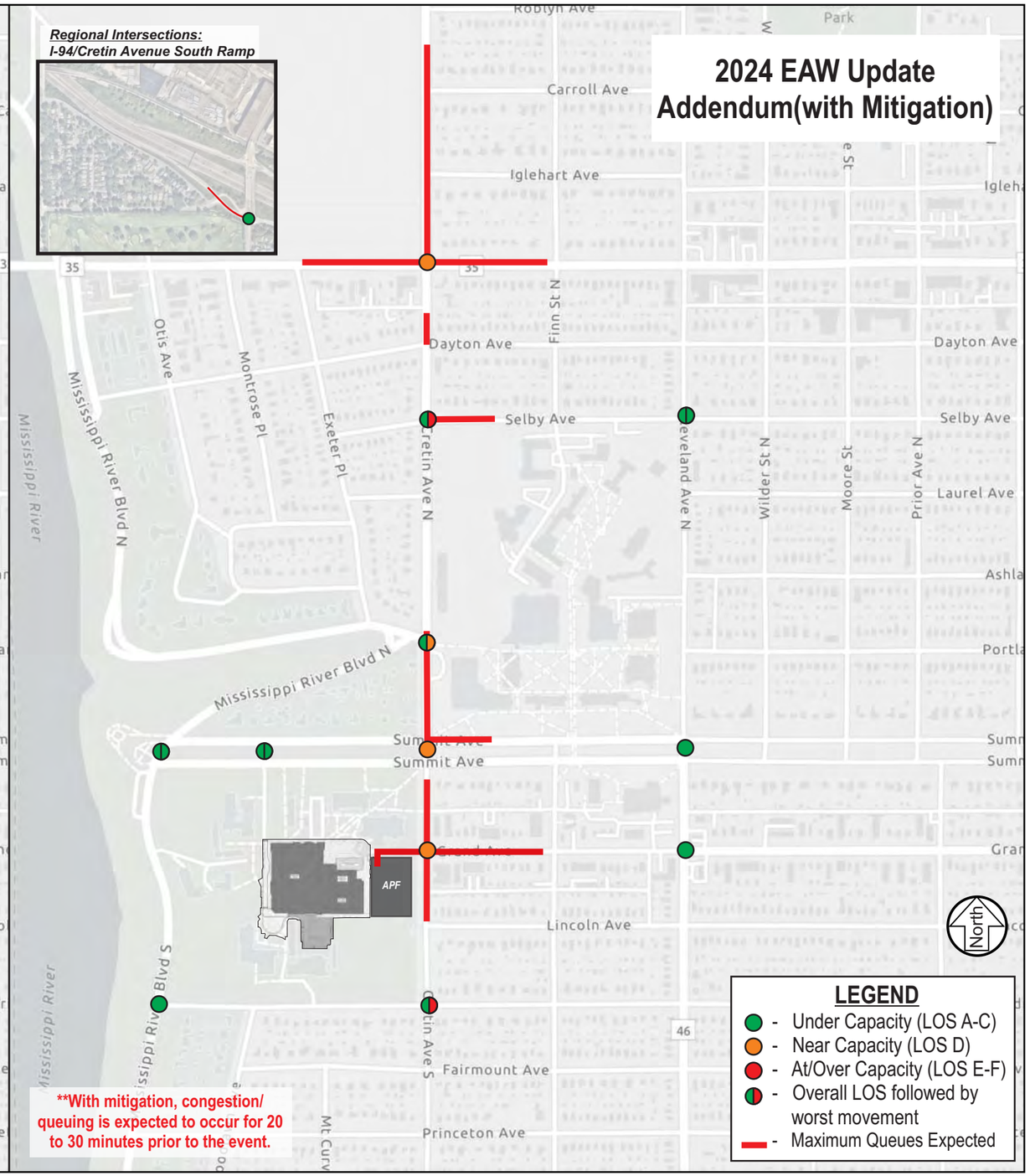

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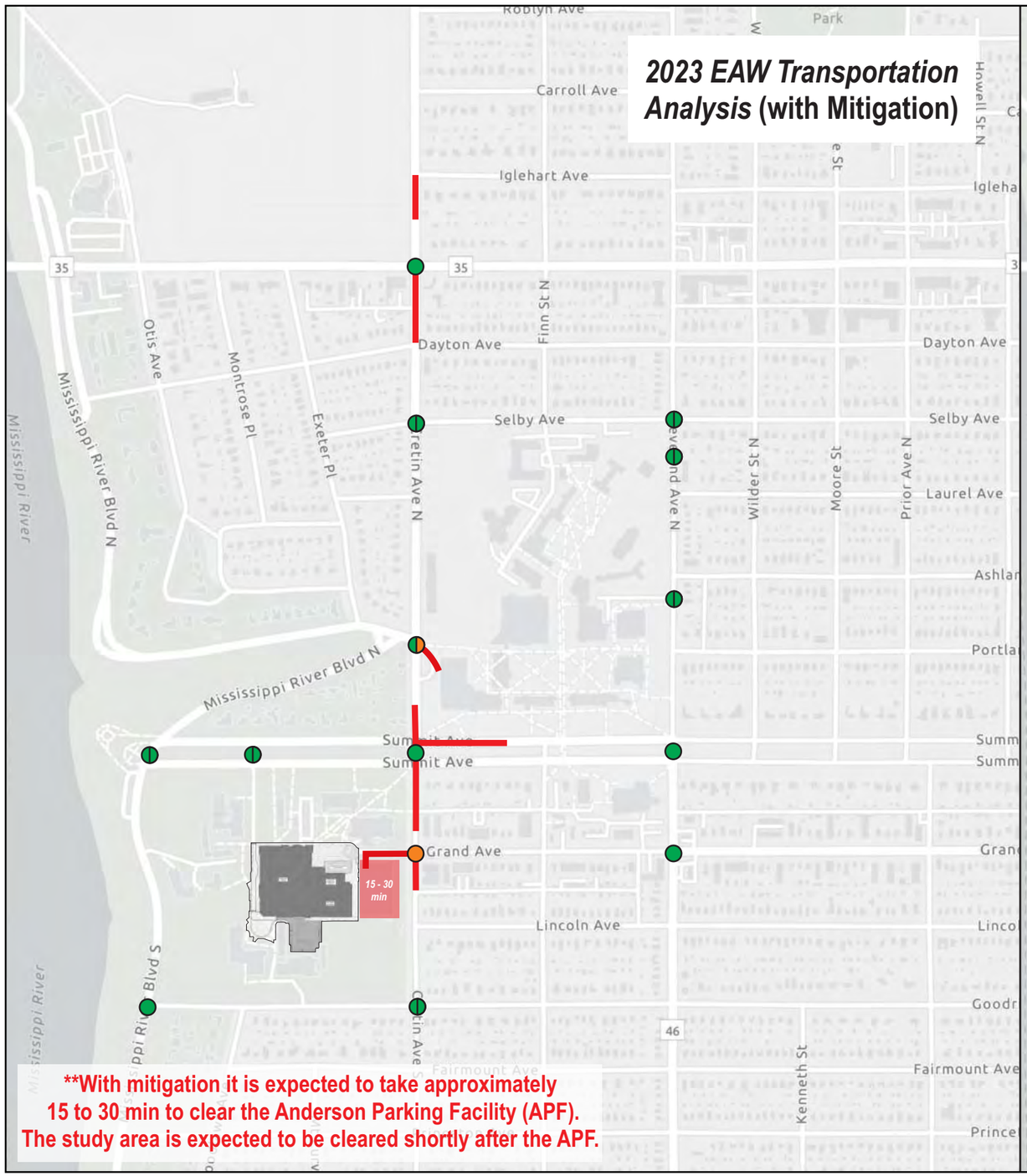
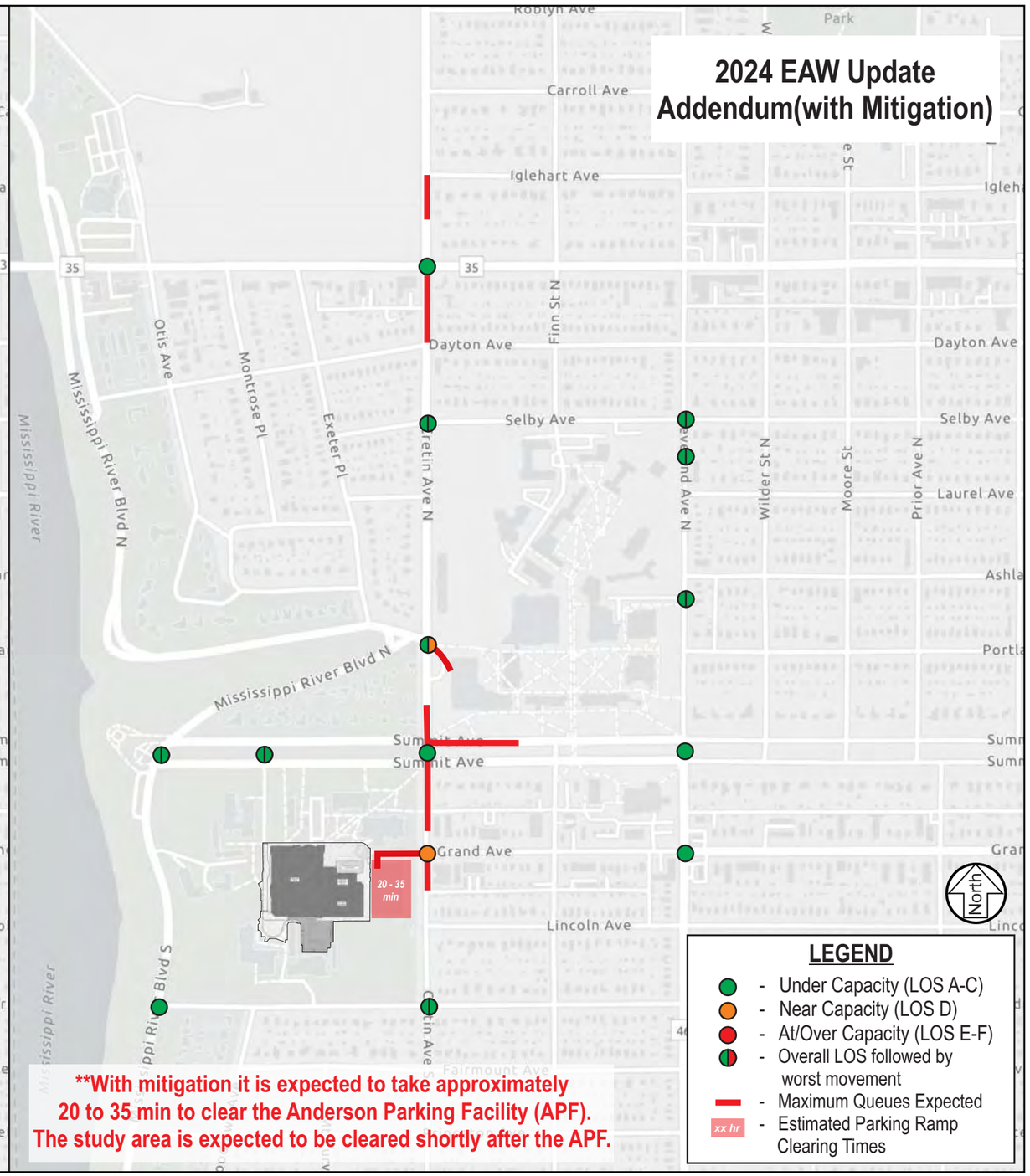
September 2024

Max Capacity - Pre-Event Operations Comparison

2024 EAW Update Transportation Analysis Addendum
City of St. Paul

Figure A3





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02416489
September 2024

Max Capacity - Post-Event Operations Comparison

2024 EAW Update Transportation Analysis Addendum
City of St. Paul

Figure A4

Table 1C. Event Parking Demand Analysis (With Mitigation) – Detailed Breakdown

Attendance		Thursday/Weekday Night				Friday Night				Saturday Night			
Range	For Parking Analysis	Number of Games [2]	Estimated Parking Surplus/Deficit [1]			Number of Games [2]	Estimated Parking Surplus/Deficit [1]			Number of Games [2]	Estimated Parking Surplus/Deficit [1]		
			No Mitigation	Low	High		No Mitigation	Low	High		No Mitigation	Low	High
5,500 – 4,500	5,500	1	-770	-305	-210	0	-430	-190	-95	1	-291	-81	14
	5,000		-639	-174	-79		-299	-59	36		-160	50	145
	4,500		-507	-42	53		-167	73	168		-28	182	277
4,499 – 3,500	4,000	0	-375	90	185	9	-35	205	300	10	104	314	409
	3,500		-244	221	316		96	336	431		235	Mitigation Not Needed	
3,499 – 2,500	3,000	1	-112	353	448	0	228	Mitigation Not Needed		1	367		
	2,500		20	485	580		360				499		
2,499 – 1,000	2,000	8	151	Mitigation Not Needed		0	491			10	630		
	1,500		283				623				762		
	1,000		415				755				894		
Less than 1,000		5	>415			9	>755			12	>894		
Attendance Threshold/# Games with Deficit		–	2,575	4,350	4,700	–	3,870	4,775	5,125	–	4,395	5,200	5,550

Table 1D - Estimated Attendance Ranges per Sporting Team

Attendance	M Hockey	W Hockey	M Basketball	W Basketball	Total
5,500 - 4,500	0	0	2	0	2
4,499 - 3,500	18	0	1	0	19
3,499 - 2,500	0	0	1	1	2
2,499 - 1,000	0	1	9	7	17
Less than 1,000	0	17	2	7	26
Total	18	18	15	15	66

Appendix B

APF Access Addendum

DRAFT Memorandum

SRF No. 16489

To: Anthony Adams, PE, Civil Engineer
Ryan Companies

From: Brent Clark, PE, Project Manager – Traffic Studies
Collin Schroeder, PE, Traffic Operations and Modeling Lead

Date: January 23, 2024

Subject: *UST Multipurpose Arena EAW Transportation Analysis* – APF Access Addendum

Introduction

The *UST Multipurpose Arena EAW Transportation Analysis* was developed by SRF Consulting Group, Inc. (SRF) in June of 2023. Since completion of the EAW, pedestrian access assumptions to/from the Anderson Parking Facility (APF) have changed. Therefore, the objectives of this addendum are to evaluate the event operations expected with the current APF access assumptions and recommend mitigation improvements/strategies to address any issues, if necessary. The following information provides the assumptions, analysis, and recommendations offered for consideration.

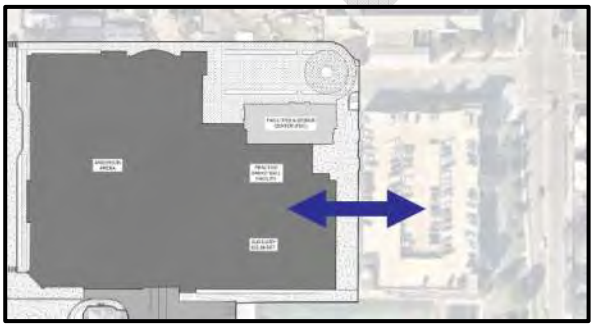
Assumption Modifications

The following assumptions have either been modified or additional information has been collected since completion of the EAW, that may impact the anticipated maximum capacity event operations.

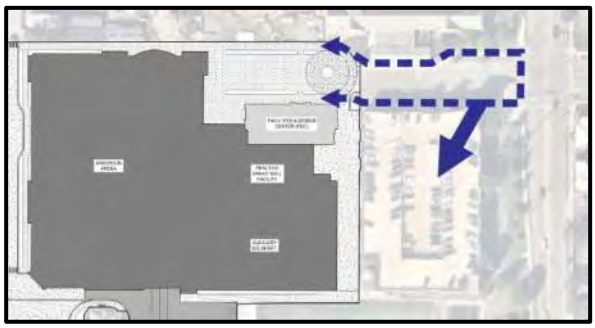
APF Pedestrian Access

As part of the EAW, the west side of the APF was expected to be modified to provide a pedestrian entrance/exit, thus providing a direct connection for APF users and the Arena. While an at-grade pedestrian access is still proposed on the west side of the APF (for access to the auxiliary ice rink only), a stairwell to provide pedestrian access from the other levels of the ramp is no longer proposed to be constructed at this time. Pedestrians are now proposed to route to/from the APF utilizing the northeast stair tower, thus crossing APF vehicular traffic either at the APF entrance or the Cretin Ave/Grand Ave intersection. Therefore, the main objective of this addendum is to evaluate the event operations expected with the current APF access and determine which crossing location is better from an operational and safety perspective.

Previous APF Access Assumptions



Current APF Crossing Options



Off-Site Parking & Shuttle Service

While off-site parking and shuttle services were identified as a mitigation strategy within the EAW, they were not assumed in any of the event operations analysis completed. As part of the EAW Mitigation, off-site parking and shuttle services will be provided for large events. Therefore, in order to accurately model a maximum capacity event, off-site parking and shuttle services were assumed to accommodate approximately 800 event-patrons and pick-up/drop-off was assumed on the west side of the Arena.

Event Arrival Volume Profiles

Peaks are expected to occur for vehicular and pedestrian traffic within the arrival and departure peak hours. As part of the EAW, 15-minute pre-event arrival distributions were developed based on detector data collected before Minnesota Twins/Vikings games and modified for the UST site to reflect higher peaks (closer event arrivals to game time) given UST is not in a downtown setting with nearby pre-event entertainment options. To better understand similar event types, ramp entering data was collected at four (4) Minnesota Gopher hockey/basketball games to review pre-event arrival distributions for similar Division-1 athletic events. Results of the data collection efforts determined that the pre-event arrival distributions for Minnesota Gopher events were more spread out than what was assumed within the EAW. Therefore, while the pre-event arrival distributions were not changed as part of this addendum, they may be more conservative than what is experienced in the field.

Operations Review

An operations analysis was conducted for both pre-event and post-event conditions during a maximum capacity weeknight event (i.e., basketball game) to determine the potential transportation impacts associated with the current APF access assumptions. The operations analysis was completed using VISSIM software, which is a more detailed microsimulation software than Synchro/SimTraffic that can better capture event operations and pedestrian/vehicle interactions. Note that based on discussions with the project team, the analysis was focused on the Grand Avenue/APF Access, Cretin Avenue/Grand Avenue, and Cretin Avenue/Summit Avenue intersections. In addition to the base assumptions identified within the EAW, various mitigation assumptions were also assumed within the analysis such as:

- Off-site parking and shuttle services were assumed to accommodate approximately 800 event patrons and pick-up/drop-offs were assumed on the west side of the Arena.
- Traffic control officers were assumed at the Cretin Avenue/Grand Avenue and Cretin Avenue/Summit Avenue intersections.
- Cones were assumed to provide two storage lanes for vehicles entering the APF, and two parking attendants (one per lane) were assumed to be checking pre-paid parking tickets during pre-event conditions.

Note the previous analysis assumed that APF users would have a direct pedestrian connection to/from the Arena. Therefore, the following pedestrian routing scenarios for APF users were analyzed from an operational and safety perspective:

- **EAW Scenario** – This scenario is representative of the "No Mitigation" and "With Mitigation" analysis completed within the EAW. The west side of the APF was assumed to provide a direct pedestrian connection between the APF and the Arena. The "With Mitigation" analysis mainly consisted of implementing designated pedestrian routes to limit any pedestrian crossings of Grand Avenue or the APF ramp.
- **APF Crossing** – Pedestrians to/from the APF are assumed to enter/exit the northeast APF stairwell, utilize the sidewalk on the south side of Grand Avenue, and cross the APF vehicular access. Parking attendants and/or traffic control officers are assumed to be located at the APF vehicular access to safely manage the pedestrian/vehicular interactions.
- **Cretin/Grand Crossing** – Pedestrians to/from the APF are assumed to enter/exit the northeast APF stairwell and cross Grand Avenue at the Cretin Avenue/Grand Avenue intersection. All APF users are assumed to utilize the sidewalk on the north side of Grand Avenue. The sidewalk on the south side of Grand Avenue is assumed to be closed through the use of barricades, cones, and/or wayfinding signage.

Max Capacity - Pre-Event Operations

An illustrative summary of the pre-event operations is shown in Figure 1. With the APF primarily utilized for event parking (691 spaces), over 1,700 pedestrians are expected to exit the ramp during the pre-event peak hour. This results in a pedestrian/vehicular conflict for APF users that reduces vehicle efficiencies entering the ramp and aligns with "Issue 1A" within the EAW.

Under the APF Crossing alternative, maximum queues are expected to extend to Dayton Avenue to the north and Sargent Avenue to the south during pre-event conditions. Note these operations are expected to be worse than the "No Mitigation" analysis scenario within the EAW.

The Cretin/Grand Crossing alternative operates much better than the APF Crossing alternative. This is due to a combination of larger pedestrian storage areas/crossing widths and that the pedestrian crossing at the intersection provides the ability (i.e. functions as a meter) to help clear APF entering queues. Under this scenario, maximum queues are expected to extend to Riverwood Place to the north and Goodrich Avenue to the south during pre-event conditions, which is similar to maximum queues within the "No Mitigation" analysis scenario within the EAW. Additional mitigation strategies/improvements are recommended to help improve these conditions and are summarized in the following section.

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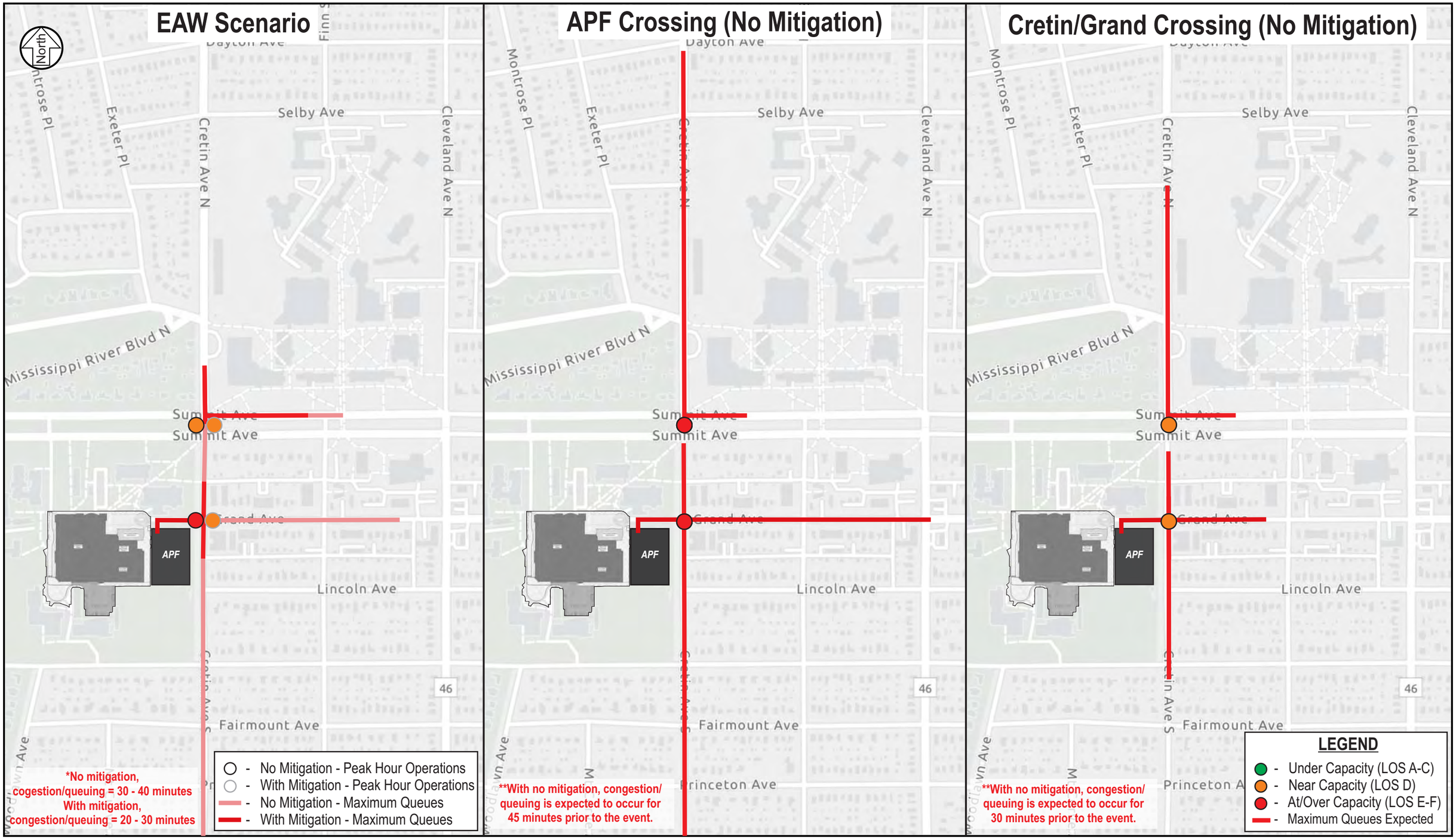

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Max Capacity - Pre-Event Operations Comparison

UST Multipurpose Arena EAW Transportation Study - APF Access Addendum

City of St. Paul

Figure 1

Max Capacity - Post-Event Operations

While some post-event congestion is expected on adjacent roadways, the bottleneck is generally expected to be exiting the APF ramp. Therefore, post-event operations were summarized based on APF clearing times and shown in Table 1. Note these clearing times represent the total amount of time it takes to clear the APF ramp and does not represent the average delay that each APF user is expected to experience. Additional mitigation strategies/improvements are recommended to help improve these conditions and are summarized in the following section.

Table 1. APF Ramp Clearing Times

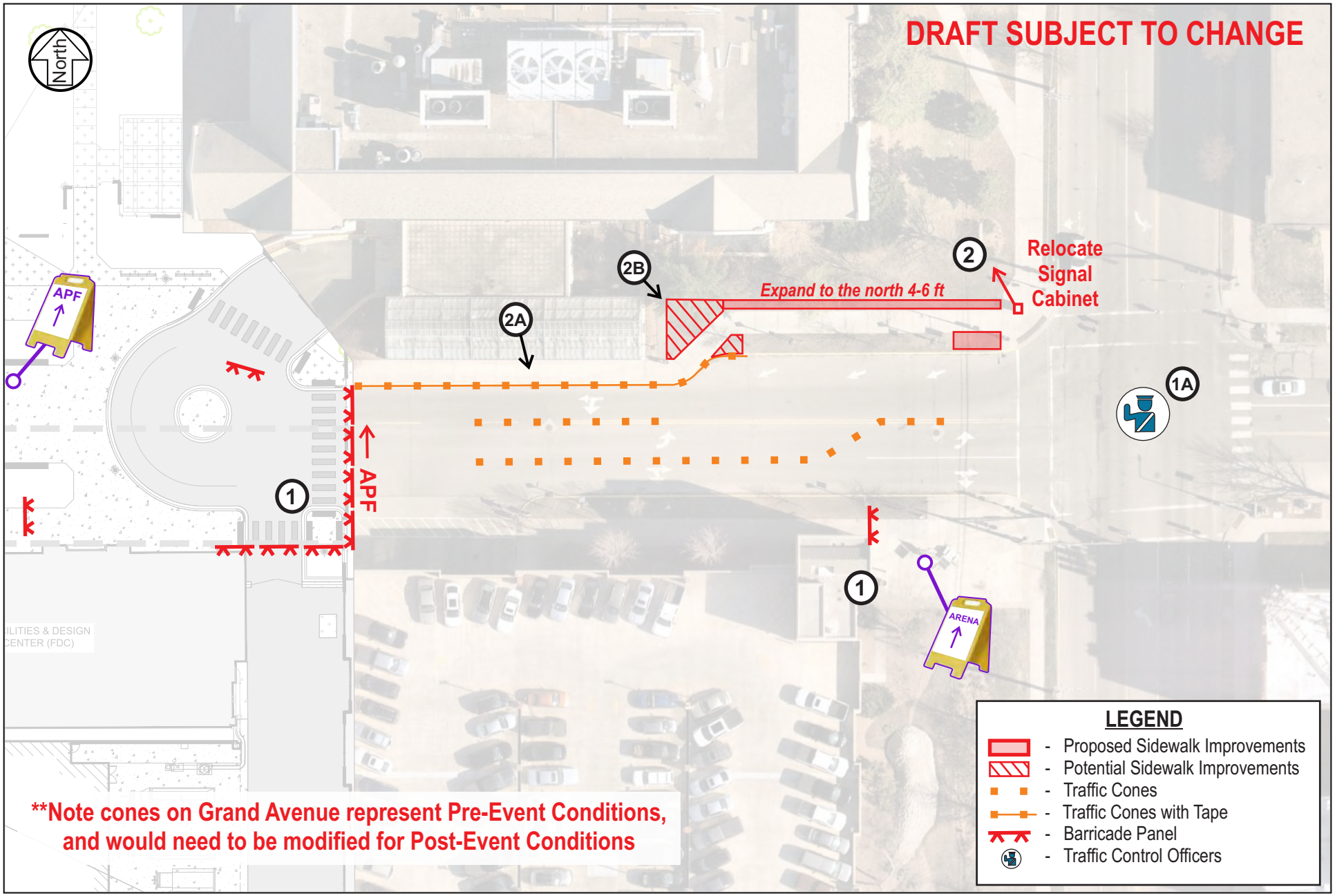
Scenario	Clearing Times
EAW Scenario (with Mitigation)	10-20 min
APF Crossing	30-45 min
Cretin/Grand Crossing	20-35 min

Event Management Recommendations

Based on the operations review, without a direct pedestrian connection from the APF to Arena, operations are expected to operate similar or worse than the "No Mitigation" scenario within the EAW. This is largely due to the amount of pedestrians that are expected to cross the vehicular entrance to the APF or the Cretin Avenue/Grand Avenue intersection. Therefore, the following mitigation strategies are recommended to help reduce event congestion and are summarized below and illustrated in Figure 2. With the mitigation improvements (1 and 2 only), the site is anticipated to operate similar to the "With Mitigation" scenario within the EAW, as shown in Figure 3.

1) Implement the "Cretin/Grand Crossing" alternative by closing the sidewalk on the South side of Grand Avenue and provide wayfinding signage to direct pedestrians to/from the Cretin Avenue/Grand Avenue intersection. The sidewalk closure can be accomplished through a combination of barricades, cones, and wayfinding signage.
    a. Note multiple traffic control officers will need to be provided at the Cretin Avenue/Grand Avenue intersection in order to implement this alternative.

2) Widen the pedestrian facilities and crossings on the west side of the Cretin Avenue/Grand Avenue intersection and relocate the existing signal cabinet in the northwest quadrant, to help manage event pedestrian demand. Widening the effective pedestrian crossing width helps reduce pedestrian crossing times, which is expected to provide operational benefits for entering traffic. While the intersection crosswalk markings could be updated to reflect the increased crossing width, constructing the sidewalk improvements alone (in addition to clearing snow) is expected to be enough for pedestrians to utilize the space as an effective crossing. In addition, traffic control officers and/or "Stop Here on Red" signage officers can help ensure eastbound vehicles don't intrude on the effective crosswalk.



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Max Capacity Mitigation Strategies

UST Multipurpose Arena EAW Transportation Study - APF Access Addendum

City of St. Paul

Figure 2

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January 2024

Operations Analysis with Mitigation

UST Multipurpose Arena EAW Transportation Study - APF Access Addendum

City of St. Paul

Figure 3

a. Note the sidewalk immediately south of the medical garden is only approximately 8-feet wide and has limited flexibility for expansion. While this section may be a slight bottleneck for pedestrians, there is expected to be enough pedestrian storage on both sides (i.e. the APF plaza and the Cretin/Grand NW sidewalk improvements) to limit any pedestrian queuing issues. Additional cones with tape or other devices should be provided directly south of the sidewalk, adjacent to the medical garden, to limit any pedestrian spillover onto the roadway.

b. Additional sidewalk space could be considered east of the medical garden section to help funnel pedestrians during pre-event conditions.

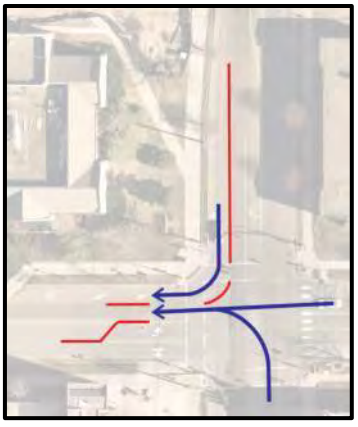
3) Provide incentives to arrive early/stay late before and after an event. As mentioned previously, the pre-event operations analysis may be conservative based on data collected at similar facilities. Additional incentives could further spread-out arrival/departure times, which could provide operational and safety benefits.

Other Considerations

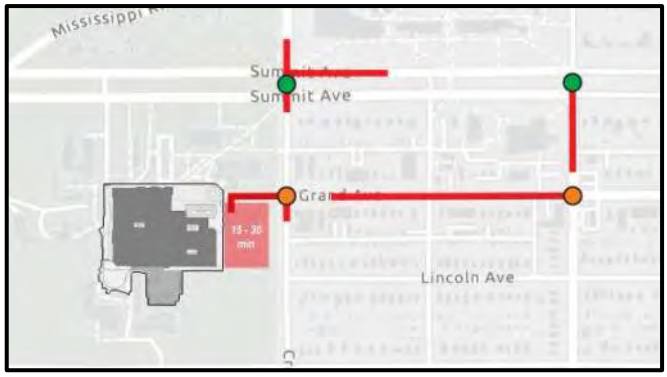
In addition to the strategies identified above, the following event management considerations are provided below and could be considered in the future if needed. Further discussion should occur with the project team as part of the Event Traffic Management Plan.

- Pre-event operations will be heavily dependent on APF service times/parking ticket checks entering the ramp. It should be noted that the analysis assumed two parking attendants (one per entering lane) would be checking pre-paid parking tickets. These operations will need to continue to be monitored and if queuing impacts occur the following strategies could be considered:
  - Increase entering efficiency by either providing additional parking attendants, utilizing one of the ramp exit lanes for entering, and/or refining the pre-paid parking system.
  - Relocate parking ticket checks to within the ramp to provide additional vehicular storage.

- A southbound right-turn only lane could be considered at the Cretin Avenue/Grand Avenue intersection during pre-event conditions. This strategy could be implemented through the use of cones, signage, and traffic control officers, and would provide the ability to allow southbound right-turn movements to occur simultaneously to northbound-left or westbound-thru movements. While this traffic control strategy could provide operational/queueing benefits, it would likely require a traffic control contractor, additional traffic control officers, and may be difficult to implement in the field. Therefore, this strategy should only be considered in the future if queueing issues occur.



- With the use of traffic control officers, the eastbound left-turn movement could be restricted during post-event conditions by converting the eastbound left-turn lane to an eastbound-thru and the eastbound thru-right to a right-turn only lane. Restricting the left-turn movement would greatly reduce pedestrian/vehicular conflicts along Cretin Avenue. A sensitivity analysis test was performed under the Cretin/Grand Crossing alternative, with the eastbound left-turn movement restricted. Results of the analysis, which is summarized in the inset, indicate that the APF ramp is expected to be cleared in 15 to 30 minutes under this scenario.
    - This is anticipated to be the most efficient strategy to clear post-event congestion from the APF ramp and on the adjacent roadway network with the current APF pedestrian access. Post-event congestion is expected to be displaced to the Cleveland Avenue/Grand Avenue and Cleveland Avenue/Summit Avenue intersections, as shown in the inset, which would likely require implementing event signal timing modifications. The turn restrictions at Cretin Avenue, however, will result in a less direct route for event patrons and some users may use alternative local roadways to reach their destination.



    - Further discussion with the project team should occur as part of the ETMP on whether to implement this strategy.
- The pedestrian facilities at the Cretin Avenue/Summit Avenue intersection are expected to be adequate. Traffic control officers are still recommended at the intersection during post-event conditions, to help clear traffic volumes from the APF ramp and improve pedestrian safety. If the eastbound left-turn restrictions are implemented at Cretin Avenue/Grand Avenue (see above), traffic control officers may no longer be needed at this location from an operations perspective.

Next Steps (Event Traffic Management Plan)

As part of the EAW Mitigation, an Event Traffic Management Plan (ETMP) is required to be developed, in consultation with the City of Saint Paul PED and Public Works Departments. As the project proceeds into the next phase, further refinement of the potential mitigation strategies is expected. The ETMP is expected to be a "living document" and mitigation/management strategies will be refined as events occur and a better understanding of event operations are experienced.

Appendix E

September 2023 Findings of Fact

UNIVERSITY OF ST. THOMAS MULTIPURPOSE ARENA

Findings of Fact

September 2023

Prepared for:

SAINT PAUL
MINNESOTA

Prepared by:

Kimley»Horn

TABLE OF CONTENTS

LIST OF APPENDICES

ADMINISTRATIVE BACKGROUND

The University of St. Thomas (UST), as the project proposer, is proposing to redevelop an approximately 6-acre site located on the University of St. Thomas South Campus in Saint Paul, Ramsey County, Minnesota. The proposed project will include one building to house a dual-purpose competition venue for the University's hockey and basketball programs with capacity for approximately 4,000 to 5,500 spectators. The project is also expected to include coaching offices, locker rooms, and student athlete support services including sports medicine, strength and conditioning, nutrition, and equipment. Additionally, two basketball practices facilities and an auxiliary ice sheet are expected. The arena will host other university events such as commencement ceremonies, academic convocations, speakers, and career fairs. Existing utility tunnels will connect the arena to nearby facilities, and a bridge will connect the third level of the arena to Anderson Parking Ramp. Three existing buildings will be demolished, and six existing surface parking lots will be partially or wholly demolished to accommodate the redevelopment.

The City of Saint Paul is the Responsible Governmental Unit (RGU) for this project. An Environmental Assessment Worksheet (EAW) has been prepared in accordance with Minnesota Rules Chapter 4410. The EAW was mandatory per Minnesota Rules, part 4410.4300, subpart 34: sports or entertainment facilities. The EAW was filed with the Minnesota Environmental Quality Board (EQB) and circulated for review and comment to the required distribution list. A notice of availability was published in the *EQB Monitor* on June 27, 2023. This notice included a description of the project, information on where copies of the EAW were available, and invited the public to provide comments.

The EAW was made available electronically on the City of Saint Paul's website at https://www.stpaul.gov/departments/planning-and-economic-development/planning/current-activities/university-st-thomas. Notice of availability was distributed through the City of Saint Paul's Electronic Notification System (ENS) and published in the Pioneer Press. An open house was held on July 12, 2023 from 6:30-8:00PM at McNeely Hall on the University of St. Thomas campus.

The EAW comment period extended from June 27, 2023, to July 27, 2023. Written comments were received from four agencies. Twenty-one public comments were also received. All comments were considered in determining the potential for significant potential environmental impacts.

Based on the information in the record, which is composed of the EAW for the proposed project, the comments submitted during the public comment period, the responses to comments, and other supporting documents, the City of Saint Paul makes the following Findings of Fact and Conclusions.

FINDINGS OF FACT

Project Description

The University of St. Thomas is proposing to redevelop an approximately 6-acre site located on the University of St. Thomas South Campus in Saint Paul, Minnesota. The proposed project will include a multi-purpose competition venue for the University's hockey and basketball programs with capacity for approximately 4,000- to 5,500 spectators. The project is also expected to include practice facilities, coaching offices, locker

rooms, and student athlete support services and will host other university events such as commencement ceremonies, academic convocations, speakers, and career fairs. The new facility will be designed to meet a LEED Silver rating[1]. There are three existing campus buildings with adjacent surface parking lots on site that will be demolished.

Corrections to the EAW or Changes to the Project Since the EAW was Published

A number of clarifications have been made in response to public comments. Corrections and additional information are included below. Please see Appendix A for the EAW published in June 2023 and Appendix D for an updated site plan that shows the new southeast Cretin Ave access point.

Per recommendation from the Minnesota Department of Natural Resources (DNR), an addition to Section 14.a. of the EAW is included. The project site is located within the Mississippi River Twin Cities Important Bird Area (IBA)[2]. The Mississippi River IBA includes the Mississippi River and its adjacent floodplain forest and upland areas extending for 38 river miles through 4 counties from Minneapolis to Hastings. According to the MN DNR, IBAs are a voluntary and non-regulatory part of an international conservation effort to bird populations[3]. As indicated in Section 14.a. of the EAW, the site provides minimal wildlife habitat due to the extent of impervious surfaces and low coverage of natural vegetation.

The MN DNR has completed a Natural Heritage Review for the proposed project. The NHIS review indicated that although no bat records are listed in the NHIS in the vicinity of the project site, all seven of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. To minimize impacts to bat species, the MN DNR recommends that tree removal be avoided from June 1 through August 15, during the active bat season.

The NHIS review indicated that the project site is located within a high potential zone of the federally endangered rusty patched bumble bee (*Bombus affinis*). According to the DNR, the rusty patched bumble bee is likely to be present in suitable habitat within high potential zones. From April through October, the rusty patched bumble bee uses underground nests in upland grasslands, shrublands, and forest edges, and forages where nectar and pollen are available. From October through April, the species overwinters under tree litter in upland forests and woodlands. As indicated in Section 14.a of the EAW, the disturbed nature of the site does not provide suitable habitat. If applicable, the DNR recommends reseeding disturbed soils with native species of grasses and forbs using Board of Water and Soil Resources (BWSR) or Minnesota Department of Transportation (MnDOT) seed mixes. To ensure compliance with federal law, the DNR recommends that the

[1] The USGBC's LEED green building program provides a framework for improving building performance and the responsible use of energy, water, and material resources through design, construction, and ongoing operations. Achieving certification demonstrates a project's verified implementation of these strategies and commitment to supporting a healthier, more sustainable community.

[2] https://netapp.audubon.org/iba/Reports/2421

[3] https://www.dnr.state.mn.us/iba/index.html

project conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Agency and Public Comments on the EAW

During the comment period, the City of Saint Paul received written comments from the U.S. Army Corps of Engineers (USACE) (two letters), Minnesota Department of Transportation (MnDOT), Minnesota Department of Natural Resources, and Metropolitan Council. The City of Saint Paul received an additional 21 written comments from the public.

Consistent with state environmental rules, responses have been prepared for all substantive comments received during the comment period. The following tables contain response to agency and public comments. Copies of the agency and public comments received are included in Appendix B and C, respectively.

Mitigation Plan

The EAW and comments received identify potential impacts of the proposed project in a number of areas, including traffic and parking impacts, visual impacts, impacts to wildlife and water quality (including removal of mature trees), noise impacts, impacts related to GHG emissions and climate change, and cumulative potential impacts. Based on the record, the City of Saint Paul as RGU has determined that based on the criteria provided:

The proposed arena will have a maximum capacity of approximately 5,500 attendees for basketball events and 4,000 attendees for hockey events. The EAW estimated both typical and max attendance for sporting events which exceed capacity at current facilities used by UST. This analysis was based on observed attendance at similar facilities in the Division 1 NCAA athletic conference that UST is a member of. Attendance for typical events was estimated at 3,000 and attendance for max events at the physical capacity of the facility of 5,500. Parking impacts were evaluated based on projected event frequency at typical and max capacity events. Max capacity events for basketball (5,500 attendees) were projected to occur 0-2 times annually (1 weeknight and 1 Saturday evening event each), and max hockey events (4,000 attendees) 4 times annually (Friday and Saturday night events, 2 each). Projected off-street parking deficits for Thursday/weeknight and Saturday evening events were 742 and 330, respectively [1]. In addition to sporting events, the arena is proposed to host other university events, but the frequency and size of these events Is not discussed in the EAW.

Potential traffic impacts were evaluated for a maximum attendance event. The EAW includes "level of service" (LOS) ratings for the max attendance scenario both with and without event traffic management strategies, which are often documented within an event traffic management plan. Event traffic management plans help facilitate vehicular traffic flow and enhance safety for pedestrians. Note the analysis did not assume a transportation management demand plan (TDMP), which would facilitate use by attendees of modes of travel other than by private automobile. The LOS ratings indicate that there would be notable impacts to traffic in the immediate vicinity of the proposed arena, particularly at the intersections of Cretin Avenue with Grand and Goodrich Avenues, the latter being unsignalized. The EAW also notes that left-turn

movements onto Cretin at unsignalized intersections would be particularly impaired for short durations (15 to 30 minutes) before and after an event.

Recommended Mitigation

Based on the nature and extent of the potential impacts, and building on the strategies identified in the EAW, City of Saint Paul staff recommend the following mitigation measures. Implementation should be tied to issuance of a Certificate of Occupancy. Please note the mandatory language (i.e., "will") for strategies; it should be understood that alternative strategies or components of strategies that result in a substantially similar or better mitigation will be considered acceptable.

1. St. Thomas has agreed to monitor event attendance, traffic, and parking for no less than two operational years after the Multipurpose Arena is occupied.
2. Event Traffic Management: St. Thomas has agreed to develop, in consultation with Saint Paul PD and Public Works, an Event Traffic Management Plan, including strategies for traffic control. The plan will tie specific strategies to event size and timing. In addition to collegiate hockey and basketball, the plan will also cover any other planned/potential events at the Multipurpose Arena.
3. Parking Management: St. Thomas has agreed to establish incentives for the use of public transportation and/or rideshare when attending events at the Multipurpose Arena. St. Thomas will also implement reasonable parking system applications to inform patrons what lots are sold out/full for major events to encourage the use of transit, rideshare or carpool, and will provide off-site parking and shuttle service to provide alternatives to on-campus parking when large events occur at the Multipurpose Arena.
4. Non-sporting Events. St. Thomas has agreed to maintain a list of potential events other collegiate sports to be held at the arena, including the type, number, frequency, and timing of such events.
5. Community Engagement. St. Thomas will work to keep the community informed of upcoming events through the neighborhood relations website http://www.stthomas.edu/neighbors as well as provide regular communications from the email list-serve. A dedicated email can also be used for neighbor concerns at: neighbors@stthomas.edu.

CONCLUSIONS

1. All requirements for environmental review of the proposed project have been met.
2. The EAW and the permit development processes related to the project have generated information that is adequate to determine whether the project has the potential for significant environmental effects.
1. Areas where potential environmental effects have been identified will be addressed during the final design of the project. If the project were to proceed, it would be subject to regulatory authority which will be sufficient to implement mitigation necessary to address potential environmental effects. Mitigation will be provided where impacts are expected to result from project construction, operation, or maintenance. Mitigation measures are incorporated into project design and have been or will be coordinated with state and federal agencies during the permit process (see page 3 for the Mitigation Plan).
2. Based on the criteria in Minnesota Rules, part 4410.1700, the project does not have the potential for significant environmental effects.

An environmental impact statement is not required for the proposed project.

Signature Nicolle Goodman
Nicolle Goodman (Sep 26, 2023 15:45 CDT)

Date Sep 26, 2023

Title Director, Department of Planning and Economic Development

APPENDIX A

June 2023 EAW

University of St. Thomas Multipurpose Arena

Environmental Assessment Worksheet

June 2023

Prepared for:

SAINT PAUL
MINNESOTA

Prepared by:

Kimley»Horn

Table of Contents

List of Tables

List of Figures

List of Appendices

December 2022 Version

Environmental Assessment Worksheet

This most recent Environmental Assessment Worksheet (EAW) form and guidance documents are available at the Environmental Quality Board's (EQB's) website at: https://www.eqb.state.mn.us. The EAW form provides information about a project that may have the potential for significant environmental effects. Guidance documents provide additional detail and links to resources for completing the EAW form.

Cumulative potential effects can either be addressed under each applicable EAW Item or can be addressed collectively under EAW Item 21.

Note to reviewers: Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation, and the need for an EIS.

1. Project Title

University of St. Thomas Multipurpose Arena

2. Proposer

Proposer: University of St. Thomas
Contact Person: Anthony Adams, PE
Title: Senior Civil Engineer
Address: 533 South Third Street, Suite 100
City, State, ZIP: Minneapolis, MN 55415
Phone: 612-492-4741
Email: Anthony.Adams@ryancompanies.com

3. RGU

RGU: City of Saint Paul
Contact Person: Josh Williams
Title: Principal Planner
Address: 25 West Fourth Street
City, State, ZIP: Saint Paul, MN 55102
Phone: 651-266-6659
Email: josh.williams@ci.stpaul.mn.us

4. Reason for EAW Preparation

Check one:

Required:	Discretionary:
☐EIS Scoping	☐Citizen petition
☒Mandatory EAW	☐RGU discretion
	☐Proposer initiated

If EAW or EIS is mandatory, give EQB rule category subpart number(s) and name(s):
Minnesota Rules, part 4410.4300, subpart 34 (sports or entertainment facilities)

5. Project Location

County: Ramsey
City/Township: Saint Paul
PLS Location (¼, ¼, Section, Township, Range): NW ¼, SE ¼, Section 5, Township 28N, Range 23W
Watershed (81 major watershed scale): Mississippi River – Twin Cities
GPS Coordinates: 44.9396077, -93.1946973
Tax Parcel Number: 052823420005, 052823420004
At a minimum, attach each of the following to the EAW:

- **County map showing the general location of the project** (see Figure 1)
- **US Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries** (see Figure 2)
- **Site plans showing all significant project and natural features. Pre-construction site plan and post-construction site plan.** (see Figure 3 and Appendix A)
- **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).**

6. Project Description

a. Provide the brief project summary to be published in the *EQB Monitor* (approximately 50 words).

The proposed University of St. Thomas Multipurpose Arena will be a redevelopment of an approximately 6-acre site located on the University of St. Thomas South Campus in Saint Paul, Minnesota. The proposed project will include a multi-purpose competition venue for the University's hockey and basketball programs with capacity for approximately 4,000 to 5,500 spectators. The project is also expected to include practice facilities, coaching offices, locker rooms, and student athlete support services and will host other university events such as commencement ceremonies, academic convocations, speakers, career fairs, and other

events for the university. The new facility will be designed to meet a LEED Silver rating[1]. There are three existing campus buildings with adjacent surface parking lots on site that will be demolished.

b. Give a complete description of the proposed project and related new construction, including infrastructure needs. If the project is an expansion, include a description of the existing facility. Emphasize 1) construction and operation methods and features that will cause physical manipulation of the environment or will produce wastes; 2) modifications to existing equipment or industrial processes; 3) significant demolition, removal, or remodeling of existing structures; and 4) timing and duration of construction activities.

The 6-acre University of St. Thomas Multipurpose Arena (Lee and Penny Anderson Arena at the University of St. Thomas) project site is located on the University of St. Thomas South Campus, bounded to the north by Summit Avenue, the east by Cretin Avenue, the South by Goodrich Avenue, and the west by Mississippi River Boulevard South. See Figure 1 and Figure 2 for project location and Figure 3 for existing site conditions.

The proposed project will include one building to house a dual-purpose competition venue for the University's hockey and basketball programs with capacity for approximately 4,000 to 5,500 spectators. The project is also expected to include coaching offices, locker rooms, and student athlete support services including sports medicine, strength and conditioning, nutrition, and equipment. Additionally, two basketball practice facilities and an auxiliary ice sheet are expected. The arena will host other university events such as commencement ceremonies, academic convocations, speakers, career fairs, and other events for the university. Existing utility tunnels will connect the arena to nearby facilities, and a bridge will connect the third level of the arena to Anderson Parking Ramp. The concept plan is included in Appendix A.

Three existing buildings on the site will be demolished to accommodate the redevelopment: Cretin Hall, Service Center, and McCarthy Gymnasium. Existing surface parking lots will be demolished to accommodate the redevelopment: Lot N, Lot P1, Lot V, Lot X, Lot Y, and a portion of Lot O (38 spaces to remain after reconstruction). Utility relocations and extensions are expected to accommodate facility construction. No onsite parking is expected to be constructed in the redevelopment as existing parking elsewhere within the University campus is to be used. Vehicular access to the facility will consist of loading zones via an access drive on the western boundary of the project site and via the termination of Grand Avenue in the northeast part of the project site.

Construction methods are expected to be typical of new buildings on the University of St. Thomas campus and may include poured in place concrete spread footing and concrete foundation walls with limited drilled piers and temporary earth retention system possibilities adjacent to existing buildings. Construction is anticipated to begin in spring 2024 and be

[1] The USGBC's LEED green building program provides a framework for improving building performance and the responsible use of energy, water, and material resources through design, construction, and ongoing operations. Achieving certification demonstrates a project's verified implementation of these strategies and commitment to supporting a healthier, more sustainable community.

complete by fall 2025. The project may complete some early utility work in the Fall of 2023 to prepare the site.

c. Project magnitude

Table 1: Project Magnitude

Measure	Magnitude
Total Project Acreage	6 acres
Institutional Building Area (square feet)	270,000 square feet
Structure Height(s)	58 feet 3 inches (Main Arena) 66 feet (Basketball Practice Facilities) 81 feet 11 inches (Raised parapets for stair/elevator overruns and/or mechanical screening)

d. Explain the project purpose. If the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The purpose of this project is to redevelop a portion of the University of St. Thomas South Campus into a multipurpose arena to house a competition venue for the University's hockey and basketball programs to meet Division I athletic program expectations.

e. Are future stages of this development, including development on any other property, planned or likely to happen? ☒ Yes ☐ No

If yes, briefly describe future stages, relationship to present project, timeline, and plans for environmental review.

The Anderson Parking Facility is an existing parking ramp that was designed for a future expansion of two additional floors. The expansion is discussed as a potential improvement in the Traffic Impact Analysis (Appendix D); however, is not currently planned or funded at this time.

f. Is this project a subsequent stage of an earlier project? ☐ Yes ☒ No

If yes, briefly describe the past development, timeline, and past environmental review.

Not applicable.

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 Representative Concentration Pathways (RCPs), which are greenhouse gas concentration scenarios used by the Intergovernmental Panel on Climate Change. RCP 4.5 is an

intermediate scenario in which emissions decline after peaking around 2040, and RCP 8.5 is a worst-case scenario in which emissions continue to rise through the century.[2]

Temperature

According to the Minnesota Climate Explorer,[3] the historical average temperature in Ramsey County between 2002 and 2022 was approximately 45.66°F, with the lowest average in 2014 (41.53°F) and the highest average in 2012 (49.17°F). The average annual temperature in Ramsey County is projected to be 49.53°F from 2040-2059 under RCP 4.5. From 2080-2099, the average annual temperature is projected to be 51.91°F and 55.68°F under RCP 4.5 and RCP 8.5, respectively[4].

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 urban heat island effect. According to the Metropolitan Council's Extreme Heat Map Tool, based on the land surface temperature at the project site during a heatwave in 2016, the site is susceptible to extreme heat.[5]

Precipitation

According to the Minnesota Climate Explorer, historic average precipitation in Ramsey County between 2002 and 2022 was approximately 31.34 inches, with the lowest average in 2022 (21.78 inches) and the highest average in 2016 (41.13 inches). Average annual precipitation in Ramsey County from 2040 to 2059 is projected to be 32.95 inches under RCP 4.5. From 2080 to 2099, average annual precipitation is projected to be 33.51 inches and 35.97 inches under RCP 4.5 and RCP 8.5, respectively.

Localized Flood Risk

The Metropolitan Council's Localized Flood Map Screening Tool[6] identifies localized flood hazards, referred to as Bluespots, which are broken into categories based on potential flood water depth. This tool shows several Bluespots within the project site. Multiple Primary and Shallow Bluespots are mapped in the northern part of the project site along Grand Avenue and in surface parking lots, with a maximum depth of 1.60 feet. A Shallow Bluespot is located along McCarthy Gymnasium in the eastern part of the project site, with a maximum depth of 0.28 feet. There are also Primary and Shallow Bluespots in the southwest portion of the project site, with a maximum depth of 1.74 feet. Primary Bluespots are the first areas to fill with water and are generally considered higher risk, while Shallow Bluespots are separate, isolated low areas generally considered low risk.

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[2] Climate Explorer Metadata. Available at https://www.dnr.state.mn.us/climate/climate-explorer-metadata.html.
[3] Minnesota Climate Explorer. Minnesota Department of Natural Resources. Available at https://arcgis.dnr.state.mn.us/ewr/climateexplorer/main/historical.
[4] The timeframe of 2060-2079 is not included because it is not one of the models in the Climate Explorer analysis.
[5] Extreme Heat Map Tool. Metropolitan Council. Available at https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/CVA/Tools-Resources.aspx.
[6] Localized Flood Map Screening Tool. Metropolitan Council. Available at https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/CVA/Tools-Resources.aspx.

Cooling Degree Days

As defined by the National Weather Service, Cooling degree days, which are often used as a proxy to estimate cooling needs for buildings, can be examined as a baseline and projected exposure indicator under the RCP 4.5 and RCP 8.5 scenarios. Cooling degree days are indexed units, not actual days, which roughly describe the demand to heat or cool a building. Cooling degree days accumulate on days warmer than 65°F when cooling is required. For example, if a weather station recorded an average daily temperature of 78°F, cooling degree days for that station would be 13[7]..[8] Cooling degree days are used as a proxy to estimate cooling needs for buildings.

According to Heat Vulnerability in Minnesota,[9] the number of cooling degree days in 2019 for Ramsey County was 374. The number of cooling degree days in 2050 for Ramsey County is projected to be 450 and 593 for RCP 4.5 and RCP 8.5, 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.

Climate considerations and adaptations for the proposed project are described in Table 2.

[7] Heat Vulnerability in Minnesota. Available at: https://maps.umn.edu/climatehealthtool/heat_app/
[8] "What Are Heating and Cooling Degree Days." National Weather Service. Available at https://www.weather.gov/key/climate_heat_cool.
[9] Heat Vulnerability in Minnesota. Minnesota Department of Health and the University of Minnesota. Available at https://maps.umn.edu/climatehealthtool/heat_app/.

Table 2: Climate Considerations and Adaptations

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	**Adaptations**
Project Design	Aspects of the 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.	The site is located in an area that experiences urban heat island effect[10]. Additionally, projected climate trends include increased temperature and precipitation, and increased frequency of freeze/thaw cycles.	• University of St. Thomas is considering ways to design landscaping (via shade trees) and stormwater management systems to reduce stormwater runoff and mitigate for the urban heat island effect. Additionally, these stormwater facilities would improve water quality and stormwater runoff in the project vicinity through using minimal turfgrass, which will reduce irrigation needs, as well as the use of native pollinating perennials, which after 2-3 years period generally do not require irrigation. Plantings around the building perimeter will be salt-tolerant and tolerant of harsh sites, urban settings. For more information on this topic, see Section 12. • University of St. Thomas has committed to building LEED-certified facilities that can be designed to use less energy and water • The following measures provide increased reliability and energy efficiency in the arena to reduce emissions: o Redundant chiller design and incorporation of glycol into supply

[10] Defined by the Environmental Protection Agency as "urbanized areas that experience higher temperatures than outlying areas. Structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies. Urban areas, where these structures are highly concentrated and greenery is limited, become "islands" of higher temperatures relative to outlying areas." Source: https://www.epa.gov/heatislands

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptations
			loop for all cooling coils will protect from freezing conditions and ensure systems remain operational. o Chillers will use next-generation refrigerants with low global warming potential. o The boiler system will include n+1 redundancy and freeze protection. o The project is being considered for connection to the campus microgrid for back-up power during outages or emergency events. • These efficiencies reduce heat emitted from the buildings and their HVAC systems and reduces indoor and outdoor exposure to heat, which is one of the impacts of the heat island effect.[11]
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, and the study area has a low risk of localized flooding.	The proposed development is in an area with low flood risk.	University of St. Thomas will investigate ways to design the stormwater management facilities to minimize standing water and reduce the risk of flooding on the project site.

[11] Source: https://www.sciencedirect.com/science/article/pii/S2666278722000083

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptations
Water Resources	Changes in land cover caused by the project could affect site surface hydrology, resulting in more stormwater runoff and nutrient loading	• Changes in weather patterns may cause a higher frequency of freeze/thaw cycles, resulting in the need for increased salting. • Chlorides from salting degrade nearby water quality and impact aquatic life.	• The stormwater system will be sized for the additional impervious areas and changes in stormwater requirements. • The snow and ice management system at the University of St. Thomas includes a multi-step process to reduce the use of chemicals for salting which includes pretreatment, removal, de-icing, and clean up For more information on this topic, see Section 12.
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.	Increased moisture added to waste material or debris, which will in turn increase methane gas production and add to greenhouse gases.	Any hazardous waste products generated or stored within the proposed development will be registered and kept in accordance with Minnesota Pollution Control Agency (MPCA) requirements. For more information on this topic, see Section 13.
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 local species and suitable habitat.	Suitable habitat for local species may become unsuitable due to land use changes, increased temperature, and increased runoff.	University of St. Thomas is investigating ways to minimize tree removals or replace more trees than are removed and include non-invasive native plants, resulting in a net gain of suitable habitat for local species including small mammals, insects, and birds. For more information on this topic, see Section 14.

8. Cover Types

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

Estimated cover type acreages within the project site before and after development are provided in Table 3. Green infrastructure and tree canopy acreages before and after site development are provided in Table 4 and Table 5.

Table 3: Cover Types

Cover Type	Before (Acres)	After (Acres)
Wetlands and Shallow Lakes (less than 2 meters deep)	0.0	0.0
Deep Lakes (more than 2 meters deep)	0.0	0.0
Rivers/Streams	0.0	0.0
Wooded/Forest	0.0	0.0
Brush/Grassland	0.0	0.0
Cropland	0.0	0.0
Livestock Rangeland/Pastureland	0.0	0.0
Lawn/Landscaping	1.3	0.3
Green Infrastructure (total from Table 4)	0.0	0.0
Impervious Surface	4.8	5.8
Stormwater Pond (wet sedimentation basin)	0.0	0.0
Other (describe)	0.0	0.0
Total	6.	6

Table 4: Green Infrastructure

Green Infrastructure	Before (Acres)	After (Acres)
Constructed Infiltration Systems (infiltration basins, infiltration trenches, rainwater gardens, bioretention areas without underdrains, swales with impermeable check dams)	0.0	0.0
Constructed Tree Trenches and Tree Boxes	0.0	0.0
Constructed Wetlands	0.0	0.0
Constructed Green Roofs	0.0	0.0
Constructed Permeable Pavements	0.0	0.0
Other (describe)	0.0	0.0
Total	0.0	0.0

The specifics of potential proposed green infrastructure will be determined as design advances and will be addressed through the City's entitlement process as well as watershed district and MPCA requirements.

Table 5: Trees

Trees	Number
Number of Mature Trees Removed During Development	76

Trees	Number
Number of New Trees Planted	50[12]

9. Permits and Approvals Required

List all known local, state, and federal permits, approvals, certifications, and financial assistance for the project. Include modifications of any existing permits, governmental review of plans, and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing, and infrastructure. *All of these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules Chapter 4410.3100.*

Table 6: Permits and Approvals Required

Unit of Government	Type of Application	Status
Federal		
Federal Aviation Administration	Notice of Proposed Construction or Alteration	To be applied for
State		
Minnesota Department of Health	Water Main Installation Permit	To be applied for, if applicable
	Well Sealing Notification	To be applied for
Minnesota Department of Natural Resources	Water Appropriation Permit	To be applied for, if applicable
Minnesota Pollution Control Agency	Construction Contingency Plan and Response Action Plan Approval	To be applied for, if applicable
	Disturbance Permit	To be applied for, if applicable
	Notice of Intent of Demolition	To be applied for, if applicable
	National Pollutant Discharge Elimination System Permit	To be applied for
	Sanitary Sewer Extension Permit	To be applied for, if applicable
Regional		
Metropolitan Council	Sewer Connection Permit	To be applied for, if applicable
Capitol Region Watershed District	Permit for Stormwater Management	To be applied for
	Permit for Erosion and Sediment Control	To be applied for
Local		
Ramsey County	Right-of-Way Permit	To be applied for, if applicable
	Road Access Permit	To be applied for, if applicable

[12] The University of St. Thomas has plans for at least 26 trees to be planted elsewhere on campus, outside of the EAW site area, in order to replace or exceed the amount of trees removed from the project. Final locations of the trees will be determined as the project design advances.

Unit of Government	Type of Application	Status
	Demolition Permit and Pre-Demolition Inspection	To be applied for, if applicable
City of Saint Paul	Building Permit	To be applied for
	Certificate of Occupancy	To be applied for
	Demolition Permit	To be applied for
	Electrical Permits and Inspections	To be applied for
	Excavation Permit	To be applied for
	Fire Engineering Permits and Inspections	To be applied for, if applicable
	Grading/Fill Permit and Inspections	To be applied for
	Heritage Preservation Commission Design Review	To be applied for
	Mechanical Permits and Inspections	To be applied for
	Obstruction Permit	To be applied for, if applicable
	Plumbing/Gas Permits and Inspections	To be applied for
	Right-of-Way Plan Review	To be applied for, if applicable
	Sewer Permits	To be applied for
	Sidewalk Permit	To be applied for, if applicable
	Sign Permit	To be applied for
	Site Plan Review	To be applied for
	Tank Permit	To be applied for, if applicable
	Plumbing Permit	To be applied for
	Transportation Demand Management Plan	To be applied for
Saint Paul Regional Water Services	Hydrant Permit	To be applied for
	Backflow Preventer Permit (and Testing)	To be applied for
	Water Main Installation	To be applied for

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 existing site is part of the University of St. Thomas campus and includes several buildings (Cretin Hall, Service Center, McCarthy Gymnasium), surface parking lots (Lots N, O, P1, V, X, and Y), and sidewalks (see Figure 3). Adjacent existing land use is institutional in all directions (the University of St. Thomas and St. Paul Seminary

campuses). Beyond campus to the north lies park/recreational and residential land, to the east lies residential and mixed-use land, to the south lies residential properties, and to the west lies park/recreational/preserve and open water (see Figure 4).

There are two parks within ¼ mile of the project site: Mississippi Gorge Regional Park to the west and Shadow Falls Park to the northwest. The Mississippi Gorge East River Parkway Trail extends through both parks.

There are no cemeteries or prime or unique farmland within or adjacent to the project site.

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.

In 2020, the City of Saint Paul adopted the *2040 Comprehensive Plan* to guide development in the city over the next 20 years.

The *2040 Comprehensive Plan* Future Land Use map designates the project site as Civic and Institutional, which includes building and open space for major institutional campuses. Three policies apply to the Civic and Institutional land use category; however, one is specific to the Capitol Area and is not applicable to the project site. Policy LU-53 encourages partnerships with colleges and universities to strengthen connections with the community and adjacent neighborhoods, and support workforce development, business creation and innovation, and retention of youth and young professionals. Policy LU-54 aims to ensure that campuses are compatible with surrounding neighborhoods by managing parking demand and supply, maintaining institution-owned housing stock, minimizing traffic congestion, and providing for safe pedestrian and bicycle access.

The project site is located in the Mississippi River Corridor Critical Area (MRCCA). The MRCCA is designated in Minnesota state law and applies to land areas on both sides of the Mississippi River in the Minneapolis-Saint Paul-Bloomington metropolitan area along a roughly 72-mile stretch of the river between Coon Rapids and Hastings, MN. The intent of the MRCCA is to protect and preserve the natural, scenic, recreational, and transportation resources along the corridor, which is done through additional planning requirements and development standards, implemented by communities located in the MRCCA.

The MRCCA was established by Governor's Executive Order 79-19. In 2017, the Minnesota Department of Natural Resources promulgated new MN Rules Sec, 6106 in place of the original executive order. Among the new features of MN Rules 6106 is that all municipalities within the MRCCA were required to include an MRCCA-specific chapter in their 2040 comprehensive plans. Saint Paul's plan includes Policy CA-1, stating that the City guide land use and development activities consistent with the management purpose of each of the MRCCA Districts. The project site is located within the River Towns and Crossings District (CA-RTC) of the MRCCA. The CA-RTC District includes historic downtown areas and limited nodes of intense development at specific river crossings. Institutional campuses that predate designation of the Mississippi River, such as the project site, are also included in this District. Land use

management within the CA-RTC District aims to focus redevelopment in limited areas at river crossings. Priorities of the CA-RTC District include minimizing erosion, minimizing untreated stormwater runoff into the river, maintaining public access to and public views of the river, and restoring natural vegetation in riparian corridors and tree canopy. While comprehensive plan policy language has been adopted and still applies, it should be noted that MN Rules 6106 also require all municipalities to adopt zoning regulations consistent with the rules for all areas within the MRCCA. Saint Paul is in the process of formal adoption of new ordinance language consistent with MN Rules 6106, but has not yet completed the adoption. Per the Rules, Saint Paul's existing MRCCA ordinance, which refers to the area where the project is located as the RC3 River Corridor Urban Open (an overlay zoning district), must remain in effect until new MRCCA zoning is formally adopted by the City.

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

The project site is currently zoned R2 – One Family Residential (see Figure 5). This district consists primarily of low-density, one-family dwellings, civic and institutional uses, and public services and utilities that serve residents. In Saint Paul, college and university campuses located in residentially zoned areas require a Conditional Use Permit (CUP), which defines campus boundaries and regulates building heights and setback requirements, among other things. There is an existing CUP in place for the University of St Thomas campus. The CUP specifies building height limits of 75′ for the western portion of the project site and 60′ for the eastern.

In addition to the underlying zoning and CUP, the project site is covered by two overlay zoning districts: the SH Student Housing Neighborhood Overlay District and overlay zoning for the MRCCA. The Student Housing overlay district only applies to non-owner occupied single family and homes and duplexes, and does not apply to the proposed arena. The project is also within the RC3 River Corridor Urban Open Overlay District (MRCCA, see Figure 6). The RC3 River Corridor Urban Open Overlay District limits building heights to 40 feet. Once formally adopted, Saint Paul's new MRCCA zoning will conform MN Rules 6106, which will allow for heights of 48′ and up to 65′ with a conditional use permit for the project site.

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, and the project site is not located within a FEMA 100-year floodplain area.

b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 10a above, concentrating on implications for environmental effects.

The proposed multipurpose arena is generally compatible with surrounding campus land uses on campus and the planned land use for the site. Civic and institutional use in the R2 –

One Family Residential zone includes college, university, seminary, or similar institutions of higher learning.

The main arena section of the proposed facility is designed to a structure height of 58 feet 3 inches. The portion of the arena to house basketball practice facilities is designed to a structure height of 66 feet. Prominent corners of the building are designed as raised parapets for stair or elevator overruns and/or mechanical screening at a height of 81 feet 11 inches. All measurements are as defined by the City of Saint Paul building height calculations. Parapets, stair or elevator overruns, and mechanical screening are not calculated towards the building height per the City's zoning regulations. For sloped roofs, the midpoint of the roof is used for structure height calculations.

The proposed structure heights of the arena exceed the maximum height allowed in the RC3 River Corridor Urban Open Overlay District of 40 feet. However, the more specific height requirements of the University of St. Thomas CUP, 75' feet in the western portion of the project site and 60' in the eastern, are controlling for purposes of height regulation per a long-standing City interpretation. The facility's structure height does not exceed the maximum height allowance as defined by the University of St. Thomas' Conditional Use Permit. Note that the basketball practice facilities portion of the building, which is designed to a height of 66 feet, is located within the portion of the site with a building height restriction of 75 feet.

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

As noted above in Item 10b, no land use or zoning incompatibilities were identified.

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.

According to the Geologic Atlas of Ramsey County (1992),[13] bedrock geology of the project site consists of Decorah Shale – green, calcareous shale with thin limestone interbeds. In April 2023, American Engineering Testing prepared a draft Report of Geotechnical Exploration for the project site. American Engineering Testing completed subsurface exploration which consisted of 12 penetration test borings throughout the project site. Bedrock was encountered at depths of 8 feet to 12 feet below ground surface. Groundwater was encountered in penetration test borings at depths of 6 feet to 12 feet below ground surface. Groundwater was also encountered in limestone seams within the bedrock formation. Surficial geology of the project consists of stream sediment of Glacial River Warren.

No sinkholes or karst conditions were identified for the project site.

[13] Geologic Atlas of Ramsey County, Minnesota. Minnesota Geological Survey. Available at https://conservancy.umn.edu/handle/11299/58233.

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.

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, there are two soil types within the site: the Urban land-Chetek complex, 3 to 15 percent slopes, which covers the majority of the project site, and the Urban land-Waukegan complex, 0 to 3 percent slopes, which covers the northeastern corner of the project site. Due to the location of the site and the classification of the soil, the soil type is not rated for an erosion hazard rating, meaning that there is not enough information to make a determination regarding soil erodibility.

In April 2023, American Engineering Testing prepared a draft Report of Geotechnical Exploration for the project site. American Engineering Testing completed subsurface exploration which consisted of 12 penetration test borings throughout the project site. Fill, consisting of a mixture of sandy lean clays, lean clays, clayey sands, and silty sands, was encountered at all boring locations to depths of 3 feet to 9.5 feet below ground surface. American Engineering Testing concluded that the fill material has variable strength and compressibility, are mostly slow draining and are susceptible to freeze-thaw movements. Soils documented below fill included coarse alluvial soil and till, determined to be moderate to slow draining and susceptible to freeze thaw movements.

Site grading for the proposed arena will occur, with approximately 60,000 cubic yards of excavation proposed for site grading and development. Grading activities within the site are anticipated to begin in spring 2024. Where required, slope stabilization will be provided by means of vegetation establishment, erosion control blankets, or other standard methods of erosion and sediment control. The proposed development within the site will require compliance with the Capitol Region Watershed District's and the City of Saint Paul's erosion and sediment control standards.

12. Water Resources

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.

There are no surface waters located within the project site (see Figure 7). No trout streams or lakes, wildlife lakes, migratory waterfowl feeding and resting lakes, or outstanding resource value waters are located within the project site or within one mile of the project site.

The National Wetlands Inventory identifies 12 wetland and water features within 1 mile of the project site, including the Mississippi River which is located less than ¼ mile west of the project site (see Figure 7). This segment of the Mississippi River is also identified as a Minnesota Department of Natural Resources (DNR) Public Watercourse and Public Water Basin (U.S. Lock & Dam #1 Pool).

The Mississippi River is listed as impaired on the Minnesota Pollution Control Agency's (MPCA's) Part 303d Impaired Waters List (ID Number 07010206-814). This stretch of the river, from Upper St. Anthony Falls to the St. Croix River, is listed as impaired for mercury, PCBs, PFOS, aluminum, nutrients, total suspended solids, and fecal coliform. Total Maximum Daily Load (TMDL) plans have been approved for mercury in fish tissue and water column, nutrients, and total suspended solids.

The National Hydrography Dataset from the U.S. Geological Survey identifies nine flowline features within 1 mile of the project site, including the Mississippi River. The nearest NHD-mapped flowline is a stream approximately 140 feet west of the project site, in alignment with the Grotto. The Grotto is a known feature within the campus. The grotto is a linear aquatic feature that conveys stormwater run-off from the impervious surfaces within the project site.

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 Minnesota Department of Natural Resources' (DNR's) Minnesota Hydrogeology Atlas,[14] depth to groundwater is mapped as greater than 50 feet across the site. In April 2023, American Engineering Testing prepared a draft Report of Geotechnical Exploration for the project site. American Engineering Testing completed subsurface exploration which consisted of 12 penetration test borings throughout the project site. Groundwater was encountered in penetration test borings at depths of 6 feet to 12 feet below ground surface. Groundwater was also encountered in limestone seams within the bedrock formation.

According to the Minnesota Department of Health's (MDH's) Minnesota Well Index,[15] one active irrigation well is mapped south of McCarthy Gymnasium. In March 2023, American Engineering Testing installed a temporary piezometer to measure groundwater levels. The well has not been updated on MDH's Well Index. According

[14] Minnesota Department of Natural Resources. Minnesota Hydrogeology Atlas. Available at https://www.dnr.state.mn.us/waters/groundwater_section/mapping/mn-hydro-atlas.html.
[15] Minnesota Department of Health. Minnesota Well Index. Available at https://mnwellindex.web.health.state.mn.us/.

to MDH's Source Water Protection Web Map Viewer,[16] the project site is not within a wellhead protection area or drinking water supply management area.

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.

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.

Wastewater pretreatment measures to be installed at the project site include a commercial kitchen grease trap. Existing sanitary sewers to serve the project site are located along Summit Avenue, Cretin Avenue, and Grand Avenue. The proposed site design includes a new sanitary sewer connection up to the south side of Summit Avenue and connection near the southeast corner of the site to an existing sanitary sewer within the site. These convey wastewater via city sanitary sewers to the Metropolitan Council interceptor system and eventually to the Metropolitan Council Wastewater Treatment Plant. The Metropolitan Council Wastewater Treatment Plant is an advanced secondary treatment plant with ultraviolet disinfection. The plant currently treats approximately 178 million gallons per day (GPD), with a capacity of up to 314 million GPD according to the Metropolitan Council Environmental Services (MCES) Plant Inflow Summary Report for the period ending September 30, 2014. Based on the Metropolitan Council Environmental Services (MCES) Sewer Availability Charge (SAC) criteria calculator, the estimated daily flow for the Multipurpose Arena is 0.055 gallons per day (MGD). Using the Metropolitan Council's hourly peaking factor of 3.2, the estimated peak flow generated is 0.176 MGD (0.06 percent of existing capacity). Thus, the existing municipal wastewater infrastructure is capable of handling new demand generated by the development.

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.

Not applicable.

3) If the wastewater discharge is to surface water, identify the wastewater treatment methods and identify discharge points and proposed effluent

[16] Minnesota Department of Health. Source Water Protection Web Map Viewer. Available at https://mdh.maps.arcgis.com/apps/View/index.html?appid=8b0db73d3c95452fb45231900e977be4.

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.

Not applicable.

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.**

The project site currently consists of approximately 4.8 acres of impervious surfaces, including approximately 2 acres of impervious surfaces which drain via topography west towards the Grotto. The Grotto lies on the University of St. Thomas campus, west of the project site and follows a drainage channel west towards the Mississippi River based on a review of topography. A National Hydrography Dataset (NHD) stream is mapped in this area. The remaining approximately 2.8 acres of impervious surfaces drain towards the southeast to an existing storm sewer tunnel which discharges to the Mississippi River.

After construction, approximately 5.8 acres of impervious surfaces are expected within the project site. Post-construction quality of stormwater runoff from the project site will be improved by best management practices (BMPs) to meet MPCA and Capital Region Watershed District treatment requirements. Design objectives for stormwater management will also include no increase in rate of stormwater drainage toward the Grotto while maintaining or improving water quality in the stormwater run-off. Remaining acres of stormwater will drain towards the existing storm sewer tunnel.

