City of Duluth

Council Chambers, City Hall

Meeting Agenda

Planning Commission.

Council Chambers

Tuesday, April 11, 2023 | **5:00 PM** | **Council Chambers**

APPROVAL OF PLANNING COMMISSION MINUTES

PL 23-0314 Meeting Minutes March 14, 2023

Attachments: 03-14-2023 PC Minutes (not approved yet)

PL 23-0309 Annual Meeting Minutes

Attachments: 03-09-2023 PC annual Minutes (not approved yet).docx

PUBLIC COMMENT ON ITEMS NOT ON AGENDA

CONSENT AGENDA

PL 23-041 Minor Subdivision at 2232 Hoover Street by Bluemoon Properties LLC

Attachments: PL 23-041 Staff report and attachments

PL 23-043 Interim Use Permit for Vacation Dwelling Unit in a Form District at 4721 E Superior St by Spruce Living

Attachments: PL23-043 Staff Report and Attachments

PL 23-030 Interim Use Permit for Renewal of a Vacation Dwelling Unit at 1802 Minnesota Avenue by William W. Weller

Attachments: PL 23-030 Staff Report and Attachments Final

PL 23-031 Interim Use Permit for Renewal of a Vacation Dwelling Unit at 1421 E Superior Street by Endion Land Co

Attachments: PL 23-031 Staff Report and Attachments

PL 23-042 Interim Use Permit for Renewal of a Vacation Dwelling Unit at 2314 Hoover Street by Matt Anderson

Attachments: PL 23-042 Staff report and attachments

PL 23-045 Interim Use Permit for Renewal of a Vacation Dwelling Unit at 829 S Lake Avenue by Nikki Olson

Attachments: P 23-045 Staff report and attachments

PL 23-048 Interim Use Permit for Renewal of a Vacation Dwelling Unit at 1137 N 6th Avenue E

Attachments: PL 23-048 Staff report and attachments

PL 23-051 Vacation of A Drainage and Utility Easement in the Kayak Bay Plat Near Grand Avenue and Bessemer Street by River West Vacation Homes, LLC

Attachments: PL23-051 Staff Report - final with attachments

PL 23-052 Vacation of A Drainage and Utility Easement in the Kayak Bay Plat Near River West Drive by River West Vacation Homes, LLC

Attachments: PL23-052 Staff Report - final with attachments

PUBLIC HEARINGS

PL 23-039 Preliminary Plat at Becks Road and 108th Ave W by Connor Bambenek

Attachments: PL 23-039 Staff Report and Attachments

NEW BUSINESS

PL 23-053 Citizen Petition for Environmental Assessment Worksheet (EAW) for Kinseth Hotel Project on Sundby Road

Attachments: PL 23-053 Memo Findings Exhibits and Petition

TABLED ITEMS

PL 23-003 UDC Text Amendments to Off-Street Parking Requirements by City of Duluth

Attachments: PL 23-003 Staff Memo and Attachments Redacted

COMMUNICATIONS

Land Use Supervisor Report

Historic Preservation Commission Report

Joint Airport Zoning Board Report

Duluth Midway Joint Powers Zoning Board Report

City of Duluth
Planning Commission

March 14, 2023 – City Hall Council Chambers
Meeting Minutes

Call to Order

President Margie Nelson called to order the meeting of the city planning commission at 5:02 p.m. on Tuesday, March 14th, 2023 in the Duluth city hall council chambers.

Roll Call

Attendance:

Members Present: Jason Crawford, Gary Eckenberg, Margie Nelson, Danielle Rhodes, Michael Schraepfer, and Andrea Wedul (arrived after the consent agenda vote)
Members Absent: Jason Hollinday, and Samuel Lobby

Staff Present: Adam Fulton, Jean Coleman (Attorney's Office), Chris Lee, John Kelley, Kyle Deming, and Cindy Stafford

Approval of Planning Commission Minutes -

Planning Commission Meeting – February 14th, 2023

MOTION/Second: Rhodes/Schraepfer approved

VOTE: (5-0)

Public Comment on Items Not on Agenda

No speakers.

(Items PL 23-017 and PL 23-027 were removed from the consent agenda and placed under public hearings.)

Consent Agenda

PL 23-024 Minor Subdivision of Parcel on Sockeye Drive by Frank Messina
PL 23-028 UDC Map Amendment for Additional Building Types in Ramsey Village R-P District North of Wadena Street Between 52nd and 53rd Avenues W by Center City Housing
PL 23-029 Vacation of Portions of Alleys North of Wadena Street Between 52nd and 53rd Avenues W. by Center City Housing Corp.
PL 23-021 Master Sign Plan at 520 W Central Entrance by Jigsaw LLC

Commissioners: PL 23-028 and 029 – Commissioner Gary Eckenberg noted the comments they received from a neighbor Meg Rosvold who had concerns about a neighboring property. He asked if that property is also owned by Center City Housing Corp. Deputy Director Fulton noted there are some addresses in the area with issues. Those are issues associated with private ownership, or the property in question may be owned by the Duluth HRA. The issues

regarding surrounding properties, should be taken seriously but are not germane to the current application. Commissioner Danielle Rhodes asked about the project funding, and if it is low-income housing. Deputy Director Fulton noted the project will be funded in part by the Minnesota Housing Finance Agency, so there will be a level of affordability provided through this new housing construction project. Rhodes asked about the regulating plan. Per Deming, the plan provides for a variety of housing styles which includes 8 different building types. Rhodes asked how many units will be in the proposed project. Deming noted they are just talking about rezoning, so he doesn't have the number. Deputy Director Fulton noted it is consistent with the Ramsey Plan. The goal for Wadena West is 60 units of affordable housing. Services will be able to be provided on-site. It will provide for needed housing in the community.
Public: No speakers.
MOTION/Second: Crawford/Schraepfer approved as per staff recommendations

VOTE: (5-0)

Public Hearings

(Commissioner Jason Crawford recused himself from the following item. His co-worker is the applicant.)

PL 23-017 Interim Use Permit for a Vacation Dwelling Unit at 325 Lake Avenue S Unit #1210 by Tim and Beth McShane
Staff: Deputy Director Fulton noted there is no presentation on this item, but staff is available to answer any questions.
Applicant: N/A
Public: No speakers.
MOTION/Second: Schraepfer/Eckenberg approved as per staff recommendations

VOTE: (5-0, Crawford Abstained)

(Commissioner Mike Schraepfer recused himself from the following item. His co-worker is the applicant.)

PL 23-027 Interim Use Permit for a Vacation Dwelling Unit at 2810 W Skyline Parkway by Mike Kokotovich
Staff: Deputy Director Fulton noted there is no presentation on this item, but staff is available to answer any questions.
Applicant: N/A
Public: No speakers.
MOTION/Second: Eckenberg/Wedul approved as per staff recommendations

VOTE: (5-0, Schraepfer Abstained)

PL 23-004 Variance to Allow an Accessory Structure in the Front Yard at 30 S 42nd Avenue E by Jack Shapiro
Staff: Kyle Deming introduced the applicant's proposal for a variance to allow the placement of a 24' x 28' detached garage in the area between the front of the home and Quebec Avenue. The need for a variance is caused by site constraints unique to the site and not caused by the

applicant, including shallow subsurface soil conditions and the location of the sanitary sewer service. Staff recommends approval with the conditions listed in the staff report.
Commissioners: Andrea Wedul asked if the proposed structure was one-story tall. Deming affirmed.
Applicant: Present, but did not speak.
Public: No speakers.
MOTION/Second: Wedul/Crawford approved as per staff recommendations

VOTE: (6-0)

PL 23-026 Variance from Side Yard Setbacks for New Single-Family Dwelling Unit at 70xx E Superior Street by Charles Obije
Staff: John Kelley introduced the applicant's proposal for a corner side yard variance to reduce the setback from the required 25' setback to 15' to construct a new house and garage on a 60' x 300'lot in the RR-2, Rural Residential 2 zone district. Staff recommends approval with the condition listed in the staff report.
Commissioners: Eckenberg asked what the time frame is for the variance. Kelley noted discussion item 8 in the staff report, which lists the project must begin within one-year.
Applicant: N/A
Public: No speakers.
MOTION/Second: Rhodes/Schraepfer approved as per staff recommendations

VOTE: (6-0)

PL 23-035 UDC Map Amendment to Rezone Property at Duluth International Airport from MU-N to MU-B to AP (Airport) District
Staff: Kyle Deming introduced the City's proposal for a UDC Map Amendment/Rezoning to change the zoning of 660 acres from MU-N to AP (Airport) and to change 110 acres from MU-B to AP in order to reflect the actual use of the land and to implement the comprehensive plan. Staff recommends approval of the rezoning to the City Council via ordinance.
Commissioners: Rhodes asked if this rezoning was in addition to the Airport Overlay. Deming noted this is the base zoning, and is separate from the Airport Overlay.
Applicant: N/A
Public: No speakers.
MOTION/Second: Wedul/Rhodes recommended approval as per staff recommendations

VOTE: (6-0)

PL 23-037 Minor Subdivision of Jigsaw Division Lot 2 into 2 Lots at the Southwest Corner of Anderson Road and Central Entrance by the Jigsaw, LLC
Staff: Kyle Deming introduced the applicant's proposal for a subdivision of a part of Lot 2, Block 1, into two parcels for a proposed development. The applicant is seeking to further split Lot 2 to create tracts of land for a 660 sq. ft. coffee kiosk and a building to contain two other tenants, a 2,500 sq. ft. restaurant and a 3,500 sq. ft. personal services use. All parcels are sized to allow space for buildings to be construction within applicable front, rear, and side yard setbacks. Staff recommends approval with the conditions listed in the staff report.
Commissioners: Wedul asked about the driveway, is there a reason to split it off? Deming indicated there will be private access easements to allow all of the parcels to cross one another.

Eckenberg asked if the proposed coffee kiosk is related to the restaurant. Deming noted the kiosk is a stand-alone business and has no relation to the restaurant other than being close in proximity.
Applicant: Dan Regan of Launch Properties (representing Jigsaw, LLC) addressed the commission and welcomed questions. Commissioner Rhodes inquired about snow removal. The applicant stated Launch Properties will be in charge of snow removal.
Public: No speakers.
MOTION/Second: Crawford/Wedul approved as per staff recommendations

VOTE: (6-0)

PL 23-038 Special Use Permit for a Restaurant at 520 W Central Entrance by Jigsaw LLC
Staff: Kyle Deming introduced the applicant's proposal for a special use permit to allow two restaurants in the Jigsaw Development at the southwest corner of Central Entrance and Anderson Road. The project will consist of 2,500 sq. ft. restaurant and a 660 sq. ft drive-thru coffee kiosk and related parking and landscaping. The proposed coffee kiosk includes a one-lane drive-thru with more than five vehicle stacking space, as is required. No screening is required for vehicles using the drive-thru due to its location away from residential properties. Staff recommends approval with the conditions listed in the staff report; including, the applicant provide additional trees along the Central Entrance frontage to comply with the UDC.
Commissioners: Eckenberg asked about the traffic flow. Do you have to go through two parking lots to get to the drive-thru? Deming affirmed. Eckenberg doesn't feel it is the safest route. President Nelson asked if there are two businesses, shouldn't there be two special use permits? Deputy Director Fulton noted they have gone both ways in the past, and decided to combine these into one permit. Wedul asked about the MN DOT traffic study. Has this project been reviewed in conjunction with the traffic study? Deming stated the plans include sidewalk connections to Central Entrance from both driveways in order to connect to future sidewalks installed with the reconstruction of Central Entrance. Additionally, the applicant updated their traffic study and concluded there will be no additional traffic impact with the redesigned project compared to the original 2018 traffic study findings. Eckenberg asked about the names of the businesses. Deming responded that he did not know the names and that the special use permit is to allow a use and not a particular business.
Applicant: Present, but did not speak.
Public: No speakers.
MOTION/Second: Eckenberg/Schraepfer approved as per staff recommendations

VOTE: (6-0)

PL 23-032 UDC Map Amendment to Rezone from MU-B to F-5 South of W 1st Street between N 19th Avenue W and N 20th Avenue W
Staff: Deputy Director Adam Fulton introduced the city's proposal for a UDC Map Amendment (rezoning) to change the zoning of one-half block from Mixed Use-Business (MU-B) to Form District 5 (F-5). This site was formerly home to the Kemps Creamery, which was built in 1914. For many decades, this stretch of W 1st Street through Lincoln Park has been primarily industrial in nature. The property owners for the majority of the area have expressed interest in finding a developer to redevelop the site with uses that complement the mix of housing and commercial uses. The maximum height for development is 55'. This will help reinvest in a blighted neighborhood. Staff recommends approval with the conditions listed in the staff report.

Commissioners: Eckenberg asked if there are form districts all around this property. Deputy Director Fulton noted just one side is a form district, and much of the surrounding area is zoned MU-B. If the city did a total rezoning, legal non-conformities would exist. Rhodes asked about the height restriction. Fulton affirmed the height limit is 55'.
Applicant: N/A
Public: No speakers.
MOTION/Second: Crawford/Wedul recommended approval as per staff recommendations

VOTE: (6-0)

Tabled Item

PL 23-003 UDC Text Amendments to Off-Street Parking Requirements by the City of Duluth
Deputy Director Fulton noted this item will remain tabled.

Communications

Land Use Supervisor (LUS) Report – Deputy Director Fulton gave an overview. Mayor Larson's State of the City Address will be on March 22, 2023 at 6 p.m. There is a brownfield public meeting being held tonight. He noted the handout given to the commissioners by Becca Mulenberg in regards to the Kinseth Hotel Group planning review for a hotel on Sundby Road. Staff will come back to the planning commission with an evaluation on if an EAW is necessary.

Heritage Preservation Commission – Gary Eckenberg gave an update. The HPC met yesterday and approved a certificate of appropriateness for temporary roof repairs at the Carnegie Building. They were informed of exterior improvements to the Board of Trade Building. The building is not a local landmark, but is located within a historic district.

Joint Airport Zoning Board – No update.

Duluth Midway Joint Powers Zoning Board – Deputy Director Fulton noted there will be an upcoming meeting in late March or early April.

Adjournment

Meeting adjourned at 6:00 p.m.

Respectfully,

_____

Ryan Pervenanze – Manager
Planning & Development

City of Duluth
Planning Commission

March 9, 2023 – Annual Meeting – Pickwick Restaurant
Meeting Minutes

Call to Order

President Margie Nelson called to order the meeting of the city planning commission at 6:15 p.m. on Tuesday, February 14th, 2023.

Roll Call/Introductions

Attendance:

Members Present: Jason Crawford, Gary Eckenberg, Jason Hollinday, Samuel Lobby, Margie Nelson, Danielle Rhodes, Michael Schraepfer, and Andrea Wedul
Member Absent: Jason Crawford
Staff Present: Tom Church, Kyle Deming, Jenn Moses, James Gittemeier, John Kelley, Chris Lee, Ryan Pervenanze

Presentations

City of Duluth 2022 Climate Progress - Mindy Granley, Sustainability Officer, gave a presentation and talked about projects, plans and partnerships. (See attachment.)

Sustainability in Transportation - James Gittemeier, transportation planner, presented on sustainability in transportation. (See attachment.)

Other Business

Election of Officers:

The commission unanimously agreed to waive the paper voting process.

President
MOTION/Second: Eckenberg/Rhodes nominated Margie Nelson for President for a second term

VOTE: (7-0)

Vice-President
MOTION/Second: Wedul/Lobby nominated Jason Hollinday for Vice-President

VOTE: (7-0)

Zenith Awards:
Chris Lee gave a presentation regarding Zenith Awards, including purpose of awards, past award, and nominee for 2023, Leijona, 521 W 2nd Street. Reuse of a historic building for 33 mixed-income apartments. (See attachment.) Commissioner Andrea Wedul suggested Lake

Superior Brewing. Questions from Commissioner Gary Eckenberg about parking and traffic control. Staff explained that it is a matter that has been under study.

MOTION/Second: Schraepfer/Nelson nominated Leijona

VOTE: (6-1, Eckenberg opposed)

MOTION/Second: Rhodes/Wedul nominated Lake Superior Brewing

VOTE: (7-0)

MOTION/Second: Wedul/ Schraepfer nominated Blacklist Brewing

VOTE: (7-0)

Adjournment

Meeting adjourned at 7:59 p.m.

Respectfully,

_____

Ryan Pervenanze – Manager
Planning & Development

City of Duluth
2022 Climate Progress

Projects, Plans, and Partnerships

Duluth's Climate Action Work Plan:
www.duluthmn.gov/sustain

Sustainability Office

- **Sustainability Officer** – Mindy Granley
- **City Sustainability Advisory Team**: 18 members across 11 Departments

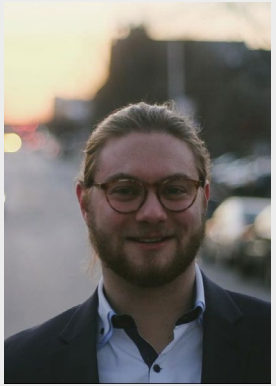
USDN urban sustainability directors network

Minnesota GreenStep Cities

ICLEI Local Governments for Sustainability USA

Great Lakes One Water Partnership

Minnesota Climate Adaptation Partnership Individual Adaptation Award 2023



Energy & Sustainability Assistant

AmeriCorps

August 2022 – August 2023

Community Resiliency & Energy Specialist

LEAD FOR AMERICA

August 2022 – July 2023

Sustainability Communications Interr

UMD

January – June 2023

City Sustainability Advisory Team (C-SAT)

- Cross-departmental
- Determines high level sustainability goals
- Contributes to and prioritizes climate action
- Shares technical knowledge and skills

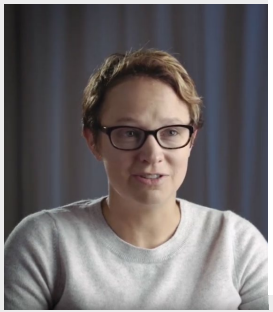
2022 Membership

Department	Members
Administrative Services	Ben Van Tassel
City Attorney's Office	Steve Hanke
Communications	Phil Jents
Community Relations	Alicia Kozlowski
Finance	Jen Carlson
Fire Department/Life Safety/Emergency Manager	Shawn Krizaj, Jonathan Otis
Parks, Property, Libraries	Jim Filby Williams, Erik Birkeland, Kate Kubiak
Planning and Economic Development	Chris Fleege, Jenn Reed Moses, James Gittemeier
Public Works and Utilities	Jim Benning
Workforce Development	Elena Foshay, Betsy Hill
Sustainability	Mindy Granley, Lydia Peterson, Parker Angelos

Energy Plan Commission

- Formed to advise the administration and city council on reducing the city's greenhouse gas emissions:
  - Develop and recommend policies to meet greenhouse gas reduction goals
  - Review and evaluate the city's Energy Plan progress
  - Promote the use of clean energy
  - Promote community best practices and strategies

Chair: Dr. Alison Hoxie



Robert Reichert

Scott Wishart

Tari Rayala

Brian Hinderliter

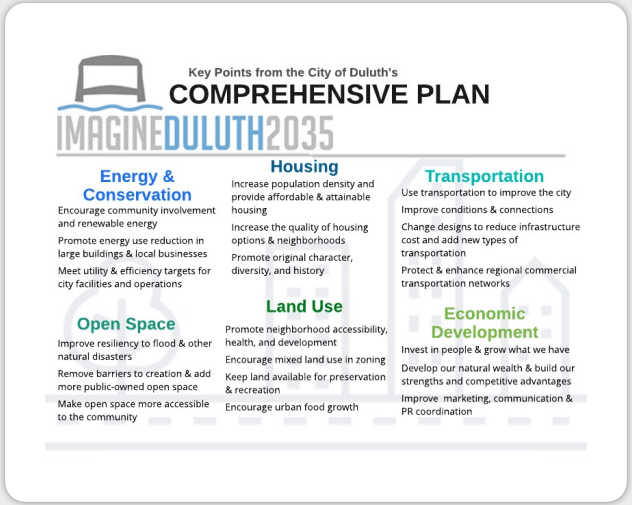
Cassie Thiessen

Gary Olson

Plans

Climate Action Work Plan: Background

- ImagineDuluth 2035
- St. Louis County Multi-Hazard Mitigation Plan
- Community-led effort: Citizens' Climate Action Plan (2020)
- Mayor's climate goal: Race to Zero
- Council's climate emergency declaration (2021)



GREAT PLAINS INSTITUTE

City of Duluth

Climate Action Work Plan

2022 - 2027

2 PHASES OF CAWP

Phase I: Build a Foundation

Drive down emissions from City operations, strengthen community resilience, eliminate barriers, enable action, seek financial and workforce pathways, implement shovel-ready and -worthy projects

Phase II: Accelerate Climate Action

Community Decarbonization

Climate mitigation and adaptation strategies highlighted in the City's climate emergency declaration:

Strategy 1: Reduce energy consumption in buildings

Strategy 2: Increase efficiency and resilience in city utilities

Strategy 3: Support low carbon transportation options

Strategy 4: Support renewable energy

Strategy 5: Improve stormwater management

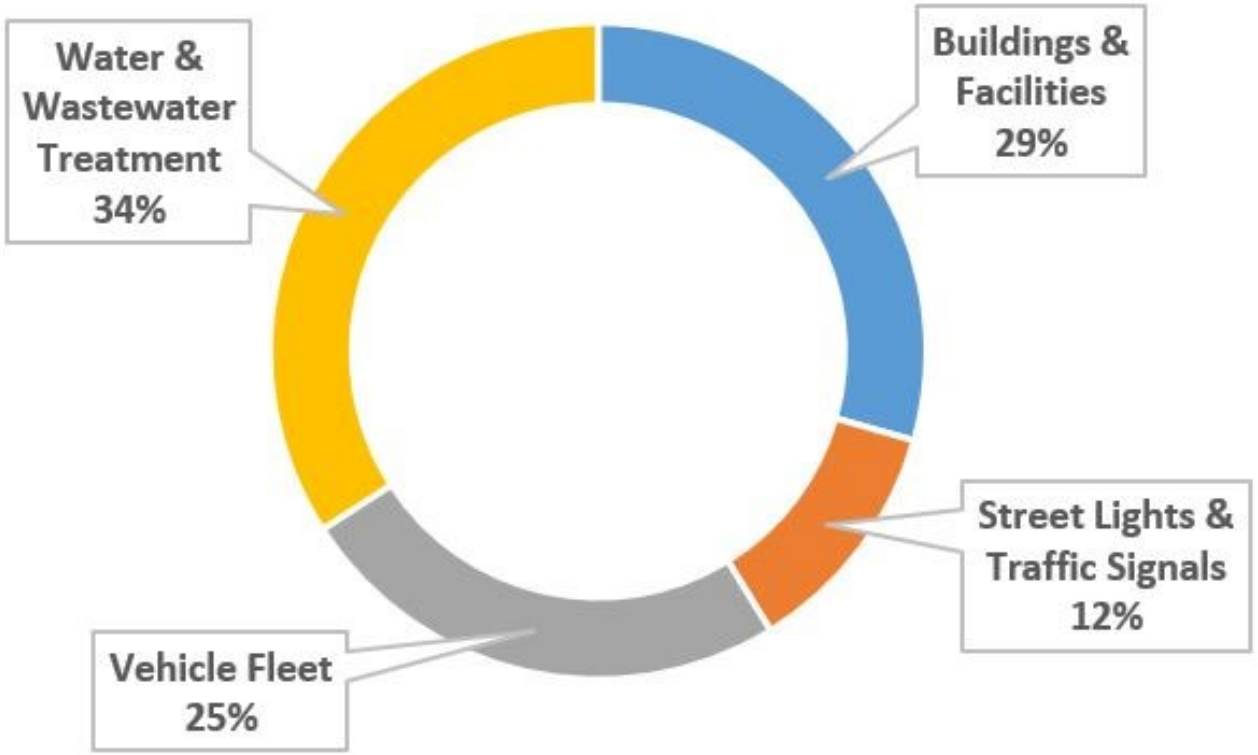
Strategy 6: Reduce solid waste

Strategy 7: Reduce disparities in public health

Strategy 8: Seek sustainability opportunities that support economic growth

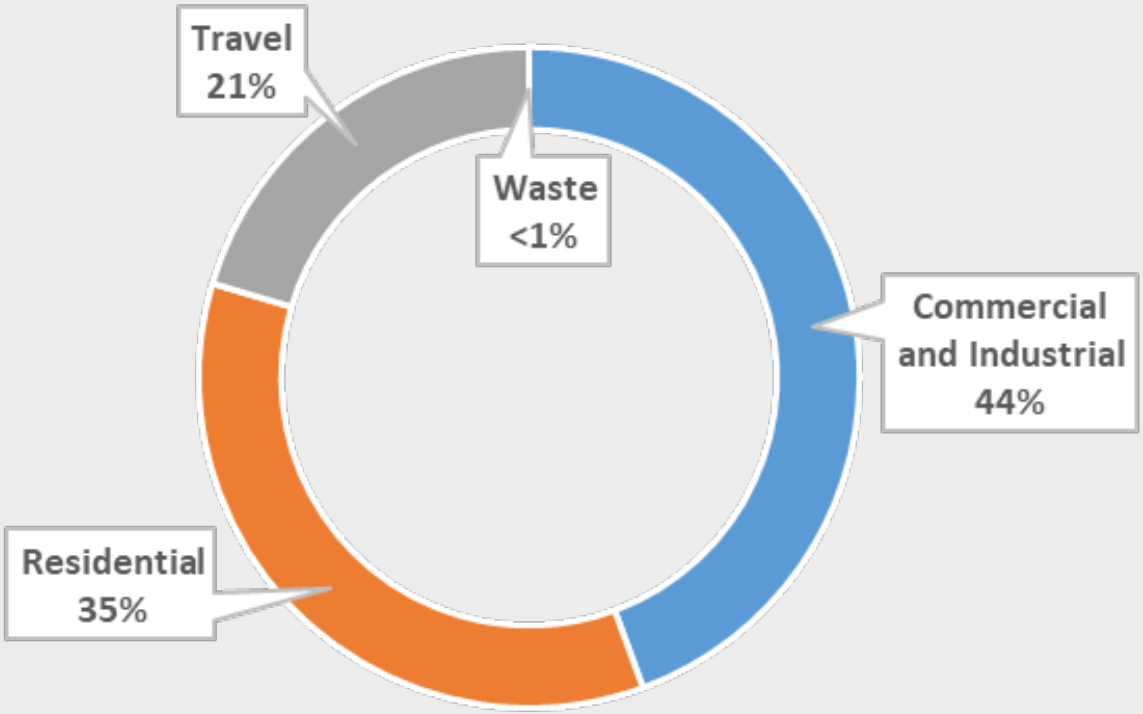
Strategy 9: Identify carbon sequestration opportunities

Municipal GHG Emissions by Sector - 2022



https://duluthmn.gov/sustain/city-projects-commitments/

Community-wide Emissions - Duluth 2018



1,335,757 Tons of Co2e

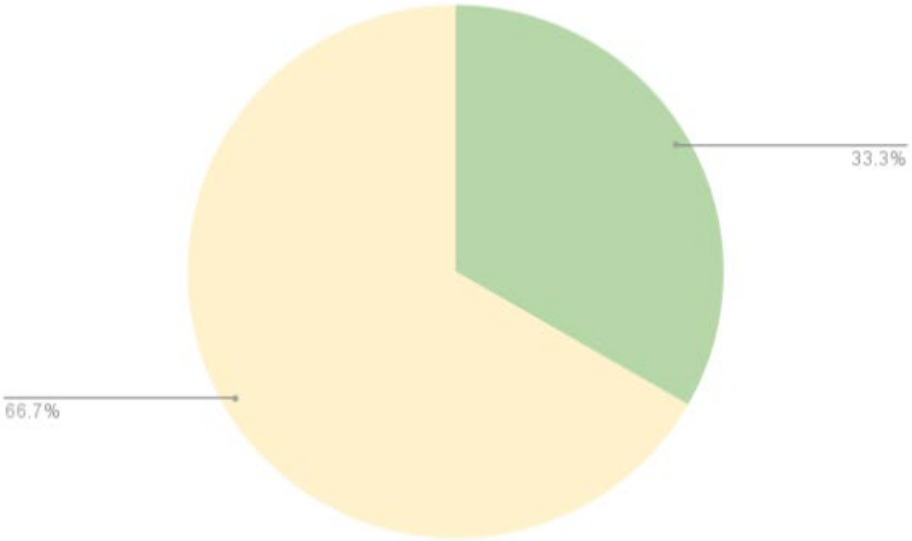
https://www.regionalindicatorsmn.com/city-summary

Projects and Partners

Objective 1:
Drive down emissions from City operations

Strategies

	Actions	Action Leads	Resources Needed
S1	**1.1 Achieve energy reduction targets for city buildings and facilities to meet 10% emissions reduction goal, per mayoral term (80% by 2050).** ❑ Complete and implement the City of Duluth Energy Plan and share progress with the Energy Plan Commission ❑ Institutionalize regular benchmarking for all city buildings and facilities ❑ Continue energy audits and assessments and prioritize improving the performance of buildings with the greatest savings opportunities ❑ Track and publicly share energy use and greenhouse gas emissions for City Operations, annually ❑ Communicate successes and benefits of climate action to further community support for more action	Property and Facilities Management, Sustainability, and Communications	Energy Analyst
S2	**1.2 Continue to improve the fuel emissions factor and efficiency for Duluth Energy System** ❑ Identify clean energy resources to replace fossil fuel inputs; eliminate coal in the next 5 years ❑ Encourage a transition to more efficient hot-water loop for new and existing customers of Duluth Energy Systems **1.3 Improve the efficiency of the water plant and distribution system** ❑ Set targets and identify opportunities to improve the energy use intensity at the water plant and distribution system	Duluth Energy Systems, Public Works and Utilities	Infrastructure for transition away from coal
	1.4 Reduce emissions from city fleet vehicles and employee commute ❑ Complete an assessment of city fleet to identify	Fleet, Property and Facilities Management,	Resources for initial fleet planning are in place



SOME PROGRESS

- 1.1: Achieve energy reduction targets for city buildings and facilities to meet 10% emissions reduction goal, per mayoral term (80% by 2050).
- 1.2: Continue to improve the fuel emissions factor and efficiency for Duluth Energy System
- 1.4: Reduce emissions from city fleet vehicles and employee commute
- 1.6: 1.6 Reduce solid waste from city operations and public events

SIGNIFICANT PROGRESS

- 1.3: Improve the efficiency of the water plant and distribution system
- 1.5: Build upon previous successes and increase installation and procurement of clean energy

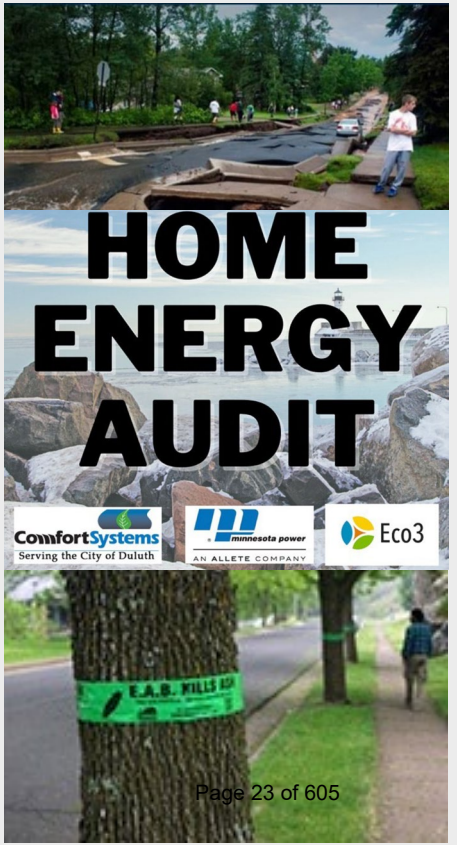
Energy Efficiency and Conservation

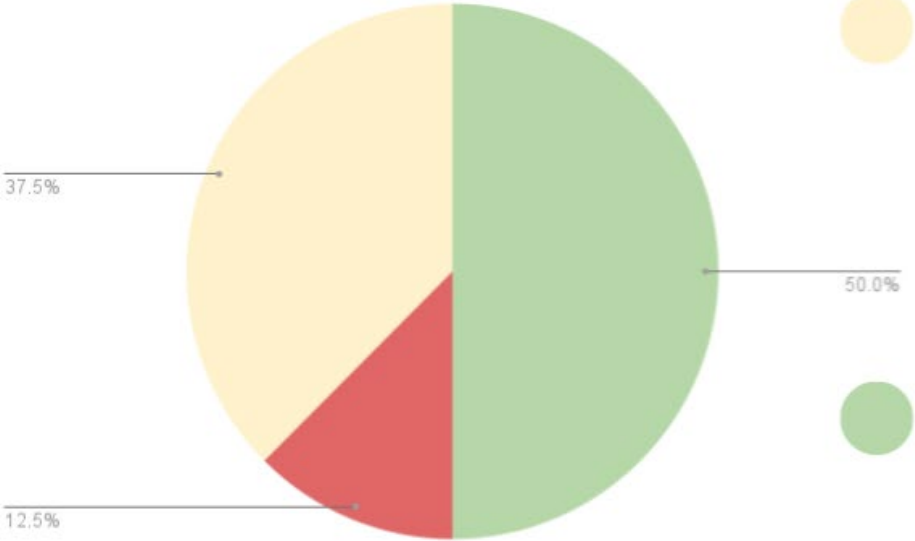
- **Buildings**
  - City Hall HVAC
- **Duluth Energy Systems**
  - 5-year coal elimination plan
  - Thermal grid updates
- **Water Utility**
  - Water main replacements
  - Advanced Metering
- **Fleet**
  - Vehicle Replacement Policy
  - Investments in EVs/Hybrids

Objective 2:
Strengthen community resilience

Strategies

Actions		Action Leads	Resources Needed
S2	**2.1 Improve the resiliency of the water plant and distribution system** Seek opportunities to improve resiliency of the water plant, including transformer upgrades, burying lines, back-up power, and clean energy procurement options. **2.2 Complete a citywide assessment of vulnerable built (sidewalks, roads, pipes, etc.) and natural (trees, soil, water, etc.) infrastructure** ❑ Manage Emerald Ash Borer, implement strategic planting plan ❑ Develop a plan to minimize risk to infrastructure, prioritizing highest risk and infrastructure located in vulnerable communities **2.3 Expand current CIP offerings from Comfort Systems for residential and commercial customers**	Public Works and Utilities, Stormwater, Property Parks and Libraries, Sustainability	Funding request is pending for water plant Funds required for citywide assessment Staff resources are available for CIP expansion
S5	**2.4 Develop a stormwater management plan that integrates resilience and identifies financing opportunities and includes these elements:** • Identification of priority parcels for preservation, vegetation quality mapping and repair, inventory natural resource and flood protection opportunities • Prioritization of improvements in high-risk neighborhoods with vulnerable populations • Reduced stormwater runoff flow and volume through green infrastructure and on-site stormwater management • Demonstration of green infrastructure on City property • Recommendations to incorporate green infrastructure into the unified development chapter • Continued collaboration with the Regional Stormwater	Public Works and Utilities, Engineering, Property Parks and Libraries, Parks Maintenance, Stormwater, Sustainability	Funds needed for stormwater planning and installation of stormwater practices