A Stormwater Pollution Prevention Plan (SWPPP) will be developed in accordance with the National Pollutant Discharge Elimination System (NPDES) permit administered by the MPCA. The SWPPP will cover temporary measures to prevent pollution during construction (erosion and sediment control as well as controls to

minimize spills, leaks, or other discharges of pollutants) and permanent measures to prevent stormwater pollution after construction. These BMPs may include one or more of the following: silt fencing, inlet sediment filters, sediment traps, diversion ditches, grit chambers, temporary ditch checks, rock filter dikes, fiber logs, turf reinforcement mats, temporary seeding, riprap and erosion control blankets for disturbed areas, and seeding or placement of sod or other plant material for final restoration. An Erosion Control Plan checklist will be followed by the developer to meet city and state requirements, minimize drainage problems and soil erosion, and prevent sediment from entering curb and gutter systems and storm sewer inlets.

The project will comply with all city, watershed district, county, and state rules for stormwater management, and chloride use will be addressed in the Stormwater Management Plan that will be reviewed by the city for compliance.

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.**

Construction dewatering may be required for the development of the project site. Construction activities associated with dewatering will include discharging into temporary sedimentation basins to reduce the rate of water discharged from the site, as well as discharging to temporary stormwater BMPs. Any temporary dewatering will require a DNR Temporary Water Appropriations General Permit 1997-0005 if less than 50 million gallons per year and less than one year in duration. It is anticipated that the temporary dewatering would only occur during utility installations and potential construction of building footings.

The water supply will be obtained from the municipal water supply system operated by Saint Paul Regional Water Services (SPRWS). SPRWS obtains water from the Mississippi River, which is filtered through a chain of lakes and drawn into the treatment plant from Vadnais Lake. The system also has 10 water supply wells, which obtain water from the Prairie du Chien and Jordan aquifers. These wells are typically only used for emergency backup or are run at limited volumes to help control temperature and odor from the surface water intakes. By only running the wells at

these limited times, SPRWS is reducing the potential impact to the available groundwater supplies, relying instead on the available surface water supplies.

Two eight-inch water mains will serve the arena for the domestic water use. Peak demand is undetermined at the current level of project design; however, project expectations on duration include heavy usage during events, average usage during the academic year, and light to medium usage in the summer. Water use will include water closets, sinks, showers, HVAC makeup water, and ice making which will serve toilet rooms, commercial kitchens, locker rooms, ice making equipment, and HVAC makeup water. The project site is currently part of the University of St. Thomas campus and existing infrastructure will be modified.

No wells will be used as a water source for this project. One existing well is located at the southern edge of McCarthy Gymnasium and will be removed during project construction. One temporary piezometer was installed at the project site to document groundwater levels and will be removed prior to project construction. If unidentified wells are found during construction, the MPCA and MDH 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.

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.**

   No wetlands are located within the project site; therefore, no impacts are anticipated.

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.

The intent of the site design will be to allow hydrology to be maintained as it exists today to the Grotto. Measures that are planned to avoid, minimize, or mitigate environmental impacts include:

- Connecting relocated storm sewer pipes into the existing storm sewer pipe upstream of the Grotto outlet to avoid disturbing the outlet connection and the existing vegetation within the channel
- Matching existing drainage areas to maintain a consistent volume of stormwater to the Grotto. Reducing volume to the Grotto may cause the existing channel to dry up and increasing volume to the Grotto may cause erosion of the existing channel and areas downstream.
- Discharging building roof water to the Grotto in lieu of surface parking lot, since building roof water is relatively clean compared to site water which often contains salts and sediments

No other surface waters are located within the project site; therefore, no additional impacts to surface waters are anticipated.

13. Contamination/Hazardous Materials/Wastes

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

The MPCA's What's in My Neighborhood database was reviewed to determine if any known contaminated properties or potential environmental hazards are located within or adjacent to the site. Two sites were identified within the project site, and two sites were identified adjacent to the site (see Figure 8 and Table 7).

Table 7: What's in My Neighborhood Sites

Site ID	Site Name	Active	Activity	Program
105494	University of Saint Thomas	Yes	Petroleum Remediation, Leak Site, Underground Tanks	Investigation and Cleanup
145996	UST South Campus Facilities Bldg	No	Construction Stormwater	Stormwater

Site ID	Site Name	Active	Activity	Program
251021	University of St. Thomas Schoenecker Center	Yes	Construction Stormwater	Stormwater
143128	Soccer/Softball Field Improvements	No	Construction Stormwater	Stormwater

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.

According to the Ramsey County Solid Waste Management Master Plan 2018-2038, Ramsey County 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.

Waste Generated During Construction

Demolition debris and earth materials will be generated during demolition of the existing facilities. Demolition debris is inert material such as concrete, brick, bituminous, and rock. The solid wastes generated during demolition will be recycled or disposed of at a state-permitted landfill. The project will target a 50 percent to 75 percent diversion rate for construction-produced waste as part of the LEED approach.

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

According to the University of St. Thomas Conditional Use Permit, a demolition survey of each building to be removed must be completed prior to demolition. The survey will identify asbestos-containing materials for the structures, if present. If asbestos-containing materials are present, they will be removed in accordance with MPCA and MDH regulations.

Waste Generated During Operation

Operation of the multipurpose arena will generate solid wastes such as food waste, beverage containers, packaging, and paper. In total, it is estimated that the proposed development will generate approximately 2,072 tons of solid waste per year. A source recycling/separation plan will be implemented for additional waste and waste that cannot be recycled will be managed in accordance with state regulations and guidelines. Waste sorting at the University of St. Thomas currently includes a co-mingled recycling program and a composting program for food waste and other compostable wastes.

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.

No existing above ground storage tanks have been identified within the project site. One approximately 20,000-gallon underground fuel storage tank is located in the northeast corner of the project site. The underground fuel storage tank is located in the northwest corner of the Service Center building and will be removed prior to demolition of the building. According to the What's in My Neighborhood database, the tank was installed in 2012. The tank will not be replaced after construction is complete.

The project may install a diesel generator to provide backup power to the arena as well as up to four additional future diesel generators to feed the University of St. Thomas' MicroGrid. These generators would have diesel storage tanks at each generator or utilize one fuel storage tank for fuel supply. The project proposer will obtain the appropriate permits from the MPCA.

Any hazardous waste materials used or stored during construction and/or operation of the project will be disposed of in the manner specified by local or state regulation or by the manufacturer. A spill prevention plan will be developed, and proper spill prevention controls will be in place for any vehicle refueling or maintenance that occurs on site during construction.

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.

Removal of the existing structures within the site is not expected to generate new hazardous waste. Toxic or hazardous waste to be stored within the site during construction will include fuel and oil necessary to operate heavy construction equipment and during operations may include commercial cleaning supplies. Regulated material and/or waste generated or stored during construction and operations will be managed in accordance with state and local requirements.

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.

The existing site is primarily impervious surfaces with minimal landscaping. There are no above ground streams, rivers, lakes or ponds located within the project site; therefore, the site provides no fish habitat. The site provides minimal wildlife habitat due to the extent of impervious surfaces and low coverage of natural vegetation. However, wildlife that can be found within the project site may include songbirds and small mammals that have adapted to an urban environment.

Fish and wildlife habitat within the vicinity of the project site includes the Mississippi River, Mississippi Gorge Regional Park, and Shadow Falls Park, all located within ¼ mile of the project site to the west and northwest.

Based on information from the U.S. Fish and Wildlife Service, the project site is located within a high potential zone of the rusty patched bumble bee; however, the disturbed nature of the site does not provide suitable habitat.

The project site is not located within any regionally significant ecological areas (RSEA), Minnesota Biological Survey (MBS) Sites of Biodiversity Significance, or native plant communities. However, as described under Item 14b, one RSEA, two MBS Sites of Biodiversity Significance, and eight native plant communities are located within one mile of the project site.

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-1074) 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.

State-Listed Threatened and Endangered Species

A review of the DNR's Natural Heritage Inventory System (NHIS) was conducted per license agreement LA-1074 for the project site and the area within approximately one mile of the project site. The database includes known occurrences of any state endangered, threatened, or special concern species. The review identified 20 records of 7 species that may be found near this area (see Table 8).

Table 8: State-Listed Threatened and Endangered Species

Species	Group	Status	Location	Habitat
Handsome Sedge (*Carex 26ormosa*)	Vascular Plant	Endangered	One record is located within the project site.	Preferred habitat within Ramsey County includes forested slopes along the Mississippi River.
Higgins Eye (*Lampsilis higginsii*)	Mussel	Federally and State Endangered	One record is located within one mile of the project site.	Preferred habitat is stable substrates of the Mississippi River and the lower portion of some large tributaries.
Kentucky Coffee Table (*Gymnocladus dioica*)	Vascular Plant	Special Concern	One record is located within the project site.	Preferred habitat includes mesic hardwood forest on terraces of the Mississippi River.
Round Pigtoe (*Pleurobema sintoxia*)	Mussel	Special Concern	One record is located within one mile of the project site.	Preferred habitat includes fast current areas dominated by coarse sand and gravel substrate in medium to large rivers.
Rusty patched Bumble Bee (*Bombus affinis*)	Insect	Federally Endangered	Four records are located within one mile of the project site.	Preferred habitat includes semi-natural upland grassland, shrubland, woodlands, and forests. The entire project site is within a High Potential Zone.
Swamp White Oak (*Quercus bicolor*)	Vascular Plant	Special Concern	One record is located within the project site and two records are located within one mile of the project site.	Preferred habitat includes floodplain forest along the Mississippi River.
Wartyback (*Quadrula nodulata*)	Mussel	Threatened	Nine records are located within one mile of the project site.	Preferred habitat includes large rivers with fine or coarse substrates in areas with slow to moderate current.

Other Sensitive Ecological Resources

The Mississippi River is located within ¼ mile of the project site and is identified as an RSEA. RSEAs are given a score of 1, 2, or 3 based on how well continuous natural areas meet standards for size, shape, connectivity, adjacent land use, and species diversity, with 3 being the highest possible score. The section of the Mississippi River near the project site has a score of 1. Areas ranked as 1 tend to be small and have less diversity in vegetative cover. They also typically have adjacent land cover types or uses that could adversely affect the RSEA.

Two MBS Sites of Biodiversity Significance, St. Paul Bluffs W and West Bank Mississippi River, are located approximately 0.15 mile and 0.30 mile west of the project site. Each MBS Site is ranked based on rare species populations, native plant communities, and landscape context. Both St. Paul Bluffs W and West Bank Mississippi River have been assigned a moderate rank. Moderate sites contain occurrences of rare species, moderately disturbed native plant communities, and/or landscapes that have strong potential for recover of native plant communities.

Eight native plant communities were identified within one mile of the project site, and approximately align with the St. Paul Bluffs W and West Bank Mississippi River MBS Sites of Biodiversity Significance. The plant communities include one Mesic Prairie (Southern), one Red Oak-White Oak-(Sugar Maple) Forest, three Red Oak-Sugar Maple-Basswood-(Bitternut Hickory) Forests, and three Silver Maple-(Virginia Creeper) Floodplain Forests.

As noted above in Item 14a, these sites and native plant communities are not located within the project site.

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.

Wildlife Habitat and Threatened and Endangered Species

No impacts to fish, wildlife, plant communities, rare features, or ecosystems are anticipated due to the lack of suitable wildlife habitat. No impacts to the state-listed and federally-listed mussels species are expected, as there is no suitable habitat within the project site and no impacts to the nearby Mississippi River are expected. The DNR is completing a Natural Heritage Review for the proposed project and results are pending (see correspondence in Appendix B).

Invasive Species

Invasive species are plants and animals that are not native to an area and are capable of causing harm. Certain measures can be taken to limit the likelihood of introducing invasive species, such as securing local materials to avoid the long-range movement of goods or washing vehicles prior to accessing the project site. Additionally, as landscape designs are finalized, they will consider including native, non-invasive plants.

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

Invasive species will be controlled on site during construction, and proposed landscaping will not include any DNR-identified invasive species. Additionally, best management practices will be followed when relocating construction equipment from other sites.

University of St. Thomas is considering ways to design landscaping plans to add shade trees and increase the landscaped area with a blend of biodiverse, native, drought tolerant plant species that could provide pollinator habitat.

No adverse impacts are expected to state-listed and federally-listed species.

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.

A search of the Minnesota State Historic Preservation Office's (SHPO) Statewide Inventory was requested to identify known historic properties and archaeological sites in the vicinity of the project. The database search identified no archaeological records in the project site. Within Township 28N, Range 23W, Section 5, the database search identified 221 records. Of the 221 records, 35 properties are listed in the National Register of Historic Places (NRHP) and 5 properties that are considered eligible for the NRHP. "Considered eligible" means that a federal agency has recommended that the property is eligible for listing in the NRHP and SHPO has accepted the recommendation for the purposes of the environmental review process. However, these properties need to be further assessed before they are officially listed in the NRHP. The remaining 181 records identified in the database search have no designation and may not have been evaluated; therefore, no assumption to their eligibility can be made. Three of the properties identified via the database search are located within the project site, and an additional 14 properties are located within 500 feet of the project site (see Table 9 and Figure 9). The three properties located within the project site are listed as considered eligible; however, these buildings are not considered locally significant for historic preservation. Given the lack of a federal nexus or formal listing on the NRHP and the lack of local designation no further evaluation or assessment is required. The City of Saint Paul Heritage Preservation staff has also reviewed the project and project site and has determined no further evaluation is needed for demolition of the existing buildings within the project site.

Table 9: Historic Properties within 500 feet of the Project Site

Property Name	Location Relative to Project	Status
Almendinger Apartments	Within 500 feet of Project Site	No designation
Apartment (2171 Grand Ave. W)	Within 500 feet of Project Site	No designation
Binz Refectory – St. Paul Seminary (University of St. Thomas)	Within 500 feet of Project Site	No designation

Property Name	Location Relative to Project	Status
Brady Education Center – St. Paul Seminary (University of St. Thomas)	Within 500 feet of Project Site	No designation
Cretin Court Apartments	Within 500 feet of Project Site	No designation
Grace Residence (University of St. Thomas)	Within 500 feet of Project Site	Considered eligible
Grand Student Apartments	Within 500 feet of Project Site	No designation
Grotto and Woodland Walk – St. Paul Seminary	Within 500 feet of Project Site	No designation
McCarthy Recreation Building – St. Paul Seminary (University of St. Thomas)	Project Site	No designation
Mills, H.S., House	Within 500 feet of Project Site	Listed in the NRHP
Nilson Apartments	Within 500 feet of Project Site	No designation
O'Shaughnessy Hall – University of St. Thomas	Within 500 feet of Project Site	No designation
St. Mary's Chapel (St. Paul Seminary)	Within 500 feet of Project Site	Listed in the NRHP
St. Paul Seminary Gymnasium/Heating Plant (Service Center Building) (University of St. Thomas)	Project Site	Considered eligible
St. Paul Seminary South Dormitory/Cretin Hall (University of St. Thomas)	Project Site	Considered eligible
Tierney, S., House	Within 500 feet of Project Site	Listed in the NRHP

The northern portion of the project site is located within the Summit Avenue West Heritage Preservation District. In February 2022 the Saint Paul Heritage Preservation Commission determined that a review of the project is required, focused on the portion of the building that lies within the Summit Avenue West Heritage Preservation District. The review will be complete when detailed project designs are provided to the Heritage Preservation Commission.

It is not anticipated that unknown archaeological sites will be uncovered during the construction of this project as the site has been previously disturbed. However, if cultural materials are encountered during construction, unanticipated discovery protocols will be followed.

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.

The project site includes existing institutional land, and no unique designated scenic views or vistas are located within the site. The City of Saint Paul *2040 Comprehensive Plan* identifies Public River Corridor Views (PRCV) within the Mississippi River Corridor Critical Area (MRCCA) on public property, including parks and trails, historic properties, and bridge overlooks. Views towards

bluffs from the opposite side of the shore are also noted. View #3 – Shadow Falls Overlook is located within ¼ mile of the project site; however, the view direction is towards the Mississippi River and away from the project site. Considering the set back from Mississippi Gorge Regional Park, views of the project site from the western bank of the Mississippi River will be minimal.

Policy CA-11 as outlined in the MRCCA plan is intended to protect and minimize impacts to PRCV from public development activities. According to the PRCV map, the project site is not located within the view range of any identified view locations. Therefore, the project will not have an impact on identified significant public views, which is consistent with Policy CA-11.

Generally, views from the surrounding area would be similar to those experienced currently, as current and future land use is within an institutional facility and there are buildings of similar massing already in the area. Changes in views of the campus would be most noticeable from portions of Goodrich Avenue, and from the Grand Avenue right-of way. The proposed project will conform with the City's regulations for building height, building form, landscape screening, and lighting. Adverse visual effects are not anticipated.

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 that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

Minimal stationary source air emissions are anticipated from natural gas use and #2 fuel oil for the boiler system. See Table 12: Proposed Operational Emissions for more information.

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.

Motor vehicles emit a variety of air pollutants including carbon monoxide (CO), hydrocarbons, nitrogen oxides, and particulates. The primary pollutant of concern is CO, which is a byproduct of the combustion process of motor vehicles. CO concentrations are highest where vehicles idle for extended periods of time. For this reason, CO concentrations are generally highest in the vicinity of signalized intersections where vehicles are delayed and emitting CO. Generally, concentrations approaching state air quality standards are found within about 100 feet of a roadway source. Further from the road, the CO in the air is dispersed by the wind such that concentrations rapidly decrease.

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 in the 10 highest traffic volume intersections in the Twin Cities do not experience CO impacts. Therefore, intersections with traffic volumes lower than these 10 highest intersections will not cause a CO impact above

state standards. MnDOT's screening method demonstrates that intersections with total daily approaching traffic volumes below 82,300 vehicles per day will not have the potential for causing CO air pollution problems. The 10 highest traffic volumes in the Twin Cities include: Cedar Avenue at County Road 42, Hwy 252 at 66th Avenue, Hwy 252 at 85th Avenue, County Road 42 at Nicollet Avenue, Hwy 252 at Brookdale Drive, Hwy 7 at County Road 101, Hwy 7 at Williston Road, University Avenue at Lexington Avenue, University Avenue at Snelling Avenue, and Hennepin Avenue at Lake Street. None of the intersections in the vicinity of the project site 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.

The project may generate temporary fugitive dust emissions during construction. These emissions would be controlled by sweeping, watering, or sprinkling, as appropriate or as prevailing weather and soil conditions dictate. Dust emissions are not anticipated during operations as all surfaces will either be impervious or vegetated.

The construction and operation of the project are not expected to generate objectionable odors.

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.

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 towards 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 (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical

land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming.[17]

This section includes an estimated quantification of the following GHG emissions associated with the proposed project:

- Carbon Dioxide (CO_2)
- Nitrous Oxide (N_2O)
- Methane (CH_4)

The projected GHG emissions are provided on an average annual basis using the CO_2 equivalent (CO_2e) and include the proposer's best estimate of average annual emissions over the proposed life/design service life of the project. Emissions were estimated using the US Environmental Protection Agency's Simplified GHG Emissions Calculator (August 2022)[18] and are summarized by project phase (i.e., construction and operations) and source type (e.g., combustion from mobile equipment, off-site electricity (see Appendix C for background analysis). Estimated existing emissions are summarized in Table 10 and estimated proposed emissions are summarized in Table 11 and Table 12 .

Construction emissions are based on length of construction, size of site, and are from mobile equipment including passenger cars, light-duty trucks, medium and heavy-duty trucks, and construction equipment (both gasoline and diesel).

Emissions from cooling and refrigeration systems are not accounted for in this operational emissions analysis as GHGs from refrigerants are approximately less than 5 percent of the total GHG emissions of a building.[19] The project will incorporate an ammonia (NH3)-based refrigerant plant for the ice rinks; however, annual usage will be limited for maintenance needs only and therefore not included in the GHG analysis. Ammonia is considered an acceptable non-ozone depleting alternative for ice rinks compared to other hydrochlorofluorocarbons substances under EPA's Significant New Alternatives Policy program.[20] There will be safety plans in place to handle the ammonia use appropriately. The project will include the use of Zambonis to service the ice rink and a forklift to service the facility and both are planned to be electric and not included in the GHG analysis. The project does not plan to purchase gases during operation or land use conversions.

Table 10: Existing Operational Emissions

Scope	Emission Type	Emission Sub-Type	CO_{2e} Emissions (tons/year)
Scope 1	Combustion	Stationary equipment	161
Scope 2	Off-site electricity	Grid-based	523

[17] Summarized from U.S. EPA, Overview of Greenhouse Gases: https://www.epa.gov/ghgemissions/overview-greenhouse-gases
[18] Source: https://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator
[19] Source: https://practicegreenhealth.org/sites/default/files/2019-06/PracticeGreenhealth_GHG_Toolkit_0.pdf
[20] Source: https://www.epa.gov/sites/default/files/2015-07/documents/ice_rinks_and_the_phaseout_of_hcfc-22.pdf

Scope	Emission Type	Emission Sub-Type	CO_{2e} Emissions (tons/year)
Scope 3	Off-site waste management[21]	Area	294
Total			**978**

Table 11: Construction Emissions

Scope[22]	Emission Type	Emission Sub-Type	CO_{2e} Emissions (tons)
Scope 1	Combustion	Mobile equipment	1,239
Total			**1,239**

Table 12: Proposed Operational Emissions

Scope	Emission Type	Emission Sub-Type	CO_{2e} Emissions (tons/year)
Scope 1	Combustion	Stationary equipment	914
Scope 2	Off-site electricity	Grid-based	1,539
Scope 3	Off-site waste management	Area	531
Total			**2,984**

b. GHG Assessment

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

The following design strategies and other sustainability measures are being considered for the proposed development to reduce emissions:

- Use energy efficient lighting.
- Occupancy/vacancy and daylight sensor controls on lighting.
- Energy efficient building envelope, including continuous insulation for all roof and wall surfaces and high-performance aluminum glazing systems.
- The facility will be designed to meet LEED Silver rating.
- Install low-flow indoor plumbing fixtures.
- Use high-efficiency boilers for domestic hot water.
- Lower carbon structure and materials selection through incorporation of products with recycled content and/or sustainable manufacturing methods.

[21] Based on calculations from CalRecycle's website titled "Estimated Solid Waste Generation Rates," available at https://www2.calrecycle.ca.gov/wastecharacterization/general/rates.

[22] Emissions are categorized as either direct or indirect. Scope 1 emissions are direct emissions that are released directly from properties owned or under the control of the project proposer. This includes, for example, the use of mobile equipment during construction. Scope 2 and 3 emissions are indirect emissions. Scope 2 emissions are associated with the offsite generation of purchased electricity and/or steam. Scope 3 emissions are from the offsite provision of waste management services, including land disposal (landfilling), recycling, and solid waste composting.

- Install on-site photovoltaics.
- Provide electrical vehicle infrastructure.
- Use low global warming potential refrigerants for the building cooling system.
- Install air curtains at all loading dock doors to reduce infiltration.

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

The proposed mitigation listed in Item 18.b.i includes best management practices for new construction and reducing 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 efficiency, and supplementing other renewable energy standards in Minnesota. The MPCA's biennial GHG emissions reduction act report from 2023[23] identifies strategies for reducing emissions in the three economic sectors with the highest emissions – transportation, electricity generation, and agriculture, forestry, and land use.

The expected lifespan of the project is 50 years, which equates to an estimated 149,200 CO_2e metric tons over the lifetime of the building (including both construction and operations phases). The proposer is committed to 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 (State of Minnesota Statutes Chapter 326.89) and City of Saint Paul building code (Saint Paul Legislative Code Chapter 326).

The University of St. Thomas has had a 53 percent reduction in carbon emissions since 2008, and 20 percent of building square footage on campus are LEED-certified. Additionally, the University has committed to a goal of carbon neutrality by 2035.

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.

Existing Noise

[23] Available at https://www.pca.state.mn.us/air-water-land-climate/climate-change-initiatives

The project site is located on at an institution (University of St. Thomas) in an urban area, and existing noise at the site is largely from the surrounding roadways. Nearby sensitive receptors include residences approximately 200 feet east, 300 feet south, and 500 feet north of the project site.

Construction Noise

Typical construction noise will be temporarily generated by construction activities. The Saint Paul Code of Ordinances regulates both the hours of operation for construction equipment and allowable noise levels. Construction of the project will adhere to requirements identified in Saint Paul Code of Ordinance Chapter 293 Section 07, which limits construction noise in residentially zoned districts to 65 decibels A (dBA) between the hours of 7:00 am and 10:00 pm, and 55 dBA between the hours of 10:00 pm and 7:00 am.

Operational Noise

The City of Saint Paul and Minnesota Pollution Control Agency regulate noise. The proposed project will potentially contribute to the existing campus noise. Further noise evaluation will be completed as design progresses and best practices to reduce noise spill will be considered including placement of speakers and other sound systems within the arena and the design of the building wall systems. The facility will be required to comply with local and state noise regulations. If the facility exceeds noise regulations, the project proposer will work with the city to identify potential mitigation options. As with any other entity, it is also possible for the project proposer to seek noise-level variances for special events, which would be reviewed by the Saint Paul City Council through existing procedures.

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

In May 2023, SRF prepared a Transportation Study for the project site (see Appendix D). According to information provided by the study, several surface parking lots (Lots N, O, P, V, X, and Y) are expected to be removed during project construction. Lot O is expected to be reconstructed during project implementation to provide 38 surface parking spaces, resulting in a total net loss of 264 surface parking spaces. The proposed development requires creation of a Transportation Demand Management Plan under Saint Paul Zoning Code Sec. 63.122.

Traffic Generation

An existing pre-event and post-event peak hour trip generation was estimated for a maximum capacity event at the project site based on assumptions that were discussed and reviewed by UST and City of St. Paul throughout the study process. Total pre-event peak hour generates approximately 1,498 trips and post-event peak generates approximately 1,581 trips.

Pedestrians and Bicycles

The project site is currently served with sidewalks and all signalized intersections surrounding the University of St. Thomas campus are programmed with leading pedestrian interval timing, which helps improve pedestrian safety. A sidewalk gap exists on the north side of Goodrich Avenue.

An off-street bicycle trail is located along Mississippi River Boulevard, west of the project site. On-street bicycle lanes are located along Summit Avenue and Cleveland Avenue to the north and east of the project site.

Transit Service

Several Metro Transit stops are located on or near the University of St. Thomas campus. Metro Transit Bus Routes 21, 63, and 87 serve the vicinity of the project site.

Routes 21 provides service between the Uptown Transit Station and downtown Saint Paul, and Route 63 provides service between western Saint Paul and downtown Saint Paul. Both Routes 21 and 63 operate seven days a week and are part of Metro Transit's High Frequency Network, with approximately 15-minute headways during peak hours on the weekdays and Saturdays. Service during nights and on Sundays provides 15 to 30-minute headways. Route 87 is a local bus route between Saint Paul and Roseville. It operates seven days a week with 30-minute headways during peak hours on the weekdays and 1-hour headways during nights and on the weekends.

Additionally, the University of St. Thomas provides a shuttle bus between the Saint Paul campus and the Minneapolis campus, is free for staff and students, and runs every 20-30 minutes.

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.***

In May 2023, SRF prepared a Transportation Study for the project site. A parking demand analysis was performed during peak non-event conditions at the University of St. Thomas and determined that on average, 173 vehicles will be displaced as a result of the project. However, on average, 259 parking spaces are available during peak non-event conditions on campus, a surplus of 86 parking spaces during those times given current (pre-project) parking availability.

An event parking demand analysis was also completed and estimated the maximum demand for basketball games to be 1,420 parking spaces, maximum demand for hockey games to be 1,050 parking spaces, and typical event demand to be 775 parking spaces. Based on campus and adjacent on-street parking restrictions, maximum basketball events are expected to have a deficit of approximately 330 to 740 vehicles which will likely use public parking in the neighborhood. Maximum basketball events may occur one to two times per year. Maximum

hockey events are expected to occur two to four times per year and parking demand is expected to generally be accommodated on campus. Typical events are expected to have a parking deficit of approximately 100 vehicles for weeknight events and parking surplus of approximately 240 to 320 vehicles for weekend events. See Table 13 from the SRF Transportation Study included in Appendix D to this EAW that provides further information on assumptions used to derive expected parking demand.

Table 13: Event parking Demand Analysis

	Total Number of Games (1)	Estimated Frequency	Available Supply	Demand (2)	Deficit/Surplus
Thursday/Weeknight Night Event					
Max Basketball (5,500)	4 to 7 BBall No Hockey	0 - 1	678	1420	-742
Typical (3,000)		6		773	-95
Friday Night Event					
Max Basketball (5,500)	1 BBall 9 Hockey	0	1016	1420	-404
Max Hockey (4,000)		2		1053	-37
Typical (3,000)		8		773	243
Saturday Night Event					
Max Basketball (5,500)	6 BBall 9 Hockey	0 - 1	1090 (3)	1420	-330
Max Hockey (4,000)		2		1053	37
Typical (3,000)		13		773	317

(1) Based on expected men's hockey and basketball schedules.
(2) UST players/coaches and event staff are expected to park in the reconstructed lot O or other commuter and faculty/staff lots.
(3) Note nearby city permit parking restrictions are generally not in effect on Saturday.

An intersection capacity analysis was conducted to determine how traffic is expected to operate during pre-event peak hour and post-event peak hour times. Capacity analysis results identify a level of service (LOS) which indicates how well an intersection is operating. Intersections are graded from LOS A (indicates best traffic operation) through LOS F (indicates an intersection where demand exceeds capacity) and are based on average delay per vehicle. Overall intersection LOS A through LOS D is generally considered acceptable in the Twin Cities Metropolitan Area, although longer delays for short periods of time and/or for specific movements are often considered acceptable as well.

Based on the intersection capacity analysis, multiple areas were identified for further consideration. Mitigation strategies for traffic congestion and event management are further discussed in Section 20.c. below. Existing conditions of intersection capacity, 2025 maximum capacity pre-event and post-event intersection capacity, and 2025 maximum capacity pre- and post-event capacity with mitigation strategies are provided in Table 13 below.

Table 14: LOS Summary

Intersection	Existing Conditions				2025 Build Maximum Capacity Event Conditions			
	AM Peak Hour		PM Peak Hour		Pre-Event		Post-Event	
	LOS	Delay s/veh (typ)	LOS	Delay s/veh (typ)	No Mitigation	Mitigation	No Mitigation	Mitigation
Cretin Ave S / Marshall Ave	C	26	D	53	C	D	C	C
Cretin Ave S / Selby Ave	A/A	10	A/B	11	A/E	B/F	A/C	A/B
Cretin Ave S / Mississippi River Blvd	A/A	5	A/A	6	A/B	A/B	A/A	A/A
Cretin Ave S / Summit Ave	A	8	B	14	D	D	D	C
Cretin Ave S / Grand Ave	B	10	B	14	E	D	F	D
Cretin Ave S / Goodrich Ave	A/A	9	A/C	16	F/F	C/F	A/C	A/C
Cleveland Ave S / Selby Ave	A/A	6	A/B	12	A/A	A/A	A/A	A/A
Cleveland Ave S / Summit Ave	B	13	B	19	B	B	B	B
Cleveland Ave S / Grand Ave	B	15	B	15	B	B	B	B
Mississippi River Blvd / Summit Ave	A/A	4	A/A	5	A/A	A/A	A/A	A/A
Mississippi River Blvd / Goodrich Ave	A	4	A	4	A	A	A	A

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

Traffic Level of Service

During both pre-event conditions, multiple unsignalized side-street approaches on Cretin Avenue will be difficult to make left-turn movements for 15 to 30 minutes. These approaches mostly consist of low-volume residential traffic. Communication should be made to area residents and other sources of commuter traffic, so they are aware of potential event traffic and the most efficient route to get to/from their destination. In urban areas, it is common for intersections to operate at LOS E or LOS F for short periods of time, particularly when balancing other transportation modal priorities.

Parking

The transportation study identified several mitigation strategies to address maximum event parking deficits and reduce on-street public parking in nearby neighborhoods during events.

The University of St. Thomas could implement time-of-day restrictions on campus parking lots during event days to clear out campus lots. This strategy could provide between 120 and 165 additional parking spaces on weekends and up to 390 additional parking spaces on weeknights. This strategy alone would not provide off-street parking sufficient to meet anticipated demand for peak-attendance basketball games or the largest potential ancillary events, such as graduation ceremonies. However, several additional mitigation strategies and improvements were identified that could help reduce this deficit. An additional mitigation strategy would be to require pre-paid event parking tickets for all visitor lots. Assignment of parking ahead of event days could assure event patrons know their destination prior to the event. Additionally, the University of St. Thomas could schedule higher attendance games on weekends to limit higher attendance games on weeknights when less on-campus parking is available, provide transit incentives with the purchase of an event ticket, utilize restricted commuter and faculty/staff parking lots, form a partnership with a rideshare company, provide overflow parking on the south athletic fields, and communicate bicycle parking locations to event patrons.

Several potential event management recommendations to reduce pedestrian/vehicular conflicts to improve pedestrian safety and reduce event congestion are outlined in the transportation study (see Appendix D). Designated pedestrian routes provided through the use of barricades, cones, and wayfinding signage is expected to improve pedestrian safety and traffic flow efficiencies during pre- and post-event peak hours. Traffic cones to allow additional storage of vehicles entering the Anderson Parking Facility along Cretin Avenue could alleviate traffic operations. Wayfinding signage within Anderson Parking Facility can direct pedestrians towards the western access and reduce crossing conflicts. Additionally, signal timing modifications and traffic control officer usage could reduce traffic congestion during pre-event and post-event conditions. As the project proceeds, further refinement of potential mitigation strategies is expected.

These potential mitigation strategies will be finalized and reviewed with the City of St. Paul through the Zoning Code-required Transportation Demand Management Plan that is a site plan review submittal requirement.

21. Cumulative Potential Effects

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 potential effects are defined as "the effect on the environment that results from the incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid, regardless of what person undertakes the other projects or what jurisdictions have authority over the projects."[24] The geographic areas considered for cumulative potential effects are those near the project site (within approximately one-half mile), and the timeframe considered includes projects that would be constructed in the reasonably foreseeable future.

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

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.

According to the City of Saint Paul Downtown Projects Map interactive viewer,[25] there is one reasonably foreseeable project within approximately one-half mile of the project site. Summit Avenue from Mississippi River Boulevard to Snelling Avenue is scheduled to be resurfaced in 2023. The University of St. Thomas does not have any board approved plans for new building construction at the Saint Paul campus. While future development of the University is indicated by historic and forecasted trends, there is not sufficiently detailed information about any future building projects to contribute to the understanding of cumulative potential effects.

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

The identified reasonably foreseeable future projects may result in impacts to transportation, utilities, or other resources. However, potential impacts of these projects will be addressed as required by regulatory permitting and approval processes, minimizing the potential for cumulative effects.

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.

All anticipated potentially adverse environmental effects are addressed in the preceding EAW items.

[25] Available at https://experience.arcgis.com/experience/99bea6f90c4a409a8a64fff81dee30e7/page/Overview/?data_id=dataSource_5-17cc347089c-layer-15%3A238

RGU Certification

*The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.*

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages, or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9c and 60, respectively,
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature Nicolle Goodman
Nicolle Goodman (Jun 20, 2023 12:45 CDT)

Date Jun 20, 2023

Title Director, Department of Planning and Economic Development

Figures

Figure 1: County Map

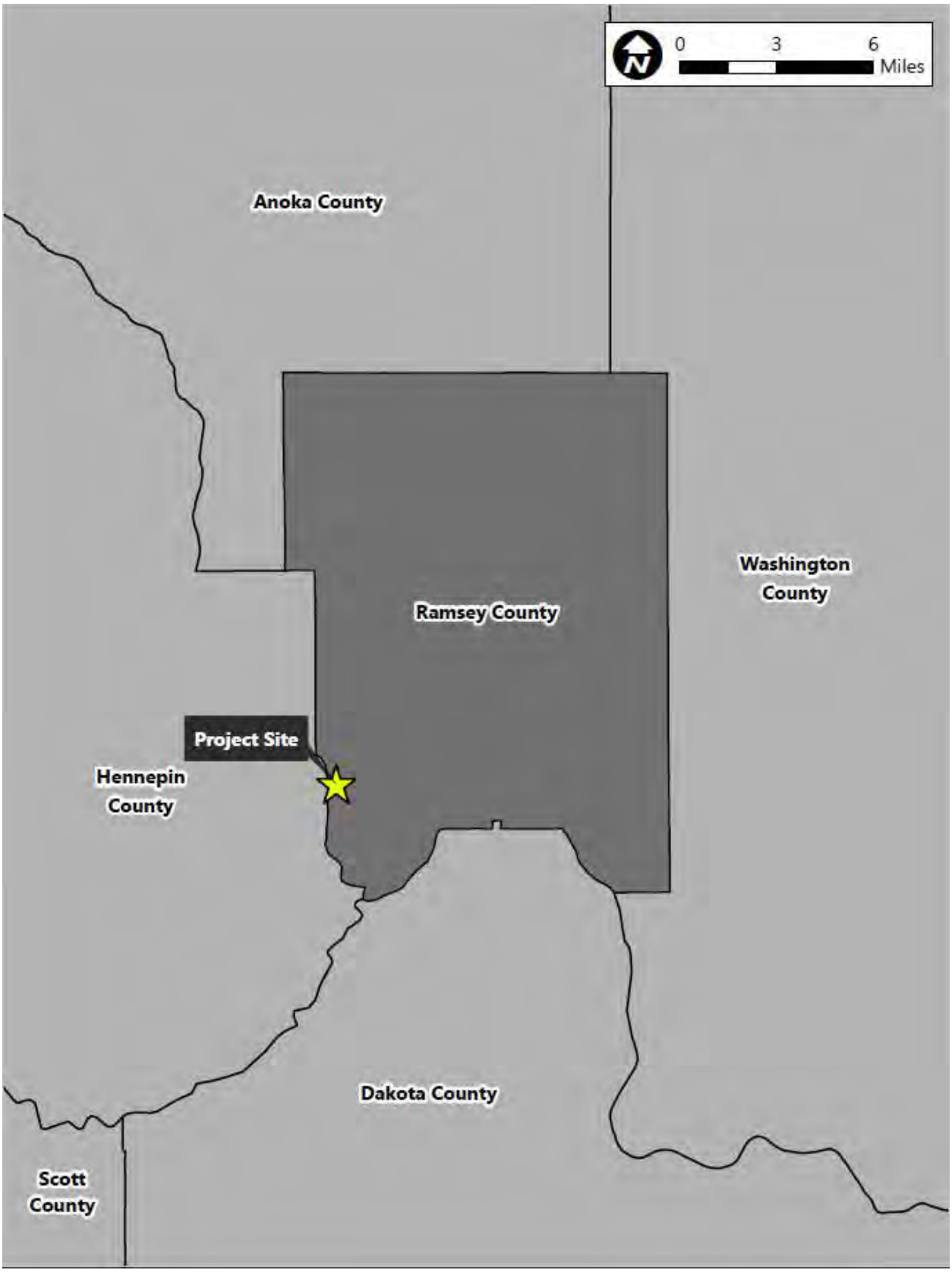


Figure 2: USGS Map

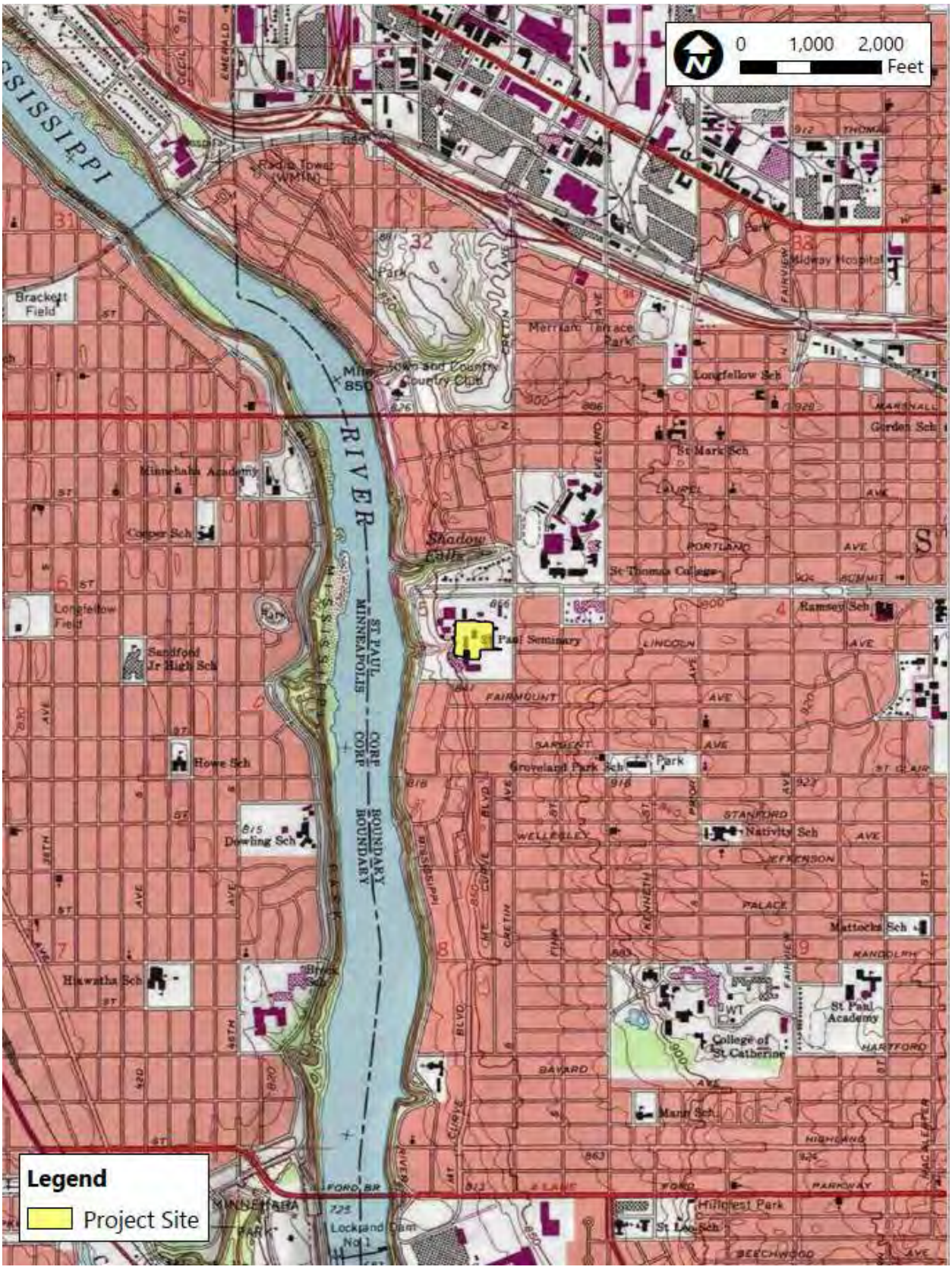


Figure 3: Existing Conditions

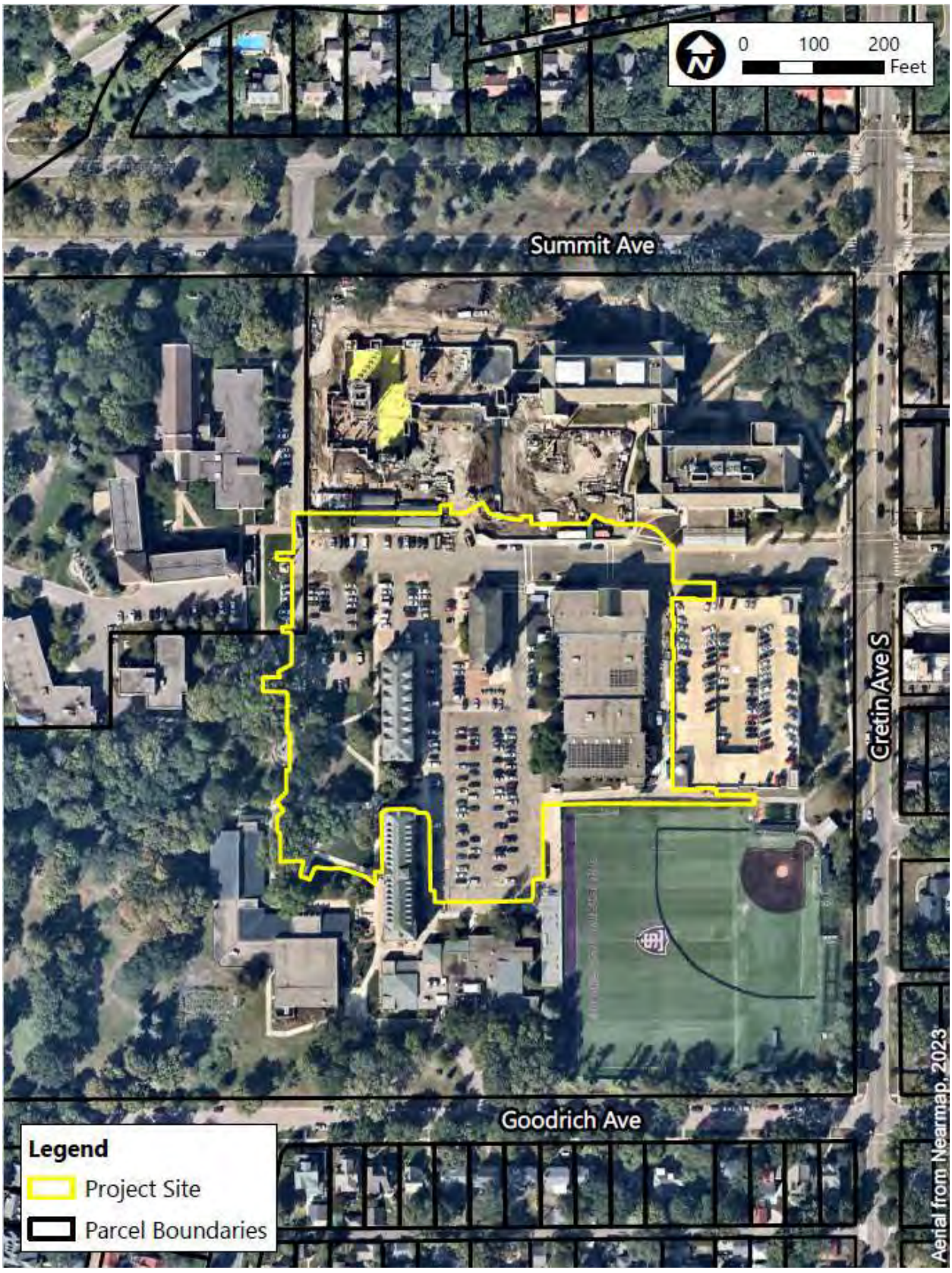


Figure 4: Existing Land Use

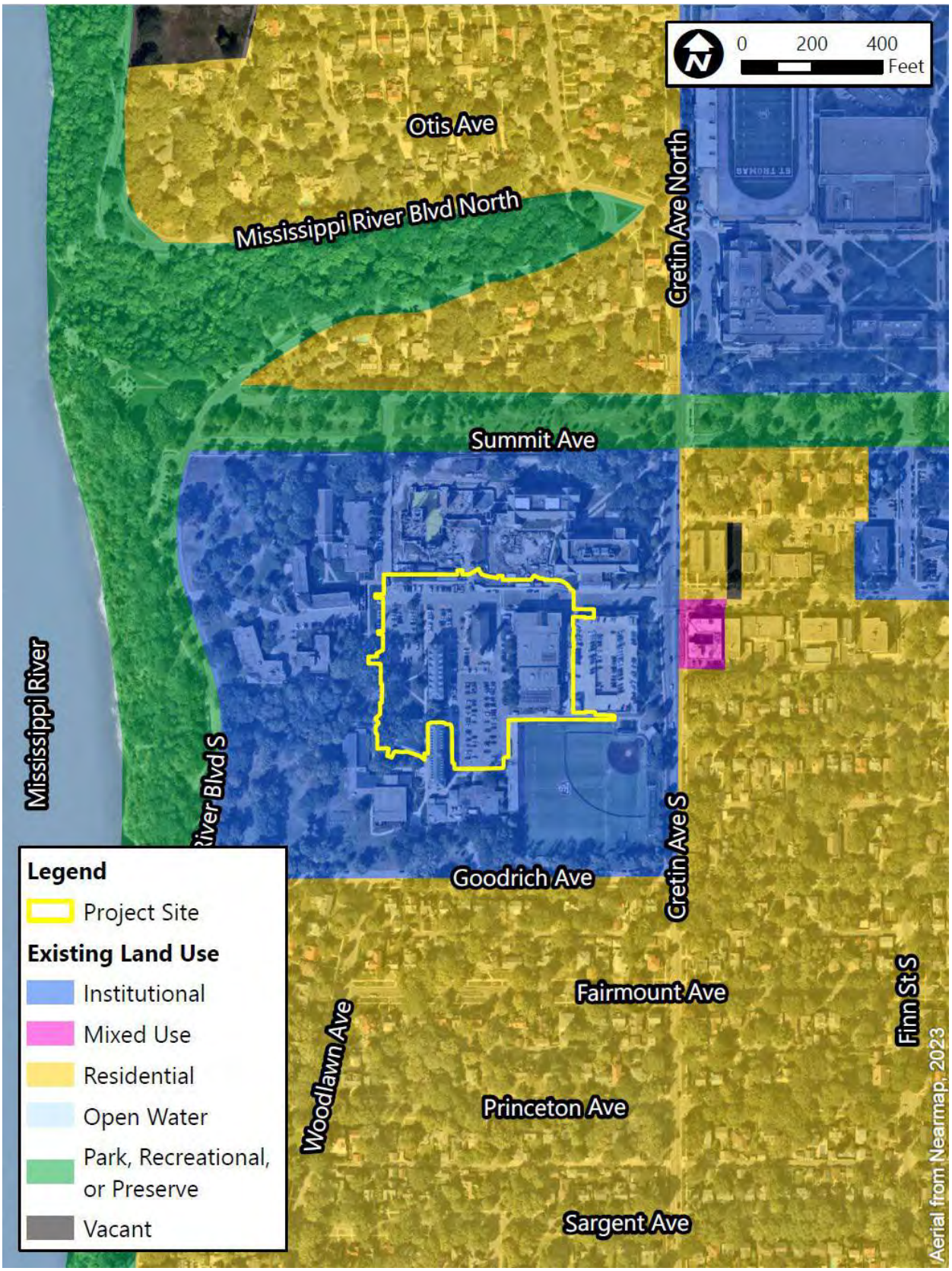


Figure 5: Existing Zoning

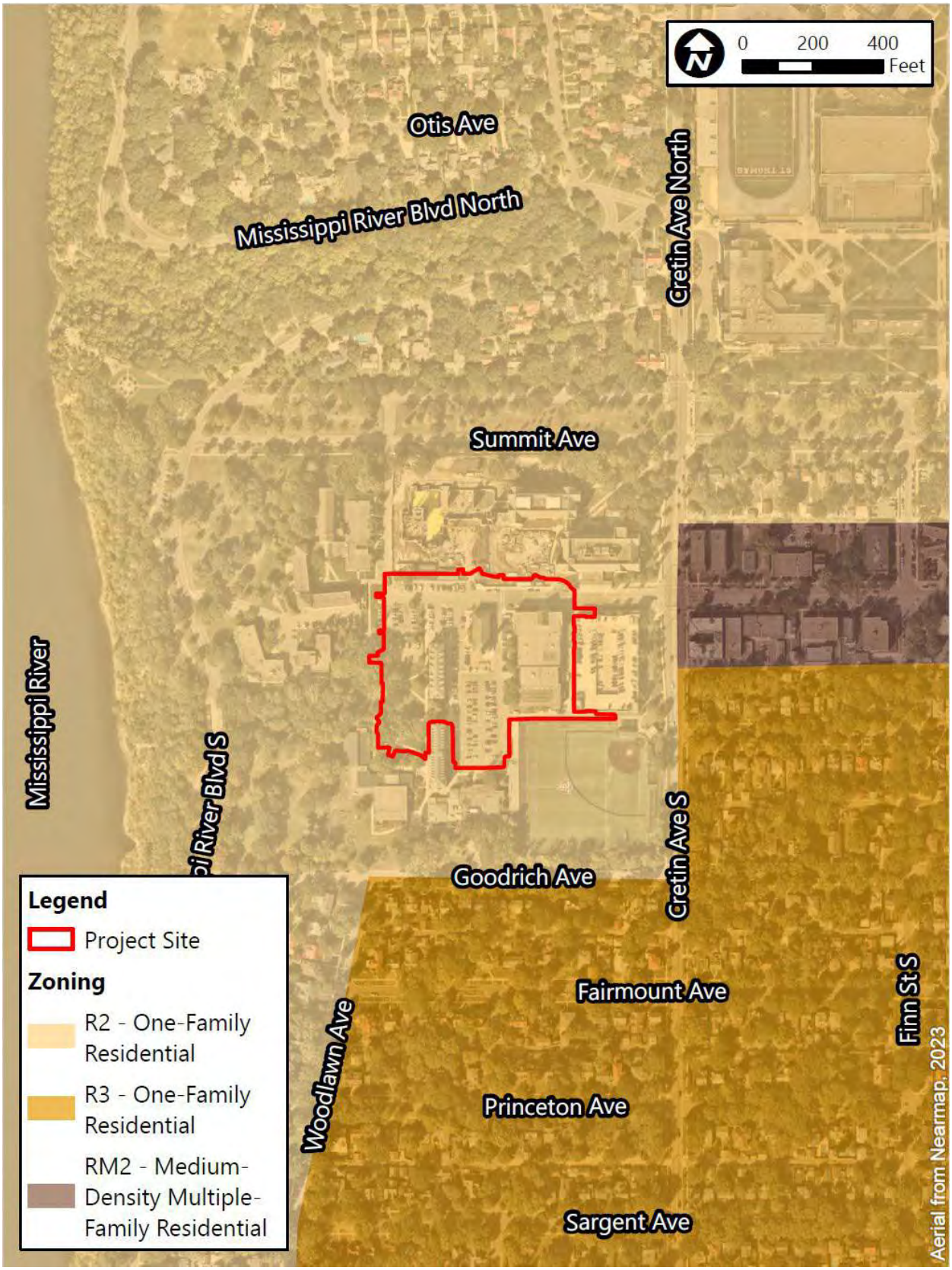


Figure 6: Zoning Overlay Districts

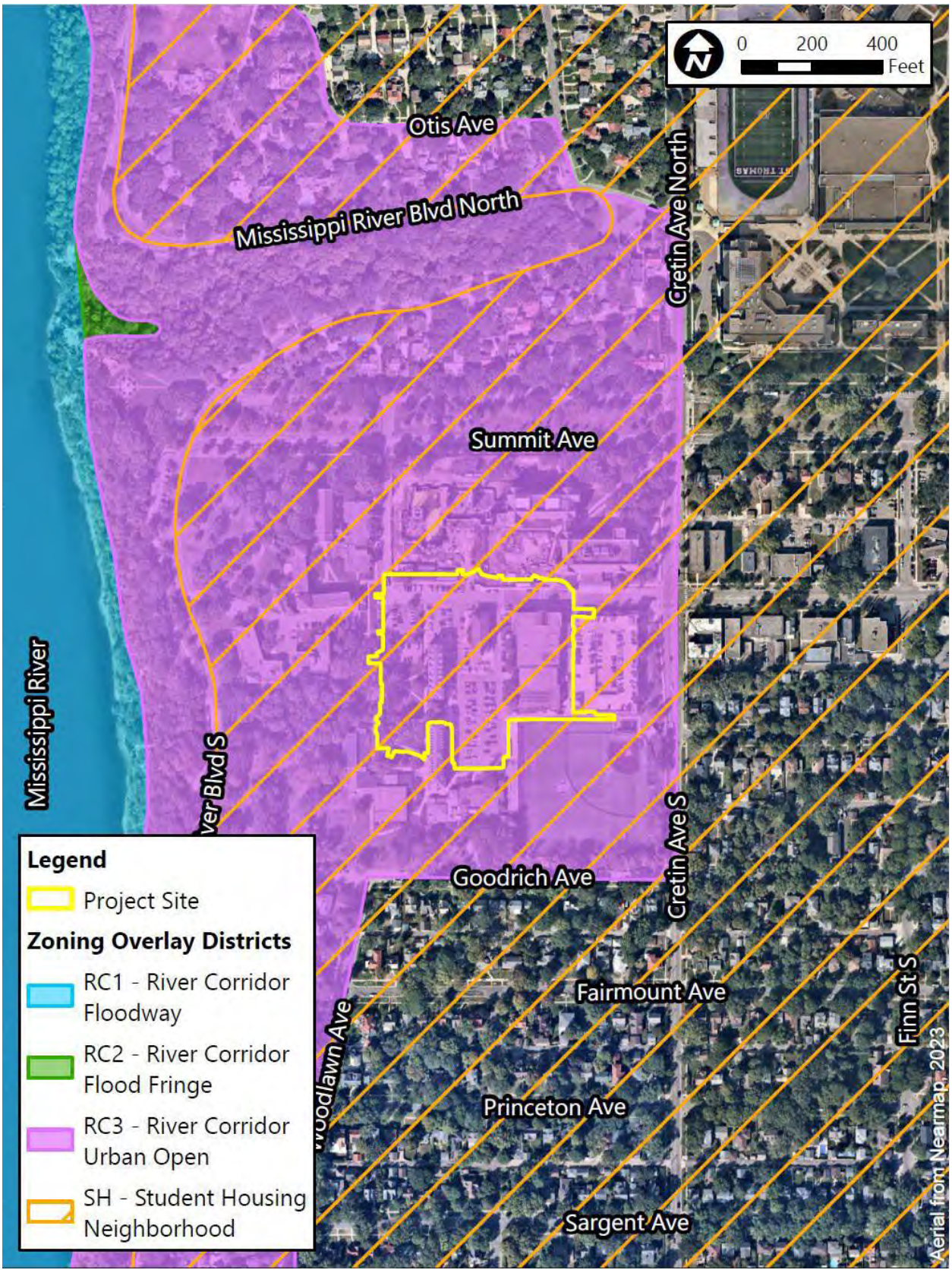


Figure 7: Water Resources

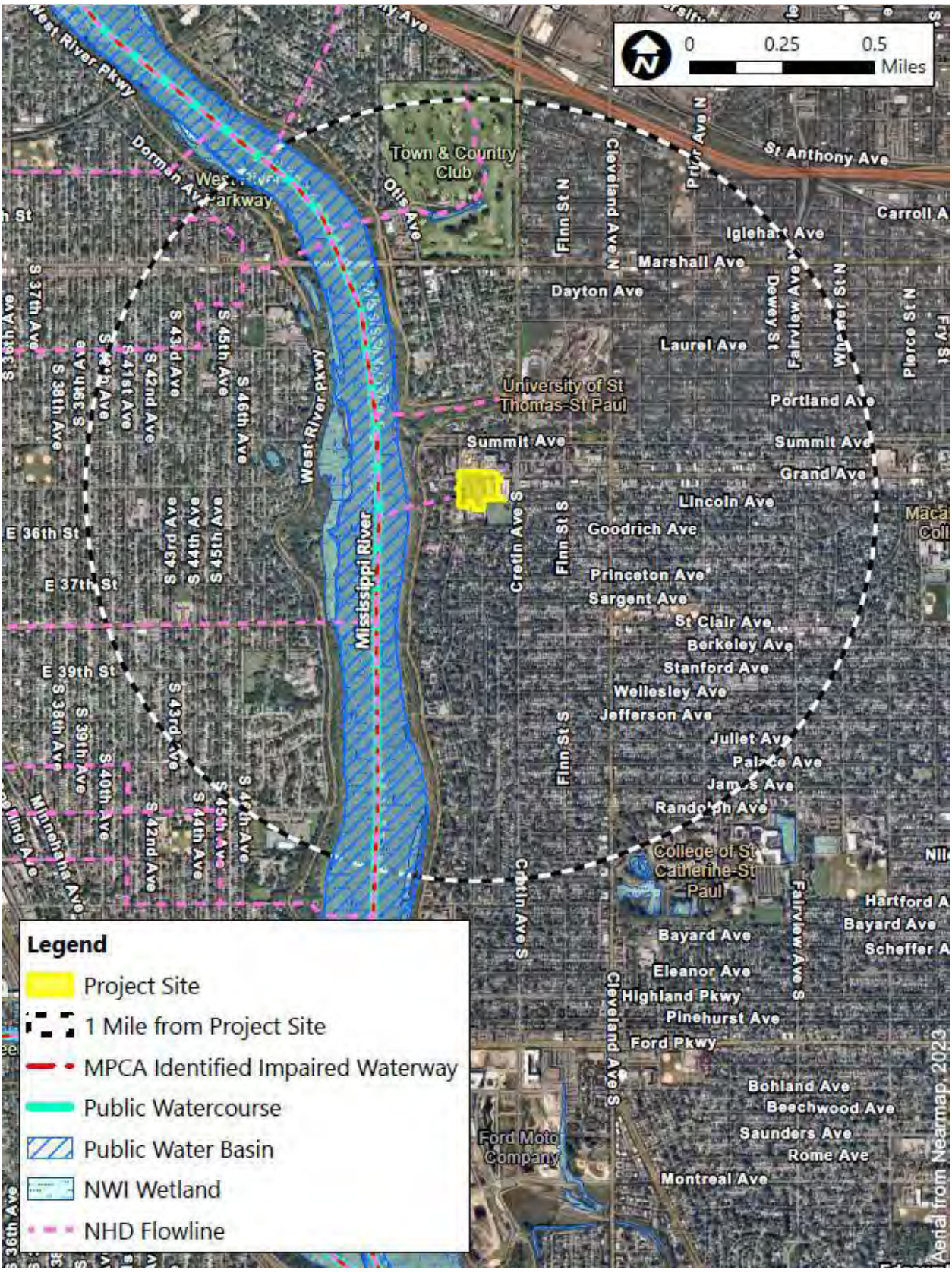


Figure 8: What's In My Neighborhood Sites Within 200 feet of the Project Site

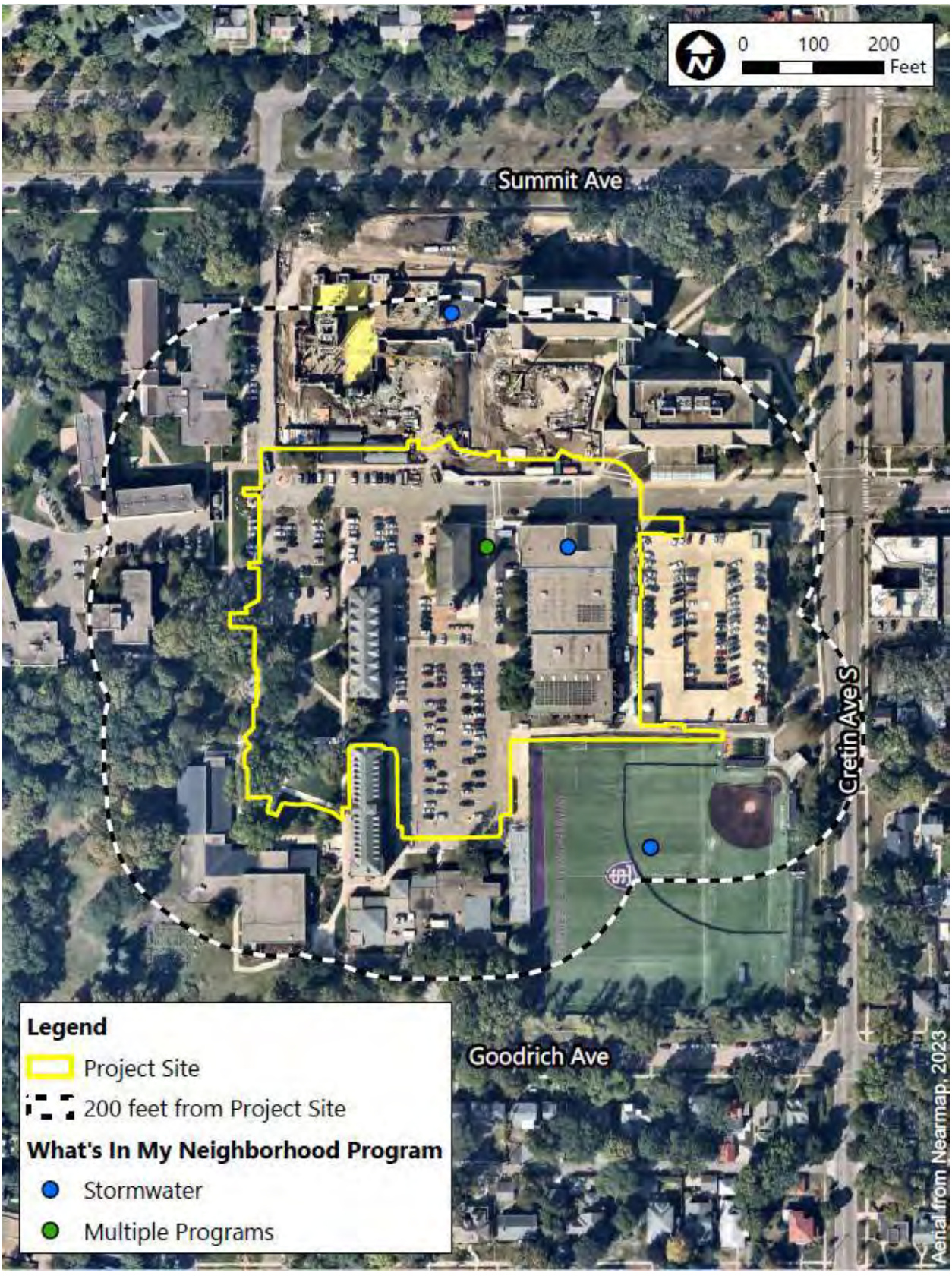


Figure 9: Historic Resources Within 500 feet of the Project Site

Appendix A

Site Plan

LEGEND:

EXISTING	PROPOSED	
		STORM SEWER PIPE
		SOLID DRAINTILE
		PERFORATED DRAINTILE
		STORM INLET
		STORM MANHOLE
		STORMWATER SYSTEM
		SANITARY SEWER PIPE
		SANITARY SEWER FORCE MAIN
		SANITARY SEWER MANHOLE
		SANITARY SEWER CLEANOUT
		WATER MAIN
		HYDRANT
		GATE VALVE
		WATER MANHOLE
		METER
		FIRE SPRINKLER
		IRRIGATION
GAS	GAS	NATURAL GAS
EOH	EOH	ELECTRIC OVERHEAD
EUG	EUG	ELECTRIC UNDERGROUND
FOH	FOH	FIBER OPTIC OVERHEAD
FUG	FUG	FIBER OPTIC UNDERGROUND
TOH	TOH	TELEPHONE OVERHEAD
TUG	TUG	TELEPHONE UNDERGROUND
COH	COH	CABLE OVERHEAD
CUG	CUG	CABLE UNDERGROUND
STM	STM	STEAM
		CHILLED WATER
		ELECTRIC MANHOLE
		TRANSFORMER
		LIGHT POLES
		POWER POLE
		GAS VALVE
		GAS METER
		FIBER OPTIC MANHOLE
		CABLE MANHOLE
		CABLE BOX
		TELEPHONE MANHOLE
		TELEPHONE BOX
		UTILITY TUNNEL
		UTILITY REMOVAL

RYAN

UST Arena • Existing Conditions Plan • 05.10.2023

ST MARYS
APEL (SMC)

SCHOENECKER
CENTER (SCC)

SCHOOL OF
DIVINITY (SOD)

OWENS SCIENCE
HALL (OWS)

SEMINARY
RESIDENCE (SEM)

FACILITIES & DESIGN
CENTER (FDC)
FFE: 861.83'

PROPOSED BUILDING

135,419± SF

ANDERSON PARKING
FACILITY (APF)
FFE: 863.50'
BFE: 853.67'

SHOP
EMORIAL
Y (IRL)

BRADY EDUCATION
CENTER (BEC)

GRACE
HALL (GRA)

BINZ REFECTORY (BIN)

SOUTH ATHLETIC
FIELDS (SAF)

CRETIN AVENUE

GRAND AVE

CRETIN AVE S

LINCOLN
AVENUE

MAPLE AVENUE

N

0 40 80
SCALE IN FEET

LEGEND:

EXISTING	PROPOSED	
		PROPERTY BOUNDARY
		LOT/TRACT LINE
		CURB
		EASEMENT
		BITUMINOUS
		CONCRETE PAVEMENT
		CONCRETE SIDEWALK
		GRAVEL
X	X	CHAIN LINK FENCE
		WOOD FENCE
		NORMAL WATER LEVEL
		DRAINAGE SWALE
BSBL	BSBL	BUILDING SETBACK LINE
PSBL	PSBL	PARKING SETBACK LINE

RYAN

Appendix B

Agency Correspondence

DEPARTMENT OF NATURAL RESOURCES

Formal Natural Heritage Review - Cover Page

See next page for results of review. A draft watermark means the project details have not been finalized and the results are not official.

Project Name: University of St. Thomas Multipurpose Arena

Project Proposer: Ryan Companies

Project Type: Development, Commercial/Institutional/Industrial

Project Type Activities: Tree Removal;Structure Removal or Bridge Removal

TRS: T28 R23 S5

County(s): Ramsey

DNR Admin Region(s): Central

Reason Requested: State EAW

Project Description: Ryan Companies proposes to develop the University of St. Thomas Multipurpose Arena on the existing campus. Three existing buildings onsite will be demolished ...

Existing Land Uses: The project site is currently part of the University of St. Thomas campus and includes buildings, impervious surfaces, and managed/landscaped open green space.

Landcover / Habitat Impacted: The proposed project will include one building, impervious surfaces, and managed/landscaped open green space.

Waterbodies Affected: No wetlands or surface waters are present within the project site; therefore, no impacts are anticipated.

Groundwater Resources Affected: N/A

Previous Natural Heritage Review: No

Previous Habitat Assessments / Surveys: No

SUMMARY OF AUTOMATED RESULTS

Category	Results	Response By Category
Project Details	No Comments	No Further Review Required
Ecologically Significant Area	Comments	Protected Wetlands: Calcareous Fens
State-Listed Endangered or Threatened Species	Needs Further Review	State-protected Species in Vicinity
State-Listed Species of Special Concern	Comments	Recommendations
Federally Listed Species	Comments	Visit IPaC for Federal Review RPBB High Potential Zone

DEPARTMENT OF NATURAL RESOURCES

March 29, 2023

Project Name: University of St. Thomas Multipurpose Arena
Project Proposer: Ryan Companies
Project Type: Development, Commercial/Institutional/Industrial
Project ID: MCE #2023-00262

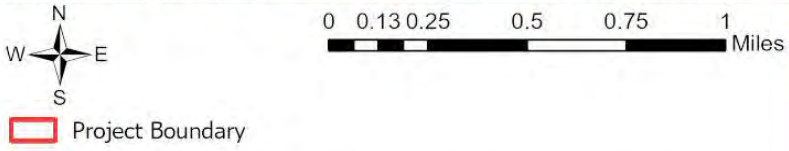
AUTOMATED RESULTS: FURTHER REVIEW IS NEEDED
As requested, the above project has undergone an automated review for potential impacts to rare features. Based on this review, one or more rare features may be impacted by the proposed project and further review by the Natural Heritage Review Team is needed. You will receive a separate notification email when the review process is complete and the Natural Heritage Review letter has been posted.

Please refer to the table on the cover page of this report for a summary of potential impacts to rare features. For additional information or planning purposes, use the Explore Page in Minnesota Conservation Explorer to view the potentially impacted rare features or to create a Conservation Planning Report for the proposed project.

If you have additional information to help resolve the potential impacts listed in the summary results, please attach related project documentation in the Edit Details tab of the Project page. Relevant information includes, but is not limited to, additional project details, completed habitat assessments, or survey results. This additional information will be considered during the project review.

University of St. Thomas Multipurpose Arena

Aerial Imagery With Locator Map



Project Boundary

Project Type: Development, Commercial/Institutional/Industrial

Project Size (acres): 6.44

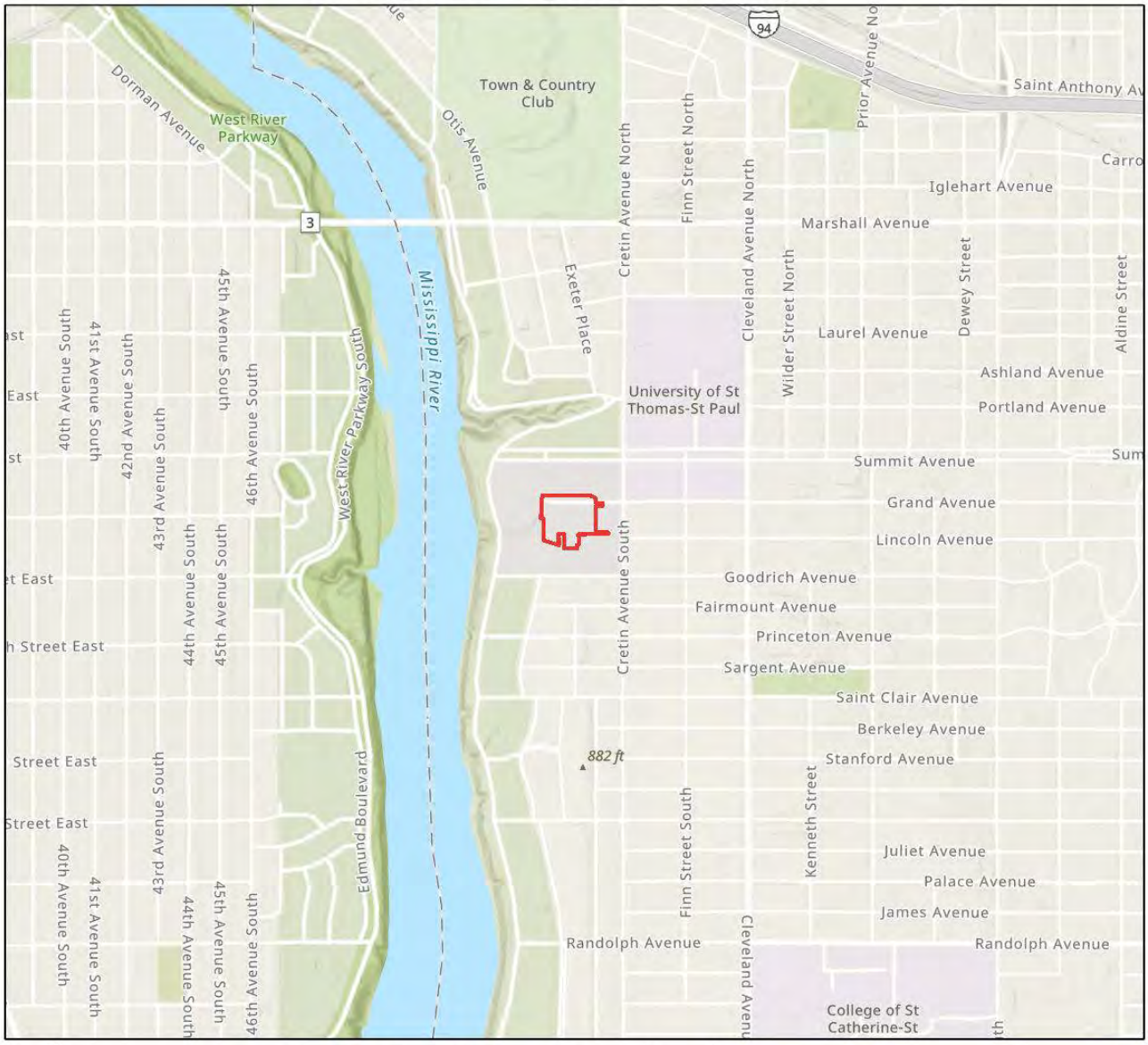
County(s): Ramsey

TRS: T28 R23 S5

City of Minneapolis, Metropolitan Council, MetroGIS, Three Rivers Park District, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

University of St. Thomas Multipurpose Arena

USA Topo Basemap With Locator Map



N
W E
S

0 0.13 0.25 0.5 0.75 1 Miles

Project Boundary

Project Type: Development, Commercial/Institutional/Industrial

Project Size (acres): 6.44

County(s): Ramsey

TRS: T28 R23 S5

Esri, NASA, NGA, USGS, FEMA
City of Minneapolis, Metropolitan Council, MetroGIS, Three Rivers Park District, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,

University of St. Thomas Multipurpose Arena EAW NHIS Species Attachment

Kimley-Horn has been contracted to complete an EAW for the University of St. Thomas Multipurpose Arena located in Saint Paul, Ramsey County, MN. Ryan Companies is proposing to redevelop the 6.1-acre project site, currently part of the University of St. Thomas campus, into a multipurpose arena to house a competition venue, practice facilities, coaching offices, locker rooms, and student athlete support services.

A review of the DNR Natural Heritage Inventory System database per license agreement LA-1074 was conducted for the project site and the area within one mile of the project site. This review identified 20 records: 3 records which intersect the project site and 17 additional records within 1 mile of the project site.

One record for Handsome Sedge (*Carex Formosa*), a state-listed endangered species, intersects the project corridor. The preferred habitat for this forest sedge includes forested slopes along the Mississippi River in Ramsey County. No suitable habitat for Handsome Sedge is located within the project site; thus, no impacts to the species are anticipated.

One record for the Kentucky Coffee Tree (*Gymnocladus dioica*), a state-listed special concern species, intersects the project corridor. This deciduous tree is found in mesic hardwood forest on terraces of the Minnesota River. This record was last observed in 1909. Based on the nature of the project as an institutional campus with landscaping, this species is not anticipated to occur within the project site; therefore, we do not anticipate any adverse impacts to this species.

One record for Swamp White Oak (*Quercus bicolor*), a state-listed special concern species, intersects the project corridor, and two records are located within one mile of the project. The preferred habitat for this deciduous tree is floodplain forests along the Mississippi River. No suitable habitat for Swamp White Oak is located within the project site; therefore, no impacts to the species are anticipated.

Four records of the Rusty Patched Bumble Bee (*Bombus affinis*), a federally-listed endangered species, are located within one mile of the project site. The preferred habitat for this species includes grasslands and tallgrass prairies. The project site is an institutional campus with impervious surfaces, structures, and landscaping. Landscaping onsite includes trees and mowed grass; therefore, no suitable habitat for the Rusty Patched Bumble Bee will be disturbed and no impacts are anticipated.

One record of Higgins Eye (*Lampsilis higginsii*), a federally-listed and state-listed endangered species, is located within one mile of the project site. The Higgins Eye occurs only in the Mississippi River and the lower portion of some of its large tributaries, occupying stable substrates that vary from sand to boulders. There are no surface water features within the project site; thus no impacts to the Higgins Eye are anticipated.

One record of Round Pigtoe (*Pleurobema sintoxia*), a state-listed special concern species, is located within one mile of the project site. Preferred habitat of the Round Pigtoe is fast current areas dominated by coarse sand and gravel substrate in medium to large rivers. They can occasionally be found in small rivers. There are no surface water features within the project site; thus no impacts to the Round Pigtoe are anticipated.

Nine records of Wartyback (*Quadrula nodulata*), a state-listed threatened species, are located within one mile of the project site. The Wartyback is found in large rivers with fine or coarse substrates in areas of slow to moderate current. There are no surface water features within the project site; thus no impacts to the Wartyback are anticipated.

There are no Minnesota Biological Survey Sites of Biodiversity Significance, Native Plant Communities, or Regionally Significant Ecological Areas, or public water bodies located within the project site. Approximately 0.10 mile west of the project site lies Mississippi Gorge Regional Park, which is identified as a Minnesota Biological Survey Site of Biodiversity Significance (site name St. Paul Bluffs W), and a Native Plant Community (Mesic Hardwood Forest System). Considering these resources are not located within project limits, no adverse impacts are anticipated. The Mississippi River is located approximately 0.15 mile west of the project site and is identified as a Regionally Significant Ecological Area and a public water body. The Mississippi River is not located within the project site; therefore, no impacts are anticipated.

Based on the information listed above, no adverse impacts are anticipated to the state-listed species or the protected habitats identified.

From:	MN_MNIT_Data Request SHPO
To:	Mayer, Susan
Subject:	RE: SHPO Database Search for EAW in Saint Paul, Ramsey County, Minnesota
Date:	Thursday, March 30, 2023 5:52:36 PM
Attachments:	image001.png image002.png image003.png image004.png History.xls

---

Hello Susan,

Please see attached. Our database has no archaeological records for the given project area.

Jim

SHPO Data Requests
Minnesota State Historic Preservation Office
50 Sherburne Avenue, Suite 203
Saint Paul, MN 55155
(651) 201-3299
datarequestshpo@state.mn.us

Notice: This email message simply reports the results of the cultural resources database search you requested. The database search is only for previously known archaeological sites and historic properties. **IN NO CASE DOES THIS DATABASE SEARCH OR EMAIL MESSAGE CONSTITUTE A PROJECT REVIEW UNDER STATE OR FEDERAL PRESERVATION LAWS –** please see our website at https://mn.gov/admin/shpo/protection/ for further information regarding our Environmental Review Process.

Because the majority of archaeological sites in the state and many historic/architectural properties have not been recorded, important sites or properties may exist within the search area and may be affected by development projects within that area. Additional research, including field surveys, may be necessary to adequately assess the area's potential to contain historic properties or archaeological sites.

Properties that are listed in the National Register of Historic Places (NRHP) or have been determined eligible for listing in the NRHP are indicated on the reports you have received, if any. The following codes may be on those reports:

NR – National Register listed. The properties may be individually listed or may be within the boundaries of a National Register District.

CEF – Considered Eligible Findings are made when a federal agency has recommended that a property is eligible for listing in the National Register and MN SHPO has accepted the recommendation for the purposes of the Environmental Review Process. These properties need to be further assessed before they are officially listed in the National Register.

SEF – Staff eligible Findings are those properties the MN SHPO staff considers eligible for listing in the National Register, in circumstances other than the Environmental Review Process.

DOE – Determination of Eligibility is made by the National Park Service and are those properties that are eligible for listing in the National Register, but have not been officially listed.

CNEF – Considered Not Eligible Findings are made during the course of the Environmental Review Process. For the purposes of the review a property is considered not eligible for listing in the National Register. These properties may need to be reassessed for eligibility under additional or alternate contexts.

Properties without NR, CEF, SEF, DOE, or CNEF designations in the reports may not have been evaluated and therefore no assumption to their eligibility can be made. Integrity and contexts change over time, therefore any eligibility determination made ten (10) or more years from the date of the current survey are considered out of date and the property will need to be reassessed.
If you require a comprehensive assessment of a project's potential to impact archaeological sites or historic/architectural properties, you may need to hire a qualified archaeologist and/or historian. If you need assistance with a project review, please contact Kelly Gragg-Johnson, Environmental Review Specialist @ 651-201-3285 or by email at kelly.graggjohnson@state.mn.us.
The Minnesota SHPO Archaeology and Historic/Architectural Survey Manuals can be found at https://mn.gov/admin/shpo/identification-evaluation/.

Please subscribe to receive SHPO notices for the most current updates regarding office hours, accessing research files, or changes in submitting materials to the SHPO.

To access historic resource information please visit our webpage on Using SHPO's Files.

From: Mayer, Susan <Susan.Mayer@kimley-horn.com>
Sent: Wednesday, March 29, 2023 10:29 AM
To: MN_MNIT_Data Request SHPO <DataRequestSHPO@state.mn.us>
Subject: SHPO Database Search for EAW in Saint Paul, Ramsey County, Minnesota

---

Hello,

Kimley-Horn is preparing an EAW for the University of St. Thomas Multipurpose Arena in Saint Paul, Ramsey County, Minnesota. I am writing to request a search of the Minnesota Statewide Inventory Database for the site located in the following section(s), township(s), and range(s):

¼ Section	Section(s)	Township	Range
SE	5	28N	23W

See the attached figure of the project location. The EAW will examine the potential impacts of proposed development within the study area.

Please let me know if you have any questions or need additional information.

Thank you,

Susan Mayer | Environmental Scientist-Analyst

Kimley-Horn | 767 Eustis Street, Suite 100, Minneapolis, MN 55114

Direct: 612-254-7320 | Mobile: 414-510-2229 | Kimley-Horn.com

Appendix C

Greenhouse Gas (GHG) Analysis

Back to Intro

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

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:	University of St. Thomas Arena EAW (Existing)
Organization Address:	
Inventory Reporting Period:	*e.g., Calendar Year 2020, Fiscal Year 2020*
Start:	*MM/DD/YY*
End:	*MM/DD/YY*
Name of Preparer:	Koehl Simmons
Phone Number of Preparer:	
Date Prepared:	

Summary of Organization's Emissions:

Scope 1 Emissions

Go To Sheet	Stationary Combustion	161	CO_2-e (metric tons)
Go To Sheet	Mobile Sources	0	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	523	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	523	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	684	CO_2-e (metric tons)
Total Scope 1 & Market-Based Scope 2	684	CO_2-e (metric tons)

Reductions

Go To Sheet	Offsets	0	CO_2-e (metric tons)

Net Scope 1 and 2 Location-Based Emissions	684	CO_2-e (metric tons)
Net Scope 1 and 2 Market-Based Emissions	684	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	274	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)

Back to Intro

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

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?	?
Fire Suppression	
Do your facilities use chemical fire suppressants?	?
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.	?
Waste Gases	
Are VOCs combusted in thermal oxidizers in your facilities?	?
Do you flare any gases on-site?	?
Electricity	
Does your inventory include facilities that use electricity?	Y
Steam	
Do you purchase steam for heating or cooling in your facilities?	?
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)?	?
Employee Commuting	
Do your employees commute to work in personal vehicles or use public transportation?	?
Product Transport	
Do you hire another company to transport products or other materials to or from your facilities?	?
Waste Generated in Operations	
Do you generate waste that is disposed of in a facility owned by another organization?	Y
Offsets	
Do you purchase greenhouse gas offsets?	N

Scope 1 Emissions from Stationary Combustion Sources

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

Guidance

(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 CO_2 emissions are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Stationary Source Fuel Combustion

Source ID	Source Description	Source Area (sq ft)	Fuel Combusted	Quantity Combusted	Units
BLR-012	*East Power Plant*	*12,517*	*Natural Gas*	*10,000*	*MMBtu*
Cretin Hall	Natural Gas Use	60	Natural Gas	3	MMBtu
Service Cer	Natural Gas Use	8,481	Natural Gas	362	MMBtu
McCarthy G	Natural Gas Use	29,061	Natural Gas	985	MMBtu
Facilities &	Natural Gas Use	29,466	Natural Gas	1,685	MMBtu

GHG Emissions

Total Organization-Wide Stationary Source Combustion by Fuel Type

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	2,958,470	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

Total Organization-Wide CO_2, CH_4 and N_2O Emissions from Stationary Source Fuel Combustion

Fuel Type	CO_2 (kg)	CH_4 (g)	N_2O (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	161,059.1	3,047.2	295.8
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	**161,059.1**	**3,047.2**	**295.8**
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	**161,059.1**	**3,047.2**	**295.8**

Total CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**161.2**
Total Biomass CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**0.0**

Back to Intro | Back to Summary | Help | Help - Market-Based Method

Scope 2 Emissions from Purchase of Electricity

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Guidance

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 "Items to Note" 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

					Market-Based						Location-Based		
					Use these cells to enter applicable market-based emission factors								
					Emission Factors			Emissions			Emissions		
Source ID	Source Description	Source Area (sq ft)	eGRID Subregion *where electricity is consumed*	Electricity Purchased (kWh)	CO_2 Emissions (lb/MWh)	CH_4 Emissions (lb/MWh)	N_2O Emissions (lb/MWh)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)
Bldg-012	*East Power Plant*	*12,517*	*HIMS (HICC Miscellaneous)*	*200,000*	*0*	*0*	*0*	*0.0*	*0.0*	*0.0*	*237,120.0*	*28.6*	*4.4*
Cretin Hall	Electricity Use	60	MROW (MRO West)	924	<enter factor>	<enter factor>	<enter factor>	1,014.9	0.1	0.0	1,014.9	0.1	0.0
Service Cer	Electricity Use	8,481	MROW (MRO West)	61,911	<enter factor>	<enter factor>	<enter factor>	68,003.4	7.4	1.1	68,003.4	7.4	1.1
McCarthy G	Electricity Use	29,061	MROW (MRO West)	383,605	<enter factor>	<enter factor>	<enter factor>	421,352.0	45.6	6.5	421,352.0	45.6	6.5
Facilities &	Electricity Use	29,466	MROW (MRO West)	595,213	<enter factor>	<enter factor>	<enter factor>	653,782.2	70.8	10.1	653,782.2	70.8	10.1
					<enter factor>	<enter factor>	<enter factor>						
					<enter factor>	<enter factor>	<enter factor>						
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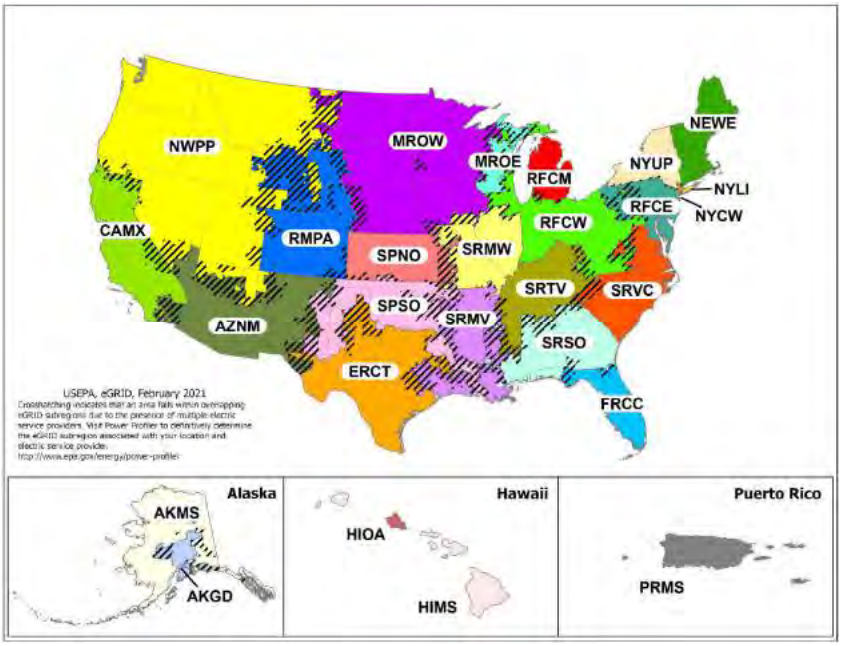
					<enter factor>	<enter factor>	<enter factor>						
					<enter factor>	<enter factor>	<enter factor>						
Total Emissions for All Sources				1,041,654				1,144,152.4	124.0	17.7	1,144,152.4	124.0	17.7

GHG Emissions

CO_2 Equivalent Emissions (metric tons)	
Location-Based Electricity Emissions	522.8
Market-Based Electricity Emissions	522.8

Notes:
1. CO_2, CH_4 and N_2O 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.



Back to Intro | Back to Summary | Help

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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 (CO_2, CH_4 and N_2O)

Source ID	Source Description	Waste Material	Disposal Method	Weight	Unit	CO_2e Emissions (kg)
Bldg-012	*East Power Plant Finished Goods*	*Steel Cans*	*Landfilled*	*1.000*	*metric ton*	*22,040*
Nonresidential Buildings	Nonresidential Waste	Mixed MSW municipal solid waste	Combusted	382	metric ton	*180,989*
Residential	Residential Waste	Mixed MSW municipal solid waste	Combusted	53	metric ton	*25,313*
Nonresidential Buildings	Nonresidential Recycling	Mixed Recyclables	Recycled	603	metric ton	*59,813*
Residential	Residential Recycling	Mixed Recyclables	Recycled	84	metric ton	*8,365*

GHG Emissions

Total Emissions by Disposal Method

Waste Material	CO_2e (kg)
Recycled	68,178
Landfilled	-
Combusted	206,302
Composted	-
Anaerobically Digested (Dry Digestate with Curing)	-
Anaerobically Digested (Wet Digestate with Curing)	-

EPA Climate Leaders Simplified GHG Emissions Calculator (Optional 3.0)

Total CO_2 Equivalent Emissions (metric tons) - Waste **274.5**

Back to Intro

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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* (.xls) as this calculator only quantifies one year of emissions at a time.

https://www.epa.gov/climateleadership/target-setting

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 its inventory.

(B) The "Go To Sheet" buttons can be used to navigate to the data entry sheets.

Organizational Information:

Organization Name:	University of St. Thomas
Organization Address:	2115 Summit Ave, St Paul, MN 55105
Inventory Reporting Period:	*Proposed Scenario*
Start:	*Jan-23*
End:	*Dec-23*
Name of Preparer:	Kimley-Horn
Phone Number of Preparer:	763-251-1015
Date Prepared:	Apr-23

Summary of Organization's Emissions:

Scope 1 Emissions

Go To Sheet	Stationary Combustion	914	CO_2-e (metric tons)
Go To Sheet	Mobile Sources	1,239	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	1,539	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	1,539	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	3,692	CO_2-e (metric tons)
Total Scope 1 & Market-Based Scope 2	3,692	CO_2-e (metric tons)

Reductions

Go To Sheet	Offsets	0	CO_2-e (metric tons)

Net Scope 1 and 2 Location-Based Emissions	3,692	CO_2-e (metric tons)
Net Scope 1 and 2 Market-Based Emissions	3,692	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	Upstream Transportation and Distribution	0	CO_2-e (metric tons)
Go To Sheet	Waste	531	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)

Back to Intro | Back to Summary | Heat Content | Help

Scope 1 Emissions from Stationary Combustion Sources

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Guidance

(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 CO_2 emissions are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Stationary Source Fuel Combustion

Source ID	Source Description	Source Area (sq ft)	Fuel Combusted	Quantity Combusted	Units
BLR-012	*East Power Plant*	*12,517*	*Natural Gas*	*10,000*	*MMBtu*
	Natural gas and #2 fuel oil for boiler syste	138,150	Natural Gas	17,200	MMBtu

GHG Emissions

Total Organization-Wide Stationary Source Combustion by Fuel Type

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	16,764,133	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

Total Organization-Wide CO_2, CH_4 and N_2O Emissions from Stationary Source Fuel Combustion

Fuel Type	CO_2 (kg)	CH_4 (g)	N_2O (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	912,639.4	17,267.1	1,676.4
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	**912,639.4**	**17,267.1**	**1,676.4**
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	**912,639.4**	**17,267.1**	**1,676.4**

Total CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**913.6**
Total Biomass CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**0.0**

Back to Intro | Back to Summary | Help

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U.S. Environmental Protection Agency

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. **Must select before picking vehicle type.**
- 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 equiment.

(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 CO_2 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

Source ID	Source Description	On-Road or Non-Road?	Vehicle Type	Vehicle Year	Fuel Usage	Units	Miles Traveled
Fleet-012	*HQ Fleet*	*OnRoad*	*Passenger Cars - Gasoline*	*2019*	*500*	*gal*	*12,065*
Construction Equipment (non-road g	Construction Equipment	NonRoad	Construction/Mining Equipment - Gasoline (2 stroke)	2007	26,453	gal	0
Passenger Cars	Construction Equipment	OnRoad	Passenger Cars - Gasoline	2007	90	gal	4,368
Construction Equipment (non-road d	Construction Equipment	NonRoad	Construction/Mining Equipment - Diesel	2007	94,476	gal	0
Medium- and Heavy- Duty Trucks	Construction Equipment	OnRoad	Medium- and Heavy-Duty Vehicles - Diesel	2007	189	gal	1,560
Light Trucks	Construction Equipment	OnRoad	Light-Duty Trucks - Gasoline	2007	176	gal	1,560

Back to Intro | Back to Summary | Help | Help - Market-Based Method

Scope 2 Emissions from Purchase of Electricity

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Guidance

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 "Items to Note" 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

					Market-Based *Use these cells to enter applicable market-based emission factors*						Location-Based		
					Emission Factors			Emissions			Emissions		
Source ID	Source Description	Source Area (sq ft)	eGRID Subregion *where electricity is consumed*	Electricity Purchased (kWh)	CO_2 Emissions (lb/MWh)	CH_4 Emissions (lb/MWh)	N_2O Emissions (lb/MWh)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)
Bldg-012	*East Power Plant*	*12,517*	*HIMS (HICC Miscellaneous)*	*200,000*	*0*	*0*	*0*	*0.0*	*0.0*	*0.0*	*228,640.0*	*22.0*	*3.4*
	Arena	138,150	MROW (MRO West)	3,440,000	<enter factor>	<enter factor>	<enter factor>	3,369,480.0	357.8	51.6	3,369,480.0	357.8	51.6
					<enter factor>	<enter factor>	<enter factor>						
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					<enter factor>	<enter factor>	<enter factor>						
Total Emissions for All Sources				3,440,000				3,369,480.0	357.8	51.6	3,369,480.0	357.8	51.6

GHG Emissions

CO_2 Equivalent Emissions (metric tons)	
Location-Based Electricity Emissions	1,539.4
Market-Based Electricity Emissions	1,539.4

Notes:
1. CO_2, CH_4 and N_2O emissions are estimated using methodology provided in EPA's Center for Corporate Climate Leadership Greenhouse Gas Inventory Guidance

Back to Intro Back to Summary Help

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Scope 3 Emissions from Waste

Guidance

(A) Enter annual waste data in ORANGE cells. Example entry is shown in first row (*GREEN Italics*).

(B) First, choose the appropriate material then the 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 (CO_2, CH_4 and N_2O)

Source ID	Source Description	Waste Material	Disposal Method	Weight	Unit	CO_2e Emissions (kg)
Bldg-012	*East Power Plant Finished Goods*	*Copper Wire*	*Landfilled*	*1,000*	*metric ton*	*22,040*
		Mixed MSW municipal solid waste	Combusted	870	metric ton	*412,258*
		Mixed Recyclables	Recycled	1,202	metric ton	*119,214*

Total Emissions by Disposal Method

Waste Material	CO_2e (kg)
Recycled	119,214
Landfilled	-
Combusted	412,258
Composted	-
Anaerobically Digested (Dry Digestate with Curing)	-
Anaerobically Digested (Wet Digestate with Curing)	-

Total CO_2 Equivalent Emissions (metric tons) - Waste	**531.5**

Appendix D

Traffic Impact Analysis

University of St. Thomas (UST) Multipurpose Arena EAW

Transportation Study

Prepared for:

City of St. Paul

June 9, 2023

SRF No. 2316489

Table of Contents

List of Figures

List of Tables

Introduction

SRF has completed a transportation study in conjunction with an EAW for the proposed University of St. Thomas (UST) multipurpose arena development in the City of St. Paul. The proposed arena is generally located in the southwest quadrant of the Cretin Avenue/Grand Avenue intersection within UST's south campus (see Figure 1: Project Location). The multipurpose arena is expected to have capacities ranging from 4,000- to 5,500-event patrons, depending on the event, and will primarily be utilized by the UST men's and women's hockey and basketball teams. Other events, such as university commencements, high school/youth sports, and conventions may also be held at the venue. In addition to holding events, the proposed arena is anticipated to include an auxiliary ice rink, separate men's and women's basketball practice facilities, and coaches offices/training facilities. As part of construction, three buildings are expected to be demolished, which include the Cretin Residence Hall, McCarthy Gymnasium, and a Service Center, as well as a net loss of approximately 265 surface parking spaces. The development is anticipated to be fully constructed and open by Fall of 2025.

The main objectives of the study are to evaluate the existing operations and parking within the study area, identify any transportation/parking impacts associated with the proposed arena during event and non-event conditions, and recommend potential mitigation to address any issues. The study summarizes various event related information pertaining to the arena and evaluates both typical (average) and maximum (worst-case) event conditions to identify issues areas and potential mitigation strategies. The following information provides the assumptions, analysis, and study findings offered for consideration.

SRF

Project Location

UST Multipurpose Arena EAW Transportation Study

City of St. Paul

Figure 1

02316489
May 2023

Existing Conditions

Existing conditions were reviewed to establish a baseline to compare to future conditions, as well as identify current issues from a safety and capacity perspective. The evaluation of existing conditions includes various data collection efforts, such as traffic volumes and parking utilization counts, as well as a review of current transportation characteristics (roadways, pedestrians, bicycles, and transit), crashes/safety, and intersection operations, which are outlined in the following sections.

Study Intersections

The following study intersections represent the primary focus of the transportation study. These intersections were identified through discussions with UST and City staff as they relate to potential development impacts, as well as future area infrastructure needs. It should be noted that these intersections generally encompass the entire UST St. Paul campus.

- Cretin Ave N/Marshall Ave
- Cretin Ave N/Selby Ave
- Cretin Ave N/Mississippi River Blvd
- Cretin Ave N/Summit Ave
- Cretin Ave N/Grand Ave
- Cretin Ave N/Goodrich Ave
- Cleveland Ave N/Selby Ave
- Cleveland Ave N/Summit Ave
- Cleveland Ave N/Grand Ave
- Summit Ave/Mississippi River Blvd
- Summit Ave/UST South Campus Access
- Mississippi River Blvd/Goodrich Ave

Other regional intersections and access locations were also included as part of the future event operations analysis as needed to help identify event traffic impacts and any potential infrastructure/traffic control needs. These other regional locations primarily consisted of signalized intersections along Cretin Avenue and Cleveland Avenue from I-94 to the north to TH 5 to the south.

Traffic Volumes

Vehicular turning movement and pedestrian/bicyclist counts were collected at the study intersections on Thursday, March 30, 2023, during a.m. and p.m. peak periods of the study intersections (7 to 9 a.m. and 4 to 6 p.m.), as well as anticipated pre- and post-event peak hours (i.e., 6 to 7 p.m. and 9 to 10 p.m.). In addition, data was collected at the Cretin Avenue/Grand Avenue intersection on Friday, March 31, 2023, and Saturday, April 1, 2023, to understand differences in traffic volumes on weekends. It should be noted that the counts were collected while most area schools (i.e., St. Paul Public Schools) and universities (i.e., UST, St. Catherine's, Macalester College) were in session. To determine if the traffic counts were representative of an average day in the study area, MnDOT detector data was reviewed at the I-94/Cretin Avenue interchange from October 2022 to March 2023. Results of the review, shown in Appendix A, indicate that March 30, 2023, was representative (if not slightly higher) of an average day for the study area, therefore, no adjustments were made to the counts. In addition, turning movement counts were either collected or estimated at the regional intersections based on a combination of the newly collected data or modifying historical traffic count data.

Roadway Characteristics

A field assessment was completed to identify various roadway characteristics within the transportation system study area, such as functional classification, general configuration, posted speed limit, and presence of on-street parking. A summary of these roadway characteristics is shown in Table 1. Note that these are general characteristics and that there are some deviations within the segments of the roadways.

Table 1. Existing Roadway Characteristics

Roadway	Functional Classification (1)	General Configuration	Speed Limit (mph)	On-Street Parking
Cretin Avenue	Major Collector	Four-Lane Undivided (2)	25	Yes (2)
Cleveland Avenue	A Minor Arterial	Two-Lane Undivided	30	Yes
Mississippi River Blvd	Local Street	Two-Lane Undivided	25	No
Marshall Avenue	A Minor Arterial	Three-Lane Divided (3)	30	Yes
Selby Avenue	Local Street	Two-Lane Undivided	25	Yes
Summit Avenue	Major Collector	Two-Lane Divided	25	Yes
Grand Avenue	Other Arterial	Three-Lane Undivided	25	Yes

(1) Functional Classification based on the City of Saint Paul 2040 Comprehensive Plan.

(2) Note various locations along Cretin Avenue contain on-street parking with time-of-day restrictions. Therefore, depending on the time of day, the corridor may operate as a two-lane roadway with parking.

(3) Generally a three-lane roadway with medians present in various locations. Note Marshall Avenue has two lanes in the westbound direction, west of Cretin Avenue.

In addition to the general roadway characteristics, there are varying types of traffic controls within the transportation system study area. The following study intersections are signalized:

- Cretin Ave /Marshall Ave
- Cretin Ave /Summit Ave
- Cretin Ave /Grand Ave
- Cleveland Ave /Summit Ave
- Cleveland Ave /Grand Ave

The Mississippi River Boulevard/Goodrich Avenue intersection is all-way stop controlled. The remining study intersections are unsignalized with side-street stop control. Existing geometrics, traffic controls, and volumes are shown in Appendix A.

Multimodal Facilities

The study area is well served with sidewalks and all signalized intersections surrounding campus are programmed with leading pedestrian interval (LPI) timing, which helps improve pedestrian safety. Note there is a sidewalk gap on the north side of Goodrich Avenue and there is not currently a direct pedestrian connection between Goodrich Avenue and south campus (i.e., pedestrians need to walk to/from Cretin Avenue to access Goodrich Avenue).

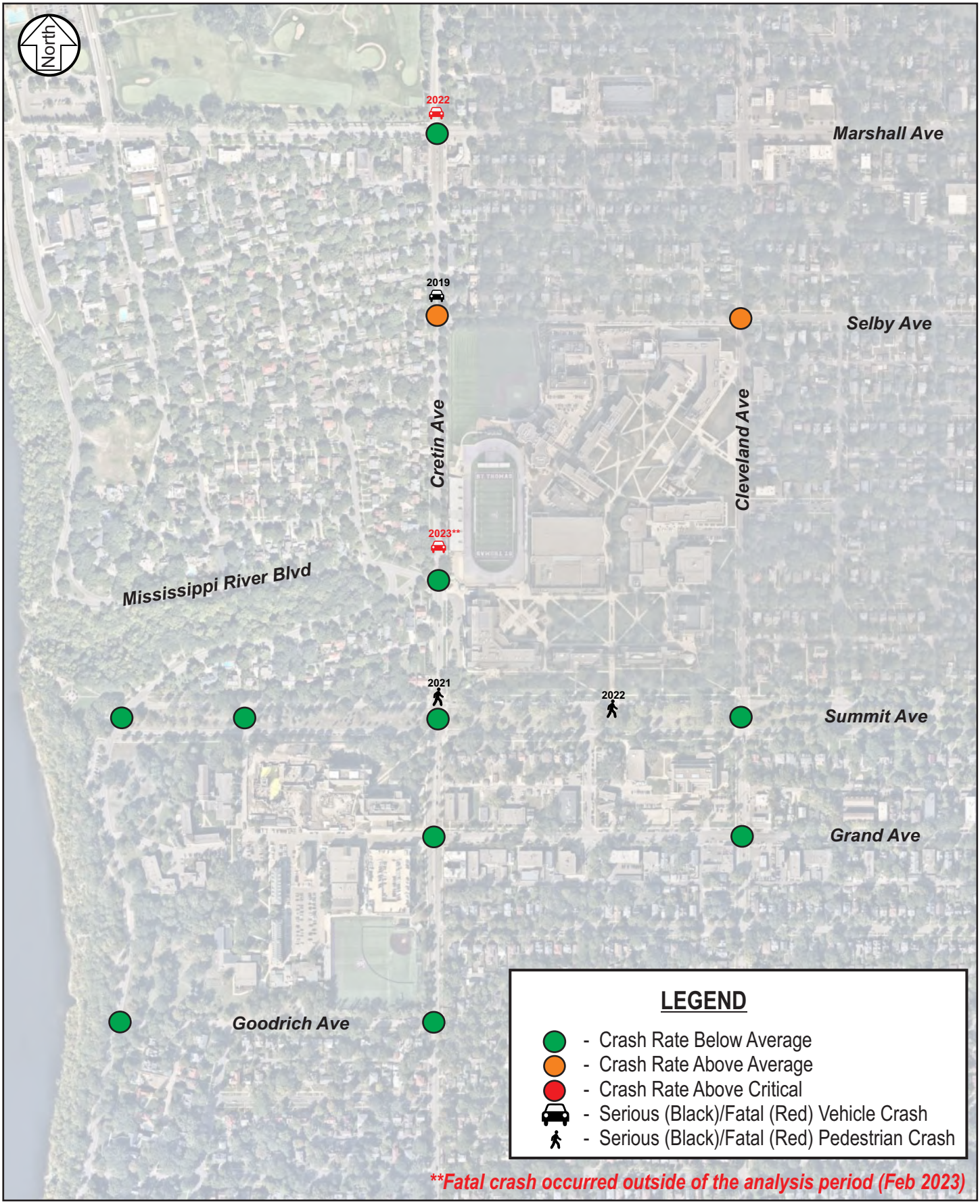
From a bicycle perspective, there is an off-street trail along the west side of Mississippi River Boulevard, and on-street bicycle lanes along Summit Avenue and Cleveland Avenue, as well as the west side of Mississippi River Boulevard. Note that Summit Avenue is currently undergoing a public visioning process to determine the long-term layout of the corridor.

As shown in the inset, there are various Metro Transit stops on (or near) the St. Paul Campus. The Metro Transit Bus Routes include routes 21, 63, and 87, which run every 15-20 minutes and are summarized below. In addition, UST runs a shuttle bus between the St. Paul and Minneapolis campuses. The shuttle runs every 20-30 minutes and is free for all UST staff/students.

- **Route 21** – Primarily operates east-west along Marshall Avenue/Lake Street from downtown St. Paul to Uptown, providing key stops near Allianz Field that serve as a feeder to the METRO Green Line.
- **Route 63** – Primarily operates east-west along Grand Avenue and 3rd Street, serving key destinations such as the METRO Green Line, Macalester College, downtown St. Paul, and the Sun Ray Transit Center.
- **Route 87** – Primarily operates north-south along Cleveland Avenue from Ford Parkway to the Rosedale Transit Center, providing key stops at the University of Minnesota St. Paul Campus and the METRO Green Line.

Safety Analysis

While not a requirement of the EAW process, a safety analysis was requested by UST to understand any trends or geometric issues at the study intersections. The safety analysis was based on reported crashes using MnDOT's Crash Mapping Analysis Tool (MnCMAT) from January 1, 2018, through December 31, 2022, which represents the most recent five-year period available. Results of the safety analysis are summarized below and shown in Figure 2, while detailed crash type/rate information is included in Appendix B.



SRF

Safety Analysis Summary (2018-2022)

UST Multipurpose Arena EAW Transportation Study
City of St. Paul

Figure 2

02316489
May 2023

- There was a total of 47 crashes reported within the study area during the analysis period. The number of crashes ranged from a high of 19 crashes at the Cretin Avenue/Marshall Avenue intersection to a low of zero (0) crashes at the Cretin Avenue/Goodrich Avenue intersection.
- In order to determine the significance of the crashes, crash rates were calculated for each intersection and compared to average crash rates published by MnDOT for intersections with similar characteristics (i.e., traffic control, traffic volumes, lighting, environment, etc.) A higher than average rate does not necessarily indicate a significant crash problem. Therefore, critical rates were calculated to determine the statistical significance. If the actual rates are below the critical rates, crashes that occurred may be due to the random nature of crashes and not necessarily a geometric design or traffic control issue. Based on the results of analysis, which is illustrated in Figure 2, no study intersections are above the critical crash rate, indicating that no study intersections have a statistically significant crash problem.
- It should be noted that one (1) fatal and three (3) serious injury crashes have occurred within the study area during the analysis period, and an additional fatal accident also occurred outside of the analysis period (i.e., February 2023). Descriptions of the fatal/serious injury crashes, which are based on the police reports, are summarized below:
    - Cretin Avenue/Marshall Avenue – Fatal angle crash. Driver ran a red light, colliding with a vehicle crossing the intersection. Based on the police reports, drugs/alcohol may have played a role in the crash.
    - Cretin Avenue/Mississippi River Blvd – Fatal head-on crash. Driver crossed the centerline, colliding with oncoming traffic. Based on the police reports, drugs/alcohol may have played a role in the crash.
    - Cretin Avenue/Selby Avenue – Serious injury angle crash. Side-street vehicle failed to observe right-of-way and pulled out into oncoming traffic.
        - Note the intersection also has an above average crash rate. Two other angle crashes have occurred at the intersection within the analysis period and all three (3) angle crashes have occurred when on-street parking may be present on Cretin Avenue. On-street parking may be encroaching on sight lines at the intersection.
    - Cretin Avenue/Summit Avenue – Serious injury pedestrian crash. A pedestrian failed to yield right-of-way and walked into oncoming traffic.
    - Summit Avenue/Pedestrian Crossing (near Finn St) – Serious injury pedestrian crash. Vehicle traveling westbound failed to see pedestrian crossing the intersection.
        - Note during data collection efforts, vehicles were observed to park and/or stop within the no parking zone prior to the pedestrian crossing. Vehicles parked in this zone may block the visibility of pedestrians. While not associated with the arena project, future consideration could be made towards constructing a curb bump out for the pedestrian crossing and/or implementing yellow pavement markings to help reinforce the no-parking zone and improve pedestrian visibility.

Operations Analysis

An intersection capacity analysis was conducted to determine how traffic is currently operating at the study intersections during typical weekday a.m. and p.m. peak hour conditions. All intersections were analyzed using Synchro/SimTraffic software, which is an industry standard. Capacity analysis results identify a Level of Service (LOS) which indicates how well an intersection is operating. Intersections are graded from LOS A through LOS F. The LOS results are based on average delay per vehicle, which corresponds to the delay threshold values shown in Table 2. LOS A indicates the best traffic operation and LOS F indicates an intersection where demand exceeds capacity. Overall intersection LOS A through D is generally considered acceptable within the Twin Cities Metropolitan Area, although longer delays for short periods of time and/or for specific movements are often considered acceptable as well. In urban areas, it is common for intersections to operate at LOS E or LOS F for short periods of time, particularly when balancing other transportation modal priorities.

Table 2. Level of Service Criteria for Signalized and Unsignalized Intersections

LOS Designation	Signalized Intersection Average Delay/Vehicle (seconds)	Unsignalized Intersection Average Delay/Vehicle (seconds)
A	≤ 10	≤ 10
B	> 10 - 20	> 10 - 15
C	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

For side-street stop-controlled intersections, special emphasis is given to providing an estimate for the level of service of the side-street approach. Traffic operations at an unsignalized intersection with side-street stop control can be described in two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support these volumes.

Second, it is important to consider the delay on the minor approach. Since the mainline does not have to stop, the majority of delay is experienced on the side-street approaches. It is typical of intersections with higher mainline traffic volumes to experience high levels of delay (poor levels of service) on the side-street approaches, but an acceptable overall intersection level of service during peak hour conditions.

Results of the existing intersection capacity analysis, shown in Table 3, indicate that all study intersections currently operate at an acceptable overall LOS D or better during the weekday a.m. and p.m. peak hours. Queuing and operational observations are discussed on Page 10, however, there are no significant operational or safety issues that would warrant improvements within the study area.

Table 3. Existing Conditions Intersection Capacity Analysis

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
Cretin Avenue S / Marshall Avenue	C	26 sec.	D	53 sec.
Cretin Avenue S / Selby Avenue (1)	A/A	10 sec.	A/B	11 sec.
Cretin Avenue S / Mississippi River Boulevard (1) (3)	A/A	5 sec.	A/A	6 sec.
Cretin Avenue S / Summit Avenue	A	8 sec.	B	14 sec.
Cretin Avenue S / Grand Avenue	B	10 sec.	B	14 sec.
Cretin Avenue S / Goodrich Avenue (1)	A/A	9 sec.	A/C	16 sec.
Cleveland Avenue S / Selby Avenue (1)	A/A	6 sec.	A/B	12 sec.
Cleveland Avenue S / Summit Avenue	B	13 sec.	B	19 sec.
Cleveland Avenue S / Grand Avenue	B	15 sec.	B	15 sec.
Mississippi River Boulevard / Summit Avenue (1)	A/A	4 sec.	A/A	5 sec.
Mississippi River Boulevard / Goodrich Avenue (2)	A	4 sec.	A	4 sec.

(1) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst side-street approach LOS. The delay shown represents the worst side-street approach delay.
(2) Indicates an unsignalized intersection with all-way stop control, where the overall LOS is shown.
(3) The eastbound left-turn movement is restricted.

The following information summarizes the operational and/or queuing observations identified as part of the existing capacity analysis:

- **Cretin Avenue/Marshall Avenue:** While the intersection operates at an acceptable overall LOS D, the southbound and eastbound approaches were observed to have 95th percentile queues of 650 feet during the p.m. peak hour. In addition, the westbound approach was observed to have queues of 450 feet or greater during the p.m. peak hour.
- **Summit Avenue at Cretin Ave and Cleveland Ave:** Due to the median width and signal limitations, there is limited storage/capability for side-street left-turn movements to enter the intersections. Of note, the westbound left-turn movement at the Summit Avenue/Cretin Avenue intersection operates at LOS F (77 seconds) with 95th percentile queues of approximately 150 feet during the p.m. peak hour.
- **Cretin Avenue:** Left-turn movements and time-of-day on-street parking were observed to cause abrupt lane changes and friction along the corridor.

Parking

UST Campus Parking/Utilization Counts

A summary of the UST campus parking supply is shown in Figure 3. Note that each lot is generally assigned/restricted to either a resident, commuter, faculty/staff, and/or visitor. The figure highlights in purple the parking locations that are open for event patrons during expected game times and are expected to be utilized for events. In addition, on-street parking locations that are adjacent to campus and do not require a city permit are also highlighted in purple. The project limits are referenced (i.e., dashed orange line) to highlight the surface parking lots that are expected to be removed by the project.

Parking utilization counts were collected on/near the UST Campus in the Spring of 2023 during two (2) different timeframes by two (2) different sources, as summarized below. Note the parking utilization counts were the basis of the non-event and event parking demand analysis, which is discussed later in this document. Detailed parking utilization count information is included in Appendix C.

1) UST Parking Counts: Parking utilization counts were collected at all St. Paul campus lots from Monday, February 27, 2023, to Friday, March 3, 2023. The counts were collected in hourly intervals from 12 a.m. to 10 p.m. Monday through Thursday, and 12 a.m. to 6 p.m. on Friday.

2) SRF Parking Counts: Parking utilization counts were collected by SRF from Thursday, March 30, 2023, to Saturday, April 1, 2023. The focus of the SRF parking counts was to collect data that was not captured by UST, such as on-street parking adjacent to campus (that do not require a city parking permit) and visitor lots on Friday and Saturday nights (i.e., 6 - 7 p.m.) that are expected to be utilized for events.

While the weather was generally clear during the week of UST parking counts, there was a snowstorm on Friday night (3/31) into Saturday morning (4/1) during the SRF parking counts. However, the storm started after the Friday afternoon counts and the Saturday weather (40 degrees and sunny) generally cleared the roadways by the time of the Saturday afternoon counts, therefore, the parking counts as it relates to event availability are considered representative of typical conditions for the campus area.

Permit Parking Locations

Numerous public neighborhood streets surrounding the UST campus currently have city permit parking restrictions. Given that UST students/staff may currently be parking on the local streets, it is important to understand where/when permit parking is located surrounding the campus. Therefore, a graphic summarizing the residential permit parking locations was developed and is shown in Figure 4. Note the graphic is based on information provided on the City of St. Paul website.

Given the proposed development will be holding events, it is important to monitor parking and the potential surrounding neighborhood impacts. Note various factors may contribute to event traffic parking on local streets, which include but are not limited to, parking supply, proximity to the arena, cost of parking, etc.

Restricted Resident Parking

MRH R3, MRH R2, Lot U

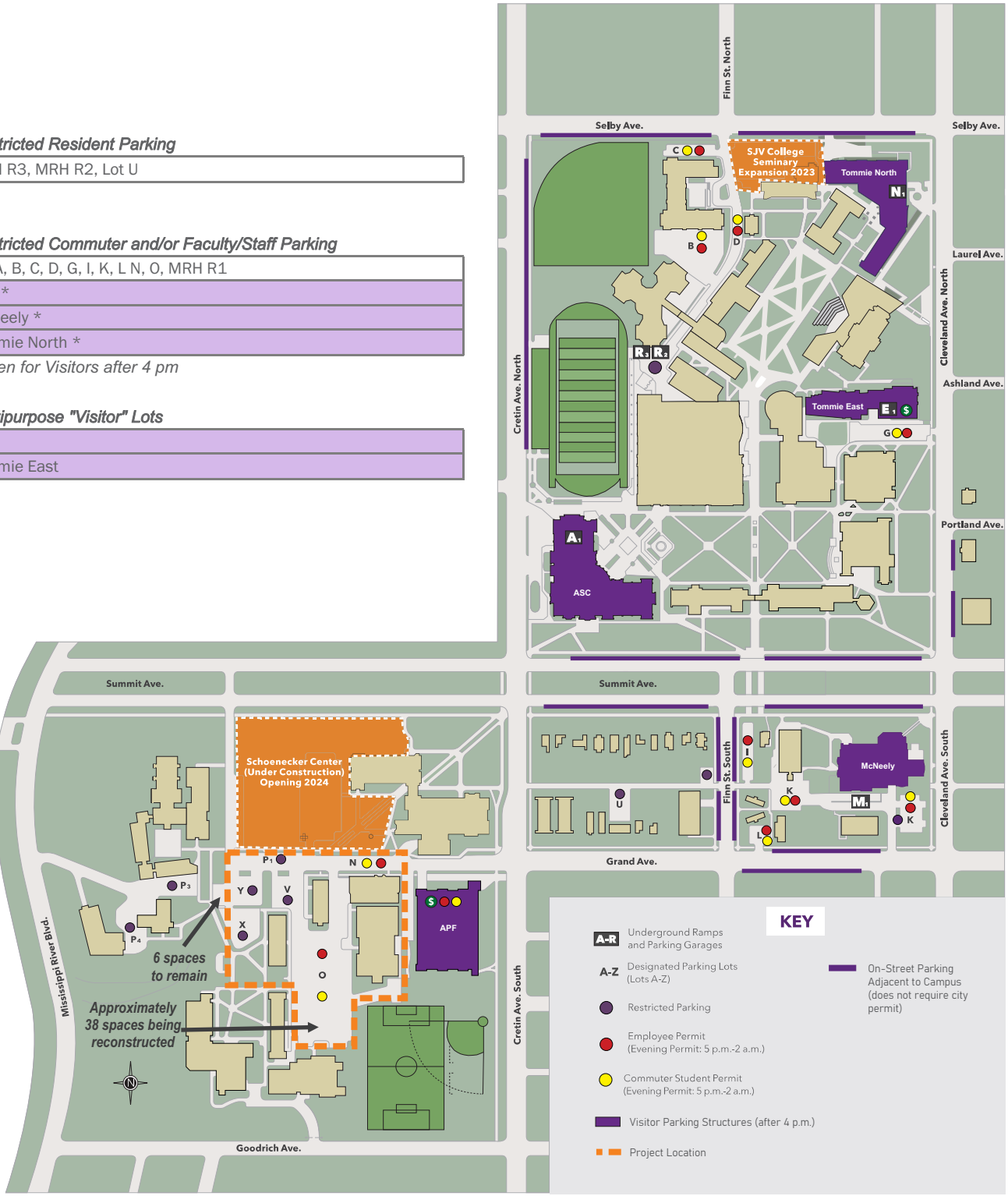
Restricted Commuter and/or Faculty/Staff Parking

Lot A, B, C, D, G, I, K, L N, O, MRH R1
ASC *
McNeely *
Tommie North *

**Open for Visitors after 4 pm*

Multipurpose "Visitor" Lots

APF
Tommie East



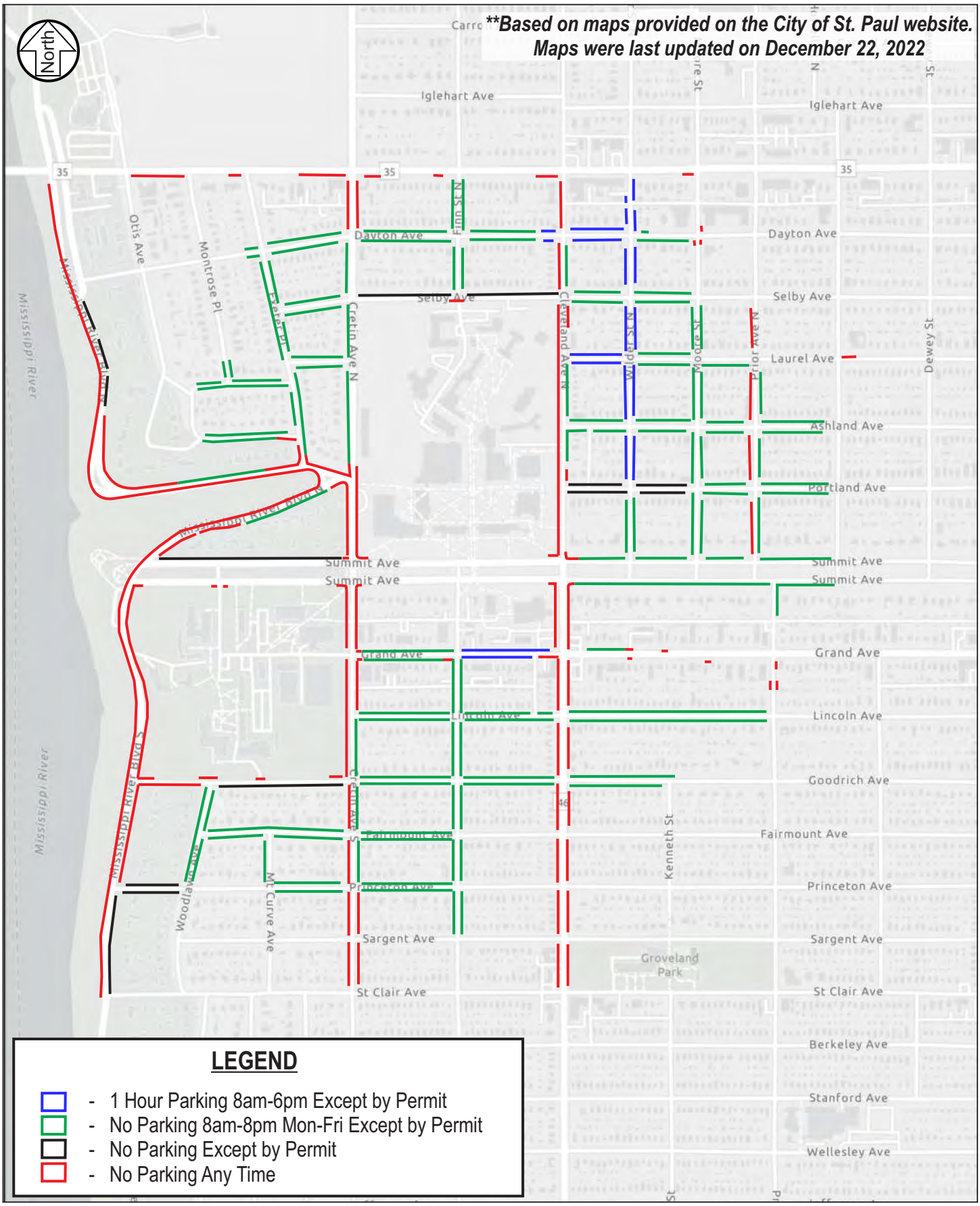
Produced by the University of St. Thomas-Minnesota. Updated July 2022.
Modified by SRF Consulting in April 2023.

UST Campus Parking Summary

UST Multipurpose Arena EAW Transportation Study
City of St. Paul

Figure 3

02316489
May 2023



Residential City Permit Parking Locations

UST Multipurpose Arena EAW Transportation Study

City of St. Paul

Figure 4

02316489
May 2023

Proposed Development

The proposed multipurpose arena development is located immediately west of the Anderson Parking Facility (APF) in the southwest quadrant of the Cretin Avenue/Grand Avenue intersection. A preliminary site plan for the proposed arena is illustrated in Figure 5, which was used as the basis for this transportation study. As mentioned previously, the multipurpose arena will primarily be utilized by the UST men's and women's hockey and basketball teams. The expected capacity for basketball/hockey events is summarized below, whereas estimated event times, schedules, and attendances are discussed later in this document.

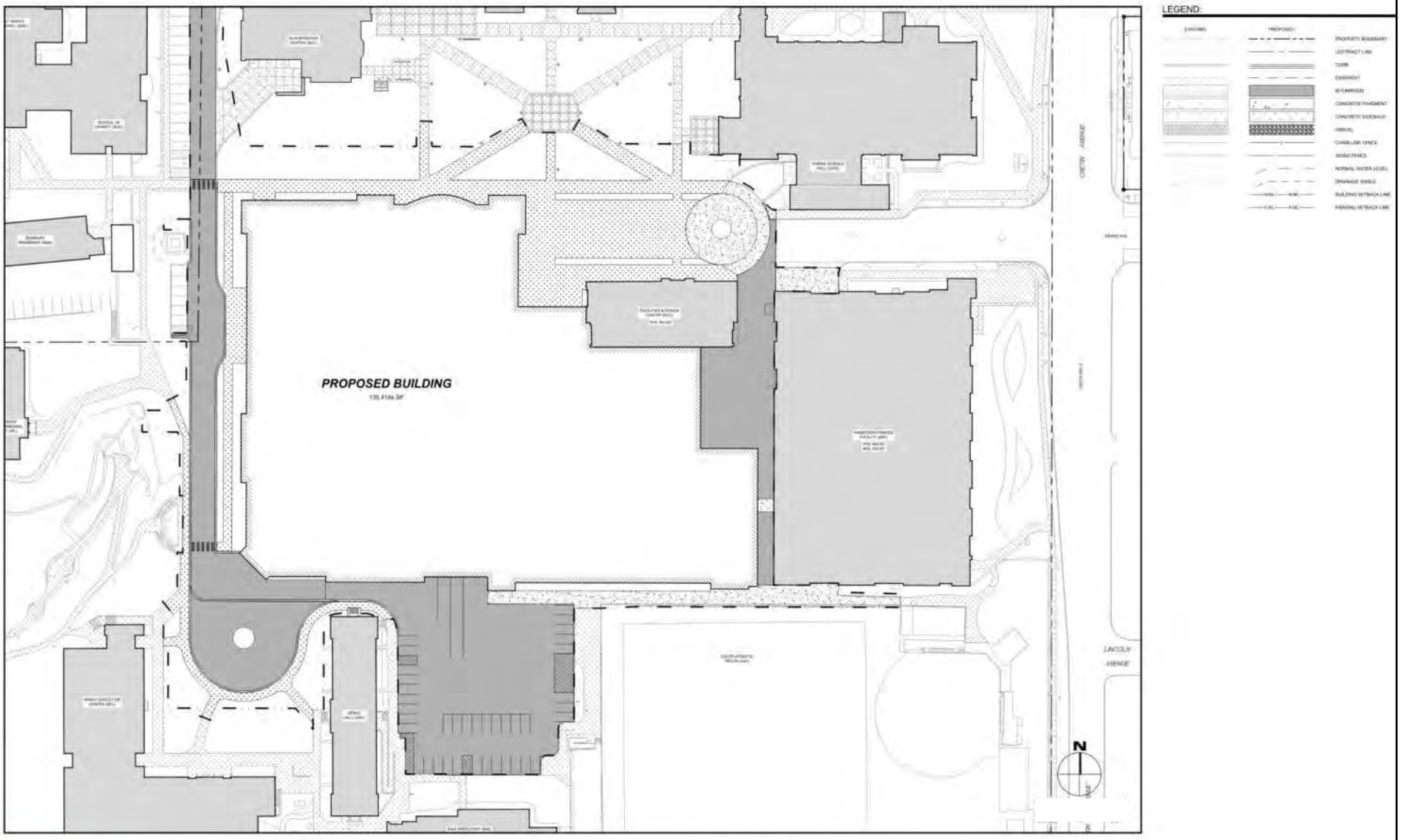
- **Basketball** – 5,500-capacity
- **Hockey** – 4,000-capacity

Other events, such as university commencements, high school/youth sports, and conventions may also be held at the venue. While other event types could have larger capacities (if floor seating is included), due to the infrequency and unknown nature of these other events, the reoccurring hockey/basketball events were the focus of this study. In addition to holding events, the proposed development is also anticipated to include an auxiliary ice rink, separate men's and women's basketball practice facilities, and coaches offices/training facilities.

The proposed arena is expected to begin construction in 2024 and open by Fall of 2025. As part of construction, three buildings are expected to be demolished, which include the Cretin Residence Hall, McCarthy Gymnasium, and a Service Center. In addition, commuter/staff lots (N, O) and School of Divinity (P, V, X, Y) surface parking lots are expected to be removed. Lot O, however, is expected to be reconstructed on the south side of the arena to provide 40 parking spaces, resulting in a total net loss of approximately 265 surface parking spaces.

The project will also result in the discontinuation of the South Campus internal roadway connection from Summit Avenue to Cretin Avenue, and a pedestrian plaza will be provided outside of the arena to enhance pedestrian facilities and safety. Vehicular access will still be provided at both access locations; however, the Summit Avenue access will only provide access to the reconstructed Lot O, and the Cretin Avenue/Grand Avenue access will only provide access to the APF. Vehicle turnarounds are expected to be constructed near both access locations. It should be noted that the Summit Avenue/South Campus intersection is also expected to be modified to better accommodate larger vehicles, as the access is expected to be utilized by team buses and delivery vehicles.

While pedestrian access will be provided at various locations surrounding the building, the primary event entrances are located in the north quadrant, near the proposed plaza area, whereas a secondary access will also be provided on the east side, near the APF. The west side of the APF is expected to be modified to provide a pedestrian entrance/exit. This access modification is expected to serve as a direct connection for APF users and the Arena. It is expected to be utilized by event users, students, staff, as well as potential parent pick-up/drop-off for youth sports. In addition, the arena has a pedestrian access in the south quadrant, that is expected to be utilized by staff, coaches, and media.



Preliminary Site Plan

UST Multipurpose Arena EAW Transportation Study
City of St. Paul

Figure 5

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May 2023

2025 Non-Event Conditions

Parking Analysis

The proposed arena development is expected to result in the net loss of approximately 265 parking spaces (308 removed + 38 reconstructed Lot O + 6 Lot Y to remain = 264). Therefore, to identify potential impacts associated with the loss of parking, a parking demand analysis was performed during peak non-event conditions. Note that the peak parking demand on the UST campus is between 11 a.m. and 1 p.m. on a weekday. The peak parking demand of the impacted lots, which is shown in Table 4, indicates that on average 173 vehicles will be displaced as a result of the project.

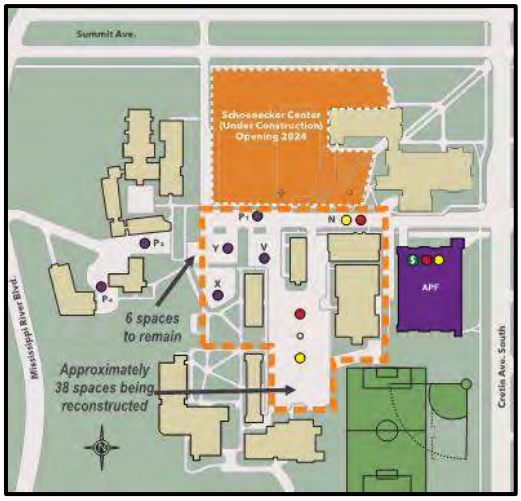


Table 4. Parking Demand of Impacted Lots

Lot ID	Total Parking Spaces	Peak Parking Demand
		Weekday 1:00 pm
Commuter and Staff/Faculty Parking		
N	9	9
O (1)	196	85
Total (N,O)	**205**	**94**
School of Divinity (SOD) Parking		
P1 (South)	18	16
V	33	20
X	21	14
Y (2)	31	29
Total (SOD)	**103**	**79**
Total	**308**	**173**

(1) Lot O is expected to be reconstructed and provide approximately 38 spaces.
(2) Six (6) spaces from Lot Y are expected to remain.

To determine if alternative campus parking sources can accommodate the displaced parking, the available parking supply on campus was reviewed. The review was focused on other non-resident parking lots and on-street parking (no permit required) adjacent to campus. Based on the parking utilization data, which is summarized in Table 5, approximately 259 parking spaces are available on average during the UST peak parking demand. Note that approximately 44 spaces are expected to be reconstructed or remain (Lot O and Lot Y) that were included in the available parking supply. In addition, Lot A (56 unrestricted spaces) is currently closed for construction and could provide additional parking spaces.

Table 5. Available Parking Supply

Lot ID	Total Unrestricted Parking Spaces (2)	Available Parking Supply
		Peak Weekday 1:00 pm
APF	691	78
ASC (1)	118	24
McNeely (1)	104	53
Tommie North (1)	112	25
Other Commuter/Staff Lots (A, B, C, D, G I, K, L)	248	0
On-Street (Adjacent)	369	35
Lot O and Lot Y (3)	44	44
Total	1,686	259

(1) Parking structure restricted during the day for contract faculty/staff parking only.
(2) Restricted parking spaces include, but are not limited to, Electric Vehicle, 15-minute parking, faculty vehicles, etc. that were not included in the general parking supply.
(3) Lot O is expected to be reconstructed and provide approximately 38 spaces. Six (6) spaces from Lot Y are expected to remain.

Table 6. Parking Demand Analysis

Available Supply	Relocated Parking	Surplus Parking
259	173	86

Results of the parking demand analysis, which is summarized in Table 6, indicate that the alternative parking supply sources can accommodate the increased parking demand associated with the impacted lots. While a surplus is expected, the following parking operations should be considered:

- The APF and Lot O/Y are expected to be full between 11 a.m. and 1 p.m. on a daily basis. Given the displaced vehicles likely have a desire to be on the south campus, these lots are expected to be fully utilized before using other alternative parking sources.
    - Note it is generally good practice for the parking supply of a visitor parking facility to equal the peak parking demand plus an additional five (5) to 15 percent. This extra supply reduces the unnecessary circulation of vehicles looking for parking and the perception of inadequate parking.
- The ASC, McNeely, and Tommie North parking structures are all restricted during the day for contract faculty/staff only. Note the impacted lots consist of a combination of commuter, faculty/staff, and School of Divinity (SOD) users, therefore, may not be a direct comparison.
- On-street parking may be difficult to find and/or not in a desirable area for south campus users.

It should be noted that UST has implemented strategies in the past to help decrease parking demand:

- In Fall of 2021, UST implemented a new policy requiring full-time, undergraduate, first and second-year students to live on campus. In Fall of 2022, there were over 2,600 students living on campus, and only 795 resident parking permits were issued. Therefore, a majority of students living on campus do not have vehicles on campus.
- UST subsidizes the cost of a Metro Transit bus pass, making them less expensive for students, faculty, and staff. Student Metro Transit College Passes (C-Pass), Faculty/Staff Metropass, and stored value cards/10-ride passes can all be purchased through the University. For reference, 700 C-Passes were purchased in the 2022-2023 calendar year.

Additional strategies to help decrease parking demand are summarized below. Constructing additional parking on campus could also be considered and is discussed later in this document.

- Issue less commuter, faculty/staff, or SOD parking permits to ensure there is adequate parking capacity within the APF for visitor parking.
- Reduce the number of student resident parking permits and discontinue resident parking in the APF (note approximately 100 resident permitted vehicles utilize the APF).
- Continue to inform and educate students of the discounted bus passes and metro transit routes/schedules. Consider providing each student with a 10-ride pass at the start of the year, to help students to familiarize themselves and/or try transit. Consider reducing C-pass/Metropass costs (increasing subsidization), particularly if students/staff purchase multiple semester passes.
- Consider expanding the UST Campus Shuttle Service to provide stops at known or desirable off-campus living locations. The shuttle expansion could be accomplished by conducting a survey to determine where off-campus students are living and whether they would utilize the service. In addition to serving the St. Paul campus students, the expansion could also capture students who are utilizing the St. Paul campus as a "park-and-ride" to get to the Minneapolis campus.
    - Note off-site parking lots could be investigated to provide shuttle services to/from.
- Issue more Minneapolis Harmon Ramp permits and/or review potential strategies to increase student/staff parking at the Minneapolis campus. These strategies would be designated towards students/staff that are traveling to/from the west metro and/or have a majority of their curriculum at the Minneapolis campus.
    - Note one potential strategy is shifting staff members to the Minneapolis campus.
- Ensure there are adequate indoor and outdoor bicycle parking spaces and facilities on campus.

Event Background/Assumptions

Various event-related assumptions were developed through discussions with UST and the City of St. Paul throughout the study process. These assumptions lay the framework for the event conditions analysis, to help identify problem areas and potential mitigation. The following event background/assumptions are summarized in the following sections.

UST Current Events

As mentioned previously, the proposed multipurpose arena is a state-of-the-art facility that will host men's and women's hockey and basketball events, as well as other events. Currently, UST hosts several events on the St. Paul campus, which are summarized below for reference:

- Men's football games are currently played at O'Shaughnessy Stadium, which is located in the north campus and has a seating capacity of approximately 5,000, but often has attendances that range from 4,000 to 6,500.
- Men's/women's basketball and women's volleyball games are currently played at Schoenecker Arena, which has a seating capacity of approximately 2,000 event patrons.
- Men's/women's soccer and women's softball games are currently played at the South Athletic Fields, just south of the APF. Seating capacities of the South Athletic Fields range from 150 to 800.
- Men's baseball games are currently played at Koch Diamond in the North Campus, which has a seating capacity of 250.
- Commencements, conventions, career fairs, etc. are often hosted on the North Campus.

Event Schedule/Times

Regular season event schedules and times were estimated based on a combination of the current UST sports schedules, as well as numerous similar programs, including two (2) programs with multipurpose (hockey/basketball) arenas. The estimated event schedule for the multipurpose arena is shown in Figure 6 and Table 7. Note that men's and women's basketball games are highlighted in gray since they are currently played on-campus, whereas men's and women's hockey games were highlighted in purple to represent "new" games/events expected on campus.

Figure 6. Estimated Event Schedule

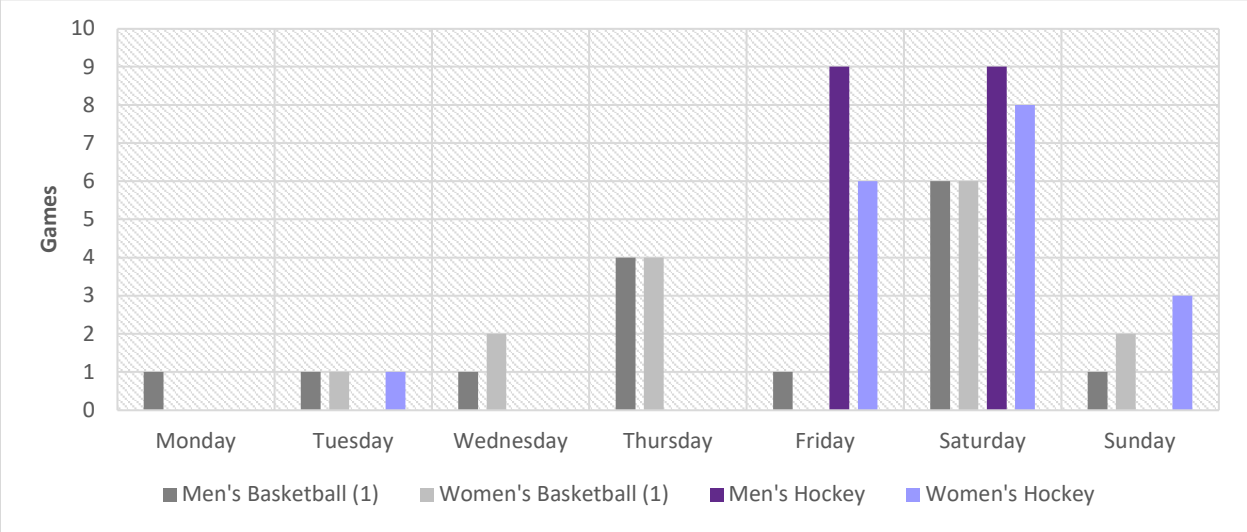


Table 7. Estimated Event Schedule

Event	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Total
Men's Basketball (1)	1	1	1	4	1	6	1	15
Women's Basketball (1)	0	1	2	4	0	6	2	15
Men's Hockey	0	0	0	0	9	9	0	18
Women's Hockey	0	1	0	0	6	8	3	18
Total	**1**	**3**	**3**	**8**	**16**	**29**	**6**	**66**

(1) Note men's and women's basketball games are currently played on-campus.

While event times can vary, based on the comparison of UST and similar multipurpose arena programs, they generally follow a pattern as shown in Table 8. Men's hockey generally plays at 7:07 p.m. on Fridays and 6:07 p.m. on Saturdays, men's basketball generally plays at 7:00 p.m. regardless of the night, and women's basketball/hockey event times can often vary, generally playing at 6 or 7 p.m. on weeknights, and in the afternoon on weekends. Note that men's hockey/basketball may have day games sporadically throughout the season, either on a weekend or holiday. If a men's and women's game are scheduled on the same day, the women's game is generally shifted to earlier in the day. On average, hockey and basketball games were assumed to last approximately two (2) hours.

Table 8. Event Time Assumptions

Men's Hockey	Men's Basketball	Women's Hockey	Women's Basketball
• Fri – 7:07 pm • Sat – 6:07 pm (1)	• All days – 7:00 pm (1)	• Fri – 6:00 or 7:00 pm (2) • Sat/Sun – 1:00 or 2:00 PM	• Mon – Fri – 6:00 or 7:00 pm (2) • Sat/Sun – 1:00 or 2:00 PM

(1) May have day games sporadically throughout season, either on a weekend or holiday

(2) If a game is scheduled on the same day as a men's game, the women's game is generally shifted to earlier in the day.

Event Attendances

Attendance data was collected for numerous similar programs during the 2022-2023 regular season to help estimate the event attendances expected at the new arena. Similar programs mostly consisted of teams that are currently in UST's conference (i.e., CCHA, WCHA, Summit League), excluding both the top and bottom capacity men's programs to eliminate outliers. The attendance data is shown in Figure 7, and stadium capacities of the similar programs are summarized in Appendix D. Note the UST attendance was included in the graphic for reference, however, was not included in the similar program average attendance, given UST's current facilities are not able to accommodate larger attendances and their recent transition to Division-1 sports. Key takeaways include:

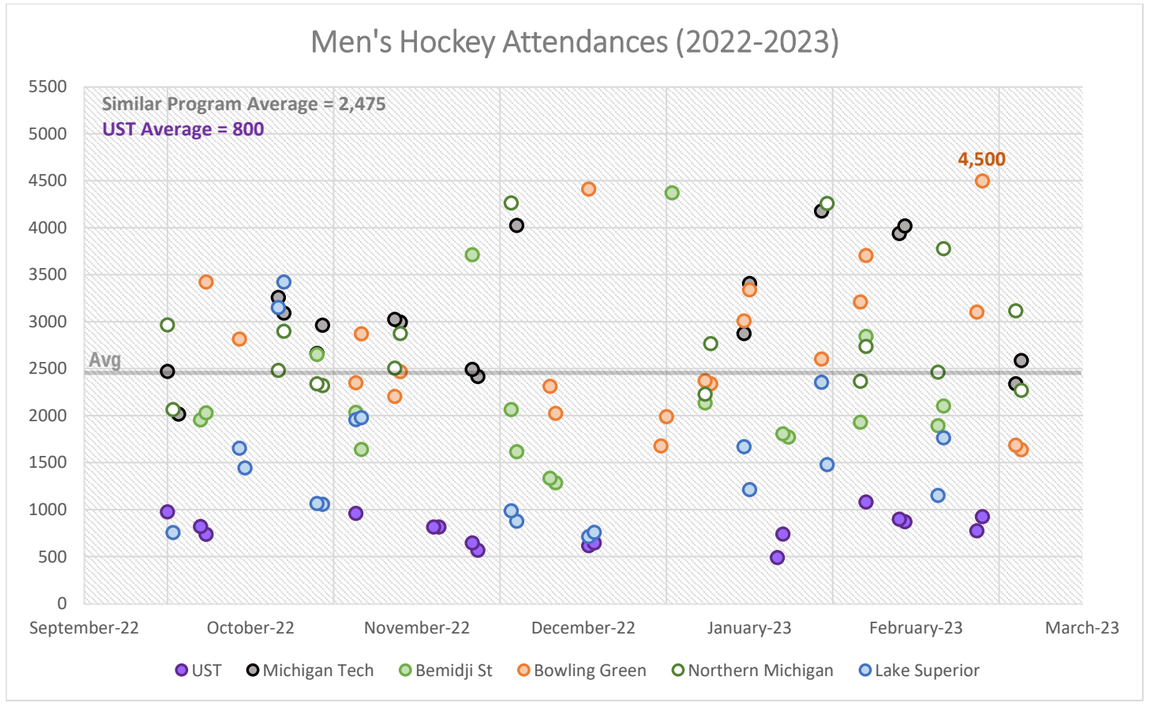
- Men's basketball programs generally have one (1) to two (2) higher attendance games per year.
  - Higher attendance games were generally rivalry games or games later in the season.
  - Note the highest attendance for similar programs was 4,600.
  - Average attendance was 1,800.
- Men's hockey programs generally have two (2) to four (4) higher attendance games per year.
  - Note the highest attendance for similar programs was 4,500.
  - Average attendance was 2,475.
- Women's hockey/basketball programs generally have a maximum attendance of around 3,000.
  - Average attendance ranges from 550 to 1,175.

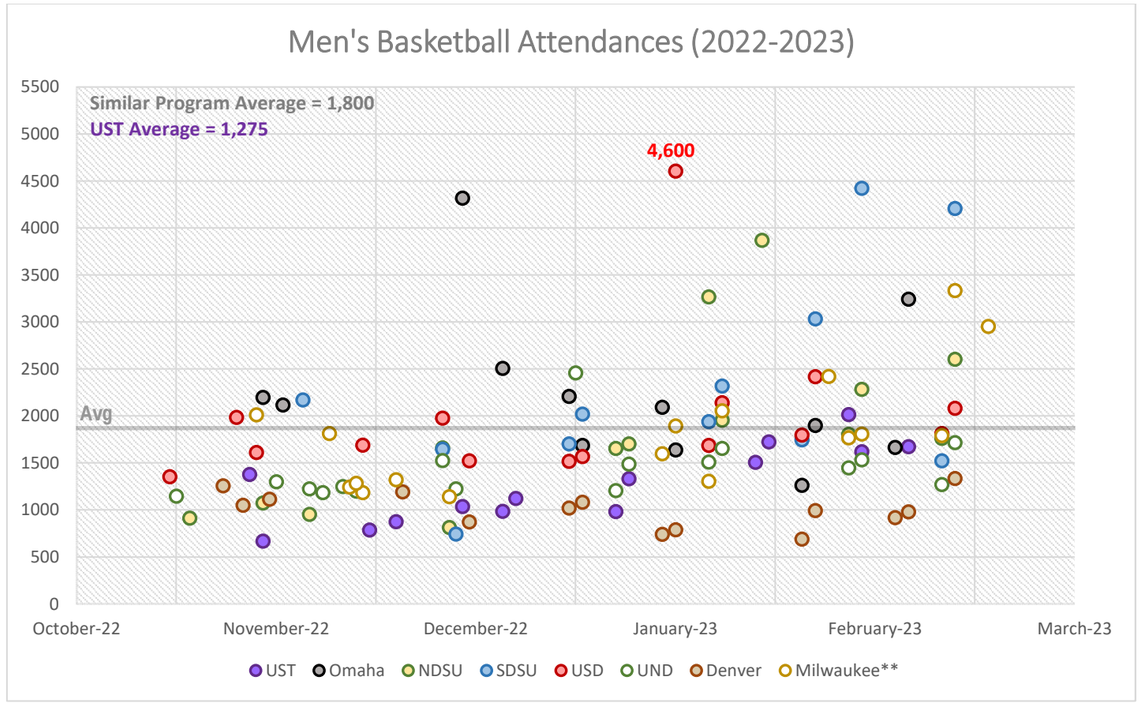
Analysis Scenarios

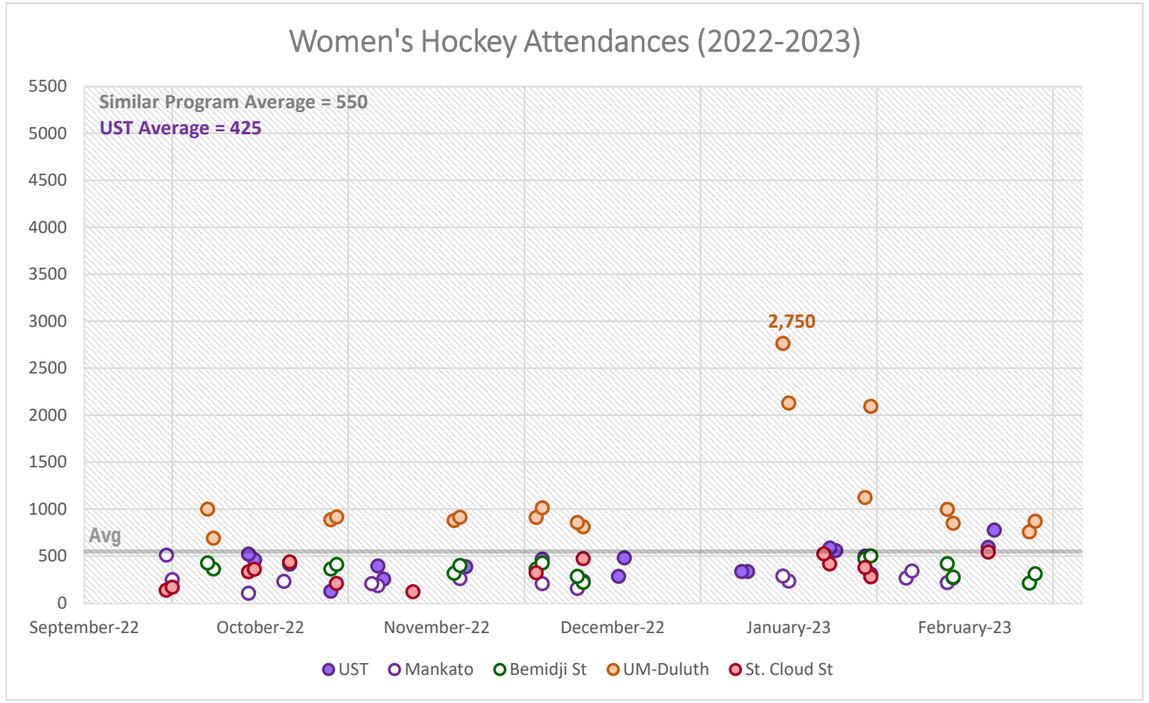
To provide a conservative estimate, the following event scenarios were the focus of the transportation study analysis:

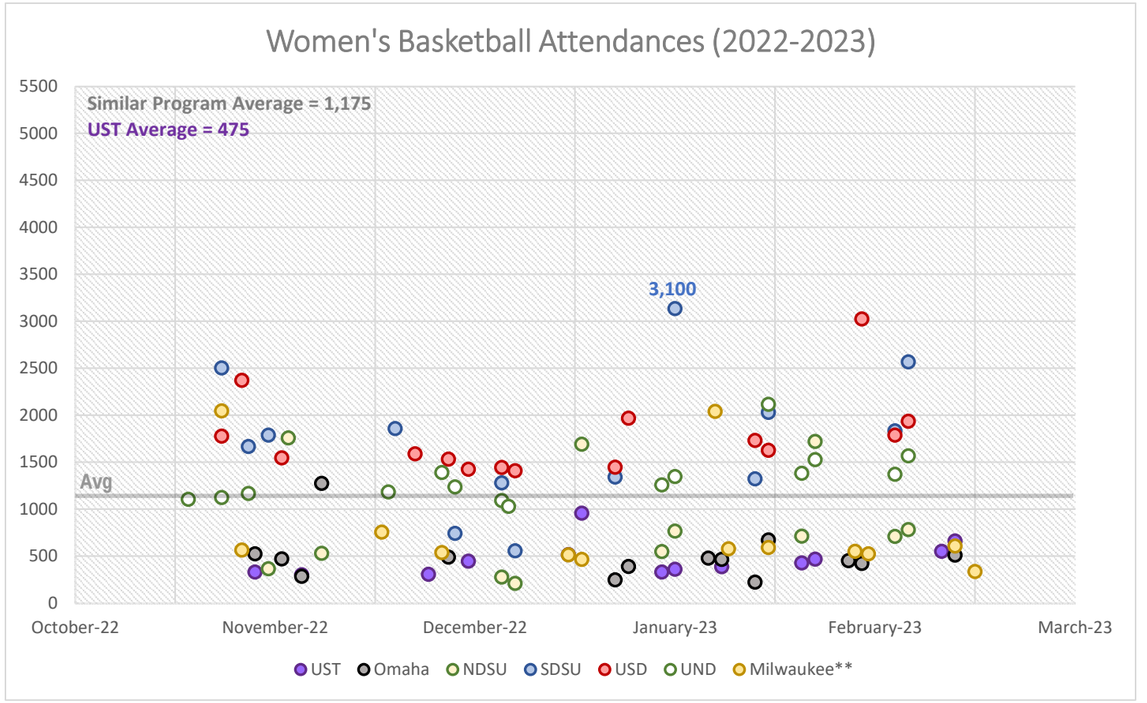
- **Max Capacity (5,500) Basketball Game on a Weeknight**
  - Represents the worst-case from an attendance, parking, and traffic perspective. May only be observed once or twice a year, if at all.
- **Typical Event (3,000) on a Friday Night**
  - Represents a conservative "average" attendance for men's sports and a maximum attendance for women's sports. Friday represents a frequent night for hockey events but is also worse than Saturday from a parking and traffic perspective.