MINIMAL PROGRESS

- 2.8: Fully establish the Natural Resource Management Program

SOME PROGRESS

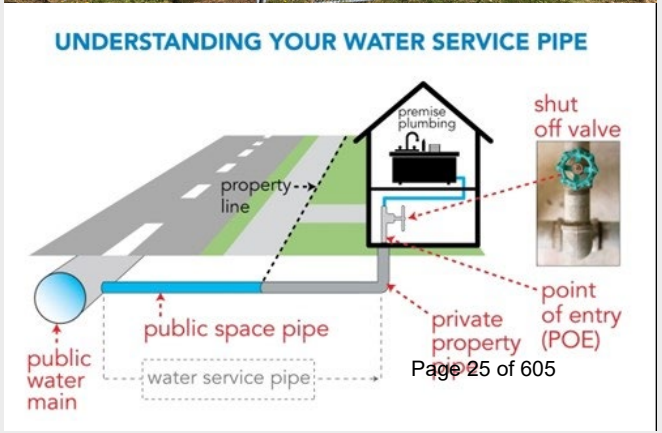
- 2.3: Expand current CIP offerings from Comfort Systems for residential and commercial customers
- 2.6: Reduce population vulnerabilities and ensure basic needs are met
- 2.7: Reduce environmental hazards and climate risks in vulnerable communities

SIGNIFICANT PROGRESS

- 2.1: Improve the resiliency of the water plant and distribution system
- 2.2: Complete a citywide assessment of vulnerable built and natural infrastructure
- 2.4: Develop a stormwater management plan that integrates resilience and identifies financing opportunities
- 2.5: Strengthen inclusive and culturally specific community relationships through neighborhood volunteer events

Infrastructure and Critical Services

- **Water Plant:** $7.8M FEMA Hazard Mitigation funding; Shoreline stabilization completed
- **Cost reduction for lead water line replacements**
- **Coastal erosion:** Advanced Assistance from FEMA, Park Point study
- **Green infrastructure**
  - Stormwater Resiliency Plan
  - Implementation projects: Keane Creek, Miller Creek, Lincoln Park
  - Code audit: remove barriers in the future, led by Minnesota Sea Grant
- **Legacy pollution** St. Louis River clean-up and access work



Waterfront Management & Resilience

- Lakewalk reconstruction
- Brighton Beach restoration & retreat
- Water Plant shoreland restoration
- Advanced Assistance: coastal erosion study

Community Resiliency

- **Affordable housing**
  - $19M from ARP for affordable housing
  - Duluth Housing Trust Fund
  - Energy Equity with ACEEE
  - Rebuild Duluth
- **Strengthening neighborhoods:** Love Your Block
- **Urban canopy**: Forestry grant for EAB removal
- **Emergency planning**
  - Ready North Network
  - DOE RACER Grant

Jean Duluth Solar Array

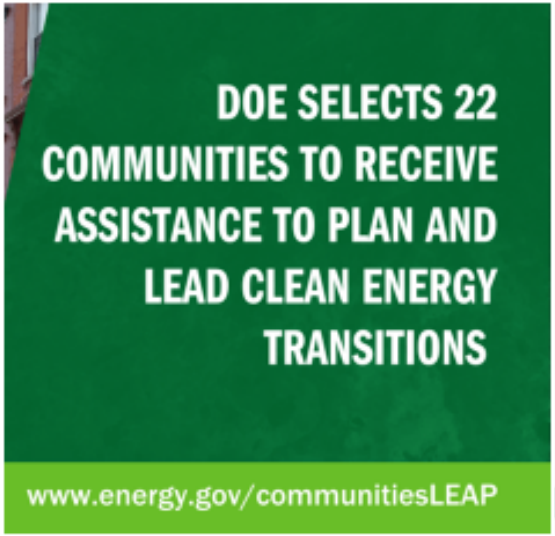
minnesota power

AN ALLETE COMPANY

- 1.6 MW
- City land lease payments to Energy Fund
- Solar power to 300 homes

Department of Energy Communities LEAP

Blueprint for a cold climate environmental justice neighborhood



Stakeholder groups to explore scoping of needs/challenges around energy transition in 6 areas:

- Transportation, Housing, Commercial/Industrial, Port, Utilities, Clean Energy Groups

Natural Gas Utility

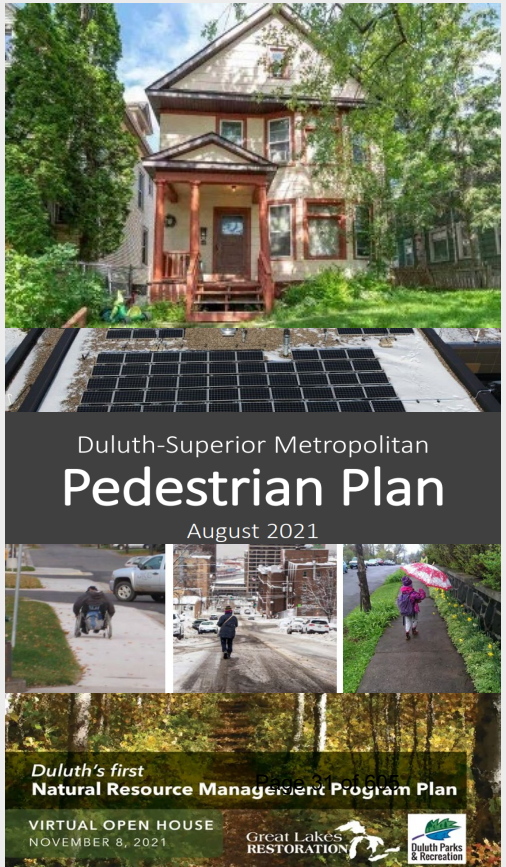
- **Conservation Improvement Program**
- Energy Transition?
  - TBD? Who takes it on?
  - Energy Plan Commission pushing for a plan of action
  - ECO Act provisions for electrification

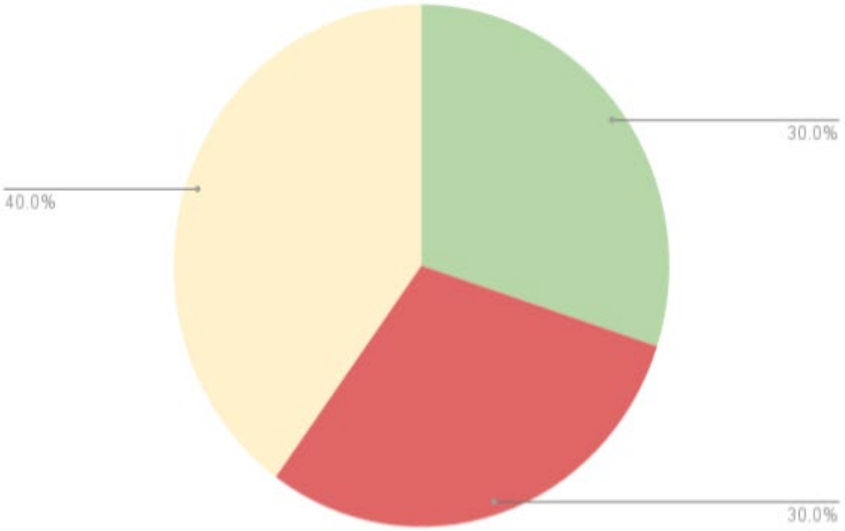
ComfortSystems

Serving the City of Duluth

Objective 3:
Eliminate barriers, enable action

	Actions	Action Leads	Resources Needed
Strategies S1	**3.1 Accelerate sustainable building design for new and substantially renovated buildings** ❑ Adopt sustainable building guidelines for all new or substantially renovated public buildings and private development that receives public funding or incentives. ❑ Require clean energy and energy efficiency improvements for housing projects that receive City funding assistance to reduce emissions and address high energy burden **3.2 Adopt a building benchmarking policy for public buildings with a voluntary phase-in for private-sector commercial buildings** **3.3 Support state policy and regulatory changes that enable the city to meet its climate and energy goals** **3.4 Incorporate climate mitigation, resilience, and justice considerations into city budget planning process** **3.5 Incorporate climate and energy actions into TIF district requirements**	Planning and Economic Development, Sustainability, Finance, Community Partners	Part-time Benchmarking or Energy Analyst position would be required Utility partners need to prepare tracking and reporting avenues
S2	**3.6 Integrate resilience in the capital improvement plan and internal policy for all city infrastructure projects**	Finance, Sustainability	
S3	**3.7 Reduce per-person, single-occupancy driving citywide** ❑ Review city code and policy to remove barriers and enable more opportunities for biking, walking, transit, and low-emissions vehicles ❑ Enhance and institutionalize complete streets policy to include user experience and green infrastructure, prioritize connectivity for vulnerable communities ❑ Gather early input on street projects to increase bike, walk, and wheelchair access along highly-used routes ❑ Collaborate with DTA to expand first-mile and last-mile	Planning and Economic Development, Community Partners	Code review requires additional resources





MINIMAL PROGRESS

- 3.2: Adopt a building benchmarking policy for public buildings with a voluntary phase-in for private-sector commercial buildings
- 3.7: Enable increased installation and procurement of clean energy for residents and businesses
- 3.9: Reduce residential and commercial solid waste through increased diversion

SOME PROGRESS

- 3.1: Accelerate sustainable building design for new and substantially renovated buildings
- 3.5: 5 Incorporate climate and energy actions into TIF district requirements
- 3.6: Integrate resilience in the capital improvement plan and internal policy for all city infrastructure projects
- 3.8: Enable increased installation and procurement of clean energy for residents and businesses

SIGNIFICANT PROGRESS

- 3.3: Support state policy and regulatory changes that enable the city to meet its climate and energy goals
- 3.4: Incorporate climate mitigation, resilience, and justice considerations into city budget planning process
- 3.10: Develop a City sustainable purchasing policy

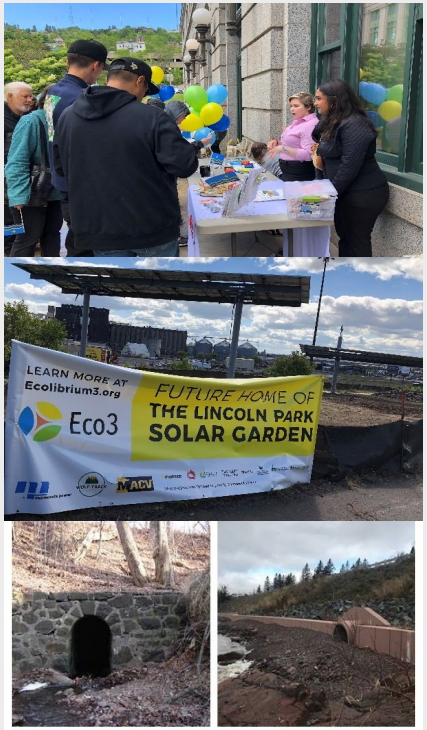
Policies

- **Building Owner Performance Requirements** adopted for City projects
- **Residential solar fee schedule** revised: fees reduced
- Parking revisions
- 2021 **LNPK bike lane**
- **Better Bus** program
- Engagement in State policy

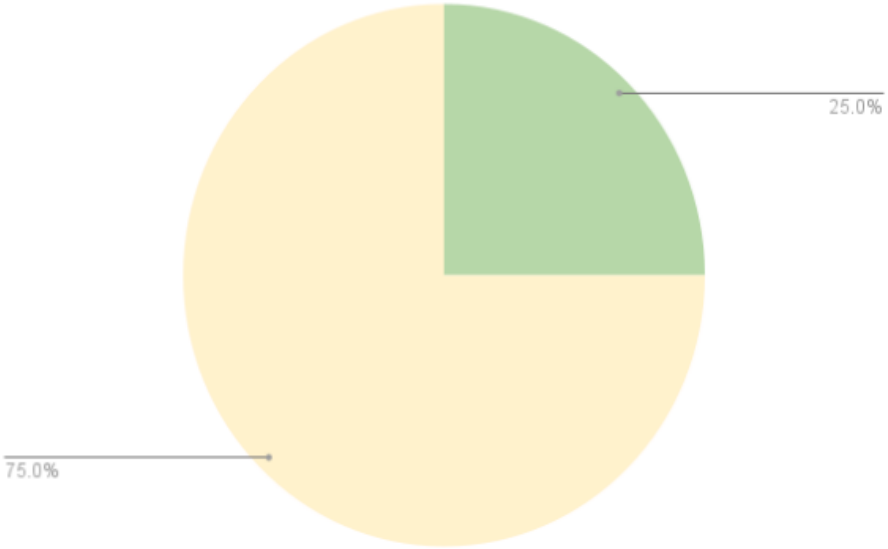
Objective 4: Financing and Workforce

Strategies

	Actions	Action Leads
S1	**4.1 Find a sustainable mechanism to support internal energy funds for continued implementation of the City of Duluth Energy Plan**	Property and Facilities Management, Finance, Sustainability
S2	**4.2 Explore funding/financing mechanisms to reduce emissions from Duluth Energy Systems**	Public Works and Utilities, Duluth Energy Systems, Sustainability
S3	**4.3 Increase funding for non-motorized transportation and improved connectivity (Duluth-Superior Metropolitan Bikeways Plan)**	Planning and Economic Development, Community Partners
S4	**4.4 Seek resources and partnerships to catalyze renewable energy development and energy efficiency, especially in vulnerable communities**	Sustainability, Property and Facilities Management, Community Partners, Human Rights, Community Relations
S5	**4.5 Identify funding and financing opportunities to implement stormwater strategies**	Engineering, Public Works and Utilities, Property Parks and Libraries, Sustainability
S7	**4.6 Seek funding to engage vulnerable communities in city resilience planning initiatives and implementation**	Sustainability, Public Works and Utilities
	4.7 Collaborate with local partners to identify green job opportunities ❑ Increase the number of sustainability-related jobs in the community through workforce and economic development partnerships ❑ Work with local partners to identify and invest in business opportunities that will support sustainability and create new jobs, including those that can recycle waste streams to create new resource materials ❑ Support development and expansion of green-focused product and service lines among local businesses	Workforce Development, Sustainability, Human Rights, Community Relations, Community Partners



CareerForce™
Minnesota's Career Resource



SOME PROGRESS

- 4.1: Find a sustainable mechanism to support internal energy funds for continued implementation of the City of Duluth Energy Plan
- 4.2: Explore funding/financing mechanisms to reduce emissions from Duluth Energy Systems
- 4.3: Increase funding for non-motorized transportation and improved connectivity (Duluth-Superior Metropolitan Bikeways Plan)
- 4.6: Seek funding to engage vulnerable communities in city resilience planning initiatives and implementation
- 4.7: Collaborate with local partners to identify green job opportunities
- 4.8: Plan and prepare to grow the city equitably and sustainably in consideration of future climate migration

SIGNIFICANT PROGRESS

- 4.4: Seek resources and partnerships to catalyze renewable energy development and energy efficiency, especially in vulnerable communities
- 4.5: Identify funding and financing opportunities to implement stormwater strategies

Internal: Sustainability Fund

- **$150k i**nvested for Strategic Facilities Planning
- **$250k** for City buildings energy efficiency
- **$200k** in gap funding for hybrid/EV fleet replacement incentives established
- **$300k** for green infrastructure (biofiltration/native plantings) in Lincoln Park (City Park)
- **$100k match** for Street Sweeping improvement
- **$37,500 match** for EAB forestry work
- **$27,450 match** for hybrid ladder truck
- **$15,000** Lead for America Fellow - Community Resiliency
- **$5,000** for Congressionally Directed Spending request preparation

External Funding

- **$34M total** for sustainability-related projects
- **Partners include:** FEMA, USDOT, DOE, MN DNR, GLISA, MN GreenCorps, AmeriCorps, MN Lake Superior Coastal Program, MPCA, Healthy Babies Bright Futures, Cities of Service, USDN, ACEEE

What's Next?

2023 and Beyond

Department of Energy RACER grant

Form Follows Function (F3)

Community energy resiliency planning

- **$483,497** for City staff salaries + fringe, travel, and indirect costs to plan solar + storage use and develop a toolkit for Dept. of Energy
- **$494,316** of contractor work, including solar siting and project partners

Timeline: 3/1/23 thru 2/28/25

Outcome: community resilience plan for solar + storage opportunities

- Technical feasibility
- Economic pathways
- Community desires
- Toolkit for other cold climate, medium-size cities

Facilities Strategic Planning

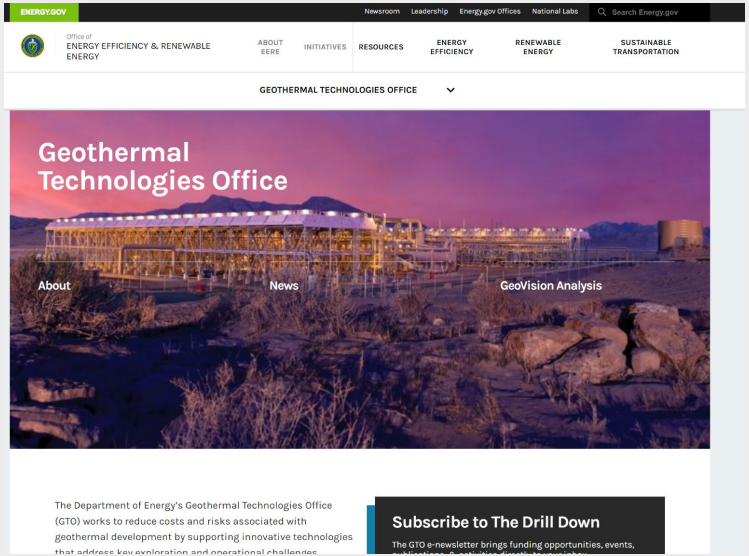
Energy Efficiency Conservation Block Grant

EECBG Formula Funds ($144k): plan to apply for voucher, strategic energy planning process/function

Submitted: Community Geothermal Heating and Cooling Design and Deployment

DE-FOA-0002632 - encouraged to proceed!

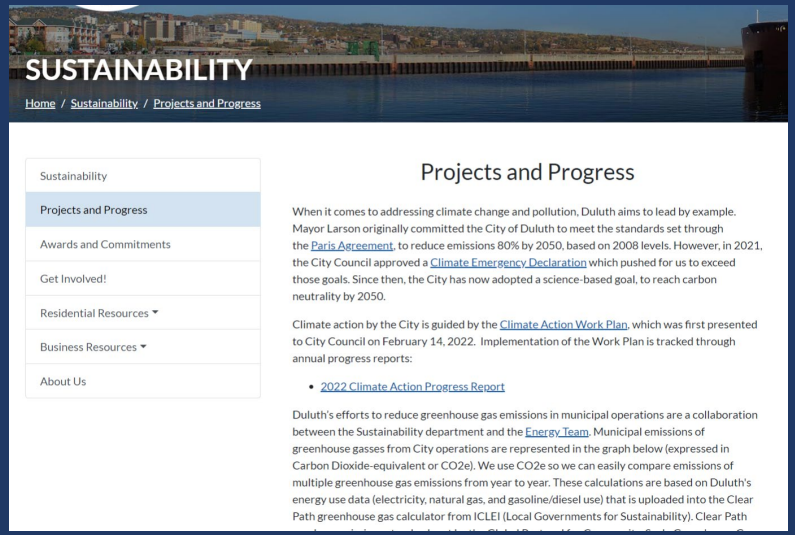
- Phase I: Feasibility study partners
  - **City of Duluth** (M. Granley, J. Benning, E. Foshay)
  - **Ever-Green Energy** (feasibility and design)
  - **Ecolibrium3/Main Street Lincoln Park** (neighborhood engagement)
- Phase II: Construction project application
  - Opportunity to align with West Superior Street 2026 construction



Eco3 THE CITY OF DULUTH MINNESOTA EVER-GREEN ENERGY™

Thank You!

For more: The 2022 Climate Action Work Plan Progress Report may be found on duluthmn.gov/sustain under “Projects and Progress”



Sustainable Transportation

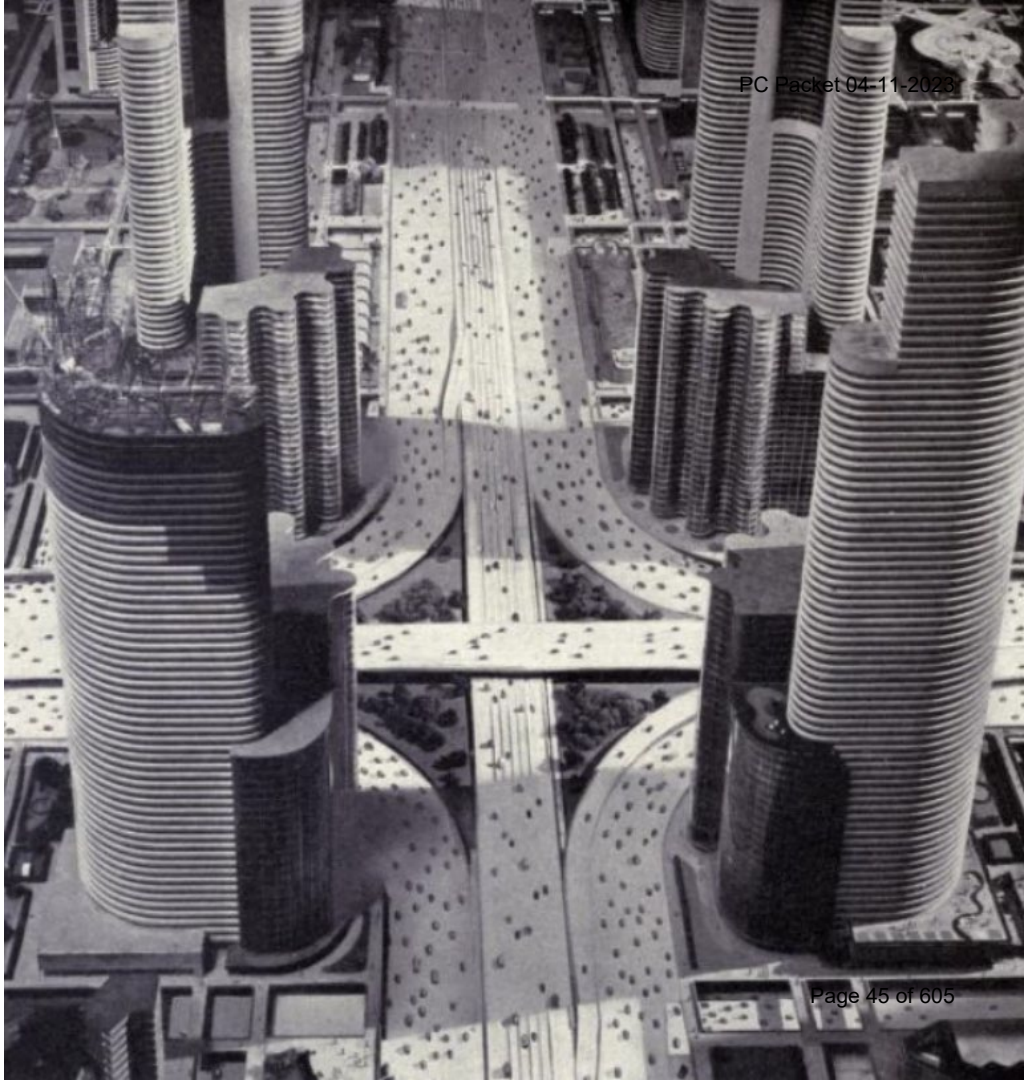
Duluth Planning Commission

March 9, 2023

- Cities are shaped by their transportation systems.

1939 - Futurama

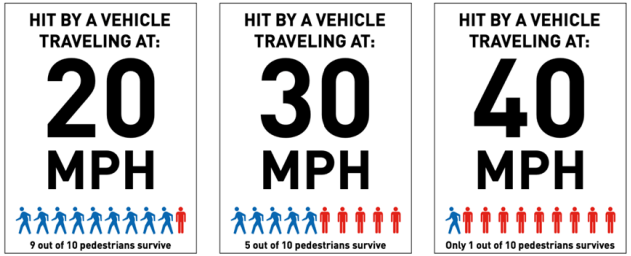
- Exhibit at the New York World's Fair
- Designed by Norman Bel Geddes
- Sponsored by General Motors
- Looking 20 years into the future



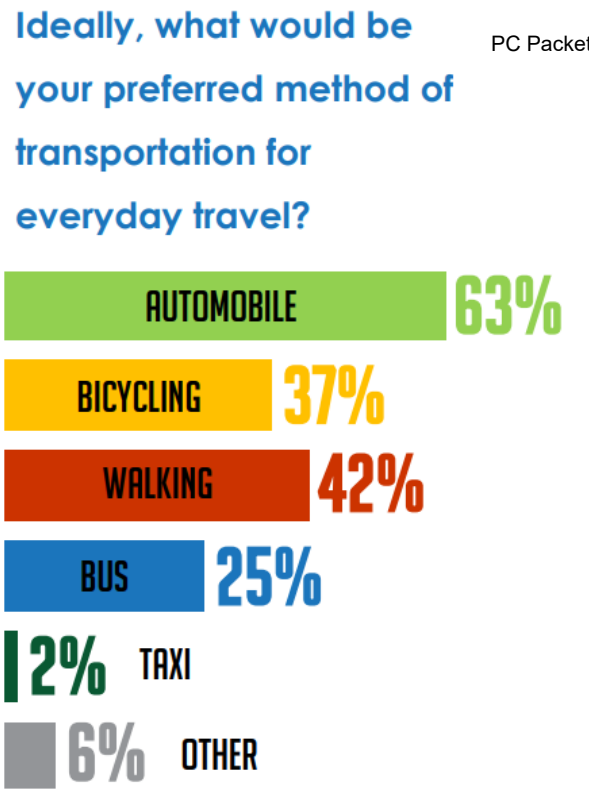

CANAL PARK
DOWNTOWN
- WATERFRONT
North Shore
Scenic Railroad
Seasonal historic train excursions
Lake Superior
Railroad Museum
Depot-based displays & excursions
Duluth Public Library
600-780 W
Michigan St Garage
Playfront Park

Big Picture Trends

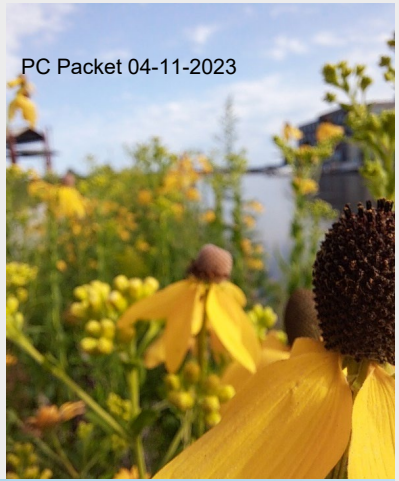
- Expectations of the role and function of streets has changed
- Changes in how we fund roads/streets
- City goals and plans
- New mixed-use developments in Duluth
- E-commerce and telecommuting



Multimodal Transportation System



Source: Imagine Duluth 2035 Survey. Participants could select up to two options.



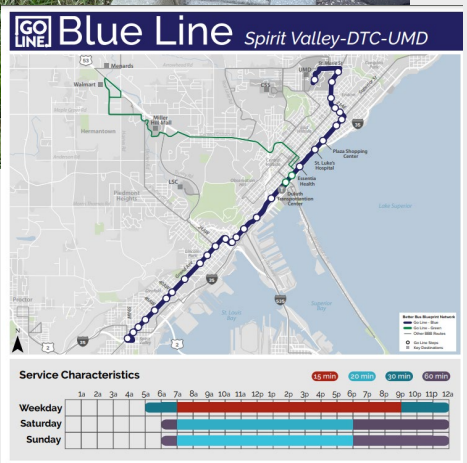


Photo courtesy of: https://e-bikeduluth.com/full_service_rentals

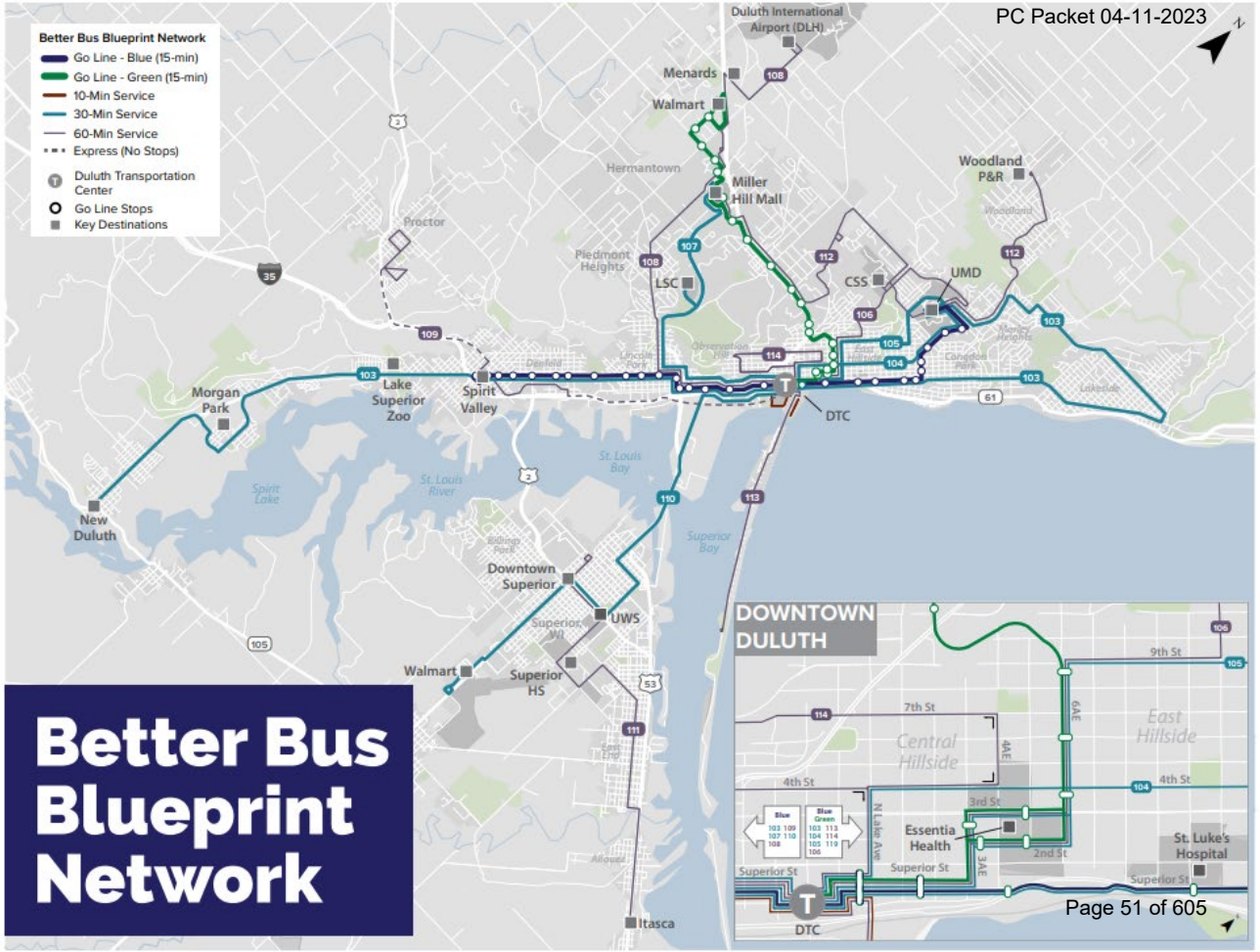
Plans are in place…

Multimodal transportation

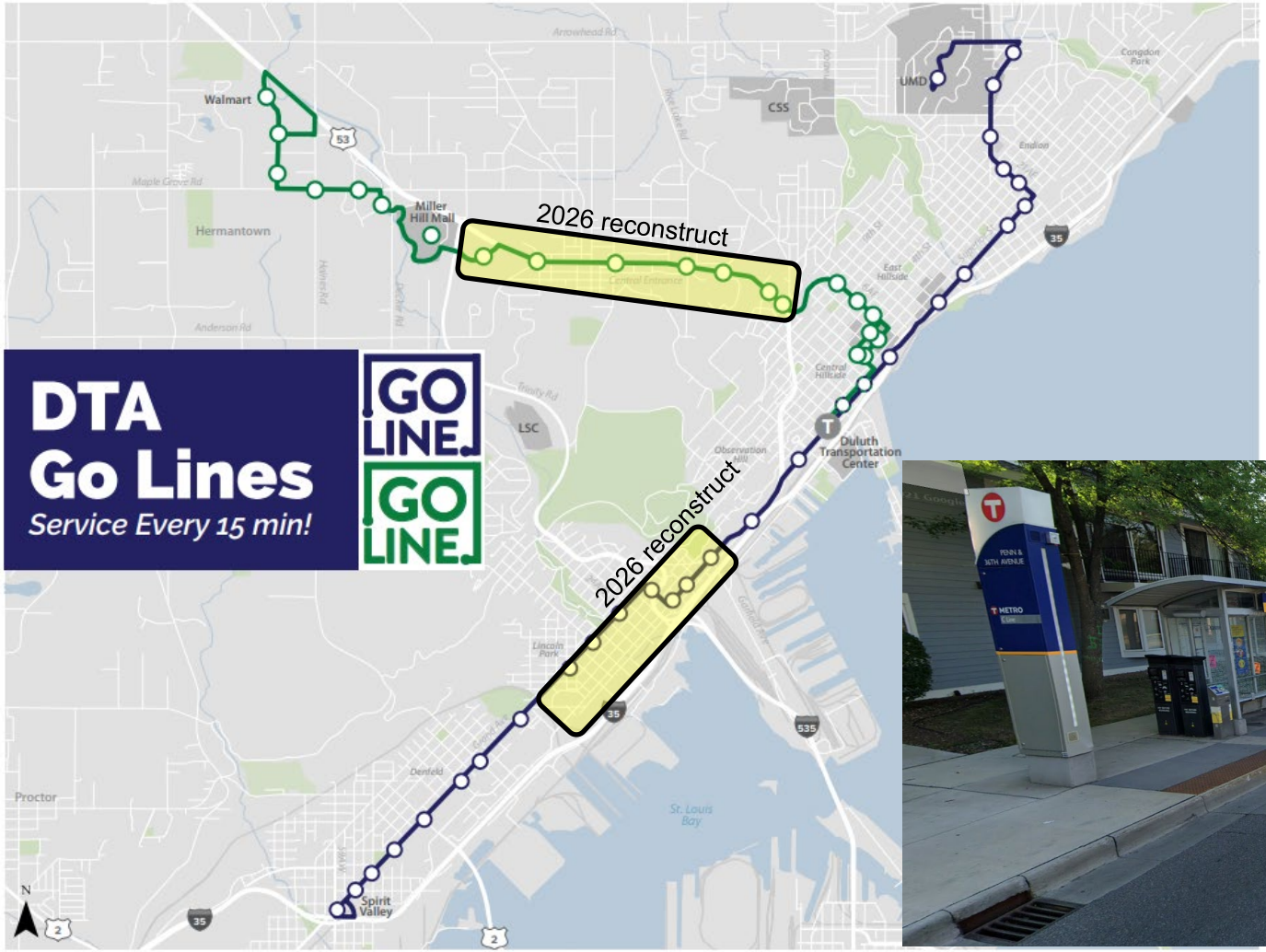
- Transit
- Bikeway
- Pedestrian

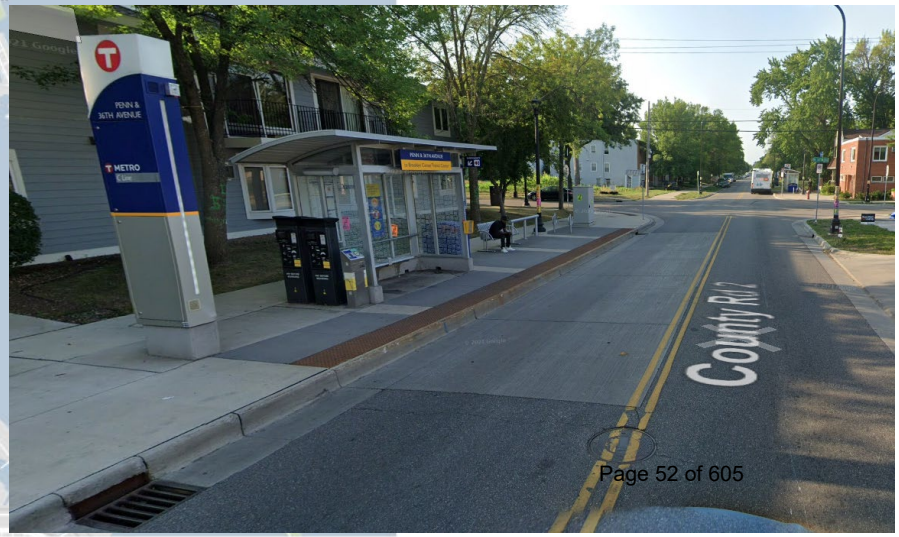
Duluth Transit Authority (DTA)