Figure 7 - Attendances at Similiar Programs









** - Not in the Summit League

Event Characteristics

As previously discussed, events are generally expected to occur from 7:00 p.m. to 9 p.m., therefore the pre-event peak hour is assumed to be the hour prior to the game time (6:00 to 7:00 p.m.) and the post-event peak hour is assumed to be the hour immediately following the end of the game (9 to 10 p.m.). It is assumed that not 100 percent of the event traffic is expected to arrive or depart the arena during the one-hour analysis period. Table 9 shows the assumed percent of vehicles arriving/departing during the analysis hour for an event. Note that 10 to 20 percent of the stadium seating will be "premium" seating, which is expected to provide pre-game dinner and drinks. In addition to the premium seating, some event patrons may arrive to the game late. For post-event conditions, five (5) percent of event patrons were assumed to leave early or be family/friends waiting for athletes after the game.

Table 9. Event Traffic During Peak Analysis Hour

Scenario	Weekday
Arrival	90 %
Departure	95 %

Peaks are expected to occur for vehicular and pedestrian traffic within the arrival and departure peak hours. It is anticipated that the arrival peak will be more spread out over the course of about 30 to 45 minutes, whereas the departure peak typically occurs within a 15-to-20-minute interval after the event. In general, pedestrian and vehicular peaks occur at the same time. However, some of the UST parking lots may be a 5 to 10-minute walk from the arena. Therefore, the staggered vehicular/pedestrian peaks associated with the anticipated 5 to 10-minute walk were accounted for during post-event analysis.

Auto-Occupancy

Based on a combination of data collected at multiple events at Allianz Soccer Stadium, local event studies, numerous technical resources, and event travel characteristics around the Twin Cities and the country, an estimate of 2.75 event patrons per vehicle was assumed for average auto occupancy.

Modal Split Assumptions

Modal split assumptions were developed for two demographics: students and non-students. The breakdown between students and non-students was based on the number of student section seats that are currently proposed for the arena (approximately 1,200 for basketball). Student modal split distributions were developed based on the number of students that live within 3/4-mile of the arena and the number of transit passes owned. Non-student distributions were based on historical basketball ticket information and general event characteristics around the Twins Cities Metropolitan Area. These assumptions were discussed and reviewed by UST and the City of St. Paul throughout the study process. A summary of the modal split assumptions and the resultant person trips is shown in Table 10.

Table 10. Max Capacity (5,500 Attendees) Event Modal Split Assumptions

Transportation Modes for Students/Non-Students	Percent by Mode	Person Trips
		5500
Students	22%	1200
Non-Students	78%	4300
Student Modal Split Assumptions		1200
Passenger Vehicle Trips	10%	120
Rideshare (Uber/Lyft/Taxi, etc.)	10%	120
Transit/Shuttle (Local Bus)	5%	60
Walk/Bike	75%	900
Non-Student Modal Split Assumptions		4300
Passenger Vehicle Trips	88%	3784
Rideshare (Uber/Lyft/Taxi, etc.)	5%	215
Transit/Shuttle (Local Bus)	2%	86
Walk/Bike	5%	215

Trip Generation

Using the assumptions outlined in this section, pre-event and post-event peak hour trip generation estimates were developed for a maximum capacity event and shown in Table 11. The trips generated were distributed to the study area based on the directional distribution shown in Figure 8, which was based on hockey/basketball season ticket zip code information, existing travel patterns, and engineering judgement.

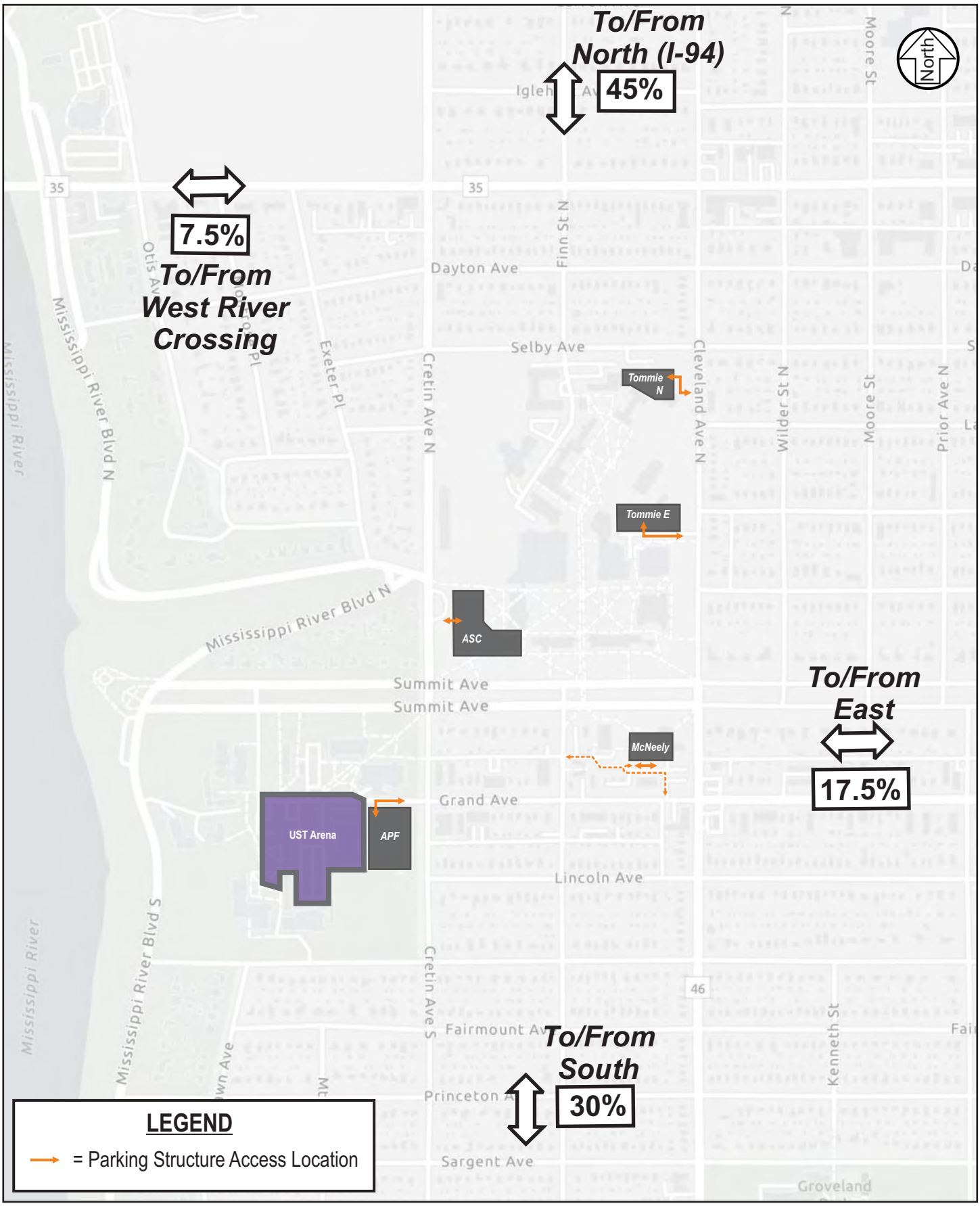
Table 11. Trip Generation Estimate (Maximum Capacity Event – 5,500 Attendance)

Vehicle Type	Vehicle Trips			
	Pre-Event Peak Hour		Post-Event Peak Hour	
	In	Out	In	Out
On-Site Parking	1,278	0 (1)	0 (1)	1,349
Rideshare (Uber/Lyft/Taxi)	110	110	116	116
Total Site Trips	**1,388**	**110**	**116**	**1,465**

(1) While there may be some on-site parking vehicles exiting during pre-event or entering during post-event, these volumes are assumed to be negligible.

Pedestrian Volumes

To determine heavy pedestrian crossing and vehicular/pedestrian conflict locations, the pedestrian volumes were routed throughout the study area based on both on-campus and off-campus parking locations, as well as other multimodal routes/locations such as transit stops, potential rideshare locations, and student/non-student walking distributions. The pedestrian volumes are shown in Appendix D.



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Directional Distribution

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Figure 8

02316489
May 2023

2025 Event Conditions

Event conditions were evaluated to understand any transportation issues and potential mitigation strategies associated with a maximum capacity event. The event conditions evaluation includes a parking demand analysis, operations analysis, and event mitigation strategies/proposed event routing.

Parking Demand Analysis (Issue Identification with No Mitigation)

Figures 3 and 4 were combined to create an overall event parking supply graphic, which is illustrated in Figure 9. Similar to Figure 3, the graphic highlights in purple the UST campus parking areas (either visitor parking structures or on-street parking adjacent to campus) that are expected to be utilized for events. A 1/2-mile is generally considered walking distance for the general public, therefore, a 1/2-mile radius from the arena was included in the graphic. City permit parking locations are shaded in gray, to help visualize the distance/locations event patrons may seek public on-street parking.

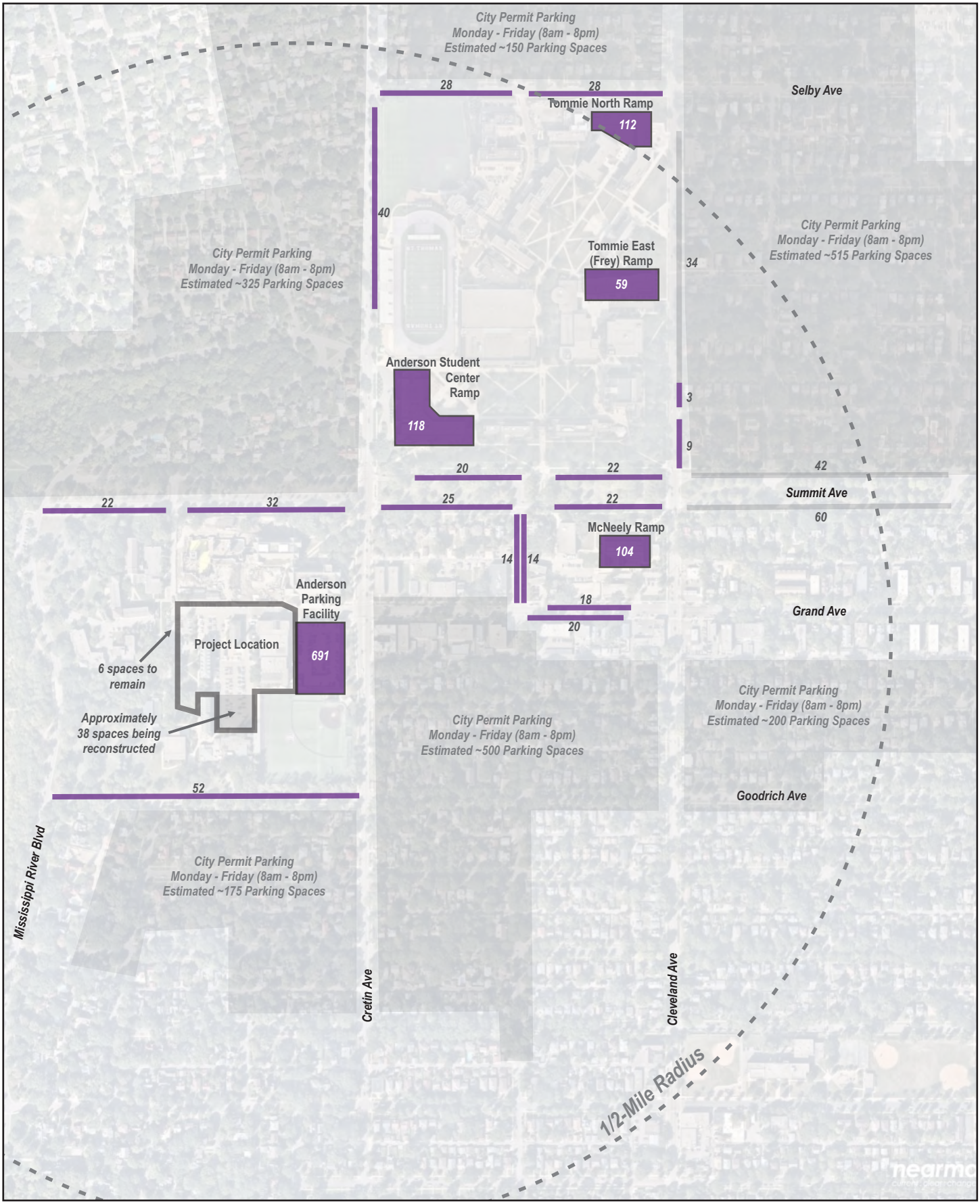
The available parking supply for each of the event parking locations is summarized in Table 12. The available parking supply is based on the parking utilization surveys completed by UST/SRF, but also accounts for the parking loss caused by the arena footprint. The parking utilization surveys were completed from 6 to 7 p.m., which is when event traffic is expected to arrive. As shown in Table 12, parking is much more available on the weekend than during the week.

Table 12. Available Parking Supply Before Events

Lot ID	Total Unrestricted Parking Spaces	Available Parking Supply (1)		
		Thursday/Weeknight 6:00 pm	Friday 6:00 pm	Saturday 6:00 pm
APF	691	302	526	569
ASC	118	96	100	108
McNeely	104	86	96	96
Tommie East	59	50	48	44
Tommie North	112	60	61	59
On-Street (Adjacent)	369	84	185	214
Total	**1453**	**678**	**1016**	**1090**

(1) Includes parking supply adjustments to account for parking loss caused by the arena footprint.

Using the modal split assumptions outlined in the Event Background/Assumptions section, an event parking demand analysis was completed and is shown in Table 13. The estimated parking demand for a maximum (5,500) basketball, maximum (4,000) hockey, and typical (3,000) event are estimated to be approximately 1,420, 1,050, and 775 vehicles, respectively.



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Event Parking Supply

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Figure 9

02316489
May 2023

Table 13. Event Parking Demand Analysis

	Total Number of Games (1)	Estimated Frequency	Available Supply	Demand (2)	Deficit/Surplus
Thursday/Weeknight Night Event					
Max Basketball (5,500)	4 to 7 BBall No Hockey	0 - 1	678	1420	-742
Typical (3,000)		6		773	-95
Friday Night Event					
Max Basketball (5,500)	1 BBall 9 Hockey	0	1016	1420	-404
Max Hockey (4,000)		2		1053	-37
Typical (3,000)		8		773	243
Saturday Night Event					
Max Basketball (5,500)	6 BBall 9 Hockey	0 - 1	1090 (3)	1420	-330
Max Hockey (4,000)		2		1053	37
Typical (3,000)		13		773	317

(1) Based on expected men's hockey and basketball schedules.

(2) UST players/coaches and event staff are expected to park in the reconstructed lot O or other commuter and faculty/staff lots.

(3) Note nearby city permit parking restrictions are generally not in effect on Saturday.

Key takeaways from the event parking demand analysis are as follows:

- Maximum basketball events are expected to have a deficit of approximately 330 to 740 spaces. These vehicles will likely utilize public parking in the neighborhood.
    - Based on similar programs, maximum basketball events may only occur one (1) or two (2) times a year, if at all.

- Maximum hockey events are generally expected to be accommodated on campus. However, some vehicles may choose to park on public streets in the neighborhoods over parking in the northeast quadrant of the north campus, especially on Saturdays when city permit parking restrictions are lifted.
    - Based on similar programs, maximum hockey events are only expected to occur two (2) to four (4) times a year.

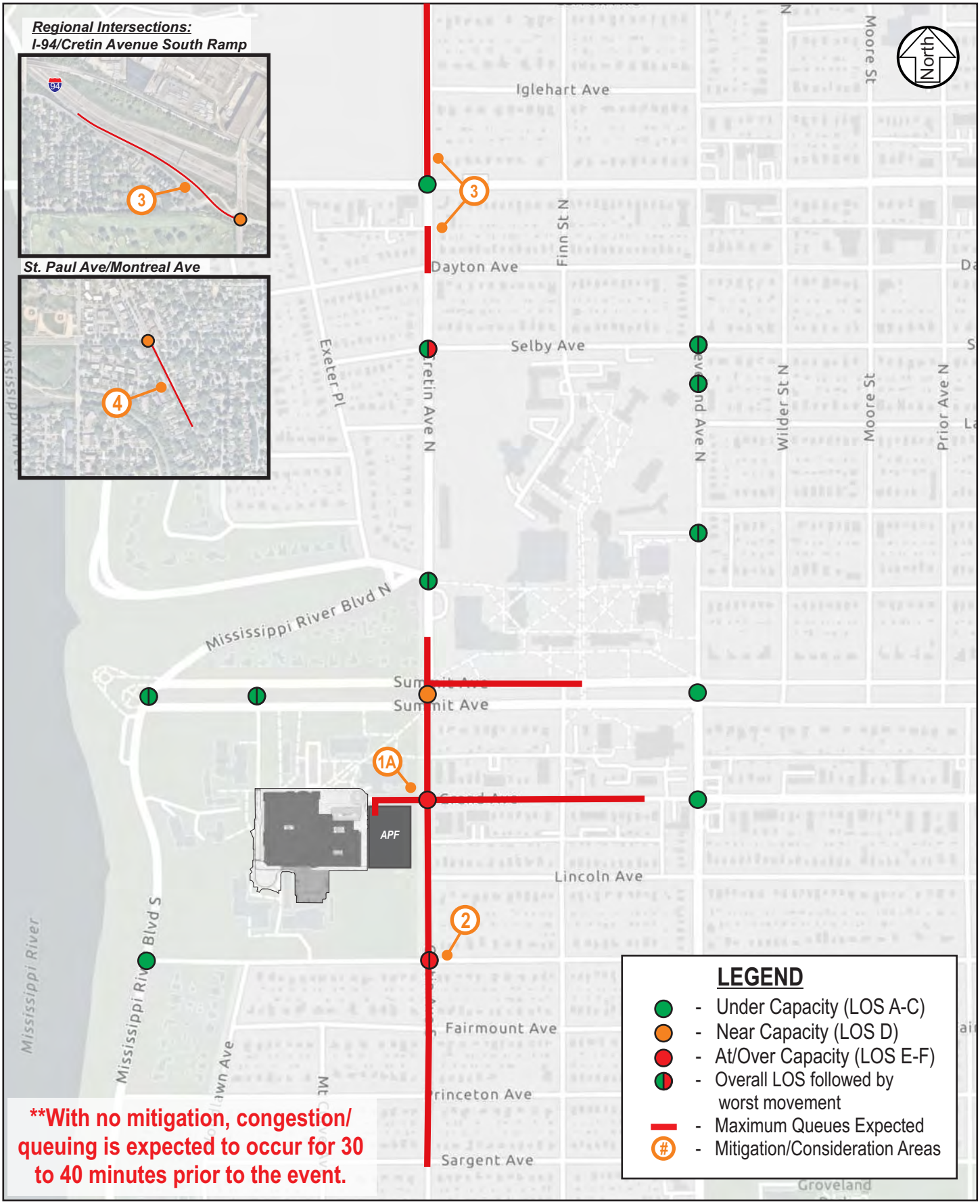
- Typical or "average" attendance events are expected to have a parking deficit of approximately 100 spaces on a weeknight and a parking surplus of approximately 240 to 320 spaces on the weekends. For typical events on weekends, event patrons will likely be able to park at either the APF, ASC, or McNeely ramps, or on-street parking near the arena. These are all desirable locations and will likely be utilized over public streets, particularly on Friday nights when city permit parking restrictions are in effect.
    - Typical events represent the majority of men's sporting events and the maximum women's sporting events.
    - Note the typical attendance was a conservative estimate compared to other similar program averages.

Operations Analysis (Issue Identification with No Mitigation)

An operations analysis was conducted for both pre-event and post-event conditions during a maximum capacity weeknight event (i.e., basketball game), to determine the potential transportation impacts associated with the increased pedestrian and vehicular traffic. Note that a maximum capacity weeknight event is considered a worst-case scenario based on a combination of less available parking and higher background traffic when compared to a weekend. The operations analysis was completed using Synchro/SimTraffic software and assumed no mitigation besides the following base assumptions:

- Year 2025 no build volumes were utilized as background traffic. Year 2025 no build volumes were developed by both applying a background growth rate of 0.25 percent to the existing pre- and post-event volumes and included trip generation estimates for the Highland Bridge development.
- Prepaid entry to the APF parking facility. Parking tickets are either expected to be checked by a parking consultant or inserted into a machine upon entry.
- For a worse-case traffic operations analysis, all event traffic was routed to the UST campus parking facilities or on-street parking locations adjacent to campus. Assuming parking further away from the campus would reduce potential traffic impacts.
- Event patrons generally know where they plan to park prior to the event and there is minimal circulation looking for parking spaces.
- On-street parking is assumed to be present along Cretin Avenue (as parking restrictions are generally lifted after 6 pm). Therefore, Cretin Avenue was modeled to have one lane of travel at the on-street parking locations.

An illustrative summary of the pre-event and post-event operations is shown in Figures 10 and 11, respectively, with traffic volumes and a summary table of results in Appendix D. Based on the operations analysis, the following issue/consideration areas were identified. The following paragraphs correspond to the numbers shown on the graphics.



Max Capacity - Pre-Event Operations (No Mitigation)

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City of St. Paul

Figure 10

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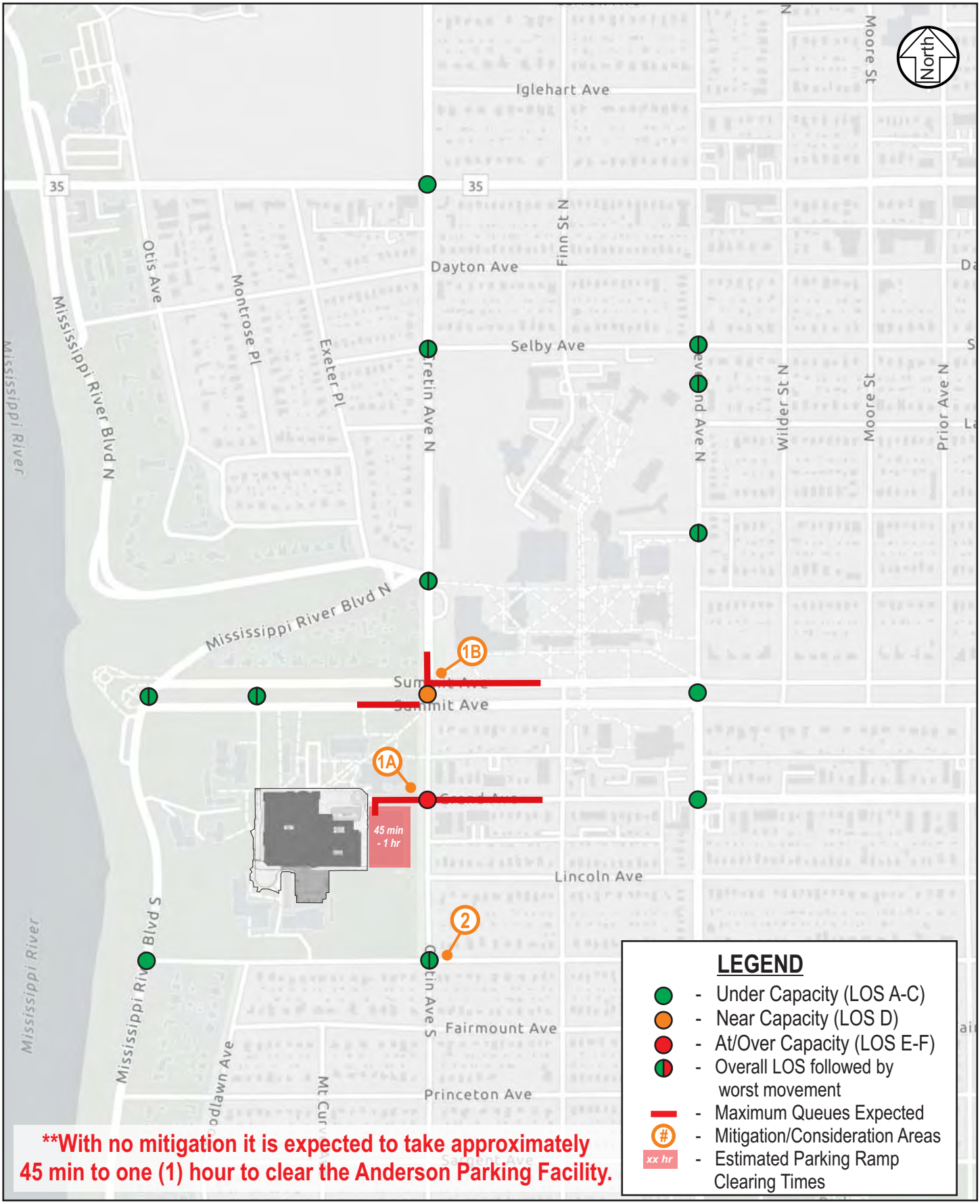
May 2023



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Max Capacity - Post-Event Operations (No Mitigation)

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City of St. Paul

Figure 11

02316489
May 2023

1A) APF Entrance and High Pedestrian Conflicts (No Mitigation)

- Approximately 800 to 1,200 pedestrians are expected to cross the vehicular entrance to the APF and the Cretin Avenue/Grand Avenue intersection.

Pre-Event:

- As mentioned previously, a service time (i.e., checking/inserting parking tickets) is expected for event patrons entering the APF ramp and most event patrons are expected to arrive within a 30-minute window prior to the start of the game. In addition, there is limited vehicular storage (approximately 200 feet or 10 vehicles) between the APF entrance and the Cretin Avenue/Grand Avenue intersection.
- The heavy pedestrian conflicts combined with the limited vehicle storage are expected to result in queues extending onto Cretin Avenue and extending into other adjacent intersections. Event patrons will have difficulty entering the site during the peak 15-minute window prior to the game starting, and the queues on Cretin Avenue will block non-event through traffic.

Post-Event:

- No protective signal phases are provided for the eastbound approach of the Cretin Avenue/Grand Avenue intersection. Pedestrians will be condensed during post-event conditions, which will make it difficult for eastbound left- or right-turn vehicles to find gaps until the majority of pedestrians have cleared the site.
- These pedestrian conflicts will delay the ability to clear the APF parking ramp. With no mitigation, it is expected to take approximately 45 minutes to one (1) hour to clear the ramp when at capacity.

1B) Cretin Avenue/Summit Avenue (No Mitigation)

- Approximately 2,000 pedestrians are expected to cross through the approaches of the Cretin Avenue and Summit Avenue intersection during pre- and post-event conditions. For reference, approximately 750 to 1,200 pedestrians cross through the intersection during each non-event a.m., midday, and p.m. peak hours. However, a majority of these crossings occur within a peak 15-minute window during class changeovers.
- Pre-event conditions will likely operate similar to non-event peak hours at the intersection. During post-event conditions, pedestrians will likely be more condensed, and it will likely be dark outside.

2) Pedestrian Crossing at Cretin Avenue/Goodrich Avenue

- There is currently a pedestrian crossing on the south side of the Cretin Avenue/Goodrich Avenue intersection. While most pedestrians are expected to cross Cretin Avenue at the signalized intersections of Summit Avenue and/or Grand Avenue, Goodrich Avenue may be a desirable crossing location for event patrons coming to/from the southeast.

- The number of pedestrian crossings at this location will be heavily dependent on where event patrons are parking.

3) Entering Volumes from I-94 (No Mitigation)

- Approximately 45 percent of event traffic is expected to be coming from I-94. These volumes result in eastbound right-turn queues at the I-94/South Ramp intersection extending to a maximum distance of approximately 1,800 feet. Congestion will continue to occur along the corridor at the Marshall Avenue intersection, as well as after the intersection when on-street parking is expected to be present.
- While the eastbound right-turn queues are expected to take up most of the off-ramp storage, the "rolling" queues are not expected to extend onto I-94 and are only expected to last for approximately 15 to 20 minutes prior to the game.

4) St. Paul Avenue/Montreal Avenue

- During pre-event conditions, northbound queues at the St. Paul Avenue/Montreal Avenue intersection are expected to extend a maximum distance of approximately 700 feet. Similar to the I-94/South Ramp intersection, queues are only expected to last approximately 15 minutes prior to the game.
- Note on-street bicycle lanes were recently implemented along St. Paul Avenue, which resulted in the removal of vehicular travel lanes in each direction. The *Highland Bridge AUAR Update* recommended traffic control improvements at the intersection that would reduce the queueing impacts.

Mitigation Strategies

Parking

The event parking demand analysis identified that UST may have a parking deficit ranging from 40 to 740 vehicles, depending on the event size and night of the week. While the larger parking deficits (over 100 vehicles) are only expected to occur once or twice a year, it is important to understand that when parking on campus become full, inconvenient, or costly, event patrons will begin to park in the public parking spaces in the neighborhood. Therefore, the following mitigation strategies and improvements were identified to help reduce on-street public parking in the neighborhoods during events.

Potential Strategies

Restrict Campus Parking Areas for Event Parking

- Time-of-day restrictions and/or "no park" days/nights could be implemented for the APF and other campus lots. Clearing/restricting the APF could provide an additional 120 to 165 parking spaces on the weekend and as many as 390 spaces on a weeknight. While the APF would be the most effective lot, restricting other parking structures and lots could be considered as well.
- To reduce essentially "shifting" student/staff parking to the public streets, early communication/notification would need to be provided prior to enforcing the event parking restrictions in UST facilities. Online classes/telecommuting may also need to be implemented simultaneously to ensure the strategy is effective.

Require Pre-Paid Event Parking Tickets (Mobile) for All Visitor Lots

- Assigning parking would ensure that event patrons know their destination prior to the event, which could eliminate any potential frustration/circulation looking for a parking space.
- While hardcopy parking tickets/passes could be distributed, most event venues currently utilize digital tickets through mobile applications. Note mobile parking applications pair well with mobile ticketing apps and could help keep all event related information completely mobile.
- Parking applications could inform event patrons what lots are sold out/full for each event. If event patrons are aware that all lots are sold out in advance, they may be more inclined to utilize transit/rideshare or carpool rather than deal with the hassle of looking for parking and/or walking further distances.
    - Note mobile parking applications could also provide transit options (bus routes and links to buy a pass) or a potential shuttle pass for larger attendance games (if implemented - see potential improvements section).
- Note parking management systems/applications could potentially be utilized by students/staff on a daily basis. Parking application capabilities and logistics would need to be further evaluated.

Schedule Higher Attendance Games on Weekends

- There may be scheduling flexibility for non-conference games, to help limit higher attendance games on weeknights, when there is less available parking on campus.

Provide Transit Incentives with the Purchase of a Ticket

- Incentives such as discounted or free bus passes could be considered.

Utilize Restricted Commuter and Faculty/Staff Parking Lots

- Strategy would likely require updated lot signage, communication, and parking operations.

Formal Partnership with a Rideshare Company

- A formal partnership with a rideshare company could be pursued to offer reduced pricing for event ticket holders.

Communicate Bicycle Parking Locations on the University Website

- Note internal bicycle parking spaces are provided within the southwest quadrant of the APF.

Provide Overflow Parking on the South Athletic Fields

- Overflow parking could be considered on the South Athletic Fields. Note this would only be able to be provided when soccer and softball seasons are not in session. Given that vehicular access to the fields would likely be provided via the reconstructed Lot O and backside of the building, the overflow parking would likely be designated for coaches, players, and event staff only. Field preservation and snow removal would need to be further evaluated.

Study Area After Constructed

- As mentioned previously, attendances can and will vary for the new multipurpose arena. Note that various assumptions within this document are considered conservative, and some of the larger event attendances and associated parking impacts may or may not actually occur. In addition, some of the strategies identified within the study could provide benefits and reduce parking demand during events. Therefore, a parking and operations field observation study could be completed during a higher capacity event within the year of opening to quantify actual impacts. A stakeholder team, including UST, the City of St. Paul, and other various stakeholders, could be developed to discuss the results of the study/observations to determine if additional mitigation strategies/improvements are needed.

Potential Improvements

Provide a Shuttle Service

- Potential shuttle service locations include, but not limited to, the UST Minneapolis Campus (Harmon Ramp), Highland Bridge (potential UST baseball/softball development parking - not currently built), and other potential off-site parking locations. It should be noted that UST has had preliminary discussions with alternative off-site parking locations.

Expand the Anderson Parking Facility (APF)

- The APF is designed with the potential to be expanded by two (2) floors. A parking lot expansion could potentially add an additional 300 parking spaces. This expansion, however, may not be compliant with the USTs conditional use permit. An expansion would also bring more vehicles near the arena where pedestrian activity is the highest, ingress into the arena may cause more queuing on Cretin Avenue, and ramp clearing times post-event would likely be longer.

Construct a Surface Parking Lot in the SW Quadrant Adjacent to Mississippi River Boulevard

- Based on a high-level estimate of stalls per square foot, this location could potentially support a 100-space parking lot. Access to the parking lot would likely be provided along Mississippi River Boulevard, and a new pedestrian connection would be required for attendees to walk to/from the lot and the arena.

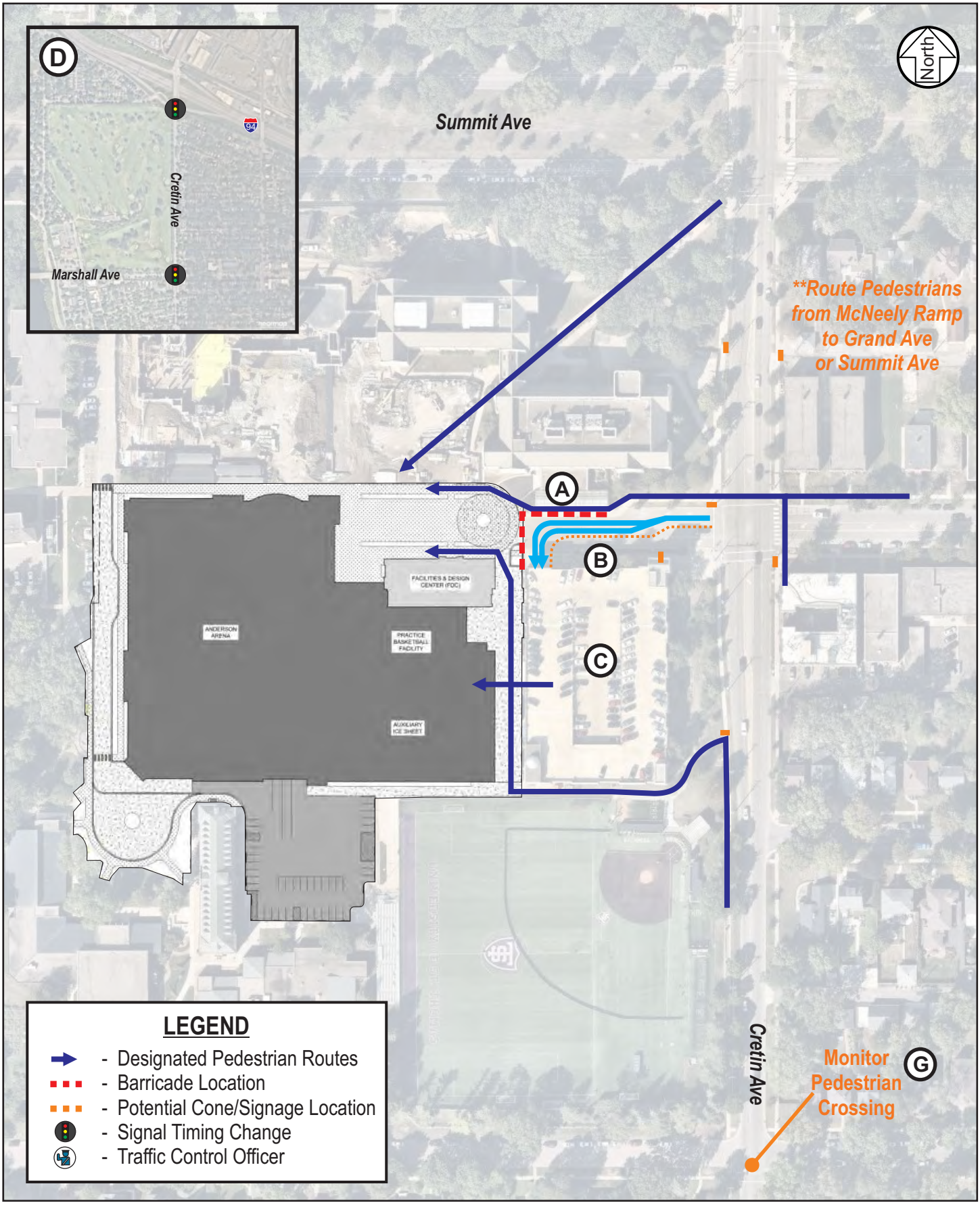
Event Management Recommendations

The following mitigation strategies are recommended to help safely and efficiently manage events and are summarized below and in Figures 12 and 13. Note the mitigation strategies are primarily focused on reducing pedestrian/vehicular conflicts, thus improving pedestrian safety and reducing event congestion.

A) Provide designated pedestrian routes through the use of barricades, cones, and wayfinding signage. The designated pedestrian routes are shown in Figures 12 and 13, and are intended to reduce pedestrian/vehicular conflicts, thus improving pedestrian safety and traffic flow efficiencies during pre- and post-event conditions.

   a. While not shown on the graphic, pedestrian wayfinding should be provided to/from the McNeely Ramp to ensure pedestrians do not route via the alley and cross Cretin Avenue at the mid-block. Pedestrians should be routed from the McNeely Ramp to either Cretin Avenue or Grand Avenue.

B) Utilize cones to provide additional storage for vehicles entering the APF during pre-event conditions. Note that the APF service times/parking payment options will need to be monitored to ensure the system is efficient. If entering queues begin to impact operations along Cretin Avenue, strategies to improve service times and/or shifting parking payment to post-event may be required.



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Max Capacity Pre-Event Mitigation Strategies

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Figure 12

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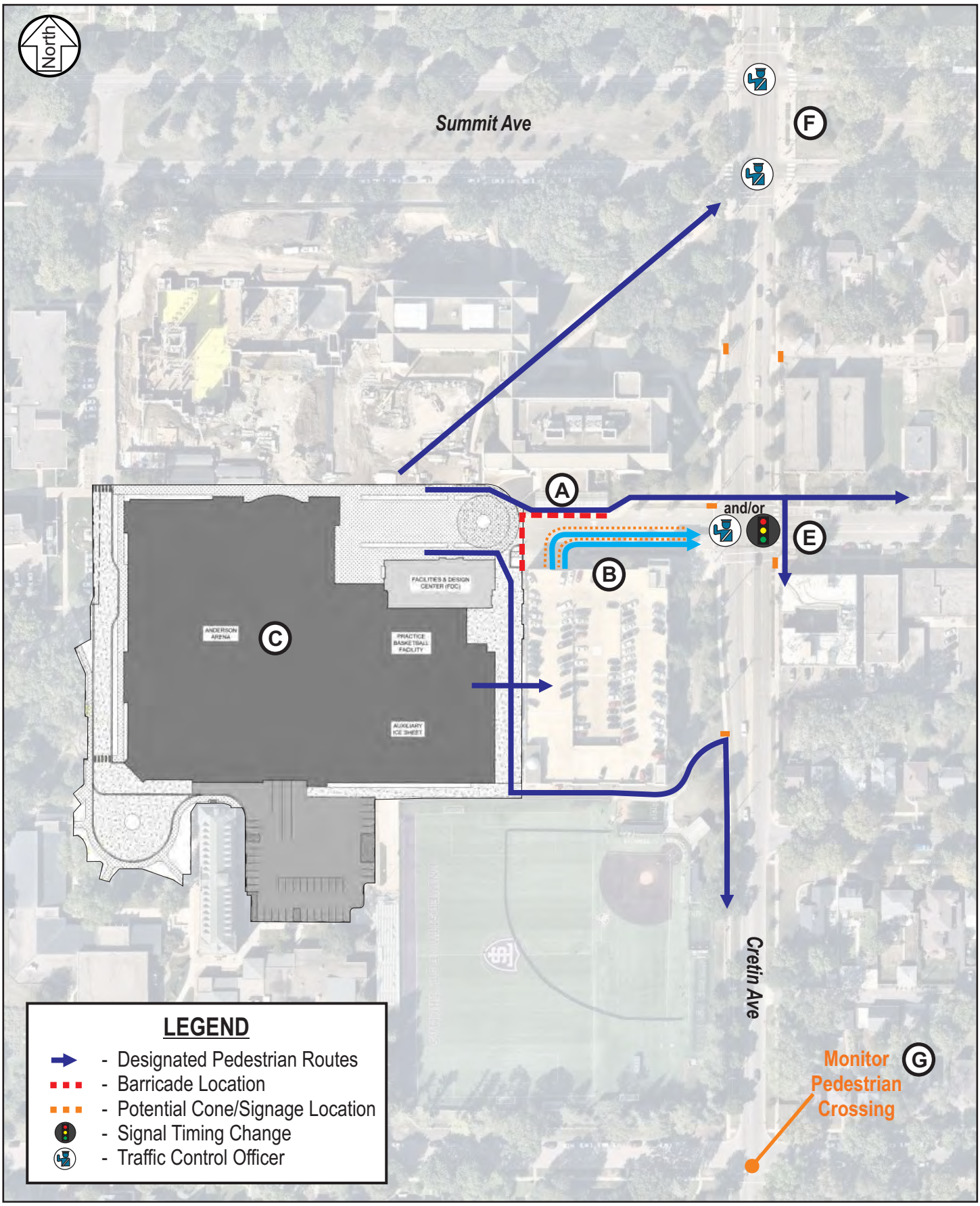
May 2023



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Max Capacity Post-Event Mitigation Strategies

UST Multipurpose Arena EAW Transportation Study

City of St. Paul

Figure 13

02316489
May 2023

a. During post-event conditions, cones could be considered to eliminate/reduce lane changing/merging exiting the ramp. Coning would improve traffic flow post-event, however, may result in a less direct route for event patrons. In addition, the internal ramp structure configuration should be further evaluated and modified/optimized for event purposes.

C) Provide wayfinding signage to route pedestrians to/from the APF/Arena to utilize the western APF access, thus reducing crossing conflicts with the APF vehicular access. This can be accomplished through permanent signage and pavement markings within the APF and throughout the arena building.

D) Event signal timing modifications could be considered at the Cretin Avenue/I-94 South Ramp and Cretin Avenue/Marshall Avenue intersections during pre-event conditions.

a. Signal timing at Cretin Avenue/Grand Avenue and Cretin Avenue/Summit Avenue should be monitored during pre-event conditions. Note current signal timing plans change at 6:40 p.m.

E) Provide a traffic control officer and/or construct an eastbound left-turn signal head at the Cretin Avenue/Grand Avenue intersection during post-event conditions.

a. Note a protected eastbound left-turn phase could be beneficial during non-event conditions and smaller events (i.e., may reduce the need for traffic control officers).

b. The eastbound left-turn movement could be restricted during post-event conditions. Restricting the movement would greatly reduce pedestrian/vehicular conflicts along Cretin Avenue, however, may result in a less direct route for event patrons. It should be noted that a traffic control officer would likely be required to effectively implement any turn restrictions and signal timing at the Cleveland Avenue/Grand Avenue intersection would need to be further reviewed.

F) Provide traffic control officers at the Cretin Avenue/Summit Avenue intersection to help clear traffic volumes from the APF ramp and improve pedestrian safety.

G) Monitor the pedestrian crossing at the Cretin Avenue/Goodrich Avenue intersection. If the pedestrian crossing is heavily utilized and/or safety/yielding issues occur during pre- and post-event conditions, a traffic control officer or campus crossing guard may be needed.

H) Yearly meetings with the City of St. Paul staff (public works, SPPD), before and after the winter sporting seasons to discuss potential modifications to event management should occur.

Other Considerations

a. Rideshare pick-up/drop-offs are expected to occur on various roadways near the arena. While no issues are expected, rideshare should continue to be monitored to determine if any issues occur for residents or traffic, and if so, a designated rideshare location could be investigated.

b. Consider providing wayfinding signage on the roadway network to direct event patrons to alternative lots. If not ticketed, consider providing DMS signage outside of the APF informing event patrons when the APF is full.

c. Consider providing activities and incentives on-site or nearby for event patrons to arrive early and stay late after an event, to spread out arrival and departure times.

d. Several mitigation strategies identified involve the use of St Paul Police Department (SPPD) traffic control officers. Therefore, further communication with the SPPD should occur to determine the availability, feasibility, and other pertinent information regarding the proposed traffic management strategies.

e. Provide early event communication/notification to local businesses/residents and those who drive/walk/bike or take transit through the area. This can be accomplished through media outlets, email notifications, websites, etc.

f. Develop an emergency plan. Emergency services (police, fire, etc.) will need to develop a plan to ensure safety and maximize efficiency in dealing with incidents on the transportation system or at the facility.

Operations Analysis with Mitigation

An operations analysis was conducted for both pre-event and post-event conditions during a maximum capacity weeknight event with the mitigation strategies and proposed pedestrian routing identified in Figures 12 and 13. An illustrative summary of the pre- and post-event operations with mitigation are shown in Figures 14 and 15, respectively, with a summary table of results in Appendix D.

Note that even with the proposed mitigation strategies, there are still anticipated to be queuing areas, which is expected given the characteristics of events. As mentioned previously, the operations at Cretin Avenue/Grand Avenue will be heavily dependent on the service times/parking payment options entering the APF. These operations will need to continue to be monitored and if queuing impacts occur, strategies to improve service times or shift parking payment to post-event may be required.

During both pre-event conditions, multiple unsignalized side-street approaches on Cretin Avenue will be difficult to make left-turn movements for 15 to 30 minutes. These approaches mostly consist of low-volume residential traffic. As mentioned previously, communication should be made to area residents and other sources of commuter traffic, so they are aware of potential event traffic and the most efficient route to get to/from their destination.

Post-event the APF will remain congested, however, with the mitigation plan the APF is anticipated to be cleared in approximately 15 to 30 minutes, rather than the approximately 45 minutes to one (1) hour anticipated with no mitigation.

Max Capacity - Pre-Event Operations (With Mitigation)

UST Multipurpose Arena EAW Transportation Study
City of St. Paul

Figure 14

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SRF

Max Capacity - Post-Event Operations (With Mitigation)

UST Multipurpose Arena EAW Transportation Study
City of St. Paul

Figure 15

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Typical Event (3,000) Operations and Mitigation

The primary difference between typical and maximum event attendances is that parking under maximum events will be further dispersed from the APF and Arena. During typical events, parking in the APF, ASC, McNeely and nearby will be at capacity, similar to a maximum event. Therefore, the event management strategies recommending pedestrian routing and APF ramp operations should continue for both typical/maximum events. Some of the noticeable differences in the two events from an event management perspective are as follows:

- Mitigation D - Less regional impacts are expected and traffic signal improvements at I-94/Cretin Avenue and Cretin Avenue/Marshall Avenue intersections are likely not needed.
- Mitigation F – Lower pedestrian volumes may reduce the need for traffic control officers at the Cretin Avenue/Summit Avenue intersection during post-event conditions.
- In general, less pedestrian and vehicular traffic may result in less queues and delays along Cretin Avenue.

Conclusion

SRF has completed a transportation study for the proposed University of St. Thomas (UST) multipurpose arena development in the City of St. Paul. In general, no significant operational or safety issues currently occur near campus or at the study intersections.

The proposed development is expected to result in a net loss of approximately 265 parking spaces. The available parking supply during the peak demand periods on campus was reviewed, and alternative parking sources are able to accommodate the increase in parking, however, parking considerations were identified. Potential mitigation strategies to reduce the parking demand on a daily basis were provided.

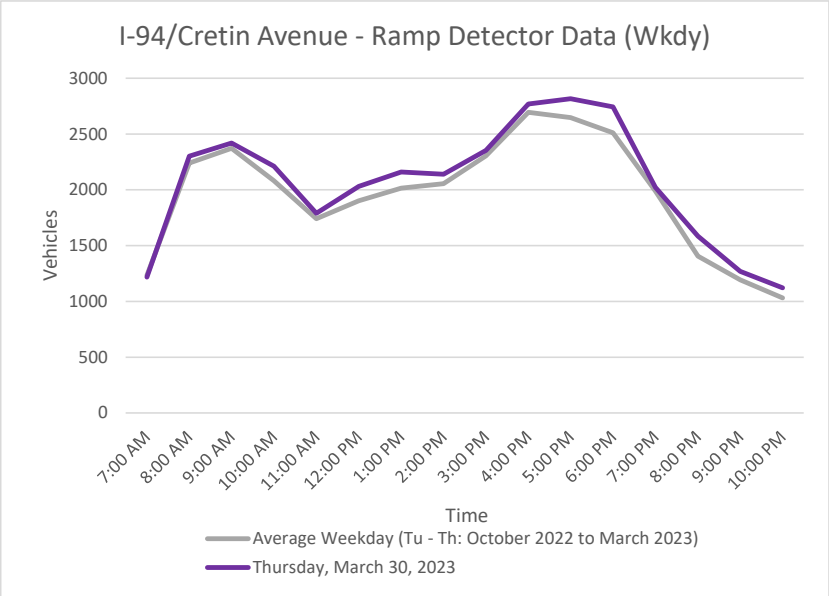
Event conditions were evaluated to understand any transportation and parking impacts and issues. Weeknight and/or larger events are anticipated to have a parking deficit on campus. However, based on similar program attendances, these events are only expected to occur five (5) to ten (10) times per year. Several potential mitigation strategies and improvements were provided to help reduce the parking demand impacts. In addition, event traffic operations were evaluated, and several event management strategies were recommended to help safely and efficiently manage events. The strategies were primarily focused on reducing pedestrian/vehicular conflicts, thus improving pedestrian safety and reducing event congestion.

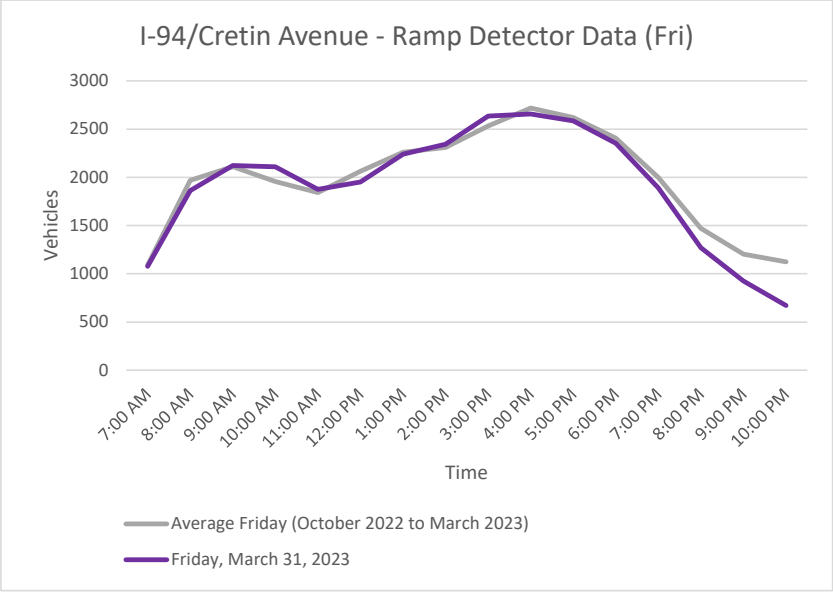
As the project proceeds, further refinement of the potential mitigation strategies is expected. The mitigation/management strategies will continue to be refined as events occur and a better understanding of event operations are experienced.

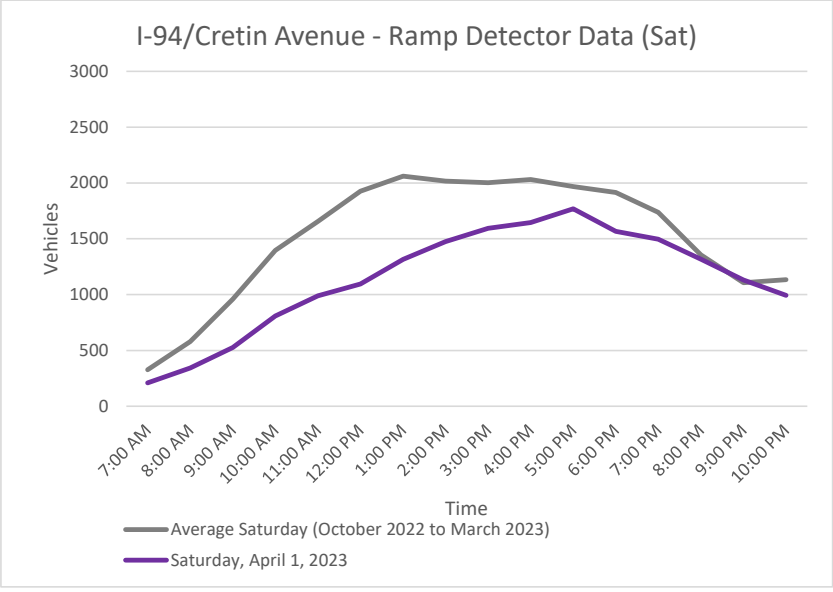
Appendix A

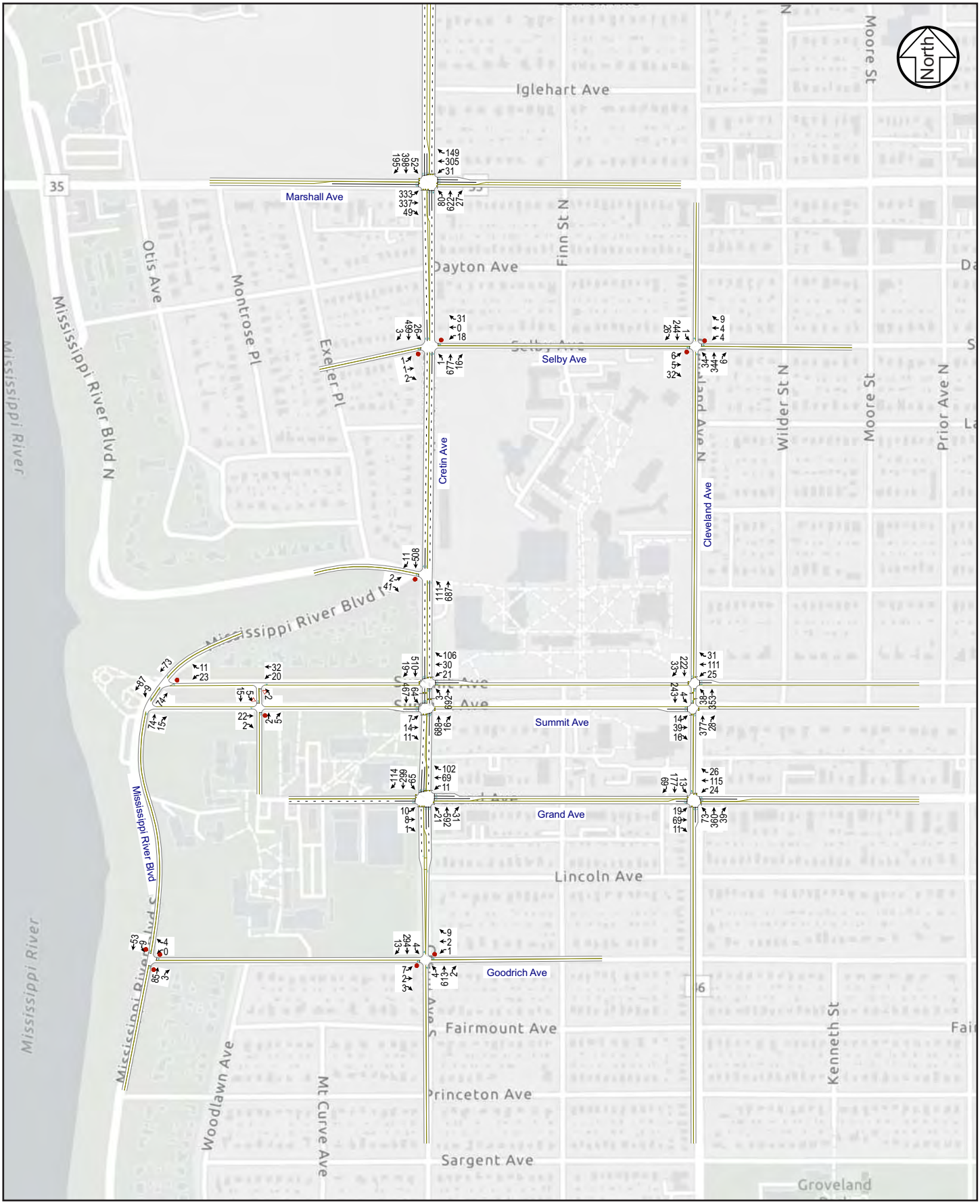
Existing Traffic Volumes

Figure A1


I-94/Cretin Avenue - Ramp Detector Data (Wkdy)
Vehicles
3000
2500
2000
1500
1000
500
0
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
Time
Average Weekday (Tu - Th: October 2022 to March 2023)
Thursday, March 30, 2023


I-94/Cretin Avenue - Ramp Detector Data (Fri)
Vehicles
3000
2500
2000
1500
1000
500
0
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
Time
Average Friday (October 2022 to March 2023)
Friday, March 31, 2023


I-94/Cretin Avenue - Ramp Detector Data (Sat)
Vehicles
3000
2500
2000
1500
1000
500
0
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
Time
Average Saturday (October 2022 to March 2023)
Saturday, April 1, 2023



Existing AM Peak Hour (7:30 to 8:30 a.m.)

Figure A2

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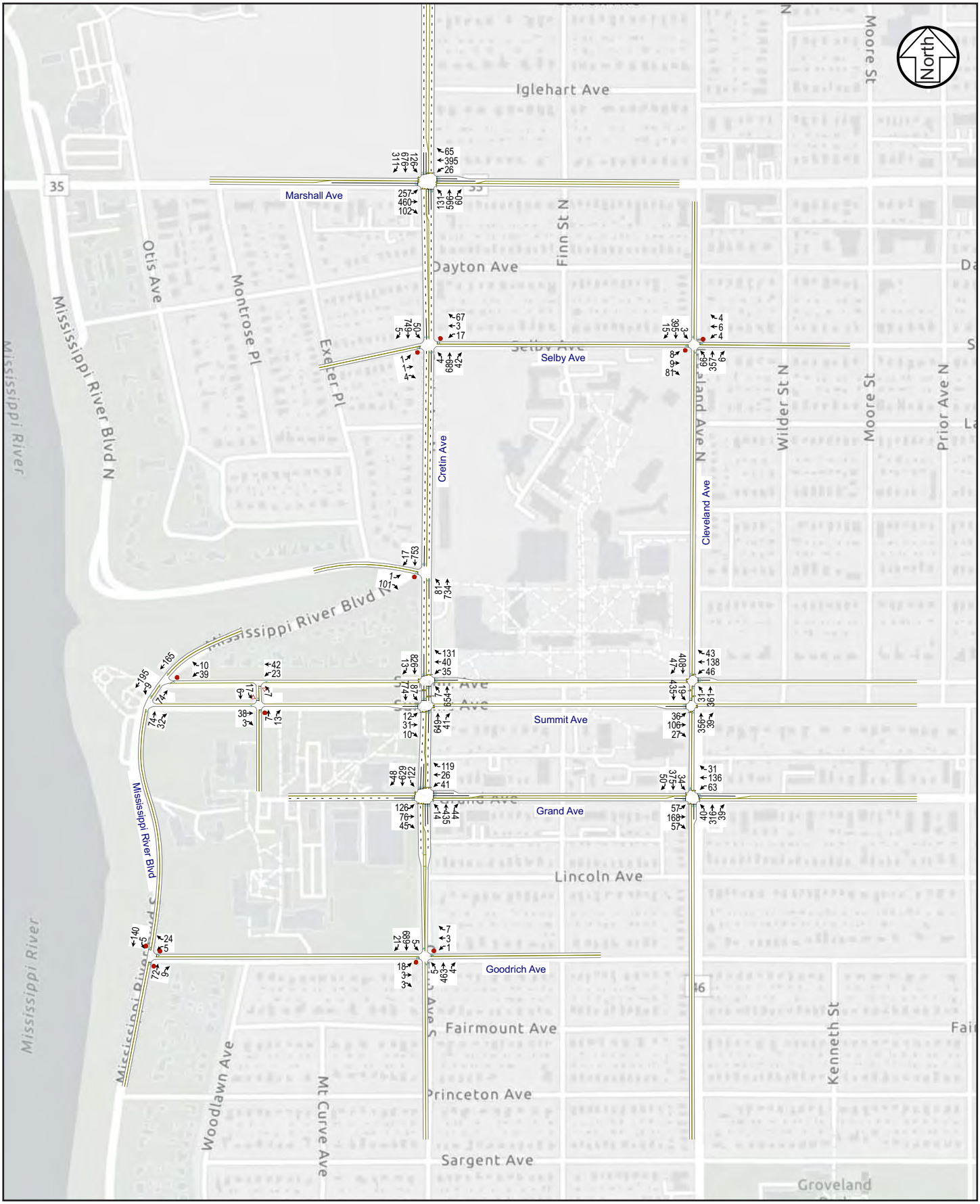

Existing PM Peak Hour (4:45 to 5:45 p.m.)

Figure A3

UST Multipurpose Arena EAW Transportation Study

City of St. Paul

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May 2023

Appendix B

Safety Analysis

Table B1 - Crash Type Summary (Jan. 2018 - Dec. 2022)

Intersections	Single Vehicle Crashes			Multiple Vehicle Crashes					Total
	Bike	Ped	Run Off Road	Left Turn/ Angle	Head On	Rear End	Side Swipe	Other	
Cretin Ave /Marshall Ave	-	1	2	4	3	6	2	1	19
Cretin Ave N / Selby Ave	-	-	-	3	-	-	1	-	4
Cretin Ave N / Mississippi River Blvd	-	-	1	-	-	-	-	-	1
Cretin Ave N / Summit Ave	1	2	-	2	-	2	-	-	7
Cretin Ave N / Grand Ave	-	-	-	2	-	-	1	1	4
Cretin Ave N / Goodrich Ave	-	-	-	-	-	-	1	-	1
Cleveland Ave N / Selby Ave	-	-	-	-	-	1	-	2	3
Cleveland Ave N / Summit Ave	-	1	-	2	-	1	-	-	4
Cleveland Ave N / Grand Ave	-	-	-	-	-	-	1	2	3
Mississippi River Blvd / Summit Ave	-	-	1	-	-	-	-	-	1
Mississippi River Blvd / Goodrich Ave	-	-	-	-	-	-	-	-	0
Total	1	4	4	13	3	10	6	6	47

Table B2 - Intersection Crash Rate Analysis (2018 - 2022)

Intersection	Intersection Type	Crash Rate		
		Average	Actual	Critical
Cretin Ave / Marshall Ave	Urban Signal	0.508	0.272	0.730
Cretin Ave / Selby Ave	Urban Thru-Stop	0.128	0.132	0.310
Cretin Ave / Mississippi River Blvd	Urban Thru-Stop	0.128	0.031	0.300
Cretin Ave / Summit Ave	Urban Signal	0.508	0.174	0.810
Cretin Ave / Grand Ave	Urban Signal	0.508	0.117	0.840
Cretin Ave / Goodrich Ave	Urban Thru-Stop	0.128	0.040	0.330
Cleveland Ave / Selby Ave	Urban Thru-Stop	0.128	0.139	0.350
Cleveland Ave / Summit Ave	Urban Signal	0.508	0.136	0.860
Cleveland Ave / Grand Ave	Urban Signal	0.508	0.118	0.890
Mississippi River Blvd / Summit Ave	Urban Thru-Stop	0.128	0.051	0.360
Mississippi River Blvd/Goodrich Ave	Urban All Way Stop	0.267	0.00	1.390

= Crash Rate is above average rate but below the critical crash rate.

Appendix C

Parking Utilization Counts

Figure C1

Lot ID	Side of Street	Parking Supply	Occupied Spaces							
			Weekday (Wednesday, March 29th)		Weeknight (Thursday, March 30th)		Friday (Friday, March 31st)		Saturday Saturday, April 1st	
			1:00 PM	% Utilized	6:00 PM	% Utilized	6:00 PM	% Utilized	6:00 PM	% Utilized
UST Campus Lots (Visitor Lots or open for visitors after 4 p.m.)										
APF		691	613	89%	308	45%	96	14%	69	10%
ASC		118	94	80%	22	19%	18	15%	10	8%
McNeely		104	51	49%	18	17%	8	8%	8	8%
Tommie East		59	31	53%	9	15%	11	19%	15	25%
Tommie North		112	87	78%	52	46%	51	46%	53	47%
Total		**1084**	**876**	**81%**	**409**	**38%**	**184**	**17%**	**155**	**14%**
On-Street Parking (Adjacent to Campus) (No City Permit Required)										
Summit Avenue (West of UST South Access) [5]	South	22	21	95%	8	36%	0	0%	0	0%
Summit Avenue (West of Cretin Ave)	South	32	30	94%	30	94%	9	28%	1	3%
Summit Avenue (West of Finn St)	North	20	12	60%	18	90%	13	65%	6	30%
	South	25	21	84%	23	92%	23	92%	3	12%
Summit Avenue (West of Cleveland Ave)	North	22	23	105%	23	105%	20	91%	8	36%
	South	22	17	77%	16	73%	16	73%	6	27%
Cleveland Avenue	East	12	13	108%	10	83%	3	25%	4	33%
Goodrich Avenue [5]	North	52	56	108%	51	98%	6	12%	5	10%
Cretin Avenue [1]	East	40	40	100%	4	10%	0	0%	1	3%
Selby Avenue (West of Finn St) [2]	South	28	23	82%	24	86%	23	82%	14	50%
Selby Avenue (East of Finn St) [2]	South	28	22	79%	21	75%	17	61%	13	46%
Grand Avenue (East of Finn St) [6]	North	18	17	94%	17	94%	17	94%	11	61%
	South	20	15	75%	16	80%	17	85%	13	65%
Finn Street [3]	East	14	11	79%	13	93%	6	43%	1	7%
	West	14	13	93%	11	79%	12	86%	2	14%
Total		**369**	**334**	**91%**	**285**	**77%**	**182**	**49%**	**88**	**24%**
Total (Visitor & On-Street)		**1453**	**1210**	**83%**	**694**	**48%**	**366**	**25%**	**243**	**17%**
UST Campus Lots (Commuter, Faculty/Staff, SOD Permit Parking Locations)										
Lot A [7]		56								
Lot B		55	55	100%	27	49%	32	58%	35	64%
Lot C		46	46	100%	27	59%				
Lot D		9	9	100%	5	56%				
Lot G		23	23	100%	21	91%	11	48%	11	48%
Lot I		16	16	100%	11	69%				
Lot K		42	42	100%	30	71%	1	2%	1	2%
Lot L		12	12	100%	5	42%				
MRH Level 1		31	21	68%	15	48%				
Lot N		9	9	100%	6	67%	1	11%	0	0%
Lot O		190	85	45%	43	23%	45	24%	29	15%
Lot P1 (South)		18	16	89%	3	17%	1	6%	0	0%
Lot P1 (NW)		22	20	91%	5	23%	3	14%	1	5%
Lot V		33	20	61%	11	33%	9	27%	7	21%
Lot X		21	14	67%	12	57%	9	43%	8	38%
Lot Y		31	29	94%	24	77%	21	68%	22	71%
Total		**444**								
Total		**558**	**417**	**75%**	**245**	**44%**	**133**	**30%**	**114**	**26%**
On-Street City Permit Parking Locations										
Summit Avenue (East of Cleveland Ave)	North	42	9	21%	2	5%	3	7%	1	2%
	South	60	11	18%	5	8%	0	0%	5	8%
Cleveland Avenue [4]		34	30	88%	31	91%	24	71%	17	50%
Total		**136**	**50**	**37%**	**38**	**28%**	**27**	**20%**	**23**	**17%**
Total Permit (Campus & On-Street)		**694**	**467**	**67%**	**283**	**41%**	**160**	**23%**	**137**	**20%**
All Parking		**2147**	**1677**	**78%**	**977**	**46%**	**526**	**24%**	**380**	**18%**

(1) No Parking or Stopping 7-9 am; 4-6 pm (Mon-Fri)
(2) Snow Plow Route
(3) 2 Hour Parking 8 am to 6 pm - (Mon - Fri)
(4) Numerous Restrictions and Signage Clutter
(5) No parking 10 pm to 6 am
(6) 1 Hour Parking 8 am to 6 pm - (Mon - Fri)
(7) Lot A Closed for Construction

Estimated
Visitor Parking (On-campus or on-street adjacent) expected to be utilized by event patrons
On-Street Parking (City Permit Required)
UST Permit Parking Only
Spring 2023 Parking Utilization Data provided by UST
Impacted by project - parking likely displaced to other lots
Data Not Collected

Appendix D

Event Assumptions/Operations

Figure D1

UST Max Capacity Event Assumptions		
Event Capacity		*5500*
Students	22%	1200
Non-Students	78%	4300
Student Modal Split Assumptions		*1200*
Passenger Vehicle Trips	10%	120
Rideshare (Uber/Lyft/Taxi, etc.)	10%	120
Transit/Shuttle (Local Bus)	5%	60
Walk/Bike Share	75%	900
Non-Student Modal Split Assumptions		*4300*
Passenger Vehicle Trips	88%	3784
Rideshare (Uber/Lyft/Taxi, etc.)	5%	215
Transit/Shuttle (Local Bus)	2%	86
Walk/Bike Share	5%	215
Vehicle Occupancy		2.75
Event Times		
Start		7:00 PM
End		9:00 PM
Event Traffic During Peak Hour Analysis		
Arrival		90%
Departure		95%

Comments:

**Based on number of student section seats proposed*

**Estimated that 4,000 students (~2,600 on-campus, 1,400 off-campus) live within walking distance (3/4-mile from arena). This represents approximately 70 percent of undergraduate students.*

**Approximately 7 percent of students own Metro Transit College Pass (C-pass provides unlimited bus rides)*

**Other factors such as on-campus attendance vs. off-campus attendance, and students meeting up before/after games, may increase walking percentages.*

**15 percent of basketball ticket purchases were from within the McCalster/Groveland Neighborhood. Estimated to be over 650 residential homes within 1/2-mile of the arena, likely near 2,000 homes within 3/4-mile of the arena.*

**Based on Local Event Studies and numerous technical resources*

**10-20 percent of stadium is Premium Seating; pre-game dinner/drinks*

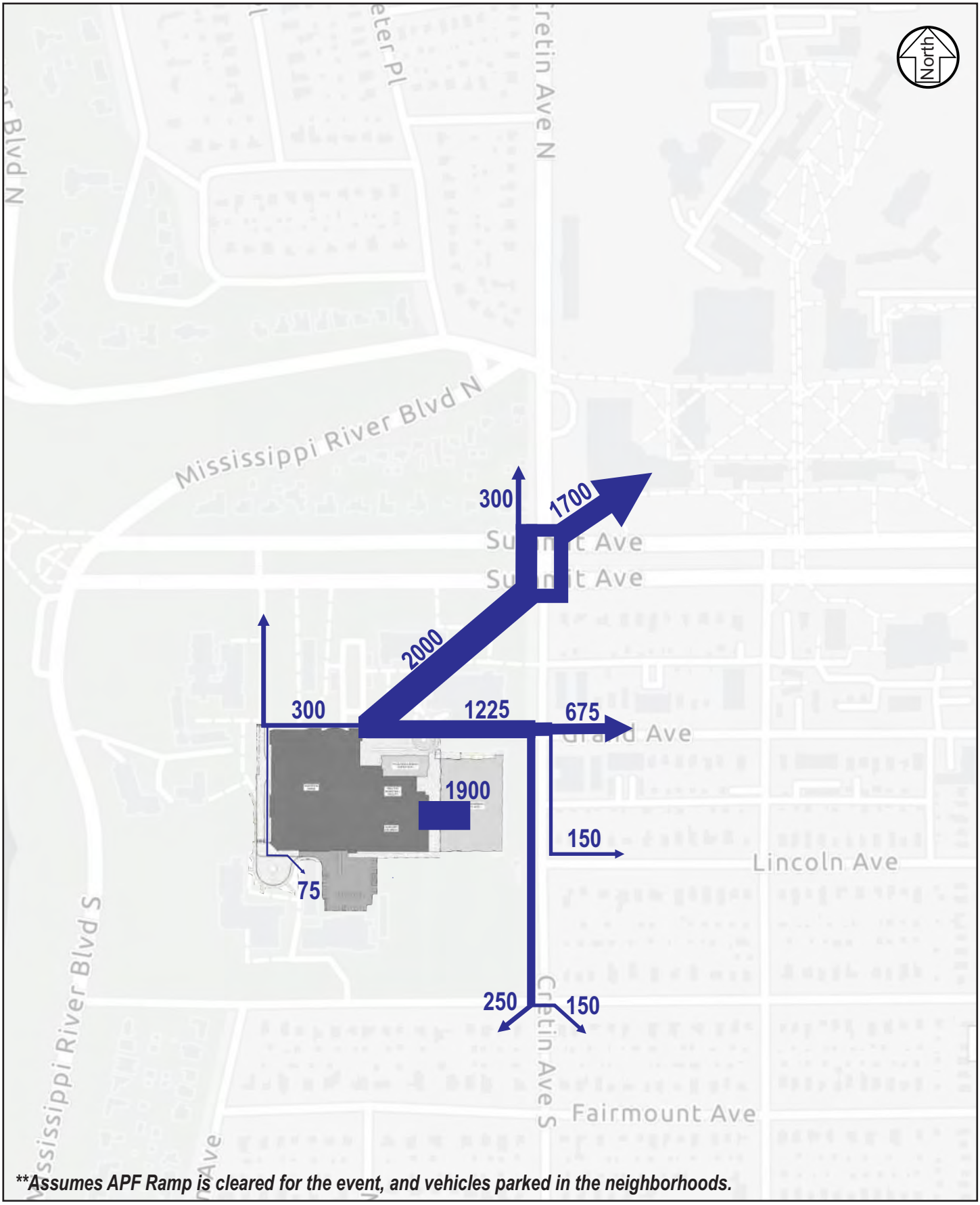
**5 percent accounts for attendance leaving early and/or post-game family/friends*

Figure D2

UST Typical Event Assumptions		
Event Capacity		*3000*
Students	22%	660
Non-Students	78%	2340
Student Modal Split Assumptions		*660*
Passenger Vehicle Trips	10%	66
Rideshare (Uber/Lyft/Taxi, etc.)	10%	66
Transit/Shuttle (Local Bus)	5%	33
Walk/Bike Share	75%	495
Non-Student Modal Split Assumptions		*2340*
Passenger Vehicle Trips	88%	2059
Rideshare (Uber/Lyft/Taxi, etc.)	5%	117
Transit/Shuttle (Local Bus)	2%	47
Walk/Bike Share	5%	117
Vehicle Occupancy		2.75
Event Times		
Start		7:00 PM
End		9:00 PM
Event Traffic During Peak Hour Analysis		
Arrival		90%
Departure		95%

Table D3 – Transportation Network - Peak Hour Volume Comparison

Mode	Existing Weekday		2025 Typical (3,000) Event		2025 Max (5,500) Event	
	AM Peak (7:30-8:30 am)	PM Peak (4:45-5:45 pm)	Pre-Event (6-7 pm)	Post-Event (9-10 pm)	Pre-Event (6-7 pm)	Post-Event (9-10 pm)
Cretin Ave (N of Marshall)	1,750	2,030	1,920	1,185	2,215	1,520
Cretin Ave (S of Goodrich)	920	1,165	1,050	600	1,200	710
Cleveland Ave (S of Goodrich)	685	890	675	420	740	520
Summit Ave (E of Cleveland)	240	390	320	185	360	250
Grand Ave (E of Cleveland)	285	475	400	230	450	300



***Assumes APF Ramp is cleared for the event, and vehicles parked in the neighborhoods.*

SRF

Max Capacity Event - Estimated Pedestrian Volumes

UST Multipurpose Arena EAW Transportation Study

City of St. Paul

Figure D4

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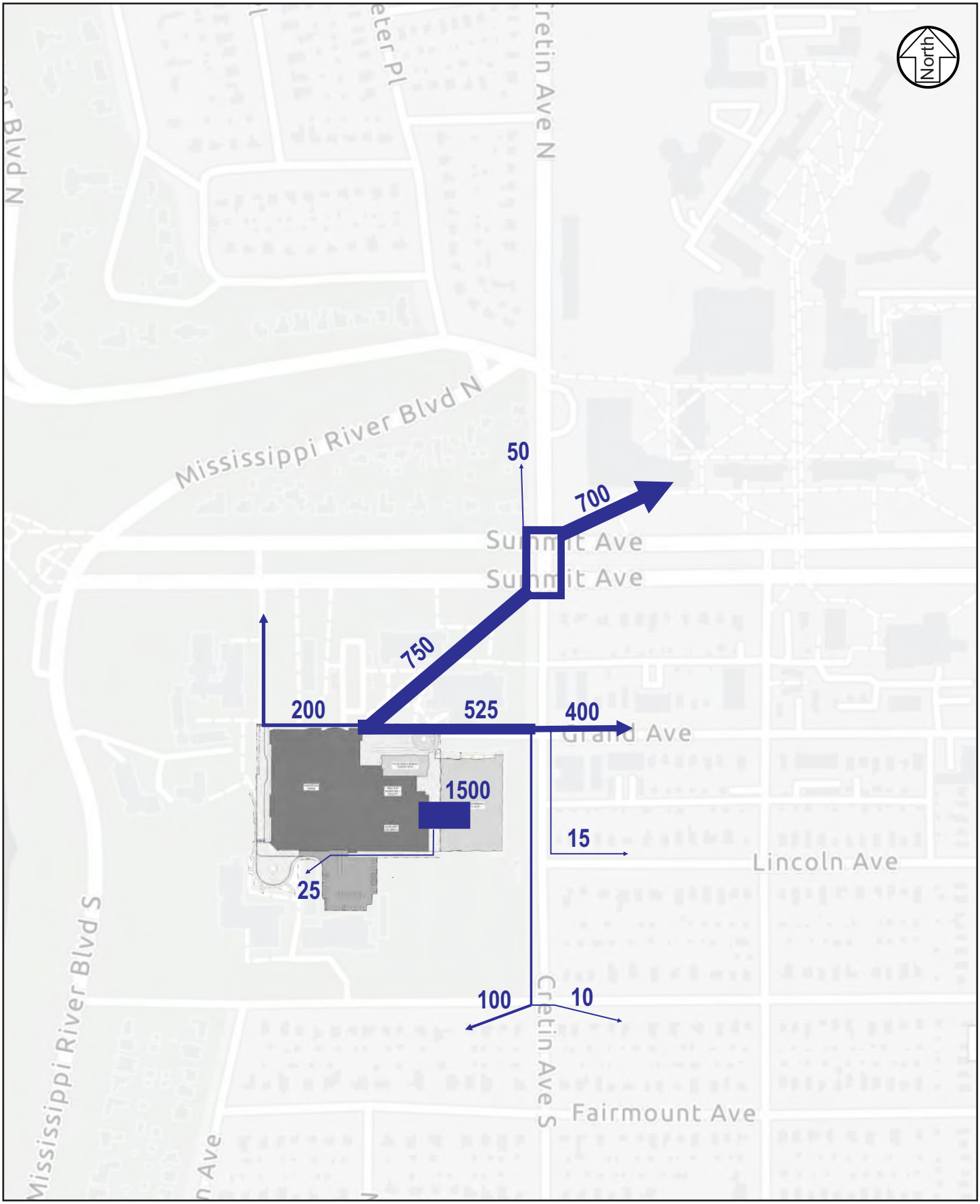

Typical (3,000) Friday Night Event - Estimated Pedestrian Volumes

Figure D5

UST Multipurpose Arena EAW Transportation Study

City of St. Paul

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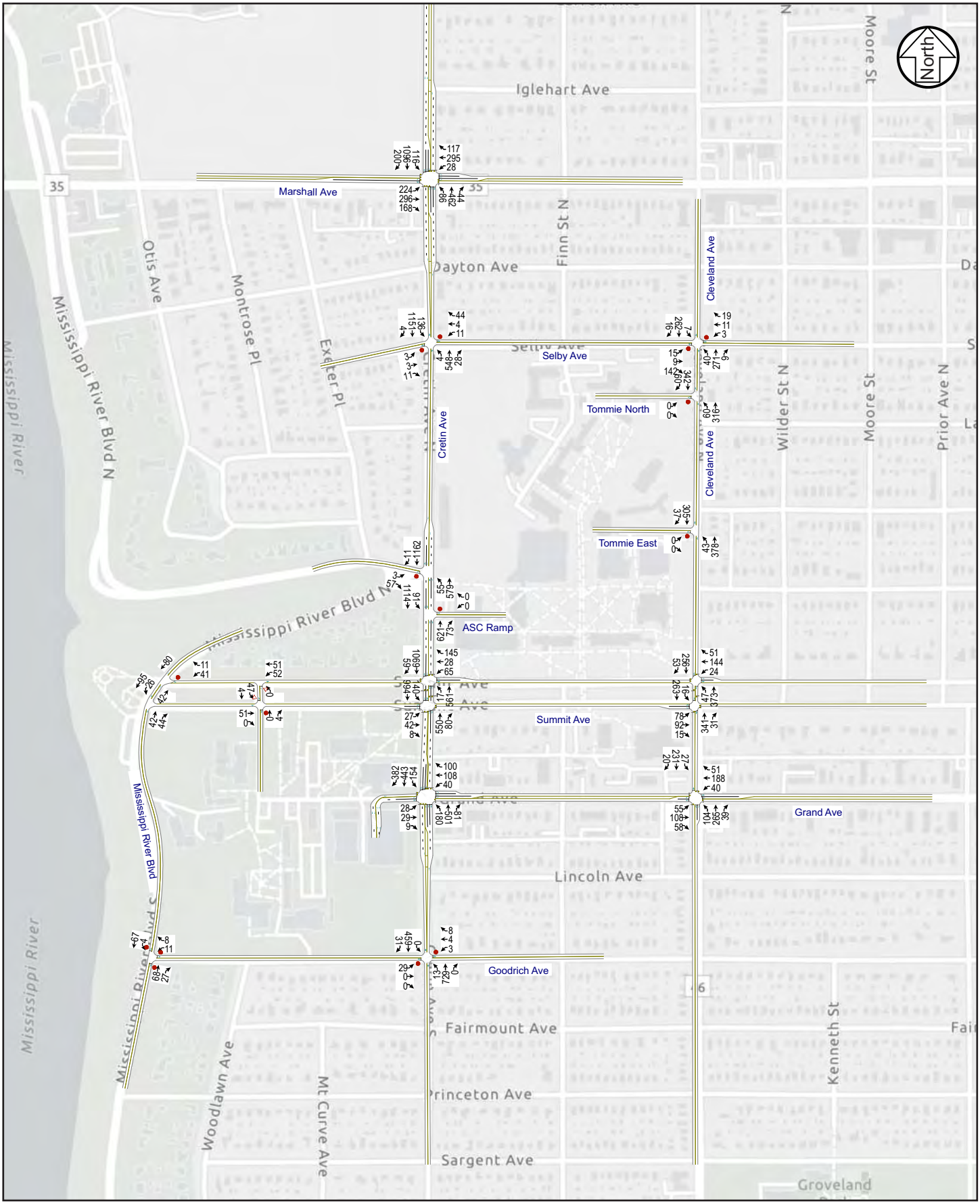
May 2023



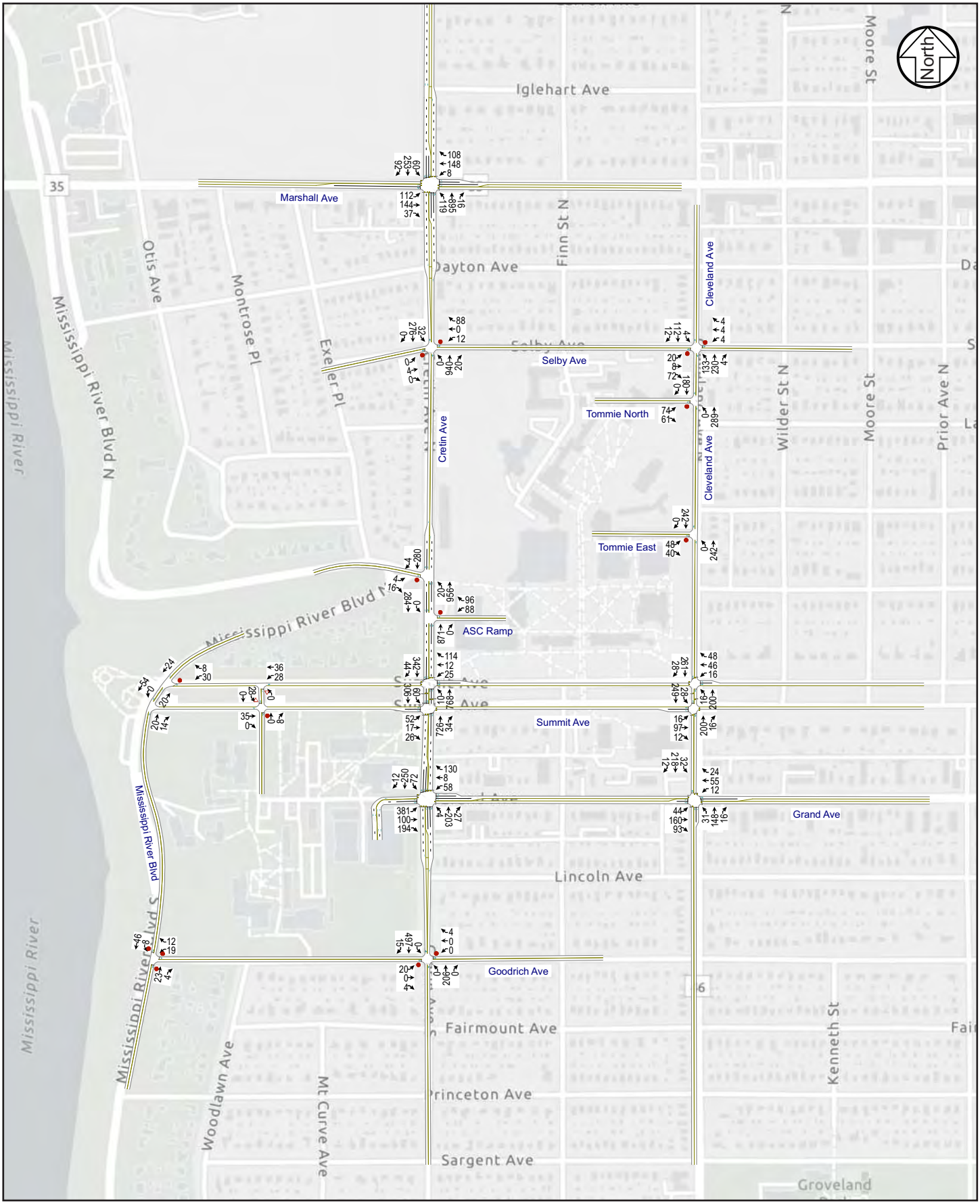
2025 Max Capacity Pre-Event Conditions (6 to 7 pm)

UST Multipurpose Arena EAW Transportation Study

City of St. Paul

Figure D6

02316489
May 2023



SRF

2025 Max Capacity Post-Event Conditions (9 to 10 pm)

UST Multipurpose Arena EAW Transportation Study

City of St. Paul

Figure D7

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May 2023

Table D8 - 2025 Build Maximum Capacity (5,500) Event Operations

Intersection	Pre-Event		Post-Event	
	No Mitigation	Mitigation	No Mitigation	Mitigation
Cretin Avenue / Marshall Avenue	C	D	C	C
Cretin Avenue / Selby Avenue (1)	A/E	B/F	A/C	A/B
Cretin Avenue /Mississippi River Boulevard (1)(3)	A/B	A/B	A/A	A/A
Cretin Avenue / Summit Avenue	D	D	D	C
Cretin Avenue / Grand Avenue	E	D	F	D
Cretin Avenue / Goodrich Avenue (1)	F/F	C/F	A/C	A/C
Cleveland Avenue / Selby Avenue (1)	A/A	A/A	A/A	A/A
Cleveland Avenue / Summit Avenue	B	B	B	B
Cleveland Avenue / Grand Avenue	B	B	B	B
Mississippi River Boulevard / Summit Avenue (1)	A/A	A/A	A/A	A/A
Mississippi River Boulevard / Goodrich Avenue (2)	A	A	A	A

(1) Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst side-street approach LOS. The delay shown represents the worst side-street approach delay.
(2) Indicates an unsignalized intersection with all-way stop control, where the overall LOS is shown.
(3) The eastbound approach has a no-left turn restriction.

Table D9 - Similar Men's Hockey Program Stadium Capacities

Program	Stadium Capacity
Michigan Tech	4,470
Bemidji St	4,400
Bowling Green	5,000
Northern Michigan	4,200
Lake Superior	4,000
Average	**4,414**

Table D10 - Similar Men's Basketball Program Stadium Capacities

Program	Stadium Capacity
Nebraska-Omaha	7,900
NDSU	5,460
SDSU	5,200
USD	6,000
UND	3,300
Denver	7,200
UW-Milwaukee**	10,780
Average	**6,549**

***Not in the Summit League*

APPENDIX B

Agency Comments

Josh Williams

From: Josh Williams
Sent: Tuesday, July 11, 2023 8:29 AM
To: *CI-StPaul_StThomasArena_EAW
Subject: Fw: MVP-2023-00747-JST 20230710 University of St. Thomas Multipurpose Arena PreApp
Attachments: 2023-00747-JST 20230710 PreApp.pdf

From: Toth, Joseph S CIV (USA) <Joseph.Toth@usace.army.mil>
Sent: Monday, July 10, 2023 3:03 PM
To: Anthony Adams <Anthony.Adams@RyanCcompanies.com>
Cc: Josh Williams <josh.williams@ci.stpaul.mn.us>; Meincke, Alexander C CIV USARMY CEMVP (USA) <Alexander.C.Meincke@usace.army.mil>
Subject: MVP-2023-00747-JST 20230710 University of St. Thomas Multipurpose Arena PreApp

Good afternoon,

We have reviewed the report referenced in the subject line for the University of St. Thomas Multipurpose Arena project proposed by the University of St. Thomas and I am attaching a pre-application letter containing information pertinent to this project. If you have any questions, please reach out to either the phone number and/or email listed within the letter. Thanks!

Joseph Toth (he/him/his)
USACE Regulatory Specialist
St. Paul District Office
332 Minnesota Street, Suite E1500
St. Paul, MN 55101
Office Phone: (651) 290-5532
Work Cell: (651) 242-1321

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT
332 MINNESOTA STREET, SUITE E1500
ST. PAUL, MN 55101-1323
JULY 10, 2023

Regulatory File No. MVP-2023-00747-JST

Ryan Companies US, Inc.
c/o Anthony Adams
533 South Third Street, Suite 100
Minneapolis, MN 55415

Dear Anthony Adams:

This letter is in response to correspondence we received from the City of St. Paul regarding the University of St. Thomas Multipurpose Arena project located in Section 5, Township 28 North, Range 23 West, Ramsey County, MN . This letter contains our initial comments on this project for your consideration. The purpose of this letter is to inform you that based on the Environmental Assessment Worksheet: University of St. Thomas Multipurpose Arena, a Department of the Army (DA) permit would not be required if there are no impacts to aquatic resources for your proposed activity. In lieu of a specific response, please consider the following general information concerning our regulatory program that may apply to the proposed project.

If the proposal involves activity in navigable waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (Section 10). Section 10 prohibits the construction, excavation, or deposition of materials in, over, or under navigable waters of the United States, or any work that would affect the course, location, condition, or capacity of those waters, unless the work has been authorized by a Department of the Army permit.

If the proposal involves discharge of dredged or fill material into waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 404 of the Clean Water Act (CWA Section 404). Waters of the United States include navigable waters, their tributaries, and adjacent wetlands (33 CFR § 328.3). CWA Section 301(a) prohibits discharges of dredged or fill material into waters of the United States, unless the work has been authorized by a Department of the Army permit under Section 404. Information about the Corps permitting process can be obtained online at http://www.mvp.usace.army.mil/regulatory.

The Corps evaluation of a Section 10 and/or a Section 404 permit application involves multiple analyses, including (1) evaluating the proposal's impacts in accordance with the National Environmental Policy Act (NEPA) (33 CFR part 325), (2) determining whether the proposal is contrary to the public interest (33 CFR § 320.4), and (3) in the case of a Section 404 permit, determining whether the proposal complies with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR part 230).

If the proposal requires a Section 404 permit application, the Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic

ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR § 230.10(a)). Time and money spent on the proposal prior to applying for a Section 404 permit cannot be factored into the Corps' decision whether there is a less damaging practicable alternative to the proposal.

If an application for a Corps permit has not yet been submitted, the project proposer may request a pre-application consultation meeting with the Corps to obtain information regarding the data, studies or other information that will be necessary for the permit evaluation process. A pre-application consultation meeting is strongly recommended if the proposal has substantial impacts to waters of the United States, or if it is a large or controversial project.

If you have any questions, please contact me in our St. Paul office at (651) 290-5532 or Joseph.Toth@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,

Joseph Toth

Joseph Toth
Regulatory Specialist

cc:
Josh Williams (RGU, City of Saint Paul)

July 27, 2023

Josh Williams, Principal Planner
City of St. Paul
25 West Fourth Street
St. Paul, MN 55102

RE: City of St. Paul – Environmental Assessment Worksheet (EAW) – University of St. Thomas Multipurpose Arena
Metropolitan Council Review No. 22881-1
Metropolitan Council District No. 14

Dear Josh Williams:

The Metropolitan Council received the EAW for the University of St. Thomas Multipurpose Arena project in the City of St. Paul on June 27, 2023. The proposed project is located on the University of St. Thomas (UST) South Campus. The proposed project is a redevelopment of an approximately 6-acre site into a multipurpose competition venue for the University's hockey and basketball programs with capacity for 4,000 to 5,500 spectators. The new facility will include practice facilities, coaching offices, locker rooms, and student athlete support services.

The staff review finds that the EAW is complete and accurate with respect to regional concerns and does not raise major issues of consistency with Council policies. An EIS is not necessary for regional purposes.

We offer the following comments for your consideration.

Item 12 b.i. Water Resources – Sanitary Sewers Roger Janzig, ES.
Roger.janzig@metc.state.mn.us
To properly calculate the potential wastewater flow for this facility, the City should submit facility site plans including spectator capacity, locker rooms, meeting rooms, storage and concession areas and any retail components that may generate and contribute to wastewater generation.

Item 20, Transportation (Joe Widing, MTS, 651-602-1822)
The transit discussion in the transportation study does not discuss or consider the planned changes to existing Route 21 and the upcoming B-Line Bus Rapid Transit (BRT) from Metro Transit. When the BRT commences operation, service changes to the UST campus is possible. The City should submit analysis of what that could mean for transit usage to/from the new arena.

This concludes the Council's review of the EAW. The Council will not take formal action on the EAW. If you have any questions or need further information, please contact Patrick Boylan, Principal Reviewer, at 651-602-1438 or via email at patrick.boylan@metc.state.mn.us.

Sincerely,

Angela R. Torres, AICP, Senior Manager
Local Planning Assistance

CC: Tod Sherman, Development Reviews Coordinator, MnDOT - Metro Division
W. Toni Carter, Metropolitan Council District 14
Patrick Boylan, Sector Representative/Principal Reviewer
Reviews Coordinator

N:\CommDev\LPA\Communities\St. Paul\Letters\St. Paul 2023 University of St. Thomas Multipurpose Arena EAW 22881-1.docx

Josh Williams

From: Josh Williams
Sent: Thursday, July 27, 2023 3:54 PM
To: *CI-StPaul_StThomasArena_EAW
Subject: FW: University of St. Thomas Multipurpose Arena EAW - DNR Comments
Attachments: 2023-00262NHletter.pdf; 2023-07-27-UniversityofStThomasMultipurposeAreaEAW-DNRcmtltr.pdf

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From: Collins, Melissa (DNR) <Melissa.Collins@state.mn.us>
Sent: Thursday, July 27, 2023 12:24 PM
To: Josh Williams <josh.williams@ci.stpaul.mn.us>
Cc: Anthony Adams <Anthony.Adams@RyanCcompanies.com>
Subject: University of St. Thomas Multipurpose Arena EAW - DNR Comments

Dear Josh Williams,

Thank you for the opportunity to review the University of St. Thomas Multipurpose Arena EAW. Please see the attached DNR comment letter and Natural Heritage letter. A confirmation of receipt would be most appreciated.

Thank you,

Melissa Collins
Regional Environmental Assessment Ecologist | Ecological and Water Resources
Pronouns: She/her/hers

Minnesota Department of Natural Resources
1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5755
Email: melissa.collins@state.mn.us
mndnr.gov

DEPARTMENT OF NATURAL RESOURCES

Division of Ecological and Water Resources
Region 3 Headquarters
1200 Warner Road
Saint Paul, MN 55106

Transmitted by Email

July 27, 2023

Josh Williams, Principal Planner
City of St. Paul
25 West Fourth Street
St. Paul, MN 55102

Dear Josh Williams,

Thank you for the opportunity to review the University of St. Thomas Multipurpose Area Environmental Assessment Worksheet (EAW) located in Ramsey County. The DNR respectfully submits the following comments for your consideration:

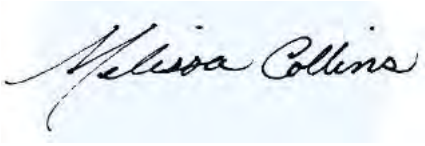
1. Page 17, Groundwater. Please note that the project area contains the St. Paul Seminary Spring (field verified by the University of Minnesota Earth Sciences Dept.; Glacial-Decorah contact). This spring is located near the head of the ravine/stream that slopes towards the Mississippi River along the western boundary of the project area. The EAW identifies the area adjacent to the spring as the Grotto (page 22, *Other Surface Waters),* and describes measures that will be taken to avoid impacting the groundwater hydrology. This spring is likely the source of the National Hydrography Dataset stream mapped within the Grotto area, which is also a mapped Minnesota River Critical Corridor Area (MRCCA) Significant Existing Vegetative Stand. Please be aware of the location and depth of this spring when determining the placement of utilities and footings in order to avoid impacting groundwater hydrology.
2. Page 20, Stormwater. We recommend that BWSR-approved, weed-free, native seed mixes be used to the greatest degree possible in stormwater features in order to provide pollinator habitat for the federally endangered Rusty-patched Bumble Bee.
3. Page 24, Rare Features. This section of the EAW should mention that the entire project area is located within the Mississippi River Twin Cities Important Bird Area (IBA), which is a significant corridor for migrating birds. Here is a complete list of bird species documented within the IBA, which may be found within the project area.
4. Page 24, Rare Features. This section of the EAW states that results of the DNR Natural Heritage Review are pending, however a final letter was issued on May 17, 2023. The Natural Heritage letter has been attached so that it may be included with DNR comments.
5. Page 29, Visual. Lighting for this development will be important due to its location within an IBA and MRCCA. Animals depend on the daily cycle of light and dark for behaviors such as

hunting, migrating, sleeping, and protection from predators. Light pollution can affect their sensitivity to the night environment and alter their activities. In addition to the undesirable effects of upward facing lighting, the hue of lights can also affect wildlife. LED lighting has become increasingly popular due to its efficiency and long lifespan. However, these bright lights tend to emit blue light, which can be harmful to birds, insects, and fish. The DNR recommends that any projects using LED luminaries follow the MnDOT Approved Products for luminaries, which limits the uplight rating to 0, and the maximum nominal color temperature to 4000K. Please choose products that have the lowest number for backlight and glare.

We recommend that all non-essential lighting be turned off during the Mayfly hatch as well as follow the Audubon Society's Lights Out program. This program advocates for darkening all buildings and structures during the bird migration from midnight until dawn March 15 - May 31 and August 15 - Oct 31. Information on this program can be found at: http://mn.audubon.org/conservation/lights-out-faq.

Thank you again for the opportunity to review this document. Please let me know if you have any questions.

Sincerely,



Melissa Collins
Regional Environmental Assessment Ecologist | Ecological and Water Resources
Minnesota Department of Natural Resources
1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5755
Email: melissa.collins@state.mn.us

CC: Anthony Adams, PE, Ryan Companies

Equal Opportunity Employer

Josh Williams

From: Muhic, P Cameron (DOT) <cameron.muhic@state.mn.us>
Sent: Sunday, July 16, 2023 8:30 PM
To: *CI-StPaul_StThomasArena_EAW
Subject: MnDOT Review of St. Thomas Arena_EAW

Dear Mr. Williams,

MnDOT has reviewed the aforementioned EAW and has no comments as we anticipate it will have little to no impact on our highways.

Cordially,

Cameron Muhic
MnDOT Senior Planner

Agency Comments

U.S. Army Corps of Engineers

Comment	Response
Based on the Environmental Assessment Worksheet: University of St. Thomas Multipurpose Arena, a Department of the Army (DA) permit would not be required if there are no impacts to aquatic resources for your proposed activity.	Thank you for your comment.

Metropolitan Council

Comment	Response
The staff review finds that the EAW is complete and accurate with respect to regional concerns and does not raise major issues of consistency with Council policies. An EIS is not necessary for regional purposes.	Thank you for your comment.
12 – Water Resources	
To properly calculate the potential wastewater flow for this facility, the City should submit facility site plans including spectator capacity, locker rooms, meeting rooms, storage and concession areas and any retail components that may generate and contribute to wastewater generation.	Thank you for your comment. As indicated in Section 9 of the EAW, the project proposer will submit all necessary materials to apply for a Sewer Connection Permit with the Metropolitan Council, if applicable. The project will submit a sewer Availability Charge (SAC) determination when the design plans are finalized. The SAC determination application requirements include facility site plans with the information noted by the Met Council.
20 - Transportation	

Comment	Response
The transit discussion in the transportation study does not discuss or consider the planned changes to existing Route 21 and the upcoming B-Line Bus Rapid Transit (BRT) from Metro Transit. When the BRT commences operation, service changes to the UST campus are possible. The City should submit analysis of what that could mean for transit usage to/from the new arena.	Per the Metro Transit website, B Line service is scheduled to begin in late 2024 and will provide faster and more frequent service along the current Route 21. The planned B Line station nearest to the proposed arena will be located at Marshall Ave and Cretin Ave. Changes to local service will be announced prior to B Line operations. Faster and more frequent service will incentivize ridership on the B Line versus current Route 21 service. The campus is also served by Route 63 (Grand Ave and Cretin Ave) as well as Route 87 (Cleveland Ave).

Minnesota Department of Natural Resources

Comment	Response
12 – Water Resources	
Page 17, Groundwater. Please note that the project area contains the St. Paul Seminary Spring (field verified by the University of Minnesota Earth Sciences Dept.; Glacial-Decorah contact). This spring is located near the head of the ravine/stream that slopes towards the Mississippi River along the western boundary of the project area. The EAW identifies the area adjacent to the spring as the Grotto (page 22, Other Surface Waters), and describes measures that will be taken to avoid impacting the groundwater hydrology. This spring is likely the source of the National Hydrography Dataset stream mapped within the Grotto area, which is also a mapped Minnesota River Critical Corridor Area (MRCCA) Significant Existing Vegetative Stand. Please be aware of the location and depth of this spring when determining the placement of utilities and footings in order to avoid impacting groundwater hydrology.	As indicated in Section 14.a.ii. of the EAW, American Engineering Testing has prepared a draft Report of Geotechnical Exploration for the project site including penetration test borings. Groundwater was encountered in penetration test borings at depths of 6 feet to 12 feet below ground surface. The proposed arena project consists of mostly at-grade construction that will sit above known groundwater flow with the exceptions being foundation walls, utilities, and a utility tunnel needed for infrastructure. Groundwater impacts will continue to be considered as design advances in order to limit changes to the existing groundwater flow.

Comment	Response
Page 20, Stormwater. We recommend that BWSR-approved, weed-free, native seed mixes (https://bwsr.state.mn.us/seed-mixes) be used to the greatest degree possible in stormwater features in order to provide pollinator habitat for the federally endangered Rusty-patched Bumble Bee.	Stormwater management for the project is planned to be subsurface management toto utilize the site area for other campus uses, therefore not requiring seed mixes within the stormwater features. As indicated in Sections 14.c. and 14.d. of the EAW, the project proposer is considering using native, non-invasive plants in landscape designs which may provide pollinator habitat.
14 – Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	
Page 24, Rare Features. This section of the EAW should mention that the entire project area is located within the Mississippi River Twin Cities Important Bird Area (IBA) (https://netapp.audubon.org/iba/Reports/2421), which is a significant corridor for migrating birds. Here is a complete list of bird species documented within the IBA, which may be found within the project area (https://ebird.org/barchart?byr=1900&eyr=2023&bmo=1&emo=12&r=US-MN_2421).	Comment noted and addressed in Section 2.2 above.
Page 24, Rare Features. This section of the EAW states that results of the DNR Natural Heritage Review are pending, however a final letter was issued on May 17, 2023. The Natural Heritage letter has been attached so that it may be included with DNR comments.	Comment noted and addressed in Section 2.2 above.
16 – Visual	
Page 29, Visual. Lighting for this development will be important due to its location within an IBA and MRCCA. Animals depend on the daily cycle of light and dark for behaviors such as hunting, migrating, sleeping, and protection from predators. Light pollution can affect their sensitivity to the night environment and alter their activities. In addition to the undesirable effects of upward facing lighting, the hue of lights can also affect wildlife. LED lighting has become increasingly popular due to its efficiency and long lifespan. However, these bright lights tend to emit blue light, which can be harmful to birds, insects, and fish. The DNR recommends that any projects using LED luminaries follow the MnDOT Approved Products for luminaries, which limits the uplight rating to 0, and the maximum nominal color	As indicated in Section 16 of the EAW, the project will conform to the City of Saint Paul's regulations for lighting.. Fixture modeling and photometric analysis will be completed for all site and building lighting to analyze light levels for the project. Additionally, the University standard for site lighting is to use LED cut-off light fixtures with a maximum nominal color temperature of 4000K. Lighting for all areas of the project site will be evaluated as part of the City of Saint Paul Site Plan Review process.

Comment	Response
temperature to 4000K (https://www.dot.state.mn.us/products/roadwaylighting/ledrestarea.html). Please choose products that have the lowest number for backlight and glare.	
We recommend that all non-essential lighting be turned off during the Mayfly hatch as well as follow the Audubon Society's Lights Out program. This program advocates for darkening all buildings and structures during the bird migration from midnight until dawn March 15 - May 31 and August 15 - Oct 31. Information on this program can be found at: http://mn.audubon.org/conservation/lights-out-faq.	Thank you for your comment. The project will conform to all lighting requirements per City of Saint Paul City Ordinances.

Minnesota Department of Transportation

Comment	Response
MnDOT has reviewed the aforementioned EAW and has no comments as we anticipate it will have little to no impact on our highways.	Thank you for your comment.

APPENDIX C

Public Comments

Josh Williams

From: Tom Alf <alftom52@gmail.com>
Sent: Thursday, July 27, 2023 7:19 AM
To: *CI-StPaul_StThomasArena_EAW
Cc: Josh Williams
Subject: Comments re: St. Thomas Arena EAW Comments

Re: St. Thomas Multipurpose Arena EAW Comments

University of St. Thomas' stated mission is to "educate students to be morally responsible leaders who think critically, act wisely and work skillfully to advance the common good". Alongside their mission UST lists Convictions: Pursuit of truth through Intellectual inquiry; Academic excellence; Faith and Reason; Dignity; Diversity; Personal Attention and Gratitude.

No mention is made in their Mission and Conviction statements of sports nor the need to achieve sports excellence by moving to Division 1 for basketball and hockey. In the EAW, Item 6d, the stated purpose of the multipurpose arena is to "…house a competition venue for the UST hockey and basketball to meet Division I athletic program expectations".

UST chose to move directly to division I from Division 3 rather than finding another Division 3 league (after being ousted from the MIAC) or going to Division 2. More importantly, highly competitive sports programs do not help UST achieve their Mission Statement nor any of their listed Convictions; whereas, improved educational facilities and better paid faculty which would help UST achieve their Mission and Convictions.

Since the arena is not a facility needed to achieve their Mission and Convictions, we ask that you do not waive zoning limitations set forth in the MRCCA – River Corridor Urban District (RC3). Similarly, we ask you to not approve the EAW given the negative impacts on environmental goals and on the negative traffic and parking issues on neighborhoods located east and south of the proposed site.

Our EAW comments:

1. General Item 6b – Construction access is via Grand Ave termination access road and another access described as "on the western boundary of the project site". Where would vehicles enter the south campus to access the western boundary of the project site? We want to make sure there is no vehicle access from Goodrich Ave to the project site.
2. Climate – Item 7 and 18
    a. St. Thomas has indicated a goal of being climate neutral by 2035. Adding a 6,000 square foot arena with two ice sheets runs counter to UST's goal of carbon neutral by 2035. Despite trying to obtain LEED Silver certification, the arena will significantly add to Greenhouse Gas (GHG) emission over its lifetime.
    b. Building the arena will destroy 76 existing mature trees with only 50 small new trees planted near the site. Besides losing 26 net trees, the loss of mature trees means significant loss of annual carbon capture until new trees are mature.
    c. The project will reduce grass and landscape by one acre adding to urban heat island impact especially when including the surface area of the 6,000 sq ft arena.
3. Land Use – Item 10
    a. Item 10 ii - This item mentions and describes the MRCCA River Towns and Crossings District (CA-TTC); however, the project site is currently falls within the+ MRCCA – River Corridor Urban District (RC3) as noted in the last sentence of this section. The River Corridor RC3 should be the zoning rule used to determine whether the project complies with those zoning rules.

The RC3 River Corridor zone calls for a maximum building height of 40 feet. The proposed project arena maximum height as noted in Item 6c is the basketball practice facility of 68 feet and 58 feet 3 inches for the main arena, both of which are substantially higher than the RC3 River Corridor zoning maximum height of 40 feet.

4. Noise -Item 19
    a. The Science and Math building built in the northeast corner of the South Campus some years ago created unacceptably loud noise from HVAC equipment on top of the building. It took St. Thomas and the City of St Paul over a year to correct his issue after repeated complaints from neighbors on the south side of the South Campus. The EAW calls for operational noise testing. Please provide us specifics of operational noise testing results as they become available. We want to avoid a repeat of the Science and Math building noise issue.
5. Transportation – Item 20
    a. Parking – The proposed arena poses significant hardship on the near-surrounding neighbors to the south and to the east of the South Campus. The only way that neighbors can protect themselves from basketball and hockey fans parking in front of their homes is to go through the St Paul parking permit process. They would need to request "No parking except for area permits" which makes it difficult for a household to hold moderate to large size gatherings over the weekend since each home is allowed only 2 visitor permits.
        i. The EAW notes that 264 net parking spaces would be lost due to arena construction leaving the Anderson ramp the only available parking on the south campus.
        ii. The transportation study goes through an elaborate analysis with a number of assumptions to attempt to determine the adequacy of on campus parking. They concluded that basketball using maximum capacity would have a parking deficit of about 330 to 740 depending whether a week night or weekend game. Given the highly competitive nature of St. Thomas sports, we feel it likely that more games for both basketball and hockey will approach max capacity than the parking study assumes.
        iii. *Used page 37 parking summary analysis, Tables page 26 and 27 and Tables page 12 (Figure 3).* The parking study ignores common sense/human nature; namely, people will look for the closest and cheapest parking available. Excluding Anderson ramp on South Campus, the closest parking are the neighbors east and south of the project site. These areas will be used before the ASC ramp or the McNeely ramp. Tommie north and Tommie East will not likely be used as they are 6-8 blocks from the project site. Tommie North and East were assumed to provide 110 spaces which if not used means more fans parking in our neighborhood.
        iv. All of this means the surrounding neighborhoods will have much more significant parking use than the study assumes which is an undue burden on the surrounding neighborhoods, especially, considering that the home basketball/hockey total of 32 games each for men and women which totals 64 games per year. Plus, all the other events St. Thomas plans to hold at the arena.
        v. At a minimum, we strongly feel that the City must insist before their approval of the EAW, that St. Thomas add the two additional allowed floors to Anderson ramp BEFORE the arena opens.
    b. Traffic
        i. The study assumes about 1,500-1,600 added car trips pre and post event. With 64 basketball/hockey games plus the other events planned for the arena, the added car trips in very concentrated times periods adds much more noise and "traffic jams" during these events adding further burden to the surrounding neighborhoods.

Tom and Karen Alf
2252 Fairmount Ave

Josh Williams

From: Eric Beck <dericbeck@hotmail.com>
Sent: Friday, July 28, 2023 12:04 AM
To: *CI-StPaul_StThomasArena_EAW
Subject: Fw: Comments on St. Thomas Arena EAW..7/27/23

From: Eric Beck <dericbeck@hotmail.com>
Sent: Friday, July 28, 2023 12:01 AM
To: StThomasArenaEAW@ci.stpaul.mn.us <StThomasArenaEAW@ci.stpaul.mn.us>; StThomasArenaEAW@ci.stpaul.mn.us <StThomasArenaEAW@ci.stpaul.mn.us>
Subject: Comments on St. Thomas Arena EAW..7/27/23

Please direct these comments to Mr. Joshua Williams:

I have several concerns already, and will likely have more as the process of planning for the new arena evolves..

Re. Deconstruction/preparation of the site:

How long will this part take, roughly?
Will this generate a significant increase in local traffic, with dump trucks, etc.?
Any how about dust and other air contaminants that may be generated when the existing buildings are demolished?

Re. Traffic after the arena has been built:

Please consider adding incentives for attendees of games, other events, etc. to:

- carpool
- Use electric or plug-in hybrid or hybrid vehicles
- add substantial outlets in the existing and new parking facilities to promote cleaner, decreased emission vehicle use
- IF buses are involved in transporting teams and/or spectators, ADD electric vehicles to your fleet

Re. environmental impacts:

- Please consider adding "green" or succulent-based roofs to the new structures, and/or include pollinator plants -> to help lighten the local environmental impact of this giant structure.
- Is any of the water/rain/snow run-off from the new arena and facilities going to be captured and re-used for: flushing toilets, watering gardens, etc.?

Thank you,

Eric Beck
2084 St. Clair Ave.
St. Paul

Josh Williams

From: Beth Brombach <bbrombach@comcast.net>
Sent: Monday, July 24, 2023 2:54 PM
To: *CI-StPaul_StThomasArena_EAW
Subject: UST Arena comment on EAW

To Whom it May concern,

I have read the UST Environmental Assessment Worksheet on the proposed hockey arena project.

This worksheet, in no way makes me feel any better about this project. As a matter of fact, there are so many things that they are proposing, which completely contradict the St. Paul 2040 Comprehensive Plan. I am wondering how all of the things they are proposing can even be considered!

Here is what I completely object to about this assessment and I will be appalled if more work isn't done to clarify the real impact on this neighborhood and the environment.

How can a parking lot be put in the last green space of the south campus? This green space is in a conservation area. It runs along the Mississippi Flyway and is used by 75% of ALL North American migratory birds! The environmental impact of chopping down these old growth oaks and putting in a parking lot and road into an area that will directly runoff into the river, is an absolute travesty. It is also a conservation area that supports the endangered rusty patched bumblebee.

How can the loss of 76 mature trees easily be discounted, by saying that 50 little trees will be planted to replace them and even more outrageous is that they won't be replaced in the area where they have been chopped down?

What assurances does this neighborhood have that our streets, particularly Goodrich Ave, will not be used as an offsite parking lot and backdoor entrance to this project. I live on Goodrich and our street is already completely full of St. Thomas cars every school day and many event weekends.

The traffic assessment was limited and done at a time when there was a threat of a big snowstorm. Also, many students and professors were already leaving for Easter Break. This does not reflect the huge volume of cars that already use Cretin.

I don't see language that describes how any problems that will develop after an immense project like this occurs, will be monitored or actions enforced. By that, I mean, noise level of the buildings, traffic, parking, light pollution, misuse of neighborhood streets & air/dust pollution.

Why are more environmentally friendly alternatives not being used for backup generators to the arena? Diesel powered is what they are proposing. Is this the 1970's?

In conclusion, the scope of the UST proposed project will have such a lasting influence on anyone who lives in the surrounding neighborhood, that it is malfeasance to allow this to happen without more work to assess all of the cumulative effects that this project will have. The project that is being considered is too large and will have lasting negative environmental effects in this area. This does NOT go along with the 2040 Comprehensive Plan. As a matter of fact it does the opposite.

Beth and Bill Brombach
2214 GOODRICH AVE

Josh Williams

From: Ann Cohen <anncohen77@hotmail.com>
Sent: Tuesday, July 18, 2023 10:15 PM
To: *CI-StPaul_StThomasArena_EAW
Cc: Carol Walsh; James Fitzpatrick; johnrgla@msn.com
Subject: Comment on St. Thomas University arena project EAW
Attachments: UST EAW.docx

Dear Mr. Williams:

Please find attached a comment letter on the St. Thomas arena project EAW. Thank you in advance for your response to these comments.

Ann E. Cohen
John Glasenapp
1831 Ashland Avenue
St. Paul, MN 55104

James Fitzpatrick
Carol Walsh
1834 Laurel Avenue
St. Paul, MN 55104

July 18, 2023

Josh Williams, Principal Planner
25 West Fourth Street
Saint Paul, MN 55102

Via Email: StThomasArena_EAW@ci.stpaul.mn.us

Re: **Environmental Assessment Worksheet (EAW) for the University of St. Thomas Multipurpose Arena (Lee and Penny Anderson Arena at the University of St. Thomas).**

Dear Mr. Williams:

The Anderson Arena Environmental Assessment Worksheet (EAW) provides only an incomplete description of the environmental impacts of the proposed arena project and how those impacts will be mitigated. Further, the University of Saint Thomas (UST) has identified future phases of the project that, if implemented, have the potential for significant environmental impacts and are at variance with UST's sustainability strategic plan and the City of Saint Paul's own sustainability goals.[1] Finally, UST has failed to identify clear opportunities for making the new building a successful example of modern environmentally-conscious construction, achieving only "silver" LEED certification.[2] The City of St. Paul, as RGU, should hold UST, a wealthy academic institution, to the highest standards as part of the City's own pledge to ensure sustainable development.

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[1] https://www.stpaul.gov/sites/default/files/Media%20Root/Mayor%27s%20Office/Saint%20Paul%20Climate%20Action%20%26%20Resilience%20Plan.pdf. This plan states: "It is crucial to replace reliance on GHG-emitting fossil fuels with carbon-free energy sources to generate electricity, deliver heat, and power our vehicles and transportation systems."

[22] To achieve LEED certification, a project earns points by adhering to prerequisites and credits that address carbon, energy, water, waste, transportation, materials, health and indoor environmental quality. Projects go through a verification and review process by GBCI and are awarded points that correspond to a level of LEED certification: Certified (40-49 points), Silver (50-59 points), Gold (60-79 points) and Platinum (80+ points).

Specific Comments

1. The EAW fails to provide any specifics or commitments regarding the measures UST will adopt to mitigate stormwater impacts related to the expansion of impervious surface and loss of vegetated landscaped areas. The EAW states (emphasis added):

> Pdf 10. University of St. Thomas *is considering* ways to design landscaping (via shade trees) and stormwater management systems to reduce stormwater runoff and mitigate for the urban heat island effect.
>
> Pdf 11. University of St. Thomas *will investigate* ways to design the stormwater management facilities to minimize standing water and reduce the risk of flooding on the project site.
>
> Pdf. 12. University of St. Thomas *is investigating* ways to minimize tree removals or replace more trees than are removed and include non-invasive native plants, resulting in a net gain of suitable habitat for local species including small mammals, insects, and birds. As it stands, the EAW predicts a net loss of 26 mature trees as the result of the project (pdf 13). Although UST plans to plant trees "elsewhere on campus," locations are not identified making verification impossible.
>
> Pdf 22. Instead of designing to reduce current direct stormwater discharge to the Mississippi, the Project appears to be designed to maintain current direct discharges via an existing stormwater tunnel. The project will thus continue impacts (erosion and sedimentation) related to rapid discharges of stormwater to the river instead of environmentally-preferable infiltration.

2. The EAW fails to clearly identify how the project will be powered. The EAW states that the project is being *considered* for connection to the campus microgrid for back-up power during outages or emergency events. Pdf 11. However, the EAW then states "The project may install a diesel generator to provide backup power to the arena *as well as up to four additional future diesel generators to feed the University of St. Thomas' MicroGrid.* These generators would have diesel storage tanks at each generator or utilize one fuel storage tank for fuel supply. The project proposer will obtain the appropriate permits from the MPCA." Pdf 27 (emphasis added). *Based on this language, it appears that one unstated potential purpose of the project will be to provide fossil fuel power for the campus rather than reduce fossil fuel dependency.* Moreover, the proposed generators will require underground or aboveground petroleum storage tanks, which will pose unavoidable issues with spills and leaks very close to the Mississippi River. The EAW contains no discussion whatsoever of the potential for installing solar panels on the structure to generate clean energy. The EAW contains no discussion of the potential to purchase

energy for the project from clean energy sources, such as a solar installation located elsewhere on campus.

3. The EAW fails to implement UST's sustainability strategic plan commitment to reduce vehicle traffic to the campus, admitting that the existing parking ramp will be expanded to accommodate increased parking as a second phase of this project, pending funding. Pdf 7. More parking will attract more individual-use vehicles. The EAW makes no mention of encouraging electric vehicle use of the facilities that will serve the project by installing charging stations. The potential for expanded parking, while helpful to reduce neighborhood impacts during high-use periods, is nevertheless environmentally detrimental. The EAW contains no discussion of how clean transportation could be used to bring fans or players to games.

4. The EAW identifies that the project will generate large quantities of construction debris that will require disposal or recycling, but fails to identify the use of techniques to "deconstruct" the existing buildings in a manner that will maximize environmentally superior *reuse* of materials. *See, e.g.*, https://www.rethos.org/sustainability. Similarly, the EAW does not contain any detail regarding the impact of waste that will be generated at games and other events held at the building.

5. The EAW attaches a UST greenhouse gas analysis. However, this analysis is not specific to the project, generally dates from 2020, is manifestly incomplete, and amounts to "lip service" rather than a real commitment by UST to addressing the most significant environmental issue of the present time.

For example, there are numerous "?" entered rather than data on the following table (pdf 71):

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?	?
Fire Suppression	
Do your facilities use chemical fire suppressants?	?
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.	?
Waste Gases	
Are VOCs combusted in thermal oxidizers in your facilities?	?
Do you flare any gases on-site?	?
Electricity	
Does your inventory include facilities that use electricity?	Y
Steam	
Do you purchase steam for heating or cooling in your facilities?	?
Market-Based Emission Factors (entered on Electricity and or Steam tabs)	

Similarly, the following information is largely missing, other than the admission that UST does not purchase any "offsets" for the greenhouse gases it produces (pdf 72):

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)?	?
Employee Commuting	
Do your employees commute to work in personal vehicles or use public transportation?	?
Product Transport	
Do you hire another company to transport products or other materials to or from your facilities?	?
Waste Generated in Operations	
Do you generate waste that is disposed of in a facility owned by another organization?	Y
Offsets	
Do you purchase greenhouse gas offsets?	N

The "proposed scenario" section dated January 2023 is also manifestly inaccurate, noting, for example, that natural gas and #2 fuel oil are used but providing fuel consumption figures solely for natural gas. This is unacceptable.

The project-specific greenhouse gas analysis is, as noted above regarding other aspects of the proposed project, entirely nonspecific with regard to mitigation strategies that will be incorporated into the project. The EAW states only that "[t]he following design strategies and other sustainability measures *are being considered* for the proposed development to reduce emissions" rather than identifying particular project commitments, such as the use of on-site photovoltaics. Pdf 36-7. While it is likely that UST will incorporate *some* of the identified mitigation features into the project, it is impossible to review the true impact of the project based on UST's "consideration" rather than "commitment."

Conclusion

The City of St. Paul should not approve a negative declaration on this EAW because it is incomplete and inaccurate. The EAW identifies impacts that have the potential to be significant, but fails to provide an adequate description of the mitigation measures that will be implemented. The EAW also identifies potential phased actions associated with this project—such as increased individual vehicle parking and diesel-powered electricity generation—that are contrary to City of Saint Paul and UST strategic sustainability plans and that constitute likely future significant environmental impacts from this project or its future phases.

Under Minn. R. 4410.1700, subp. 2a:

> If the RGU determines that information necessary to a reasoned decision about the potential for, or significance of, one or more possible environmental impacts is lacking, but could be reasonably obtained, the RGU shall either:
>
> A. make a positive declaration and include within the scope of the EIS appropriate studies to obtain the lacking information; or
>
> B. postpone the decision on the need for an EIS, for not more than 30 days or such other period of time as agreed upon by the RGU and proposer, in order to obtain the lacking information. If the RGU postpones the decision, it shall provide written notice of its action, including a brief description of the lacking information, within five days to the project proposer, the EQB staff, and any person who submitted substantive comments on the EAW.

The City of St. Paul should require UST to produce information regarding how it will mitigate the impacts of this project and its likely future phases, rather than providing a "negative declaration" based on UST's "vague statements of good intentions." UST should be held to the highest standards for the production of information supporting documents of this nature because it has the capacity to collect, analyze and produce accurate and complete information. The City should ensure that this EAW is accurate

and complete before it is approved, or should order UST to prepare an Environmental Impact Statement.

Sincerely,

Ann E. Cohen
John Glasenapp
1831 Ashland Avenue
Saint Paul, MN 55104

James Fitzpatrick
Carol Walsh
1834 Laurel Avenue
Saint Paul, MN 55104

Josh Williams

From: David Ziebarth <davidziebarth@icloud.com>
Sent: Thursday, July 27, 2023 9:37 AM
To: *CI-StPaul_StThomasArena_EAW
Subject: EAW
Attachments: I have many concerns about the clarity of the UST arena EAW.docx

I have many concerns about the clarity of the UST arena EAW, but will limit the number for readability. I have read, researched terms, and annotated the document over the course of the past weeks, and am still left with@@@@@

1. In the introduction, in the very first paragraph, it is stated “other events…high school/youth sports, and conventions may also be held at the venue.” On p. 19. It is stated “conventions, career fairs, etc. are often hosted on the North Campus.” Will they be moved to the flagship Anderson Arena?
UST representative Amy McDonough told participants at a MGCC HLU meeting “We aren’t building this to have it stand empty”.
I find it hard to fathom that an institution as well organized as UST doesn’t have specifics on what these “other events” will be. Those of us who have been involved in high school athletics have seen the large number of attendees at legacy games, conference tournaments and consolation rounds, bringing in hundreds or thousands of people from outside the immediate area. Throughout the document, references are made to the shortage of parking. These vague “other events” could be significant and needed to be addressed as to their impact on traffic and parking.

2. Regarding the effects of this large arena on traffic and safety of pedestrians and drivers, on p. 10, Appendix D, it is stated that on Cretin Ave. “Left turn movements and time-of-day-on-street parking were observed to cause abrupt lane changes and friction along the corridor.” Cretin Ave is already congested (reference p. 10, Appendix D). Adding a predicted number of up to 3784 “passenger vehicle trips (p. 24, Appendix D) on the roadway will only add to this friction. Long wait times at lights, even longer waits from residential streets without lights (“During both pre-event conditions, multiple unsignalized side-street approaches on Cretin Avenue will be difficult to make left-turn movements for 13 to 30 minutes.” p. 38, Appendix D) are expected to occur as a result of the proposed arena.
It is difficult to see how this predicted and predictable effect on Cretin Ave., intersecting residential streets, and pedestrians who attempt to cross this already busy road is acceptable, particularly when the city comp plan emphasizes the commitment of the city to the safety of pedestrians and bikers.
Idling cars will also add pollutants and Greenhouse gases, another effect not fitting with the com plan’s commitments to city residents.

3. Parking will be a huge issue. The EAW has laid out numerous deficits in parking spaces from a shortage of 40 to a shortage of 742 (Table 13, p. 28, Appendix D and p. 34, Appendix D). This is taking into account the assumption that many people will walk up to 0.5 mi to attend. The document states that it is “good practice for the parking supply of a visitor parking facility to equal the peak parking demand plus an additional 5 to 15%” (p.17, Appendix D) in order to reduce cars driving around looking for spots to park (again, safety and Greenhouse gas emissions are an issue). This best practice is obviously not being followed.
The EAW suggests that the excess cars will use “public parking” in the neighborhood but doesn’t identify where that is. Those of us who live here know it is nonexistent.
36 hockey games that are now played at the hockey arena in Mendota heights will move the South Campus. They will be played mostly on Fri. and Sat. nights (Fig. 6, Table 7, p. 20, Appendix D), adding congestion, traffic, and parking requirements.

4. Because the “other events” are not identified, the hours of operation aren’t either. This is important information for analyzing the effects of this proposal on the neighborhood and should be included in a comprehensive EAW.

5. The document states that the Summit Ave./South Campus intersection is “expected to be modified to better accommodate” (p. 14, Appendix D) the buses and delivery vehicles that will use the roadway on the west side of the arena. That space is already constricted. The seminary grounds, grotto, and historic chapel are all located in this area. Access of these large vehicle to the relocated Lot O seems difficult without further removal of buildings in the future, particularly during the winter with snow accumulation. This should be addressed in the EAW. The modifications should also have described.

6. Possible mitigation strategies include scheduling more games on weeknights, overflow parking on the South Athletic Fields (which would seem to void guarantees on the integrity of the artificial turf fields), expanding the APF (which the documents states “may not” be in compliance with the CUP- shouldn’t we know this?- and would add to queuing as even more cars would enter and exit the ramp onto Cretin Ave.), and constructing a parking lot on the corner of Goodrich and the River Blvd which would result in taking down even more old oak trees along the Mississippi Flyway (p. 36, Appendix D).

7. The visual effects are said to not be “adverse”. We have not seen what this 70’ building will look like from the sides and back, and the visual effects could be extremely “adverse”.

I could go on and on. The EAW is a lengthy document filled with charts, tables and data. But, it leaves many issues unresolved, with the suggestion (p. 35, Appendix D) further study could be done after completion of construction. I would suggest that it will be too late at that point.
This should trigger an EIS.

Sincerely, Colleen Crenshaw

Josh Williams

From: KATHLEEN DEMING <kajadevin8@gmail.com>
Sent: Friday, July 21, 2023 7:03 PM
To: *CI-StPaul_StThomasArena_EAW
Subject: Baseball Field

Hello~ Please DO NOT ALLOW St. Thomas U. to build a ball field at Highland Bridge (or to acquire another square foot of property anywhere off campus) UNLESS they are willing to pay the full value of property tax.

Any further thinning of our property tax base is going to further cost us property-tax payers, and citizens in this town are drowning in taxes.

I'm living below the poverty line, and if I had the use of my tax money, I could afford to have done some of the badly needed repairs on my 102-year-old house.

I believe that all church-affiliated colleges should have to pay tax on their acreage that is NOT PHYSICALLY OCCUPIED by their church or chapel.

I don't use trash service as I still share with a neighbor, yet had to go begging for assistance to pay for medication. BEfore the city in 1984 broke the back of the private Recycling Unlimited, which provided recycling throughout the city - with the exception of one last small area which was being planned for, recycling was FREE. Now we get charged for it. SHAME! SHAME! SHAME! There are limits to citizens' budgets. There should be limits to the city's.

STOP eroding the tax base! Stop charging us for things we don't use!

Kathleen Deming
1562 Goodrich Ave.; 55105

Memo

To: Josh Williams
From: Meg Grove
cc: Mitra Jalali
Date: 7/21/2023
Re: Questions, comments, requests for clarification on St. Thomas EAW

I have read through the Environmental Assessment Worksheet associated with St. Thomas' proposed multi-use complex, and have some questions and requests for clarification:

1) Project Description: The EAW says that "Vehicular access to the facility will consist of loading zones via an access drive on the western boundary. Please describe. What are assurances that Goodrich Avenue will not become the offsite parking lot and backdoor entrance to the project both during construction and operations?

2) Project Description: Expansion of the Anderson Parking Ramp is mentioned as a "potential improvement in the Traffic Impact Analysis," though nothing is planned or funded "at this time." Considering St. Thomas' goal of carbon neutrality by 2035, and the City's Comprehensive Plan goals of minimizing traffic, why is this even on the table? Why would something that only encourages driving be a good idea? Also, based on discussions with City and project consultant staff at the 7/12 public meeting, assumptions used to calculate traffic at the ramp seem to be best case scenarios. What about when the weather isn't optimal? What about when vehicles break down or collide in and around the ramp? Explain how long wait times – whether under optimal or suboptimal conditions – won't result in lots of idling vehicles, and environmentally harmful emissions in this heavily residential area? With so much emphasis on through put of vehicles, it is difficult to see how the ramp log jams are consistent with St.Thomas' carbon neutrality goals, or with the City's 2040 Comprehensive Plan Resiliency goals (reducing carbon emissions, improving environmental sustainability), and Urban Design (limit stand alone parking uses, and encouraging private landowners to create/maintain green infrastructure).

3) Climate Adaption and Resilience: Continuing to build in an urban setting will exacerbate the Urban Heat Island. The EAW acknowledges that the area is "susceptible to extreme heat." How does this comport with St. Thomas' carbon neutrality goal, and with the City's Comprehensive Plan's Resilience and Urban Design goals?

4) Cover Types: UST says it will remove 76 mature trees to accommodate the complex, and that it will plant 50 new trees around the area. Also, "...St. Thomas has plans for at least 26 trees to be planted elsewhere on campus, outside of the EAW site area..." We heard at the 7/12 meeting from the project consultant that St. Thomas is "committed" to replacing the lost trees, one-for-one. New trees will take decades to become true replacements for the ones to be removed, which seems antithetical to carbon neutrality and Comprehensive Plan

goals. How can this be a reasonable answer to the EAW question? Also, “has plans for” and is “committed to” are not very reassuring. This seems to leave room for St. Thomas to change its mind. Who holds them accountable to their plans and commitments? How does this response support the 2040 Comprehensive Plan Urban Design goals (promote high-quality urban design that supports…a healthy environment, and enhances the public realm; encouraging … private landowners…to create and maintain privately owned public space (POPS) and green infrastructure…)?

It seems convenient for UST to say it will put other trees elsewhere, just not on the South Campus site. Why would replacing the lost 26 trees to be placed outside of the EAW area be counted as a mitigation for purposes of this EAW? In fact, if UST wants to use the other parts of its campus to take up slack on any issue, doesn't that argue for a broader EIS?

5) Land Use: Saint Paul has not yet adopted the new rules of the MRCCA. I am sure the City Planning Commission is aware of the inconsistent application of the CA-River Towns and Crossings District. Why does UST property receive this designation while the Saint Paul Seminary remains zoned a River Neighborhood? Furthermore, the property bordered by Cretin, Goodrich, Mississippi River Boulevard, Exeter, and Otis Avenues is located entirely within the MRCCA and is designated further as a Primary Conservation Area (PCA) under three categories: Bluff Impact Zone, Significant Existing Vegetative Stands, and Unstable Soils and Bedrock. The PCA designation is meant “to ensure that they are given priority consideration for protection.” All these considerations which have been in effect for almost 50 years by Governor’s Executive Order 79-19 appear to be ignored in the EAW.

   I understand that the City does not count parapets and rooftop mechanical equipment toward the overall building height. What I don’t understand is why that is allowable. Could it be that difficult to design the building to completely meets height limits?

6) Contamination/Hazardous Materials/Wastes: UST says it "may install a diesel generator to provide backup power to the arena as well as up to four additional future generators to feed the [school's] MicroGrid." Why would this be necessary? Instead of backup generators, what about batteries to store the power gained from the solar panels on various buildings on campus? Seems that burning diesel would be a step backward in terms of carbon neutrality and of the City’s 2040 Comprehensive Plan.

7) Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features): The area could be habitat for the endangered Rusty Patched Bumblebee (which is the Minnesota State Bee), according to the EAW, but isn't because it is already "disturbed." However, there are efforts all around us to restore habitat. How is this response aligned with the City’s 2040 Comprehensive Plan Urban Design goals, especially around promoting ‘high quality urban design that supports …a healthy environment and enhances the public realm’ and ‘visible green infrastructure landscape features, such as rain gardens…?’

8) Visual: The EAW says the project 'will conform with the City's regulations for building height…Adverse visual impacts are not anticipated." Who defines what is "adverse?" What happens if they occur? Who monitors? Who corrects?

9) Air - Dust and Odors: The EAW says, "The construction and operation of the project are not expected to generate objectionable odors." Objectionable by whose standards? Is anyone asking the people who live around the area? Is anyone planning how to monitor during construction and after the building opens? What if there are problems? Who is empowered take complaints or required to take some kind of action?

10) Greenhouse Gas Emissions/Carbon Footprint: The EAW lists "design strategies and other sustainability measures being considered for the proposed development to reduce emissions." *Considered*? Maybe considered, then tossed aside? Who is responsible for monitoring and ongoing mitigation/enforcement if there are problems?

11) Noise: In the Operational Noise section, the EAW says "The proposed project will potentially contribute to the existing campus noise. Further noise evaluation will be completed as design progresses..." This response seems inadequate. It supports what many neighbors fear because we've experienced it before: build first and worry about noise later - and only if someone brings it up. Later in that paragraph, the EAW says, "If the facility exceeds noise regulations, the project proposer will work with the city to identify potential mitigation options." Those of us who've lived here a long time recall when the Frey Science Building went operational. Switching on the massive exhaust fans on top of the building produced unbearably loud noise. It wasn't until more than a year after neighbors lodged numerous complained that the school finally added sound muffling to the fans. The EAW has also overlooked the noise generated by additional traffic generated by the project. Residents of the neighborhood have already experienced significant traffic noise increases resulting from the Grand/Cretin intersection modification and from the Highland Bridge development.

    We get noise – we live in an urban area. Please explain how so much additional noise generated by one neighbor must be the price the rest of us pay, particularly when the project seems to be incongruent with St Thomas' and the City's stated goals and values (carbon neutrality, 2040 Comprehensive Plan Urban Design, Resiliency, and Community Health focus areas).

12) Transportation: - The EAW says that "Maximum basketball events may occur one to two times per year. Maximum hockey events are expected to occur two to four times per year..." One wonders - why build at all? As we've heard from St. Thomas' own staff, "you don't build for Easter Sunday." However, we've also heard from St. Thomas staff that they plan to market use of the complex all year round, yet the environmental impact of those events - whatever they may be - are not included in this EAW, which makes it incomplete. Why not make some assumptions and put those into the calculations?

The Traffic Study's traffic volume data depends on traffic counts for March 30, 2023, just before a major snowstorm (March 31-April 1). Given how that storm was forecasted and hyped, we believe the volume of traffic was significantly lower than normal. The Parking study also discounted the snowstorm as a factor. I strongly suggest updated parking and traffic studies to truly reflect what is/will happen.

Continuing on the topic of the traffic study, it includes mention of putting a surface lot on Mississippi River Boulevard as a way to mitigate parking issues. This cannot be acceptable! Certainly THAT would trigger more scrutiny because of the MRCC.

13) Cumulative Potential Effects: The EAW asks UST to "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..." The EAW says "The University of St. Thomas does not have any board approved plans for new building construction at the Saint Paul campus. While future development of the University is indicated by historic and forecasted trends, there is not sufficiently detailed information about any future building projects to contribute to the understanding of the cumulative potential effects." Neighbors have heard this numerous times over the years, always some version of "there are no plans." UST has stated that it is in an arms race to attract students from the dwindling age cohort, and that moving to Division 1 athletics is a marketing strategy. The EAW should include some assumptions about future development since even UST indicates it will occur. They have already said development of the East and West blocks of Grand Avenue is next. The constant drip-drip-drip of development while hiding behind statements about not having any "board approved plans" insults the neighborhood and the City. Why not treat all of St. Thomas as it really is – a single site - and require a more thorough study of the impacts of its building program with a comprehensive Environmental Impact Statement?

As a final note, while I understand that a public meeting on the St. Thomas EAW was not required, it did not seem as though the 7/12/23 had much substance. In fact, it seemed designed less to illuminate the neighbors and other interested parties, and more to stifle disagreement. More a check off on the to-do list than true engagement. St. Paul claims to be proud of citizen involvement, but failed miserably in this case.

Meg Grove
2198 Goodrich Avenue
St. Paul MN 55105
(651)295-8296
Meg.grove@hotmail.com

Josh Williams

From: Joan Haan <jmbhaan@outlook.com>
Sent: Thursday, July 27, 2023 9:15 PM
To: *CI-StPaul_StThomasArena_EAW
Subject: Hockey/basketball arena

Dear Mr. Williams

I live at 2249 Summit Ave. I am a biker and walker and driver from my home to other locations. What I want is what is best for the community and my neighborhood. I appreciate UST's desire to be a good neighbor and share the arena as a resource beyond UST events. UST is part of our community as are the residents. I believe safety, environment, and traffic are mutual concerns.

I recently had a lengthy conversation with Jerome Benner, the new neighborhood liaison. He is interested in finding ways to make traffic and routing more amiable/ less negatively impacting neighborhoods.
Some ideas:

- Signage, cones, directing traffic
- Encouraging walking, biking, carpooling as pro environmental action
- Email Schedule of events in advance to neighbors so we can plan accordingly – text alerts for those who opt in . . ..
- Expansion (higher levels) of the exiting Anderson parking structure – that will need variance from the city and may be the best solution for additional parking vs. neighborhood parking and traffic.

Please take these and other creative ideas into consideration. We neighbors want safe access to our neighborhood and for those who visit for sporting events. We love our neighborhood and want to maintain that beauty of this place where we are so privileged to live!

Thank you,
Joan Haan

Sent from Mail for Windows

Josh Williams

From: Doua Yang
Sent: Monday, July 24, 2023 1:16 PM
To: Laura Halferty
Cc: *CI-StPaul_StThomasArena_EAW
Subject: RE: New arena at St. Thomas

Hi Laura,

We appreciate your email. Both CM Jalali and I were at the public meeting two weeks ago at UST. We were able to listen and learn about neighbor concerns and comments. Parking concerns is consistent with what we've heard in months prior, and we will continue to work with UST and City staff to find the best solutions.

I have included Josh Williams from City of Saint Paul to ensure your comment is recorded in the EAW public comment period.

Thank you,

Doua Yang-Hernandez
Legislative Aide
Councilmember Mitra Jalali, Ward 4
City of Saint Paul
651.266.8641
www.StPaul.gov

From: Laura Halferty <halfpint1763@gmail.com>
Sent: Monday, July 24, 2023 11:24 AM
To: #CI-StPaul_Ward4 <Ward4@ci.stpaul.mn.us>
Subject: New arena at St. Thomas

Hi Mitra,
I am emailing you regarding the planned arena at Saint Thomas University. I have lived in the neighborhood for about 15 years and have been supportive of Saint Thomas, it's variance requests, and it's building projects. However, I am very concerned that the planning for the new hockey arena does not adequately address parking. I feel very strongly that parking solutions need to be identified and approved before the arena is built. We already have parking issues in the neighborhood and the city has not consistently enforced the permits in place to alleviate the dearth of parking.

In addition, existing traffic on Cretin has resulted in numerous accidents and fatalities. Additional traffic (especially at high speeds) on river road is concerning as well given all the bicycle and foot traffic. With a little planning and funding, the arena project can be a success for both Saint Thomas and the neighborhood. Thank you for your help in making sure this new development is holistically planned.

Sincerely,

Laura Halferty
2187 Summit Ave.
St. Paul, MN 55105
612–508– 6376

Sent from my iPhone

VIRGINIA ANNE HOUSUM
2229 FAIRMOUNT AVENUE
SAINT PAUL, MINNESOTA 55105

July 24, 2023

TO THE CITY OF SAINT PAUL PLANNING OFFICE:

As a neighbor who will be immediately affected by the Saint Thomas multipurpose arena to be built on the south campus of the University of Saint Thomas ("UST"), I wish to comment in response to the environmental assessment worksheet ("EAW") prepared by Kimley Horn, as a consultant to UST. Preliminarily, I would like to mention that even though I have attended three meetings concerning the proposed arena, many things in the EAW were shocking to me when I read it, and have left me with the impression that the extent of the damage the arena will do to my neighborhood in Macalester Groveland is far greater than was represented by UST to the attendees at public meetings. Unlike UST, most of the attendees at the meetings have been Saint Paul taxpayers. For that reason, I think our comments should be given great weight, as UST again endeavours to impose on its neighbors.

Flawed process

As several people have pointed out at the public meetings, UST failed to engage with its neighbors effectively and has pushed forward with its proposed arena, without taking into account its effect on the area. The attendance at the public meetings has been sparse, and calls to neighbors has disclosed that many of them are unaware of the arena proposal. This is occurring despite UST stating explicitly at the June 12 meeting that the quality of the neighborhood is a valuable amenity to UST's efforts to recruit new students. I am certain that had UST engaged in a real public process, neighbors would have developed ideas to mitigate the damage the arena will cause to the neighborhood if it is built as disclosed in the EAW. Thus, the very quality of the neighborhood benefitting UST is being jeopardized by UST's failure to engage appropriately with its neighbors. As I have tried to talk to my neighbors about the arena, many of them have not heard of the proposal or, if they have heard of it, believe that UST is a neighborhood bully who gets its way, no matter what. The arena proposal could have been improved with neighborhood input. In particular, the traffic study contains many errors and people who are in the neighborhood day in, day out (in contrast to Kimley Horn's one day traffic count on a snowy Saturday in March) could have told Kimley Horn of the real traffic situation. Instead, UST has embarked on a premature EAW, and forced those of its neighbors who have learned of the arena proposal to respond to it, without having the opportunity to provide their input. So much for UST trying to be a good neighbor.

Uncertainties expressed in EAW create concerns about the real extent of the project

The EAW repeatedly references that UST "is considering" ways to improve the project. *See* for example, the description of landscaping to be used to limit adverse climate effects (page 7); UST "is investigating" ways to minimize tree removals (page 9); and the lengthy descriptions of parking mitigation strategies (pages 34 through 40). Implicit in these sections is the only

conclusion that a reader can draw: UST is rushing through this EAW process without making commitments on exactly what it is going to do. The whole EAW is premised on vague promises of improvements which may or may not come to fruition. The neighborhood's experience with UST has been that it often does not follow through on ambiguous aspirational goals. As a result, neighbors will not be satisfied unless actual detailed and enforceable commitments by UST are put in writing.

Errors and/or misrepresentations in EAW

The EAW contains representations which are inconsistent with information provided orally by UST at the public meetings. These inconsistencies cause me to doubt the entire EAW process, because, as noted above, it is not possible at this time, given the EAW, to understand fully and completely how extensive the damage will be in the neighborhood from the arena. Among others, the misrepresentations include the following:

1. The EAW states that "no impacts to fish, wildlife, plant communities, rare features, or ecosystems are anticipated due to the lack of suitable wildlife habitat….no impacts to the nearby Mississippi River are expected" (EAW, page 27). Somehow, Kimley Horn failed to recognize that the Mississippi River is the most important flyway for migratory birds in the country and is protected by international treaties. The decline in bird populations has been documented over and over again over the last 20 years. Birds do not simply fly over the river; but use nearby areas as resting spots and places to replenish themselves. Anyone who has spent any time in the immediate area of the river could explain that the number of migrating birds changes during the spring and fall. Of great importance, the implications for bird populations easily could be mitigated if UST retained an appropriate consultant familiar with bird populations and mitigation methods, such as bird friendly glass in the arena, and care and attention given to lighting in the arena, which could could reduce bird collisions with the building. The building should not be permitted to go forward without a commitment by UST to undertake ALL necessary steps to mitigate adverse effects on bird populations.

2. UST has stated at public meetings that approximately 75 trees on the site will be replaced by the arena, but that these are young, small trees in parking lots. However, a visual inventory of the site disclosed that there are dozens of mature trees, including trees approximately 50 years old, which would be lost. UST has pledged that a very large cottonwood tree on the west side of the site near the top of the ravine going down to the Mississippi River will be saved, but there are large trees in the area between the seminary and Cretin Hall which will be lost as well. It is incumbent on UST to agree in writing to replace the trees which will be destroyed, on a ratio of at

least 4:1, to compensate for the loss of the air filtration and carbon sequestration trees provide. Further, the new trees should be planted on the south campus, where the greatest damage from the new arena is going to occur.

3. Of great importance in the MacGroveland neighborhood and Kings Maplewood subarea, UST has explicitly stated at public meetings that the wooded area at the northeast corner of Goodrich Avenue and Mississippi River Boulevard would **not** be affected by the construction of the arena. However, in the EAW, in a discussion on mitigation for lost parking from the project, Kimley Horn recommends construction of a surface parking lot in the southwest quadrant adjacent to Mississippi River Boulevard (page 36). This parklike setting contains over two dozen mature trees, and should be viewed as a public amenity, as it is used every day, all year round, by many residents of the City of Saint Paul. UST MUST commit in writing to leave this parcel, of approximately 5 acres, in the same condition it is now, and to solve the parking problem of its own making elsewhere. The city must bear in mind that UST owns the entire two block area bounded by Summit Avenue, Cleveland Avenue, Grand Avenue, and Cretin Avenue. It has a small parking lot on the northwest corner of Grand and Cleveland. UST can solve its parking problem by building a structure on that site or elsewhere on that block, but the approximate five acre plot at Goodrich and Mississippi River Boulevard must be off the table now and in the future. As indicated above, only a detailed and enforceable written instrument will satisfy this requirement.

Traffic implications

The tenor of the EAW is addressed to the laudable goal of minimizing collisions between pedestrians and cars. But that is not the only traffic issue which must be addressed. Even without pedestrian accidents, the arena project is going to have a very significant deleterious effect on traffic along Cretin Avenue, especially at the intersections with Goodrich, Fairmount, Princeton, and Sargent Avenues, north of St Clair. The defects in the EAW I have identified in the discussion of traffic implications of the arena include the following:

1. The EAW is fatally flawed in failing to consider the future growth in traffic on Cretin Avenue from the continuing buildout of the Highland Bridge development. Beyond the issue of the number of crashes discussed by the EAW, Cretin Avenue has become a crowded speedway from Highland Bridge to I-94. Mitigation is desperately needed, before there are pedestrian collisions along Cretin Avenue. At the very least, a pedestrian activated blinking light or roundabout will need to be installed at Goodrich and Cretin. Other traffic calming will also be needed, perhaps by finding a way to narrow Cretin Avenue.

2. I travel north on Cretin Avenue and turn east on Marshall about three mornings a week, between 7 AM and 9 AM. Notwithstanding the conclusion in the EAW that the queues on westbound Marshall Avenue only develop in the afternoon (page 10), cars are usually backed up on westbound Marshall Avenue for about two blocks in the morning. The EAW does not even consider the traffic impact westbound at that time of day.

3. The traffic study done on March 31, during a snowstorm, and on Saturday April 1 (page 11) is <u>not</u> representative of traffic on Cretin Avenue. Traffic always starts later on Saturdays, and after a snowstorm was doubtless delayed even longer. This appears to be a material skewing of the data to back into UST's desired conclusion that the parking problem it is foisting onto its neighbors is not significant. However, there are a significant number of drivers speeding up and down Cretin Avenue at all times of the day and night, and attention to pedestrian crosswalks is inconsistent. The City should not rely on the shallow analysis prepared by Kimley Horn in the EAW, but should undertake its own traffic study and develop a meaningful plan to reduce traffic on Cretin, or effectuate calming of the traffic on that arterial.

4. The EAW reports a loss of 264 parking spaces on the UST campus from the arena project, without taking into account significant events, like commencement, basketball games, and hockey games. The EAW fails to mention that UST already has asked the city to eliminate the parking spaces along the east side of Cretin Avenue north of Summit Avenue, so the actual shortfall in spaces is probably closer to 285. This is another example of UST holding back crucial information needed for a meaningful EAW. The non-event solutions proposed by UST will be difficult to measure, and UST needs to develop not only accountability for these proposed steps, <u>but a definite plan for what it will do in a Plan B if those steps fail</u>. UST needs to solve its parking problem on its own property, and not by creating congestion and inconvenience for its neighbors. <u>At the very least, in those neighboring areas where parking is only by permits issued to residents, the hours of parking restrictions must be extended throughout the times of anticipated events, i.e. probably to midnight</u>.

5. The assumptions made in the EAW about parking demand during events (a shortfall of up to 740 spaces), as well as the number of events, are unrealistic (EAW, page 28). In addition, the projections in the EAW about the time it will take to exit the Anderson Parking Facility ("APF") are inconsistent with my experience at other parking facilities in the city. I feel certain that when the APF is full, it will take over an hour to vacate the APF, especially in light of the traffic light at Cretin and Grand

Avenues, and the likelihood of pedestrians crossing both streets at the exact same time.

Conclusions

The inadequate effort made by UST to inform its neighbors of the intended multiuse facility, and the meaningless "public" process to date alone indicate the inadequacy of the EAW. UST has wasted an opportunity to engage its neighbors in developing creative solutions to the consequences of its decision to proceed with a new multiuse facility on the south campus. I doubt that anyone contests the right of UST to build a new facility on the campus, but UST should not be permitted to encumber the neighborhood unnecessarily, as it proposes. Throughout the EAW, UST minimizes the numerous detrimental impacts the arena will have in the area, only some of which have been addressed in this comment. UST should convene a group of neighbors who will work with it to help it find meaningful mitigation opportunities. In the EAW, Kimley Horn fails to suggest mitigation strategies which do anything other than dump the problems which will be created by the arena on UST's immediate neighbors. With respect to the heavily impacted intersection of Goodrich and Cretin, all that it offers is a one sentence comment: "The number of pedestrian crossings in this location will be heavily dependent on where event patrons are parking" (page 33). This alone proves the inadequacy of the EAW.

As a resident of Saint Paul, I expect the City to require UST to engage with its neighbors to provide meaningful opportunities for mitigation, especially on the issues of retention of the open space at the northwest corner of Goodrich and Mississippi River Boulevard, effects on the Mississippi River flyway, parking, and the dangerous conditions on Cretin and Cleveland Avenues. To allow an entity which does not contribute to the City by paying taxes to impose on the City as suggested by the self-serving EAW submitted by UST does a serious disservice to the body politic. UST needs to negotiate in good faith with representatives of its neighbors and agree in writing to enforceable conditions to the construction of a multiuse facility. The EAW should be withdrawn until such a process is completed.

Respectfully submitted,

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Josh Williams

From: Daniel Kennedy <dan@lakestreetlaw.com>
Sent: Wednesday, July 26, 2023 5:43 PM
To: *CI-StPaul_StThomasArena_EAW
Cc: Jerome Benner; mgcc@macgrove.org; Leah Timberlake Sullivan
Subject: Comments on St. Thomas Multipurpose Arena EAW
Attachments: EAW Analysis.pdf

Dear Mr. Williams,

Attached please find my comments on the Environmental Assessment Worksheet for the Lee and Penny Anderson Arena at the University of St. Thomas. Please e-mail me with any questions.

Sincerely,

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University of St. Thomas

Lee and Penny Anderson Multipurpose Arena

Analysis of St. Thomas's Environmental Assessment Worksheet

Prepared By:
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This analysis of the Environmental Assessment Worksheet ("EAW") issued in conjunction with the planning for the Lee and Penny Anderson Multipurpose Arena examines the EAW's assumptions, specifies topics that the EAW did not address, and concludes that the arena presents unacceptable changes in access, parking, and traffic flow. Acceptable alternatives exist for the identified problems with access and parking, but not for traffic flow. The analysis concludes that the arena would create unacceptable environmental impacts that are great enough that the construction of the arena should not be permitted as currently designed.

The placement of a sports arena in a residential neighborhood naturally raises questions about traffic, parking, access, and headlights. These are all addressed in this analysis.

A. Four Key Aspects of Arena Plan

1. The proposed site plan truncates the South Campus's main access route from Grand Avenue, so that 100% of traffic directly to the arena and 100% of the trucks and other vehicles driving to and from Grace Hall, O'Shaughnessy Science Hall, and Schoenecker Hall would be redirected from Cretin Avenue to Summit Avenue.
3. In addition to spectators' cars[1], the arena will be serviced by team buses, spectator buses, vending supply trucks, and dumpster haulers; their sole access to the arena would be to travel on Summit Avenue. All of those vehicles weigh more than 10,000 pounds. Summit Avenue is a registered historic district and a designated parkway with a maximum vehicle weight of 9,000 pounds.
2. St. Thomas is not adding any parking for this 5,500-seat arena. Instead, the arena will displace 264 parking stalls without replacing any of them. The EAW's solution is that thousands of spectators will park on surrounding residential streets.
4. The EAW acknowledges that the level of service for traffic on Cretin Avenue would not be acceptable at multiple intersections during arena events.