Transit Network Redesign



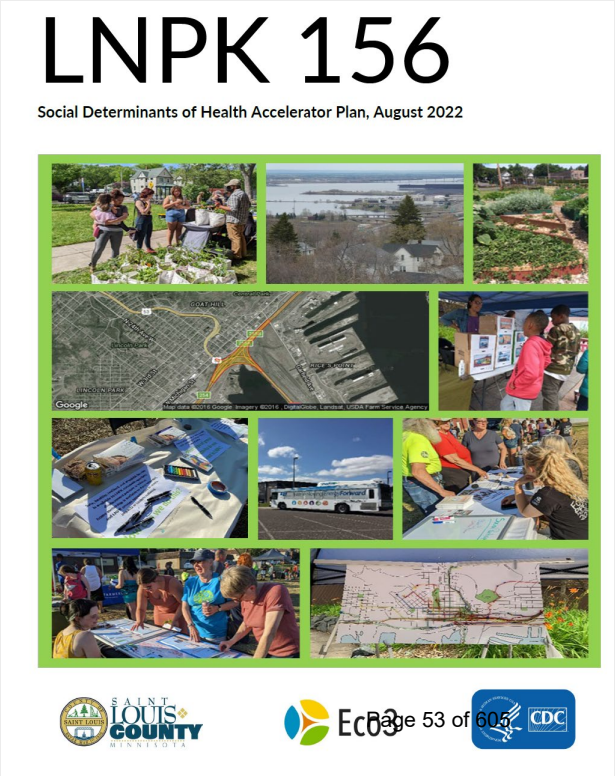
Bus Rapid Transit





West Superior Street: Active Transportation Corridor Project

- **$25M RAISE** (Rebuilding American Infrastructure with Sustainability and Equity) **Grant**
- Business district revitalization – local, small business focus
- Community and City desire a “street of the future”
- Regional Infrastructure with disproportionate neighborhood impacts



Sustainable Transportation

Duluth Planning Commission

March 9, 2023




Zenith Award for Plan Implementation - 2023

Duluth, Minnesota

"Zenith City of the Unsalted Seas"

- Dr. Thomas Preston Foster, 1868

THE CITY OF DULUTH MINNESOTA

Zenith Award for Plan Implementation

Ze-nith – n. 1. The most successful period of time. 2. The highest point reached in the sky by a celestial body. 3. Culminating point

- A project that has been built, or a program or event that has been conducted, that supports the goals, policies, or recommendations of a City of Duluth plan or study.
- Chosen by Planning Commission at its Annual Meeting
- Guideline of 1-2 awards each year
- Award winners will be invited to attend a presentation at a Planning Commission meeting

2022 Award

Enger Lofts

1832 W Superior St

Developer: One LLC

- Former home of Enger and Olson Furniture
- Remodeled to provide 33 apartments
- Provides additional housing in the Lincoln Park Craft District

2023 Award Nominee

Leijona

521 W 2nd Street

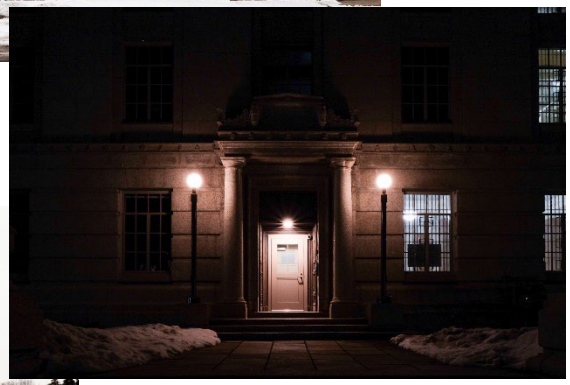
Developer: New History

- Former home to thousands of inmates as the St. Louis County Jail
- Remodeled to provide 33 apartments
- Provides additional housing downtown Duluth while reusing a historic building

2023 Award Nominee

Supports Imagine Duluth 2035 Governing Principles 1, 5, 8, and 9:

- *Reuse previously developed lands*
- *Promise reinvestment in neighborhoods.*
- *Encourage mix of activities, uses, and densities.*
- *Support private actions that contribute to the public realm.*



Do YOU know of a Zenith Award Nominee?

THE CITY OF DULUTH MINNESOTA

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-041	**Contact**	John Kelley	
Type	Minor Subdivision	**Planning Commission Date**		April 11, 2023
Deadline for Action	**Application Date**	February 15, 2023	**60 Days**	April 16, 2023
	Date Extension Letter Mailed	March 17, 2023	**120 Days**	June 15, 2023
Location of Subject	PID # 010-4550-01810			
Applicant	Bluemoon Properties LLC	**Contact**		
Agent	Jesse and Ian Soumis	**Contact**		
Legal Description	See Attached			
Site Visit Date	March 31, 2023	**Sign Notice Date**		N/A
Neighbor Letter Date	N/A	**Number of Letters Sent**		N/A

Proposal
Applicant is requesting a Minor Subdivision to divide one vacant parcel into two lots in the Piedmont Heights neighborhood. All parcels will have frontage on Hoover Street.

Recommended Action: Approval with conditions.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	R-1	Residential	Traditional Neighborhood
North	R-1	Residential	Traditional Neighborhood
South	R-1	Residential	Traditional Neighborhood
East	R-1	Residential	Traditional Neighborhood
West	R-1	Residential	Traditional Neighborhood/Open Space

Summary of Code Requirements

50-33.1 General: All subdivision plats and replats, and all registered land surveys, shall create lots, streets and walkways and open spaces consistent with the requirements of the zone district within which the land is located.

50-37.5, D 1. The planning commission shall approve the application if it determines that: (a) The lot or lots to be subdivided or combined have frontage on an improved public street; (b) Each proposed lot meets the minimum zoning requirements of the district that it is in; (c) If an existing structure on a lot complies with the requirements of this Chapter, then after the minor subdivision structures on each of the resulting lots will still comply with the requirements of this Chapter; and (d) If one or more of the existing lots, or a structure on one or more of those lots, does not comply with the requirements of this Chapter, the proposed relocation will not create any new nonconformity or increase any existing nonconformity between the requirements of this Chapter.

50-14.5.A. R-1 minimum lot area: 4,000 square feet; minimum lot frontage: 40 feet.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Principle #1
Reuse previously developed lands. Directs new investment to sites which have the potential to perform at a higher level than their current state. This strengthens neighborhoods and is preferred to a dispersed development pattern …. Site preparation or building modification costs are offset by savings in existing public infrastructure such as streets and utilities, and transit, fire, and police services.

Future Land Use: Traditional Neighborhood - Characterized by grid or connected street pattern… Limited commercial, schools, churches, and home businesses… Includes many of Duluth 's older neighborhoods, infill projects, neighborhood extensions, and new traditional neighborhood areas.

History: The site is made up of one vacant parcel in the Piedmont Heights neighborhood. There was a dwelling unit on the lot that was torn down in 2021. The underlying plat is "West End Central Division of Duluth" platted in 1919.

Review and Discussion Items
Staff finds that:
1. Applicant is requesting a Minor Subdivision to divide one parcel into two lots. The lot to be split is vacant land owned by the applicant.
2. The subdivision will create lots that meet the zoning requirements of the R-1 district. Minimum lot area in the R-1 district is 4,000 square feet. Each lot will be 50' x 130' or 6,500 square feet.
3. The parcels have the required street frontage along Hoover Street. Each lot will have 50 feet of street frontage on Hoover Street. The proposed subdivision, if approved, would not make the parcels non-conforming due to lot frontage, lot area, or similar bulk standard.
4. No public, agency, or other City comments were received.
5. The attached exhibit demonstrates compliance with Minnesota statutes 462.358 and 505 or 508, as applicable.
6. Approval of this Minor Subdivision signifies that City of Duluth UDC standards are met. St. Louis County may have additional requirements. This subdivision approval lapses if deeds are not recorded with St. Louis County within 180 days. Applicant must provide the City with proof of recording.

Staff Recommendation
Based on the above findings, Staff recommends that Planning Commission approve the Minor Subdivision with the following conditions:
1. Appropriate deeds be filed with St. Louis County within 180 days. Prior to recording the deed that results from this adjustment, the Planning Division will need to stamp the deed, indicating compliance with the local zoning code.
2. Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission approval; however, no such administrative approval shall constitute a variance from the provisions of Chapter 50.

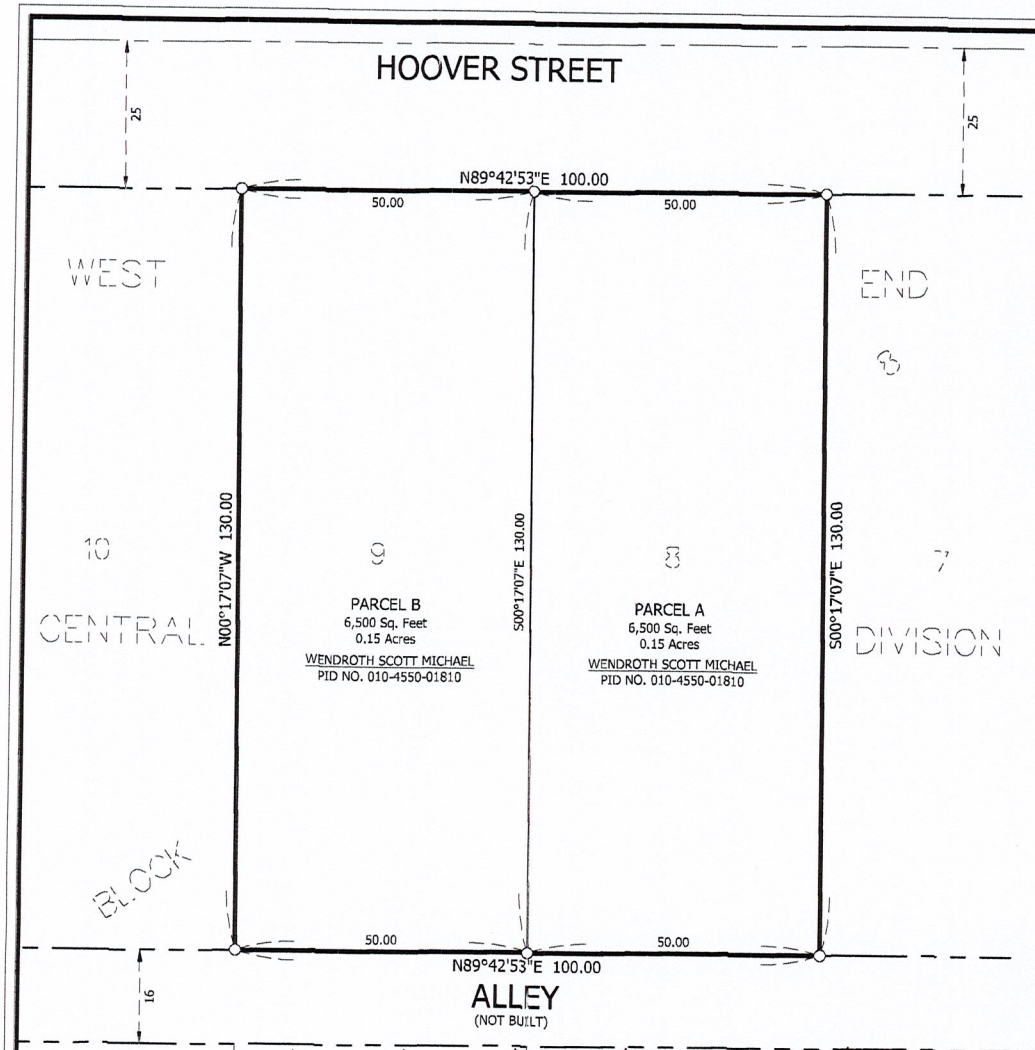
PL 23-041
Minor Subdivision
Site Map

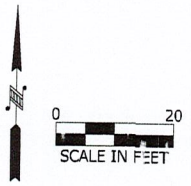
Legend
Zoning Boundaries

The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.

Aerial photography flown 2016

Prepared by: City of Duluth Community Planning Division, May 3, 2019. Source: City of Duluth.





PARENT LEGAL DESCRIPTION PER CERTIFICATE OF TITLE NO. 356640
Lot 8 Block 8 WEST END CENTRAL DIVISION OF DULUTH
Lot 9 Block 8 WEST END CENTRAL DIVISION OF DULUTH

LEGAL DESCRIPTION OF PARCEL A
Lot 8, Block 8, WEST END CENTRAL DIVISION OF DULUTH, according to the recorded plat thereof, St. Louis County, Minnesota.
Said parcel contains 6,500 square feet or 0.15 acres

LEGAL DESCRIPTION OF PARCEL B
Lot 9, Block 8, WEST END CENTRAL DIVISION OF DULUTH, according to the recorded plat thereof, St. Louis County, Minnesota.
Said parcel contains 6,500 square feet or 0.15 acres

LEGEND

- X — FENCE LINE
- ohu — OVERHEAD UTILITIES
- CENTER LINE
- RIGHT OF WAY LINE
- BOUNDARY LINE AS SURVEYED
- EXISTING PLAT LINE
- PROPOSED PARCEL LINE
- ○ SET CAPPED REBAR RLS. NO. 49505

SURVEYOR'S NOTES

1. THIS SURVEY HAS BEEN PREPARED WITHOUT BENEFIT OF A TITLE COMMITMENT OR TITLE OPINION. A TITLE SEARCH FOR RECORDED OR UNRECORDED EASEMENTS WHICH MAY BENEFIT OR ENCUMBER THIS PROPERTY HAS NOT BEEN COMPLETED BY ALTA LAND SURVEY COMPANY. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR SHOWING THE LOCATION OF RECORDED OR UNRECORDED EASEMENTS OR OTHER ENCUMBRANCES NOT PROVIDED TO THE SURVEYOR AS OF THE DATE OF THE SURVEY.
2. BEARINGS ARE BASED ON THE ST. LOUIS COUNTY TRANSVERSE MERCATOR COORDINATE SYSTEM OF 1996. (NAD 83 2011)
3. NO SPECIFIC SOILS INVESTIGATION HAS BEEN COMPLETED ON THIS LOT BY ALTA LAND SURVEY COMPANY. THE SUITABILITY OF SOILS TO SUPPORT THE SPECIFIC STRUCTURE PROPOSED IS NOT THE RESPONSIBILITY OF ALTA LAND SURVEY COMPANY OR THE SURVEYOR.
4. DUE TO SNOW AND ICE COVERAGE, SOME FEATURES MAY NOT HAVE BEEN VISIBLE DURING THE COURSE OF THIS SURVEY.

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

David R. Evanson
MN License #49505
DATE:02-13-2023

CERTIFICATE OF SURVEY

CLIENT:ROBB STAUBER
ADDRESS:2232 HOOVER STREET
DULUTH, MN 55811
DATE:02-13-2023
JOB NO:23-029
SHEET 1 OF 1
REVISIONS:

ALTA LAND SURVEY COMPANY
PHONE: 218-727-5211
LICENSED IN MN & WI
WWW. ALTALANDSURVEYDULUTH.COM

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-043		**Contact**	Chris Lee	
Type	Interim Use Permit– Vacation Dwelling Unit in Form District		**Planning Commission Date**		April 11, 2023
Deadline for Action	**Application Date**		February 24, 2023	**60 Days**	April 25, 2023
	Date Extension Letter Mailed		March 8, 2022	**120 Days**	June 24, 2023
Location of Subject	4721 E Superior St				
Applicant	Spruce Living LLC		**Contact**		
Agent	Taylor Maund		**Contact**		
Legal Description	Lot 6, Block 50 London Addition to Duluth PIN: 010-3010-03500				
Site Visit Date	March 29, 2023		**Sign Notice Date**		March 28, 2023
Neighbor Letter Date	March 21, 2023		**Number of Letters Sent**		40

Proposal
Applicant is proposing a new interim use permit for a vacation dwelling unit. The permit would allow for a 3-bedroom condominium with a maximum of 7 occupants in the F-2 form district.

Vacation dwelling units located in form districts are exempt from minimum night stays and parking, and there is no cap on number of permits issued.

Staff is recommending Planning Commission approve with conditions.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	F-2	Mixed Use Building	Neighborhood Commercial
North	F-2	Residential Structure	Neighborhood Commercial
South	F-2	Street/Trail/Railroad	Neighborhood Commercial
East	F-2	Medical Office	Neighborhood Commercial
West	R-1	Residential Structure	Neighborhood Commercial

Summary of Code Requirements:
UDC Section 50-19.8. Permitted Use Table. A Vacation Dwelling Unit is an Interim Use in the F-2 zone district.
UDC Sec. 50-37.10.E . . . the Council shall only approve an interim use permit, or approve it with conditions, if it determines that:
1. A time limit is needed to protect the public health, safety and welfare from potential longer term impacts of the requested use in that location ….;
2. The applicant agrees to sign a development agreement with the city.
3. Except for properties within the Higher Education Overlay District as identified in 50-18.5, the minimum rental period

and off-street parking requirements of 50-20.3.U and 50-20.5.M shall not apply for vacation dwelling units or accessory vacation dwelling units in form districts.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principle #8 - Encourage mix of activities, uses, and densities - The issuance of a permit allows an existing structure in the downtown area to be functionally used, decrease vacancy levels, and increase tax base.

Econ. Dev. Policy #3 - Build on Existing Economic Strengths & Competitive Advantages
S9: Encourage expansion of the city's tourism economy through efforts to expand in areas of current activity, such as in Canal Park, but also through marketing and investment in destination neighborhoods and iconic tourism experiences unique to Duluth. The proposed IUP in this location will enhance the level of activity in the downtown, and increase opportunities for additional commerce.

Future Land Use – Neighborhood Commercial: Small - to moderate -scale commercial, serving primarily the adjacent neighborhood(s). May include specialty retail; community -gathering businesses such as coffee shops or lower intensity entertainment; offices; studios or housing above retail (storefront retail with vertical mixed use)

Current History: The property currently is a mixed-use building constructed in 1936. The ground floor contains a restaurant.

Review and Discussion Items:

1) Applicant's property is located at 4721 East Superior Street. The unit is located on the second floor above New London Cafe. The proposed vacation dwelling unit contains 3 bedrooms that would allow for a maximum of 7 guests.

2) Permit holders must designate a managing agent or local contact who resides with 25 miles of the City and who has authority to act for the owner in responding 24 hours a day to complaints from neighbors or the City. Permit holder must provide the contact information for the managing agent or local contact to all property owners within 100 feet of the property boundary. The applicants have listed Taylor Maund as the managing agent.

3) The site is not required to provide parking and there is no off-street parking indicated on the site plan.

4) The site does not have any outdoor amenities and no screening is required as it is not adjacent to any residential uses.

5) A time limit on this Interim Use Permit ("IUP") is needed to minimize negative impacts to surrounding residential uses thereby causing damage to the public's health, safety and welfare. Section 50-20.3.U.7 states the IUP shall expire upon change in ownership of the property or in six years, whichever occurs first.

6) Applicant will apply for all relevant permits and licenses and these are contingent upon approval of the Interim Use Permit for a Vacation Dwelling Unit.

7) Applicant must comply with Vacation Regulations (included with staff report), including providing information to guests on city rules (included with staff report as "Selected City Ordinances on Parking, Parks, Pets, and Noise").

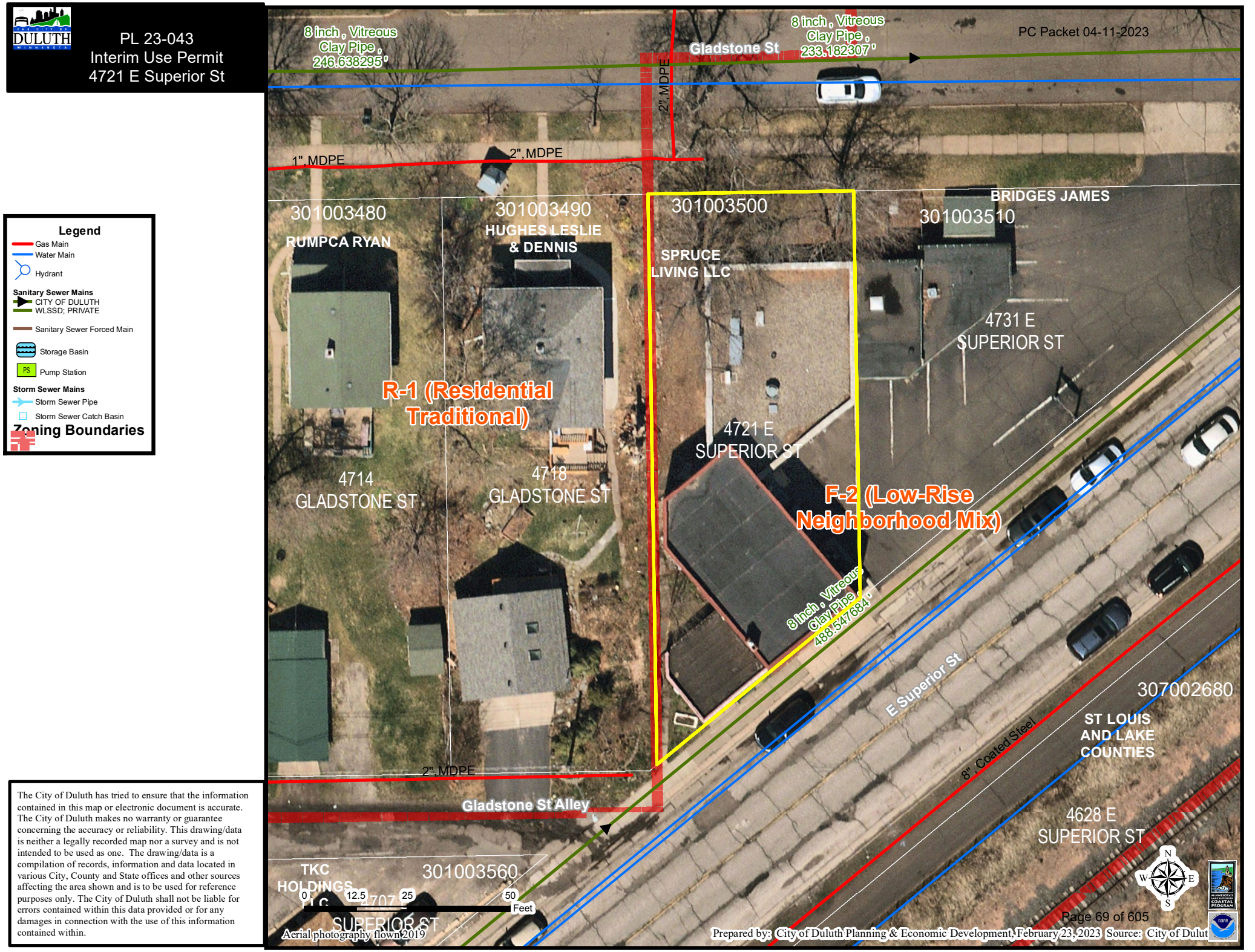
8) No comments from citizens, City staff, or any other entity were received regarding the application.

Staff Recommendation:

Based on the above findings, Staff recommends that Planning Commission approve the interim use permit subject to the following:

1) The applicant shall adhere to the terms and conditions listed in the Interim Use Permit.
2) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission; however, no such administration approval shall constitute a variance from the provisions of Chapter 50

PL 23-043
Interim Use Permit
4721 E Superior St



Legend

- Gas Main
- Water Main
- Hydrant

Sanitary Sewer Mains

- CITY OF DULUTH
- WLSSD; PRIVATE
- Sanitary Sewer Forced Main
- Storage Basin
- Pump Station

Storm Sewer Mains

- Storm Sewer Pipe
- Storm Sewer Catch Basin

Zoning Boundaries

Aerial photography flown 2019

Prepared by: City of Duluth Planning & Economic Development, February 23, 2023 Source: City of Dulut

Vacation Dwelling Unit Worksheet

1. The minimum rental period shall be not less than two consecutive nights (does not apply to Form districts). **What will be your minimum rental period?** 1 (one) **nights**

2. The total number of persons that may occupy the vacation dwelling unit is one person plus the number of bedrooms multiplied by two. You may rent no more than four bedrooms.

How many legal bedrooms are in the dwelling? 3 (three)

What will be your maximum occupancy? 7 (seven)

3. Off-street parking shall be provided at the following rate:

a. 1-2 bedroom unit, 1 space

b. 3 bedroom unit, 2 spaces

c. 4+ bedroom unit, number of spaces equal to the number of bedrooms minus one.

d. Vacation dwelling units licensed on May 15, 2016, are entitled to continue operating under the former off-street parking requirement. The parking exemption for vacation dwelling units licensed on May 15, 2016, expires upon transfer of any ownership interest in the permitted property.

e. Form districts are not required to provide parking spaces.

How many off-street parking spaces will your unit provide? no off-street parking for Forms district. Parking is abundant on Superior St.

4. Only one motorhome (or pickup-mounted camper) and/or one trailer either for inhabiting or for transporting recreational vehicles (ATVs, boat, personal watercraft, snowmobiles, etc.) may be parked at the site, on or off the street. **Will you allow motorhome or trailer parking? If so, where?** only street parking available

5. The property owner must provide required documents and adhere to additional requirements listed in the City of Duluth's UDC Application Manual related to the keeping of a guest record, designating and disclosing a local contact, property use rules, taxation, and interim use permit violations procedures. ✓

6. The property owner must provide a site plan, drawn to scale, showing parking and driveways, all structures and outdoor recreational areas that guests will be allowed to use, including, but not limited to, deck/patio, barbeque grill, recreational fire, pool, hot tub, or sauna, and provide detail concerning the provision of any dense urban screen that may be required to buffer these areas from adjoining properties. Please note that this must be on 8 x 11 size paper. Please see attached.

7. The interim use permit shall expire upon change in ownership of the property or in six years, whichever occurs first. An owner of a vacation dwelling unit permitted prior to May 15, 2016, may request, and the land use supervisor may grant, an application for adjustment of an existing permit to conform to this section, as amended, for the remainder of the permit term. ✓

8. Permit holder must keep a guest record including the name, address, phone number, and vehicle (and trailer) license plate information for all guests and must provide a report to the City upon 48 hours' notice. **Please explain how and where you will**

keep your guest record (log book, excel spreadsheet, etc): Plan is to use Air BNB to track guest record and export this to our own files, we will keep any info AirBnB does not track in a Spreadsheet.

9. Permit holder must designate a managing agent or local contact who resides within 25 miles of the City and who has authority to act for the owner in responding 24-hours-a-day to any complaints from neighbors or the City. The permit holder must notify the Land Use Supervisor within 10 days of a change in the managing agent or local contact's contact information.

Please provide the name and contact information for your local contact:

Taylor Maund | 832 628 5216 | taylor.maund@gmail.com
1022 W 2nd St Duluth MN 55806

10. Permit holder must disclose in writing to their guests the following rules and regulations:

a. The managing agent or local contact's name, address, and phone number;

b. The maximum number of guests allowed at the property;

c. The maximum number of vehicles, recreational vehicles, and trailers allowed at the property and where they are to be parked;

d. Property rules related to use of exterior features of the property, such as decks, patios, grills, recreational fires, pools, hot tubs, saunas and other outdoor recreational facilities;

e. Applicable sections of City ordinances governing noise, parks, parking and pets;

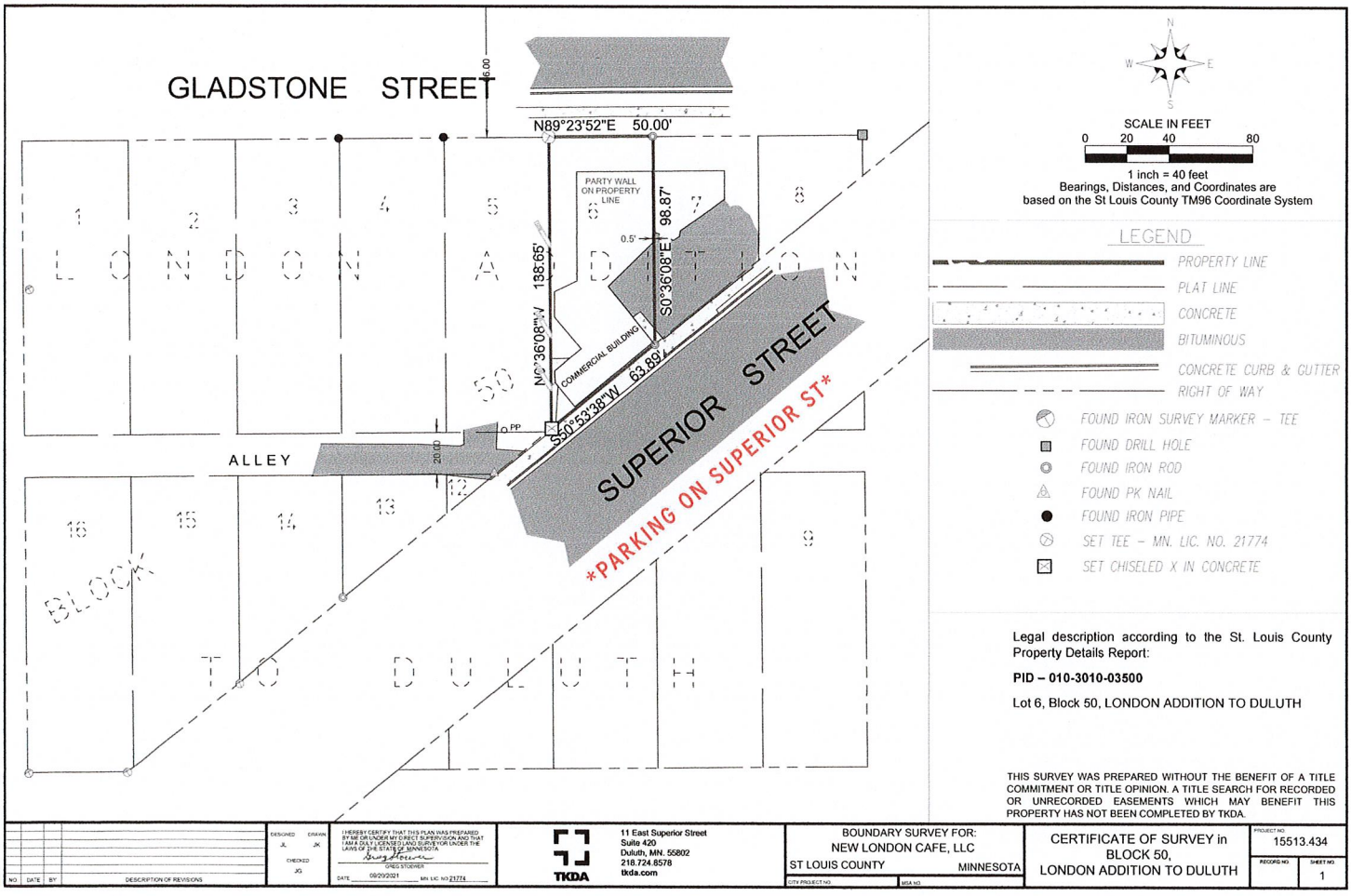
Please state where and how this information will be provided to your guests:

on listing and on guest guide that will be on site for guests to reference.

11. Permit holder must post their permit number on all print, poster or web advertisements. **Do you agree to include the permit number on all advertisements?** yes

12. Prior to rental, permit holder must provide the name, address, and phone number for the managing agent or local contact to all property owners within 100' of the property boundary; submit a copy of this letter to the Planning and Community Development office. In addition, note that permit holder must notify neighboring properties within 10 days of a change in the managing agent or local contact's contact information. ✓

R-1 (Residential Traditional)
F-2 (Low-Rise Neighborhood Mix)
PARKING
ON STREET
SUPERIOR ST
4731 E SUPERIOR ST
4721 E SUPERIOR ST
4710 GLADSTONE ST
4714 GLADSTONE ST
4701 E SUPERIOR ST



Legal description according to the St. Louis County Property Details Report:

PID – 010-3010-03500

Lot 6, Block 50, LONDON ADDITION TO DULUTH

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT OR TITLE OPINION. A TITLE SEARCH FOR RECORDED OR UNRECORDED EASEMENTS WHICH MAY BENEFIT THIS PROPERTY HAS NOT BEEN COMPLETED BY TKDA.