B. Requirements for a 5,500-seat arena

Any analysis of the environmental impact of a Division I sports arena should discuss the basic requirements for such an arena to function successfully. Without including the totality of those who need to access the arena, any discussion would be misleading and could vastly understate the impact on the arena's environment. This is a fundamental flaw of the EAW, which does not include such a discussion. Using comparisons to other arenas (adjusted for different seating capacities, where appropriate), the nominal requirements for a 4,000-5,500 seat hockey and basketball arena would be as follows:

[1] The term "car" is meant to include other passenger vehicles such as SUVs and light trucks.

	# per game (range of 3,000-5,500 spectators)	Gross Vehicle Weight
Bus for visiting team*	1	20,000
Buses for fans from visiting team, youth groups, etc. (assume 500 fans, coach capacity of 50, school bus capacity is 65)	4-11	20,000
Food truck (snack bar: hot dogs, popcorn, etc.) (Sysco/US Foods)*	1	30,000
Beverage vendor truck (Coca-Cola/Pepsi)*	1	22,000
Franchise food truck (e.g., Subway, Domino's)*	4	15,000
Dumpster hauler, trash*	1	28,000
Dumpster hauler, recycling*	1	28,000
Cars (using EAW's 2.75 fans per car)	900-1,650	6,000 or less
Pedestrians (assume 500 students from north campus, remainder walking from cars parking in neighborhood	2,750-5,000	N/A

* This number will apply to all games, regardless of attendance.

It is important to note that a 5,500-seat arena does not cap attendance at 5,500 spectators. St. Thomas currently plays basketball in Schoenecker Arena, which has 5,000 seats. Attendance ranges as high as 6,500 spectators (presumably with many standing). EAW, App. D at 19.

Also significant is that "average attendance" and "typical schedule" figures in the EAW are based on past data, not upcoming schedules. For example, the St. Thomas men's hockey team hosted home games in 2022-23 against Michigan Tech, Bemidji State, Bowling Green, Northern Michigan, and Lake Superior. EAW, App. D at 22. None of these teams would have a sizable fan base in the Twin Cities. In 2023-24, the schedule includes home games against St. Cloud State, Minnesota State-Mankato, and University of Minnesota-Duluth, each closer to St. Paul and with established hockey programs. Attendance numbers will surely grow next season.

C. Compounding Traffic

The site plan calls for changes in the traffic patterns inside the South Campus, most notably the elimination of direct access from Cretin Avenue (at Grand Avenue) to every part of the South Campus other than Owens Science Hall and Anderson Parking Ramp. Other buildings on the South Campus (Anderson Arena, Grace Hall, Biz Refectory, Brady Education Center, O'Shaughnessy Science Hall, and the new

Schoenecker Hall) will have their access to Grand Avenue eliminated. Access will instead be through the Summit Entrance. All cars, delivery vans, service vehicles, garbage trucks, and other vehicles that entered from Cretin would be required to drive down Summit Avenue and into the Summit Entrance.

Fig. 1: Grace Hall

Fig. 2: O'Shaughnessy Science Hall and Schoenecker Hall

D. Access Problems

Buses: The EAW does not discuss bus access, but St. Thomas officials have indicated that buses accessing the arena will drive west on Summit Avenue to the existing entrance of the St. Paul Seminary ("Summit Entrance"), then drive south through the Seminary to a new road that will bring them past the west side of the arena to a south entrance to the arena, where passengers will unload. The distance from the arena to Cretin Avenue is approximately 250 feet. Instead, the buses will drive 0.5 miles to Summit Avenue and then east to Cretin Avenue.

Problems:
Parking: The site plan includes space for one or two buses to park next to the arena. That is not sufficient for the number of team and fan buses that will need to park. Because they will not be able to park at the arena, they will have to exit the South Campus, leaving out the Summit Entrance and re-entering Summit Avenue. Many will likely park (illegally, due to full-time permit parking restrictions) on westbound Summit Avenue west of the median break to the Summit Entrance. There — or any other place in the neighborhood they can find parking — they will idle to keep the bus warm during the winter hockey and basketball games. This would be true no matter where fans loaded and unloaded, because the site plan lacks bus parking.

Access: Buses will enter the South Campus to unload, leave due to lack of parking, re-enter to load, and leave again with passengers. For each game, buses will traverse Summit Avenue four times. With 5 to 12 total buses required for each game, the burden on Summit Avenue will be tremendous: noise, exhaust, and the danger of having up to 48 total bus trips on Summit in just a few hours. This would be repeated game after game. Even if the burden were one fourth this much, it would be far too great.

Fig. 3: Buses illegally driving west on Summit Avenue, then through Summit Entrance. Photo taken from residential property.

Parkway Restrictions: The St. Paul City Council has designated Summit Avenue a "parkway." Vehicles driving on parkways may not exceed 9,000 pounds. St. Paul Leg. Code §§145.02, 170.07. *All* of the various trucks and buses accessing the arena

through the Summit Entrance vastly exceed the parkway limit of 9,000 pounds. Their use of the parkway is contrary to the City's aim to achieve "the maximum enjoyment by all persons and protect[] the natural resources therein." St. Paul Leg. Code §170.10.

Headlight Effect: Because basketball and hockey are winter sports, the headlights of trucks and buses leaving through the Summit Entrance will be on and aimed straight at residential properties on the north side of Summit Avenue. Below is an illustration of the effects of the headlights (taken from south side of Summit Avenue at Summit Entrance using headlights from a 10-year-old Ford sedan):

Fig. 4. Headlights on house (low beams)

Fig. 5. Headlights on house (high beams)

The effect of up to 24 buses leaving the Summit Entrance *per game* would add to the impact described above. Adding the food, beverage, trash and recycling trucks would further compound the effect. The site plan also includes 38 parking spaces for cars, meaning within a few hours for every game, more than 60 vehicles would aim their headlights directly across the street at residential properties (the figure shows the house directly across from the Summit Entrance, but as the vehicles turn onto Summit Avenue, their light would be shared with the neighboring residences as well).

Trucks: The site plan shows that the sole access to the arena is through the Summit Entrance, meaning that food vending trucks (Sysco/US Foods), franchise food supply trucks (Subway/Domino's), beverage trucks (Coca-Cola/Pepsi, perhaps beer suppliers), and dumpster haulers for trash and recycling would all travel west on Summit Avenue past houses, enter through the Summit Entrance, drive through the Seminary and around the arena, then exit in the reverse direction, back to Summit and past the same houses. At approximately eight vehicles per game, that constitutes 16 trips down Summit Avenue.

Other Uses: The EAW focuses on Division I sporting events, but St. Thomas intends to use the arena for far more than that. University convocations and commencements, high school and youth sports, and conventions are also planned for the arena. EAW,

Appendix D, at 2. Those events will expand the six-month basketball/hockey schedule (late September to early March) to fill the calendar year. The conventions alone would bring higher truck traffic to Summit Avenue than even the largest of sporting events due to the number of individual presenters who will be setting up booths and displays.

Parkway Restrictions: All of the trucks needed to service the arena far exceed the 9,000 pound-limit set forth in the St. Paul Legislative Code.

Headlight Effect: All of the trucks would produce the same headlight effect, adding 8 more trips to the 24 times that buses leave the Summit Entrance - *per game*.

Cars: The EAW states that 38 surface parking spaces will be available next to the arena. Their only access will be through the Summit Entrance. They are permitted to drive on the parkway, but that does not diminish the fact that 38 vehicles will drive each way to the arena, adding 38 pairs of headlights to the headlight effect and 76 total trips past the houses on Summit Avenue - *per game*.

Available Alternative:
To comply with the St. Paul Legislative Code, St. Thomas could easily route vehicles bound for the South Campus through the Cretin/Grand entrance that has been the main entrance to the Seminary since its founding. Unlike Summit Avenue, parallel Grand Avenue *is* a truck route. St. Paul Leg. Code §146.04. The Grand Entrance is just 250 feet from the arena. The Summit Entrance could be limited to access to the St. Paul Seminary.

E. Parking Problems

Currently, St. Thomas does not provide nearly enough off-street parking for its needs. The spill-over effect is great, with the on-street parking surrounding the campus fully occupied at most hours of the day. The university's tradition of spilling over its geographical limits has spawned permit-parking zones adjacent to campus. As students and staff park outside those zones, the ring of permit-parking zones has increased in diameter around the campus. St. Thomas's modest supply of parking simply does not meet its current needs due to commuting students and staff. This parking shortage will increase, as St. Thomas administrators have indicated a desire to increase total enrollment by 10% in the upcoming years.

In proposing its arena with a capacity of 5,500, St. Thomas does not plan to add any off-street parking to its supply. Instead, it eliminates 264 spaces right at the arena site where they would be most needed. EAW at 35.

The EAW's solution is to have its spectators park in the surrounding residential neighborhood. A map of the permit parking zones shows the weaknesses of the permit parking zones, some of which require a permit only on weekdays. It is unlikely, however, that those zones would remain unchanged after spectators consistently fill

those streets with cars at the same times (Friday and Saturday nights) when the residents may wish to have visitors who need on-street parking. A restriction of the permit parking zones would leave St. Thomas with an arena that cannot rely on nearby on-street parking.

Available Alternative:
To provide parking for its arena, St. Thomas could expand its Anderson Parking Ramp laterally southward along Cretin Avenue. This would impact its existing softball and soccer fields, but softball is moving to the Highland Bridge development (the former Ford plant) and soccer games can be played on the football stadium as is done at many other post-secondary institutions such as nearby Macalester College. St. Thomas has the available land to solve the parking shortage it plans to create, rather than to thrust it onto the neighborhood and inspire more restrictive permit parking zones.

F. Traffic Problems

Cars conflicting with trucks. The food, beverage, trash, and other trucks that service the arena would not be arriving or departing at the same time as spectator vehicles.

Cars conflicting with buses. Visiting team buses would arrive earlier than spectators and would not conflict. Spectator buses could enter through the Grand Entrance, but would not enter the Anderson Parking Ramp and would be diverted around the arena to the south side.

Cars conflicting with pedestrians. If the EAW is correct, students residing on campus will walk to the arena, crossing Cretin Avenue at the same time that arena traffic is at its highest before and after games. The EAW discusses extended signals for arena-bound traffic and traffic officers to halt traffic, but arena traffic will run north-south at the same that students will need to travel east-west across Cretin. This inherent and dangerous conflict could be solved by a pedestrian tunnel underneath Cretin Avenue, but has no other obvious solution if an arena is built.

Cars conflicting with cars. The EAW's solution to pre-game and post-game traffic issues is to have non-arena traffic stop so that arena traffic may swiftly flow onto Cretin and Grand Avenues. This would be accomplished by altering the signal patterns, such as adding a dedicated left-turn light to northbound Cretin and keeping the light green for traffic leaving the Anderson Parking Ramp; this could be done at Grand Avenue and Summit Avenue to allow cars to leave the South Campus unhindered. The result would be that non-arena traffic on Summit, Grand, and Cretin would be halted or slowed for a period of 20-30 minutes before and after each game. The EAW admits that the level of service (LOS) at nearby intersections will be F (the lowest rating), and that F is an unacceptable LOS. Specifically, the EAW's traffic study that the LOS will go from its current A to an F at Cretin and Goodrich, from B to F at Cretin and Grand, and from A to D at Cretin and Summit.

Cars conflicting with bicycles. The EAW mentions bicycle options several times. Because basketball and hockey are winter sports, the EAW is misguided in relying on any spectators arriving by bicycle. The site plan does not include any bicycle parking.

Public Transportation: The EAW identifies three public transit options for the arena (Routes 21, 63, and 87). The only consistent service to the University of St. Thomas in 2024 will be Route 63 on Grand Avenue. Route 87 on Cleveland Avenue has service only once per hour on weekends, and Route 21 will no longer run from Lake Street to the St. Thomas campus after it is replaced by the B Line rapid transit service. Consistent public transit will only be possible from the east down Grand Avenue but buses will not be able to travel as scheduled because traffic will be halted for cars driving to or from the arena.

No Available Alternative:
Unlike the access and parking issues discussed above, there is no reasonable way that thousands of vehicles can travel to and from the arena without creating significant conflicts with existing traffic patterns. If this were a once-a-year phenomenon such as graduation, the occasional conflict could be acceptable. St. Thomas proposes to hold numerous events each week, and St. Thomas acknowledges that the results will produce an unacceptable level of service on the surrounding streets.
St. Thomas has not committed to implement any mitigation strategy, and the few that are discussed in the EAW (e.g., bicycle ridership in winter, city bus service) would not have a significant impact.

G. Impact on Surrounding Historic District

The portion of Summit Avenue adjacent to St. Thomas is part of the Summit Avenue West Heritage Preservation District, which is on the National Register of Historic Places. Eight of the eleven houses on Summit Avenue north of the South Campus, and five of their garages, were identified as contributing structures to the historic district in the historic district registration form.

As noted above, Summit Avenue itself is one of 14 parkways is the City of St. Paul listed in St. Paul Legislative Code, Section 145.02, entitled “Parkways where trucks are prohibited.” Summit Avenue originally had a 100-foot right of way, but the property owners on both sides of Summit Avenue donated 50 feet of their frontage from Lexington Parkway to the Mississippi River to create a 200-foot right of way and allow space for the medians that exist today. It can perhaps be assumed that the donors did not wish to bring truck traffic 50 feet closer to the homes.

At the same time that St. Thomas is planning to send dozens of buses and trucks into a historic district, the university plans to demolish Cretin Hall to create space for an arena. Architect Cass Gilbert, who designed three state capitals (including Minnesota’s), the U.S. Supreme Court building, and other notable structures, designed

three residence halls for the St. Paul Seminary: Grace Hall, Loras Hall, and Cretin Hall. St. Thomas recently demolished Loras Hall to make way for Schoenecker Hall, currently under construction. Cretin Hall was erected in 1894 and transferred in 1987 to St. Thomas for use as a dormitory. It houses 90 students on five levels. The EAW identifies Cretin Hall as eligible for nomination as a historic structure.

Conclusion

The EAW demonstrates that the Anderson arena as planned would have a significant negative effect on the South Campus's environment. The access routes have been designed without consideration for the statutory vehicular weight limitations of Summit Avenue, the planned use of an historic district for all heavy vehicles includes not just the arena but also other major buildings on campus, and vehicle headlights from a dozens of trucks, buses, and cars would have a negatively impact neighboring residential properties. The fact that St. Thomas lacks current capacity yet intends to eliminate 264 spaces rather than increase its off-street parking supply to meet the new demand will inevitably thrust the university's parking problem onto the surrounding residents. The degradation of the traffic level of services from A and B to D and F will significantly hinder non-arena traffic before and after games. While St. Thomas may perceive that an on-campus arena will be a benefit to the university, the negative environmental effects of the arena proposal described in the EAW greatly outweigh that benefit.

Josh Williams

From: Wellens, Ann <AWellens@Taftlaw.com>
Sent: Thursday, July 27, 2023 3:08 PM
To: *CI-StPaul_StThomasArena_EAW
Cc: Manderscheid, Marc
Subject: Comments on the Environmental Assessment Worksheet Dated June 2023, Concerning the Proposed University of St. Thomas Multipurpose Arena - Sent on behalf of Marc J Manderscheid
Attachments: Comments on the Environmental Assessment Worksheet Dated June 2023, Concerning the Proposed University of St. Thomas Multipurpose Arena.pdf

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COMMENTS ON THE ENVIRONMENTAL ASSESSMENT WORKSHEET DATED JUNE 2023, CONCERNING THE PROPOSED UNIVERSITY OF ST. THOMAS MULTIPURPOSE ARENA

Submitted by Marc J Manderscheid

I. THE CITY'S EAW FAILS TO PROPERLY DEFINE THE "PROJECT" AND EVEN TO CONSIDER "CUMULATIVE IMPACT" AND THE "CUMULATIVE POTENTIAL EFFECTS" OF ONGOING AND PROPOSED DEVELOPMENT ON THE UNIVERSITY'S SOUTH CAMPUS

The June 2023 St. Thomas EAW prepared on behalf of the City of Saint Paul violates Minnesota law by improperly defining the proposed "project" and in failing to properly consider the "cumulative potential effects" of the connected actions and phased actions which are a part of the University's redevelopment of its South Campus.

The purpose of an Environmental Assessment Worksheet ("EAW") is to provide the information needed to properly assess the environmental impact of a proposed project, and to determine whether a more detailed Environmental Impact Statement ("EIS") is required under Minnesota law. Minn. R. 4410.1000, subp. 1. Because the City's EAW improperly and incorrectly defines the "Project," the full information necessary to conduct a proper environmental review is necessarily missing, and the EAW fails in its essential purpose to provide accurate and relevant information concerning how the South Campus redevelopment clearly has the potential for significant environmental effects.

Background Information Concerning the Recent Ongoing Development of the University's South Campus and the New South Campus Quadrangle

In 1987, the University purchased approximately 23 acres of land and multiple older buildings from the St. Paul Seminary, which area is presently referred to as the South Campus. The University's initial new construction in the South Campus was to the southwest of the Cretin and Summit Avenues intersection, when it built the Frey Science and Engineering Center,

consisting of Owens Hall and O'Shaughnessy Hall. The second major new construction was of a parking ramp to replace parking spaces lost because the University constructed new buildings across the Summit and Cretin Avenue intersection on the North Campus.

> In February 2009, St. Thomas opened the Anderson Parking Facility, a five level, 724-space parking ramp, on the southwest corner of Cretin and Grand Avenue South. The ramp replaces parking spaces that will be lost in Lot H (402 spaces) to make way for the proposed Anderson Student Center and in Lot E (71 spaces) that were lost because of the construction of the Anderson Athletic and Recreation Complex.

See December 2009 EAW for Anderson Student Center and Anderson Athletic and Recreation Complex, p. 4; *see* pp. 21-22.

When the Anderson Parking Facility was built, the City's parking regulations required that parking for an athletic stadium must be located within 600 feet of the sports facility. The Anderson Parking Facility was located more than the required distance away from O'Shaughnessy Stadium, thus causing the University in April 2010 to request a modification of its Special Condition Use Permit, so that it could avoid being required to comply with the City's parking regulations. St. Thomas subsequently amended its development plans to include a total of 118 underground parking spaces in the Anderson Student Center.

The point of mentioning the above history is to make clear that the Anderson Parking Facility on the South Campus was never intended solely to supply parking spaces to the South Campus, but it was primarily constructed to serve as the principal parking facility for the buildings and facilities on the southwest corner of the North Campus, including the new Anderson Student Center. The Anderson Parking Facility has also been used to provide parking for events on the top floor of the Anderson Student Center, which has a large meeting and conference space with table seating for up to 794 persons and 860 seats auditorium style. This space is often rented to outside groups for meetings, conferences, and social events held on Friday and Saturday evenings.

Persons attending these events are directed by the University to park in the Anderson Parking Facility on the South Campus.

As far back as 2010, only one year after the Anderson Parking Facility opened, there was ongoing discussion between St. Thomas, the City, and the community about the desirability of adding an additional two floors to the Anderson Parking Facility, in order to meet the substantially increased parking demand caused by all of the new construction on the North Campus.

In 2015, the University constructed the multi-level Facilities and Design Center adjacent to the Anderson Parking Facility, facing the Grand Avenue extension.

In November 2016, the University's Board of Trustees unanimously approved a new 10-year Campus Master Plan, which it developed with the campus planning firm of Hastings + Chivetta. The Master Plan stated that future projects for the South Campus were to include a new 137,000 square foot science and engineering building on the north side of the Grand Avenue extension and adding two more levels on the top of the Anderson Parking Facility, which would require a height modification in the 1990 Special Condition Use Permit, which allows only a 60-foot building in that location. *See* November 2016 Campus Master Plan and Press Release describing the Plan.

In June, 2019, the University submitted to the City of St. Paul a "Site Plan Review Application" for a project which was described as "New Permanent Parking Lot West of Loras Hall." The application identified the Project architect as "Kimley-Horn" and the contractor as "Ryan Companies U.S., Inc." This project a "New permanent parking lot west of Loras Hall and second, alley repaving and garage removals along the west block alley." On the South Campus, the plan was to build a new 58-stall code-compliant parking lot, in the location now occupied by the Schoenecker Center, for a net parking gain of 38 parking spaces. This project was to start

construction in August, 2019, but was withdrawn shortly after the permit materials were submitted to the City.

The hasty withdrawing by the University of its proposal to increase surface parking spaces on the South Campus is explained by the University's announcement just a few months later that it would be constructing the Schoenecker Center, which would combine instruction in science, technology, engineering, arts, and math into one large new building. The Schoenecker Center, presently under construction, consists of a five level, 130,000 square foot structure connected by skyway to the existing Frey Engineering and Science complex. In addition to constructing the new building, the Schoenecker Center development includes replacing multiple surface parking lots on the north side of the Grand Avenue extension with a new "South Campus Quadrangle." This Quadrangle would replicate on the South Campus some of the same green space, landscaping and sidewalks now present on the several quads located on the North Campus. In order to construct the new Schoenecker Center and Quad, the University last year eliminated approximately 127 surface parking spaces. There is no parking in the new Schoenecker Center and the University has not replaced any of the 127 recently removed parking spaces.

The City's EAW Fails to Comply With the Mandatory Standards for EAW Preparation

Correctly identifying and defining the "project" in an EAW is critical to gathering all of the necessary information for analyzing the possible detrimental effects and potential environmental impacts. Among the defined terms in the EAW regulations is a "Phased Action" which "means two or more projects to be undertaken by the same proposer that . . . will have environmental effects on the same geographic area; and are substantially certain to be undertaken sequentially over a limited period of time." Minnesota Rules, Part 4410.0200, Subp. 60. A similar concept is set forth in the definition for "Connected Actions." *Id.* at Subp. 9(c).

Minn. Rule 4410.1000, Subp. 4, provides: "Connected actions and phased actions. Multiple projects and multiple stages of a single project that are connected actions or phased actions must be considered in total when determining the need for an EAW, preparing the EAW, and determining the need for an EIS." The June 2023 EAW fails this mandatory standard.

One of the most important reasons for correctly defining a project in the first instance is to identify the "cumulative impact" and "cumulative potential effects" of activities where not all of the construction is done pursuant to the same construction contract.

> "Cumulative impact" means the impact on the environment that results from incremental effects of the project in addition to other past, present, and reasonably foreseeable future projects regardless of what person undertakes the other projects. Cumulative impacts can result individually minor but collectively significant projects taking place over a period of time.
>
> "Cumulative potential effects" means the effect on the environment that results from the incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid . . . . Significant cumulative potential effects can result from individually minor projects taking place over a period of time. In analyzing the contributions of past projects to cumulative potential effects, it is sufficient to consider the current aggregate effects of past actions.

See Minn. R. 4410.0200, subp. 11 and 11a.

The above defined terms from the EAW regulations identify the critical nature of properly defining the "project" in the first instance. Here, the City's EAW, prepared by St. Thomas's retained design professionals, fails to properly identify the project, and "other projects" in the environmentally relevant area, thus both misstating and understating the environmental effects which will arise because of the University's concentrated new construction in and around its new South Campus Quadrangle.

The EAW's Response to Question 6, the "Project Description" is Inaccurate and Incomplete

The EAW's answers to Item 6 of the EAW Form are inaccurate, incomplete, and misleading. Item 6.b. requires "a complete description of the proposed project and related new construction, including infrastructure needs." Because the EAW fails to fully describe all of the redevelopment which has already taken place around the South Campus Quadrangle area, it fails to identify the physical changes that have already occurred and are continuing to occur in the area immediately adjacent to the proposed new arena. Subsection d. to Item 6 requires an answer to the question "Are future stages of this development, including development on any other property, planned or likely to happen?" The EAW references only the Anderson Parking Facility, and fails to include the Schoenecker Center and South Campus Quadrangle.

In response to Question 6.b., the EAW asks the reader to see "Figure 3" for existing site conditions. A quick glance at Figure 3 shows the immediate adjacency to the new arena of the ongoing construction of the Schoenecker Center and the construction yet to begin to create the South Campus Quadrangle. Look at the recent aerial photographs! *See* EAW Figures 3, 8, and 9. There is obviously additional construction presently going on today immediately adjacent to the location of the new arena. The new South Campus Quadrangle, which will be expanded from what is depicted on the "Existing Conditions Plan · 05.10.2023" will cover land adjacent to both the Schoenecker Center and the new arena, eliminating the Grand Avenue extension, and expanding the size of the Quadrangle to include land on both sides of the former driveway.

Perhaps the EAW's failure to define the "project" as including the Schoenecker Center building and the adjacent the South Campus Quadrangle is because the contractor for the Schoenecker Center is McGough Construction Co., LLC, while the "Proposer" and contractor for the Anderson Arena is Ryan Companies. It makes no difference in EAW preparation if two

different contractors are building on adjacent property having the same owner. There is only one University of St. Thomas.

The University has often lauded the interconnected nature of its South Campus redevelopment. At the June 5, 2023 UST/Community meeting hosted by UST President Vischer, it was explained by a UST speaker that "the Arena completes the fourth side of the South Quadrangle." On July 24, 2023, UST issued a press released entitled: "Schoenecker Center Transforms South Campus."

The EAW rules require that all of the related physical changes to the immediate physical environment be taken into account when preparing an EAW. The June 2023 EAW fails to do so. The failure to include and describe all of the phased and connected construction in the June 2023 EAW report violates the Minnesota Environmental Policy Act and renders the conclusions in the June 2023 EAW incomplete, inaccurate, and unreliable. *See Pope County Mothers v. Minn. Pollution Control Agency*, 594 N.W.2d 233, 237 (Minn. Ct. App., 1999), where the Court held the MPCA did not "engage in reasoned decision making when it failed to consider the cumulative environmental effects" of "multiple individual sites."

Item 6.e. of the EAW questionnaire asks: "Are future stages of this development, including development on any other property, planned or likely to happen?" If yes, then the EAW regulations require a description of future stages, relationship to the present project, timeline, and plans for environmental review." *Id.* The EAW appropriately answers the first question "yes." The only other project listed in the EAW, however, is: "The Anderson Parking Facility is an existing parking ramp that was designed for future expansion of two additional floors. The expansion is discussed as a potential improvement in the Traffic Impact Analysis (Appendix D.); however, it is not currently planned or funded at this time."

So what? The University has been discussing the addition of two additional floors to the Anderson Parking Facility since 2010; it was specifically included as an upcoming project in the 2016 Campus Master Plan approved by the University Board of Trustees. The question asked in preparing an EAW is not whether "construction plans" have been drawn or capital funding has been raised. The question asked in an EAW, is whether there are future stages of the development which are "likely to happen?" With new construction of one-half million square feet of new buildings already underway or planned, all within the same geographic area, the two additional stories on the Anderson Parking Facility are indeed "likely to happen." Whether the University considers a project as not being "real" until its full funding has been authorized by the Board of Trustees, is a completely separate question from whether the environmental impact of new development "likely to happen" must be included within an EAW analysis of potentially harmful environmental effects likely to occur within a limited land area.

Item 21, "Cumulative Potential Effects" Fails to Properly Quote the Rule, Fails to Analyze the Issue, and Fails to Meaningfully Analyze the Cumulative Potential Effects of the Construction Bordering the University's South Campus Quadrangle

The language in the first sentence of the definition for "Cumulative potential effects" requires an analysis of "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 . . . ." Minn. Rule 4410.0200, Subp. 11a. Thus, it is only logical that "other projects" include past, present, and future projects, and that all of the projects together must be analyzed and understood to properly identify all cumulative potential effects. This interpretation of the first sentence is further supported by the final clause of the next sentence, which requires that the EAW analysis also "includ[e] future projects actually planned or for which a basis of expectation has been laid . . . ." The word "including" in the Rule makes clear that not only are past and present projects to be analyzed, but also "future projects."

"Future projects" does not limit the cumulative effects analysis to cover only future projects, as the City's EAW suggests in the response to Items 6 and 21.

The text in the June 2023 EAW omits any reference to the next sentence in the regulatory definition of Cumulative Potential Effects, which states: "Significant cumulative potential effects can result from individually minor projects taking place over a period of time." Minn. Rule 4410.0200, subp. 11a. The rules require that adjacent changes in land use must be included in considering cumulative potential effects. The next sentence further supports a broad interpretation of the types of construction projects to be included in a proper analysis: "In analyzing the contributions of past projects to cumulative potential effects, it is sufficient to consider the current aggregate effects of past actions." *Id.* Thus, the full text of Rule 4410.0200, subpart 11.a. makes it absolutely imperative that a proper analysis of cumulative potential effects must include all past, present, and future actions. The June 2023 EAW's failure to even identify, yet alone analyze the effects of all of the past and present projects, *i.e.*, the Schoenecker Center construction, the plan for the South Campus Quadrangle, and the planned expansion of the Anderson Parking Facility, must be taken into account now in the EAW analysis.

Subparagraph b. of Item 21 asserts that "The University of St. Thomas does not have any board approved plans for new building construction at the St. Paul Campus." This is erroneous. The University has "plans." In November 2016, the St. Thomas Board of Trustees unanimously approved a "10-year St. Paul Campus Master Plan." On the South Campus, Item 11 of the Master Plan specifically calls for a "New Academic Building [for] Science & Engineering [with a size of] 137,000 SF." Item 13 of the Plan clearly states: "Expand Anderson Parking Facility (two levels) · 300 parking spaces."

The new science and engineering building called for in the 2016 Master Plan is presently under construction. The plan to expand the Anderson Parking Facility, by adding two levels on top of the existing ramp, can be accurately analyzed now because the location, dimensions, and floor plan for the new construction will be the same as it is on the level existing below the proposed two new levels. It is simply wrong to suggest, as is done in the EAW, that "there is not sufficiently detailed information about any future building projects to contribute to the understanding of cumulative potential effects."

The City of St. Paul Must Reject the June 2023 EAW for its Failure to Meet the Requirements of the Minnesota Environmental Policy Act and the Applicable Rules

An outline of a City's responsibility to appropriately consider "potential impacts" and "cumulative potential effects" is set forth in the recent case of *In Re City of Cohasset's Decision on the Need for an Environmental Impact Statement for the Proposed Frontier Project*, 985 N.W. 2d 370 (Minn. Ct. App. 2023). As the Appeals Court noted, and the law and rules make clear, an environmental impact statement is required "if the proposed project has the potential for significant environmental effects." 985 N.W. 2d at 378. The Appeals Court reversed the city's decision and remanded for the city to issue a new decision on the need for an EIS, after concluding that the City's decision not to require a proper environmental analysis was "unsupported by substantial evidence." *Id.* Here, if the City of St. Paul does not require the preparation of a proper EAW with full and accurate information, or order the preparation of an Environmental Impact Statement, the City will simply cause delay and uncertainty to the University's timetable. *See Pope County Mothers*, 594 N.W.2d at 238.

II. THE TRANSPORTATION STUDY FAILS TO ACCOUNT FOR NUMEROUS FACTORS, THUS SERIOUSLY UNDERESTIMATING ALMOST CERTAIN FUTURE PARKING PROBLEMS

The Transportation Study by SFR fails to account for numerous issues with existing insufficient parking and fails to appropriately analyze future parking problems. The Transportation Study needs to be redone with the correct base data, in order to develop a real-world view of the parking shortage and the resulting transportation congestion likely to arise because of the University's proposed new construction.

Just as the body of the EAW report fails to identify the "cumulative impact" and the "cumulative potential effects" of the development already occurring on the University's South Campus, the parking study is similarly flawed. For instance, the parking study fails even to discuss the new Schoenecker Center, which is presently under construction and will open in 2024. The 130,000 square foot Schoenecker Center will create greater parking demand by bringing additional students, faculty, staff, visitors, and programs to the South Campus Quadrangle. Those persons are going to need to park somewhere.

The site of the Schoenecker Center used to provide 127 parking spaces for use by South Campus visitors. The construction of the Schoenecker Center eliminated those spaces, as well as creating increased evening demand, such as will arise from the music auditorium in the new building. Similarly, the parking demand analysis fails to account for the hundreds of persons attending programs, events, and dinners on the third floor of the Anderson Student Center. I have often driven down Cretin Avenue on weekend evenings and seen many persons dressed in suits and fine dresses walking along Cretin from the Anderson Parking Facility to the Anderson Student Center. None of the first two events were even taken into account in the parking demand analysis by SRF; all three occurring simultaneously was never considered. It is easy to imagine that on a Friday night there will be a basketball game in the new arena, a music concert in the Schoenecker

Center, and a non-profit fundraising event on the third floor of the Student Center. Where are all these people going to park?

On page 16, the parking analysis identifies that the construction of the arena alone "is expected to result in the net loss of approximately 265 parking spaces." But, this statement fails to account for the 127 recently eliminated spaces lost because of the construction of the Schoenecker Center and the north portion of the new South Campus Quadrangle.[1] Thus, the total parking loss from the current and proposed construction is at least 392 spaces, almost one-half again more than the 265 that was analyzed in the parking study.

Table 12, "Available Parking Supply Before Events" suggests that on Friday and Saturday nights there will be between 185 and 214 parking spaces available on nearby public streets for persons attending events in the new arena. Figure 9 identifies a potential number of street parking spaces. My experience from living nearly adjacent to the University's campus for over 25 years is that there are seldom significant numbers of parking spaces available on weekends along Summit and Grand Avenues when school is in session; students and their weekend guests make substantial use of the free parking available on those public streets and it can be difficult to even find any significant number of on-street parking spaces.

The University's basketball and hockey games will be played in the late fall throughout the winter. During this same time period, it often snows in St. Paul. Sometimes the City declares snow emergencies. When the City declares snow emergencies, there will be no neighborhood parking available anywhere near the University. Moreover, as was the case this past winter, the City's difficulty in clearing snow from curb to curb significantly restricts the number of on street

[1] There were actually 145 spaces north of the Grand Avenue Extension. 18 of these spaces were accessed directly from the Extension and may have been counted in SRF's calculation. If not, the loss from Schoenecker Center and related construction is 145 spaces, not 127.

parking spaces which are available. The parking study fails to account for snow in St. Paul during the winter sports' seasons.

Figure 9, "Event Parking Supply," notes those residential blocks near the University in which the City Residential Permit Parking program is in place. The Study's Event Parking Demand analysis specifically notes, in footnote 3 that "nearby city permit parking restrictions are generally not in effect on Saturday," and thus assumes that all of the neighborhood streets will be available on weekends for arena parking. At the public forums which the University has hosted this year, UST's southern residential neighbors have made very clear their intentions to petition the City to extend the residential permit parking restrictions to include Saturdays and to extend the evening parking restrictions to 10:00 p.m. The University is very well aware of the neighborhood attitude on this issue. As a matter of fairness and equity, it is entirely inappropriate for the University to fail to spend the money necessary to construct parking facilities on its own campus, and thereby shift the burden of automobile storage to the surrounding neighborhoods, when the reason the demand exists is for persons attending University events.

The "Key takeaways from the event parking demand" suggest that for maximum basketball events there is expected to be "a deficit of approximately 330 to 740 spaces. These vehicles will likely utilize public parking in the neighborhood." *See* Page 28. The next paragraph provides: "Maximum hockey events are generally expected to be accommodated on campus. However, some vehicles may choose to park on public streets on the neighborhoods over parking in the Northeast Quadrant of the North Campus, especially on Saturdays when city permit parking restrictions are lifted." *See* p. 28. This acknowledgment illustrates one of the major elements of blindness in the Parking Study. When the University makes its campus parking spaces available, it charges a fee for parking. Parking on neighborhood streets is "free." A fact of life is that most

persons driving to events in the University's new arena would prefer free parking over pay parking. The Study fails even to discuss how this issue will impact parking demand and congestion in the neighborhood.

In the real world, patrons coming to the University to attend athletic events will likely be cruising the neighborhood looking for free parking spaces (even if signs restrict it, there will undoubtedly be persons parking in violation of the permit restrictions). There are substantial numbers of neighborhood residents who pay for their resident parking permits for their families and guests, such that there are often very limited open parking spaces available now on the neighborhood streets. The Parking Study fails to account for how the actions of drivers seeking "free" parking will increase congestion, delay traffic clearing, potentially create safety issues, and have negative and deleterious effects on the quality of life for the neighbors residing south of the University.

Again, the EAW identifies that during some events there "are expected to [be] a deficit of approximately 330 to 740 vehicles which will likely use public parking in the neighborhood." EAW, p. 36. Even this number is likely low as it is based on unrealistic assumptions (such as assuming patrons will be willing to pay to park in Tommie North, so that they can walk back across the entire campus late on winter evenings!). Because so many of the base assumptions used forecasting supply for and proposed mitigation are either unrealistic or unlikely to happen, the Transportation Study fails to provide sufficiently accurate information such that the true impact of the proposed arena is accurately set forth.

The EAW and SRF's Transportation Analysis fail to explain how shunting hundreds of cars into the nearby residential neighborhoods can possibly satisfy Policy LU-54 of the City's 2040 Comprehensive Plan, which seeks to:

> Ensure institutional campuses are compatible with their surrounding neighborhoods by managing parking demand and supply, . . . minimizing traffic congestion, and providing for safe pedestrian and bicycle access.

The word "ensure" is often defined as "to secure or guarantee" and "to make sure or certain." There is nothing "certain" about simply listing "possibilities" for mitigation, when the University has not indicated its willingness to implement mitigation activities.

When an RGU considers mitigation measures as offsetting the potential for significant environmental effects under Minn. R. 4410.1700, it may reasonably do so only if those measures are specific, targeted, and are certain to be able to mitigate the environmental effects." 713 N.W.2d at 835. The EAW fails this test. The traffic study's purported mitigation analysis is disjointed and fails to establish how or even if the possible ideas for mitigation will actually solve the parking and congestion problems likely to occur.

The Minnesota courts have concluded that an RGU may not rest its decision "on 'mitigation' that amounts to only 'vague statements of good intentions.'" *Citizens Advocating Responsible Development vs. Kandiyohi Board of Commissioners*, 713 N.W. 2d 817, 822 (Minn. 2006). An RGU is simply not allowed to push off to the future the possible mitigation of environmental harm. "Under MEPA, an RGU must determine whether a given project has the potential for significant environmental effects before approving the project." *Id.* at 835.

Parking Conclusion

In summary, what the University has done or is proposing with regard to parking on the South Campus is the following:

- Eliminate 392 parking spaces.
- Add one-half million square feet of new buildings with a 5,000 seat arena and new academic spaces.

- "No onsite parking is expected to be constructed in the redevelopment."

When reduced to its stark essentials, this "conclusion" makes no sense.

III. THE CITY OF ST. PAUL SHOULD REJECT THE CURRENT EAW AND REQUIRE MORE AND BETTER STUDY

The City must reject the current EAW and at least require that a full and accurate EAW be prepared, which properly defines the project; identifies all of the negative potential environmental effects; and complies with Minnesota law. Or, the City could direct that an Environmental Impact Statement be prepared.

Kimley Horn and SRF have put the City of St. Paul into a difficult position. No doubt, the University of St. Thomas would like to be done with the environmental review as soon as possible. But, the Minnesota Environmental Policy Act and the Rules thereunder must be followed. As set forth above, the June 2023 EAW fails to properly define the project; fails to appropriately consider connected actions and phased actions; improperly minimizes the cumulative potential effects of all elements for the University's South Campus Quadrangle and related construction. The parking and congestion analyses omit necessary information, and strongly suggest that the University's acknowledged parking shortage should be solved by forcing the neighborhood to bear the negative consequences of insufficient parking on campus.

There is simply not enough accurate and complete information in the June 2023 EAW for the City to reasonably and appropriately analyze the potential environmental impacts of what the University is proposing. The standards for the City's decision on whether there is a need for an EIS is set forth in Minn. R. 4410.1700. Subpart 2.a. provides that if there is insufficient information "necessary to a reasoned decision about the potential for, or significance of, one or more possible environmental impacts is lacking, but could reasonably be obtained, the RGU shall

either 'require an EIS to obtain the lacking information or postpone the decision on the need for an EIS, and grant an extension to allow time in order to obtain the lacking information.'"

An RGU's "decision will be deemed arbitrary and capricious if the agency "entirely failed to consider an important aspect of the problem, if it offered an explanation for the decision that runs counter to the evidence, or if the decision is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Trout Unlimited, Inc. vs. Minn. Dept. of Agriculture*, 528 N.W. 2d 903, 907 (Minn. App. 1995). The City should do the right thing and either require that a proper EAW be prepared, which fully analyzes all of the connected and phased actions and the cumulative potential effects of the University's South Campus redevelopment project, or direct the preparation of an Environmental Impact Statement.

Respectfully submitted on July 27, 2023 by

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Josh Williams

From: Kathryn McGuire <mcguire.kathy56@gmail.com>
Sent: Thursday, July 27, 2023 1:52 PM
To: Josh Williams; *CI-StPaul_StThomasArena_EAW
Subject: Re: EAW for UST Arena Proposal
Attachments: EAW Public Comment, July 27, 2023.docx

> On Jul 27, 2023, at 1:50 PM, Kathryn McGuire <mcguire.kathy56@gmail.com> wrote:
>
> Dear Mr. Williams,
>
> Attached is my public comment regarding the UST EAW. Please confirm that you have received my
> Email and that my comments will be included in the public comments for this EAW.
>
> Thank you,
>
> Kathryn McGuire
> 1942 Glenhill Road
> Saint Paul, MN 55118
>

July 27, 2023

Mr. Josh Williams,

I request that the following comments be recorded with the public comments for the EAW-University of Saint Thomas (UST) multi-use arena proposal. The EAW contains several inaccuracies, incomplete information, and potential impacts that warrant further investigation. There is need for further and more intensive, environmental review of this project together with all development and expansion at UST.

Cumulative Potential Effects: Over the past 100 years,UST has undergone an inordinate amount of development and expansion, which has increased dramatically in the last 50 years. It is common knowledge that there will be further development beyond the multi-use complex currently under review. Regardless of whether or not plans have been board approved, UST representatives have openly stated that the east and west blocks will soon be developed and that all athletic facilities will be upgraded to meet best practice standards for Division I athletics. The EAW is not sufficient in assessing the broad impact that UST has imposed on the surrounding community. The cumulative potential effects of UST development should be assessed in total, rather than in a project-by-project, piecemeal fashion. An Environmental Impact Statement (EIS) might be a more appropriate means of assessment since the UST expansion and development has "significantly affected the quality of the human environment." (National Environmental Policy Act of 1969 NEPA)

Project Description: The project proposes a seating capacity of 5,500 people but no funding or approved plan for additional parking. This is an inadequate response to the problems identified in the Traffic Impact Analysis. Provisions for parking should be established during the planning phase, not as an afterthought.

Climate Adaption and Resilience: According to the Metropolitan Council's Extreme Heat Map, the location of the UST proposed project is "susceptible to extreme heat". Other communities, Hopkins, MN for example, use this information to mitigate heat island effect, and this is what Saint Paul should be doing. The UST proposed development would further contribute to the Urban Heat Island Effect, which is in direct conflict with the 2040 Comprehensive Plan policy goals and detrimental to the health and well-being of people. Further investigation is warranted.

Cover Types: The removal of 76 mature trees from the MRCCA would have an enormous environmental impact. The carbon absorption rate of trees accelerates as the trees age, and tall, old trees are carbon storehouses for the planet. Furthermore, when forests are cut down, the stored carbon is released into the atmosphere as carbon dioxide. This is in sharp contrast to UST's goals of carbon neutrality and the resiliency goals of the 2040 Comprehensive Plan. The EAW has not adequately assessed the environmental impact of removing 76 carbon storehouses and releasing that carbon dioxide into the atmosphere. These potential impacts warrant further investigation.

Cover Types: There is additional environmental impact as trees can reduce urban heat island effects by shading building surfaces, deflecting radiation from the sun, and releasing moisture into the atmosphere. The removal of 76 mature trees from the MRCCA is in sharp contrast to the resiliency goals of the 2040 Comprehensive Plan. The EAW has not adequately assessed the environmental impact of removing shade trees that reduce the Heat Island Effect. These potential impacts warrant further investigation.

Cover Types: UST proposes to plant new, young trees in other areas of the campus. It will take decades for young trees to achieve the environmental benefits of mature trees for carbon absorption and heat island reduction. Furthermore, planting 26 young trees elsewhere on campus does not mitigate the environmental impact within the MRCCA area which contains the South Campus. This proposed solution is useless as it is not within the project location.

Land Use: The EAW cites the 2040 Comprehensive Plan Land Use Goal 54 which is "to ensure that campuses are compatible with surrounding neighborhoods by managing parking demand and supply, maintaining institution owned housing stock, minimizing traffic congestion, and providing for safe pedestrian and bicycle access." How can UST and the EAW conclude that the proposed plan is in anyway consistent with these goals? Traffic congestion and pedestrian safety are already problematic due to the increased traffic on Cretin Avenue, and the added traffic will compound traffic congestion profoundly. The EAW fails to address this obvious contradiction to the 2040 Comprehensive Plan. Furthermore, the UST proposal is contradictory to goals of the Saint Paul Climate Action & Resiliency Plan and other policy goals of the 2040 Comp Plan including:
Goal #1. Economic and population growth focused around transit.
Goal #4. Strong connections to Mississippi River, parks, and trails
Goal #8. People centered urban design
Policy LU-1. Encourage transit-supportive density and direct the majority of growth to areas with the highest existing or planned transit capacity.
Policy LU-21. Identify, preserve, protect and, where possible, restore natural resources and habitat throughout the city with the following ordinances:
Policy LU-36. Promote neighborhood- serving commercial businesses within Urban Neighborhoods that are compatible with the character and scale of the existing residential development.
Policy LU-38. Direct the location of new secondary schools and post-secondary educational institutions along transit routes and bicycle and pedestrian networks to provide options for students and staff, and decrease traffic congestion in adjacent neighborhoods.
Policy HP-3. Pursue funding to evaluate, maintain, renovate and preserve City-owned eligible and potentially eligible property, and assist private owners to do the same.
Policy HP-12. Prioritize the retention of locally-designated/listed historic and cultural resources or those determined eligible for designation over demolition when evaluating projects that require or request City action, involvement or funding, or those of related development authorities.
Policy CA-2. Protect Primary Conservation Areas through planning, land use and land alteration regulations, and other tools.
Policy CA-3. Minimize impacts to PCAs from public and private development and land use activities.
Policy CA-5. Manage vegetation and conduct vegetation restoration consistent with park master plans and MRCCA requirements.
Policy CA-6. Promote the preservation and re-establishment of natural vegetation on privately-owned property.
Policy CA-7. Consider alternative design standards related to subdivision and development of land within the MRCCA, such as conservation design or transfer of development rights, in order to protect or restore PCAs.
Policy CA-9. Explore permanent protection measures (such as acquisition and conservation easements) to protect PCAs.

Land Use: The St. Paul City Council has not yet adopted the new rules of the MRCCA, nor are they required to adopt the new rules. To assume that this will be adopted is inaccurate. Furthermore, members of the City Council, Planning Commission, and DNR, are well aware of the inconsistencies and inaccuracies in the zoning assigned to the properties owned by UST and the Saint Paul Seminary. The EAW has portrayed inaccurate and incomplete information regarding the zoning of the MRCCA property, and the EAW has inaccurately portrayed the City Council's role and prerogative in this process.

Land Use: The property bordered by Cretin, Goodrich, Exeter, and Otis Avenues and the Mississippi River Boulevard, is located entirely within the MRCCA which was designated "to protect its natural, cultural, and scenic resources." (Minnesota DNR-MRCCA). This property is designated with further protection as a Primary Conservation Area (PCA) under three categories: Bluff Impact Zone, Significant Existing Vegetative Stands, and Unstable Soils and Bedrock. These protections have been in effect since 1976, and the PCA designation is placed "to ensure that they are given priority consideration for protection." (2040 Comprehensive Plan—MRCCA Chapter). The EAW has failed to address the intended purposes of the MRCCA and PCA protections. Further assessment is warranted.

Land Use: City of Saint Paul Planning Commission Resolution file number 90-14, February 9, 1990, approved the Special Conditional Use Permit (SCUP) for UST. That permit granted taller building heights within the MRCCA boundaries. The Planning Commission noted that one of the justifications for the taller building height was that it would encourage the preservation of more green space/open space on campus by encouraging buildings with smaller footprints. So, UST has extracted the provision of tall building heights while completely ignoring the underlying intent which is to preserve open space/green space by preventing construction of buildings with large footprints. UST has abused the intent of the SCUP, and the EAW has not performed a complete assessment of the Planning Commission Resolution 90-14 regarding the Special Conditional Use Permit. Further investigation is warranted.

Land Use: Planning Commission Resolution File 90-14 noted , "Before the Planning Commission may grant approval of a principal use subject to special conditions, the Commission shall find that. . . the use will not be detrimental to the existing character of the development in the immediate neighborhood or endanger the public health, safety and general welfare." The development of a complex of this size, mass, and magnitude plus its associated traffic and noise, is detrimental to the character of the neighborhood, and it does endanger the public health, safety, and general welfare of its residents in terms of noise, traffic congestion, emissions, loss of trees, and added stress. Even the mere discussion of this proposal has caused health-threatening stress to neighborhood residents. The EAW has provided incomplete information regarding the premises of the SCUP. Further assessment is warranted.

Geology, soils, and Topography/Landforms: The Department of Natural Resources (DNR) identified calcareous fens as a protected wetland on the property, as well as its associated rare plant species. Calcareous fens are considered to be rare, fragile, and highly protected (files.dnr.state.mn.us). Inexplicably, the EAW fails to address the calcareous fens on the property. This is incomplete information and it warrants further investigation.

Water Resources: The EAW cites the National Hydrography Dataset mapped flow line stream 140 feet west of the project in alignment with the Grotto. It also mentions the 12 penetration test borings conducted by American Engineering Testing which revealed groundwater at depths of 6 to 12 feet. One might easily deduce that there is a sensitive flow of water within this MRCCA area and yet there is no mention of protections or possible detriments. The EAW is incomplete in this analysis of water resources. Further investigation is warranted.

Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features): The EAW fails miserably with regard to identification of wildlife, plant communities, and sensitive ecological resources. Again, the DNR has identified the calcareous fens, a very rare, fragile, protected wetland, but the EAW makes no mention of it. On this section of the MRCCA property, on several occasions, I have seen a pair of enormous barred owls perched high in the tall, mature trees. I have seen bald eagles, red-tailed hawks, and several owl species. I have also seen adult and juvenile trumpeter swans flying overhead. Each year, more than 325 species of migratory birds make their way along the Mississippi Flyway. The U.S Fish and Wildlife Service identifies the project site as a high potential zone for the Rusty Patched Bumblebee, an endangered species, but UST development has already disturbed the habitat. The EAW has failed to identify significant wildlife and sensitive ecological resources at the site. Further investigation is warranted.

Historic Properties: In 1984, an application was submitted for the Saint Paul Seminary property to be included in the National Register of Historic Places (NRHP). Inexplicably, that application was never submitted, and oddly enough, UST purchased the property in 1987. Since taking ownership, UST has proceeded to raze the historic buildings and change the property without reservation, to the extent that the property is too far compromised to qualify as a historic district though several buildings are still considered eligible. The EAW has not provided complete information as to why the original application was never processed and included in the NRHP. Furthermore, the Heritage Preservation Commission has determined that a review of the project is required with regard to the eligibility of three historic properties on the project site. Further investigation is warranted.

Visual: Residents of Goodrich, Fairmount, Woodlawn, Cretin, and Summit Avenues and the Mississippi River Road, the Saint Paul Seminary residents and staff, and may other neighborhood residents have appreciated the open space vistas of the MRCCA property. Since 1979, most, if not all, of these residents purchased their homes with the knowledge of the MRCCA protected property and open visual vistas it provides. Many purchased their properties when the Saint Paul Seminary was still considered eligible as a historic property. This area of Saint Paul is grossly deficient in public park space and open space, and the MRCCA area has helped to fill that deficit. It is insulting to say that "the project will not have an impact on identified significant public views" and "views from the surrounding area would be similar to those experienced currently." Where there once was MRCCA Urban Open Space and an extended landscape of mature trees and wildlife is now the back end of the Anderson Parking Ramp. No building on any part of the campus has the footprint and mass of the proposed arena. The EAW has failed to thoroughly assess the visual impacts of this proposed arena, and it is inaccurate in its comparisons to other structures and current views. Further investigation is warranted.

Air: Increased traffic congestion and car idling will significantly increase the emissions of carbon monoxide, hydrocarbons, nitrogen oxides, benzyne, formaldehyde, and particulates. To anyone with asthma or other health issues, this is a nightmare. We did not purchase homes near the 10 highest traffic volumes in the Twin Cities. We purchased our homes in a clean, quiet, neighborhood adjacent to the MRCCA. The EAW has grossly underestimated the harmful impact of emissions on air quality. Further investigation is warranted.

Greenhouse Gas (GHG) Emissions/Carbon Footprint: Many ice rink refrigerants contain potent greenhouse gases that warm the atmosphere. Common synthetic refrigerants called hydrofluorocarbons (HFCs) have a Global Warming Potential (GWP) hundreds to thousands of times stronger than that of carbon dioxide (Environmental and Energy Study Institute, February 2022). The EAW makes no mention of the harmful effects of refrigerants. This is incomplete information that warrants further investigation.

Greenhouse Gas (GHG) Emissions/Carbon Footprint: The EAW mentions that UST "may" install up to four diesel generators for back-up power and to feed the UST MicroGrid. "Diesel generators produce particulate matter (PM), volatile organic compounds (VOCs), nitrous oxide (NOx) among other harmful pollutants that create smog and exacerbate respiratory conditions." They also produce Greenhouse Gas Emissions (GHG). (Facilities Engineering Associates, P.C., 2017) This proposal for diesel generators is in complete contradiction to UST's carbon neutrality goals, and it is in contradiction to the Saint Paul Climate Resiliency goals and goals of the 2040 Comprehensive Plan. This warrants further investigation.

Noise: The UST neighborhood has experiences a significant increase in noise from rooftop equipment on the new buildings, and from traffic noise with the increased traffic on Cretin Avenue. In particular, the Ford development has significantly increased traffic noise. Also, the modified intersection at Grand and Cretin and the lack of traffic enforcement has resulted in speeding at that intersection and all along Cretin Avenue. Cars on Cretin have been clocked at 45, 50, and 55 mph, and that appears to be more the rule than the exception. Noise levels will increase in the neighborhood, so does it not matter that UST will make a bad situation even worse? To address noise after the fact is not adequate. Data is needed to determine precisely how much noise will be generated by the mechanicals and how that noise would be mitigated. This should be done during the planning phase, not during or after building. Noise is a public health concern, and further investigation is warranted.

Transportation: The traffic study conducted is flawed and insufficient. First, the time period chosen for testing, just prior to a major, forecasted snowstorm, is NOT reflective of typical traffic volumes as drivers were likely off the road in anticipation of the storm. Also, shouldn't a thorough traffic assessment also measure rush hour traffic during all weather conditions? Entering and exiting a property onto Cretin Avenue during stormy or icy conditions is a life-threatening experience. Secondly, the traffic analysis

seems to focus on major event games, but it does not address the additional traffic associated with graduations, convocations, employment fairs, youth hockey, non-major event games and other events that UST intends to hold in the proposed facility. These will all contribute to a congested, dangerous traffic situation that already exists on Cretin Avenue, and it is likely to spill onto residential side streets. It is important to keep in mind that this is a RESIDENTIAL AREA where people walk, ride bicycles, try to cross Cretin Avenue with strollers and young children. Many Saint Paul residents cross Cretin Avenue as they walk to the MRCCA area. Recall Goal #4 of the 2040 Comprehensive Plan is to promote "Strong connections to Mississippi River, parks, and trails". Remediation strategies of "Barricades, cones, and wayfinding signage" does NOT meet this goal. The addition of significant traffic into this residential area presents an incompatible mix that is contradictory to the policy goals of the 2040 Comprehensive Plan regarding the reduction of traffic in residential areas. It is also contradictory to the UST carbon neutrality goals and the goals of the Saint Paul Climate Action & Resiliency Plan. More in-depth assessment is warranted.

Other Potential Environmental Effects: The proposed project increases the amount of impervious surface in the MRCCA and PCA areas. Not only is this a net increase, it is also a change from discontinuous impervious surfaces to a single, very large, impervious surface. This is counterintuitive to any location, but it is particularly insulting to the MRCCA area where delicate water flow, vegetation, unstable soils, bluff impact zones, and calcareous fen wetlands exist. Further assessment is warranted.

The inadequacies of this EAW shed an unfortunate light upon UST, the City of Saint Paul, and Kimley-Horn. Any project, and in particular a project of this magnitude, deserves an environmental assessment that matches the integrity of the laws designed to protect our environment and natural resources. I look forward to a more honest and forthright assessment.

Sincerely,

Kathryn McGuire
1942 Glenhill Road
Saint Paul, MN 55118

Josh Williams

From: Kathryn Mitchell <mitch040@msn.com>
Sent: Thursday, July 20, 2023 10:00 AM
To: *CI-StPaul_StThomasArena_EAW
Subject: St. Thomas Hockey and Basketball Arena

Hello St. Paul friends,

I am writing with neighborhood concerns about this new development that will increase traffic and street parking in our neighborhood. Already, with any activities like graduations, football games etc, the neighborhood becomes a big crowded parking lot with folks parking right up to the edges of alleys and driveways. My neighbors cannot have their friends and relatives come over unless they live in walking distance. Clearly there is no provision, once again, for parking. It is possible to put more levels in the Anderson ramp, but there is no interest in doing so we were told at the last meeting. How about some neighborly accountability and responsibility for all the vehicles brought in to this exciting new space?

Another concern is traffic flow. Mississippi River Rd is supposed to be a Parkway, but already at 8am and 5pm it has its own rush hour as many commuters prefer this to Cretin Ave, which is also busy and potholed. Unfortunately, most of these drivers do not observe the 25mph limit and many of them are going 40mph+. It is frightening, especially as there are many cyclists on this road. Surely it will be the route of choice for many coming to these events off of highway 5.

Please consider your tax paying, considerate and law abiding residents and the natural beauty of this area as you ponder this new development.

Sincerely,

Kathryn Mitchell
mitch040@msn.com

Josh Williams

From: art punyko <artpunyko@gmail.com>
Sent: Wednesday, July 26, 2023 8:40 PM
To: *CI-StPaul_StThomasArena_EAW
Subject: EAW Comments

Dear Josh

Thank you for attending and presenting at the recent MGCC meeting on July 26th.

Here are my comments and/or questions on the EAW

1. Do the EAW estimates in section 18 for GHG emissions assume any of the mitigation strategies (in 18 b) have been implemented?

2. Per section 18, the proposed facility is estimated to have 3X the GHG emissions of the existing structures. Can the city EAW approval process and/or permitting process require UST to provide a certain percentage of photovoltaic and/or wind power generation and/or carbon offsets in order to reduce the off-site electrical generation emissions over the next 50 years?

3. In section 20b, there are tables that contain the parking deficit during the different event types and days of the week. Do these estimates assume that any of the mitigation strategies have been implemented?

Regards
Art Punyko
artpunyko@gmail.com

Josh Williams

From: Vettel, Matthew <mwvettel@stthomas.edu>
Sent: Monday, July 24, 2023 2:46 PM
To: *CI-StPaul_StThomasArena_EAW
Subject: Comment from The Saint Paul Seminary

The Saint Paul Seminary would like to make the following comment on the EAW for the University of St. Thomas Multipurpose Arena. This comment was approved by Fr. Joseph Taphorn, Rector of The Saint Paul Seminary:

> The Saint Paul Seminary would like to clarify that the driveway access off Summit Ave is a shared drive owned by both the University of St. Thomas (owners of Lot 2) and The Saint Paul Seminary (owners of Lot 1). The driveway is halfway on both lots. This detail was not included in the EAW. The seminary looks forward to future conversations with the University regarding anticipated changes, both structural changes and traffic volume changes, to the shared drive.

Thank you,
Matt Vettel

Matt Vettel | Senior Advancement Officer and Special Assistant to the Rector
The Saint Paul Seminary — Joyful Catholic Leaders
E: mwvettel@stthomas.edu **W:** saintpaulseminary.org
O: 651-962-5777

SAINT PA
SEMINAR

Josh Williams

From: Kelly Vinson-Taylor <kellyvtaylor@yahoo.com>
Sent: Thursday, July 27, 2023 9:11 AM
To: *CI-StPaul_StThomasArena_EAW
Subject: University of St. Thomas Arena Project

Hello...my name is Kelly Vinson-Taylor and I live at 2127 Dayton Avenue. I am strongly apposed to the University of St. Thomas Arena Project due to the parking, traffic, and safety issues this will create and I don't feel were addressed in the Traffic Study portion of the EAW. I've attended 3 meetings where the University has spoken about the project (Meeting held at the Merriam Park Library, Meeting at the University of St. Thomas earlier this summer, and the EAW meeting held on July 12th and read through the entire EAW. Below are my key points/questions:

- Marshall & Cleveland were not included as a study intersection, although there was reference to traffic being routed to Cleveland. For that reason, that intersection should be included in the traffic study.
- Other key factors were not incorporated into the traffic study that need to be considered: The Bridge development is at the beginning of being built out. What impact will there be to Cretin Ave traffic flow as more people move into that development? There is work afoot to create "traffic calming" on Cretin and go from 4 lanes to 3 lanes. If that occurs, this traffic study is irrelevant and the result is that traffic for UST events will be backed up even more. Rapid Bus is being added to Marshall and by doing this new platforms are being added to key intersections (Marshall & Cleveland and Marshall & Cretin) this will change traffic flow in these areas, but was not factored into the study.
- Pg. 8 - references that there is not a crash problem currently. What about when the new volume of traffic is added? How will that impact crash volume? What about pedestrians trying to cross Cretin when it's dark at 4:30 in winter? It is currently not safe to cross Cretin unless you do so at a traffic light.
- Pg 14 - Total net loss of approx. 265 surface parking spaces. That is significant and one of the mitigation strategies is to hold large events on weekends so spectators can park in the neighborhood. I can attest that Dayton Ave. between Finn & Cretin during the academic year is "wall to wall" cars parked on both sides of the street due to student rentals in the neighborhood and St. Paul's focus on increasing density. Given these events will be held in winter (Nov. thru March), when poor snow plowing causes the streets to narrow, cars driving down Dayton cannot pass each other unless by chance there is an open parking space (which is rare) and will need to back up down the street the allow the other car to get by. Adding more traffic and fewer UST parking spaces is going to make this existing issue much worse.
- The study made reference to 75% of the students are going to walk or ride bicycles. Walking yes, but riding bicycles in hockey and basketball season which is winter...that is highly unlikely and needs to be adjusted.
- The study does not include Division 1 schools that have built a major arena in a city neighborhood vs. schools like Creighton who hold their basketball events in an area near downtown. Are there any? Has this been done before? Building an arena in a city neighborhood is much different than Creighton or schools in rural areas where there is access to more land to build parking and have fewer traffic issues.
- One entrance in and out of the arena and the parking ramp on Cretin is a significant bottleneck. Even with a traffic cop, how will anyone coming out of the ramp after a game be able to make a left onto Cretin to get to 94? And if they are required to go right, they will be try to weave around on the neighborhood streets trying to find there way out.

Overall, it seems the University of St. Thomas is trying to "squish" an arena into a small space and in the process is going to create multiple issues that will negatively impact the neighborhood and the spectator experience. I highly recommend that the traffic study factor in the issues mentioned above and be conducted again during the upcoming winter months when there will be a more apples to apples comparison.

Sincerely,

Kelly Vinson-Taylor
2127 Dayton Ave.

Josh Williams

From: Donn Waage <Waage58@outlook.com>
Sent: Tuesday, July 18, 2023 12:53 PM
To: *CI-StPaul_StThomasArena_EAW
Cc: #CI-StPaul_Ward4
Subject: Comment on St. Thomas Proposed Arena EAW
Attachments: St Thomas Arena.docx

I have attached my comments on the pro[posed St Thomas Arena. Thank you.

Donn Waage
2229 Fairmount Ave
Saint Paul

University of St Thomas Arena Environmental Assessment

Comments:

The proposed St Thomas Arena (Arena) would be a massive building that requires thoughtful study before approval. The building would be 275,000 square feet, or 42% of the size of the Xcel Arena. I am concerned that the EAW fails to identify, or understand, the full impact of this huge project.

The Arena will likely be the single largest project to ever impact the local neighborhoods and last for 50 years or more. Now is the time for thoughtful consideration of its impacts. The Xcel Arena, a LEED Platinum building, fits comfortably into downtown St. Paul which has large capacity streets and existing parking. Allianz Stadium also fits comfortably into a transit friendly area. In contrast the St Thomas arena project would be in a predominantly residential area which has limited roads and existing traffic and parking issues.

I will quickly review the major issues here:

1. Game Attendance. St Thomas believes its current sports facilities are inadequate, which is why they seek to build the Arena. St Thomas' goal is to fill the Arena for each of 66 regular games and to rent it out for profit. The EAW does not give the basis for estimates of game attendance, but they appear to be based on last year's games in the inadequate facilities. In addition, St Thomas' men's and women's hockey and women's basketball teams had losing seasons last year. More fans typically support winning teams. St. Thomas seems to be saying, "We are building this big expensive building, but don't worry, we won't use it much." Who would build a $125 million building and state that it would only be used to capacity 3-4 times a year? In assessing the financial costs to the City and the impacts on local residents, a more realistic assessment of game attendance considering St Thomas' attendance GOALl, must be developed.

2. Events. The EAW, and St Thomas officials, have stated they will rent out the Arena for events. The EAW contains no estimates or analysis of the possible number or impact of events. The EWA refers to weddings and speakers; what about concerts? What times would these events be held? Will there be any time limits? Would alcohol be allowed? A fair estimate of the number and impact of events is critical to understanding the impact of this project because few of the mitigating factors suggested for St Thomas sports activities could be applied to them.

3. Alcohol. Last year St Thomas sought and received an expansion of its liquor license to include most of the campus and drastically increased the hours liquor can be served. St

Thomas' POLICY currently does not allow alcohol at sports events. Will this change? Will alcohol be served at other activities and events at the Arena?

4. Traffic. The EAW made a traffic count on March, 30, 2023. That study is irrelevant without including the City's traffic study for **Highland Bridge** which estimates up to 4,893 new trips daily on Cretin and Cleveland Avenues. The City also just approved the **Summit Ave. Regional Bikeway** which will substantially impact both auto traffic and parking. The Potential Cumulative Effects (page 39) of these APPROVED projects should be included in this report. There is no indication that these projects were included despite the Cumulative Impacts requirement. I asked two staff people in the "Transportation area" of the July 12 Arena Workshop and neither could tell me if the traffic study included the City's Highland Bridge estimates. If an honest traffic study were done it may indicate a need to enlarge Cretin Avenue, <u>at public expense</u>.

5. Parking. The report identifies real potential parking problems for the neighborhood. The EAW estimates the maximum parking space demand at 1,420 for basketball and 1,050 for hockey. It simply is not credible to expect an activity with 5,00-7,000 attendees will use so few parking spaces. In addition, the APPROVED Summit Avenue Regional Bikeway would likely remove many parking spots and reduce access by vehicles. Again, there is no indication that these potential impacts were included in the Study.

   The report identifies many things St Thomas could do to mitigate traffic and parking problems but there is no indication that they will be implemented. Because some of these "solutions" will have further negative impacts they should be considered now, before the Arena is built, instead of on a crisis basis.

6. Environment. The proposed Arena will be built on North America's largest migratory bird flyway. The building will be the tallest in the area and yet there is no recognition of the potential deadly impact on migratory birds. US Bank Stadium, although further from the Mississippi River, is one of the region's most deadly buildings for birds due to its height and lightingThe National Audubon Society and Minneapolis Audubon sued the Stadium Authority over the US Bank migratory bird issue. There is no recognition of this important environmental issue in the EAW. Mississippi River zoning has been in effect since the 1970s and St Thomas commented on the recent Mississippi River Corridor Critical Area ordinance so it should be aware of its requirements.

   Another major limitation of this EAW is that it includes no mention of lighting. Most basketball and hockey games occur between November 1 and March 1. The sun sets at 6:00 p.m. on November 1 and 6:01 p.m. on March 1. With dramatic increases in auto and pedestrian traffic additional lighting may be necessary. What additional lighting will be at the arena and will this lighting be projected downwards rather than randomly

upward impacting both birds and the neighborhood? Thoughtful design and lighting could save the lives of thousands of birds over the life of this project.

The EAW estimates only 20% of the game attendees will be students. With the impact of carbon on climate change such a major part of EAW review, should there be an assessment of the environmental cost of fans traveling from the suburbs to St Thomas for a game? Would there not be much less climate impact by building this arena in a suburban location? Will the new arena end its ranking as a Green College in the Princeton Review?

7. Construction Impacts. Construction impacts are of course temporary but real. Thousands of trucks and workers will come into the neighborhood. How will these, traffic, parking, noise and lighting impacts be mitigated. Among other things, will there be a responsible person at St Thomas assigned to help mitigate construction impacts?

8. Throughout this EAW and studies there are numerous references to mitigations that St Thomas **could** do. I believe the community needs real commitments instead of inadequate studies and hoping for the best.

St. Thomas wants to build a new Arena to have better sports facilities that draw more donors and students. It wants to build on its own land thus saving millions of dollars. It wants to avoid adding to its parking structure which would also add to its costs. But achieving St Thomas' two financial goals imposes burdens of the City and local residents that it does not want to mitigate or even acknowledge. St Thomas is a non-profit which contributes to the City but not financially. This project will add financial burdens to the City and traffic, noise and traffic to the local residents. I am especially concerned that, after construction, many Arena impacts will require City fixes. In particular, rebuilding Cretin Avenue could be very costly. If this inadequate EAW has a goal it seems to be to prove that:

If We Build It They Will Not Come.

It would be fascinating to review the communications St Thomas sent to its arena donors. The mission of the University of St Thomas is …"to educate morally responsible leaders who think critically, act wisely and work skillfully to advance the common good." I do not think their actions to build a new arena live up to their mission statement.

Josh Williams

From: Margaret Wirth-Johnson <mwirthjohnson@gmail.com>
Sent: Thursday, July 27, 2023 3:54 PM
To: *CI-StPaul_StThomasArena_EAW
Cc: Josh Williams
Subject: Hold everything!

To Whom It May Concern:

I was not present at the July 12 meeting on the EAW (re the proposed stadium at St. Thomas) but I have read all of the many concerns that have been raised by four neighbors, (Grove,
Brombach, Crenshaw, McGuire) who were at the meeting, and who have been working on behalf of, not only all of us who live in the neighborhood of St. Thomas to keep abreast of how a new stadium on the South Campus of St. Thomas will affect—not just us in this area, but also how it will affect the rest of the citizens of St. Paul and beyond, as the current plans for the proposed stadium do not adequately address concerns for environmental needs given the continued climate change crisis we are in.

Given the very legitimate points and questions raised by this group, I urge that plans and timelines for this stadium be halted until these neighbors' points can be addressed thoroughly, and that a new report be issued which contains responses to these questions and concerns. Ignoring the 2040 St. Paul Comprehensive Plan and a goal of carbon neutrality is not the direction St. Thomas should be taking.

In the 33 years my husband and I have lived in St. Thomas neighborhood, we have seen almost non-stop building and expansion of the campus, resulting in more noise in the area and way more traffic on Cretin Avenue. The noise of the excess traffic is one thing we contend with. Speeding cars on Cretin Avenue has resulted in Dayton-Cretin and Selby-Cretin intersections being almost impossible to cross during heavy traffic times. I have to data to back up this claim, but my impression is that St. Thomas traffic (cars going to and from the school) is the major reason for the heavy use of this street. It's very clear that this is so when one observes the great lessening of Cretin traffic during school breaks. According to the St. Paul Transportation Committee of UPDC, these two spots are where cars are LEAST likely to stop for crossing pedestrians. The very idea that St. Thomas would like to have yet another building that will bring even MORE traffic to this area is abhorrent to me and to others.

Again, I repeat, stop the process and address every single point on my neighbors' letter before continuing on with the plan to build.

Maggie Wirth-Johnson
2224 Dayton Avenue
St. Paul, MN 55104

Josh Williams

From: Josh Williams
Sent: Monday, July 24, 2023 2:29 PM
To: *CI-StPaul_StThomasArena_EAW
Subject: FW: EAW for proposed for St Thomas Arena - comments

From: Meg Grove <meg.grove@hotmail.com>
Sent: Saturday, July 22, 2023 8:43 AM
To: Josh Williams <josh.williams@ci.stpaul.mn.us>
Cc: Rosemary Maun <rosemary@maunmedia.com>
Subject: Fw: EAW for proposed for St Thomas Arena - comments

Josh - Here are comments on the St. Thomas EAW from Rosemary Maun. She had some trouble with her email, so asked me to send them to you on her behalf. I've cc'd her as well.

Meg Grove

> On Jul 21, 2023, at 8:37 PM, Rosemary Maun <rosemary@maunmedia.com> wrote:
>
> Meg, I'm sorry but I'm having a horrid time in getting my short paragraph to either of the EAW comments before the end date. I'd appreciate it if you would send it for me.
>
> "My house was built in 1926 and it's been my Home now just short of 50 years. My three sons were all raised here. I planned on being here for the duration. What saddens me, besides all the unnecessary devastation to a lovely neighborhood - it just isn't right! I'm afraid the day will come when I will see someone killed while trying to cross Cretin Avenue on Goodrich. There has to be a better solution. I'm asking that you find one."
>
> Rosemary Maun
> 2188 Goodrich Avenue
> St. Paul, MN 55105

From: Meg Grove <meg.grove@hotmail.com>
Sent: Saturday, July 22, 2023 8:39 AM

To: Josh Williams <josh.williams@ci.stpaul.mn.us>
Subject: Re: EAW for proposed for St Thomas Arena - comments

Hi Josh. Thanks for picking this up. Here's the email and attachment.

In related news, one of my neighbors, Rosemary Maun, emailed me that she's having trouble emailing her comments. She's a very sweet older person who struggles with technology sometimes. She asked me to send them in for her. I will do that under a separate email to this same address - hope that's ok.

Thanks!

Meg Grove

From: Josh Williams <josh.williams@ci.stpaul.mn.us>
Sent: Friday, July 21, 2023 6:54 PM
To: Meg Grove <meg.grove@hotmail.com>
Subject: EAW for proposed for St Thomas Arena - comments

Hi Meg,

This evening I was compiling the last of the comments the City received on the St Thomas EAW. Your comment and one other were flagged as potential spam by Microsoft (probably because you included an attachment and it was from a Hotmail address). I released the email and it should be now included in the location where we are collecting comments for response, but things can be a little weird with City systems in the evenings, as this is when a lot back-up and other maintenance routines are run.

Would you please resend your email and attachment to this address when you have a chance? I don't think there is a problem but I want to make sure. Thanks much!

Josh

SAINT PAUL
MINNESOTA

Josh Williams
Principal Planner
he/him/his
Department of Planning and Economic Development
1400 City Hall Annex, 25 West Fourth Street
Saint Paul, MN 55102
P: 651-266-6659
josh.williams@ci.stpaul.mn.us

UST Arena EAW

Open House Comment Form
July 12, 2023

NAME: Carol Walsh
ADDRESS: 1934 Laurel Ave. St P
PHONE: 651-644-0226
EMAIL: bycarolwalsh@hotmail.com

COMMENTS: TRAFFIC

Please be mindful of pedestrians — students, neighbors of all ages, visitors — and clearly mark and maintain areas where you can cross safely. Keep the 'walking street' feel for adequate amount of time to cross streets.

Ensure adequate lighting for pedestrians and cyclists.