NO	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JL DRAWN JK CHECKED JG

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA.
GREG STORNER
DATE 09/29/2021 MN. LIC. NO. 21774

TKDA
11 East Superior Street
Suite 420
Duluth, MN. 55802
218.724.8578
tkda.com

BOUNDARY SURVEY FOR:
NEW LONDON CAFE, LLC
ST LOUIS COUNTY MINNESOTA
CITY PROJECT NO.
MSA NO.

CERTIFICATE OF SURVEY in BLOCK 50, LONDON ADDITION TO DULUTH

PROJECT NO. 15513.434
RECORD NO.
SHEET NO. 1

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-030		**Contact**	Chris Lee, clee@duluthmn.gov	
Type	Interim Use Permit– Accessory Vacation Dwelling Unit - Renewal		**Planning Commission Date**		April 11, 2023
Deadline for Action	**Application Date**	February 7, 2023	**60 Days**		May 6, 2023 (extended)
	Date Extension Letter Mailed	February 13, 2023	**120 Days**		July 5, 2023 (extended)
Location of Subject	1802 Minnesota Ave				
Applicant	William Weller		**Contact**		
Agent	Flagship Rentals		**Contact**		
Legal Description					
Site Visit Date	March 29, 2023		**Sign Notice Date**		March 28, 2023
Neighbor Letter Date	March 21, 2023		**Number of Letters Sent**		28

Proposal
Applicant proposes to use their home as a vacation dwelling unit. A vacation dwelling unit allows for periods of occupancy of 2 to 29 days, with a minimum stay of two consecutive nights. This is a renewal of permit PL 17-039.

Staff recommends Planning Commission recommend approval.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	R-1	Single Family Residential	Traditional Residential
North	R-1	Single Family Residential	Traditional Residential
South	R-1	Single Family Residential	Traditional Residential
East	R-1	Single Family Residential	Traditional Residential
West	R-1	Single Family Residential	Traditional Residential

Summary of Code Requirements:

UDC Section 50-19.8. Permitted Use Table. A vacation dwelling unit is an Interim Use in the R-1 zone district.

UDC Section 50-20.3. Use-Specific Standards. Lists all standards specific to vacation dwelling units.

UDC Sec. 50-37.10.E . . . the commission shall only approve an interim use permit, or approve it with conditions, if it determines that: 1. A time limit is needed to protect the public health, safety and welfare from potential longer term impacts of the requested use in that location ….; 2. The applicant agrees to sign a development agreement with the city.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principle #8 - Encourage mix of activities, uses, and densities. A short-term rental allows property owners to generate income and provides a service for tourists.

Econ. Dev. Policy #3 - Build on Existing Economic Strengths & Competitive Advantages

Future Land Use: Traditional Neighborhood: Characterized by a grid or connected street pattern, houses orientated with shorter dimension to the street and detached garages, some with alleys. Limited commercial, schools, churches, and home-businesses. Parks and open space areas are scattered through or adjacent to the neighborhood. Includes many of Duluth's older neighborhoods, infill projects and neighborhood extensions, and new traditional neighborhood areas.

Current History: This home is 2,065 square feet constructed in 1970. This is a renewal of a 2017 permit.

Review and Discussion Items:

1) The applicant's property is located on 1802 Minnesota Ave. The building is a 4-bedroom home that would allow a maximum occupancy of 9 people.

2) Three off-street parking spaces are required for this interim use permit. The site plan indicates 3 off-street parking spaces on the driveway and side yard.

3) There are no reported complaints of this property under its current interim use permit.

4) Permit holders must designate a managing agent or local contact who resides with 25 miles of the City and who has authority to act for the owner in responding 24 hours a day to complaints from neighbors or the City. Permit holder must provide the contact information for the managing agent or local contact to all property owners within 100 feet of the property boundary. The applicants have listed Max Hendrickson to serve as the managing agent.

5) The site plan submitted indicates that there is existing screening from properties on the south, north and west sides of the property. The useable exterior space has been buffered from all adjoining properties in accordance with the UDC requirements.

6) A time limit on this Interim Use Permit ("IUP") is needed to minimize negative impacts to surrounding residential uses thereby causing damage to the public's health, safety and welfare. Section 50-20.3.U.7 states the IUP shall expire upon change in ownership of the property or in six years, whichever occurs first.

7) Applicant will need to apply for all relevant permits and licenses required of the Interim Use Permit for a Vacation Dwelling Unit.

8) Applicant must comply with Vacation Regulations (included with staff report), including providing information to guests on city rules (included with staff report as "Selected City Ordinances on Parking, Parks, Pets, and Noise").

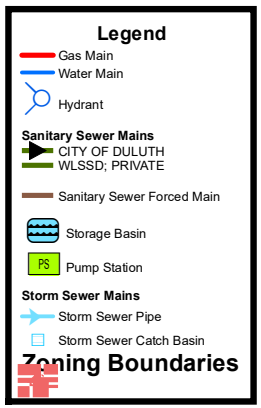
9) One comment was received with concern to a firepit, and a condition has been proposed to address its operation and maintenance. No other public, City, or agency comments were received.

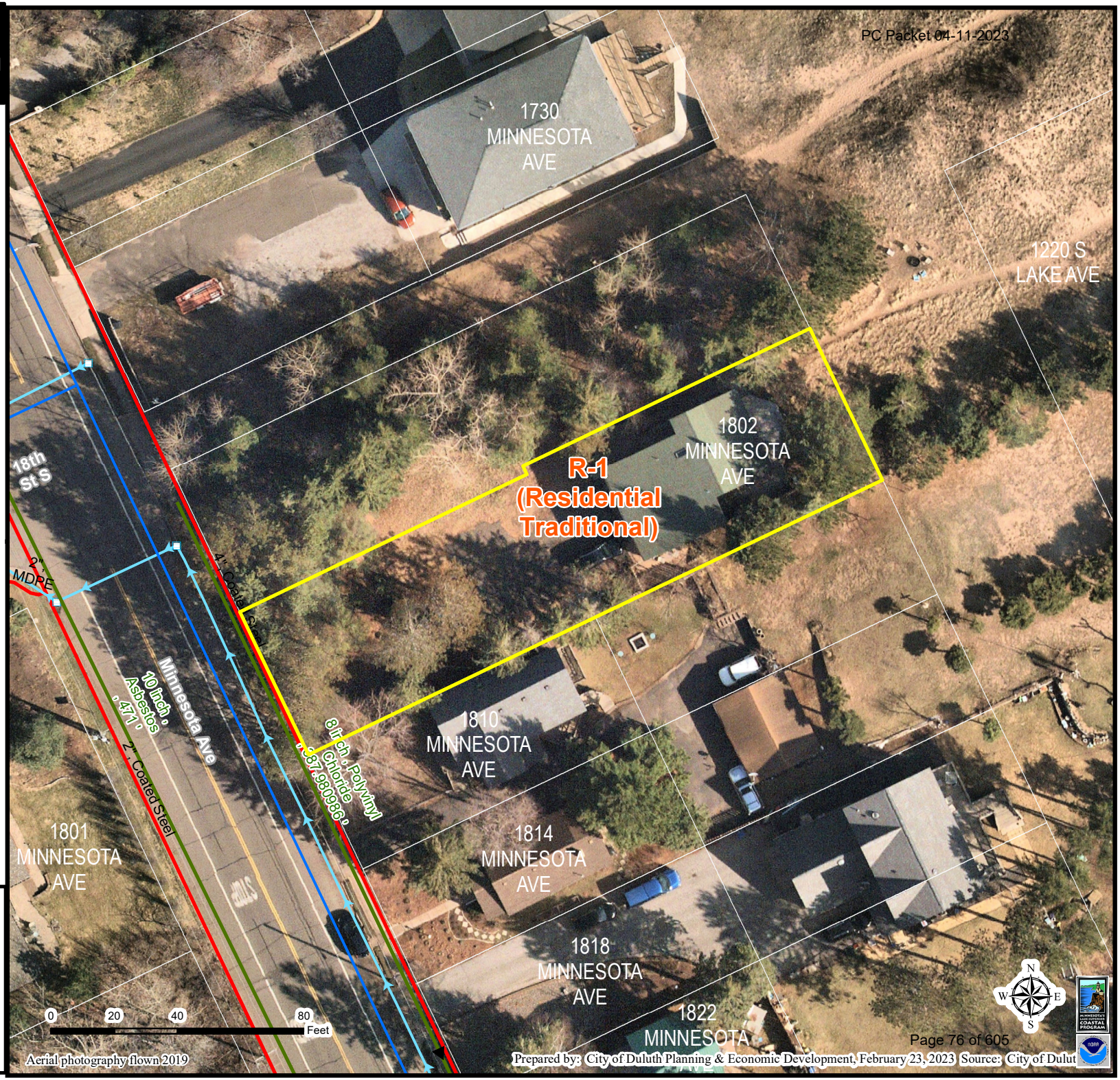
Staff Recommendation:

Based on the above findings, Staff recommends that Planning Commission approve the interim use permit subject to the following:

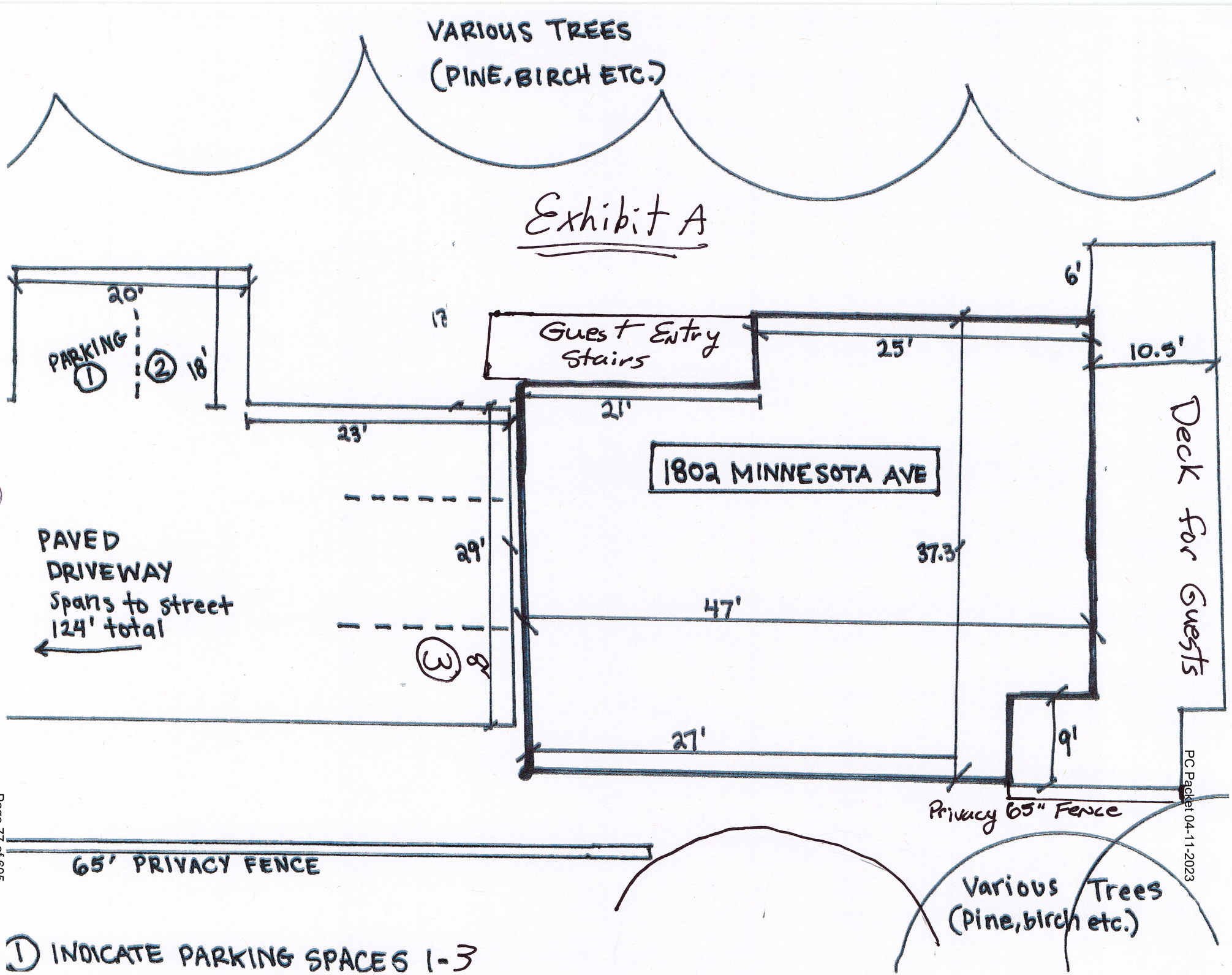
1) The permit shall lapse if no activity is taken within one year of approval.
2) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission; however, no such administration approval shall constitute a variance from the provisions of Chapter 50
3) Applicant will remove the fire pit prior to being issued the renewed permit.

PL 23-030
Interim Use Permit - Renewal
1802 Minnesota Ave





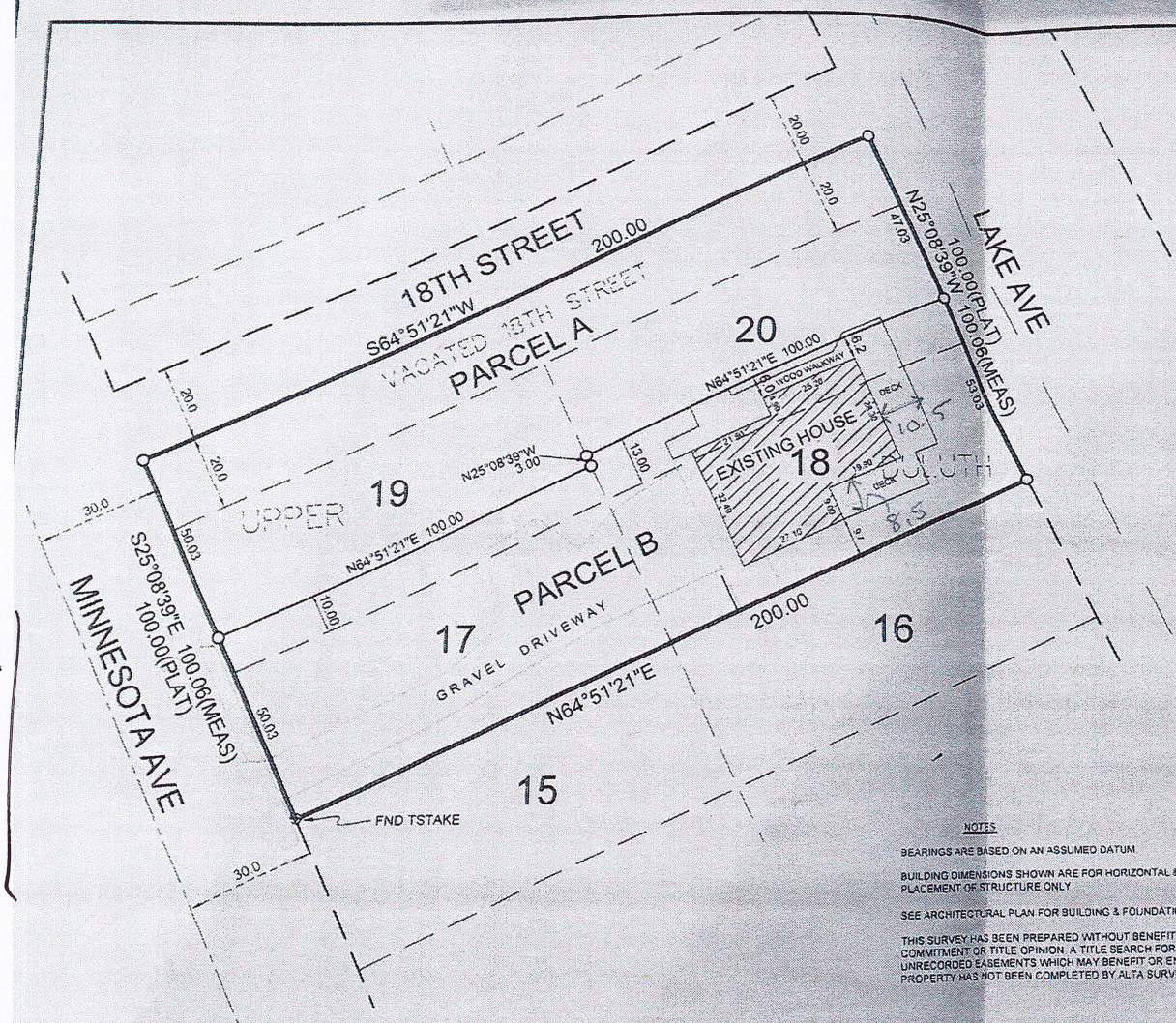
The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.

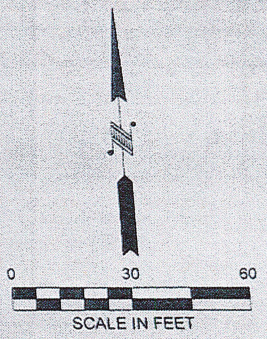


1) INDICATE PARKING SPACES 1-3

"Exhibit A"

CERTIFICATE OF SURVEY





LEGAL DESCRIPTIONS

PARCEL A

Lot 19, Minnesota Avenue Upper Duluth, except the Southerly 10.0 feet thereof, and Lot 20 Lake Avenue Upper Duluth, except the Southerly 13.0 feet thereof, and the Southerly 20.00 feet of the adjacent vacated 18th Street South.

PARCEL B

Lot 17 and the Southerly 10.0 feet of Lot 19, Minnesota Avenue Upper Duluth, and Lot 18 and Southerly 13.0 feet of Lot 20, Lake Avenue Upper Duluth.

9

NOTES

BEARINGS ARE BASED ON AN ASSUMED DATUM

BUILDING DIMENSIONS SHOWN ARE FOR HORIZONTAL & VERTICAL PLACEMENT OF STRUCTURE ONLY

SEE ARCHITECTURAL PLAN FOR BUILDING & FOUNDATION DIMENSIONS

THIS SURVEY HAS BEEN PREPARED WITHOUT BENEFIT OF A TITLE COMMITMENT OR TITLE OPINION. A TITLE SEARCH FOR RECORDED OR UNRECORDED EASEMENTS WHICH MAY BENEFIT OR ENCUMBER THIS PROPERTY HAS NOT BEEN COMPLETED BY ALTA SURVEY COMPANY, INC

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Date: 12-17-10

Ronald L. Krueger MN License No. 14374

E: 11-17-10
LE: 1 IN = 30 FEET
NT: MINNESOTA AVENUE LLC
PERTY ADD: 1802 MINNESOTA AVENUE
JECT NO: 10-131

ALTA
SURVEY COMPANY, INC.
Residential/Commercial Land Surveying-Lan
Developement-Legal Descriptions
P.O. BOX 161138 Duluth, MN 55806
Phone: 218-727-5211 Fax: 218-727-3798

From: planning
To: Chris Lee
Subject: FW: 1802 MN AVE Vacation Rental Permit Renewal
Date: Monday, March 27, 2023 2:42:10 PM

From: Jody Berquist <REDACTED EMAIL>
Sent: Monday, March 27, 2023 1:20 PM
To: planning <planning@DuluthMN.gov>
Subject: 1802 MN AVE Vacation Rental Permit Renewal

We are writing in regards to the above property permit renewal for vacation rentals.

We have the following concerns:
1. There is a fire pit in the back of the property that is used a lot by the renters and many times during times of dry weather with very dry grass surrounding it. In our opinion, just living 2 doors away, there is a fairly high risk of a grass fire starting and then starting all the pine trees right next to it on fire. This also tends to get used late into the night...midnight to 2am some nights with loud conversations that are very well heard because our windows to our bedroom face it and they are open at night in the summertime as we do not have AC. We would propose that the owner remove the firepit all together to remove the risk of fire, especially now that there is not a fire department located on park point. We have not called the fire department or police in the past, but will this year if these fires continue during unsafe times and loud conversations occur past 10pm.

2. Many times also, partially cooked food and scraps are left behind around the firepit. The fox or other animals will bring bones, moldy food, etc. into our yard and our dogs will find it. Another reason to have the owner remove the firepit.

Thank you for your attention to this matter.

Jody Berquist
1724 Minnesota Ave
REDACTED PHONE NUMBER

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-031		**Contact**	Chris Lee, clee@duluthmn.gov	
Type	Interim Use Permit– Accessory Vacation Dwelling Unit - Renewal		**Planning Commission Date**		April 11, 2023
Deadline for Action	**Application Date**	February 9, 2023	**60 Days**		April 12, 2023
	Date Extension Letter Mailed	February 13, 2023	**120 Days**		June 11, 2023
Location of Subject	1421 East Superior St				
Applicant	Michael Schraepfer		**Contact**		
Agent	Heirloom Properties		**Contact**		
Legal Description	PIN: 010-1480-04980				
Site Visit Date	February 29, 2023		**Sign Notice Date**		March 28, 2023
Neighbor Letter Date	February 17, 2023		**Number of Letters Sent**		57

Proposal
The applicant proposes to renew an interim use permit for Unit 3 of a three unit building as a vacation rental property. This unit contains 2 bedrooms to allow 5 occupants. A vacation dwelling unit allows for periods of occupancy of 2 to 29 days, with a minimum stay of 2 nights. This is a renewal of permit PL 16-084.

Staff is recommending Planning Commission recommend approval.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	MU-N	Multifamily residential	Central Business Secondary
North	R-2	Multifamily residential	Central Business Secondary
South	F-4	Commercial	Central Business Secondary
East	MU-N	Single family residential	Central Business Secondary
West	MU-N	Multifamily residential	Central Business Secondary

Summary of Code Requirements:

UDC Section 50-19.8. Permitted Use Table. A vacation dwelling unit is an Interim Use in the MU-N zone district.

UDC Section 50-20.3. Use-Specific Standards. Lists all standards specific to vacation dwelling units.

UDC Sec. 50-37.10.E . . . the commission shall only approve an interim use permit, or approve it with conditions, if it determines that: 1. A time limit is needed to protect the public health, safety and welfare from potential longer term impacts of the requested use in that location ….; 2. The applicant agrees to sign a development agreement with the city.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principle #8 - Encourage mix of activities, uses, and densities. A short-term rental allows property owners to generate income and provides a service for tourists.

Econ. Dev. Policy #3 - Build on Existing Economic Strengths & Competitive Advantages

Future Land Use: Central Business Secondary: An area adjacent to and supporting the primary central business area or a stand-alone area providing a similar mix of destination land uses but at a lower intensity than the primary CB area. Includes mixed regional and neighborhood retail, employment centers, public spaces, medium density residential, and public parking facilities

Current History: This structure is 2,030 square feet constructed in 1899. This is a renewal of a 2016 permit.

Review and Discussion Items:

1) The applicant's property is located on 1421 E Superior St. The building contains 3 apartment units. The renewal permit is for Unit 3 that contains 2 bedrooms for a maximum occupancy of 5.

2) One off-street parking space is required for this interim use permit. The site plane indicate 1 off-street parking space on the rear of the building.

3) There are no reported complaints of this property under its current interim use permit.

4) Permit holders must designate a managing agent or local contact who resides with 25 miles of the City and who has authority to act for the owner in responding 24 hours a day to complaints from neighbors or the City. Permit holder must provide the contact information for the managing agent or local contact to all property owners within 100 feet of the property boundary. The applicants have listed Heirloom Properties to serve as the managing agent.

5) The site plan submitted indicates there are no exterior amenities available. The site plan shows existing screening/buffering in the northwest corner of the rear yard from the adjacent property. The east side of the property has a combination of building, shrubs and trees for screening. An existing detached garage is located in the northeast corner of the adjacent property.

6) A time limit on this Interim Use Permit ("IUP") is needed to minimize negative impacts to surrounding residential uses thereby causing damage to the public's health, safety and welfare. Section 50-20.3.U.7 states the IUP shall expire upon change in ownership of the property or in six years, whichever occurs first.

7) Applicant will need to apply for all relevant permits and licenses required of the Interim Use Permit for a Vacation Dwelling Unit.

8) Applicant must comply with Vacation Regulations (included with staff report), including providing information to guests on city rules (included with staff report as "Selected City Ordinances on Parking, Parks, Pets, and Noise").

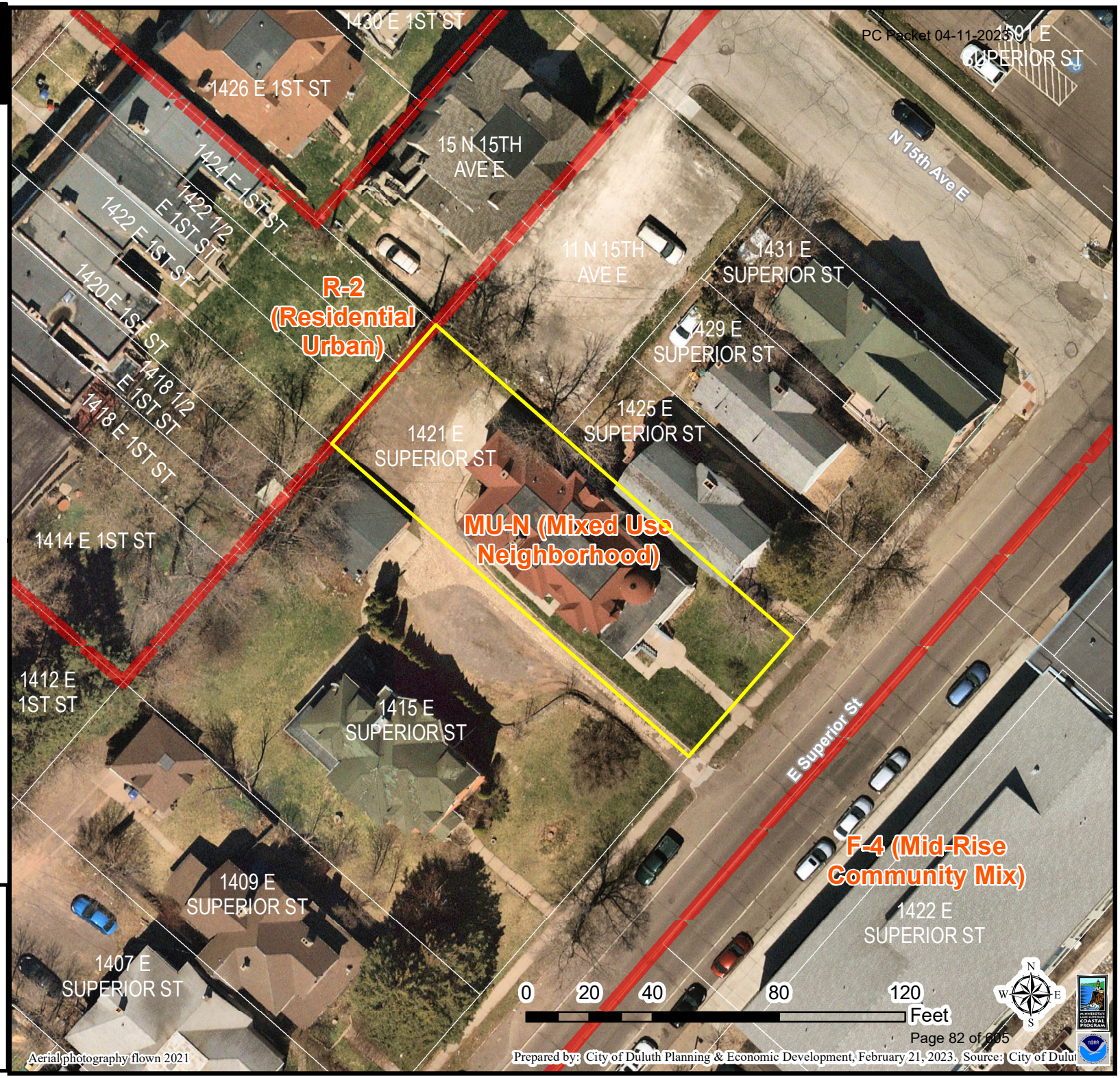
9) No public, City, or agency comments were received.

Staff Recommendation:

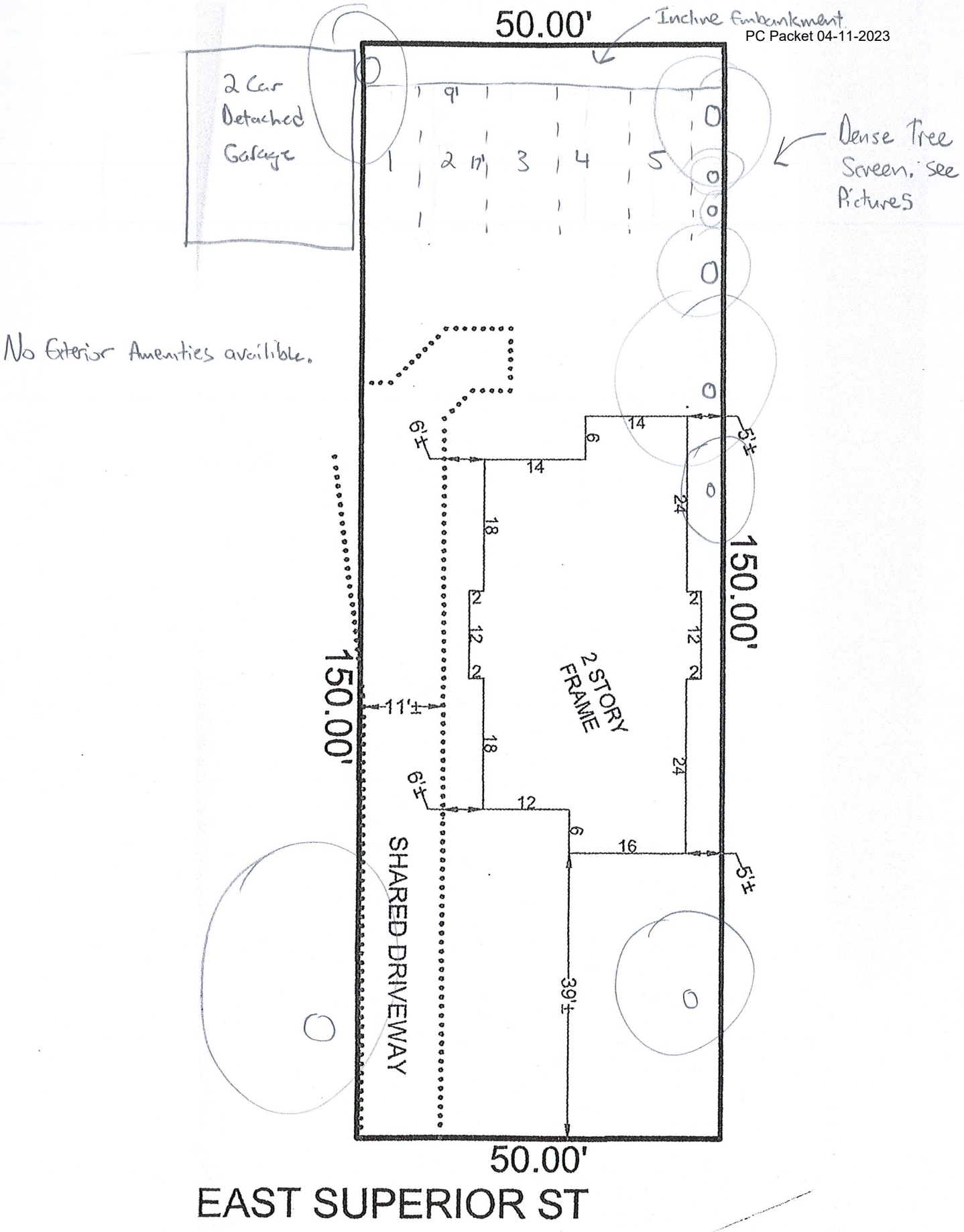
Based on the above findings, Staff recommends that Planning Commission approve the interim use permit subject to the following:

1) The permit shall lapse if no activity is taken within one year of approval.
2) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission; however, no such administration approval shall constitute a variance from the provisions of Chapter 50

PL23-031
IUP Renewal
1421 E Superior St



Legend
Zoning Boundaries


50.00'
Incline Embankment
2 Car Detached Garage
Dense Tree Screen, see Pictures
No Exterior Amenities availible.
150.00'
150.00'
2 STORY FRAME
SHARED DRIVEWAY
39'±
50.00'
EAST SUPERIOR ST

Vacation Dwelling Unit Worksheet

1. The minimum rental period shall be not less than two consecutive nights (does not apply to Form districts). **What will be your minimum rental period?** 2 **nights**

2. The total number of persons that may occupy the vacation dwelling unit is one person plus the number of bedrooms multiplied by two. You may rent no more than four bedrooms.

How many legal bedrooms are in the dwelling? 2

What will be your maximum occupancy? 5

3. Off-street parking shall be provided at the following rate:

a. 1-2 bedroom unit, 1 space

b. 3 bedroom unit, 2 spaces

c. 4+ bedroom unit, number of spaces equal to the number of bedrooms minus one.

d. Vacation dwelling units licensed on May 15, 2016, are entitled to continue operating under the former off-street parking requirement. The parking exemption for vacation dwelling units licensed on May 15, 2016, expires upon transfer of any ownership interest in the permitted property.

e. Form districts are not required to provide parking spaces.

How many off-street parking spaces will your unit provide? 2

4. Only one motorhome (or pickup-mounted camper) and/or one trailer either for inhabiting or for transporting recreational vehicles (ATVs, boat, personal watercraft, snowmobiles, etc.) may be parked at the site, on or off the street. **Will you allow motorhome or trailer parking? If so, where?** No

5. The property owner must provide required documents and adhere to additional requirements listed in the City of Duluth's UDC Application Manual related to the keeping of a guest record, designating and disclosing a local contact, property use rules, taxation, and interim use permit violations procedures.

6. The property owner must provide a site plan, drawn to scale, showing parking and driveways, all structures and outdoor recreational areas that guests will be allowed to use, including, but not limited to, deck/patio, barbeque grill, recreational fire, pool, hot tub, or sauna, and provide detail concerning the provision of any dense urban screen that may be required to buffer these areas from adjoining properties. Please note that this must be on 8 x 11 size paper.

7. The interim use permit shall expire upon change in ownership of the property or in six years, whichever occurs first. An owner of a vacation dwelling unit permitted prior to May 15, 2016, may request, and the land use supervisor may grant, an application for adjustment of an existing permit to conform to this section, as amended, for the remainder of the permit term.

8. Permit holder must keep a guest record including the name, address, phone number, and vehicle (and trailer) license plate information for all guests and must provide a report to the City upon 48 hours' notice. **Please explain how and where you will**

keep your guest record (log book, excel spreadsheet, etc):
We will keep it electronically in spreadsheet from booking software.

9. Permit holder must designate a managing agent or local contact who resides within 25 miles of the City and who has authority to act for the owner in responding 24-hours-a-day to any complaints from neighbors or the City. The permit holder must notify the Land Use Supervisor within 10 days of a change in the managing agent or local contact's contact information.

Please provide the name and contact information for your local contact:
Heirloom Vacation Rental Management 218-409-4885

10. Permit holder must disclose in writing to their guests the following rules and regulations:

a. The managing agent or local contact's name, address, and phone number;

b. The maximum number of guests allowed at the property;

c. The maximum number of vehicles, recreational vehicles, and trailers allowed at the property and where they are to be parked;

d. Property rules related to use of exterior features of the property, such as decks, patios, grills, recreational fires, pools, hot tubs, saunas and other outdoor recreational facilities;

e. Applicable sections of City ordinances governing noise, parks, parking and pets;

Please state where and how this information will be provided to your guests:
It will be emailed in advance and provided onsite in a handbook.

11. Permit holder must post their permit number on all print, poster or web advertisements. **Do you agree to include the permit number on all advertisements?** Yes.

12. Prior to rental, permit holder must provide the name, address, and phone number for the managing agent or local contact to all property owners within 100' of the property boundary; submit a copy of this letter to the Planning and Community Development office. In addition, note that permit holder must notify neighboring properties within 10 days of a change in the managing agent or local contact's contact information.

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-042	**Contact**		Chris Lee, clee@duluthmn.gov	
Type	Interim Use Permit– Accessory Vacation Dwelling Unit - Renewal	**Planning Commission Date**		April 11, 2023	
Deadline for Action	**Application Date**	March 8, 2023	**60 Days**	May 7, 2023	
	Date Extension Letter Mailed	March 18, 2023	**120 Days**	July 6, 2023	
Location of Subject	2314 Hoover Street				
Applicant	Matt and Tara Anderson	**Contact**			
Agent		**Contact**			
Legal Description	Lot 4 and E ½ Lot 5				
Site Visit Date	March 29, 2023	**Sign Notice Date**		March 28, 2023	
Neighbor Letter Date	March 21, 2023	**Number of Letters Sent**		55	

Proposal
Applicant proposes to use their 2 bedroom home as a vacation dwelling unit. A vacation dwelling unit allows for periods of occupancy of 2 to 29 days, with a minimum stay of two consecutive nights. This is a renewal of permit PL 16-149.

Staff is recommending Planning Commission recommend approval.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	R-1	Single Family Residential	Traditional Residential
North	R-1	Single Family Residential	Traditional Residential
South	R-1	Single Family Residential	Traditional Residential
East	R-1	Single Family Residential	Traditional Residential
West	R-1	Single Family Residential	Traditional Residential

Summary of Code Requirements:

UDC Section 50-19.8. Permitted Use Table. A vacation dwelling unit is an Interim Use in the R-1 zone district.

UDC Section 50-20.3. Use-Specific Standards. Lists all standards specific to vacation dwelling units.

UDC Sec. 50-37.10.E . . . the commission shall only approve an interim use permit, or approve it with conditions, if it determines that: 1. A time limit is needed to protect the public health, safety and welfare from potential longer term impacts of the requested use in that location ….; 2. The applicant agrees to sign a development agreement with the city.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principle #8 - Encourage mix of activities, uses, and densities. A short-term rental allows property owners to generate income and provides a service for tourists.

Econ. Dev. Policy #3 - Build on Existing Economic Strengths & Competitive Advantages

Future Land Use: Traditional Neighborhood: Characterized by a grid or connected street pattern, houses orientated with shorter dimension to the street and detached garages, some with alleys. Limited commercial, schools, churches, and home-businesses. Parks and open space areas are scattered through or adjacent to the neighborhood. Includes many of Duluth's older neighborhoods, infill projects and neighborhood extensions, and new traditional neighborhood areas.

Current History: This is a renewal of a 2016 permit.

Review and Discussion Items:

1) The applicant's property is located at 2314 Hoover Street. The dwelling unit has 2 bedrooms which would allow for a maximum occupancy of 5 people.

2) One off-street parking space is required for this interim use permit. The site plan indicates 2 off-street parking spaces on the driveway in front of the garage.

3) There are no reported complaints of this property under its current interim use permit.

4) Permit holders must designate a managing agent or local contact who resides with 25 miles of the City and who has authority to act for the owner in responding 24 hours a day to complaints from neighbors or the City. Permit holder must provide the contact information for the managing agent or local contact to all property owners within 100 feet of the property boundary. The applicants have listed themselves to serve as the managing agent.

5) The site plan submitted indicates that there is existing screening from properties on the South lot line. There are no outdoor amenities indicated on the site plan.

6) A time limit on this Interim Use Permit ("IUP") is needed to minimize negative impacts to surrounding residential uses thereby causing damage to the public's health, safety and welfare. Section 50-20.3.U.7 states the IUP shall expire upon change in ownership of the property or in six years, whichever occurs first.

7) Applicant will need to apply for all relevant permits and licenses required of the Interim Use Permit for a Vacation Dwelling Unit.

8) Applicant must comply with Vacation Regulations (included with staff report), including providing information to guests on city rules (included with staff report as "Selected City Ordinances on Parking, Parks, Pets, and Noise").

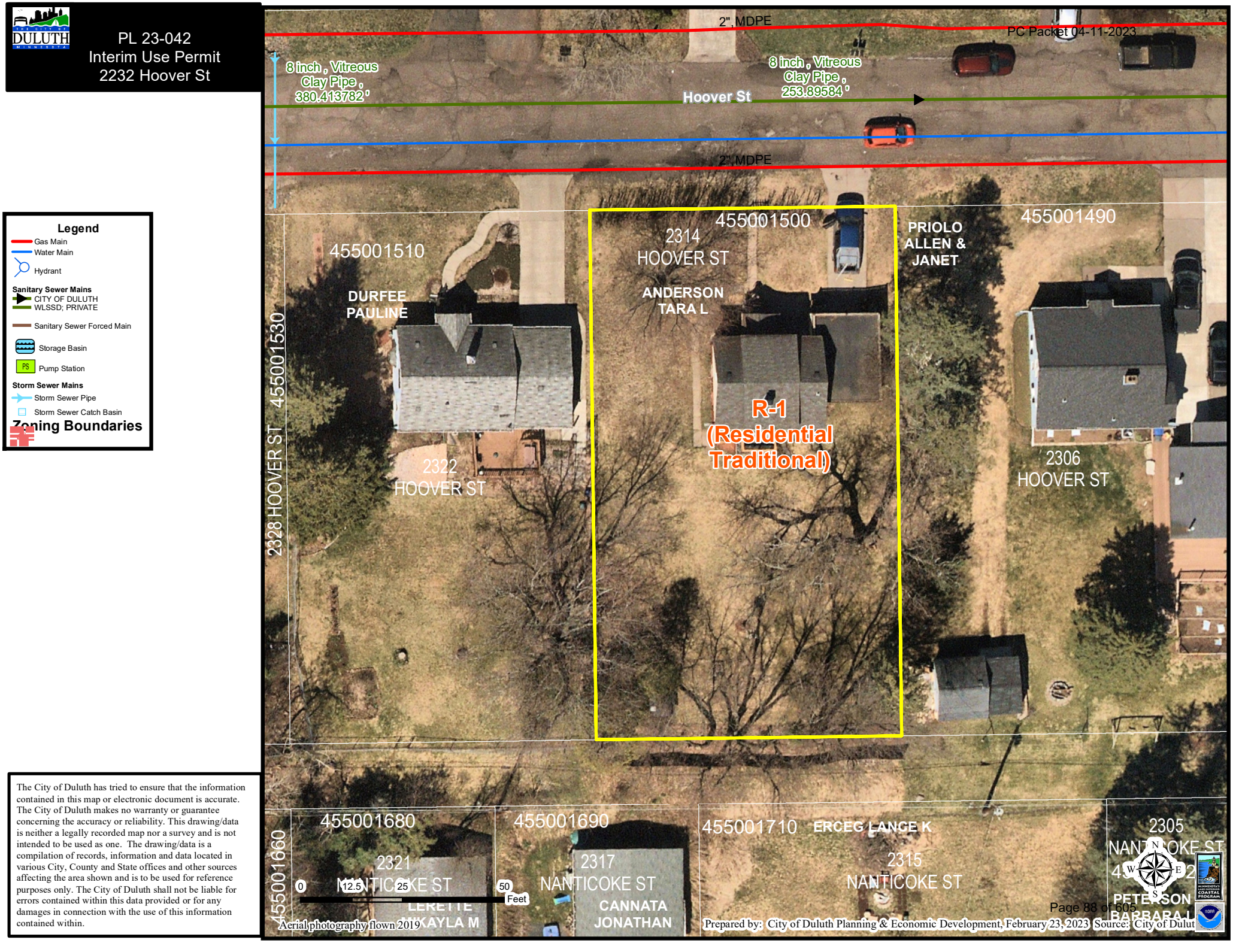
9) No public, City, or agency comments were received.

Staff Recommendation:

Based on the above findings, Staff recommends that Planning Commission approve the interim use permit subject to the following:

1) The permit shall lapse if no activity is taken within one year of approval.
2) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission; however, no such administration approval shall constitute a variance from the provisions of Chapter 50

PL 23-042
Interim Use Permit
2232 Hoover St



Legend

- Gas Main
- Water Main
- Hydrant

Sanitary Sewer Mains

- CITY OF DULUTH
- WLSSD; PRIVATE
- Sanitary Sewer Forced Main
- Storage Basin
- Pump Station

Storm Sewer Mains

- Storm Sewer Pipe
- Storm Sewer Catch Basin

Zoning Boundaries

Aerial photography flown 2019

Prepared by: City of Duluth Planning & Economic Development, February 23, 2023 Source: City of Dulut

DULUTH
MINNESOTA

Pre-App;
2314 Hoover St

Legend

Trout Stream (GPS)
Other Stream (GPS)

Zoning Boundaries
Zoning Boundaries

Water Distribution System
30 - 60" Water Pipe
16 - 24" Water Pipe
4 - 6" Water Pipe

Sanitary Sewer Collection System
Sanitary Sewer Collector
Sanitary Sewer Interceptor
Sanitary Sewer Forced Main
Storage Basin
PS Pump Station

Gas Distribution Main
8" - 16" Gas Pipes
4" - 6" Gas Pipes
0" - 4" Gas Pipes

Storm Sewer Collection System
Storm Sewer Pipe
Storm Sewer Catch Basin
Vacated ROW

Easement Type
Utility Easement
Other Easement

Hoover St

8'-6"
75'-4"
12' Tall hedges
Large Maple Tree
30'-1"
Additional paved single offstreet parking space
25'-10"
Single stall garage parking
31'-3"
Upper and lower decks
Numerous large spruce trees lining the property
2322 HOOVER ST
130'-4"
2314 HOOVER ST
37'-7"
2306 HOOVER ST
28" diameter full size maple
12' Tall Red Pine
76'-6"
77'-11"
76' Full height fence
4 large cedar trees
12'-10"
Large Spruce Tree
16'-5"
4 mature large spruce and 3 smaller fir trees lining the fence.
Storage Shed
76'
76' Full height fence.
2321
2317
0 10 20

- Receive an "Applicant Letter," which acknowledges a complete application, shares the date of the Planning Commission meeting and the assigned staff person, and notifies you of State-mandated deadlines for the City to make a decision, **OR**
- Receive notification that your application is incomplete, with details on further information to submit.

2. Public Notice. A mailed notice will be sent by the City to property owners within 350 feet.

☐ **You are required to post a sign notice** on the property at least two weeks before the date of the public hearing. See UDC Section 50-37.1.H for information on size, placement, and content of each sign; you may want to contact a sign company or printing company to have the sign made. You must provide evidence that the signs were in place; ***submit photo(s) of the signs to the Planning Division at least two weeks before the date of the public hearing.***

3. Staff Review. Planning staff will evaluate your application and prepare a staff report. When considering a recommendation for an interim use, Planning Staff generally review the Comprehensive Plan (including the Future Land Use Map, Governing Principles, and Policies), surrounding land uses and zoning, individual factors that are unique or special to the proposal, compliance with any approved district plan for the area, any additional UDC criteria, and other related factors.

- You will receive an email with the Planning Commission agenda and a link to this staff report about 5 days prior to the meeting.

4. Planning Commission Hearing. Planning Commission meetings are scheduled at 5:00 pm on the second Tuesday of each month. **We ask that applicants or an agent attend this meeting.**

The Planning Commission will hold a public hearing and make a recommendation to adopt, adopt with modifications, or deny the application.

5. City Council Decision. The Planning Commission recommendation will be forwarded to City Council in the form of a resolution. City Council will make a decision whether to approve the permit, approve it with modifications, or deny it.

The City Clerk's office will send notice of the Council action to the applicant.

6. Development Agreement. Interim Use Permits require a development agreement, to be finalized and signed after City Council approval. Staff will discuss the format and content of the development agreement with you. Alternatively, a development agreement can be done prior to submitting your application; let Planning staff know if you would prefer this.

Note that other City codes may apply to your project. Please be aware of any applicable Building Code (Construction Services Division), Fire Code (Life Safety Division), and stormwater/engineering (Engineering Division) regulations. The zoning approval may be only the first step in a several step process.

Vacation Dwelling Unit Worksheet

1. The minimum rental period shall be not less than two consecutive nights (does not apply to Form districts). **What will be your minimum rental period?** 2 **nights**

2. The total number of persons that may occupy the vacation dwelling unit is one person plus the number of bedrooms multiplied by two. You may rent no more than four bedrooms.

How many legal bedrooms are in the dwelling? 2

What will be your maximum occupancy? 5

3. Off-street parking shall be provided at the following rate:

a. 1-2 bedroom unit, 1 space

b. 3 bedroom unit, 2 spaces

c. 4+ bedroom unit, number of spaces equal to the number of bedrooms minus one.

d. Vacation dwelling units licensed on May 15, 2016, are entitled to continue operating under the former off-street parking requirement. The parking exemption for vacation dwelling units licensed on May 15, 2016, expires upon transfer of any ownership interest in the permitted property.

e. Form districts are not required to provide parking spaces.

How many off-street parking spaces will your unit provide? 2

4. Only one motorhome (or pickup-mounted camper) and/or one trailer either for inhabiting or for transporting recreational vehicles (ATVs, boat, personal watercraft, snowmobiles, etc.) may be parked at the site, on or off the street. **Will you allow motorhome or trailer parking? If so, where?** No

5. The property owner must provide required documents and adhere to additional requirements listed in the City of Duluth's UDC Application Manual related to the keeping of a guest record, designating and disclosing a local contact, property use rules, taxation, and interim use permit violations procedures.

6. The property owner must provide a site plan, drawn to scale, showing parking and driveways, all structures and outdoor recreational areas that guests will be allowed to use, including, but not limited to, deck/patio, barbeque grill, recreational fire, pool, hot tub, or sauna, and provide detail concerning the provision of any dense urban screen that may be required to buffer these areas from adjoining properties. Please note that this must be on 8 x 11 size paper.

7. The interim use permit shall expire upon change in ownership of the property or in six years, whichever occurs first. An owner of a vacation dwelling unit permitted prior to May 15, 2016, may request, and the land use supervisor may grant, an application for adjustment of an existing permit to conform to this section, as amended, for the remainder of the permit term.

8. Permit holder must keep a guest record including the name, address, phone number, and vehicle (and trailer) license plate information for all guests and must provide a report to the City upon 48 hours' notice. **Please explain how and where you will**

keep your guest record (log book, excel spreadsheet, etc):
Xcel spreadsheet

9. Permit holder must designate a managing agent or local contact who resides within 25 miles of the City and who has authority to act for the owner in responding 24-hours-a-day to any complaints from neighbors or the City. The permit holder must notify the Land Use Supervisor within 10 days of a change in the managing agent or local contact's contact information.

Please provide the name and contact information for your local contact:
Matt Anderson Cell: 612-490-6472

10. Permit holder must disclose in writing to their guests the following rules and regulations:

a. The managing agent or local contact's name, address, and phone number;

b. The maximum number of guests allowed at the property;

c. The maximum number of vehicles, recreational vehicles, and trailers allowed at the property and where they are to be parked;

d. Property rules related to use of exterior features of the property, such as decks, patios, grills, recreational fires, pools, hot tubs, saunas and other outdoor recreational facilities;

e. Applicable sections of City ordinances governing noise, parks, parking and pets;

Please state where and how this information will be provided to your guests:
In the lease agreement

11. Permit holder must post their permit number on all print, poster or web advertisements. **Do you agree to include the permit number on all advertisements?** Yes

12. Prior to rental, permit holder must provide the name, address, and phone number for the managing agent or local contact to all property owners within 100' of the property boundary; submit a copy of this letter to the Planning and Community Development office. In addition, note that permit holder must notify neighboring properties within 10 days of a change in the managing agent or local contact's contact information.

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-045		**Contact**	John Kelley, jkelley@duluthmn.gov	
Type	Interim Use Permit– Vacation Dwelling Unit - Renewal		**Planning Commission Date**		April 11, 2023
Deadline for Action	**Application Date**		March 7, 2023	**60 Days**	May 6, 2023
	Date Extension Letter Mailed		March 17, 2023	**120 Days**	July 5, 2023
Location of Subject	829 South Lake Avenue				
Applicant	Nikki Olson		**Contact**		
Agent			**Contact**		
Legal Description	010-4380-02260				
Site Visit Date	March 31, 2023		**Sign Notice Date**		March 28, 2023
Neighbor Letter Date	March 28, 2023		**Number of Letters Sent**		33

Proposal
Applicant is proposing a renewal interim use permit (original application was PL 17-041) for a vacation dwelling unit. The permit would allow for a 2-bedroom house with a maximum of 5 occupants.

Staff is recommending Planning Commission approve with conditions.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	R-1	Residential	Traditional Neighborhood
North	R-1	Residential	Traditional Neighborhood
South	R-1	Residential	Traditional Neighborhood
East	R-1	Residential	Traditional Neighborhood
West	R-1	Residential	Traditional Neighborhood

Summary of Code Requirements:

UDC Section 50-19.8. Permitted Use Table. A vacation dwelling unit is an Interim Use in the R-1 zone district.

UDC Section 50-20.3. Use-Specific Standards. Lists all standards specific to vacation dwelling units.

UDC Sec. 50-37.10.E . . . the commission shall only approve an interim use permit, or approve it with conditions, if it determines that: 1. A time limit is needed to protect the public health, safety and welfare from potential longer term impacts of the requested use in that location ….; 2. The applicant agrees to sign a development agreement with the city.

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principle #8 - Encourage mix of activities, uses, and densities. A short-term rental allows property owners to generate income and provides a service for tourists.

Econ. Dev. Policy #3 - Build on Existing Economic Strengths & Competitive Advantages
S9: Encourage expansion of the city's tourism economy through efforts to expand in areas of current activity, such as in Canal Park, but also through marketing and investment in destination neighborhoods and iconic tourism experiences unique to Duluth. The proposed IUP in this location will enhance the level of activity in the downtown, and increase opportunities for additional commerce.

Future Land Use – Traditional Neighborhood: Characterized by grid or connected street pattern, houses oriented with shorter dimension to the street and detached garages, some with alleys. Limited commercial, schools, churches, and home businesses. Parks and open space areas are scattered through or adjacent to the neighborhood. Includes many of Duluth's older neighborhoods, infill projects, neighborhood extensions, and new traditional neighborhood areas.

Current History: The subject property, 829 South Lake Avenue, had an approved interim use permit in 2017, which expires in 2023.

Review and Discussion Items:

1) Applicant's property is located at 829 South Lake Avenue. The proposed vacation dwelling unit contains 2 bedrooms, which would allow for a maximum of 5 guests.
2) Applicant is proposing a renewal interim use permit (original application was PL 17-041) for a vacation dwelling unit. The property is under the same ownership and there are no changes to the occupancy number and no exterior amenities have been added. The site plan depicts a 6-foot-tall privacy fence along the north rear property line.
3) The property owner to the south of the applicant's lot have provided a letter waiving the requirement for a dense urban screen.
4) The applicant is proposing 2 off-street parking spaces provided in front of the existing garage in the driveway located on the south side of the house with access from South Lake Avenue.
5) Permit holders must designate a managing agent or local contact who resides with 25 miles of the City and who has authority to act for the owner in responding 24 hours a day to complaints from neighbors or the City. Permit holder must provide the contact information for the managing agent or local contact to all property owners within 100 feet of the property boundary. The applicant has listed themselves to serve as the managing agent.
6) A time limit on this Interim Use Permit ("IUP") is needed to minimize negative impacts to surrounding residential uses thereby causing damage to the public's health, safety and welfare. Section 50-20.3.U.7 states the IUP shall expire upon change in ownership of the property or in six years, whichever occurs first.
7) Applicant will apply for all relevant permits and licenses and these are contingent upon approval of the Interim Use Permit for a Vacation Dwelling Unit.
8) Applicant must comply with Vacation Regulations (included with staff report), including providing information to guests on city rules (included with staff report as "Selected City Ordinances on Parking, Parks, Pets, and Noise").
9) No public, agency, or other City comments were received.

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

Staff Recommendation:

Based on the above findings, Staff recommends that Planning Commission recommend approval subject to the following:

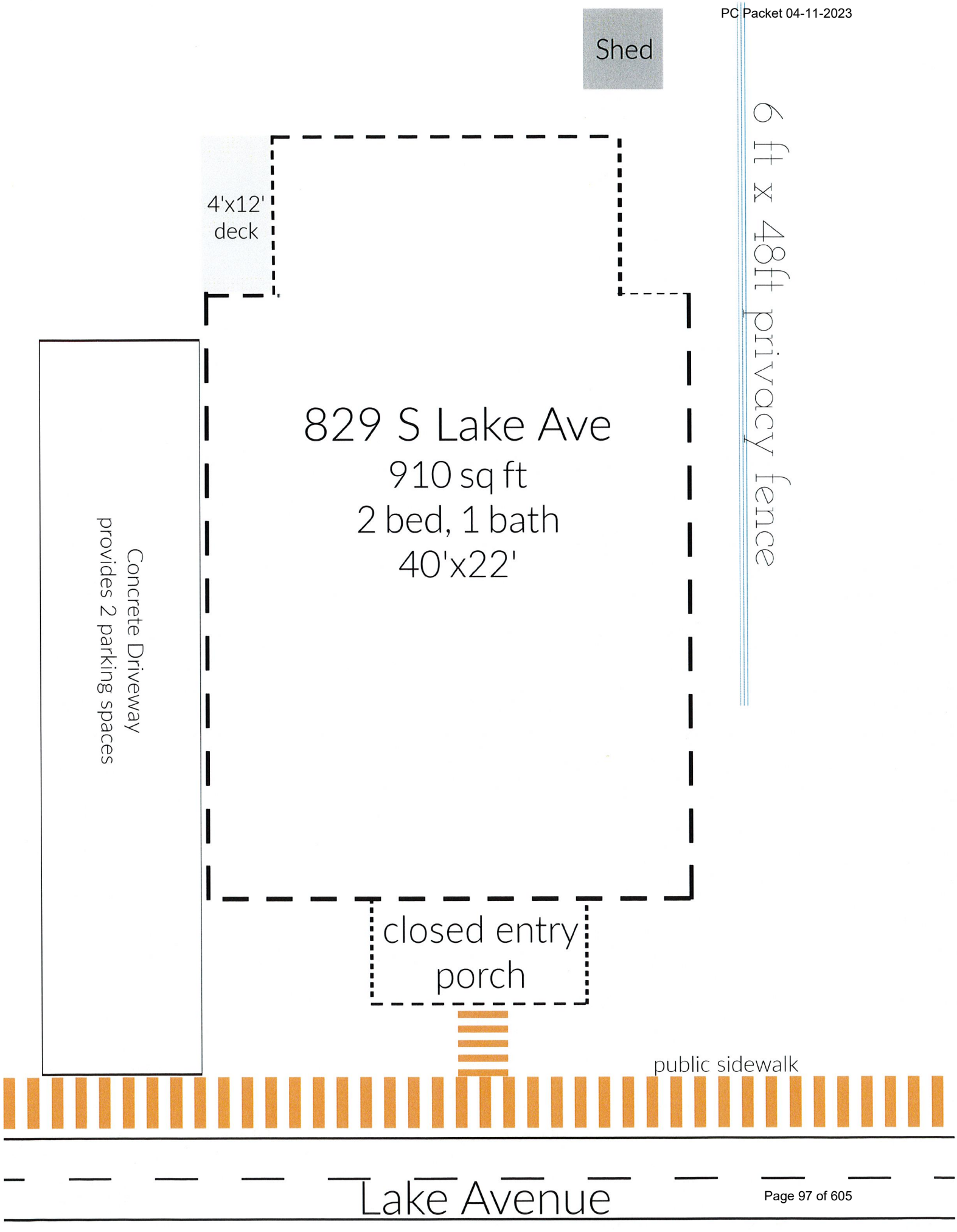
1) The applicant shall adhere to the terms and conditions listed in the Interim Use Permit.
2) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission; however, no such administration approval shall constitute a variance from the provisions of Chapter 50

PL 23-045
Interim Use Permit
Site Map

Legend
Zoning Boundaries

Aerial photography flown 2016

Prepared by: City of Duluth Community Planning Division, May 3, 2019. Source: City of Duluth.


Shed
6 ft x 48ft privacy fence
4'x12'
deck
829 S Lake Ave
910 sq ft
2 bed, 1 bath
40'x22'
Concrete Driveway
provides 2 parking spaces
closed entry
porch
public sidewalk
Lake Avenue

March 5, 2023

I am pursuing a renewal for my short-term vacation rental, 829 S Lake Ave. Duluth, MN 55802.

This letter is to acknowledge that we are not interested in a large barrier, privacy fencing or shrubs, between our properties. We have a positive relationship and work together to take care of the property. We openly communicate about the short-term vacation rental and any problems that may arise.

Leigh and Deborah Schwartz,

831 S Lake Avenue

Duluth, MN 55802

Nikki Olson,

829 S Lake Avenue

Duluth, MN 55802

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-048	**Contact**	John Kelley, jkelley@duluthmn.gov	
Type	Interim Use Permit– Vacation Dwelling Unit-Renewal	**Planning Commission Date**		April 11, 2023
Deadline for Action	**Application Date**	March 9, 2023	**60 Days**	May 8, 2023
	Date Extension Letter Mailed	March 17, 2023	**120 Days**	July 7, 2023
Location of Subject	1137 North 6th Avenue East			
Applicant	Jacob Shaw	**Contact**		
Agent	Adam McCauley	**Contact**		
Legal Description	010-0470-01650			
Site Visit Date	March 30, 2023	**Sign Notice Date**		March 28, 2023
Neighbor Letter Date	March 21, 2023	**Number of Letters Sent**		46

Proposal
Applicant is proposing a renewal interim use permit (original application was PL 17-037) for a vacation dwelling unit. The permit would allow for a 3-bedroom house with a maximum of 7 occupants.

Staff is recommending Planning Commission approve with conditions.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	R-1	Residential	Traditional Neighborhood
North	R-1	Residential	Traditional Neighborhood
South	R-1	Residential	Traditional Neighborhood
East	R-1	Residential	Traditional Neighborhood
West	R-1	Vacant land	Traditional Neighborhood

Summary of Code Requirements:

UDC Section 50-19.8. Permitted Use Table. A vacation dwelling unit is an Interim Use in the R-1 zone district.

UDC Section 50-20.3. Use-Specific Standards. Lists all standards specific to vacation dwelling units.

UDC Sec. 50-37.10.E . . . the commission shall only approve an interim use permit, or approve it with conditions, if it determines that: 1. A time limit is needed to protect the public health, safety and welfare from potential longer term impacts of the requested use in that location ….; 2. The applicant agrees to sign a development agreement with the city.

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principle #8 - Encourage mix of activities, uses, and densities. A short-term rental allows property owners to generate income and provides a service for tourists.

Econ. Dev. Policy #3 - Build on Existing Economic Strengths & Competitive Advantages
S9: Encourage expansion of the city's tourism economy through efforts to expand in areas of current activity, such as in Canal Park, but also through marketing and investment in destination neighborhoods and iconic tourism experiences unique to Duluth. The proposed IUP in this location will enhance the level of activity in the downtown, and increase opportunities for additional commerce.

Future Land Use – Traditional Neighborhood: Characterized by grid or connected street pattern, houses oriented with shorter dimension to the street and detached garages, some with alleys. Limited commercial, schools, churches, and home businesses. Parks and open space areas are scattered through or adjacent to the neighborhood. Includes many of Duluth's older neighborhoods, infill projects, neighborhood extensions, and new traditional neighborhood areas.

Current History: The subject property, 1137 North 6th Avenue East, had an approved interim use permit in 2017, which expires in 2023. There are no known reports of violations to the permit.

Review and Discussion Items:

1) Applicant's property is located at 1137 North 6th Avenue East. The proposed vacation dwelling unit contains 3 bedrooms, which would allow for a maximum of 7 guests.
2) Applicant is proposing a renewal interim use permit (original application was PL 17-037) for a vacation dwelling unit. The property is under the same ownership and there are no changes to the occupancy number and no exterior amenities have been added. The site plan shows a patio in the rear yard area on the northwest corner of the dwelling. There is existing screening/buffering consisting of leafy shrubs along the southern side yard lot line. Aerial photography also identifies vegetation along the south side lot line. The applicant has received a letter from the adjacent property to the north waiving the dense urban screening requirement along the northern side yard.
3) The applicant is proposing 2 off-street parking spaces provided as one space in the tuck under garage and one space in the driveway with access from North 6th Avenue East.
4) Permit holders must designate a managing agent or local contact who resides with 25 miles of the City and who has authority to act for the owner in responding 24 hours a day to complaints from neighbors or the City. Permit holder must provide the contact information for the managing agent or local contact to all property owners within 100 feet of the property boundary. The applicant has listed themselves to serve as the managing agent.
5) A time limit on this Interim Use Permit ("IUP") is needed to minimize negative impacts to surrounding residential uses thereby causing damage to the public's health, safety and welfare. Section 50-20.3.U.7 states the IUP shall expire upon change in ownership of the property or in six years, whichever occurs first.
6) Applicant will apply for all relevant permits and licenses and these are contingent upon approval of the Interim Use Permit for a Vacation Dwelling Unit.
7) Applicant must comply with Vacation Regulations (included with staff report), including providing information to guests on city rules (included with staff report as "Selected City Ordinances on Parking, Parks, Pets, and Noise").
8) No public, City, or agency comments were received.

THE CITY OF DULUTH MINNESOTA

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

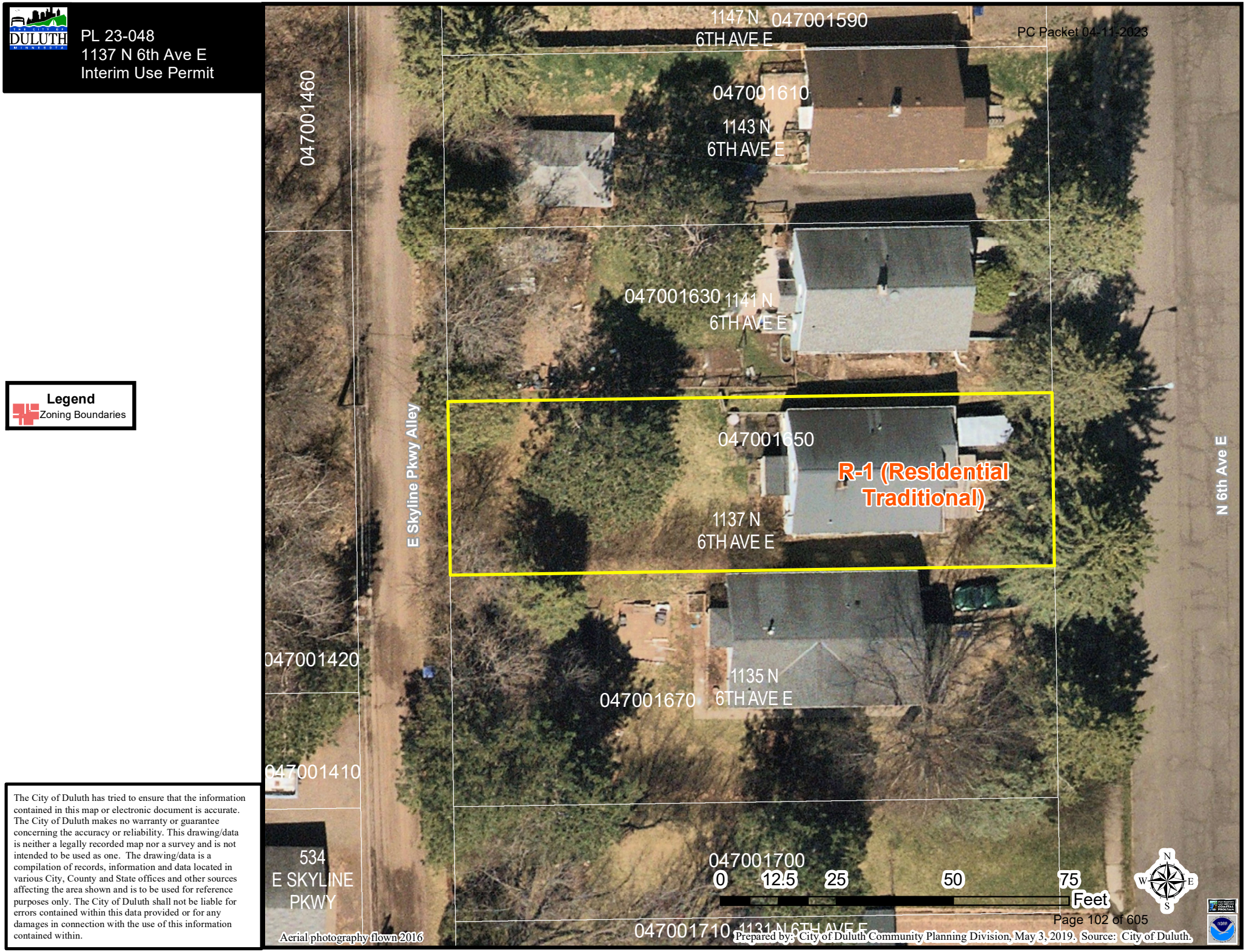
218-730-5580
planning@duluthmn.gov

Staff Recommendation:

Based on the above findings, Staff recommends that Planning Commission recommend approval subject to the following:

1) The applicant shall adhere to the terms and conditions listed in the Interim Use Permit.
2) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission; however, no such administration approval shall constitute a variance from the provisions of Chapter 50

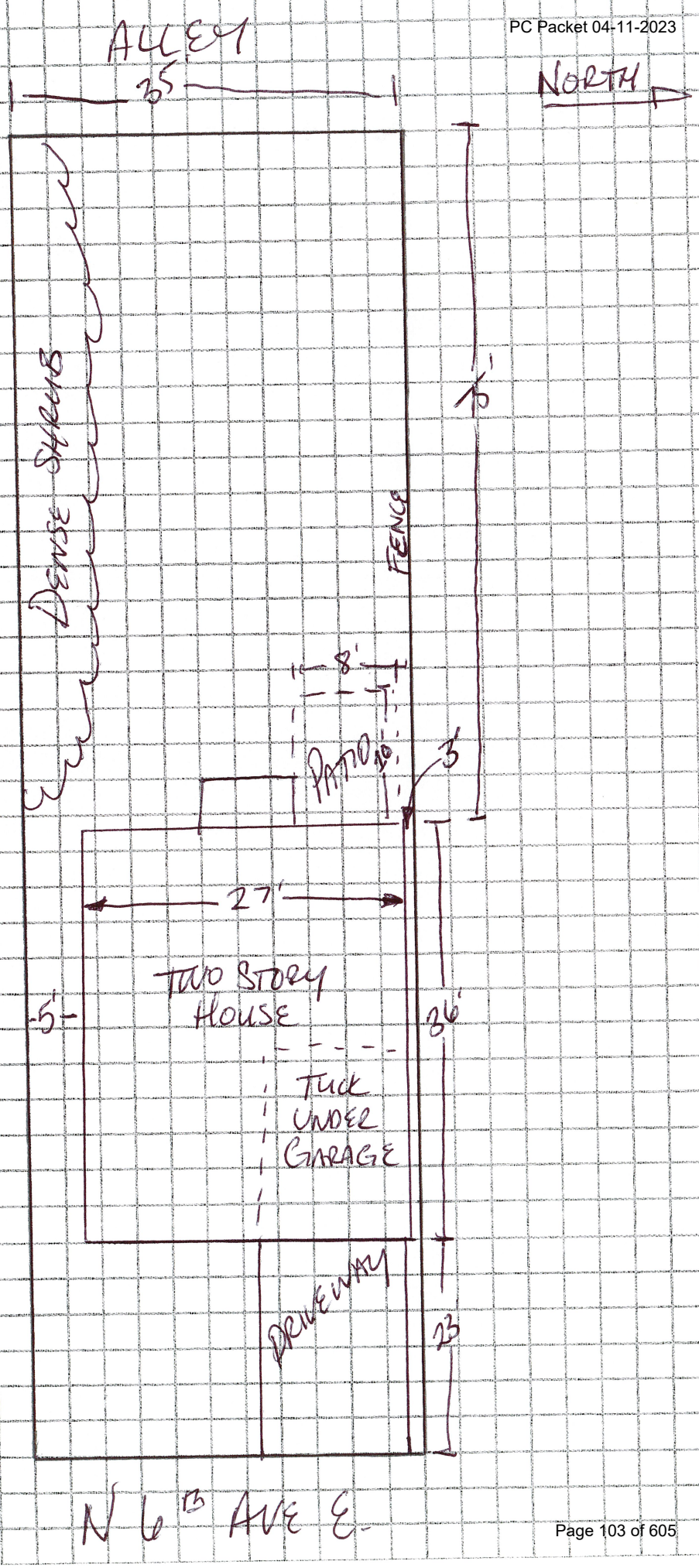
PL 23-048
1137 N 6th Ave E
Interim Use Permit



Legend
Zoning Boundaries

Aerial photography flown 2016

Prepared by: City of Duluth Community Planning Division, May 3, 2019. Source: City of Duluth.