Public Comments

Tom and Karen Alf

Comment	Response
6 – Project Description	
No mention is made in their Mission and Conviction statements of sports nor the need to achieve sports excellence by moving to Division 1 for basketball and hockey. In the EAW, Item 6d, the stated purpose of the multipurpose arena is to "…house a competition venue for the UST hockey and basketball to meet Division I athletic program expectations". UST chose to move directly to division I from Division 3 rather than finding another Division 3 league (after being ousted from the MIAC) or going to Division 2. More importantly, highly competitive sports programs do not help UST achieve their Mission Statement nor any of their listed Convictions; whereas, improved educational facilities and better paid faculty which would help UST achieve their Mission and Convictions.	Thank you for your comment. This comment is not related to the EAW.
General Item 6b – Construction access is via Grand Ave termination access road and another access described as "on the western boundary of the project site". Where would vehicles enter the south campus to access the western boundary of the project site? We want to make sure there is no vehicle access from Goodrich Ave to the project site.	Thank you for your comment. Primary access to the Arena both during and after construction will be from Grand and Cretin. Changes to vehicle access along Goodrich Ave are not anticipated for this project.
7 – Climate Adaptation and Resilience	
St. Thomas has indicated a goal of being climate neutral by 2035. Adding a 6,000 square foot arena with two ice sheets runs counter to UST's goal of carbon neutral by 2035. Despite trying to obtain LEED Silver certification, the arena will significantly add to Greenhouse Gas (GHG) emission over its lifetime.	Potential GHG emissions for a project are evaluated as a required element of an EAW. The University of St. Thomas, the project proposer, has stated a commitment to the goal of carbon neutrality by 2035 and are evaluating options to achieve this goal for the institution. The City of Saint Paul's Climate Action and Resilience Plan calls for City operations to be carbon-neutral by 2030, and citywide carbon neutrality. The proposed project is general consistent with that plan,

Comment	Response
	which calls for the City to work with private entities and utilities to reduce energy consumption in both existing and new buildings and to provide less carbon intensive or carbon neutral energy, respectively.
Building the arena will destroy 76 existing mature trees with only 50 small new trees planted near the site. Besides losing 26 net trees, the loss of mature trees means significant loss of annual carbon capture until new trees are mature.	Evaluation of expected GHG emissions and potential impacts to climate change are required elements of an EAW process. Currently there are no tree preservation requirements in the City of Saint Paul at the project location. However, the University of St. Thomas has committed to replacing all trees removed onsite at a 1:1 ratio. The University's stated intent is to replace the trees within or adjacent to the approximately 6-acre site for the Arena project, but since there is limited space within the Arena project area they will first replace trees elsewhere on the South Campus and then look at other areas within the remaining portions of campus for tree planting opportunities, if needed
The project will reduce grass and landscape by one acre adding to urban heat island impact especially when including the surface area of the 6,000 sq ft arena.	Thank you for your comment.
10 – Land Use	

Comment	Response
Item 10 ii - This item mentions and describes the MRCCA River Towns and Crossings District (CATTC) [sic]; however, the project site is currently falls within the MRCCA – River Corridor Urban District (RC3) as noted in the last sentence of this section. The River Corridor RC3 should be the zoning rule used to determine whether the project complies with those zoning rules. The RC3 River Corridor zone calls for a maximum building height of 40 feet. The proposed project arena maximum height as noted in Item 6c is the basketball practice facility of 68 feet and 58 feet 3 inches for the main arena, both of which are substantially higher than the RC3 River Corridor zoning maximum height of 40 feet.	The MRCCA overlay is part of the Saint Paul Zoning Code. Per Ch. 61 of the Saint Paul Zoning Code. When an application has been filed and determined to be complete, applicants have the option of having a project evaluated under either the code at the time of application or the code as amended subsequent to the amendment but prior to action on the application. The Saint Paul Planning Commission has held a public hearing on a draft new MRCCA ordinance consistent with Minn. Rules 6106, which govern the MRCCA, and City staff expect the draft ordinance to go back to the Planning Commission for a final recommendation to the City Council in Fall of 2023. At the time the EAW was released for public review and comment, no formal applications for the proposed arena had been submitted to the City. As noted in the EAW, the City of Saint Paul regulates building height on the University of St. Thomas South Campus via a previously approved Conditional Use Permit (CUP).
19 – Noise	
The Science and Math building built in the northeast corner of the South Campus some years ago created unacceptably loud noise from HVAC equipment on top of the building. It took St. Thomas and the City of St Paul over a year to correct his issue after repeated complaints from neighbors on the south side of the South Campus. The EAW calls for operational noise testing. Please provide us specifics of operational noise testing results as they become available. We want to avoid a repeat of the Science and Math building noise issue.	Thank you for your comment. Noise from any equipment will be required to meet City of Saint Paul ordinance, which is based on state law. The comment has been shared with the project proposer and the project design team, and the City will note the need for noise testing in project approval documents..
20 – Transportation	

Comment	Response
Parking – The proposed arena poses significant hardship on the near-surrounding neighbors to the south and to the east of the South Campus. The only way that neighbors can protect themselves from basketball and hockey fans parking in front of their homes is to go through the St Paul parking permit process. They would need to request "No parking except for area permits" which makes it difficult for a household to hold moderate to large size gatherings over the weekend since each home is allowed only 2 visitor permits.	Thank you for your comment. The EAW used attendance numbers from other Division 1 programs within UST's conference, excluding the top and bottom capacity programs, to estimate potential parking deficits for sporting events. Based on current understanding of planned facility usage, events creating parking deficits greater than 100 spaces are expected to occur only a few times annually (see numbered page 37 of the EAW (Appendix A) for more information on annual frequency and days of week of events). However, it is possible that some sporting events may result in more attendance than projected in the EAW analysis. In addition, parking demand for non-sporting events was not evaluated. The Findings of Fact document for the EAW outlines mitigation measures that the City of Saint Paul will require as conditions of any permit approvals in order to mitigate potential impact related to parking demanded by the proposed project. For more information, see the section titled **Mitigation Plan**.
The EAW notes that 264 net parking spaces would be lost due to arena construction leaving the Anderson ramp the only available parking on the south campus. The transportation study goes through an elaborate analysis with a number of assumptions to attempt to determine the adequacy of on campus parking. They concluded that basketball using maximum capacity would have a parking deficit of about 330 to 740 depending whether a week night or weekend game. Given the highly competitive nature of St. Thomas sports, we feel it likely that more games for both basketball and hockey will approach max capacity than the parking study assumes. Used page 37 parking summary analysis, Tables page 26 and 27 and Tables page 12 (Figure 3). The parking study ignores common sense/human nature; namely, people will	Given the nearby permit parking restrictions, during weeknight events the ASC and McNeely ramps are equally as close, if not closer, than legal neighborhood on-street parking. As noted in the Transportation Study, these permit parking restrictions are largely lifted on weekends, which will likely result in drivers being more likely to utilize on-street parking in the surrounding area instead of off-street parking facilities on the UST campus. The mitigation measures required by the City of Saint Paul as conditions of any permit approvals for the proposed project recommend consideration of changes

Comment	Response
look for the closest and cheapest parking available. Excluding Anderson ramp on South Campus, the closest parking are the neighbors east and south of the project site. These areas will be used before the ASC ramp or the McNeely ramp. Tommie north and Tommie East will not likely be used as they are 6-8 blocks from the project site. Tommie North and East were assumed to provide 110 spaces which if not used means more fans parking in our neighborhood.	to nearby residential parking permit districts as part of a larger parking management plan for events. UST will communicate expected off-street parking areas for sporting events within held within the building like is done for other university sporting events.
All of this means the surrounding neighborhoods will have much more significant parking use than the study assumes which is an undue burden on the surrounding neighborhoods, especially, considering that the home basketball/hockey total of 32 games each for men and women which totals 64 games per year. Plus, all the other events St. Thomas plans to hold at the arena.	As part of mitigation of potential impacts to parking related to the proposed project, The City of Saint Paul is requiring St. Thomas to consult with the City of Saint Paul on enforcement of parking violations.
At a minimum, we strongly feel that the City must insist before their approval of the EAW, that St. Thomas add the two additional allowed floors to Anderson ramp BEFORE the arena opens.	Thank you for your comment. The City of Saint Paul as the RGU has determined that mitigation measures other than immediate expansion of the Anderson Parking Facility are available and can sufficiently off-set potential parking impacts of the proposed project. Required mitigation measures also include ongoing evaluation of parking and traffic impacts of the proposed project.
The study assumes about 1,500-1,600 added car trips pre and post event. With 64 basketball/hockey games plus the other events planned for the arena, the added car trips in very concentrated times periods adds much more noise and “traffic jams” during these events adding further burden to the surrounding neighborhoods.	The trip generation estimates in Table 11 of the Transportation Study (1,500 – 1,600) are for maximum capacity basketball events, which are anticipated to occur once or twice per year. Event congestion is expected to occur; however, it is anticipated to only last 20-30 minutes pre- and post-event.

Eric Beck

Comment	Response
6 – Project Description	

Comment	Response
Re. Deconstruction/preparation of the site: How long will this part take, roughly?	Deconstruction of the existing buildings and preparation of the site will take approximately 9 months. Some overlap between deconstruction of the existing site and construction of the new site may occur based on when certain buildings can be removed.
7 – Climate Adaptation and Resilience	
Please consider adding "green" or succulent-based roofs to the new structures, and/or include pollinator plants -> to help lighten the local environmental impact of this giant structure.	The project will incorporate pollinator friendly landscaping into the project design to build upon the existing pollinator pathways within the campus. A “green roof” is not planned at this time.
Is any of the water/rain/snow run-off from the new arena and facilities going to be captured and re-used for: flushing toilets, watering gardens, etc.?	Water re-use within the building is not being considered at this time. The project team is exploring if water re-use for irrigation is a viable option.
17 – Air	
Re. Deconstruction/preparation of the site: Any how about dust and other air contaminants that may be generated when the existing buildings are demolished?	Dust will be managed during demolition of the existing structures and during construction. The project is required to comply with local ordinances. The City of Saint Paul and Capitol Region Watershed District require various construction site practices to reduce fugitive dust. These practices are required as part of the permitting process
20 – Transportation	
Re. Deconstruction/preparation of the site: Will this generate a significant increase in local traffic, with dump trucks, etc.?	The project will generate construction traffic similar to other projects on the University of St. Thomas Campus and other projects in Saint Paul of similar size and scope. As part of the permitting process, the City of Saint Paul

Comment	Response
	will identify appropriate haul routes to and from the site for construction vehicles.
Re. Traffic after the arena has been built: Please consider adding incentives for attendees of games, other events, etc. to: carpool; use electric or plug-in hybrid or hybrid vehicles; add substantial outlets in the existing and new parking facilities to promote cleaner, decreased emission vehicle use; IF buses are involved in transporting teams and/or spectators, ADD electric vehicles to your fleet.	Thank you for your comment. While use of EVs is not among these measures, the City supports adoption of EVs through public installations, and encourages all applicants, particularly larger businesses and institutions to include EV charging stations in new facilities. For more information, see the list of mitigation in the section titled **Mitigation Plan**.

Beth and Bill Brombach

Comment	Response
8 – Cover Types	
How can the loss of 76 mature trees easily be discounted, by saying that 50 little trees will be planted to replace them and even more outrageous is that they won't even be replaced in the area where they have been chopped down?	Currently there are no tree preservation requirements in the City of Saint Paul at the project location. However, the University of St. Thomas has committed to replacing all trees removed onsite at a 1:1 ratio. The University's stated intent is to replace the trees within or adjacent to the approximately 6 acre site for the Arena project, but since there is limited space within the Arena project area they will replace them elsewhere on the South Campus and then look at other areas within the remaining portions of campus for tree planting opportunities if needed.
13 – Contamination/Hazardous Materials/Wastes	

Comment	Response
Why are more environmentally friendly alternatives not being used for backup generators to the arena? Diesel powered is what they are proposing. Is this the 1970s?	Emergency power is a requirement for the Arena to meet life safety requirements and would only be used during a power outage or during the required monthly testing Theproject proposer is evaluating multiple alternatives for backup generators. Emergency power demand for the building will influence allowable fuel sources.
14 – Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	
It is also a conservation area that supports the endangered rusty patched bumblebee.	Per the project proposer, the project will incorporate pollinator friendly landscaping into the project design to build upon the existing pollinator pathways within the campus. See also response to comments from the Minnesota Department of Natural Resources.
20 – Transportation	
How can a parking lot be put in the last green space of the south campus? This green space is in a conservation area. It runs along the Mississippi Flyway and is used by 75% of ALL North American migratory birds. The environmental impact of chopping down these old growth oaks and putting in a parking lot and road to an area that will directly runoff into the river, is an absolute travesty.	Use of this area for parking was identified as a potential strategy in the EAW to help meet parking demand for large events. The City does not support this strategy, and it would likely not be permitted under Mississippi River Corridor Critical Area Rules (the City is in the process of adopting new ordinances consistent with the MRCCA Rules). The project. The project proposer has also indicated that they do not support this strategy.
What assurances does this neighborhood have that our streets, particularly Goodrich Ave, will not be used as an offsite parking lot and backdoor entrance to this project. I live on Goodrich and our street is already completely full of St. Thomas cars every school day and many event weekends.	On the south side of Goodrich Avenue, parking is by permit only between Cretin Avenue and Woodlawn Avenue, and completely banned between Woodlawn Avenue and Mississippi River Boulevard. For more information, see the list of mitigation in the section titled **Mitigation Plan**.
The traffic assessment was limited and done at a time when there was a threat of a big snowstorm. Also, many students and professors were	Thank you for your comment. As stated on Page 4 of the Transportation Study "To determine if the traffic counts were representative of an average day in the study area, MnDOT detector data was reviewed at the I-94/Cretin Avenue interchange from October 2022 to March 2023. Results

Comment	Response
already leaving for Easter Break. This does not reflect the huge volume of cars that already use Cretin.	of the review, shown in Appendix A, indicate that March 30, 2023, was representative (if not slightly higher) of an average day for the study area, therefore, no adjustments were made to the counts." Please note that Easter Break for the University of St. Thomas occurred from April 7-10 which is one week after the traffic counts were collected.
21 – Cumulative Potential Effects	
I don't see language that describes how any problems that will develop after an immense project like this occurs, will be monitored or actions enforced. By that, I mean, noise level of the buildings, traffic, parking, light pollution, misuse of neighborhood streets & air/dust pollution.	The project will be required to comply with all applicable City Ordinances regarding noise and lighting. Typical construction practices to reduce dust and dirt migration will also be required. Traffic and parking will be addressed through mitigation measures which the project proposer will be required to implement.
In conclusion, the scope of the UST proposed project will have such a lasting influence on anyone who lives in the surrounding neighborhood, that it is malfeasance to allow this to happen without more work to assess all of the cumulative effects that this project will have. The project that is being considered is too large and will have lasting negative environmental effects in this area. This does NOT go along with the 2040 Comprehensive Plan. As a matter of fact it does the opposite.	Thank you for your comment. The EAW evaluates potential impacts resulting from the project and found the project to be generally consistent with the Comprehensive Plan. The subsequent permitting process will provide opportunities for further comment on the appropriateness of the project and compliance with the Comprehensive Plan.

Ann Cohen, John Glasenapp, James Fitzpatrick, and Carol Walsh

Comment	Response
The City of St. Paul should not approve a negative declaration on this EAW because it is incomplete and inaccurate. The EAW identifies impacts that have the potential to be significant, but fails to provide an adequate description of the mitigation measures that will be implemented. The EAW also identifies potential phased actions associated with this	Thank you for your comment. The purpose of an EAW is to identify potential impacts from a proposed project. A negative declaration is only made if the City determines that proper mitigation, identified in this document, has

Comment	Response
project—such as increased individual vehicle parking and diesel-powered electricity generation—that are contrary to City of Saint Paul and UST strategic sustainability plans and that constitute likely future significant environmental impacts from this project or its future phases. The City of St. Paul should require UST to produce information regarding how it will mitigate the impacts of this project and its likely future phases, rather than providing a "negative declaration" based on UST's "vague statements of good intentions." UST should be held to the highest standards for the production of information supporting documents of this nature because it has the capacity to collect, analyze and produce accurate and complete information. The City should ensure that this EAW is accurate and complete before it is approved, or should order UST to prepare and Environmental Impact Statement.	been identified. All mitigation measures are required to be implemented as part of project permitting. For more information, see the list of mitigation in the section titled **Mitigation Plan**. Phased actions are defined in Minn. Rules 4410 and refer to projects for which multiple phases are planned within a period of time. The project proposer has noted the possible future addition of vehicular parking on the campus, particularly via an addition to the Anderson Parking Facility (APF) but has not established a timeline for that possible work. The question of timing aside, any proposed addition to APF or construction of additional parking elsewhere on the St. Thomas campus would require City review, including a traffic study and identification of any needed updates to the traffic management plan for the proposed arena, which is required as mitigation. Regarding diesel power generation, the project proposer has indicated that diesel power generation beyond that for emergency back-up is no longer proposed as part of the project.
7 – Climate Adaptation and Resilience	
The EAW fails to provide any specifics or commitments regarding the measures UST will adopt to mitigate stormwater impacts related to the expansion of impervious surface and loss of vegetated landscaped areas. The EAW states (emphasis added): Pdf 10. University of St. Thomas *is considering* ways to design landscaping (via shade trees) and stormwater management systems to reduce stormwater runoff and mitigate for the urban heat island effect.	The project is still under design and the Project Proposer is currently evaluating design elements to minimize impacts to existing resources on the site. The terminology such as "considering" and "investigating" was used to allow for the project design to further advance and incorporate the appropriate design features and mitigation strategies. The project team is currently working through the design of the project and as design progresses, ways to minimize run-off and provide efficient

Comment	Response
Pdf 11. University of St. Thomas *will investigate* ways to design the stormwater management facilities to minimize standing water and reduce the risk of flooding on the project site. Pdf. 12. University of St. Thomas *is investigating* ways to minimize tree removals or replace more trees than are removed and include non-invasive plants, resulting in a net gain of suitable habitat for local species including small mammals, insects, and birds. As it stands, the EAW predicts a net loss of 26 mature trees as the result of the project (pdf 13). Although UST plans to plant trees "elsewhere on campus," locations are not identified making verification impossible.	and effective stormwater management will be implemented. There are local and state stormwater requirements that apply to this project which are required for the project to advance to construction and will be documented as part of any future permitting processes. The City of Saint Paul advises on landscaping, including trees, during permitting approvals. There is no requirement that trees be replaced in the same location.
The EAW fails to clearly identify how the project will be powered. The EAW states that the project is being considered for connection to the campus microgrid for back-up power during outages or emergency events. Pdf. 11. However, the EAW then states "The project may install a diesel generator to provide backup power to the arena *as well as up to four additional future diesel generators to feed the University of St. Thomas' MicroGrid*. These generators would have diesel storage tanks at each generator or utilize one fuel storage tank for fuel supply. The project proposer will obtain the appropriate permits from the MPCA." Pdf 27 (emphasis added). *Based on this language, it appears that one unstated potential purpose of the project will be to provide fossil fuel power for the campus rather than reduce fossil fuel dependency*. Moreover, the proposed generators will require underground or aboveground petroleum storage tanks, which will pose unavoidable issues with spills and leaks very close to the Mississippi River. The EAW contains no discussion whatsoever of the potential for installing solar panels on the structure to generate clean energy. The EAW contains no discussion of the potential to purchase energy for the project from clean energy sources, such as a solar installation located elsewhere on campus.	The intent is that the Arena project will be powered through connection to the existing Xcel Energy grid that exists along Cretin Avenue. A backup generator will be included in order to meet code requirements. The project is evaluating ways to meet the University's sustainability goals through the design of the project including the relocation of solar panels that exist on top of McCarthy Gymnasium. The University has decided to eliminate the Microgrid Expansion program from the Arena project; therefore, the diesel generators identified for the Microgrid Expansion will not be incorporated into this project. MPCA permits are required for all tanks for storage of petroleum products and hazardous materials. Tanks over 500 gallons require secondary containment for the stored liquid in the event of a tank leak.
12 – Water Resources	
Pdf 22. Instead of designing to reduce current direct stormwater discharge to the Mississippi, the Project appears to be designed to maintain current direct discharges via an existing stormwater tunnel. The project will thus continue impacts (erosion and	The project will meet rate control, volume control, and water quality treatment requirements as outlined in the Capitol Region Watershed District Rules and City ordinance. These rules are in place to ensure that

Comment	Response
sedimentation) related to rapid discharges of stormwater to the river instead of environmentally-preferable infiltration.	stormwater is discharged from the project site at an equal or lesser rate than existing conditions and the stormwater discharge is cleaner than the existing water leaving the site. Due to the shallow groundwater and poor soils, infiltration is not a viable option for the site according to local and state regulations.
13 – Contamination/Hazardous Materials/Wastes	
The EAW identifies that the project will generate large quantities of construction debris that will require disposal or recycling, but fails to identify the use of techniques to "deconstruct" the existing buildings in a manner that will maximize environmentally superior *reuse* of materials. *See, e.g.*, https://www.rethos.org/sustainability. Similarly, the EAW does not contain any details regarding the impact of waste that will be generated at games and other events held at the building.	Thank you for your comment. The project proposer has indicated that the project will pursue the maximum number of LEED points for diverting waste from landfills through careful on-site management of materials and coordination with their chosen waste management partner. Construction debris will be sorted and disposed of at the appropriate offsite locations. The project will also be required to meet all city, county, and state requirements for demolition. The project proposer has indicated that waste generated at events held at the Multipurpose Arena will be disposed of through the University's waste, recycling and compost programs located within their campus. The University has a goal to reach a waste landfill diversion rate of 80% by 2030.
18 – Greenhouse Gas (GHG) Emissions/Carbon Footprint	
The EAW attaches a UST greenhouse gas analysis. However, this analysis is not specific to the project, generally dates from 2020, is manifestly incomplete, and amounts to "lip service" rather than a real commitment by UST to addressing the most significant environmental issue of the present time. For example, there are numerous "?" rather than data on the following table (pdf 71).	The Project is in the early stages of design and the design details have not been finalized. The mitigation strategies identified in the EAW have not been incorporated into the operational emissions calculations as presented in the EAW.

Comment	Response
Similarly, the following information is largely missing, other than the admission that UST does not purchase any "offsets" for the greenhouse gases it produces (pdf 72). The "proposed scenario" section dated January 2023 is also manifestly inaccurate, noting, for example, that natural gas and #2 fuel oil are also used but providing fuel consumption figures solely for natural gas. This is unacceptable. The project-specific greenhouse gas analysis is, as noted above regarding other aspects of the proposed project, entirely nonspecific with regard to mitigation strategies that will be incorporated into the project. The EAW states only that "[t]he following design strategies and other sustainability measures *are being considered* for the proposed development to reduce emissions" rather than identifying particular project commitments, such as the use of on-site photovoltaics. Pdf 36-7. While it is likely that UST will incorporate *some* of the identified mitigation features into the project, it is impossible to review the true impact of the project based on UST's "consideration" rather than "commitment."	The South Campus has some buildings that are provided low-pressure steam from a central heating plant located in Owens Science Hall, but the Arena is planned to be a heated by energy-efficient hot water boilers located in the building. The arena's hot water boilers will be interconnected to adjacent buildings to provide redundancy for improved resilience. #2 fuel will only be used when natural gas is curtailed by Xcel Energy in times of extreme cold when natural gas demand is high. The emergency generator will also use #2 fuel but will only run infrequently during power outages or required monthly testing. There is not a central cooling plant on the South Campus, but building systems are interconnected, when possible, to allow phased operations due to cooling demand and to also provide redundancy for improved resilience. The University has a goal of carbon neutrality by 2035 and they will look to incorporate mitigation strategies as described in the EAW to help achieve that goal.
20 – Transportation	
The EAW fails to implement UST's sustainability strategic plan commitment to reduce vehicle traffic to the campus, admitting that the existing parking ramp will be expanded to accommodate increased parking as a second phase of this project, pending funding. Pdf. 7. More parking will attract more individual-use vehicles. The EAW makes no mention of encouraging electric vehicle use of the facilities that will serve the project by installing charging stations. The potential for expanded parking, while helpful to reduce neighborhood impacts during high-use periods, is nevertheless environmentally detrimental. The EAW contains no discussion of how clean transportation could be used to bring fans or players to games.	Thank you for your comment. The existing Anderson Parking Facility (APF) was initially designed to expand an additional two levels when the project was constructed in 2008. The APF expansion is listed as one potential mitigation strategy in the Transportation Study. For more information, see the list of mitigation in the section titled **Mitigation Plan**.

Colleen Crenshaw

Comment	Response
6 – Project Description	
In the introduction, in the very first paragraph, it is stated “other events…high school/youth sports, and conventions may also be held at the venue.” On p. 19. It is stated “conventions, career fairs, etc. are often hosted on the North Campus.” Will they be moved to the flagship Anderson Arena? UST representative Amy McDonough told participants at a MGCC HLU meeting “We aren’t building this to have it stand empty”. I find it hard to fathom that an institution as well organized as UST doesn’t have specifics on what these “other events” will be. Those of us who have been involved in high school athletics have seen the large number of attendees at legacy games, conference tournaments and consolation rounds, bringing in hundreds or thousands of people from outside the immediate area. Throughout the document, references are made to the shortage of parking. These vague “other events” could be significant and needed to be addressed as to their impact on traffic and parking.	According to the project proposer, it is possible that other events such as conventions, career fairs, and commencements currently held in other spaces across campus may now occur in the arena. Depending on size of “non-athletic” events, they may also continue to be held in other locations on campus. The primary scheduled, reoccurring use of the arena is for basketball and hockey events and therefore was selected as the focus of the EAW transportation analysis. The events studied represent the likely maximum impact from a traffic and parking perspective. The project proposer has not provided detailed information on the type, attendance, or frequency of "non-athletic events" that may be held in the arena. It should be noted that some events would have a much larger student to non-student ratio than athletic events. Please see the list of mitigation in the section titled **Mitigation Plan** for more information.
Because the “other events” are not identified, the hours of operation aren’t either. This is important information for analyzing the effects of this proposal on the neighborhood and should be included in a comprehensive EAW.	See the response directly above for response.
16 – Visual	
The visual effects are said to not be “adverse”. We have not seen what this 70’ building will look like from the sides and back, and the visual effects could be extremely “adverse”.	The building will be visible on the campus.. However, existing buildings remain adjacent to the proposed building on campus. The building will be most visible from the south. The proposed building height is consistent with the campus CUP previously issued by the City. The project proposer has also committed to match the architectural

Comment	Response
	materials and design quality of existing buildings on campus, and has agreed to share renderings as the project design advances., .
20 – Transportation	
Regarding the effects of this large arena on traffic and safety of pedestrians and drivers, on p. 10, Appendix D, it is stated that on Cretin Ave. "Left turn movements and time-of-day-on-street parking were observed to cause abrupt lane changes and friction along the corridor." Cretin Ave is already congested (reference p. 10, Appendix D). Adding a predicted number of up to 3784 "passenger vehicle trips (p. 24, Appendix D) on the roadway will only add to this friction. Long wait times at lights, even longer waits from residential streets without lights ("During both pre-event conditions, multiple unsignalized side-street approaches on Cretin Avenue will be difficult to make left-turn movements for 13 to 30 minutes." p. 38, Appendix D) are expected to occur as a result of the proposed arena. It is difficult to see how this predicted and predictable effect on Cretin Ave., intersecting residential streets, and pedestrians who attempt to cross this already busy road is acceptable, particularly when the city comp plan emphasizes the commitment of the city to the safety of pedestrians and bikers. Idling cars will also add pollutants and Greenhouse gases, another effect not fitting with the com plan's commitments to city residents.	Collegiate sporting events are expected to occur largely outside of peak traffic hours (i.e. 7-9 am, 4-6 pm on weekdays). During this time, background traffic volumes are lower. Event congestion is only expected to occur for 20-30 minutes before and after the event. Several event management strategies were recommended as part of the Transportation Study to improve safety and comfort for pedestrians walking to/from the arena during pre- and post-event conditions and can be seen on Page 36, 39 and Figures 12 and 13. For more information, see the list of mitigation in the section titled **Mitigation Plan**.
Parking will be a huge issue. The EAW has laid out numerous deficits in parking spaces from a shortage of 40 to a shortage of 742 (Table 13, p. 28, Appendix D and p. 34, Appendix D). This is taking into account the assumption that many people will walk up to 0.5 mi to attend. The document states that it is "good practice for the parking supply of a visitor parking facility to equal the peak parking demand plus an additional 5 to 15%" (p.17, Appendix D) in order to reduce cars driving around looking for spots to park (again, safety and Greenhouse gas emissions are an issue). This best practice is obviously not being followed. The EAW suggests that the excess cars will use "public parking" in the neighborhood but doesn't identify where that is. Those of us who live here know it is nonexistent. 36 hockey games that are now played at the hockey arena in Mendota heights will move the South Campus. They will be played mostly on Fri. and Sat. nights (Fig. 6, Table 7, p. 20, Appendix D), adding congestion, traffic, and parking requirements.	Events are expected to occur on weeknights and weekends when there is significantly more available parking on campus than weekday mid-day. Based on the event parking demand analysis on Page 28 of the Transportation Study, most events are expected to have a parking surplus on campus. For sporting events where a parking deficit is expected, several mitigation strategies and improvements were identified to reduce on-street public parking in the neighborhood and are summarized on pages 34-36. Modifications to the Summit Ave driveway and medians are no longer proposed due to the addition of the southeast Cretin Ave access point (see Appendix D for updated site plan).

Comment	Response
	For more information, see the list of mitigation in the section titled **Mitigation Plan**.
The document states that the Summit Ave./South Campus intersection is "expected to be modified to better accommodate" (p. 14, Appendix D) the buses and delivery vehicles that will use the roadway on the west side of the arena. That space is already constricted. The seminary grounds, grotto, and historic chapel are all located in this area. Access of these large vehicle to the relocated Lot O seems difficult without further removal of buildings in the future, particularly during the winter with snow accumulation. This should be addressed in the EAW. The modifications should also have described.	Based on analysis completed by the project proposer, truck access to the South Campus from Summit Avenue would require minor modifications to the median opening on Summit Avenue between Cretin Avenue and MRB. The modifications would not require the removal of additional building. Changes to the paving or median areas within Summit Ave, or expansion of the roadway, as those modifications would be considered impacts to the parkland division, and would require approval from the Saint Paul Parks and Recreation Board and compensatory parkland dedication elsewhere. Modifications to the Summit Ave driveway and medians are no longer proposed due to the addition of the southeast Cretin Ave access point (see Appendix D for updated site plan). The University will continue to explore the best routes for buses/vehicles both external and internal to the project site as the project design advances.
Possible mitigation strategies include scheduling more games on weeknights, overflow parking on the South Athletic Fields (which would seem to void guarantees on the integrity of the artificial turf fields), expanding the APF (which the documents states "may not" be in compliance with the CUP- shouldn't we know this?- and would add to queuing as even more cars would enter and exit the ramp onto Cretin Ave.), and constructing a parking lot on the corner of Goodrich and the River Blvd which would result in taking down even more old oak trees along the Mississippi Flyway (p. 36, Appendix D).	Thank you for your comments. Expansion of the Anderson Parking Facility would require City approvals, including amendments to any event operations plans for the proposed arena to account for anticipated additional vehicles entering and exiting the site. Please note that the mitigation strategy noted in the comment is to schedule higher attendance games on weekends, not weeknights, as there is more available campus parking on weekends. Addition of two levels to the APF would not require an amendment to the campus CUP, provided that the top parking deck is 60' or less above grade; stairwells, elevator overruns, equipment and parapets/railings are allowed

Comment	Response
	above the maximum building height. This would require a relocation of the existing University observatory located at the southwest corner of the ramp. The City of Saint Paul does not support construction of new surface parking at the NE corner of MRB and Goodrich Ave. The project proposer has also indicated that they do not intend to pursue a new parking lot at that location.

Kathleen Deming

Comment	Response
Please DO NOT ALLOW St. Thomas U. to build a ball field at Highland Bridge (or to acquire another square foot of property anywhere off campus) UNLESS they are willing to pay the full value of property tax. Any further thinning of our property tax base is going to further cost us property-tax payers, and citizens in this town are drowning in taxes. I'm living below the poverty line, and if I had the use of my tax money, I could afford to have done some of the badly needed repairs on my 102-year-old house. I believe that all church-affiliated colleges should have to pay tax on their acreage that is NOT PHYSICALLY OCCUPIED by their church or chapel. I don't use trash service as I still share with a neighbor, yet had to go begging for assistance to pay for medication. Before the city in 1984 broke the back of the private Recycling Unlimited, which provided recycling throughout the city – with the exception of one last small area which was being planned for, recycling was FREE. Now we get charged for it. SHAME! SHAME! SHAME! There are limits to citizens' budgets. There should be limits to the city's. STOP eroding the tax base! Stop charging us for things we don't use!	The proposed UST ballfields at Highland Bridge are not covered by the EAW. The City of Saint Paul City Council has determined that construction of ballfields at Highland Bridge, is permissible and amended the Master Plan for the site has been amended by the City Council accordingly. Beyond that regulatory role for the City, the construction of the proposed ballfields and associated facilities are an agreement between private parties.

Meg Grove

Comment	Response
6 – Project Description	
The EAW says that "Vehicular access to the facility will consist of loading zones via an access drive on the western boundary." Please describe.	The full reference in the EAW is "Vehicular access to the facility will consist of loading zones via an access drive on the western boundary of the project site and via the termination of Grand Avenue in the northeast part of the project site." The private extension of Grand Ave is proposed to be terminated with a turnaround just north of the Facilities Design Center to allow vehicular access to the Anderson Parking Facility, loading access to the Owen's Science Hall loading dock, and access to the Recycling Center proposed in the alley west of the Anderson Parking Facility. An extension of the existing University access point to Summit Ave is proposed to run along the western and southern sides of the arena building, providing access to Lot O, and continuing to Cretin Avenue, just south of the Anderson Parking Facility. The new Cretin Avenue access location is designated for heavy loading/delivery vehicles, whereas the existing Summit Avenue access point is the primary vehicular ingress/egress for buses and Lot O users. An updated site plan is shown in Appendix D. The University will continue to explore the best routes for buses/vehicles both external and internal to the project site as the project design advances.
7 – Climate Adaptation and Resilience	
Continuing to build in an urban setting will exacerbate the Urban Heat Island. The EAW acknowledges that the area is "susceptible to extreme heat." How does this comport with St. Thomas' carbon neutrality goal, and with the City's Comprehensive Plan's Resilience and Urban Design goals?	The University of St. Thomas has stated a commitment to the proposed arena being built to a LEED-Silver certification, and designed to use less energy and water. While not currently required for a privately funded project, this is consistent with the goals of the City's Climate Action and Resilience Plan. The project proposer has indicated the intent to include

Comment	Response
	the following measures, which will provide for increased reliability and energy efficiency in the arena, including: • Redundant chiller design and incorporation of glycol into supply loop for all cooling coils will protect from freezing conditions and ensure systems remain operational. • Chillers will use next-generation refrigerants with low global warming potential. • The boiler system will include n+1 redundancy and freeze protection. These efficiencies reduce heat emitted from the buildings and their HVAC systems and reduces indoor and outdoor exposure to heat, which is one of the impacts of the heat island effect.
8 – Cover Types	
UST says it will remove 76 mature trees to accommodate the complex, and that it will plant 50 new trees around the area. Also, "…St. Thomas has plans for at least 26 trees to be planted elsewhere on campus, outside of the EAW site area…" We heard at the 7/12 meeting from the project consultant that St. Thomas is "committed" to replacing the lost trees, one-for-one. New trees will take decades to become true replacements for the ones to be removed, which seems antithetical to carbon neutrality and Comprehensive Plan goals. How can this be a reasonable answer to the EAW question? Also, "has plans for" and is "committed to" are not very reassuring. This seems to leave room for St. Thomas to change its mind. Who holds them accountable to their plans and commitments? Howe does this response support the 2040 Comprehensive Plan Urban Design goals (promote high-quality urban design that supports…a healthy environment, and enhances the public realm; encouraging…private landowners…to	The City of Saint Paul does not require tree preservation at the project location. However, the University of St. Thomas has committed to replacing all trees removed for the project to at least a 1:1 ratio. The University's intent is to replace the trees within or adjacent to the approximately 6 acre site for the Arena project; however, space is limited at the arena site, so some tree replacement will occur elsewhere on the South Campus, and, if needed, on other parts of the campus. The terminology such as "has plans for" and is "committed to" was used to communicate the intent but to allow for the project design to further advance, as all tree replacement locations have not yet been identified.

Comment	Response
create and maintain privately owned public space (POPS) and green infrastructure…)? It seems convenient for UST to say it will put other trees elsewhere, just not on the South Campus site. Why would replacing the lost 26 trees to be placed outside of the EAW area be counted as a mitigation for purposes of this EAW? In fact, if UST wants to use the other parts of its campus to take up slack on any issue, doesn't that argue for a broader EIS?	
10 – Land Use	
Saint Paul has not yet adopted the new rules of the MRCCA. I am sure the City Planning Commission is aware of the inconsistent application of the CA-River Towns and Crossings District. Why does UST property receive this designation while the Saint Paul Seminary remains zoned a River Neighborhood? Furthermore, the property bordered by Cretin, Goodrich, Mississippi River Boulevard, Exeter, and Otis Avenues is located entirely within the MRCCA and is designated further as a Primary Conservation Area (PCA) under three categories: Bluff Impact Zone, Significant Existing Vegetative Stands, and Unstable Soils and Bedrock. The PCA designation is meant "to ensure that they are given priority consideration for protection." All these considerations which have been in effect for almost 50 years by Governor's Executive Order 79-19 appear to be ignored in the EAW.	The City of Saint Paul is currently working through the formal process to adopt new ordinances consistent with the MRCCA Rules promulgated by the Department of Natural Resources. The next step in the process is for the Planning Commission to formally respond to public comments and forward a recommendation to the City Council. The districts (River Towns Crossings and River Neighborhood) were designated by the MN Department of Natural Resources during the state rulemaking process and can only be changed through that same process. As noted in the EAW, building height limits on the University of St. Thomas Campus are governed by the existing Conditional Use Permit (CUP). The only Primary Conservation Area designated for the proposed project site is that for soil erosion susceptibility. The majority of the site is assigned an erosion potential of 200 out of maximum 1960. A portion of the site may fall into an area along Cretin Avenue rated with an erosion potential of 370 out of 1960. A smaller number indicates lesser erosion potential.)
I understand that the City does not count parapets and rooftop mechanical equipment toward the overall building height. What I don't understand is why that is allowable. Could it be that difficult to design the building to completely meets height limits?	Thank you for your comment. The definition of building height is part of the general definitions in Chapter 60 of the Saint Paul Legislative Code, part of Title VIII, the Zoning Code. This provision describes methods for measuring building height based on roof type and for flat roofs has been

Comment	Response
	interpreted to exclude rooftop equipment, stairwells, elevator overruns, etc. as they generally occupy a small portion of the roof area.
13 – Contamination/Hazardous Materials/Wastes	
UST says it "may install a diesel generator to provide backup power to the arena as well as up to four additional future generators to feed the [school's] MicroGrid." Why would this be necessary? Instead of backup generators, what about batteries to store the power gained from the solar panels on various buildings on campus? Seems that burning diesel would be a step backward in terms of carbon neutrality and of the City's 2040 Comprehensive Plan.	A backup generator will be included in order to meet code requirements. The proposer has indicated that the project is evaluating ways to meet the University's sustainability goals through the design of the project including the relocation of existing solar panels currently located on top of McCarthy Gymnasium, which is slated for demolition as part of the project. Batteries would not have sufficient capacity to store the power necessary to service the arena in emergency situations. The University has stated that a decision has been made to eliminate connection to the Microgrid from the proposed project; and that therefore the diesel generators identified for backup power to the Microgrid will not be included in the project.
14 – Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	
The area could be habitat for the endangered Rusty Patched Bumblebee (which is the Minnesota State Bee), according to the EAW, but isn't because it is already "disturbed." However, there are efforts all around us to restore habitat. How is this response aligned with the City's 2040 Comprehensive Plan Urban Design goals, especially around promoting 'high quality urban design that supports …a healthy environment and enhances the public realm' and 'visible green infrastructure landscape features, such as rain gardens…?'	The proposed project area is composed of approximately 4 acres of impervious surfaces, with the remaining areas lawn or landscaped areas. Areas of maintained turf grass and, because they do not are generally not considered, along with pollinator habitat due to the lack of flowering plants. Landscaped areas may or may not provide habitat, depending on the plantings. The project proposer has also committed to incorporating pollinator friendly landscaping/plantings into the project design.
16 — Visual	
The EAW says the project 'will conform with the City's regulations for building height…Adverse visual impacts are not anticipated." Who defines	The Arena building will be visible on the campus; particularly from Goodrich Avenue. Views from Cretin Ave Summit will be partially or almost

Comment	Response
what is “adverse?” What happens if they occur? Who monitors? Who corrects?	entirely screened by other buildings, and it will be well set back from Mississippi River Boulevard. The University has committed to matching the architectural design and materials of existing buildings on the campus. Building height will be required to comply with the limits in the campus CUP, and building design will be reviewed by the Saint Paul Heritage Preservation Commission (HPC). As noted in the comments, visual impacts can be subjective. The analysis and findings in the EAW are based on compliance with existing regulatory requirements.
17 – Air	
The EAW says, "The construction and operation of the project are not expected to generate objectionable odors." Objectionable by whose standards? Is anyone asking the people who live around the area? Is anyone planning how to monitor during construction and after the building opens? What if there are problems? Who is empowered take complaints or required to take some kind of action?	Per the Minnesota Pollution Control Agency (MPCA), Minnesota does not have a state odor rule.[4] Accordingly, odor complaints are generally handled at the municipal (county or city/township) level. The City of Saint Paul investigates odor issues on a complaint basis.
18 – Greenhouse Gas (GHG) Emissions/Carbon Footprint	
The EAW lists "design strategies and other sustainability measures being considered for the proposed development to reduce emissions." *Considered*? Maybe considered, then tossed aside? Who is responsible for monitoring and ongoing mitigation/enforcement if there are problems?	The terminology “considered” was used to communicate the expressed intent of the project proposer to incorporate multiple strategies/measures to reduce GHG emissions. Per the project proposer, multiple options are under consideration but have not yet been finalized. The City as RGU(as well as other agencies responsible for reviewing permit applications) will consider proposed mitigation measures as part of project review and permitting.

[4] https://www.pca.state.mn.us/air-water-land-climate/noise-and-odor

Comment	Response
19 — Noise	
In the Operational Noise section, the EAW says "The proposed project will potentially contribute to the existing campus noise. Further noise evaluation will be completed as design progresses..." This response seems inadequate. It supports what many neighbors fear because we've experienced it before: build first and worry about noise later - and only if someone brings it up. Later in that paragraph, the EAW says, "If the facility exceeds noise regulations, the project proposer will work with the city to identify potential mitigation options." Those of us who've lived here a long time recall when the Frey Science Building went operational. Switching on the massive exhaust fans on top of the building produced unbearably loud noise. It wasn't until more than a year after neighbors lodged numerous complained that the school finally added sound muffling to the fans.	The project proposer has committed to conducting noise evaluation throughout the design process. This includes analysis of building wall sections (thickness of insulation, etc.), location and screening of mechanical equipment, and selection of broadcast and audio systems within the arena The project proposer is committed to completing an operational noise study to evaluate noise from the completed building and identify any needed noise mitigation. The project will be required to meet City of Saint Paul noise ordinances, which are the most restrictive allowed under state law.
The EAW has also overlooked the noise generated by additional traffic generated by the project. Residents of the neighborhood have already experienced significant traffic noise increases resulting from the Grand/Cretin intersection modification and from the Highland Bridge development.	The traffic increase on adjacent roadways is not expected to generate a significant noise increase as defined by state rules.
We get noise – we live in an urban area. Please explain how so much additional noise generated by one neighbor must be the price the rest of us pay, particularly when the project seems to be incongruent with St Thomas' and the City's stated goals and values (carbon neutrality, 2040 Comprehensive Plan Urban Design, Resiliency, and Community Health focus areas).	Thank you for your comment. The University is committed to completing a noise study to evaluate potential noise from the building and to identify noise mitigation options as needed. The project will be required to meet City of Saint Paul noise ordinances and MPCA regulations for noise. Some additional traffic noise will be generated during peak times for events held in the Multipurpose Arena. The traffic increase on adjacent roadways will not generate a significant noise increase as defined by state rules.
20 - Transportation	

Comment	Response
Expansion of the Anderson Parking Ramp is mentioned as a "potential improvement in the Traffic Impact Analysis," though nothing is planned or funded "at this time." Considering St. Thomas' goal of carbon neutrality by 2035, and the City's Comprehensive Plan goals of minimizing traffic, why is this even on the table? Why would something that only encourages driving be a good idea? Also, based on discussions with City and project consultant staff at the 7/12 public meeting, assumptions used to calculate traffic at the ramp seem to be best case scenarios. What about when the weather isn't optimal? What about when vehicles break down or collide in and around the ramp? Explain how long wait times – whether under optimal or suboptimal conditions – won't result in lots of idling vehicles, and environmentally harmful emissions in this heavily residential area? With so much emphasis on through put of vehicles, it is difficult to see how the ramp log jams are consistent with St. Thomas' carbon neutrality goals, or with the City's 2040 Comprehensive Plan Resiliency goals (reducing carbon emissions, improving environmental sustainability), and Urban Design (limit stand alone parking uses, and encouraging private landowners to create/maintain green infrastructure).	In addition to the possibility of an expansion of the Anderson Parking Facility, several mitigation strategies and improvements were identified as part of the Transportation Study, including facilitation of travel modes other than private vehicle. The parking ramp operations were modeled to represent maximum capacity event conditions. Note it is not standard practice to model emergency situations as a part of the traffic analysis. For more information, see the list of mitigation in the section titled **Mitigation Plan**.
What are assurances that Goodrich Avenue will not become the offsite parking lot and backdoor entrance to the project both during construction and operations?	On the south side of Goodrich Avenue, parking is by permit only between Cretin Avenue and Woodlawn Avenue, and completely banned between Woodlawn Avenue and Mississippi River Boulevard. Available parking on the north side of this stretch of Goodrich Avenue is likely to be utilized during events at the proposed arena, particularly events with projected higher attendance. No access is proposed during construction and operations.
The EAW says that "Maximum basketball events may occur one to two times per year. Maximum hockey events are expected to occur two to four times per year..." One wonders - why build at all? As we've heard from St. Thomas' own staff, "you don't build for Easter Sunday."	Per the University, their current athletic facilities for basketball and hockey do not meet all NCAA Division I standards., and the arena was designed by the project proposer both support to meet NCAA regulations and conference expectations for NCAA Division 1 requirements. Also, while the

Comment	Response
	comment is appreciated, please note that the EAW is not intended to address the need for the proposed project.
However, we've also heard from St. Thomas staff that they plan to market use of the complex all year round, yet the environmental impact of those events - whatever they may be - are not included in this EAW, which makes it incomplete. Why not make some assumptions and put those into the calculations?	Per the project proposer, the primary scheduled, reoccurring use of the arena is for basketball and hockey events, and the projected frequency of events was the basis of the EAW transportation analysis. The largest events considered (as noted in the comment) represent the greatest impact, from a traffic and parking perspective, likely to occur. "Non-athletic events" have only been generally described by the project proposer. Events for students would likely have less impact on traffic and parking than hockey and basketball games due to the large student to non-student ratio. The City of Saint Paul is requiring the University of St. Thomas to provide a list of non-sporting events likely to held at the proposed arena within six months of project approval, should it be approved. Large “non-sporting” events will be treated similar to large sporting events.
The Traffic Study’s traffic volume data depends on traffic counts for March 30, 2023, just before a major snowstorm (March 31-April 1). Given how that storm was forecasted and hyped, we believe the volume of traffic was significantly lower than normal. The Parking study also discounted the snowstorm as a factor. I strongly suggest updated parking and traffic studies to truly reflect what is/will happen.	The traffic counts cited in the comment were compared to counts from a typical day in the study area drawn from MnDOT traffic detector data measured at the I-94/Cretin Avenue interchange from October 2022 to March 2023. Results of the review, shown in Appendix A, indicate that March 30, 2023, was representative (if not slightly higher) of a typical day for the study area. Based on this, no adjustments were made to the March 30, 2023 counts.
Continuing on the topic of the traffic study, it includes mention of putting a surface lot on Mississippi River Boulevard as a way to mitigate parking issues. This cannot be acceptable! Certainly THAT would trigger more scrutiny because of the MRCC.	This construction of a new surface parking lot at the southwest corner of the UST South Campus was identified as a potential way to provide additional off-street parking as a strategy for reducing demand for parking on neighborhood streets during larger events. The City of Saint Paul does not support this approach, and the University of St. Thomas has agreed to not pursue this approach.
21 – Cumulative Potential Effects	

Comment	Response
The EAW asks UST to “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”…" The EAW sa“s "The University of St. Thomas does not have any board approved plans for new building construction at the Saint Paul campus. While future development of the University is indicated by historic and forecasted trends, there is not sufficiently detailed information about any future building projects to contribute to the understanding of the cumulative potential effec”s." Neighbors have heard this numerous times over the years, always some version of “there are no plans.” UST has stated that it is in an arms race to attract students from the dwindling age cohort, and that moving to Division 1 athletics is a marketing strategy. The EAW should include some assumptions about future development since even UST indicates it will occur. They have already said development of the East and West blocks of Grand Avenue is next. The constant drip-drip-drip of development while hiding behind statements about not having any “board approved plans” insults the neighborhood and the City. Why not treat all of St. Thomas as it really is – a single si–e - and require a more thorough study of the impacts of its building program with a comprehensive Environmental Impact Statement?	The subject of the EAW is the proposed project, the proposed arena. An assessment of cumulative potential effects is based on known, unrelated projects planned or underway at the time of the EAW. The Schnoecker Center, while under construction at this time, was analyzed as part of existing conditions. In order to conduct an environmental review, the Responsible Governmental Unit (in this case the City of Saint Paul) must be presented with a proposed project. Any new projects proposed by the University that exceed an EAW or EIS threshold as defined by MN State Rules 4410, would be required to complete the appropriate environmental review. If the anticipated redevelopment of the East and West blocks of Grand Avenue exceeds an EAW or EIS threshold as defined by MN state rules, the University would be required to complete an environmental review. The University would also need to meet the regulatory permitting and approval processes.

Joan Haan

Comment	Response
20 - Transportation	

Comment	Response
I recently had a lengthy conversation with Jerome Benner, the new neighborhood liaison. He is interested in finding ways to make traffic and routing more amiable/ less negatively impacting neighborhoods. Some ideas: - Signage, cones, directing traffic - Encouraging walking, biking, carpooling as pro environmental action - Email Schedule of events in advance to neighbors so we can plan accordingly – text alerts for those who opt in. - Expansion (higher levels) of the exiting Anderson parking structure – that will need variance from the city and may be the best solution for additional parking vs. neighborhood parking and traffic.	Thank you for your comment. These suggestions will be considered as part of event management planning.

Laura Halferty

Comment	Response
20 - Transportation	
I have lived in the neighborhood for about 15 years and have been supportive of St. Thomas, it's variance requests, and it's building projects. However, I am very concerned that the planning for the new hockey arena does not adequately address parking. I feel very strongly that parking solutions need to be identified and approved before the arena is built. We already have parking issues in the neighborhood and the city has not	Several mitigation strategies and improvements were identified as part of the Transportation Study that could be effective. For more information, see the list of mitigation in the section titled **Mitigation Plan**.

Comment	Response
consistently enforced the permits in place to alleviate the dearth of parking.	
Existing traffic on Cretin has resulted in numerous accidents and fatalities. Additional traffic (especially at high speeds) on river road is concerning as well given all the bicycle and foot traffic.	Thank you for your comment. For more information, see the list of mitigation in the section titled **Mitigation Plan**.

Virginia Housum

Comment	Response
As several people have pointed out at the public meetings, UST failed to engage with its neighbors effectively and has pushed forward with its proposed arena, without taking into account its effect on the area. The attendance at the public meetings has been sparse, and calls to neighbors has disclosed that many of them are unaware of the arena proposal. This is occurring despite UST stating explicitly at the June 12 meeting that the quality of the neighborhood is a valuable amenity to UST's efforts to recruit new students. I am certain that had UST engaged in a real public process, neighbors would have developed ideas to mitigate the damage the arena will cause to the neighborhood if it is built as disclosed in the EAW. Thus, the very quality of the neighborhood benefitting UST is being jeopardized by UST's failure to engage appropriately with its neighbors. As I have tried to talk to my neighbors about the arena, many of them have not heard of the proposal or, if they have heard of it, believe that UST is a neighborhood bully who gets its way, no matter what. The arena proposal could have been improved with neighborhood input.	Thank you for your comment. The City of Saint Paul, as the RGU, was responsible for official notifications regarding the EAW. This included providing a press release, publishing notice of the availability of the EAW in the Pioneer Press, sending out notice via the City's (electronic) Early Notification System, and hosting a public meeting during the public comment period. Staff also attended a District Council meeting. The City always encourages any project proposer (whether the project is subject to an EAW or not) to conduct direct community outreach. The University notes that the project was discussed at numerous District Council meetings, and that the University hosted multiple public forums to present the project.
The EAW repeatedly references that UST "is considering" ways to improve the project. See for example, the description of landscaping to be used to limit adverse climate effects (page 7); UST "is investigating" ways to minimize tree removals (page 9); and the lengthy descriptions of parking mitigation strategies (pages 34 through 40). Implicit in these sections	The terminology such as "is considering" and "is investigating" was used to allow for the project design to further advance and incorporate the appropriate design features. The project is in the early design phase and the

Comment	Response
is the only conclusion that a reader can draw: UST is rushing through this EAW process without making commitments on exactly what it is going to do. The whole EAW is premised on vague promises of improvements which may or may not come to fruition. The neighborhood's experience with UST has been that it often does not follow through on ambiguous aspirational goals. As a result, neighbors will not be satisfied unless actual detailed and enforceable commitments by UST are put in writing.	proposer is evaluating numerous measures to limit impacts and work toward the University's clean energy goals.
8 – Cover Types	
UST has stated at public meetings that approximately 75 trees on the site will be replaced by the arena, but that these are young, small trees in parking lots. However, a visual inventory of the site disclosed that there are dozens of mature trees, including trees approximately 50 years old, which would be lost. UST has pledged that a very large cottonwood tree on the west side of the site near the top of the ravine going down to the Mississippi River will be saved, but there are large trees in the area between the seminary and Cretin Hall which will be lost as well. It is incumbent on UST to agree in writing to replace the trees which will be destroyed, on a ratio of at least 4:1, to compensate for the loss of the air filtration and carbon sequestration trees provide. Further, the new trees should be planted on the south campus, where the greatest damage from the new arena is going to occur.	Currently there are no tree preservation requirements in the City of Saint Paul at the project location. However, the University of St. Thomas has committed to replacing all trees removed onsite to at least 1:1 ratio. The University's intent is to replace the trees within or adjacent to the approximately 6 acre site for the Arena project, but since there is limited space within the Arena project area they will first replace them elsewhere on the South Campus and then look at other areas within the remaining portions of campus for tree planting opportunities if needed.
14 – Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	
The EAW states that "no impacts to fish, wildlife, plant communities, rare features, or ecosystems are anticipated due to the lack of suitable wildlife habitat….no impacts to the nearby Mississippi River are expected" (EAW, page 27). Somehow, Kimley Horn failed to recognize that the Mississippi River is the most important flyway for migratory birds in the country and is protected by international treaties. The decline in bird populations has been documented over and over again over the last 20 years. Birds do not simply fly over the	The project site is located within the Mississippi River Twin Cities Important Bird Area (IBA)[5]. The Mississippi River IBA includes the Mississippi River and its adjacent floodplain forest and upland areas extending for 38 river miles through 4 counties from Minneapolis to Hastings. According to the MN DNR, IBAs are a voluntary and non-

[5] https://netapp.audubon.org/iba/Reports/2421

Comment	Response
river; but use nearby areas as resting spots and places to replenish themselves. Anyone who has spent any time in the immediate area of the river could explain that the number of migrating birds changes during the spring and fall. Of great importance, the implications for bird populations easily could be mitigated if UST retained an appropriate consultant familiar with bird populations and mitigation methods, such as bird friendly glass in the arena, and care and attention given to lighting in the arena, which could reduce bird collisions with the building. The building should not be permitted to go forward without a commitment by UST to undertake ALL necessary steps to mitigate adverse effects on bird populations.	regulatory part of an international conservation effort to bird populations[6]. The information above was added as a correction to the EAW after receiving recommendations from the MN DNR. As indicated in Section 14.a. of the EAW, the site provides minimal wildlife habitat due to the extent of impervious surfaces and low coverage of natural vegetation. The project will be required to comply with applicable City of Saint Paul lighting and bird-safe glass ordinance language. Fixture modeling and photometric analysis will be completed for all site and building lighting to analyze light levels for the project.
20 – Transportation	
In particular, the traffic study contains many errors and people who are in the neighborhood day in, day out (in contrast to Kimley Horn's one day traffic count on a snowy Saturday in March) could have told Kimley Horn of the real traffic situation.	Thank you for your comment. As stated on Page 4 of the Transportation Study "To determine if the traffic counts were representative of an average day in the study area, MnDOT detector data was reviewed at the I-94/Cretin Avenue interchange from October 2022 to March 2023. Results of the review, shown in Appendix A, indicate that March 30, 2023, was representative (if not slightly higher) of an average day for the study area, therefore, no adjustments were made to the counts.
The EAW is fatally flawed in failing to consider the future growth in traffic on Cretin Avenue from the continuing buildout of the Highland Bridge development. Beyond the issue of the number of crashes discussed by the EAW, Cretin Avenue has become a crowded speedway from Highland Bridge to I-94. Mitigation is desperately needed, before there are pedestrian collisions along Cretin Avenue. At the very least, a pedestrian activated blinking light or	Future Highland Bridge Traffic was accounted for, as stated on Page 29 of the Transportation Study "Year 2025 no build volumes were developed by both applying a background growth rate of 0.25 percent to the existing

[6] https://www.dnr.state.mn.us/iba/index.html

Comment	Response
roundabout will need to be installed at Goodrich and Cretin. Other traffic calming will also be needed, perhaps by finding a way to narrow Cretin Avenue.	pre- and post-event volumes and included trip generation estimates for the Highland Bridge development." The Transportation Study recommended that the Cretin Ave and Goodrich Ave intersection be monitored and traffic control officers or campus crossing guards be utilized as needed if the crossing is heavily utilized during events. Pedestrian safety is important to the City and the project proposer. The City and the proposer will continue to evaluate pedestrian safety improvements at the intersections adjacent to the stadium during the design phase.
I travel north on Cretin Avenue and turn east on Marshall about three mornings a week, between 7 AM and 9 AM. Notwithstanding the conclusion in the EAW that the queues on westbound Marshall Avenue only develop in the afternoon (page 10), cars are usually backed up on westbound Marshall Avenue for about two blocks in the morning. The EAW does not even consider the traffic impact westbound at that time of day.	Thank you for your comment. Westbound queues were observed during data collection efforts and in the traffic analysis modeling to extend near Finn Street during the a.m. peak hour. Note event traffic—the focus of the EAW—is not expected to overlap or impact a.m. peak hour operations.
The traffic study done on March 31, during a snowstorm, and on Saturday April 1 (page 11) is not representative of traffic on Cretin Avenue. Traffic always starts later on Saturdays, and after a snowstorm was doubtless delayed even longer. This appears to be a material skewing of the data to back into UST's desired conclusion that the parking problem it is foisting onto its neighbors is not significant. However, there are a significant number of drivers speeding up and down Cretin Avenue at all times of the day and night, and attention to pedestrian crosswalks is inconsistent. The City should not rely on the shallow analysis prepared by Kimley Horn in the EAW but should undertake its own traffic study and develop a meaningful plan to reduce traffic on Cretin, or effectuate calming of the traffic on that arterial.	As stated on Page 4 of the Transportation Study, "To determine if the traffic counts were representative of an average day in the study area, MnDOT detector data was reviewed at the I-94/Cretin Avenue interchange from October 2022 to March 2023. Results of the review, shown in Appendix A, indicate that March 30, 2023, was representative (if not slightly higher) of an average day for the study area, therefore, no adjustments were made to the counts." And Page 11, "There was a snowstorm on Friday night (3/31) into Saturday morning (4/1) during the SRF parking

Comment	Response
	counts. However, the storm started after the Friday afternoon counts and the Saturday weather (40 degrees and sunny) generally cleared the roadways by the time of the Saturday afternoon counts, therefore, the parking counts as it relates to event availability are considered representative of typical weekend conditions for the campus area." Traffic safety and enforcement is an ongoing priority of the City. For more information, see the list of mitigation in the section titled **Mitigation Plan**.
The EAW reports a loss of 264 parking spaces on the UST campus from the arena project, without taking into account significant events, like commencement, basketball games, and hockey games. The EAW fails to mention that UST already has asked the city to eliminate the parking spaces along the east side of Cretin Avenue north of Summit Avenue, so the actual shortfall in spaces is probably closer to 285. This is another example of UST holding back crucial information needed for a meaningful EAW. The non-event solutions proposed by UST will be difficult to measure, and UST needs to develop not only accountability for these proposed steps, but a definite plan for what it will do in a Plan B if those steps fail. UST needs to solve its parking problem on its own property, and not by creating congestion and inconvenience for its neighbors. At the very least, in those neighboring areas where parking is only by permits issued to residents, the hours of parking restrictions must be extended throughout the times of anticipated events, i.e. probably to midnight.	Thank you for your comment. The loss of 264 parking spaces on the UST campus was accounted for in both non-event and event parking demand analysis; see Page 17 for the non-event conditions and Page 28 for event conditions. The request by UST to the City to remove the parking spaces along the east side of Cretin Ave, north of Summit Ave, was in response to neighbor requests to improve traffic conditions along Cretin Ave. The City of Saint Paul currently has no plans to remove the parking spaces along Cretin Avenue, therefore, the parking spaces were included within the parking and traffic analysis. Requests can be made directly to the City Public Works Dept to extend the hours of parking restrictions. In addition, this strategy (alterations to current residential parking permit district hours of applicability) is suggested to be included in the required comprehensive parking management plan. For more information, see the list of mitigation in the section titled **Mitigation Plan**.

Comment	Response
The assumptions made in the EAW about parking demand during events (a shortfall of up to 740 spaces), as well as the number of events, are unrealistic (EAW, page 28). In addition, the projections in the EAW about the time it will take to exit the Anderson Parking Facility ("APF") are inconsistent with my experience at other parking facilities in the city. I feel certain that when the APF is full, it will take over an hour to vacate the APF, especially in light of the traffic light at Cretin and Grand Avenues, and the likelihood of pedestrians crossing both streets at the exact same time.	Thank you for your comment. The event parking demand analysis was based on the modal split assumptions (Table 10 and Page 24 of Transportation Study) discussed and confirmed with City staff. The event frequency (or number of events) was based on research into comparable athletic programs from the previous athletic calendar year. This research also informed estimated event attendance, and is shown in Figure 7. For more information, see the list of mitigation in the section titled **Mitigation Plan**.
In the EAW, Kimley Horn fails to suggest mitigation strategies which do anything other than dump the problems which will be created by the arena on UST's immediate neighbors. With respect to the heavily impacted intersection of Goodrich and Cretin, all that it offers is a one sentence comment: "The number of pedestrian crossings in this location will be heavily dependent on where event patrons are parking" (page 33). This alone proves the inadequacy of the EAW.	Thank you for your comment. For more information, see the list of mitigation in the section titled **Mitigation Plan**.
UST has explicitly stated at public meetings that the wooded area at the northeast corner of Goodrich Avenue and Mississippi River Boulevard would not be affected by the construction of the arena. However, in the EAW, in a discussion on mitigation for lost parking from the project, Kimley Horn recommends construction of a surface parking lot in the southwest quadrant adjacent to Mississippi River Boulevard (page 36). This parklike setting contains over two dozen mature trees, and should be viewed as a public amenity, as it is used every day, all year round, by many residents of the City of Saint Paul. UST MUST commit in writing to leave this parcel, of approximately 5 acres, in the same condition it is now, and to solve the parking problem of its own making elsewhere. The city must bear in mind that UST owns the entire two block area bounded by Summit Avenue, Cleveland Avenue, Grand Avenue, and Cretin Avenue. It has a small parking lot on the northwest corner of Grand and Cleveland. UST can solve its parking problem by building a structure on that site or	This was only one potential strategy of many that were identified in the Transportation Study to help offset public parking in the neighborhoods during larger events. This specific location for a surface parking lot is not supported by, and no longer being considered as a mitigation strategy by, the City. The University has also indicated that they do not intend to pursue this option.

Comment	Response
elsewhere on that block, but the approximate five acre plot at Goodrich and Mississippi River Boulevard must be off the table now and in the future. As indicated above, only a detailed and enforceable written instrument will satisfy this requirement.	

Daniel Kennedy

Comment	Response
15 – Historic Properties	
The portion of Summit Avenue adjacent to St. Thomas is part of the Summit Avenue West Heritage Preservation District, which is on the National Register of Historic Places. Eight of the eleven houses on Summit Avenue north of the South Campus, and five of their garages, were identified as contributing structures to the historic district in the historic district registration form. As noted above, Summit Avenue itself is one of 14 parkways is the City of St. Paul listed in St. Paul Legislative Code, Section 145.02, entitled "Parkways where trucks are prohibited." Summit Avenue originally had a 100-foot right of way, but the property owners on both sides of Summit Avenue donated 50 feet of their frontage from Lexington Parkway to the Mississippi River to create a 200-foot right of way and allow space for the medians that exist today. It can perhaps be assumed that the donors did not wish to bring truck traffic 50 feet closer to the homes. At the same time that St. Thomas is planning to send dozens of buses and trucks into a historic district, the university plans to demolish Cretin Hall to create space for an arena. Architect Cass Gilbert, who designed three state capitals (including Minnesota's), the U.S. Supreme Court building, and other notable structures, designed three residence halls for the St. Paul Seminary: Grace Hall, Loras Hall, and Cretin Hall. St. Thomas recently demolished Loras Hall to make way for Schoenecker Hall, currently under construction. Cretin Hall was erected in 1894 and transferred in 1987 to St. Thomas for use as a	Thank you for your comment. The City requires all large commercial vehicles to utilize designated truck routes to the maximum extent possible. Summit Avenue is longer being considered for truck/bus access to the proposed arena. Access will instead occur via Cretin Avenue. Previously approved truck access from Summit Ave to Schoenecker will still occur. A small portion of the proposed arena (approximately the northern 10 feet of the building as designed) falls within the West Summit Avenue (National and Local) Historic Preservation District. The design of the building will be reviewed by the Saint Paul Heritage Preservation Commission.

Comment	Response
dormitory. It houses 90 students on five levels. The EAW identifies Cretin Hall as eligible for nomination as a historic structure.	
20 – Transportation	
Any analysis of the environmental impact of a Division I sports arena should discuss the basic requirements for such an arena to function successfully. Without including the totality of those who need to access the arena, any discussion would be misleading and could vastly understate the impact on the arena's environment. This is a fundamental flaw of the EAW, which does not include such a discussion. Using comparisons to other arenas (adjusted for different seating capacities, where appropriate), the nominal requirements for a 4,000-5,500 seat hockey and basketball arena would be as follows (*see Appendix C for exhibit*). It is important to note that a 5,500-seat arena does not cap attendance at 5,500 spectators. St. Thomas currently plays basketball in Schoenecker Arena, which has 5,000 seats. Attendance ranges as high as 6,500 spectators (presumably with many standing). EAW, App. D at 19.	Thank you for your comment. The reference to "Appendix C" is understood to refer to the concerns raised by the commenter regarding changes to traffic patterns for access to and circulation within the South Campus. These comments are responded to below. In regard to attendance, the primary scheduled, reoccurring use of the arena is for basketball and hockey events and is the focus of the EAW transportation analysis. The events studied represent a maximum scenario from a traffic and parking perspective. The potential scope of "non-athletic events" have only been generally described by the project proposer. As mitigation, the City is requiring a more detailed listing of the planned events prior to occupancy of the arena, if approved for construction. This listing will be updated as needed on an annual basis. Event and parking management requirements will apply to non-sporting events based on anticipated attendance and impacts.. The attendance of existing St. Thomas arenas comment is inaccurately stated. As mentioned on Page 19 of the Transportation Study: "Men's/women's basketball and women's volleyball games are currently played at Schoenecker Arena, which has a seating capacity of approximately 2,000 event patrons." and

Comment	Response
	"Men's football games are currently played at O'Shaughnessy Stadium, which is located in the north campus and has seating capacity of approximately 5,000, but often has attendances that range from 4,000 to 6,500."
Also significant is that "average attendance" and "typical schedule" figures in the EAW are based on past data, not upcoming schedules. For example, the St. Thomas men's hockey team hosted home games in 2022-23 against Michigan Tech, Bemidji State, Bowling Green, Northern Michigan, and Lake Superior. EAW, App. D at 22. None of these teams would have a sizable fan base in the Twin Cities. In 2023-24, the schedule includes home games against St. Cloud State, Minnesota State-Mankato, and University of Minnesota-Duluth, each closer to St. Paul and with established hockey programs. Attendance numbers will surely grow next season.	As mentioned on Page 21 of the Transportation Study, attendance projections were based on similar programs within UST's conference and excluded UST's attendance given their current facility capacity restrictions and recent transition to Division-1 sports. Also noted on Page 21, "Men's hockey programs generally have two (2) to four (4) higher attendance games per year" which should account for schedule fluctuations from year to year. Per the mitigation required by the City of Saint Paul as RGU, event attendance and traffic and parking impacts will be monitored on an ongoing basis, with frequency of monitoring at the discretion of City staff.
The site plan calls for changes in the traffic patterns inside the South Campus, most notably the elimination of direct access from Cretin Avenue (at Grand Avenue) to every part of the South Campus other than Owens Science Hall and Anderson Parking Ramp. Other buildings on the South Campus (Anderson Arena, Grace Hall, Biz Refectory, Brady Education Center, O'Shaughnessy Science Hall, and the new Schoenecker Hall) will have their access to Grand Avenue eliminated. Access will instead be through the Summit Entrance. All cars, delivery vans, service vehicles, garbage trucks, and other vehicles that entered from Cretin would be required to drive down Summit Avenue and into the Summit Entrance.	Thank you for your comment. Access to Biz Refectory and Brady Education Center will continue to be as it exists, from Goodrich Avenue. Access to O'Shaugnessy Science Hall will also not be changed. The primary pedestrian and shuttle access to the proposed arena will occur via the Grand Avenue extension. Service vehicle access to Schoenecker will continue to be via the previously approved access from Summit Avenue. Service access to the proposed arena for larger trucks and buses will be from a new access point from Cretin Avenue. Any needed service vehicle access to Grace Hall will occur via the existing Summit Avenue or proposed Cretin Avenue access

Comment	Response
	routes. The new access from Cretin Avenue will be reviewed in more detail as a part of the site plan review process.
Buses: The EAW does not discuss bus access, but St. Thomas officials have indicated that buses accessing the arena will drive west on Summit Avenue to the existing entrance of the St. Paul Seminary ("Summit Entrance"), then drive south through the Seminary to a new road that will bring them past the west side of the arena to a south entrance to the arena, where passengers will unload. The distance from the arena to Cretin Avenue is approximately 250 feet. Instead, the buses will drive 0.5 miles to Summit Avenue and then east to Cretin Avenue. Problems: Parking: The site plan includes space for one or two buses to park next to the arena. That is not sufficient for the number of team and fan buses that will need to park. Because they will not be able to park at the arena, they will have to exit the South Campus, leaving out the Summit Entrance and re-entering Summit Avenue. Many will likely park (illegally, due to full-time permit parking restrictions) on westbound Summit Avenue west of the median break to the Summit Entrance. There — or any other place in the neighborhood they can find parking — they will idle to keep the bus warm during the winter hockey and basketball games. This would be true no matter where fans loaded and unloaded, because the site plan lacks bus parking. Access: Buses will enter the South Campus to unload, leave due to lack of parking, re-enter to load, and leave again with passengers. For each game, buses will traverse Summit Avenue four times. With 5 to 12 total buses required for each game, the burden on Summit Avenue will be tremendous: noise, exhaust, and the danger of having up to 48 total bus	The quantity of team buses for each event in the arena (football games generally require more buses) is assumed to be one visiting team bus based on past events. The project proposer has modified the proposed project to provide access for larger vehicles (buses and large delivery vehicles) from Cretin Avenue. Interim parking for buses during events will be further evaluated as part of any permitting processes, including site plan review, but will not occur directly adjacent to residential use. The number of buses at events will be monitored per mitigation required by the City of Saint Paul as the RGU. Buses and trucks may need to exit the site via the existing connection to Summit Ave., but in doing so would only traverse east-bound Summit (adjacent to the campus and not residences) to Cretin. Shuttle service from remote parking lots for event patrons is being required as parking mitigation. This mitigation measure is also suggested on Page 36 of the Transportation Study. While shuttle services will help reduce parking impacts to the surrounding neighborhood as well as the number of vehicles traveling near the arena,

Comment	Response
trips on Summit in just a few hours. This would be repeated game after game. Even if the burden were one fourth this much, it would be far too great. Parkway Restrictions: The St. Paul City Council has designated Summit Avenue a "parkway." Vehicles driving on parkways may not exceed 9,000 pounds. St. Paul Leg. Code §§145.02, 170.07. All of the various trucks and buses accessing the arena through the Summit Entrance vastly exceed the parkway limit of 9,000 pounds. Their use of the parkway is contrary to the City's aim to achieve "the maximum enjoyment by all persons and protect[] the natural resources therein." St. Paul Leg. Code §170.10. Headlight Effect: Because basketball and hockey are winter sports, the headlights of trucks and buses leaving through the Summit Entrance will be on and aimed straight at residential properties on the north side of Summit Avenue. Below is an illustration of the effects of the headlights (*see Appendix C for exhibit*). The effect of up to 24 buses leaving the Summit Entrance per game would add to the impact described above. Adding the food, beverage, trash and recycling trucks would further compound the effect. The site plan also includes 38 parking spaces for cars, meaning within a few hours for every game, more than 60 vehicles would aim their headlights directly across the street at residential properties (the figure shows the house directly across from the Summit Entrance, but as the vehicles turn onto Summit Avenue, their light would be shared with the neighboring residences as well). Trucks: The site plan shows that the sole access to the arena is through the Summit Entrance, meaning that food vending trucks (Sysco/US Foods), franchise food supply trucks (Subway/Domino's), beverage trucks (Coca-Cola/Pepsi, perhaps beer suppliers), and dumpster haulers for trash and recycling would all travel west on Summit Avenue past houses, enter through the Summit Entrance, drive through the Seminary and around the arena, then exit in the reverse direction, back to Summit and past the same houses. At approximately eight vehicles per game, that constitutes 16 trips down Summit Avenue. Other Uses: The EAW focuses on Division I sporting events, but St. Thomas intends to use the arena for far more than that. University convocations and commencements, high school and youth sports, and conventions are also planned for the arena. EAW, Appendix D, at 2. Those events will expand the six-month basketball/hockey schedule (late September to	no detailed shuttle service, routing plans, or pick-up/drop-off locations have been identified at this time. Any visiting team shuttle services would need to be coordinated with the University of St. Thomas for routing and pick-up/drop-off locations. All delivery vehicles would be planned to occur outside of event periods, presumably during the morning hours of weekdays. The project proposer will need to finalize service vendors to specify scheduling. Based on the likely number of service vehicles/buses exiting to Summit Avenue during nighttime hours as described in this response, the instances of headlights shining on Summit Avenue residences when these vehicles exit to Summit is likely to be far less frequent than contemplated in the comment. For more information, see the list of mitigation in the section titled **Mitigation Plan**.

Comment	Response
early March) to fill the calendar year. The conventions alone would bring higher truck traffic to Summit Avenue than even the largest of sporting events due to the number of individual presenters who will be setting up booths and displays. Parkway Restrictions: All of the trucks needed to service the arena far exceed the 9,000 pound-limit set forth in the St. Paul Legislative Code. Headlight Effect: All of the trucks would produce the same headlight effect, adding 8 more trips to the 24 times that buses leave the Summit Entrance - *per game*. Cars: The EAW states that 38 surface parking spaces will be available next to the arena. Their only access will be through the Summit Entrance. They are permitted to drive on the parkway, but that does not diminish the fact that 38 vehicles will drive each way to the arena, adding 38 pairs of headlights to the headlight effect and 76 total trips past the houses on Summit Avenue - *per game*. Available Alternative: To comply with the St. Paul Legislative Code, St. Thomas could easily route vehicles bound for the South Campus through the Cretin/Grand entrance that has been the main entrance to the Seminary since its founding. Unlike Summit Avenue, parallel Grand Avenue is a truck route. St. Paul Leg. Code §146.04. The Grand Entrance is just 250 feet from the arena. The Summit Entrance could be limited to access to the St. Paul Seminary.	
Currently, St. Thomas does not provide nearly enough off-street parking for its needs. The spill-over effect is great, with the on-street parking surrounding the campus fully occupied at most hours of the day. The university's tradition of spilling over its geographical limits has spawned permit-parking zones adjacent to campus. As students and staff park outside those zones, the ring of permit-parking zones has increased in diameter around the campus. St. Thomas's modest supply of parking simply does not meet its current needs due to commuting students and staff. This parking shortage will increase, as St. Thomas administrators have indicated a desire to increase total enrollment by 10% in the upcoming years.	Several mitigation strategies and improvements were identified to help reduce on-street public parking in the neighborhoods during events and are summarized in detail on pages 34 - 36 of the Transportation Study. For more information, see the list of mitigation in the section titled **Mitigation Plan**.

Comment	Response
In proposing its arena with a capacity of 5,500, St. Thomas does not plan to add any off-street parking to its supply. Instead, it eliminates 264 spaces right at the arena site where they would be most needed. EAW at 35. The EAW's solution is to have its spectators park in the surrounding residential neighborhood. A map of the permit parking zones shows the weaknesses of the permit parking zones, some of which require a permit only on weekdays. It is unlikely, however, that those zones would remain unchanged after spectators consistently fill those streets with cars at the same times (Friday and Saturday nights) when the residents may wish to have visitors who need on-street parking. A restriction of the permit parking zones would leave St. Thomas with an arena that cannot rely on nearby on-street parking. Available Alternative: To provide parking for its arena, St. Thomas could expand its Anderson Parking Ramp laterally southward along Cretin Avenue. This would impact its existing softball and soccer fields, but softball is moving to the Highland Bridge development (the former Ford plant) and soccer games can be played on the football stadium as is done at many other post-secondary institutions such as nearby Macalester College. St. Thomas has the available land to solve the parking shortage it plans to create, rather than to thrust it onto the neighborhood and inspire more restrictive permit parking zones.	
Cars conflicting with trucks. The food, beverage, trash, and other trucks that service the arena would not be arriving or departing at the same time as spectator vehicles. Cars conflicting with buses. Visiting team buses would arrive earlier than spectators and would not conflict. Spectator buses could enter through the Grand Entrance, but would not enter the Anderson Parking Ramp and would be diverted around the arena to the south side. Cars conflicting with pedestrians. If the EAW is correct, students residing on campus will walk to the arena, crossing Cretin Avenue at the same time that arena traffic is at its highest before and after games. The EAW discusses extended signals for arena-bound traffic and traffic officers to halt traffic, but arena traffic will run north-south at the same that students will need to travel east-west across Cretin. This inherent and dangerous conflict could be	A tunnel under Cretin Ave is not a feasible improvement due to the existing infrastructure beneath Summit Ave. As mentioned on Page 9 of the Transportation Study, "In urban areas, it is common for intersections to operate at LOS E or LOS F for short periods of time, particularly when balancing other transportation modal priorities." and "It is typical of intersections with higher mainline traffic volumes to experience high levels of delay (poor levels of service) on the side-street approaches, but an acceptable overall intersection level of service during peak hour conditions."

Comment	Response
solved by a pedestrian tunnel underneath Cretin Avenue, but has no other obvious solution if an arena is built. Cars conflicting with cars. The EAW's solution to pre-game and post-game traffic issues is to have non-arena traffic stop so that arena traffic may swiftly flow onto Cretin and Grand Avenues. This would be accomplished by altering the signal patterns, such as adding a dedicated left-turn light to northbound Cretin and keeping the light green for traffic leaving the Anderson Parking Ramp; this could be done at Grand Avenue and Summit Avenue to allow cars to leave the South Campus unhindered. The result would be that non-arena traffic on Summit, Grand, and Cretin would be halted or slowed for a period of 20-30 minutes before and after each game. The EAW admits that the level of service (LOS) at nearby intersections will be F (the lowest rating), and that F is an unacceptable LOS. Specifically, the EAW's traffic study that the LOS will go from its current A to an F at Cretin and Goodrich, from B to F at Cretin and Grand, and from A to D at Cretin and Summit. Cars conflicting with bicycles. The EAW mentions bicycle options several times. Because basketball and hockey are winter sports, the EAW is misguided in relying on any spectators arriving by bicycle. The site plan does not include any bicycle parking. Public Transportation: The EAW identifies three public transit options for the arena (Routes 21, 63, and 87). The only consistent service to the University of St. Thomas in 2024 will be Route 63 on Grand Avenue. Route 87 on Cleveland Avenue has service only once per hour on weekends, and Route 21 will no longer run from Lake Street to the St. Thomas campus after it is replaced by the B Line rapid transit service. Consistent public transit will only be possible from the east down Grand Avenue but buses will not be able to travel as scheduled because traffic will be halted for cars driving to or from the arena. No Available Alternative: Unlike the access and parking issues discussed above, there is no reasonable way that thousands of vehicles can travel to and from the arena without creating significant conflicts with existing traffic patterns. If this were a once-a-year phenomenon such as graduation, the occasional conflict could be acceptable. St. Thomas proposes to hold numerous events each week, and St. Thomas acknowledges that the results will produce an unacceptable level of service on the surrounding streets. St. Thomas has not committed to implement any mitigation strategy, and the few that are discussed in	The intersections with operational issues on the side-street approaches (but not overall) is discussed on Page 40 of the Transportation Study, "During both pre-event conditions, multiple unsignalized side-street approaches on Cretin Avenue will be difficult to make left-turn movements for 15 to 30 minutes. These approaches mostly consist of low-volume residential traffic. As mentioned previously, communication should be made to area residents and other sources of commuter traffic, so they are aware of potential event traffic and the most efficient route to get to/from their destination." Bicycle parking has not been located at this time in the project design; however, it is intended to be included in the project.