3/2/2023

I do not require a dense urban screen between my property (1141 N 6th Ave E) and 1137 N 6th Ave E.

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-051	**Contact**	Kyle Deming	
Type	Vacation of Drainage and Utility Easement	**Planning Commission Date**		April 11, 2023
Deadline for Action	Application Date	March 9, 2023	**60 Days**	N/A
	Date Extension Letter Mailed	N/A	**120 Days**	N/A
Location of Subject	South side of Grand Avenue near Bessemer Street (Riverside)			
Applicant	River West Vacation Homes, LLC	**Contact**	Brad Johnson	
Agent		**Contact**		
Legal Description	Part of Lot 2, Block 1, Kayak Bay Plat (see attached Exhibit A)			
Site Visit Date	March 31, 2023	**Sign Notice Date**		March 28, 2023
Neighbor Letter Date	March 23, 2023	**Number of Letters Sent**		8

Proposal: Vacation of part of a drainage and utility easement in preparation for site development.

Staff Recommendation
Approval of the vacation, with conditions.

	Current Zoning	*Existing Land Use*	*Future Land Use Map Designation*
Subject	MU-P Mixed Use-Planned	Vacant	Neighborhood Commercial
North	P-1 Park	Vacant	Neighborhood Commercial
South	R-P	Munger Trail	Open Space
East	MU-P Mixed Use-Planned	Vacant	Neighborhood Commercial
West	MU-P Mixed Use-Planned	Creek	Open Space

Summary of Code Requirements
Vacation of public rights of way and/or easements require a Planning Commission public hearing with a Recommendation to City Council. City Council action is to approve or deny by resolution. Resolutions approving either a full or partial vacation require a 6/9's vote of the council.

UCD Sec. 50-37.6.C – The Planning Commission shall review the proposed vacation, and Council shall approve the proposed vacation, or approve it with modifications, if it determines that the street, highway, or easement proposed for vacation:

1. Is not and will not be needed for the safe and efficient circulation of automobiles, trucks, bicycles, or pedestrians or the efficient supply of utilities or public services in the city;
2. Is not otherwise needed to promote the public health, safety, or welfare of the citizens of Duluth.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principles and Policies:

The following Imagine Duluth 2035 Governing Principles should be considered when reviewing the request:

- Governing Principle #7 – Create and maintain connectivity. The proposed vacation will reduce options for future public utility connectivity overall, but as site development details are now clearer, this easement will not be needed for public utilities.
- Governing Principle #8 – Encourage a mix of activities, uses, and densities. Vacation will facilitate site development consistent with the MU-P regulating plan with the vision for creating a mixed-use neighborhood.
- Governing Principle #9 – Support private actions that contribute to the public realm. Vacation will allow for the site development consistent with the MU-P regulating plan.

Future Land Use

- Neighborhood Commercial: Small- to moderate-scale commercial, serving primarily the adjacent neighborhood(s). May include specialty retail; community-gathering businesses such as coffee shops or lower intensity entertainment; offices.

Zoning

- Mixed Use-Planned: Provides a flexible development option for mixed use projects that integrate creative site design, provide a variety of building types, provide unique on-site amenities, conserve natural features, increase pedestrian connectivity, or otherwise result in a final product that provides a greater level of public benefit than would be required under the existing zone district. Each MU-P district requires approval of an MU-P regulating plan that includes the location, type, and intensity of proposed development and a description of public amenities or benefits included.

History:

- February 13, 2017, City Council approval of UDC Map Amendment to MU-P (PL 16-105) for Kayak Bay Village.
- March 14, 2017, Planning Commission approval of Preliminary Plat (PL 17-028).
- July 10, 2018, Planning Commission approval of Final Plat (PL 18-078).
- September 15, 2022, Land Use Supervisor approval of regulating plan amendment affecting Lot 2, Block 1, Kayak Bay.

Review and Discussion Items

Staff finds:

1. The proposal is to vacate the existing drainage and utility easement to facilitate development of Lot 2, Block 1, Kayak Bay. The original purpose for the drainage and utility easement was for the placement of a storm water basin to serve development on Lot 2, Block 1, Kayak Bay and to preserve a small wetland.
2. The original concept for development of Lot 2 was a single building and parking outside the easement area with a storm water basin in the eastern portion of the "L" and a small wetland to be preserved in the western portion of the "L" (see "Wetland Impacts Exhibit" within the attached Regulating Plan). Revised plans (attached) show the eastern part of the easement area as parking and private utilities and the western part as a storm water basin.
3. The revised plan's storm water basin will impact a small isolated wetland (estimated 1,300 sq. ft.), which will require mitigation by filing of an amended wetland replacement plan and purchasing wetland credits before construction.
4. A general development stream, 84th Ave. W. Creek, flows approximately 25 feet west of the easement area and has a 50-foot-wide naturally-vegetative buffer along it. There is a wetland at the bottom of the creek ravine as well as a floodplain area that are located in the "jog" in the western boundary of the vacation area in order that these features may continue to be preserved.
5. City storm water engineer Tom Johnson commented, "The stormwater management requirements for the River West Development will be accomplished via privately owned stormwater management facilities that do not need to be in an easement. The facilities will need to be designed and constructed to City requirements and will be reviewed and approved. The drainage easement vacations will keep in place an easement over wetlands to be protected and for a drainage way that is mapped for FEMA Floodplain."
6. The drainage and utility easement is not needed for its original purpose as the private storm water basin does not need to be located in a public drainage and utility easement. The portion of the easement remaining will still protect the wetland and drainage way in the 84th Ave. W. Creek ravine. The approximately 1,300 sq. ft. isolated wetland will be mitigated by purchase of wetland credits.
7. Separate from the drainage and utility easement that is subject to this vacation application there exists along the

southerly property boundary of Lot 2, Block 1, Kayak Bay, a 20-foot-wide utility easement recorded on Torrens Doc. No. 1003989. A gas main and a power line are currently installed within that easement and it is not the intention of this vacation action to extinguish that easement. Staff is working with City attorney and property staff on clarifying this for the Council resolution.

8. Separate from the drainage and utility easement that is the subject of this vacation application there exists at the northwest corner of Lot 2, Block 1, Kayak Bay, a 35-foot by 60-foot utility easement in favor of the State of MN. There are no City-maintained utilities located within that easement and it is not the intention of this vacation action to extinguish that easement. Staff is working with City attorney and property staff on clarifying this for the Council resolution.
9. MN Power commented on the need to maintain their power line located within the easement recorded on the Torrens document in #7 above. No other comments have been received on the proposed vacation.
10. Vacations of rights of way and easements lapse unless the vacation is recorded with the county recorder within 90 days after final approval. The vacation recording is facilitated by the City of Duluth.

Staff Recommendation:

Based on the above findings, staff recommends that Planning Commission recommend to City Council approval of the easement vacation, as petitioned, with the following condition:

1. The Council approve the vacation with at least a 6/9's vote.
2. Applicant must present a vacation exhibit meeting the City Engineer's requirements within 90 days of Planning Commission's recommendation or the application will be denied.
3. The vacation must be recorded within 90 days of final approval by City Council, or such approval will lapse.

PL 23-051
Easement Vacation
Riverwest Vacation Homes, LLC

Area Map

Legend

- Zoning Boundaries

Streams

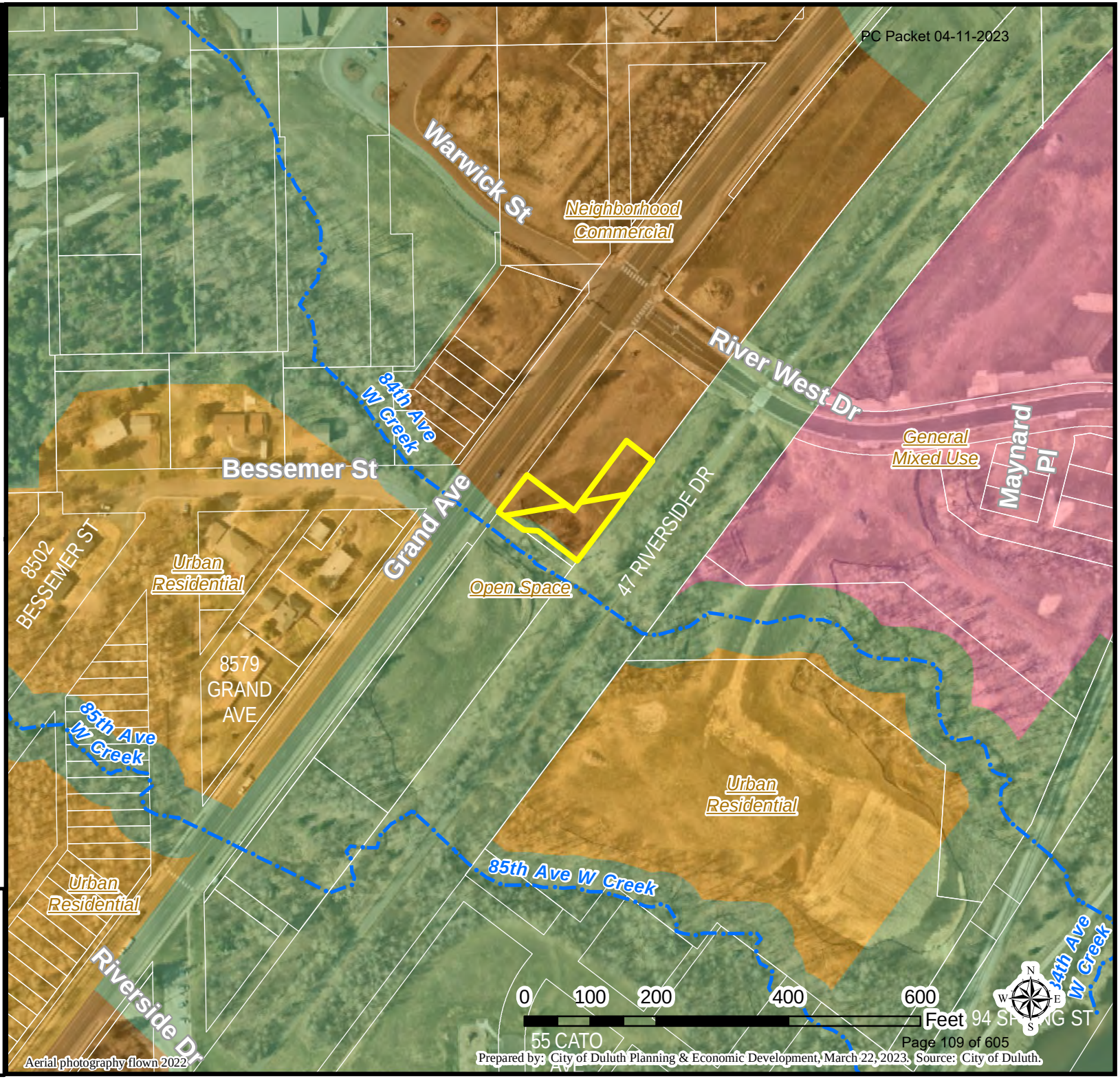
- Other Stream (GPS)

Trails

- Bike/Hike
- Hiking
- Multi-Use - Paved
- XC
- Multi-Purpose Snowmobile
- Subdivision Boundaries

PL 23-051
Easement Vacation
Riverwest Vacation Homes, LLC

Future Land Use Map



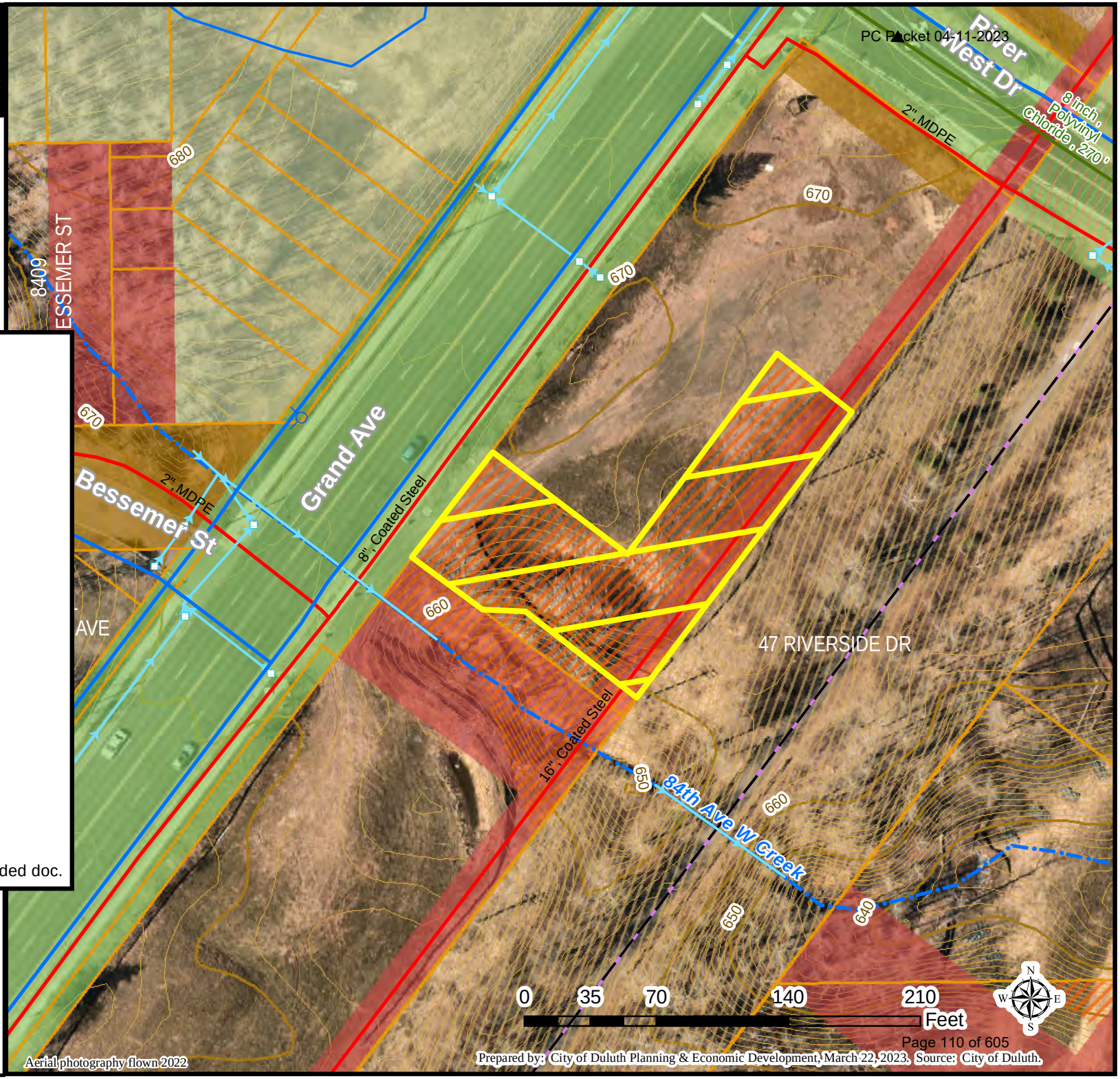
Legend

Streams
- Other Stream (GPS)

Future Land Use
- Open Space
- Urban Residential
- Neighborhood Commercial
- General Mixed Use

PL 23-051
Easement Vacation
Riverwest Vacation Homes, LLC

Site Map



Legend

Streams
- Other Stream (GPS)

Parcels

Trails
- XC
- Multi-Purpose Snowmobile

Distribution Main
- Water Main
- Hydrant
- Gas Main

Sanitary Sewer Mains
- City of Duluth

Storm Sewer Mains
- Storm Sewer Pipe
- Storm Sewer Catch Basin

Elevation
- 1 Ft contour
- 10 Ft contour
- Undefined ROW Status

ROW Status
- Utility, Active
- Railroad, Active
- Road, Active - currently in use
- Road, Vacated - vacated
- Conservation, Vacated - via recorded doc.

KAYAK BAY

being a portion of IRONTON FIRST DIVISION and GOVERNMENT LOT 1
Section 23, Township 49 North, Range 15 West of the 4th Principal Meridian
City of Duluth, St. Louis County, Minnesota

CURVE TABLE				
CURVE	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING
C1	1389.92	3°50'51"	93.34	S25°32'55"W
C2	1389.92	7°09'12"	173.53	S31°02'57"W
C3	1339.92	13°51'58"	324.27	N29°12'38"E
C4	267.00	37°19'33"	173.94	S80°37'32"E
C5	332.99	31°45'04"	184.53	S83°24'47"E
C6	267.00	27°57'20"	130.27	N85°18'39"W
C7	332.99	39°07'35"	227.40	N79°43'32"W
C8	1434.92	2°23'08"	59.75	S34°33'52"W
C9	1434.92	2°39'43"	66.67	S37°05'18"W
C10	1434.92	2°32'40"	63.73	S39°41'29"W
C11	1429.92	3°08'47"	78.52	S42°32'17"W
C12	5654.65	4°25'33"	436.80	N39°32'25"E
C13	5654.65	2°01'35"	200.00	N42°49'11"E
C14	5804.65	6°05'06"	616.48	S40°22'11"W
C15	5944.65	6°21'55"	660.42	N40°30'36"E
C16	5994.65	6°41'00"	699.25	N40°40'08"E

City of Duluth
Slopes or Retaining Walls & Fills
Easements

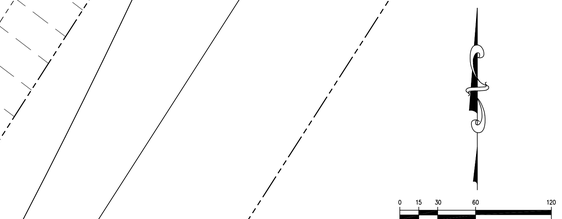
Slopes or Retaining Walls & Fills Easement within 50 feet of centerline Grand Aveue, a.k.a. Trunk Highway Number 23 (T.H. 23), are within the limits of an easement for highway purposes running in favor of the State of Minnesota pursuant to Documents No. 154863 (Torrens) and 611688 (Abstract). In addition, these easements are subject to right of access to the State of Minnesota for T.H. 23 as contained in Document No. 172934 (Torrens).

¥ *Slopes & Fills Easement Doc No. 158334*

£ *Slopes & Fills Easement Doc No. 158335*

Proposed Vacation

BESSEMER STREET
MATCHLINE A
GRAND AVENUE (T.H. 23)
IRONTON
FIRST DIVISION
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
BLOCK 6
LOT 1
LOT 2
OUTLOT A
OUTLOT B
ALLEY
DRAINAGE AND UTILITY EASEMENT
DRAINAGE EASEMENT Doc No. 970316
HUNGER TRAIL
(f.k.a. DULUTH SHORT LINE RAILWAY COMPANY)
SELLWOOD
INDUSTRIAL
FURNACE
UNNAMED STREET
DALLAS STREET
MANITOU STREET
OATO AVENUE
RIVERSIDE
PENTON BOULEVARD
UNION AVENUE
CENTERLINE VACATED INDUSTRIAL AVENUE
SOUTHEAST CORNER OF THE SW1/4 OF THE NE1/4
TRAIL ACCESS EASEMENT DOCUMENT No. 352865
UTILITY EASEMENT DOCUMENT No. 01278596
Vacated Document No. XXXXXXX
EXTENEDED
NORTHERN PACIFIC RAILWAY COMPANY
(f.k.a. ST. PAUL and DULUTH RAILROAD COMPANY)



(SCALE IN FEET)

Basis of Bearing is Grid North, St. Louis County Transverse Mercator NAD 83 (1996) Coordinate System.

LEGEND

- PLAT BOUNDARY LINE
- PLAT BLOCK LINE
- PLAT LOT LINE
- PLATTED BLOCK LINE
- PLATTED LOT LINE
- SECTION LINE
- QUARTER SECTION LINE
- SIXTEENTH SECTION LINE
- ROAD RIGHT-OF-WAY LINE
- RAILROAD RIGHT-OF-WAY LINE
- EXISTING EASEMENT LINE
- DRAINAGE EASEMENT (THIS PLAT)
- 5/8" x 30" REBAR WITH ALUMINUM CAP INSCRIBED "MINNESOTA PLS 44075", SET THIS SURVEY
- COMPUTED POSITION, NO MONUMENT FOUND OR SET
- FOUND SQUARE IRON ROD
- FOUND P.K. NAIL
- FOUND REBAR
- FOUND STONE MONUMENT
- FOUND IRON PIPE
- DELINEATED WET LAND
- (R) RECORD DISTANCE
- (f.k.a.) FORMALLY KNOWN AS
- C1 SEE CURVE TABLE FOR INFORMATION

LHB
PERFORMANCE DRIVEN DESIGN.
LHBcorp.com
21 W. Superior St., Ste. 500 | Duluth, MN 55802 | 218.727.8446

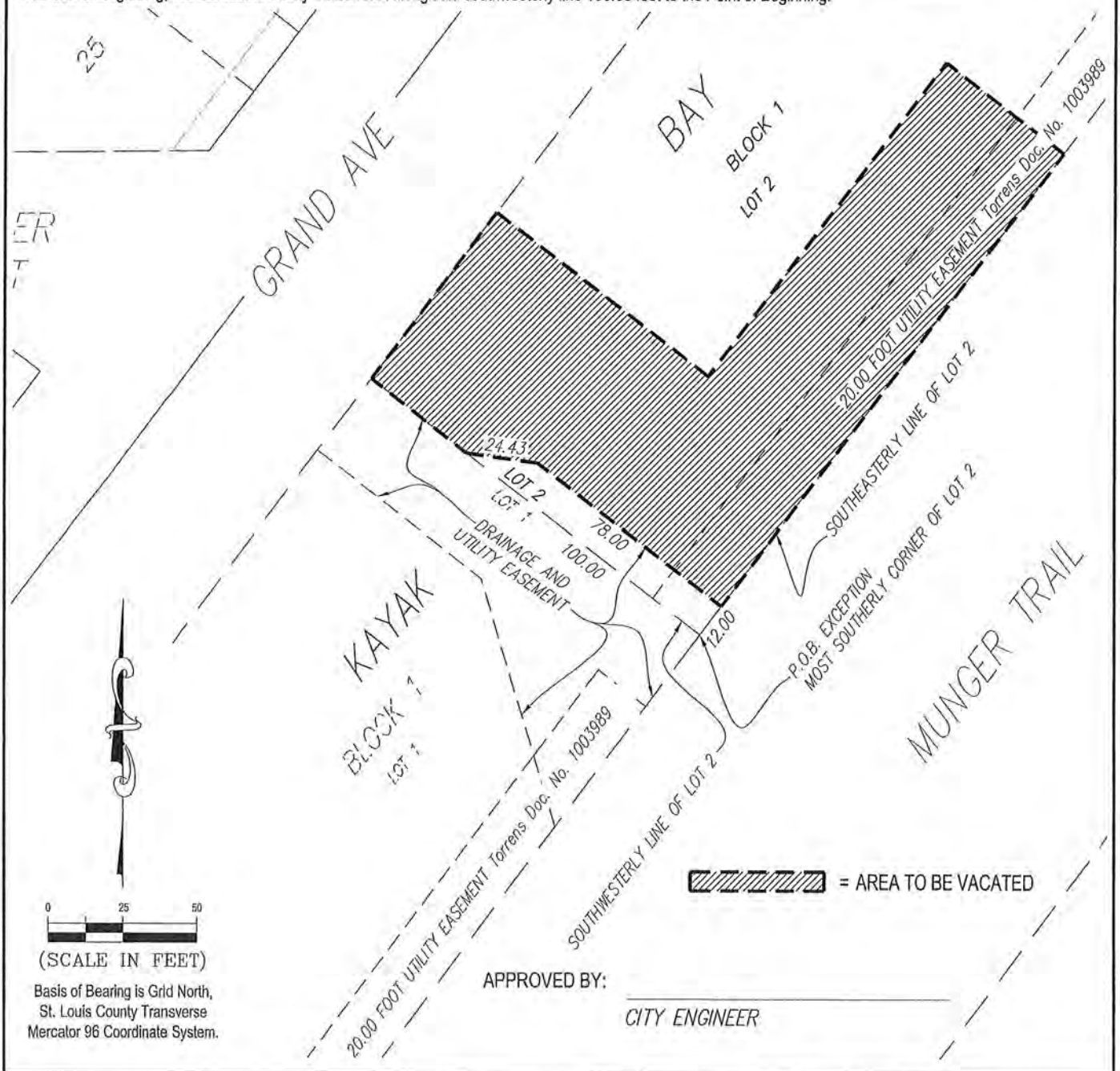
EXHIBIT B

VACATION EXHIBIT

VACATION DESCRIPTION:

All of a Drainage and Utility Easement per plat of KAYAK BAY, Saint Louis County, Minnesota, affecting Lot Two (2), Block One (1), said KAYAK BAY except that part described as follows:

Beginning at the most southerly corner of said Lot 2; thence northeasterly along the southeasterly line of said Lot 2, a distance of 12.00 feet; thence northwesterly parallel with the southwesterly line of said Lot 2, a distance of 78.00 feet; thence 24.43 feet westerly to said southwesterly line distant 100.00 feet from the Point of Beginning; thence southeasterly 100.00 feet along said southwesterly line 100.00 feet to the Point of Beginning.



Basis of Bearing is Grid North, St. Louis County Transverse Mercator 96 Coordinate System.

APPROVED BY: _____

CITY ENGINEER

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Print Name: Paul A. Vogel License # 44075

Signature: _____ Date: 3/06/2023

DATE PREPARED: 3/06/23
PROJ NO: 221375
FILE: 220857_Parti
SHEET 1 of 1 SHEETS

LHB
PERFORMANCE DRIVEN DESIGN.
LHBcorp.com
21 W. Superior St., Ste. 500 | Duluth, MN 55802 | 218.727.8446

FILE: ..\220857\500 Drawings\Survey\220857_Partial Utility and Drng Vacation.dwg

EXHIBIT A

.
VACATION DESCRIPTION:

All of a Drainage and Utility Easement per plat of KAYAK BAY, Saint Louis County, Minnesota, affecting Lot Two (2), Block One (1), said KAYAK BAY except that part described as follows:
Beginning at the most southerly corner of said Lot 2; thence northeasterly along the southeasterly line of said Lot 2, a distance of 12.00 feet; thence northwesterly parallel with the southwesterly line of said Lot 2, a distance of 78.00 feet; thence 24.43 feet westerly to said southwesterly line distant 100.00 feet from the Point of Beginning; thence southeasterly 100.00 feet along said southwesterly line 100.00 feet to the Point of Beginning.

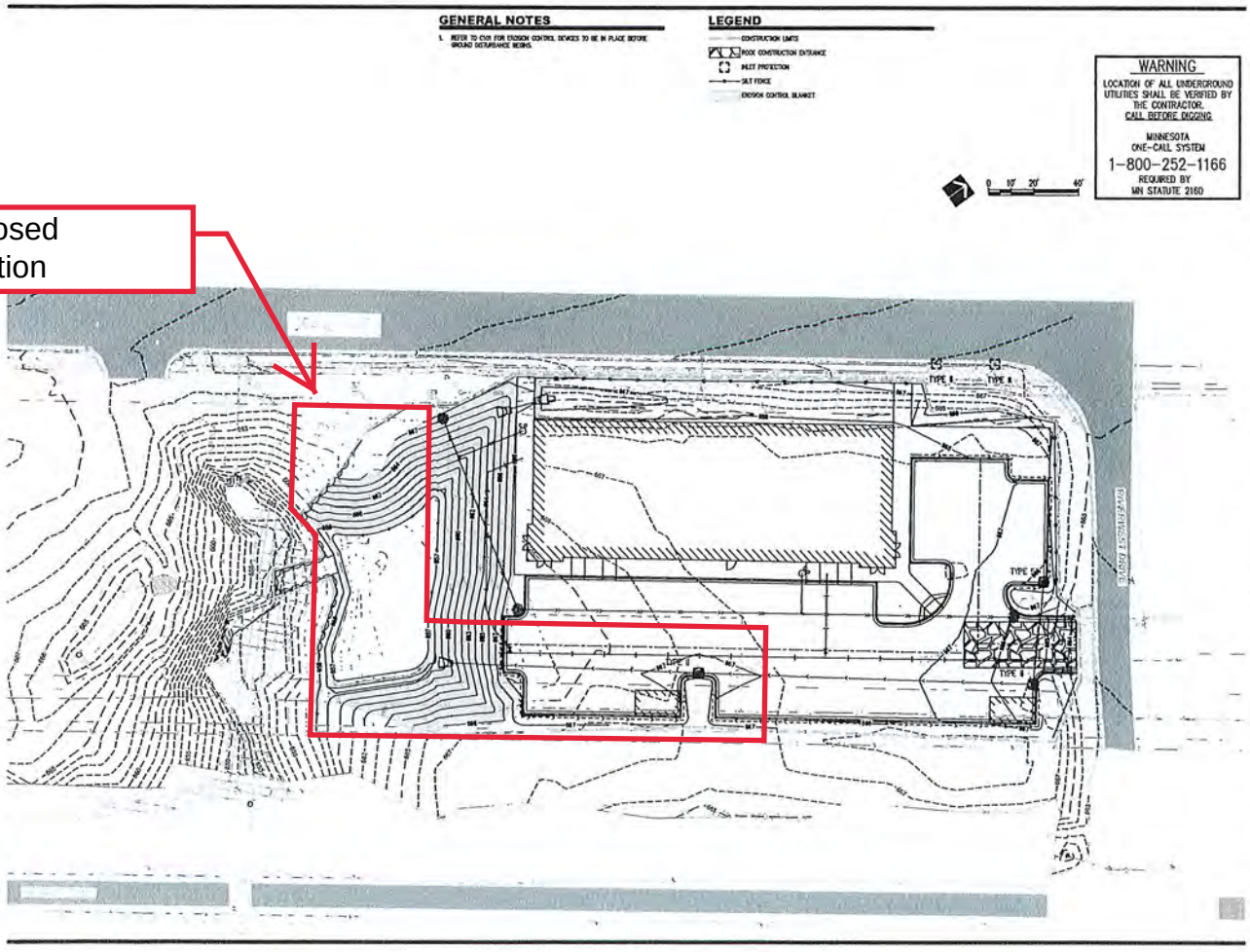
I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Paul A. Vogel

Signed_____

Date_____03/06/2023_____ License No. 44075

Revised Development Plan for Lot 2



River West

Retail
Preliminary Only

Duluth, MN 55802
Feb. 10, 2023

Site Plan

True North

Working North

RIVERWEST

JAY P. NELSON
ARCHITECT
AIA, LEED AP, NCARB, CID
7601 WAYZATA BOULEVARD,
SUITE 250
ST. LOUIS PARK, MN. 55426

RIVERWEST DEVELOPMENT
MU-P REGULATING PLAN

On Grand Avenue Corridor
Duluth, MN

City of Duluth, MN
Planning Department Submittal
August 31, 2022

This plan has been reviewed and approved by the City of Duluth Land Use Supervisor.	
Land Use Supervisor Signature	Date 9/15/22

Prepared for:
Spirit Valley Land Company LLC

LHB Project:150444

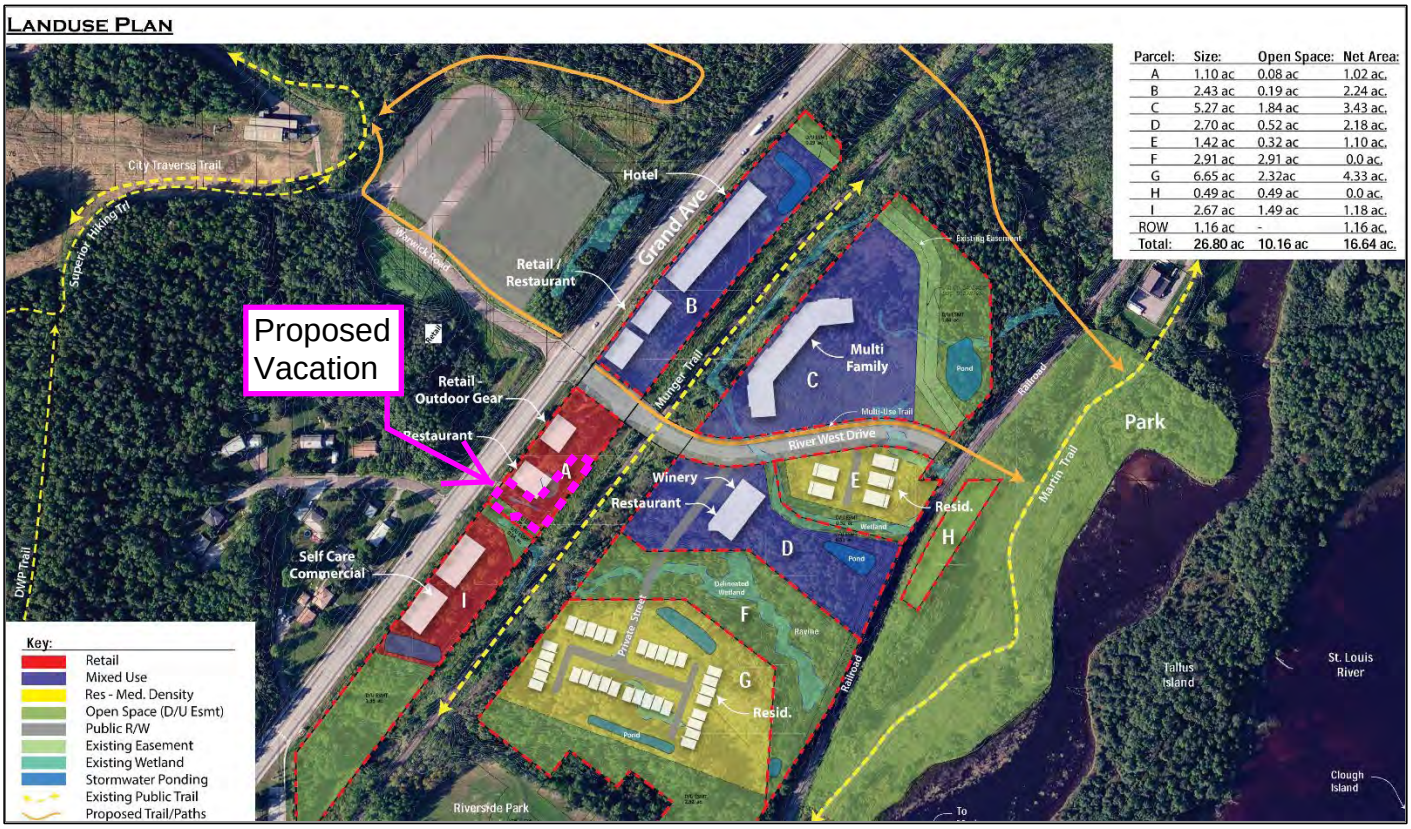
LHB
PERFORMANCE DRIVEN DESIGN.

LHB Inc.
21 West Superior Street
Suite 500
Duluth, MN 55802

A. Development Land Use Plan

Below is a master plan illustrating the general layout of development areas and building parcels in relation to the natural features to remain, the proposed road and trails circulation systems, and proposed land use for each parcel. All regulation and code related items are included in the following pages.

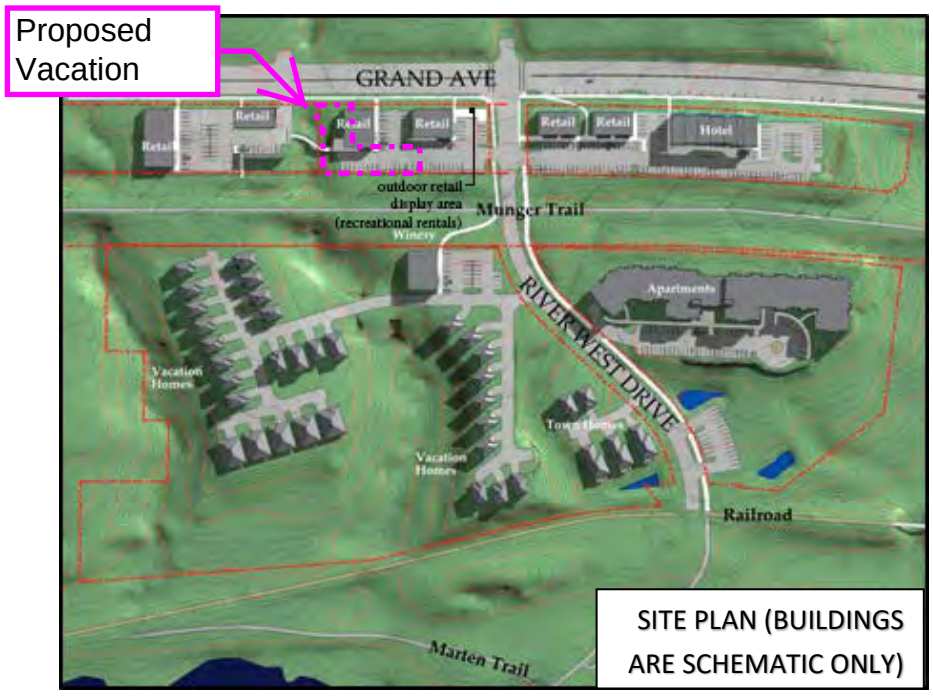
Please note, if any code-related item is not specifically called out in the following pages, it is assumed that the code-related item will comply with the City of Duluth's UDC. All signage and site lighting will comply with the UDC standards. All landscaping, including parking lot landscaping, will also be in accordance with UDC standards.



A1. Potential Site Plan Layout

Below are two site plan layouts illustrating the most recent potential development scheme. Each lot will need to go through a detailed site plan review so what is illustrated below is preliminary and subject to change.

Please note, the two access points into the development off of Grand Avenue shown below were already installed by MnDOT in 2021 as part of the Trunk Highway 23 roadway improvements project. Building placements are for schematic purposes only and will change during site plan review. Outdoor retail display area for recreational rentals, such as bikes and kayaks, are illustrated below for potential outdoor adventure retailer.



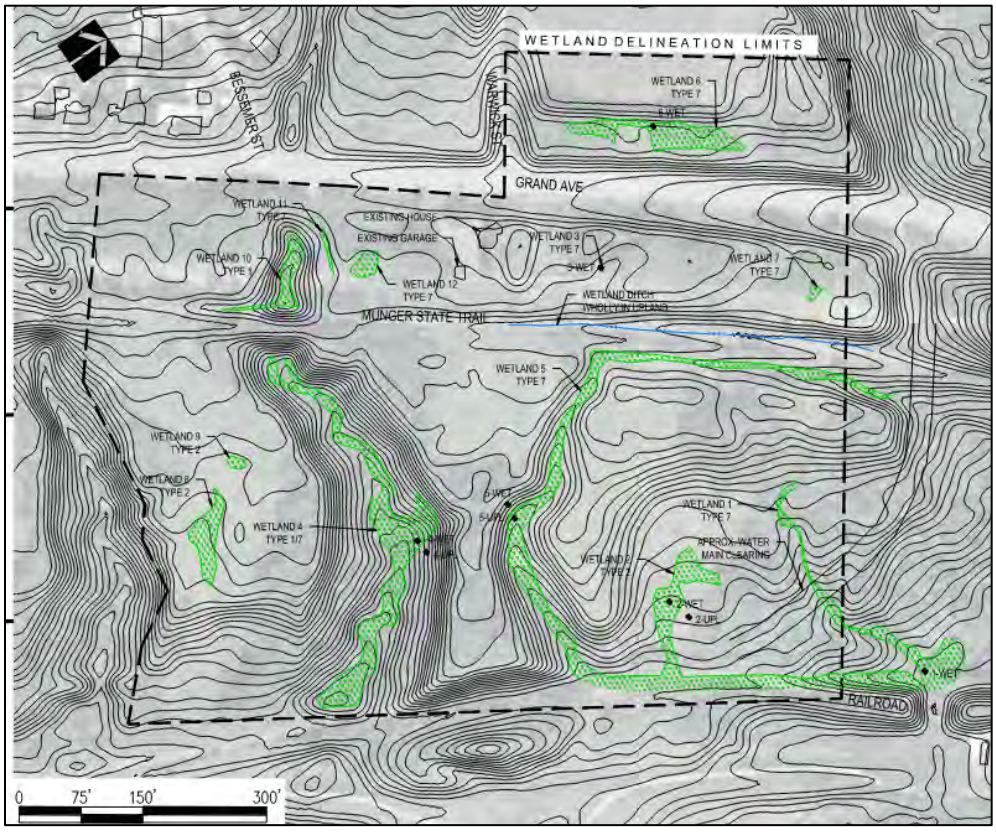
F. **Natural Resources Inventory**

Prior to a conceptual plan being created, a wetland delineation and comprehensive tree survey were conducted to mark natural resources within the site. With that information in hand, the overall concept plan was designed with sustainability in mind, as most wetlands have been avoided to the best extent possible and the preservation of mature vegetation and natural drainage ways have also been taken into consideration. The placement of future buildings have been sited to minimize earth-moving activities and take advantage of certain viewsheds to the river, as well as climatic conditions such as western exposures for daylighting and solar heat gain.

Approximately 16.64 acres (or 62%) of the MU-P property are planned for mixed-use development out of the total 26.80 acres of land. The balance of the site, which is approximately 10.16 acres (or 38%) will remain in its natural condition and/or will be designated as open green space, and consists of mature wooded vegetation and wetlands on varied topography. The majority of the ravines and naturally occurring wetlands will be undisturbed, allowing the diverse landscape to continue to act as a rich ecological feature benefiting local wildlife, and the surrounding environment.

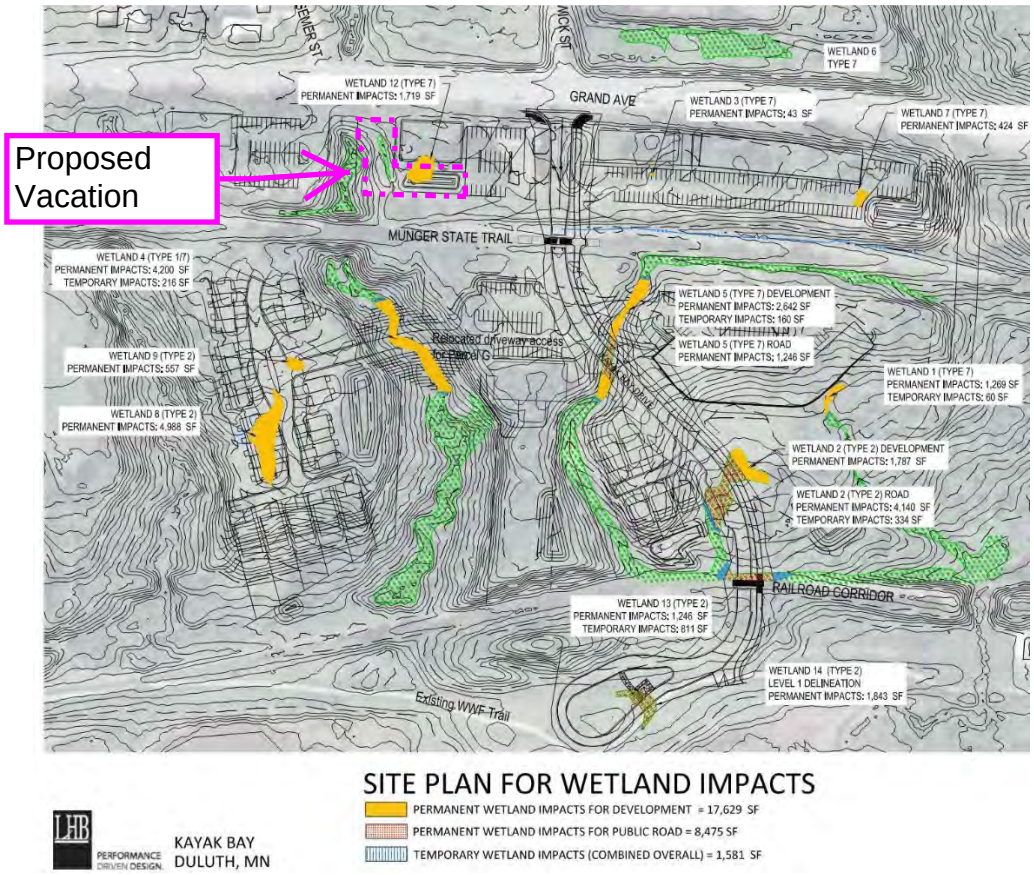
Below is a wetland delineation exhibit showing the natural drainage ways that drain from Grand Avenue towards the St. Louis River. The majority of these wetlands and drainage ways will be preserved in the RiverWest development project as evidenced on the Wetland Impacts Exhibit on the following page.

WETLAND DELINEATION EXHIBIT



Original Development Concept

WETLAND IMPACTS EXHIBIT



As part of the project requirements, the development must contract with a certified professional to perform post road/grading site inspection to verify that wetland impacts and tree preservations were done in accordance with the proposed plans. In accordance with these requirements, the public road that was already installed by the City, was built per plan and field inspected by MSA Professional Services, Inc, and the mass grading and utility work that occurred as part of the site preparation was done per plan and inspected by LHB during the 2021 construction season.

G. **Common Open Space**

The RiverWest MU-P Regulating Plan strives to maximize the natural beauty and ecological features of the site while also providing new public amenities to the St. Louis River Corridor community and nearby neighborhoods. Public access will be allowed but will be limited to access via trail and/or the public road. The areas shown in green on the concept plan are considered common open space and total 38% of the total land area (this only includes areas outside of the right-of-ways). Protection and maintenance of the open spaces will be the responsibility of the private landowners.

Lot A (1.10 ac) = Total common open space is **.08 acres (or 7%)**

Lot B (2.43 ac) = Total common open space is **.19 acres (or 7.8%)**

Lot C (5.27 ac) = Total common open space is **1.84 acres (or 35%)**

Lot D (2.70 ac) = Total common open space is **.52 acres (or 19%)**

Lot E (1.42 ac) = Total common open space is **.32 acres (or 23%)**

Lot F (2.91 ac) = Total common open space is **2.91 acres (or 100%)**

includes stormwater pond for adjacent parcels D &G

Lot G (6.65 ac) = Total common open space is **2.32 acres (or 35%)**

Lot H (0.49 ac) = Total common open space is **.49 acres (or 100%)**

includes storage /parking/temporary service areas

Lot I (2.67 ac) = Total common open space is **1.49 acres (or 56%)**

H. **Permitted and Special Uses**

Below is a list of permitted uses within the MU-P by Parcel:

Parcels A & I (Retail/Commercial)

- Dwelling: townhouse, multi-family, live-work, single-family
- Bank
- Office
- Medical or Dental Clinic
- Lodging (Hotel or Motel)
- Restaurant (less than 5,000 sf with or without drive-thru)
- Restaurant (5,000 sf or more with or without drive-thru)
- Retail store less than 10,000 sf
- Filling Station (with or without convenience store)
- Garden Material Sales
- Personal Services or Repair, large more than 10,000 sf
- Personal Services or Repair, small less than 10,000 sf
- Event Center
- Preschool
- Parking Lot
- Personal Care

Parcels B, C, & D (Mixed-Use)

- Dwelling: townhouse, multi-family, live-work, single-family
- Bank
- Office
- Medical or Dental Clinic
- Lodging (Hotel or Motel)
- Vacation Dwelling Community*
- Restaurant (less than 5,000 sf with or without drive-thru)
- Restaurant (5,000 sf or more with or without drive-thru)
- Retail store less than 10,000 sf
- Filling Station (with or without convenience store)
- Garden Material Sales
- Winery/Brewery
- Personal Services or Repair, large more than 10,000 sf
- Personal Services or Repair, small less than 10,000 sf
- Event Center
- Preschool
- Parking Lot
- Personal Care

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-052	**Contact**	Kyle Deming	
Type	Vacation of Drainage and Utility Easement	**Planning Commission Date**		April 11, 2023
Deadline for Action	Application Date	March 9, 2023	**60 Days**	N/A
	Date Extension Letter Mailed	N/A	**120 Days**	N/A
Location of Subject	Southwest of River West Dr. northwest of the railroad (Riverside)			
Applicant	River West Vacation Homes, LLC	**Contact**	Brad Johnson	
Agent		**Contact**		
Legal Description	Part of Lot 1, Block 4, Kayak Bay Plat (see attached Exhibit A)			
Site Visit Date	March 31, 2023	**Sign Notice Date**	March 28, 2023	
Neighbor Letter Date	March 23, 2023	**Number of Letters Sent**	5	

Proposal: Vacation of part of a drainage and utility easement in preparation for site development.

Staff Recommendation
Approval of the vacation, with conditions.

	Current Zoning	***Existing Land Use***	***Future Land Use Map Designation***
Subject	MU-P Mixed Use-Planned	Vacant	General Mixed Use
North	MU-P Mixed Use-Planned	Vacant	General Mixed Use
South	MU-P Mixed Use-Planned	Vacant	General Mixed Use
East	MU-P Mixed Use-Planned	Railroad	Open Space
West	MU-P Mixed Use-Planned	Vacant	General Mixed Use

Summary of Code Requirements
Vacation of public rights of way and/or easements require a Planning Commission public hearing with a Recommendation to City Council. City Council action is to approve or deny by resolution. Resolutions approving either a full or partial vacation require a 6/9's vote of the council.

UCD Sec. 50-37.6.C – The Planning Commission shall review the proposed vacation, and Council shall approve the proposed vacation, or approve it with modifications, if it determines that the street, highway, or easement proposed for vacation:

1. Is not and will not be needed for the safe and efficient circulation of automobiles, trucks, bicycles, or pedestrians or the efficient supply of utilities or public services in the city;
2. Is not otherwise needed to promote the public health, safety, or welfare of the citizens of Duluth.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principles and Policies:

The following Imagine Duluth 2035 Governing Principles should be considered when reviewing the request:

- Governing Principle #7 – Create and maintain connectivity. The proposed vacation will reduce options for future public utility connectivity overall, but as site development details are now clearer, this easement will not be needed for public utilities.
- Governing Principle #8 – Encourage a mix of activities, uses, and densities. Vacation will facilitate site development consistent with the MU-P regulating plan with the vision for creating a mixed-use neighborhood.
- Governing Principle #9 – Support private actions that contribute to the public realm. Vacation will allow for the site development consistent with the MU-P regulating plan.

Future Land Use

- General Mixed Use - The broadest mix of uses, including light industrial, office, commercial, and residential use, with performance standards to ensure compatibility. Includes areas that are in transition from industrial uses and large redevelopments that require master plans and phased development.

Zoning

- Mixed Use-Planned: Provides a flexible development option for mixed use projects that integrate creative site design, provide a variety of building types, provide unique on-site amenities, conserve natural features, increase pedestrian connectivity, or otherwise result in a final product that provides a greater level of public benefit than would be required under the existing zone district. Each MU-P district requires approval of an MU-P regulating plan that includes the location, type, and intensity of proposed development and a description of public amenities or benefits included.

History:

- February 13, 2017, City Council approval of UDC Map Amendment to MU-P (PL 16-105) for Kayak Bay Village.
- March 14, 2017, Planning Commission approval of Preliminary Plat (PL 17-028).
- July 10, 2018, Planning Commission approval of Final Plat (PL 18-078).
- September 15, 2022, Land Use Supervisor approval of regulating plan amendment affecting Lot 2, Block 1, Kayak Bay.

Review and Discussion Items

Staff finds:

1. The proposal is to vacate the existing drainage and utility easement to facilitate development of Lot 1, Block 4, Kayak Bay. The original purpose for the drainage and utility easement was for the placement of a storm water basin to serve development on Lot 1, Block 4, Kayak Bay.
2. The original concept for development of Lot 1 was a single building and parking outside the easement area with a storm water basin in the southeast portion of the lot (see "Wetland Impacts Exhibit" within the attached Regulating Plan). The Revised Development Plan (see "Common Interest Community Number 159" drawing attached) shows development of 14 townhomes throughout the site with a smaller storm water basin in the southeast corner.
3. The revised plan retains the portion of the drainage and utility easement over the wetlands in the bottom of the ravine and uses retaining walls to hold back a proposed private driveway accessing some of the townhomes. The ravine conveys water, but is not an officially mapped stream, shoreland or floodplain.
4. City storm water engineer Tom Johnson commented, "The stormwater management requirements for the River West Development will be accomplished via privately owned stormwater management facilities that do not need to be in an easement. The facilities will need to be designed and constructed to City requirements and will be reviewed and approved. The drainage easement vacation will keep in place an easement over wetlands to be protected and for a drainage way . . . ."
5. The drainage and utility easement is not needed for its original purpose as the private storm water basin does not need to be located in a public drainage and utility easement. The portion of the easement remaining will still protect the wetland and drainage way in the ravine.
6. No other comments have been received on the proposed vacation.
7. Vacations of rights of way and easements lapse unless the vacation is recorded with the county recorder within 90 days after final approval. The vacation recording is facilitated by the City of Duluth.

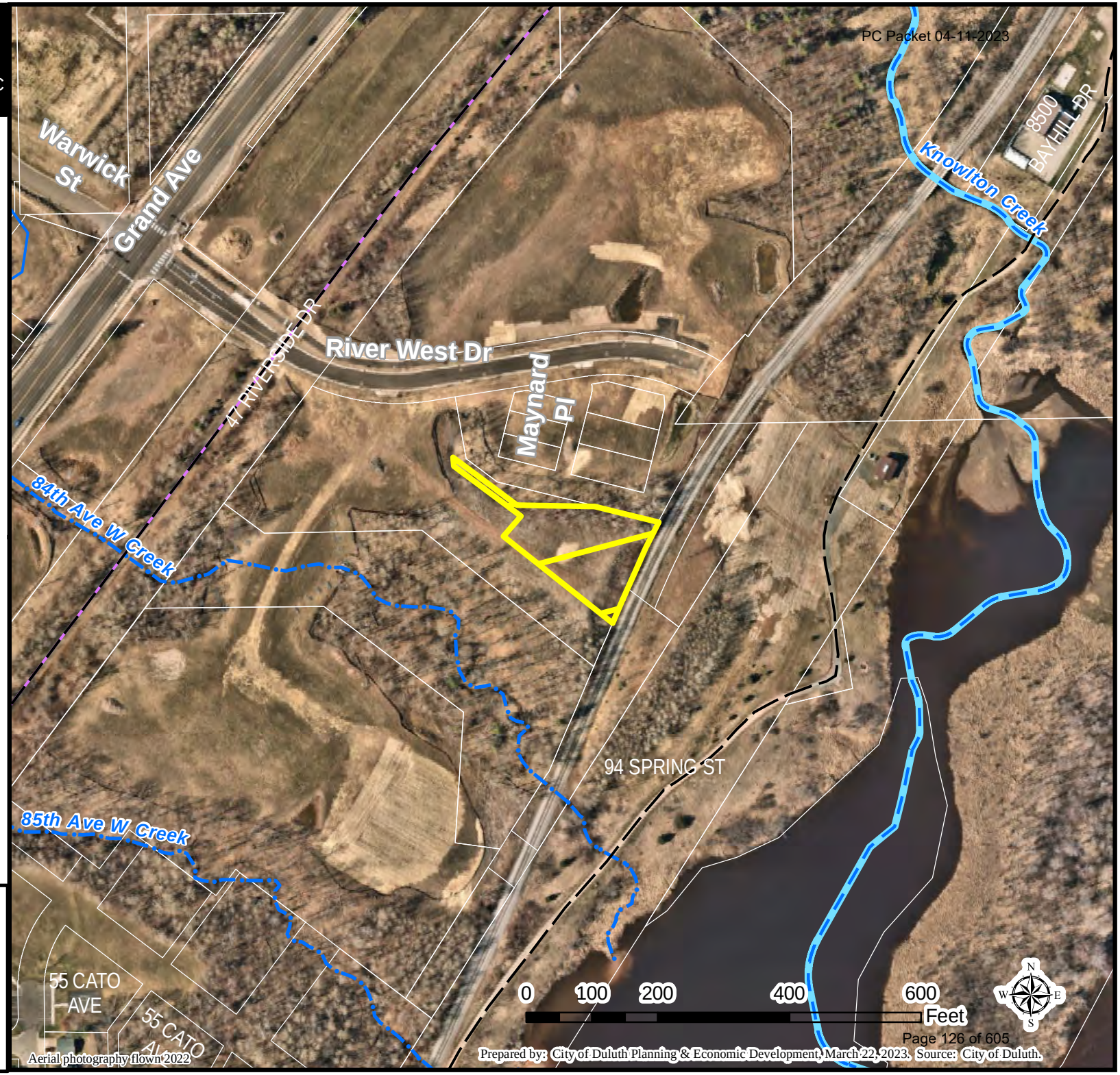
Staff Recommendation:

Based on the above findings, staff recommends that Planning Commission recommend to City Council approval of the petitioned easement vacation, as petitioned, with the following condition:

1. The Council approve the vacation with at least a 6/9’s vote.
2. Applicant must present a vacation exhibit meeting the City Engineer's requirements within 90 days of Planning Commission's recommendation or the application will be denied.
3. The vacation must be recorded within 90 days of final approval by City Council, or such approval will lapse.

PL 23-052
Easement Vacation
Riverwest Vacation Homes, LLC

Area Map



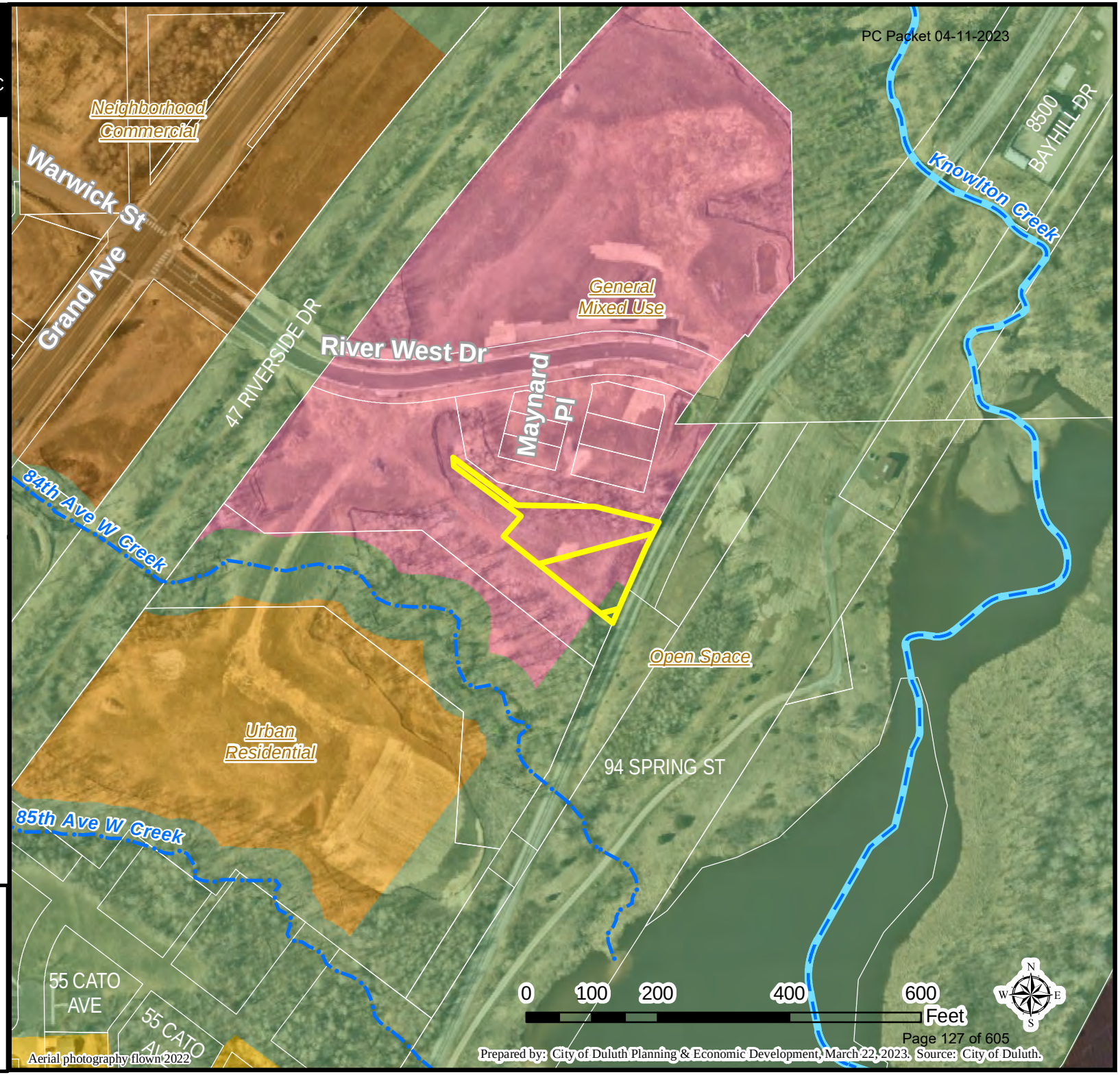
Legend

Streams
- Trout Stream (GPS)
- Other Stream (GPS)

Trails
- Multi-Use - Paved
- XC
- Multi-Purpose Snowmobile

PL 23-052
Easement Vacation
Riverwest Vacation Homes, LLC

Future Land Use Map



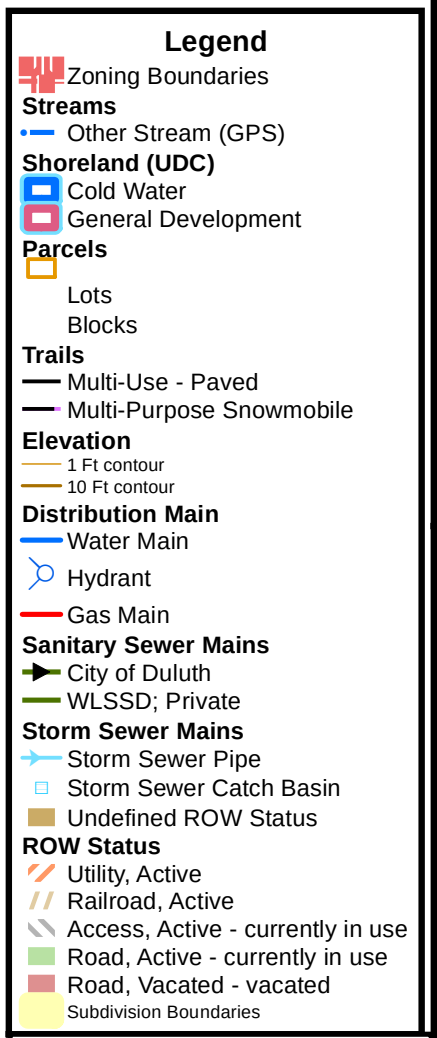
Legend

Streams
- Trout Stream (GPS)
- Other Stream (GPS)

Future Land Use
- Open Space
- Traditional Neighborhood
- Urban Residential
- Neighborhood Commercial
- General Mixed Use

PL 23-052
Easement Vacation
Riverwest Vacation Homes, LLC

Site Map



River West Dr
8 inch , Polyvinyl Chloride , 270'
2" ,MDPE
2" ,MDPE
Maynard Pl
8605 MAYNARD PL
8611 MAYNARD PL
8621 MAYNARD PL
CIC #151 Riverwest Townhomes
Block3
Block4
Block6
Block J
Kayak Bay
MU-P (Mixed Use Planned)
84th Ave W Creek
I-G (Industrial General)
Ironton 1st Division
94 SPRING ST
54 , Ductile Iron , 413,289346'
54 , Ductile Iron , WLS500,344776'

0 45 90 180 270 Feet

Aerial photography flown 2022

Prepared by: City of Duluth Planning & Economic Development, March 22, 2023. Source: City of Duluth.