Comment	Response
the EAW (e.g., bicycle ridership in winter, city bus service) would not have a significant impact.	

Marc Manderscheid

Comment	Response
6 – Project Description	
The City's EAW Fails to Properly Define the "Project" and Even Consider "Cumulative Impact" and the "Cumulative Potential Effects" of Ongoing and Proposed Development on the University's South Campus The June 2023 St. Thomas EAW prepared on behalf of the City of Saint Paul violates Minnesota law by improperly defining the proposed "project" and in failing to properly consider the "cumulative potential effects" of the connected actions and phased actions which are a part of the University's redevelopment of its South Campus. The purpose of an Environmental Assessment Worksheet ("EAW") is to provide the information needed to properly assess the environmental impact of a proposed project, and to determine whether a more detailed Environmental Impact Statement ("EIS") is required under Minnesota law. Minn. R. 4410.1000, subp. 1. Because the City's EAW improperly and incorrectly defines the "Project," the full information necessary to conduct a proper environmental review is necessarily missing, and the EAW fails in its essential purpose to provide accurate and relevant information concerning how the South Campus redevelopment clearly has the potential for significant environmental effects. **Background information concerning the recent ongoing development of the University's South Campus and the new South Campus Quadrangle**	As noted in guidance from the Environmental Quality Board (EQB) for completing environmental reviews, the RGU must determine what components the project includes for the purposes of the environmental review. "Connected actions," are actions by any proposer that are closely connected to the initial project. "Phased actions," are future actions by the same proposer. For purposes of assessing whether a mandatory EAW or EIS threshold is reached, there is a 3-year look-back, which is an extension of the phased action concept into the recent past. <u>Connected Actions:</u> The Schoenecker Center and Arena projects are not considered connected actions as one was not induced by the other, one was not a prerequisite for the other, and both projects can be justified by themselves, as explained by the MN Rules 4410.0200, subp. 9c, the types of relationships that could be considered connected actions. The Schoenecker Center was constructed to meet a space deficit for academic programs across the University's campus. The Arena is intended to meet the demand of Division I athletics and

Comment	Response
In 1987, the University purchased approximately 23 acres of land and multiple older buildings from the St. Paul Seminary, which area is presently referred to as the South Campus. The University's initial new construction in the South Campus was to the southwest of the Cretin and Summit Avenues intersection, when it built the Frey Science and Engineering Center, consisting of Owens Hall and O'Shaughnessy Hall. The second major new construction was of a parking ramp to replace parking spaces lost because the University constructed new buildings across the Summit and Cretin Avenue intersection on the North Campus. In February 2009, St. Thomas opened the Anderson Parking Facility, a five level, 724-space parking ramp, on the southwest corner of Cretin and Grand Avenue South. The ramp replaces parking spaces that will be lost in Lot H (402 spaces) to make way for the proposed Anderson Student Center and in Lot E (71 spaces) that were lost because of the construction of the Anderson Athletic and Recreation Complex. See December 2009 EAW for Anderson Student Center and Anderson Athletic and Recreation Complex, p. 4; see pp. 21-22. When the Anderson Parking Facility was built, the City's parking regulations required that parking for an athletic stadium must be located within 600 feet of the sports facility. The Anderson Parking Facility was located more than the required distance away from O'Shaughnessy Stadium, thus causing the University in April 2010 to request a modification of its Special Condition Use Permit, so that it could avoid being required to comply with the City's parking regulations. St. Thomas subsequently amended its development plans to include a total of 118 underground parking spaces in the Anderson Student Center. The point of mentioning the above history is to make clear that the Anderson Parking Facility on the South Campus was never intended solely to supply parking spaces to the South Campus, but it was primarily constructed to serve as the principal parking facility for the buildings and facilities on the southwest corner of the North Campus, including the new Anderson Student Center. The Anderson Parking Facility has also been used to provide parking for events on the top floor of the Anderson Student Center, which has a large meeting and conference space with table seating for up to 794 persons and 860 seats auditorium style. This space is often rented to outside groups for meetings, conferences,	lack of suitable athletic venues. Both stand alone in their uses for the University. Phased Actions: The Phased Actions relationship looks at future actions by the same proposer. There are not any known future stages of development beyond the Arena project that meet the criteria of the MN Rules 4410.0200, subp. 60. The Schoenecker Center building has received all permits and approvals and is currently under construction, expecting to be completed in January 2024. As noted in the EAW, The University of St. Thomas does not have any board approved plans for new building construction at the Saint Paul campus. While future development of the University is indicated by historic and forecasted trends, there is not sufficiently detailed information about any future building projects to contribute to the understanding of cumulative potential effects. If a future project within the University of St. Thomas exceeds an EAW or EIS threshold as noted in MN Rules 4410, the appropriate environmental review will be completed. Also, if a project starts within the geographic area within the next three years, that project may be subject to the 3-year, look-back period that would include impacts from other projects that have not completed an EAW or EIS. As noted in the EAW, the Anderson Parking Facility is an existing parking ramp that was designed for future expansion of two additional floors. The expansion is discussed as a potential improvement in the Traffic Impact Analysis however, it is not currently planned or funded at this time. As previously noted, the expansion of the Anderson Parking Facility would require a review through

Comment	Response
and social events held on Friday and Saturday evenings. Persons attending these events are directed by the University to park in the Anderson Parking Facility on the South Campus. As far back as 2010, only one year after the Anderson Parking Facility opened, there was ongoing discussion between St. Thomas, the City, and the community about the desirability of adding an additional two floors to the Anderson Parking Facility, in order to meet the substantially increased parking demand caused by all of the new construction on the North Campus. In 2015, the University constructed the multi-level Facilities and Design Center adjacent to the Anderson Parking Facility, facing the Grand Avenue extension. In November 2016, the University's Board of Trustees unanimously approved a new 10-year Campus Master Plan, which it developed with the campus planning firm of Hastings + Chivetta. The Master Plan stated that future projects for the South Campus were to include a new 137,000 square foot science and engineering building on the north side of the Grand A venue extension and adding two more levels on the top of the Anderson Parking Facility, which would require a height modification in the 1990 Special Condition Use Permit, which allows only a 60-foot building in that location. See November 2016 Campus Master Plan and Press Release describing the Plan. In June, 2019, the University submitted to the City of St. Paul a "Site Plan Review Application" for a project which was described as "New Permanent Parking Lot West of Loras Hall." The application identified the Project architect as "Kimley-Horn" and the contractor as "Ryan Companies U.S., Inc." This project a "New permanent parking lot west of Loras Hall and second, alley repaving and garage removals along the west block alley." On the South Campus, the plan was to build a new 58-stall code-compliant parking lot, in the location now occupied by the Schoenecker Center, for a net parking gain of 38 parking spaces. This project was to start construction in August, 2019, but was withdrawn shortly after the permit materials were submitted to the City. The hasty withdrawing by the University of its proposal to increase surface parking spaces on the South Campus is explained by the University's announcement just a few months later that it would be constructing the Schoenecker Center, which would combine instruction in science, technology, engineering, arts, and math into one large new building. The	the City process and would require an amendment to the CUP. <u>3-Year, Look-Back Rule:</u> Based on the "3-year look-back rule" concept, the Schoenecker Center building could be considered a "phased action" with the Arena project, as the Schoenecker Center project submitted its first application in October 2021, which is within the 3-year window of the arena project EAW completed in June 2023, and was not reviewed through an EAW or EIS. However, any impacts and mitigation needed for the Schoenecker Center project has previously been identified and addressed through the permitting and approval process. The rules require that preparation of the EAW and consideration of the need for an EIS consider phased actions and connected actions. To that end, impacts associated with the Schoenecker Center project were included as part of the existing conditions analysis and background conditions for the EAW and Traffic study analysis. The Schoenecker Center construction (with an anticipated completion date of Jan 2024) is shown in Figure 3 and on an inset-on Page 16 of the Transportation Study. There is a multi-use component to college campuses in which students, faculty, staff, and visitors often park once and visit multiple locations on campus. The *ITE Parking Generation Manual, 5th Edition,* which is a parking industry standard, only generates parking demand on college campuses based on enrollment. Therefore, a building addition on a college campus is not a good indicator for changes in parking demand. Based on UST

Comment	Response
Schoenecker Center, presently under construction, consists of a five level, 130,000 square foot structure connected by skyway to the existing Frey Engineering and Science complex. In addition to constructing the new building, the Schoenecker Center development includes replacing multiple surface parking lots on the north side of the Grand A venue extension with a new "South Campus Quadrangle." This Quadrangle would replicate on the South Campus some of the same green space, landscaping and sidewalks now present on the several quads located on the North Campus. In order to construct the new Schoenecker Center and Quad, the University last year eliminated approximately 127 surface parking spaces. There is no parking in the new Schoenecker Center and the University has not replaced any of the 127 recently removed parking spaces. **The City's EAW fails to comply with the Mandatory Standards for EAW Preparation** Correctly identifying and defining the "project" in an EAW is critical to gathering all of the necessary information for analyzing the possible detrimental effects and potential environmental impacts. Among the defined terms in the EAW regulations is a "Phased Action" which "means two or more projects to be undertaken by the same proposer that... will have environmental effects on the same geographic area; and are substantially certain to be undertaken sequentially over a limited period of time." Minnesota Rules, Part 4410.0200, Subp. 60. A similar concept is set forth in the definition for "Connected Actions." Id. at Subp. 9(c). Minn. Rule 4410.1000, Subp. 4, provides: "Connected actions and phased actions. Multiple projects and multiple stages of a single project that are connected actions or phased actions must be considered in total when determining the need for an EAW, preparing the EAW, and determining the need for an EIS." The June 2023 EA W fails this mandatory standard. One of the most important reasons for correctly defining a project in the first instance is to identify the "cumulative impact" and "cumulative potential effects" of activities where not all of the construction is done pursuant to the same construction contract. "Cumulative impact" means the impact on the environment that results from incremental effects of the project in addition to other past, present, and reasonably foreseeable future projects regardless of what person undertakes the other projects. Cumulative impacts can	discussions, student enrollment, staff, and faculty projections are expected to remain relatively consistent through the analysis period, therefore, no additional parking estimates were assumed. The Schoenecker Center project was constructed to accommodate a space deficit for existing academic needs. One of main considerations related to connected and phased actions is whether a mandatory EAW or EIS threshold has been met. Because UST is not improperly dividing a larger project into smaller pieces to evade environmental review, and because the Schoenecker Center is taken into account in the EAW and is subject to enforceable mitigation measures, the EAW complies with all requirements.

Comment	Response
result individually minor but collectively significant projects taking place over a period of time. "Cumulative potential effects" means the effect on the environment that results from the incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid… Significant cumulative potential effects can result from individually minor projects taking place over a period of time. In analyzing the contributions of past projects to cumulative potential effects, it is sufficient to consider the current aggregate effects of past actions. See Minn. R. 4410.0200, subp. 11 and 1 la. The above defined terms from the EAW regulations identify the critical nature of properly defining the "project" in the first instance. Here, the City's EAW, prepared by St. Thomas's retained design professionals, fails to properly identify the project, and "other projects" in the environmentally relevant area, thus both misstating and understating the environmental effects which will arise because of the University's concentrated new construction in and around its new South Campus Quadrangle. **The EAW's response to question 6, the "Project Description" is inaccurate and incomplete** The EAW's answers to Item 6 of the EA W Form are inaccurate, incomplete, and misleading. Item 6.b. requires "a complete description of the proposed project and related new construction, including infrastructure needs." Because the EAW fails to fully describe all of the redevelopment which has already taken place around the South Campus Quadrangle area, it fails to identify the physical changes that have already occurred and are continuing to occur in the area immediately adjacent to the proposed new arena. Subsection d. to Item 6 requires an answer to the question "Are future stages of this development, including development on any other property, planned or likely to happen?" The EAW references only the Anderson Parking Facility, and fails to include the Schoenecker Center and South Campus Quadrangle. In response to Question 6.b., the EAW asks the reader to see "Figure 3" for existing site conditions. A quick glance at Figure 3 shows the immediate adjacency to the new arena of the ongoing construction of the Schoenecker Center and the construction yet to begin to	

Comment	Response
create the South Campus Quadrangle. Look at the recent aerial photographs! See EAW Figures 3, 8, and 9. There is obviously additional construction presently going on today immediately adjacent to the location of the new arena. The new South Campus Quadrangle, which will be expanded from what is depicted on the "Existing Conditions Plan· 05.10.2023" will cover land adjacent to both the Schoenecker Center and the new arena, eliminating the Grand A venue extension, and expanding the size of the Quadrangle to include land on both sides of the former driveway. Perhaps the EAW's failure to define the "project" as including the Schoenecker Center building and the adjacent the South Campus Quadrangle is because the contractor for the Schoenecker Center is McGough Construction Co., LLC, while the "Proposer" and contractor for the Anderson Arena is Ryan Companies. It makes no difference in EAW preparation if two different contractors are building on adjacent property having the same owner. There is only one University of St. Thomas. The University has often lauded the interconnected nature of its South Campus redevelopment. At the June 5, 2023 UST/Community meeting hosted by UST President Vischer, it was explained by a UST speaker that "the Arena completes the fourth side of the South Quadrangle." On July 24, 2023, UST issued a press released entitled: "Schoenecker Center Transforms South Campus." The EAW rules require that all of the related physical changes to the immediate physical environment be taken into account when preparing an EAW. The June 2023 EAW fails to do so. The failure to include and describe all of the phased and connected construction in the June 2023 EAW report violates the Minnesota Environmental Policy Act and renders the conclusions in the June 2023 EAW incomplete, inaccurate, and unreliable. See Pope County Mothers v. Minn. Pollution Control Agency, 594 N.W.2d 233,237 (Minn. Ct. App., 1999), where the Court held the MPCA did not "engage in reasoned decision making when it failed to consider the cumulative environmental effects" of "multiple individual sites." Item 6.e. of the EAW questionnaire asks: "Are future stages of this development, including development on any other property, planned or likely to happen?" If yes, then the EAW regulations require a description of future stages, relationship to the present project, timeline, and plans for environmental review." Id. The EAW appropriately answers the first question "yes." The only other project listed in the EAW, however, is: "The Anderson	

Comment	Response
Parking Facility is an existing parking ramp that was designed for future expansion of two additional floors. The expansion is discussed as a potential improvement in the Traffic Impact Analysis (Appendix D.); however, it is not currently planned or funded at this time." So what? The University has been discussing the addition of two additional floors to the Anderson Parking Facility since 201 0; it was specifically included as an upcoming project in the 2016 Campus Master Plan approved by the University Board of Trustees. The question asked in preparing an EAW is not whether "construction plans" have been drawn or capital funding has been raised. The question asked in an EAW, is whether there are future stages of the development which are "likely to happen?" With new construction of one-half million square feet of new buildings already underway or planned, all within the same geographic area, the two additional stories on the Anderson Parking Facility are indeed "likely to happen." Whether the University considers a project as not being "real" until its full funding has been authorized by the Board of Trustees, is a completely separate question from whether the environmental impact of new development "likely to happen" must be included within an EAW analysis of potentially harmful environmental effects likely to occur within a limited land area.	
21 – Cumulative Potential Effects	
Item 21, "Cumulative Potential Effects" fails to properly quite the rule, fails to analyze the issue, and fails to meaningfully analyze the Cumulative Potential Effects of the construction bordering the University's South Campus Quadrangle The language in the first sentence of the definition for "Cumulative potential effects" requires an analysis of "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…" Minn. Rule 4410.0200, Subp. 11a. Thus, it is only logical that "other projects" include past, present, and future projects, and that all of the projects together must be analyzed and understood to properly identify all cumulative potential effects. This interpretation of the first sentence is further supported by the final clause of the next sentence, which requires that the EAW analysis also "includ[e] future projects actually planned or for which a basis of expectation	The Schoenecker Center building has received all permits and approvals and is currently under construction. Any impacts and mitigation needed for this project have previously been identified and addressed through the permitting and approval process. This project was included as part of the existing conditions analysis and background conditions for the EAW and Traffic study analysis. As previously noted, the expansion of the Anderson Parking Facility would require a review through the City process and would require an amendment to the CUP.

Comment	Response
has been laid... " The word "including" in the Rule makes clear that not only are past and present projects to be analyzed, but also "future projects." "Future projects" does not limit the cumulative effects analysis to cover only future projects, as the City's EAW suggests in the response to Items 6 and 21. The text in the June 2023 EAW omits any reference to the next sentence in the regulatory definition of Cumulative Potential Effects, which states: "Significant cumulative potential effects can result from individually minor projects taking place over a period of time." Minn. Rule 4410.0200, subp. 1 la. The rules require that adjacent changes in land use must be included in considering cumulative potential effects. The next sentence further supports a broad interpretation of the types of construction projects to be included in a proper analysis: "In analyzing the contributions of past projects to cumulative potential effects, it is sufficient to consider the current aggregate effects of past actions." Id. Thus, the full text of Rule 4410.0200, subpart 11.a. makes it absolutely imperative that a proper analysis of cumulative potential effects must include all past, present, and future actions. The June 2023 EAW's failure to even identify, yet alone analyze the effects of all of the past and present projects, i.e., the Schoenecker Center construction, the plan for the South Campus Quadrangle, and the planned expansion of the Anderson Parking Facility, must be taken into account now in the EAW analysis. Subparagraph b. of Item 21 asserts that "The University of St. Thomas does not have any board approved plans for new building construction at the St. Paul Campus." This is erroneous. The University has "plans." In November 2016, the St. Thomas Board of Trustees unanimously approved a "10-year St. Paul Campus Master Plan." On the South Campus, Item 11 of the Master Plan specifically calls for a "New Academic Building [for] Science & Engineering [with a size of] 137,000 SF." Item 13 of the Plan clearly states: "Expand Anderson Parking Facility (two levels) 300 parking spaces." The new science and engineering building called for in the 2016 Master Plan is presently under construction. The plan to expand the Anderson Parking Facility, by adding two levels on top of the existing ramp, can be accurately analyzed now because the location, dimensions, and floor plan for the new construction will be the same as it is on the level existing below the proposed two new levels. It is simply wrong to suggest, as is done in the	Cumulative potential effects need only be analyzed for future projects if such projects are planned or for which a basis of expectation has been laid. While future development of the University is indicated by historic and forecasted trends, there is not sufficiently detailed information about any future building projects to contribute to the understanding of cumulative potential effects. If a future project within the University of St. Thomas exceeds an EAW or EIS threshold as noted in MN Rules 4410, the appropriate environmental review will be completed.

Comment	Response
EAW, that "there is not sufficiently detailed information about any future building projects to contribute to the understanding of cumulative potential effects."	
21- Cumulative Effects	
The City of St. Paul must reject the June 2023 EAW for its failure to meet the requirements of the Minnesota Environmental Policy Act and the applicable rules An outline of a City's responsibility to appropriately consider "potential impacts" and "cumulative potential effects" is set forth in the recent case of In Re City of Cohasset's Decision on the Need for an Environmental Impact Statement for the Proposed Frontier Project, 985 N.W. 2d 370 (Minn. Ct. App. 2023). As the Appeals Court noted, and the law and rules make clear, an environmental impact statement is required "if the proposed project has the potential for significant environmental effects." 985 N.W. 2d at 378. The Appeals Court reversed the city's decision and remanded for the city to issue a new decision on the need for an EIS, after concluding that the City's decision not to require a proper environmental analysis was "unsupported by substantial evidence." Id. Here, if the City of St. Paul does not require the preparation of a proper EAW with full and accurate information, or order the preparation of an Environmental Impact Statement, the City will simply cause delay and uncertainty to the University's timetable. See Pope County Mothers, 594 N.W.2d at 238.	State administrative rules also include standards and criteria for the decision on the need for an Environmental Impact Statement (EIS), based on the potential for significant environmental effects. State rules defines environment as land, air, water, minerals, flora, fauna, ambient noise, energy resources, and artifacts or natural features of historic, geologic, or aesthetic significance. Through the EAW process environmental impacts have been identified and mitigation measures have been outlined in the document. No significant impacts that cannot be mitigated through the appropriate permits and approvals process have been identified.
20 – Transportation	
The Transportation Study by SRF fails to account for numerous issues with existing insufficient parking and fails to appropriately analyze future parking problems. The Transportation Study needs to be redone with the correct base data, in order to develop a real-world view of the parking shortage and the resulting transportation congestion likely to arise because of the University's proposed new construction. Just as the body of the EAW report fails to identify the "cumulative impact" and the "cumulative potential effects" of the development already occurring on the University's South Campus, the parking study is similarly flawed. For instance, the parking study fails even to discuss the new Schoenecker Center, which is presently under construction and will	The Schoenecker Center construction (with an anticipated completion date of January) is shown in Figure 3 and on an inset-on Page 16 of the Transportation Study. There is a multi-use component to college campus in which students, faculty, staff, and visitors often park once and visit multiple locations on campus. The ITE Parking Generation Manual, 5th Edition, which is a parking industry standard, only generates parking demand on college campuses based on enrollment. Therefore, a

Comment	Response
open in 2024. The 130,000 square foot Schoenecker Center will create greater parking demand by bringing additional students, faculty, staff, visitors, and programs to the South Campus Quadrangle. Those persons are going to need to park somewhere. The site of the Schoenecker Center used to provide 127 parking spaces for use by South Campus visitors. The construction of the Schoenecker Center eliminated those spaces, as well as creating increased evening demand, such as will arise from the music auditorium in the new building. Similarly, the parking demand analysis fails to account for the hundreds of persons attending programs, events, and dinners on the third floor of the Anderson Student Center. I have often driven down Cretin A venue on weekend evenings and seen many persons dressed in suits and fine dresses walking along Cretin from the Anderson Parking Facility to the Anderson Student Center. None of the first two events were even taken into account in the parking demand analysis by SRF; all three occurring simultaneously was never considered. It is easy to imagine that on a Friday night there will be a basketball game in the new arena, a music concert in the Schoenecker center, and a non-profit fundraising event on the third floor of the Student Center. Where are all these people going to park? On page 16, the parking analysis identifies that the construction of the arena alone "is expected to result in the net loss of approximately 265 parking spaces." But, this statement fails to account for the 127 recently eliminated spaces lost because of the construction of the Schoenecker Center and the north portion of the new South Campus Quadrangle . Thus, the total parking loss from the current and proposed construction is at least 392 spaces, almost one-half again more than the 265 that was analyzed in the parking study. Table 12, "Available Parking Supply Before Events" suggests that on Friday and Saturday nights there will be between 185 and 214 parking spaces available on nearby public streets for persons attending events in the new arena. Figure 9 identifies a potential number of street parking spaces. My experience from living nearly adjacent to the University's campus for over 25 years is that there are seldom significant numbers of parking spaces available on weekends along Summit and Grand A venues when school is in session; students and their weekend guests make substantial use of the free parking available on those public streets and it can be difficult to even find any significant number of on-street parking spaces. The University's basketball and hockey games will be played in the late fall throughout the winter. During this same time period, it often snows in St. Paul. Sometimes the City declares	building addition on a college campus is not a good indicator for changes in parking demand. Based on UST discussions, student enrollment, staff, and faculty projections are expected to remain relatively consistent through the analysis period, therefore, no additional parking estimates were assumed. The Schoenecker Center project was constructed to address space deficits for existing academic programs. As discussed on page 11 of the Transportation Study, UST collected parking utilization counts on four (4) weeknights, and the average of those counts were utilized to represent an average or typical weeknight condition. In addition, parking counts were collected by SRF from Thursday, March 30, 2023 to Saturday, April 1, 2023. While there will always be daily variations in parking demand, the analysis was meant to be based on typical or average parking conditions at and around campus. As discussed on Page 21 of the Transportation Study, a maximum capacity (sold-out) basketball game on a weeknight was the focus of the transportation study analysis as it represents the "worst-case from an attendance, parking, and traffic perspective." As discussed on Page 11 of the Transportation Study, the parking utilization counts were collected in Spring of 2023, when on-going Schoenecker Center construction was occurring, and the 127-space lot was already eliminated. Therefore, the “base” parking count data already accounted for this loss in parking. Comment noted regarding snow. Snow events and/or emergencies would significantly impact the number of on-

Comment	Response
snow emergencies. When the City declares snow emergencies, there will be no neighborhood parking available anywhere near the University. Moreover, as was the case this past winter, the City's difficulty in clearing snow from curb to curb significantly restricts the number of on street parking spaces which are available. The parking study fails to account for snow in St. Paul during the winter sports' seasons. Figure 9, "Event Parking Supply," notes those residential blocks near the University in which the City Residential Permit Parking program is in place. The Study's Event Parking Demand analysis specifically notes, in footnote 3 that "nearby city permit parking restrictions are generally not in effect on Saturday," and thus assumes that all of the neighborhood streets will be available on weekends for arena parking. At the public forums which the University has hosted this year, UST's southern residential neighbors have made very clear their intentions to petition the City to extend the residential permit parking restrictions to include Saturdays and to extend the evening parking restrictions to 10:00 p.m. The University is very well aware of the neighborhood attitude on this issue. As a matter of fairness and equity, it is entirely inappropriate for the University to fail to spend the money necessary to construct parking facilities on its own campus, and thereby shift the burden of automobile storage to the surrounding neighborhoods, when the reason the demand exists is for persons attending University events. The "Key takeaways from the event parking demand" suggest that for maximum basketball events there is expected to be "a deficit of approximately 330 to 740 spaces. These vehicles will likely utilize public parking in the neighborhood." See Page 28. The next paragraph provides: "Maximum hockey events are generally expected to be accommodated on campus. However, some vehicles may choose to park on public streets on the neighborhoods over parking in the Northeast Quadrant of the North Campus, especially on Saturdays when city permit parking restrictions are lifted." See p. 28. This acknowledgment illustrates one of the major elements of, blindness in the Parking Study. When the University makes its campus parking spaces available, it charges a fee for parking. Parking on neighborhood streets is "free." A fact of life is that most persons driving to events in the University's new arena would prefer free parking over pay parking. The Study fails even to discuss how this issue will impact parking demand and congestion in the neighborhood.	street parking available. Much like Saint Paul residents need to react to snow emergencies and plan for parking differently than their normal practices, the University would need to accommodate additional parking during those unique periods as well. Page 29 of the Transportation Study notes the assumption "Prepaid entry to the APF parking facility. Parking tickets are either expected to be checked by a parking consultant or inserted into a machine upon entry." as parking costs are expected to be increased at the APF due to its proximity to the arena. The parking demand analysis was primarily focused on the total available parking supply vs. the expected event parking demand. Visitor parking structures operate a self-paid service that costs $1.50/hour after 4 pm. For basketball/hockey events, the cost to park in these visitor structures would be less than $4. This cost may not be significant enough to deter users from parking closer to the arena (depending on the lot) during the winter and avoiding circling neighborhoods and/or parallel parking. Many event attendees will be students and/or season ticket holders who are attending multiple events each season. The University will need to continue to stress parking in the available lots on campus and the recurring attendees will develop habits for where to park when attending each event. Based on similar program attendances, the larger parking deficits (i.e., 330 to 740 vehicles) are expected to occur once or twice a year. The base assumptions as part of the Transportation Study were discussed and confirmed by the University of St.

Comment	Response
In the real world, patrons coming to the University to attend athletic events will likely be cruising the neighborhood looking for free parking spaces (even if signs restrict it, there will undoubtedly be persons parking in violation of the permit restrictions). There are substantial numbers of neighborhood residents who pay for their resident parking permits for their families and guests, such that there are often very limited open parking spaces available now on the neighborhood streets. The Parking Study fails to account for how the actions of drivers seeking "free" parking will increase congestion, delay traffic clearing, potentially create safety issues, and have negative and deleterious effects on the quality of life for the neighbors residing south of the University. Again, the EAW identifies that during some events there "are expected to [be] a deficit of approximately 330 to 740 vehicles which will likely use public parking in the neighborhood." EAW, p. 36. Even this number is likely low as it is based on unrealistic assumptions (such as assuming patrons will be willing to pay to park in Tommie North, so that they can walk back across the entire campus late on winter evenings!). Because so many of the base assumptions used forecasting supply for and proposed mitigation are either unrealistic or unlikely to happen, the Transportation Study fails to provide sufficiently accurate information such that the true impact of the proposed arena is accurately set forth. The EAW and SRF's Transportation Analysis fail to explain how shunting hundreds of cars into the nearby residential neighborhoods can possibly satisfy Policy LU-54 of the City's 2040 Comprehensive Plan, which seeks to: Ensure institutional campuses are compatible with their surrounding neighborhoods by managing parking demand and supply, ... minimizing traffic congestion, and providing for safe pedestrian and bicycle access. The word "ensure" is often defined as "to secure or guarantee" and "to make sure or certain." There is nothing "certain" about simply listing "possibilities" for mitigation, when the University has not indicated its willingness to implement mitigation activities. When an RGU considers mitigation measures as offsetting the potential for significant environmental effects under Minn. R. 4410. I 700, it may reasonably do so only if those measures are specific, targeted, and are certain to be able to mitigate the environmental effects." 713 N.W.2d at 835. The EAW fails this test. The traffic study's purported mitigation	Thomas and the City of Saint Paul. The Tommie North lot is within a 1/2-mile radius of the Arena, which is generally considered walking distance for event patrons. Given permit parking restrictions, this walking distance wouldn't be substantially different to parking in the public parking in the neighborhoods. Several potential mitigation strategies and improvements were identified to help reduce public parking in the neighborhoods and are discussed on Pages 34-36 of the Transportation Study. For more information, see the list of mitigation in the section titled **Mitigation Plan**. The Transportation Study was a thorough and comprehensive study with numerous data collection efforts at most, if not all, primary intersections and parking locations surrounding the University of St. Thomas Saint Paul Campus. The various data collection efforts completed as part of the study established a new "base" condition for campus, which took into account all traffic and parking changes and impacts from prior construction and/or campus modifications.

Comment	Response
analysis is disjointed and fails to establish how or even if the possible ideas for mitigation will actually solve the parking and congestion problems likely to occur. The Minnesota courts have concluded that an RGU may not rest its decision "on 'mitigation' that amounts to only 'vague statements of good intentions."' Citizens Advocating Responsible Development vs. Kandiyohi Board of Commissioners, 713 N.W. 2d 817, 822 (Minn. 2006). An RGU is simply not allowed to push off to the future the possible mitigation of environmental harm. "Under MEPA, an RGU must determine whether a given project has the potential for significant environmental effects before approving the project." Id. at 835.	
Parking Conclusion	
In summary, what the University has done or is proposing with regard to parking on the South Campus is the following: •Eliminate 392 parking spaces. •Add one-half million square feet of new building with a 5,000 seat arena and new academic spaces. •"No onsite parking is expected to be constructed in the redevelopment." When reduced to its stark essentials, this "conclusion" makes no sense.	Thank you for your comment.
The City of St. Paul should reject the current EAW and require more and better study	
The City must reject the current EAW and at least require that a full and accurate EAW be prepared, which properly defines the project; identifies all of the negative potential environmental effects; and complies with Minnesota law. Or, the City could direct that an Environmental Impact Statement be prepared. Kimley Horn and SRF have put the City of St. Paul into a difficult position. No doubt, the University of St. Thomas would like to be done with the environmental review as soon as possible. But, the Minnesota Environmental Policy Act and the Rules thereunder must be followed. As set forth above, the June 2023 EAW fails to properly define the project; fails to appropriately consider connected actions and phased actions; improperly minimizes the	Comment noted.

Comment	Response
cumulative potential effects of all elements for the University's South Campus Quadrangle and related construction. The parking and congestion analyses omit necessary information, and strongly suggest that the University's acknowledged parking shortage should be solved by forcing the neighborhood to bear the negative consequences of insufficient parking on campus. There is simply not enough accurate and complete information in the June 2023 EAW for the City to reasonably and appropriately analyze the potential environmental impacts of what the University is proposing. The standards for the City's decision on whether there is a need for an EIS is set forth in Minn. R. 4410.1700. Subpart 2.a. provides that if there is insufficient information "necessary to a reasoned decision about the potential for, or significance of, one or more possible environmental impacts is lacking, but could reasonably be obtained, the RGU shall either 'require an EIS to obtain the lacking information or postpone the decision on the need for an EIS, and grant an extension to allow time in order to obtain the lacking information."' An RGU's "decision will be deemed arbitrary and capricious if the agency "entirely failed to consider an important aspect of the problem, if it offered an explanation for the decision that runs counter to the evidence, or if the decision is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Trout Unlimited, Inc. vs. Minn. Dept. of Agriculture, 528 N.W. 2d 903, 907 (Minn. App. 1995). The City should do the right thing and either require that a proper EAW be prepared, which fully analyzes all of the connected and phased actions and the cumulative potential effects of the University's South Campus redevelopment project, or direct the preparation of an Environmental Impact Statement.	

Kathryn McGuire

Comment	Response
6 – Project Description	

Comment	Response
The project proposes a seating capacity of 5,500 people but no funding or approved plan for additional parking. This is an inadequate response to the problems identified in the Traffic Impact Analysis. Provisions for parking should be established during the planning phase, not as an afterthought.	Thank you for your comment. For more information, see the list of mitigation in the section titled **Mitigation Plan**.
7 – Climate Adaptation and Resilience	
According to the Metropolitan Council's Extreme Heat Map, the location of the UST proposed project is "susceptible to extreme heat". Other communities, Hopkins, MN for example, use this information to mitigate heat island effect, and this is what Saint Paul should be doing. The UST proposed development would further contribute to the Urban Heat Island Effect, which is in direct conflict with the 2040 Comprehensive Plan policy goals and detrimental to the health and wellbeing of people. Further investigation is warranted.	University of St. Thomas has committed to building LEED-certified facilities that can be designed to use less energy and water in order to support the City's Climate Action and Resilience Plan. The following measures provide increased reliability and energy efficiency in the arena to reduce emissions: • Redundant chiller design and incorporation of glycol into supply loop for all cooling coils will protect from freezing conditions and ensure systems remain operational. • Chillers will use next-generation refrigerants with low global warming potential. • The boiler system will include n+1 redundancy and freeze protection. These efficiencies reduce heat emitted from the buildings and their HVAC systems and reduces indoor and outdoor exposure to heat, which is one of the impacts of the heat island effect.
8 – Cover Types	

Comment	Response
The removal of 76 mature trees from the MRCCA would have an enormous environmental impact. The carbon absorption rate of trees accelerates as the trees age, and tall, old trees are carbon storehouses for the planet. Furthermore, when forests are cut down, the stored carbon is released into the atmosphere as carbon dioxide. This is in sharp contrast to UST's goals of carbon neutrality and the resiliency goals of the 2040 Comprehensive Plan. The EAW has not adequately assessed the environmental impact of removing 76 carbon storehouses and releasing that carbon dioxide into the atmosphere. These potential impacts warrant further investigation. There is additional environmental impact as trees can reduce urban heat island effects by shading building surfaces, deflecting radiation from the sun, and releasing moisture into the atmosphere. The removal of 76 mature trees from the MRCCA is in sharp contrast to the resiliency goals of the 2040 Comprehensive Plan. The EAW has not adequately assessed the environmental impact of removing shade trees that reduce the Heat Island Effect. These potential impacts warrant further investigation. UST proposes to plant new, young trees in other areas of the campus. It will take decades for young trees to achieve the environmental benefits of mature trees for carbon absorption and heat island reduction. Furthermore, planting 26 young trees elsewhere on campus does not mitigate the environmental impact within the MRCCA area which contains the South Campus. This proposed solution is useless as it is not within the project location.	Currently there are no tree preservation requirements in the City of Saint Paul at the project location. However, the University of St. Thomas has committed to replacing all trees removed onsite to at least a 1:1 ratio. The University's stated intent is to replace the trees within or adjacent to the approximately 6-acre site for the Arena project, but since there is limited space within the Arena project area they will first replace trees elsewhere on the South Campus and then look at other areas within the remaining portions of campus for tree planting opportunities if needed.
10 – Land Use	

Comment	Response
The EAW cites the 2040 Comprehensive Plan Land Use Goal 54 which is "to ensure that campuses are compatible with surrounding neighborhoods by managing parking demand and supply, maintaining institution owned housing stock, minimizing traffic congestion, and providing for safe pedestrian and bicycle access." How can UST and the EAW conclude that the proposed plan is in anyway consistent with these goals? Traffic congestion and pedestrian safety are already problematic due to the increased traffic on Cretin Avenue, and the added traffic will compound traffic congestion profoundly. The EAW fails to address this obvious contradiction to the 2040 Comprehensive Plan. Furthermore, the UST proposal is contradictory to goals of the Saint Paul Climate Action & Resiliency Plan and other policy goals of the 2040 Comp Plan including: Goal #1. Economic and population growth focused around transit. Goal #4. Strong connections to Mississippi River, parks, and trails Goal #8. People centered urban design Policy LU-1. Encourage transit-supportive density and direct the majority of growth to areas with the highest existing or planned transit capacity. Policy LU-21. Identify, preserve, protect and, where possible, restore natural resources and habitat throughout the city with the following ordinances: Policy LU-36. Promote neighborhood- serving commercial businesses within Urban Neighborhoods that are compatible with the character and scale of the existing residential development. Policy LU-38. Direct the location of new secondary schools and post-secondary educational institutions along transit routes and bicycle and pedestrian networks to provide options for students and staff, and decrease traffic congestion in adjacent neighborhoods. Policy HP-3. Pursue funding to evaluate, maintain, renovate and preserve City-owned eligible and potentially eligible property, and assist private owners to do the same. Policy HP-12. Prioritize the retention of locally-designated/listed historic and cultural resources or those determined eligible for designation over demolition when evaluating	The *2040 Comprehensive Plan* Future Land Use map designates the project site as Civic and Institutional, which includes building and open space for major institutional campuses. Three policies apply to the Civic and Institutional land use category; however, one is specific to the Capitol Area and is not applicable to the project site. Policy LU-53 encourages partnerships with colleges and universities to strengthen connections with the community and adjacent neighborhoods, and support workforce development, business creation and innovation, and retention of youth and young professionals. Policy LU-54 aims to ensure that campuses are compatible with surrounding neighborhoods by managing parking demand and supply, maintaining institution-owned housing stock, minimizing traffic congestion, and providing for safe pedestrian and bicycle access. In Saint Paul, college and university campuses located in residentially zoned areas require a Conditional Use Permit (CUP), which defines campus boundaries and regulates building heights and setback requirements, among other things. There is an existing CUP in place for the University of St Thomas campus. The project will be required to comply with City ordinances and zoning as outlined in the City Code which incorporates the goals and policies identified in the 2040 Comprehensive Plan. Also, mitigation strategies identified in the EAW will help the project meet the policies mentioned above.

Comment	Response
projects that require or request City action, involvement or funding, or those of related development authorities. Policy CA-2. Protect Primary Conservation Areas through planning, land use and land alteration regulations, and other tools. Policy CA-3. Minimize impacts to PCAs from public and private development and land use activities. Policy CA-5. Manage vegetation and conduct vegetation restoration consistent with park master plans and MRCCA requirements. Policy CA-6. Promote the preservation and re-establishment of natural vegetation on privately-owned property. Policy CA-7. Consider alternative design standards related to subdivision and development of land within the MRCCA, such as conservation design or transfer of development rights, in order to protect or restore PCAs. Policy CA-9. Explore permanent protection measures (such as acquisition and conservation easements) to protect PCAs.	
The St. Paul City Council has not yet adopted the new rules of the MRCCA, nor are they required to adopt the new rules. To assume that this will be adopted is inaccurate. Furthermore, members of the City Council, Planning Commission, and DNR, are well aware of the inconsistencies and inaccuracies in the zoning assigned to the properties owned by UST and the Saint Paul Seminary. The EAW has portrayed inaccurate and incomplete information regarding the zoning of the MRCCA property, and the EAW has inaccurately portrayed the City Council's role and prerogative in this process.	As noted in the EAW, Saint Paul is in the process of formal adoption of new ordinance language consistent with MN Rules 6106 but has not yet completed the adoption. Per the Rules, Saint Paul's existing MRCCA ordinance, which refers to the area where the project is located as the RC3 River Corridor Urban Open (an overlay zoning district), must remain in effect until new MRCCA zoning is formally adopted by the City. In Saint Paul, college and university campuses located in residentially zoned areas require a Conditional Use Permit (CUP), which defines campus boundaries and regulates

Comment	Response
	building heights and setback requirements, among other things. There is an existing CUP in place for the University of St Thomas campus.
The property bordered by Cretin, Goodrich, Exeter, and Otis Avenues and the Mississippi River Boulevard, is located entirely within the MRCCA which was designated "to protect its natural, cultural, and scenic resources." (Minnesota DNR-MRCCA). This property is designated with further protection as a Primary Conservation Area (PCA) under three categories: Bluff Impact Zone, Significant Existing Vegetative Stands, and Unstable Soils and Bedrock. These protections have been in effect since 1976, and the PCA designation is placed "to ensure that they are given priority consideration for protection." (2040 Comprehensive Plan—MRCCA Chapter). The EAW has failed to address the intended purposes of the MRCCA and PCA protections. Further assessment is warranted.	As noted in the EAW, Saint Paul is in the process of formal adoption of new ordinance language consistent with MN Rules 6106 but has not yet completed the adoption. Per the Rules, Saint Paul's existing MRCCA ordinance, which refers to the area where the project is located as the RC3 River Corridor Urban Open (an overlay zoning district), must remain in effect until new MRCCA zoning is formally adopted by the City. In Saint Paul, college and university campuses located in residentially zoned areas require a Conditional Use Permit (CUP), which defines campus boundaries and regulates building heights and setback requirements, among other things. There is an existing CUP in place for the University of St Thomas campus.
City of Saint Paul Planning Commission Resolution file number 90-14, February 9, 1990, approved the Special Conditional Use Permit (SCUP) for UST. That permit granted taller building heights within the MRCCA boundaries. The Planning Commission noted that one of the justifications for the taller building height was that it would encourage the preservation of more green space/open space on campus by encouraging buildings with smaller footprints. So, UST has extracted the provision of tall building heights while completely ignoring the underlying intent which is to preserve open space/green space by preventing construction of buildings with large footprints. UST has abused the intent of the SCUP, and the EAW has not performed a complete assessment of the Planning Commission Resolution 90-14 regarding the Special Conditional Use Permit. Further investigation is warranted.	The proposed Arena project is looking to utilize the existing campus area by redeveloping a portion of the campus that is already covered in mostly impervious surfaces, such as existing buildings and surface parking lots. The multipurpose function of the Arena will allow for multiple uses to occur within the building, thus reducing the need for additional buildings to be placed on campus and opening up those opportunities for additional open space. The project will be reviewed through the Site Plan Review process and will be required to comply with the conditions described in the current CUP.

Comment	Response
Planning Commission Resolution File 90-14 noted , "Before the Planning Commission may grant approval of a principal use subject to special conditions, the Commission shall find that... the use will not be detrimental to the existing character of the development in the immediate neighborhood or endanger the public health, safety and general welfare." The development of a complex of this size, mass, and magnitude plus its associated traffic and noise, is detrimental to the character of the neighborhood, and it does endanger the public health, safety, and general welfare of its residents in terms of noise, traffic congestion, emissions, loss of trees, and added stress. Even the mere discussion of this proposal has caused health-threatening stress to neighborhood residents. The EAW has provided incomplete information regarding the premises of the SCUP. Further assessment is warranted.	As noted in the EAW, the project will require a review through the Site Plan process and other applicable permits and approvals to confirm the project is in compliance with applicable City ordinances.
11 – Geology, Soils, and Topography/Landforms	
The Department of Natural Resources (DNR) identified calcareous fens as a protected wetland on the property, as well as its associated rare plant species. Calcareous fens are considered to be rare, fragile, and highly protected (files.dnr.state.mn.us). Inexplicably, the EAW fails to address the calcareous fens on the property. This is incomplete information and it warrants further investigation.	Water resources are discussed in Section 12 of the EAW. None of the reviewed resources depicted wetlands within the project site. Calcareous fens are rare and distinctive peat-accumulating wetlands which rely on a constant supply of upwelling groundwater rich in calcium and other minerals. According to the DNR Identification List of Known Calcareous Fens[7] and Calcareous Fens-Source Feature Points dataset[8], there are no known calcareous fens located within Ramsey County or on the project site.
12 – Water Resources	

[7] https://files.dnr.state.mn.us/eco/wetlands/calcareous_fen_list.pdf

[8] https://gisdata.mn.gov/dataset/biota-nhis-calcareous-fens

Comment	Response
The EAW cites the National Hydrography Dataset mapped flow line stream 140 feet west of the project in alignment with the Grotto. It also mentions the 12 penetration test borings conducted by American Engineering Testing which revealed groundwater at depths of 6 to 12 feet. One might easily deduce that there is a sensitive flow of water within this MRCCA area and yet there is no mention of protections or possible detriments. The EAW is incomplete in this analysis of water resources. Further investigation is warranted.	As noted in the EAW, no impacts to the Grotto or other identified linear aquatic resources are anticipated. As noted by the American Engineering Testing analysis, a perched groundwater table has been identified on the site. The project design will account for the perched groundwater and design mitigation measures will be implemented. The project will meet rate control, volume control, and water quality treatment requirements as outlined in the Capitol Region Watershed District Rules. These rules are in place to ensure that stormwater is discharged from the project site at an equal or lesser rate than existing conditions and the stormwater discharge is cleaner than the existing water leaving the site.
14 – Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	
The EAW fails miserably with regard to identification of wildlife, plant communities, and sensitive ecological resources. Again, the DNR has identified the calcareous fens, a very rare, fragile, protected wetland, but the EAW makes no mention of it.	According to the DNR Identification List of Known Calcareous Fens[9] and Calcareous Fens-Source Feature Points dataset[10], there are no known calcareous fens located within Ramsey County or on the project site.
On this section of the MRCCA property, on several occasions, I have seen a pair of enormous barred owls perched high in the tall, mature trees. I have seen bald eagles, red-tailed hawks, and several owl species. I have also seen adult and juvenile trumpeter swans flying overhead. Each year, more than 325 species of migratory birds make their way along the Mississippi Flyway.	Thank you for your comment. The project site is located within the Mississippi River Twin Cities Important Bird Area (IBA)[11]. The Mississippi River IBA includes the Mississippi River and its adjacent floodplain forest and upland areas extending for 38 river miles through 4 counties from Minneapolis to Hastings. According to the MN DNR, IBAs are a voluntary and non-regulatory part of an international

[9] https://files.dnr.state.mn.us/eco/wetlands/calcareous_fen_list.pdf

[10] https://gisdata.mn.gov/dataset/biota-nhis-calcareous-fens

[11] https://netapp.audubon.org/iba/Reports/2421

Comment	Response
	conservation effort to bird populations[12.] The information above was added as a correction to the EAW after receiving recommendations from the MN DNR. As indicated in Section 14.a. of the EAW, the site provides minimal wildlife habitat due to the extent of impervious surfaces and low coverage of natural vegetation.
The U.S Fish and Wildlife Service identifies the project site as a high potential zone for the Rusty Patched Bumblebee, an endangered species, but UST development has already disturbed the habitat. The EAW has failed to identify significant wildlife and sensitive ecological resources at the site. Further investigation is warranted.	The Arena project study area is currently approximately 4 acres of impervious surface with the remaining areas as lawn/landscaping and wooded areas. The campus is a disturbed environment as it contains lawn/landscaping and impervious surfaces in a highly urbanized area. The project will incorporate pollinator friendly landscaping into the project design to expand on the pollinator corridors already established on campus. This will create foraging habitat that could support pollinators such as the Rusty Patched Bumblebee.
15 – Historic Properties	
In 1984, an application was submitted for the Saint Paul Seminary property to be included in the National Register of Historic Places (NRHP). Inexplicably, that application was never submitted, and oddly enough, UST purchased the property in 1987. Since taking ownership, UST has proceeded to raze the historic buildings and change the property without reservation, to the extent that the property is too far compromised to qualify as a historic district though several buildings are still considered eligible. The EAW has not provided complete information as to why the original application was never processed and included in the NRHP. Furthermore, the Heritage Preservation Commission has determined that a review of the project is required with regard to the eligibility of three historic properties on the project site. Further investigation is warranted.	"Considered eligible" means that a federal agency has recommended that the property is eligible for listing in the NRHP and SHPO has accepted the recommendation for the purposes of the environmental review process. However, these properties need to be further assessed before they are officially listed in the NRHP. The Project proposer has initiated conversations with the Historic Preservation Commission (HPC) and the HPC will be reviewing the proposed project for compliance.

[12] https://www.dnr.state.mn.us/iba/index.html

Comment	Response
16 - Visual	
Residents of Goodrich, Fairmount, Woodlawn, Cretin, and Summit Avenues and the Mississippi River Road, the Saint Paul Seminary residents and staff, and may other neighborhood residents have appreciated the open space vistas of the MRCCA property. Since 1979, most, if not all, of these residents purchased their homes with the knowledge of the MRCCA protected property and open visual vistas it provides. Many purchased their properties when the Saint Paul Seminary was still considered eligible as a historic property. This area of Saint Paul is grossly deficient in public park space and open space, and the MRCCA area has helped to fill that deficit. It is insulting to say that "the project will not have an impact on identified significant public views" and "views from the surrounding area would be similar to those experienced currently." Where there once was MRCCA Urban Open Space and an extended landscape of mature trees and wildlife is now the back end of the Anderson Parking Ramp. No building on any part of the campus has the footprint and mass of the proposed arena. The EAW has failed to thoroughly assess the visual impacts of this proposed arena, and it is inaccurate in its comparisons to other structures and current views. Further investigation is warranted.	The proposed project will not significantly change the views from identified public views in the vicinity. The Arena is situated between exiting facilities and buildings on South Campus and is not significantly increasing impervious surfaces. UST has shared preliminary renderings at initial community meetings and will continue to do so as the project design advances.
17 – Air	
Increased traffic congestion and car idling will significantly increase the emissions of carbon monoxide, hydrocarbons, nitrogen oxides, benzyne, formaldehyde, and particulates. To anyone with asthma or other health issues, this is a nightmare. We did not purchase homes near the 10 highest traffic volumes in the Twin Cities. We purchased our homes in a clean, quiet, neighborhood adjacent to the MRCCA. The EAW has grossly underestimated the harmful impact of emissions on air quality. Further investigation is warranted.	The EAW has addressed vehicle emissions consistent with Minnesota Environmental Quality Board guidance and in consultation with MPCA. MPCA is the regulatory body for air quality and did not provide any comments on the EAW. The MPCA reviews Air Quality Index (AQI) to confirm that the Twin Cities Metro Area continues to be an Attainment Area for Air Quality. The MPCA monitors 10 air pollutants and review the AQI to confirm the Twin Cities metropolitan area continues to be an attainment area. As part of the Clean Air Act, The US EPA calculates the AQI for five major pollutants. The data collected from the MPCA monitoring stations is compared

Comment	Response
	to the EPA AQI ranges. The Twin Cities AQI on August 2, 2023 was 30, meaning the air quality in this section of Saint Paul is considered good.[13]
18 – Greenhouse Gas (GHG) Emissions/Carbon Footprint	
Many ice rink refrigerants contain potent greenhouse gases that warm the atmosphere. Common synthetic refrigerants called hydrofluorocarbons (HFCs) have a Global Warming Potential (GWP) hundreds to thousands of times stronger than that of carbon dioxide (Environmental and Energy Study Institute, February 2022). The EAW makes no mention of the harmful effects of refrigerants. This is incomplete information that warrants further investigation.	Emissions from ice rink refrigerants were considered as part of Item 18. The project will incorporate an ammonia (NH3)-based refrigerant plant for the ice rinks; however, annual usage will be limited for maintenance needs only and therefore not included in the GHG analysis. Ammonia is considered an acceptable non-ozone depleting alternative for ice rinks compared to other hydrochlorofluorocarbons substances under EPA's Significant New Alternatives Policy program. Source: https://practicegreenhealth.org/sites/default/files/2019-06/PracticeGreenhealth_GHG_Toolkit_0.pdf
The EAW mentions that UST "may" install up to four diesel generators for back-up power and to feed the UST MicroGrid. "Diesel generators produce particulate matter (PM), volatile organic compounds (VOCs), nitrous oxide (NOx) among other harmful pollutants that create smog and exacerbate respiratory conditions." They also produce Greenhouse Gas Emissions (GHG). (Facilities Engineering Associates, P.C., 2017) This proposal for diesel generators is in complete contradiction to UST's carbon neutrality goals, and it is in contradiction to the Saint Paul Climate Resiliency goals and goals of the 2040 Comprehensive Plan. This warrants further investigation.	The University has decided to eliminate the Microgrid from the Arena project; therefore, the diesel generators identified for backup power to the Microgrid will not be needed for the project. A backup generator will be included in order to meet code requirements for the Arena. The project is evaluating ways to meet the University's clean energy goals through the design of the project including the relocation of existing solar panels that exist on top of McCarthy Gymnasium.
19 – Noise	

[13] https://www.pca.state.mn.us/air-water-land-climate/current-air-quality-conditions

Comment	Response
The UST neighborhood has experiences a significant increase in noise from rooftop equipment on the new buildings, and from traffic noise with the increased traffic on Cretin Avenue. In particular, the Ford development has significantly increased traffic noise. Also, the modified intersection at Grand and Cretin and the lack of traffic enforcement has resulted in speeding at that intersection and all along Cretin Avenue. Cars on Cretin have been clocked at 45, 50, and 55 mph, and that appears to be more the rule than the exception. Noise levels will increase in the neighborhood, so does it not matter that UST will make a bad situation even worse? To address noise after the fact is not adequate. Data is needed to determine precisely how much noise will be generated by the mechanicals and how that noise would be mitigated. This should be done during the planning phase, not during or after building. Noise is a public health concern, and further investigation is warranted.	Noise evaluation will be completed throughout the design process such as analysis of building wall sections (thickness of insulation, etc.), location and screening of mechanical equipment, and selection of broadcast and audio systems within the arena. Since the Arena is still in the early stages of design, it would be premature to complete an operational noise assessment with the selection of such systems at this time. The University is committed to completing a noise study to evaluate potential noise from the building and to identify noise mitigation options as needed. The project will be required to meet City of Saint Paul noise ordinances and MPCA regulations for noise.
20 – Transportation	

Comment	Response
The traffic study conducted is flawed and insufficient. First, the time period chosen for testing, just prior to a major, forecasted snowstorm, is NOT reflective of typical traffic volumes as drivers were likely off the road in anticipation of the storm. Also, shouldn't a thorough traffic assessment also measure rush hour traffic during all weather conditions? Entering and exiting a property onto Cretin Avenue during stormy or icy conditions is a life-threatening experience. Secondly, the traffic analysis seems to focus on major event games, but it does not address the additional traffic associated with graduations, convocations, employment fairs, youth hockey, non-major event games and other events that UST intends to hold in the proposed facility. These will all contribute to a congested, dangerous traffic situation that already exists on Cretin Avenue, and it is likely to spill onto residential side streets. It is important to keep in mind that this is a RESIDENTIAL AREA where people walk, ride bicycles, try to cross Cretin Avenue with strollers and young children. Many Saint Paul residents cross Cretin Avenue as they walk to the MRCCA area. Recall Goal #4 of the 2040 Comprehensive Plan is to promote "Strong connections to Mississippi River, parks, and trails". Remediation strategies of "Barricades, cones, and wayfinding signage" does NOT meet this goal. The addition of significant traffic into this residential area presents an incompatible mix that is contradictory to the policy goals of the 2040 Comprehensive Plan regarding the reduction of traffic in residential areas. It is also contradictory to the UST carbon neutrality goals and the goals of the Saint Paul Climate Action & Resiliency Plan. More in-depth assessment is warranted.	As stated on Page 4 of the Transportation Study "To determine if the traffic counts were representative of an average day in the study area, MnDOT detector data was reviewed at the I-94/Cretin Avenue interchange from October 2022 to March 2023. Results of the review, shown in Appendix A, indicate that March 30, 2023, was representative (if not slightly higher) of an average day for the study area, therefore, no adjustments were made to the counts." Graduations, conventions, and career fairs are already occurring on campus, therefore, are not a new impact to the area. There is only one auxiliary sheet of ice, and youth hockey teams generally only have 15-20 players, therefore, impacts from youth sports are expected to be minimal. Barricades, cones, and wayfinding signage are temporary event management strategies that are specifically designed to improve pedestrian safety by limiting pedestrian/vehicle interactions.
21 – Cumulative Potential Effects	
Over the past 100 years, UST has undergone an inordinate amount of development and expansion, which has increased dramatically in the last 50 years. It is common knowledge that there will be further development beyond the multi-use complex currently under review. Regardless of whether or not plans have been board approved, UST representatives have openly stated that the east and west blocks will soon be developed and that all athletic facilities will be upgraded to meet best practice standards for Division I athletics. The EAW is not sufficient in assessing the broad impact that UST has imposed	Any new projects proposed by the University that exceed an EAW or EIS threshold as defined by MN State Rules 4410, would be required to complete the appropriate environmental review. If the anticipated redevelopment of the East and West blocks of Grand Avenue exceeds an EAW or EIS threshold as

Comment	Response
on the surrounding community. The cumulative potential effects of UST development should be assessed in total, rather than in a project-by-project, piecemeal fashion. An Environmental Impact Statement (EIS) might be a more appropriate means of assessment since the UST expansion and development has "significantly affected the quality of the human environment." (National Environmental Policy Act of 1969 NEPA)	defined by MN state rules, the University would be required to complete an environmental review.
21 – Other Potential Environmental Effects	
The proposed project increases the amount of impervious surface in the MRCCA and PCA areas. Not only is this a net increase, it is also a change from discontinuous impervious surfaces to a single, very large, impervious surface. This is counterintuitive to any location, but it is particularly insulting to the MRCCA area where delicate water flow, vegetation, unstable soils, bluff impact zones, and calcareous fen wetlands exist. Further assessment is warranted.	The project is required to comply with all local and state stormwater requirements to treat stormwater run-off prior to discharging into any city or regional stormwater facilities. The proposed project will comply with all local and regional requirements for rate, volume, and water quality. The proposed project will also be required to provide sufficient erosion and sediment control per NPDES SWPP requirements. Per MNDNR, no calcareous fens are located within the project vicinity.

Kathryn Mitchell

Comment	Response
20 – Transportation	
Already, with any activities like graduations, football games etc., the neighborhood becomes a big crowded parking lot with folks parking right up to the edges of alleys and driveways. My neighbors cannot have their	For more information, see the list of mitigation in the section titled **Mitigation Plan**.

Comment	Response
friends and relatives come over unless they live in walking distance. Clearly there is no provision, once again, for parking. It is possible to put more levels in the Anderson ramp, but there is no interest in doing so we were told at the last meeting. How about some neighborly accountability and responsibility for all the vehicles brought in to this exciting new space?	
Mississippi River Rd is supposed to be a Parkway, but already at 8am and 5pm it has its own rush hour as many commuters prefer this to Cretin Ave, which is also busy and potholed. Unfortunately, most of these drivers do not observe the 25mph limit and many of them are going 40mph+. It is frightening, especially as there are many cyclists on this road. Surely it will be the route of choice for many coming to these events off of highway 5.	Thank you for your comment.

Art Punyko

Comment	Response
18 – Greenhouse Gas (GHG) Emissions/Carbon Footprint	
Do the EAW estimates in section 18 for GHG emissions assume any of the mitigation strategies (in 18 b) have been implemented?	No, the proposed operational emissions table 12 in Item 18 is not reduced to reflect any of the potential mitigation strategies listed in Items 18b.
Per section 18, the proposed facility is estimated to have 3X the GHG emissions of the existing structures. Can the city EAW approval process and/or permitting process require UST to provide a certain percentage of photovoltaic and/or wind power generation and/or carbon offsets in order to reduce the off-site electrical generation emissions over the next 50 years?	The University has committed to meet certain clean energy goals to reduce their carbon footprint. The City will continue to encourage project proposers to evaluate to use clean energy generating options.
20 – Transportation	

Comment	Response
In section 20b, there are tables that contain the parking deficit during the different event types and days of the week. Do these estimates assume that any of the mitigation strategies have been implemented?	No, these estimates are the "base" scenario, where no mitigation is implemented.

Saint Paul Seminary

Comment	Response
The Saint Paul Seminary would like to clarify that the driveway access off Summit Ave is a shared drive owned by both the University of St. Thomas (owners of Lot 2) and The Saint Paul Seminary (owners of Lot 1). The driveway is halfway on both lots. This detail was not included in the EAW. The seminary looks forward to future conversations with the University regarding anticipated changes, both structural changes and traffic volume changes, to the shared drive.	Thank you for your comment.

Kelly Vinson-Taylor

Comment	Response
20 – Transportation	

Comment	Response
Marshall & Cleveland were not included as a study intersection, although there was reference to traffic being routed to Cleveland. For that reason, that intersection should be included in the traffic study.	The study intersections analyzed as part of the transportation study were identified through discussions with UST and City staff. As stated on Page 39 of the Transportation Study, traffic is only expected to be routed to Cleveland Avenue during post-event conditions if a traffic control officer is utilized at Cretin Avenue/Grand Avenue, and the traffic control officer restricts eastbound left-turn. If this occurs, the signal timing at Cleveland Avenue/Grand Avenue and potentially Cleveland Avenue/Marshall Avenue should be considered for review. For more information, see the list of mitigation in the section titled **Mitigation Plan**.
Other key factors were not incorporated into the traffic study that need to be considered: The Bridge development is at the beginning of being built out. What impact will there be to Cretin Ave traffic flow as more people move into that development? There is work afoot to create "traffic calming" on Cretin and go from 4 lanes to 3 lanes. If that occurs, this traffic study is irrelevant and the result is that traffic for UST events will be backed up even more. Rapid Bus is being added to Marshall and by doing this new platforms are being added to key intersections (Marshall & Cleveland and Marshall & Cretin) this will change traffic flow in these areas, but was not factored into the study.	Future Highland Bridge Traffic was accounted for, as stated on Page 29 of the Transportation Study "Year 2025 no build volumes were developed by both applying a background growth rate of 0.25 percent to the existing pre- and post-event volumes and included trip generation estimates for the Highland Bridge development." Also stated on Page 29 "On-street parking is assumed to be present along Cretin Avenue (as parking restrictions are generally lifted after 6 pm). Therefore, Cretin Avenue was modeled to have one lane of travel at the on-street parking locations." Therefore, Cretin Avenue would operate similarly to any potential 3-lane facility. Rapid bus lines on Marshall Avenue are anticipated to have minimal impacts on the analysis performed as part of this study.

Comment	Response
Pg. 8 - references that there is not a crash problem currently. What about when the new volume of traffic is added? How will that impact crash volume? What about pedestrians trying to cross Cretin when it's dark at 4:30 in winter? It is currently not safe to cross Cretin unless you do so at a traffic light.	Note the multipurpose arena is primarily an event venue and is anticipated to have little to no impact on traffic during day-to-day non-event conditions. Several event management strategies are recommended on Page 36 and 39 and Figures 12 and 13 of the Transportation Study. These management strategies primarily focused on reducing pedestrian/vehicle conflicts, thus improving pedestrian safety. The majority of pedestrians will be routed to either the Cretin Ave/Summit Ave or Cretin Ave/Grand Ave intersections, which are signalized. In addition, the study recommends monitoring the Cretin Ave/Goodrich Ave crossing and provide traffic control officers or campus crossing guards if the crossing is heavily utilized and/or safety issues occur.
Pg 14 - Total net loss of approx. 265 surface parking spaces. That is significant and one of the mitigation strategies is to hold large events on weekends so spectators can park in the neighborhood. I can attest that Dayton Ave. between Finn & Cretin during the academic year is "wall to wall" cars parked on both sides of the street due to student rentals in the neighborhood and St. Paul's focus on increasing density. Given these events will be held in winter (Nov. thru March), when poor snow plowing causes the streets to narrow, cars driving down Dayton cannot pass each other unless by chance there is an open parking space (which is rare) and will need to back up down the street the allow the other car to get by. Adding more traffic and fewer UST parking spaces is going to make this existing issue much worse.	The strategy to hold large events on the weekend is because there is more available parking on campus during the weekend. University classes generally do not occur on weekends, which results in several of the campus parking spaces to remain open for use. Thank you for the comment about Dayton Avenue and winter conditions.
The study made reference to 75% of the students are going to walk or ride bicycles. Walking yes, but riding bicycles in hockey and basketball season which is winter...that is highly unlikely and needs to be adjusted.	75 percent represents the total number of students walking or biking, most, if not all, are assumed to be walkers. This assumption is considered reasonable based on the number of students that live within walking distance of the arena.

Comment	Response
The study does not include Division 1 schools that have built a major arena in a city neighborhood vs. schools like Creighton who hold their basketball events in an area near downtown. Are there any? Has this been done before? Building an arena in a city neighborhood is much different than Creighton or schools in rural areas where there is access to more land to build parking and have fewer traffic issues.	The similar programs reviewed in the Transportation Study are based on numerous division 1 programs within UST's conference, excluding the top and bottom capacity programs to eliminate outliers. .
One entrance in and out of the arena and the parking ramp on Cretin is a significant bottleneck. Even with a traffic cop, how will anyone coming out of the ramp after a game be able to make a left onto Cretin to get to 94? And if they are required to go right, they will be try to weave around on the neighborhood streets trying to find there way out.	Traffic control officers have the ability to stop pedestrians and traffic to allow vehicles exiting the parking ramp to make a left-turn movement. This could also be achieved through traffic signal improvements at the Cretin & Grand intersection.
Overall, it seems the University of St. Thomas is trying to "squish" an arena into a small space and in the process is going to create multiple issues that will negatively impact the neighborhood and the spectator experience. I highly recommend that the traffic study factor in the issues mentioned above and be conducted again during the upcoming winter months when there will be a more apples to apples comparison.	Thank you for your comment.

Donn Waage

Comment	Response
Throughout this EAW and studies there are numerous references to mitigations that St Thomas could do. I believe the community needs real commitments instead of inadequate studies and hoping for the best.	Comment noted. The mitigation strategies outlined in the EAW and in the section titled **Mitigation Plan** will be addressed by the City through the identified approvals and permit required for the project.
6 – Project Description	

Comment	Response
St Thomas believes its current sports facilities are inadequate, which is why they seek to build the Arena. St Thomas' goal is to fill the Arena for each of 66 regular games and to rent it out for profit. The EAW does not give the basis for estimates of game attendance, but they appear to be based on last year's games in the inadequate facilities. In addition, St Thomas' men's and women's hockey and women's basketball teams had losing seasons last year. More fans typically support winning teams. St. Thomas seems to be saying, "We are building this big expensive building, but don't worry, we won't use it much." Who would build a $125 million building and state that it would only be used to capacity 3-4 times a year? In assessing the financial costs to the City and the impacts on local residents, a more realistic assessment of game attendance considering St Thomas' attendance GOALl, must be developed.	As shown on page 27 and Figure 7 of the Transportation Study, the projected attendance was based on numerous division 1 programs within UST's conference, excluding the top and bottom capacity programs to eliminate outliers. Note the UST attendance was included in the graphic for reference, however, was not included in the similar program average attendance, given UST's current facilities are not able to accommodate larger attendances and their recent transition to Division-1 sports.
Last year St Thomas sought and received an expansion of its liquor license to include most of the campus and drastically increased the hours liquor can be served. St Thomas' POLICY currently does not allow alcohol at sports events. Will this change? Will alcohol be served at other activities and events at the Arena?	Thank you for your comment. Comment not related to the EAW.
The EAW, and St Thomas officials, have stated they will rent out the Arena for events. The EAW contains no estimates or analysis of the possible number or impact of events. The EWA refers to weddings and speakers; what about concerts? What times would these events be held? Will there be any time limits? Would alcohol be allowed A fair estimate of the number and impact of events is critical to understanding the impact of this project because a few of the mitigating factors suggested for St Thomas sports activities could be applied to them.	The primary scheduled, reoccurring use of the arena is for basketball and hockey events and therefore was selected as the focus of the EAW transportation analysis. The events studied represent a worst-case scenario from a traffic and parking perspective. "Non-athletic events" are currently unknown, likely infrequent, and are anticipated to be significantly less impactful on traffic and parking than hockey and basketball games as they would have a much larger student to non-student ratio.
14 – Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	

Comment	Response
The proposed Arena will be built on North America's largest migratory bird flyway. The building will be the tallest in the area and yet there is no recognition of the potential deadly impact on migratory birds. US Bank Stadium, although further from the Mississippi River, is one of the region's most deadly building for birds due to its height and lighting. The national Audubon Society and Minneapolis Audubon sued the Stadium Authority over the US Bank migratory bird issue. There is no recognition of this important environmental issue in the EAW. Mississippi River zoning has been in effect since the 1970s and St Thomas commented on the recent Mississippi River Corridor Critical Area ordinance should be aware of its requirements.	The project site is located within the Mississippi River Twin Cities Important Bird Area (IBA) . The Mississippi River IBA includes the Mississippi River and its adjacent floodplain forest and upland areas extending for 38 river miles through 4 counties from Minneapolis to Hastings. According to the MN DNR, IBAs are a voluntary and non-regulatory part of an international conservation effort to bird populations. The information above was added as a correction to the EAW after receiving recommendations from the MN DNR. The project will be required to comply with City of Saint Paul and MRCCA lighting ordinances. Fixture modeling and photometric analysis will be completed for all site and building lighting to analyze light levels for the project.
16 – Visual	
Another major limitation of this EAW is that it includes no mention of lighting. Most basketball and hockey games occur between November 1 and March 1. The sun sets at 6:00 p.m. on November 1 and 6:01 p.m. on March 1. With dramatic increases in auto and pedestrian traffic additional lighting may be necessary. What additional lighting will be at the arena and will this lighting be projected downwards rather than randomly upward impacting both birds and the neighborhood? Thoughtful design and lighting could save the lives of thousands of birds over the life of this project.	The project will comply with MRCCA and City lighting ordinances. Fixture modeling and photometric analysis will be completed for all site and building lighting to analyze light levels for the project. Additionally, the University standard for site lighting is to use LED cut-off light fixtures with a maximum nominal color temperature of 4000K.
18 – Greenhouse Gas (GHG) Emissions/Carbon Footprint	
The EAW estimates only 20% of the game attendees will be students. With the impact of carbon on climate change such a major part of EAW review, should there be an assessment of the environmental cost of fans traveling from the suburbs to St Thomas for a game? Would there not be much less climate impact by building this arena in a suburban location? Will the new arena end its ranking as a Green College in the Princeton Review?	Thank you for your comment. The Greenhouse Gas Emissions evaluation focuses on operational emissions for the proposed facility which was discussed in the EAW.

Comment	Response
20 – Transportation	
The EAW made a traffic count on March 30, 2023. That study is irrelevant without including the City's traffic study for **Highland Bridge** which estimates up to 4,893 new trips daily on Cretin and Cleveland Avenues. The City also just approved the **Summit Ave. Regional Bikeway** which will substantially impact both auto traffic and parking. The Potential Cumulative Effects (page 39) of these APPROVED projects should be included in this report. There is no indication that these projects were included despite the Cumulative Impacts requirement. I asked two staff people in the "Transportation area" of the July 12 Arena Workshop and neither could tell me if the traffic study included the City's Highland Bridge estimates. If an honest traffic study were done it may indicate a need to enlarge Cretin Avenue, at public expense.	Future Highland Bridge Traffic was accounted for, as stated on Page 29 of the Transportation Study "Year 2025 no build volumes were developed by both applying a background growth rate of 0.25 percent to the existing pre- and post-event volumes and included trip generation estimates for the Highland Bridge development." The Summit Avenue bikeway improvements are discussed on Page 6 of the Transportation Study "Note that Summit Avenue is currently undergoing a public visioning process to determine the long-term layout of the corridor." While the Summit Bikeway is approved, project construction is not expected for 10 to 15 years, and is not expected to impact parking within the study area (parking impacts are mostly East of Lexington).
The report identifies real potential parking problems for the neighborhood. The EAW estimates the maximum parking space demand at 1,420 for basketball and 1,050 for hockey. It simply is not credible to expect an activity with 5,000-7,000 attendees will use so few parking spaces. In addition, the APPROVED Summit Avenue Regional Bikeway would likely remove many parking spots and reduce access by vehicles. Again, there is no indication that these potential impacts were included in the Study. The report identifies many things St Thomas could do to mitigate traffic and parking problems but there is no indication that they will be implemented. Because some of these "solutions" will have further negative impacts they should be considered now, before the Arena is built, instead of on a crisis basis.	Event modal split assumptions are documented in Table 10 on Page 24 of the Transportation Study, which were based on numerous discussions with UST and City staff. While the Summit Bikeway is approved, project construction is not expected for 10 to 15 years, and is not expected to impact parking within the study area (parking impacts are mostly East of Lexington).
Construction impacts are of course temporary but real. Thousands of trucks and workers will come into the neighborhood. How will these, traffic, parking, noise and lighting impacts be mitigated. Among other things, will there be a reasonable person at St Thomas assigned to help mitigate construction impacts?	The project and construction will be required to comply with all City Ordinances as it relates to noise, odors, dust, and construction access and truck routing. The University

Comment	Response
	will work with the arena design-build team to mitigate construction impacts to the extent possible.

Maggie Wirth-Johnson

Comment	Response
Given the very legitimate points and questions raised by this group, I urge that plans and timelines for this stadium be halted until these neighbors' points can be addressed thoroughly, and that a new report be issued which contains responses to these questions and concerns. Ignoring the 2040 St. Paul Comprehensive Plan and a goal of carbon neutrality is not the direction St. Thomas should be taking.	Thank you for your comment.
In the 33 years my husband and I have lived in St. Thomas neighborhood, we have seen almost non-stop building and expansion of the campus, resulting in more noise in the area and way more traffic on Cretin Avenue. The noise of the excess traffic is one thing we contend with. Speeding cars on Cretin Avenue has resulted in Dayton-Cretin and Selby-Cretin intersections being almost impossible to cross during heavy traffic times. I have to data to back up this claim, but my impression is that St. Thomas traffic (cars going to and from the school) is the major reason for the heavy use of this street. It's very clear that this is so when one observes the great lessening of Cretin traffic during school breaks. According to the St. Paul Transportation Committee of UPDC, these two spots are where cars are LEAST likely to stop for crossing pedestrians. The very idea that St. Thomas would like to have yet another building that will bring even MORE traffic to this area is abhorrent to me and to others.	Note the multipurpose arena is primarily an event venue and is anticipated to have little to no impact on traffic during day-to-day non-event conditions. Event traffic is expected to occur outside of the heavy commuter peak hours (i.e. 7-9 am, 4-6 pm), and is only expected to last for 20-30 minutes before and after the event.

Carol Walsh

Comment	Response
Please be mindful of pedestrians – students, neighbors of all ages, visitors – and clearly mark and maintain areas where you can cross safely. Keep the walking stick man on for adequate amount of time to cross streets. Ensure adequate lighting for pedestrians and cyclists.	Thank you for your comment.

Rosemary Maun

Comment	Response
My house was built in 1926 and it's been my Home now just short of 50 years. My three sons were all raised here. I planned on being here for the duration. What saddens me, besides all the unnecessary devastation to a lovely neighborhood - it just isn't right! I'm afraid the day will come when I will see someone killed while trying to cross Cretin Avenue on Goodrich. There has to be a better solution. I'm asking that you find one.	Thank you for your comment. Pedestrian safety is important to the City and the project proposer. The City and the proposer will continue to evaluate pedestrian safety improvements at the intersections adjacent to the stadium during the design phase.

APPENDIX D

Updated Site Plan

ST MARYS
APEL (SMC)

SCHOOL OF
DIVINITY (SOD)

SEMINARY
RESIDENCE (SEM)

OWENS SCIENCE
HALL (OWS)

FACILITIES & DESIGN
CENTER (FDC)

ANDERSON PARKING
FACILITY (APF)

PROPOSED BUILDING

128,417± SF

BRADY EDUCATION
CENTER (BEC)

GRACE
HALL (GRA)

SOUTH ATHLETIC
FIELDS (SAF)

CRETIN AVENUE

GRAND AVENUE

CRETIN AVENUE

LINCOLN
AVENUE

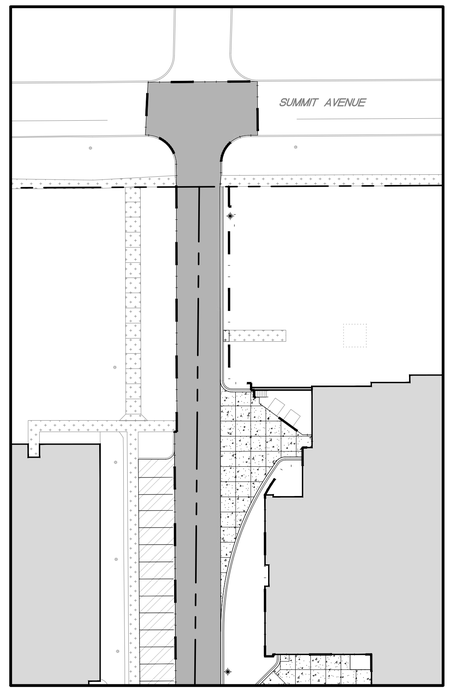
N

0 40 80
SCALE IN FEET

LEGEND:

EXISTING	PROPOSED	
		PROPERTY BOUNDARY
		LOT/TRACT LINE
		CURB
		EASEMENT
		BITUMINOUS
		MILL & OVERLAY
		CONCRETE PAVEMENT
		CONCRETE SIDEWALK
		GRAVEL
X	X	CHAIN LINK FENCE
		WOOD FENCE
		NORMAL WATER LEVEL
		DRAINAGE SWALE
BSBL BSBL		BUILDING SETBACK LINE
PSBL PSBL		PARKING SETBACK LINE
		CONSTRUCTION LIMITS

SUMMIT AVE IMPROVEMENTS:



RYAN