PL 23-052
Easement Vacation
Riverwest Vacation Homes, LLC

Site Map

Legend

Streams
- Other Stream (GPS)

Trails
- Multi-Use - Paved
- Multi-Purpose Snowmobile

Elevation
- 1 Ft contour
- 10 Ft contour

Distribution Main
- Water Main
- Hydrant
- Gas Main

Sanitary Sewer Mains
- City of Duluth
- WLSSD; Private

Storm Sewer Mains
- Storm Sewer Pipe
- Storm Sewer Catch Basin

KAYAK BAY

being a portion of IRONTON FIRST DIVISION and GOVERNMENT LOT 1
Section 23, Township 49 North, Range 15 West of the 4th Principal Meridian
City of Duluth, St. Louis County, Minnesota

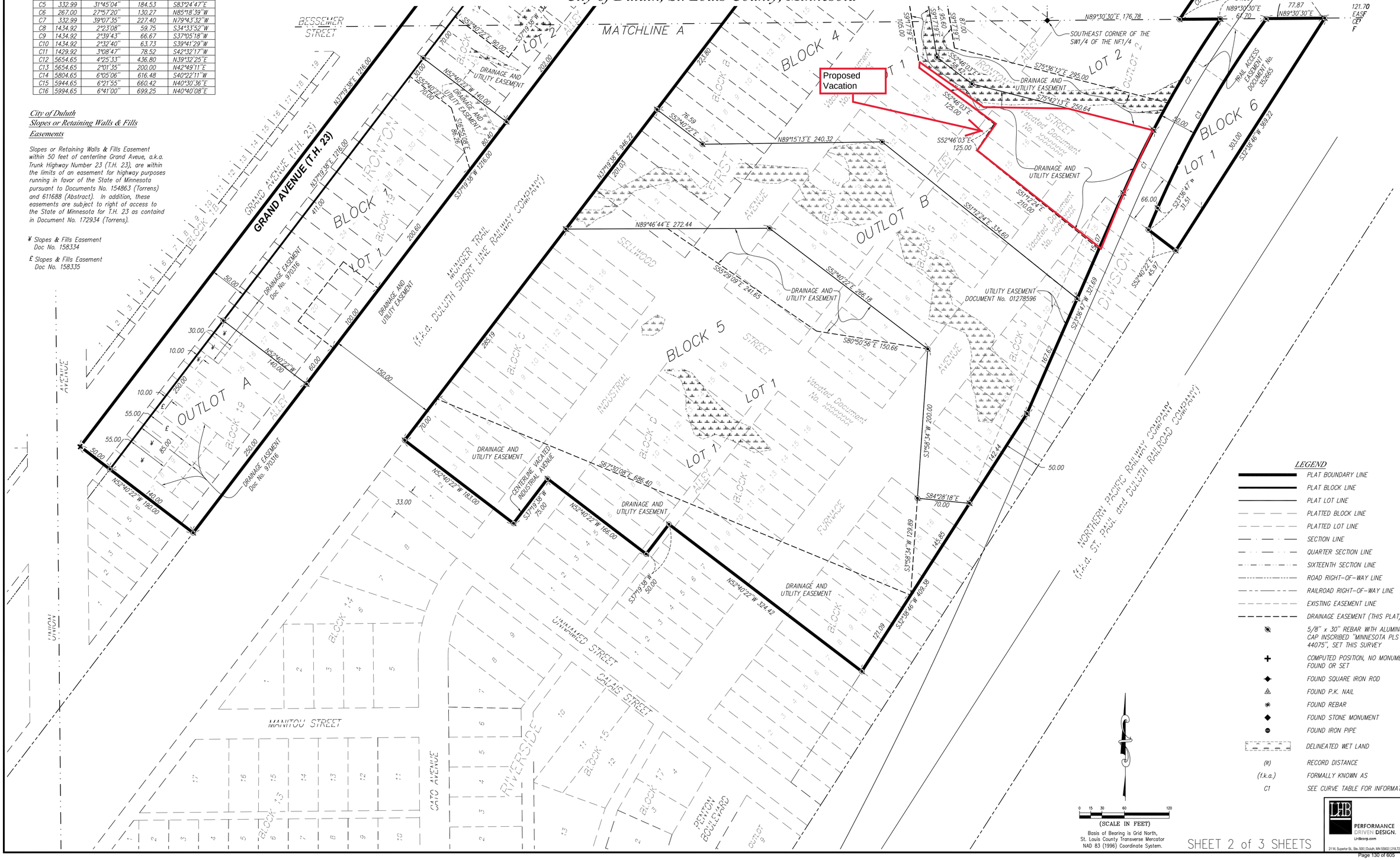
CURVE TABLE				
CURVE	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING
C1	1389.92	3°50'51"	93.34	S25°32'55"W
C2	1389.92	7°09'12"	173.53	S31°02'57"W
C3	1339.92	13°51'58"	324.27	N29°12'38"E
C4	267.00	37°19'33"	173.94	S80°37'32"E
C5	332.99	31°45'04"	184.53	S83°24'47"E
C6	267.00	27°57'20"	130.27	N85°18'39"W
C7	332.99	39°07'35"	227.40	N79°43'32"W
C8	1434.92	2°23'08"	59.75	S34°33'52"W
C9	1434.92	2°39'43"	66.67	S37°05'18"W
C10	1434.92	2°32'40"	63.73	S39°41'29"W
C11	1429.92	3°08'47"	78.52	S42°32'17"W
C12	5654.65	4°25'33"	436.80	N39°32'25"E
C13	5654.65	2°01'35"	200.00	N42°49'11"E
C14	5804.65	6°05'06"	616.48	S40°22'11"W
C15	5944.65	6°21'55"	660.42	N40°30'36"E
C16	5994.65	6°41'00"	699.25	N40°40'08"E

City of Duluth
Slopes or Retaining Walls & Fills
Easements

Slopes or Retaining Walls & Fills Easement within 50 feet of centerline Grand Aveue, a.k.a. Trunk Highway Number 23 (T.H. 23), are within the limits of an easement for highway purposes running in favor of the State of Minnesota pursuant to Documents No. 154863 (Torrens) and 611688 (Abstract). In addition, these easements are subject to right of access to the State of Minnesota for T.H. 23 as containd in Document No. 172934 (Torrens).

¥ *Slopes & Fills Easement Doc No. 158334*

£ *Slopes & Fills Easement Doc No. 158335*



LEGEND

- PLAT BOUNDARY LINE
- PLAT BLOCK LINE
- PLAT LOT LINE
- PLATTED BLOCK LINE
- PLATTED LOT LINE
- SECTION LINE
- QUARTER SECTION LINE
- SIXTEENTH SECTION LINE
- ROAD RIGHT-OF-WAY LINE
- RAILROAD RIGHT-OF-WAY LINE
- EXISTING EASEMENT LINE
- DRAINAGE EASEMENT (THIS PLAT)
- 5/8" x 30" REBAR WITH ALUMINUM CAP INSCRIBED "MINNESOTA PLS 44075", SET THIS SURVEY
- COMPUTED POSITION, NO MONUMENT FOUND OR SET
- FOUND SQUARE IRON ROD
- FOUND P.K. NAIL
- FOUND REBAR
- FOUND STONE MONUMENT
- FOUND IRON PIPE
- DELINEATED WET LAND
- (R) RECORD DISTANCE
- (f.k.a.) FORMALLY KNOWN AS
- C1 SEE CURVE TABLE FOR INFORMATION

0 15 30 60 120

(SCALE IN FEET)

Basis of Bearing is Grid North, St. Louis County Transverse Mercator NAD 83 (1996) Coordinate System.

SHEET 2 of 3 SHEETS

LHB
PERFORMANCE DRIVEN DESIGN.
LHBcorp.com
21 W. Superior St., Ste. 500 | Duluth, MN 55802 | 218.727.8446

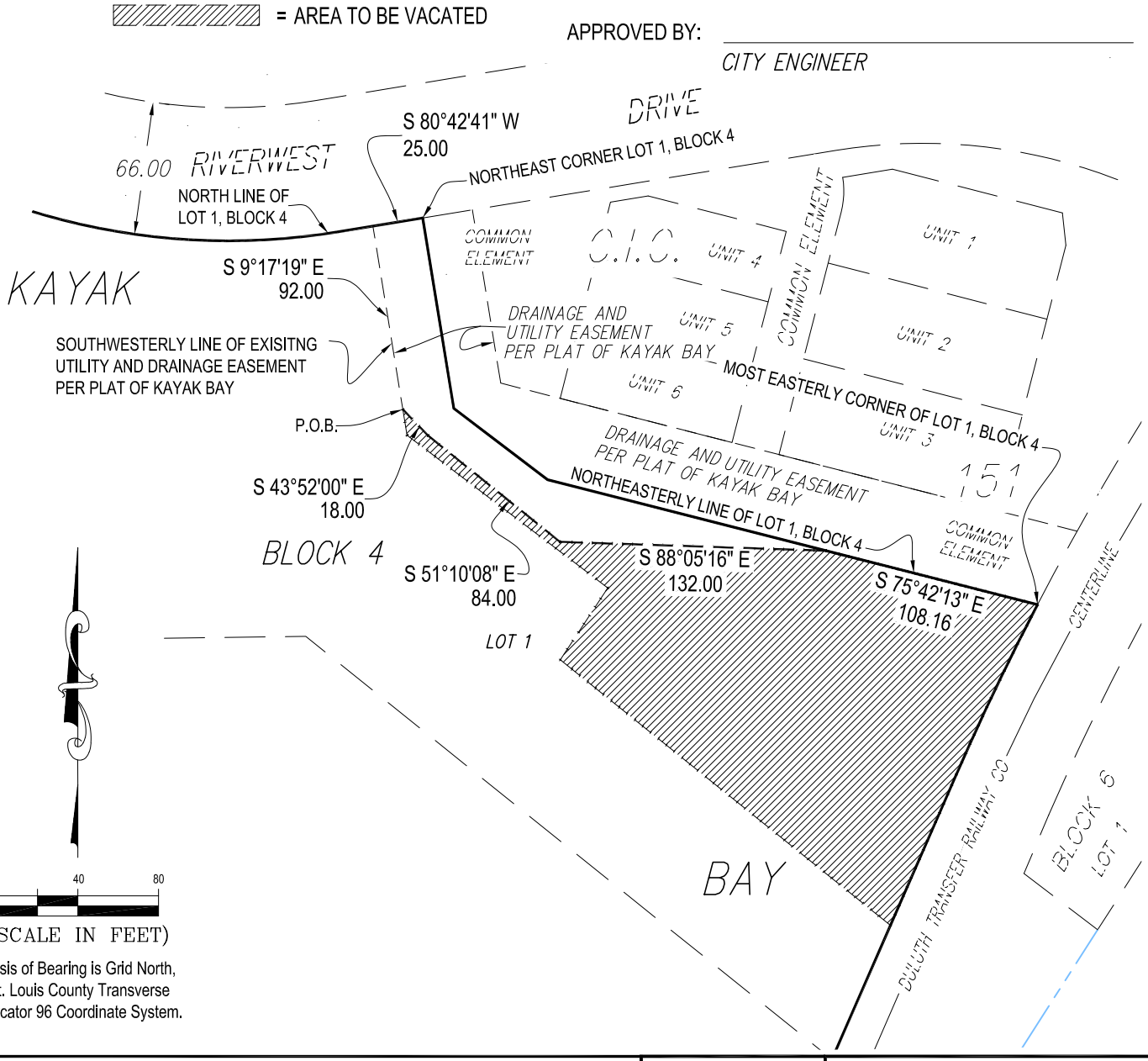
EXHIBIT B

VACATION EXHIBIT

VACATION DESCRIPTION:

That part of a Drainage and Utility Easement per plat of KAYAK BAY, Saint Louis County, Minnesota, affecting Lot One (1), Block Four (4), said KAYAK BAY, lying southerly of the following described line:

Commencing at the northeast corner of Lot 1, Block 4, KAYAK BAY; thence South 80 degrees 42 minutes 41 seconds West along the north line of said Lot 1, a distance of 25.00 feet to the southwesterly line of an existing utility and drainage easement per plat of KAYAK BAY; thence South 09 degrees 17 minutes 19 seconds East along said southwesterly line, a distance of 92.00 feet to the Point of Beginning of the line to be described; thence South 43 degrees 52 minutes 00 seconds East, a distance of 18.00 feet; thence South 51 degrees 10 minutes 08 seconds East, a distance of 84.00 feet; thence South 88 degrees 05 minutes 16 seconds East, a distance of 132.00 feet to the northeasterly line of said Lot 1, Block 4; thence South 75 degrees 42 minutes 13 seconds East along said northeasterly line, a distance of 108.16 to the most easterly corner of said Lot 1, Block 4 feet and said line there terminating.



Basis of Bearing is Grid North,
St. Louis County Transverse
Mercator 96 Coordinate System.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Print Name: Paul A. Vogel License # 44075

Signature: Date: 3/02/2023

DATE PREPARED: 3/02/23
PROJ NO: 221375
FILE: 221375_Parti
SHEET 1 of 1 SHEETS

LHB

21 W. Superior St., Ste. 500 | Duluth, MN 55802 | 218.727.8446

FILE: ..\221375\500 Drawings\Survey\221375_Partial Vac and Drng Vacation.dwg

EXHIBIT A

VACATION DESCRIPTION:

That part of a Drainage and Utility Easement per plat of KAYAK BAY, Saint Louis County, Minnesota, affecting Lot One (1), Block Four (4), said KAYAK BAY, lying southerly of following described line:

Commencing at the northeast corner of Lot 1, Block 4, KAYAK BAY; thence South 80 degrees 42 minutes 41 seconds West along the north line of said Lot 1, a distance of 25.00 feet to the southwesterly line of an existing utility and drainage easement per plat of KAYAK BAY; thence South 09 degrees 17 minutes 19 seconds East along said southwesterly line, a distance of 92.00 feet to the Point of Beginning of the line to be described; thence South 43 degrees 52 minutes 00 seconds East, a distance of 18.00 feet; thence South 51 degrees 10 minutes 08 seconds East, a distance of 84.00 feet; thence South 88 degrees 05 minutes 16 seconds East, a distance of 132.00 feet to the northeasterly line of said Lot 1, Block 4; thence South 75 degrees 42 minutes 13 seconds East along said northeasterly line, a distance of 108.16 to the most easterly corner of said Lot 1, Block 4 feet and said line there terminating.

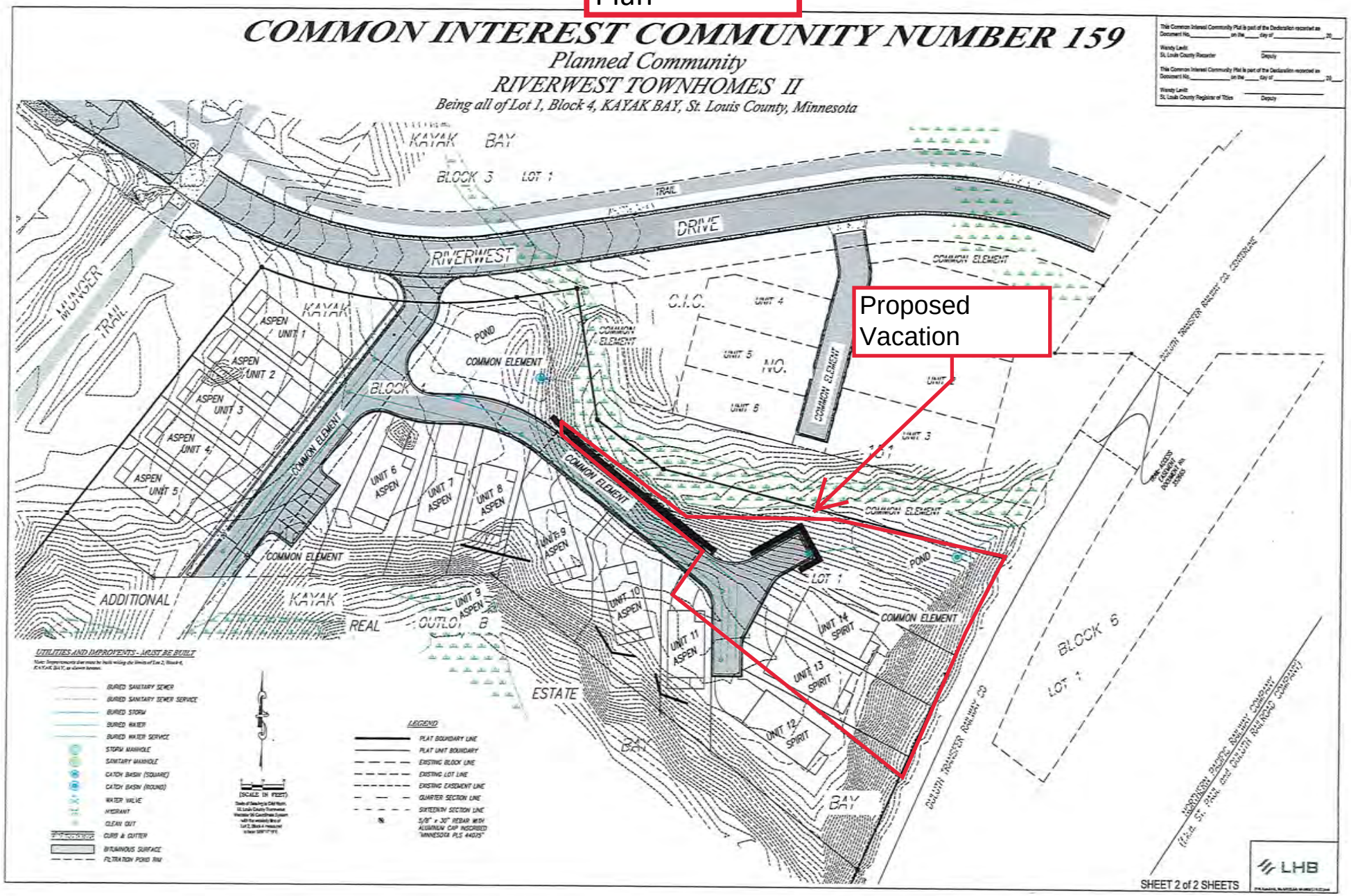
I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Paul A. Vogel

Signed_____

Date_____03/02/2023_____ License No. 44075

Revised Development Plan



RIVERWEST DEVELOPMENT
MU-P REGULATING PLAN

On Grand Avenue Corridor
Duluth, MN

City of Duluth, MN
Planning Department Submittal
August 31, 2022

This plan has been reviewed and approved by the City of Duluth Land Use Supervisor.	
Land Use Supervisor Signature	Date 9/15/22

Prepared for:
Spirit Valley Land Company LLC

LHB Project:150444

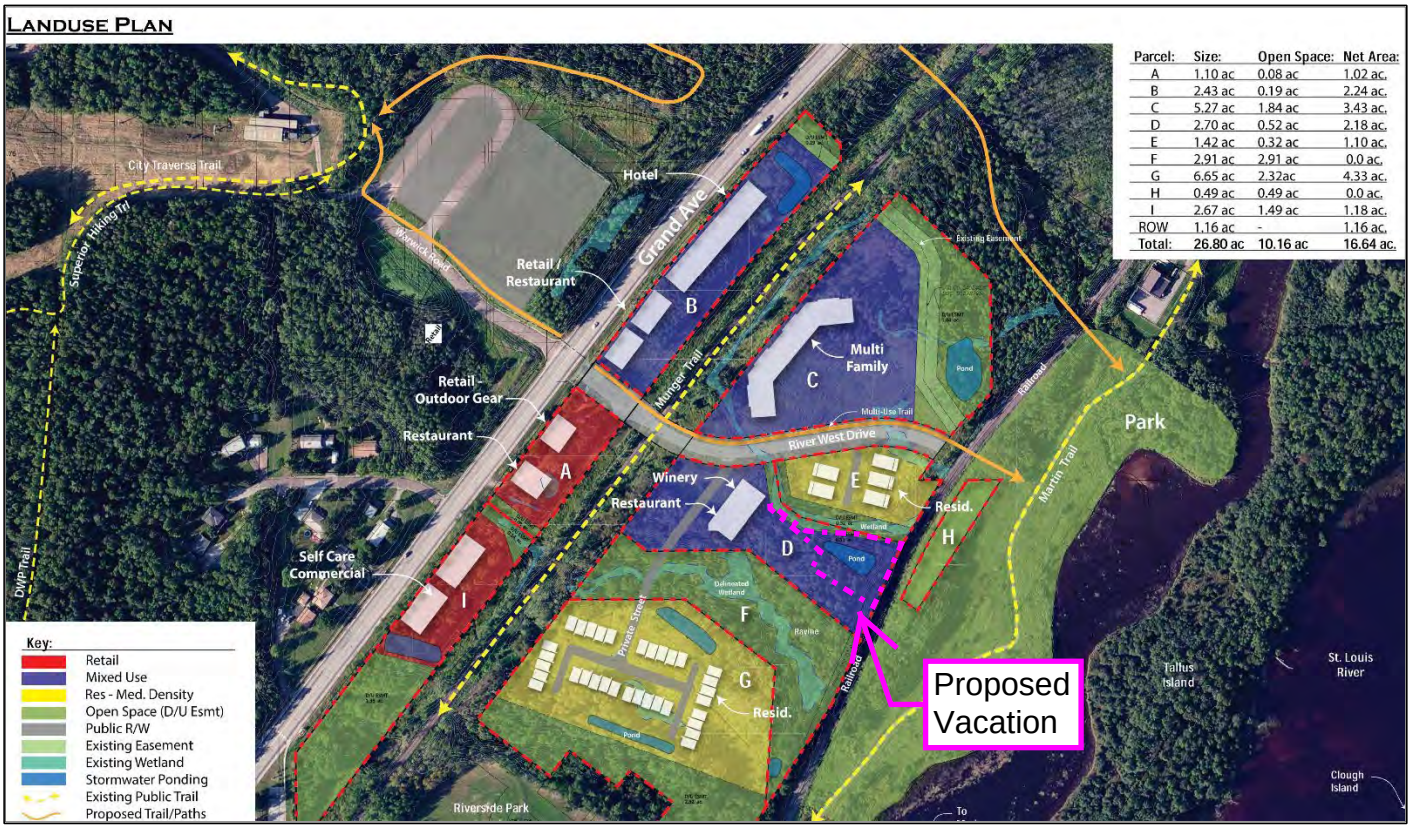
LHB
PERFORMANCE DRIVEN DESIGN.

LHB Inc.
21 West Superior Street
Suite 500
Duluth, MN 55802

A. Development Land Use Plan

Below is a master plan illustrating the general layout of development areas and building parcels in relation to the natural features to remain, the proposed road and trails circulation systems, and proposed land use for each parcel. All regulation and code related items are included in the following pages.

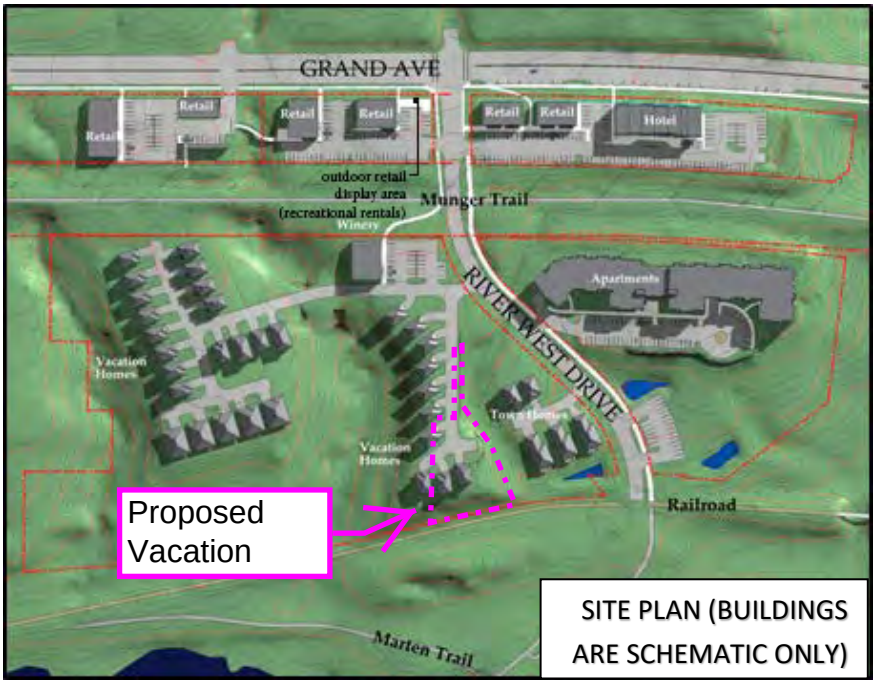
Please note, if any code-related item is not specifically called out in the following pages, it is assumed that the code-related item will comply with the City of Duluth's UDC. All signage and site lighting will comply with the UDC standards. All landscaping, including parking lot landscaping, will also be in accordance with UDC standards.



A1. Potential Site Plan Layout

Below are two site plan layouts illustrating the most recent potential development scheme. Each lot will need to go through a detailed site plan review so what is illustrated below is preliminary and subject to change.

Please note, the two access points into the development off of Grand Avenue shown below were already installed by MnDOT in 2021 as part of the Trunk Highway 23 roadway improvements project. Building placements are for schematic purposes only and will change during site plan review. Outdoor retail display area for recreational rentals, such as bikes and kayaks, are illustrated below for potential outdoor adventure retailer.



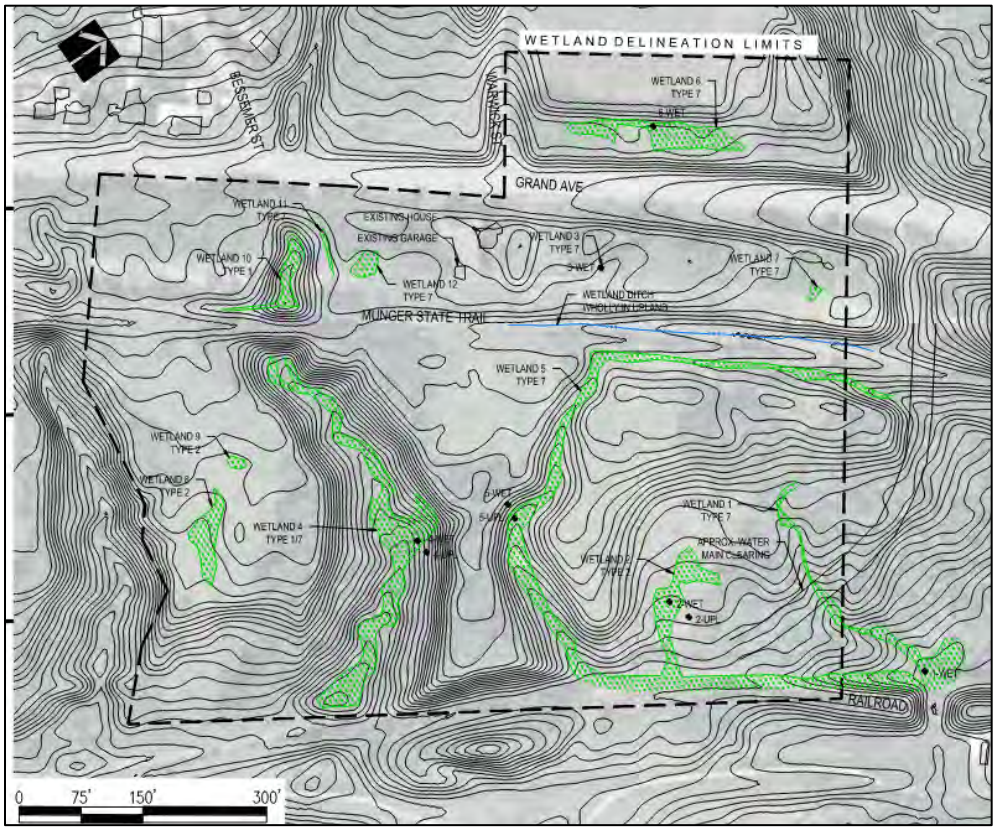
F. **Natural Resources Inventory**

Prior to a conceptual plan being created, a wetland delineation and comprehensive tree survey were conducted to mark natural resources within the site. With that information in hand, the overall concept plan was designed with sustainability in mind, as most wetlands have been avoided to the best extent possible and the preservation of mature vegetation and natural drainage ways have also been taken into consideration. The placement of future buildings have been sited to minimize earth-moving activities and take advantage of certain viewsheds to the river, as well as climatic conditions such as western exposures for daylighting and solar heat gain.

Approximately 16.64 acres (or 62%) of the MU-P property are planned for mixed-use development out of the total 26.80 acres of land. The balance of the site, which is approximately 10.16 acres (or 38%) will remain in its natural condition and/or will be designated as open green space, and consists of mature wooded vegetation and wetlands on varied topography. The majority of the ravines and naturally occurring wetlands will be undisturbed, allowing the diverse landscape to continue to act as a rich ecological feature benefiting local wildlife, and the surrounding environment.

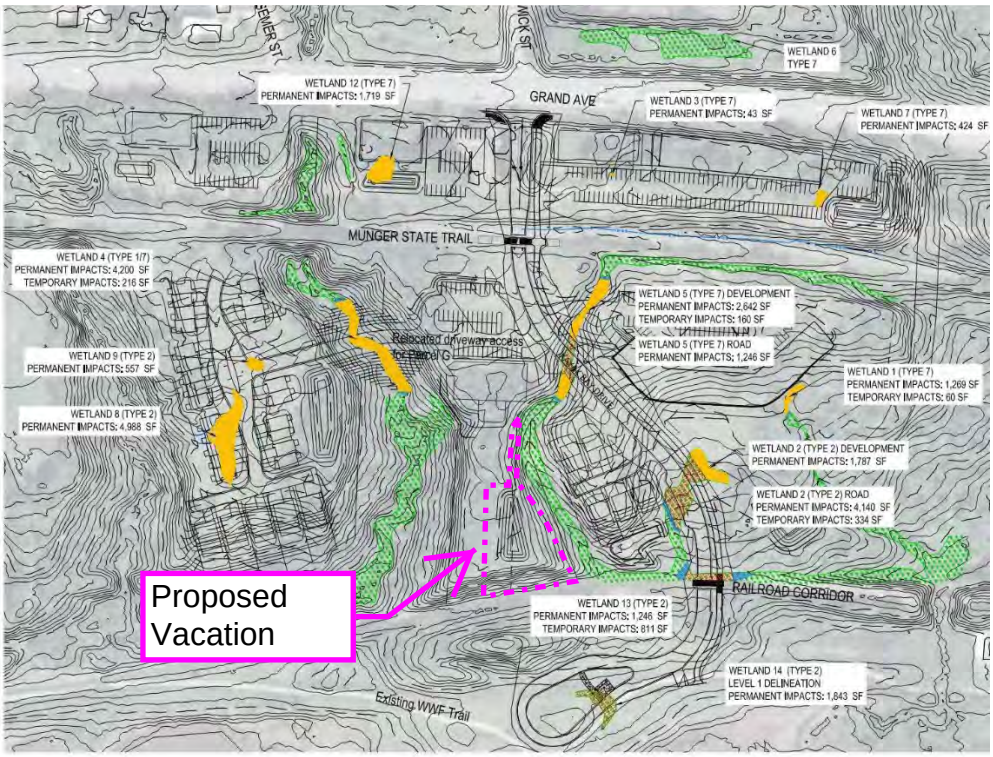
Below is a wetland delineation exhibit showing the natural drainage ways that drain from Grand Avenue towards the St. Louis River. The majority of these wetlands and drainage ways will be preserved in the RiverWest development project as evidenced on the Wetland Impacts Exhibit on the following page.

WETLAND DELINEATION EXHIBIT



Original Development Concept

WETLAND IMPACTS EXHIBIT



As part of the project requirements, the development must contract with a certified professional to perform post road/grading site inspection to verify that wetland impacts and tree preservations were done in accordance with the proposed plans. In accordance with these requirements, the public road that was already installed by the City, was built per plan and field inspected by MSA Professional Services, Inc, and the mass grading and utility work that occurred as part of the site preparation was done per plan and inspected by LHB during the 2021 construction season.

G. **Common Open Space**

The RiverWest MU-P Regulating Plan strives to maximize the natural beauty and ecological features of the site while also providing new public amenities to the St. Louis River Corridor community and nearby neighborhoods. Public access will be allowed but will be limited to access via trail and/or the public road. The areas shown in green on the concept plan are considered common open space and total 38% of the total land area (this only includes areas outside of the right-of-ways). Protection and maintenance of the open spaces will be the responsibility of the private landowners.

Lot A (1.10 ac) = Total common open space is **.08 acres (or 7%)**

Lot B (2.43 ac) = Total common open space is **.19 acres (or 7.8%)**

Lot C (5.27 ac) = Total common open space is **1.84 acres (or 35%)**

Lot D (2.70 ac) = Total common open space is **.52 acres (or 19%)**

Lot E (1.42 ac) = Total common open space is **.32 acres (or 23%)**

Lot F (2.91 ac) = Total common open space is **2.91 acres (or 100%)**

includes stormwater pond for adjacent parcels D &G

Lot G (6.65 ac) = Total common open space is **2.32 acres (or 35%)**

Lot H (0.49 ac) = Total common open space is **.49 acres (or 100%)**

includes storage /parking/temporary service areas

Lot I (2.67 ac) = Total common open space is **1.49 acres (or 56%)**

H. **Permitted and Special Uses**

Below is a list of permitted uses within the MU-P by Parcel:

Parcels A & I (Retail/Commercial)

- Dwelling: townhouse, multi-family, live-work, single-family
- Bank
- Office
- Medical or Dental Clinic
- Lodging (Hotel or Motel)
- Restaurant (less than 5,000 sf with or without drive-thru)
- Restaurant (5,000 sf or more with or without drive-thru)
- Retail store less than 10,000 sf
- Filling Station (with or without convenience store)
- Garden Material Sales
- Personal Services or Repair, large more than 10,000 sf
- Personal Services or Repair, small less than 10,000 sf
- Event Center
- Preschool
- Parking Lot
- Personal Care

Parcels B, C, & D (Mixed-Use)

- Dwelling: townhouse, multi-family, live-work, single-family
- Bank
- Office
- Medical or Dental Clinic
- Lodging (Hotel or Motel)
- Vacation Dwelling Community*
- Restaurant (less than 5,000 sf with or without drive-thru)
- Restaurant (5,000 sf or more with or without drive-thru)
- Retail store less than 10,000 sf
- Filling Station (with or without convenience store)
- Garden Material Sales
- Winery/Brewery
- Personal Services or Repair, large more than 10,000 sf
- Personal Services or Repair, small less than 10,000 sf
- Event Center
- Preschool
- Parking Lot
- Personal Care

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 23-039	**Contact**	Chris Lee		
Type	Preliminary Plat	**Planning Commission Date**		April 11, 2023	
Deadline for Action	**Application Date**	March 13, 2023	**60 Days**	May 13, 2023	
	Date Extension Letter Mailed	March 23, 2023	**120 Days**	July 12, 2023	
Location of Subject	Beck Road and 108th Ave West				
Applicant	Connor Bambenek	**Contact**			
Agent	Jason Kadelbach	**Contact**	Northwestern Surveying & Engineering		
Legal Description	See attached, PIN: 010-2730-00235				
Site Visit Date	March 25, 2023	**Sign Notice Date**	March 28, 2023		
Neighbor Letter Date	March 21, 2023	**Number of Letters Sent**	8		

Proposal
Create a new plat for 12.85 acres of currently vacant and unplatted land. Platting this parcel will establish two buildable lots. Lot 1 will contain 5 acres and Lot 2 will contain 7.85 acres. A single family home is proposed for Lot 2.

Staff recommends approval, with conditions.

	Current Zoning	*Existing Land Use*	*Future Land Use Map Designation*
Subject	RR-1	Undeveloped	Open Space
North	RR-1	Undeveloped	Open Space
South	R-1	Undeveloped	Open Space
East	RR-1	Undeveloped	Open Space
West	RR-1	Undeveloped	Open Space

Summary of Code Requirements

The planning commission shall approve the application, or approve it with modifications if it determines that:
(a) Is consistent with the comprehensive land use plan;
(b) Is consistent with all applicable requirements of MSA 462.358 and Chapter 505;
(c) Is consistent with all applicable provisions of this Chapter;
(d) Is consistent with any approved district plan covering all or part of the area of the preliminary plat;
(e) Is located in an area with adequate police, fire and emergency facilities available to serve the projected population of the subdivision within the City's established response times, or the applicant has committed to constructing or financing public facilities that will allow police, fire or emergency service providers to meet those response times;
(f) Will not create material adverse impacts on nearby properties, or if material adverse impacts may be created they will be mitigated to the extent reasonably possible;

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principle #5 – Promote reinvestment in neighborhoods. The project is sited adjacent to existing transportation and utility infrastructure.

Governing Principle #12- Create efficiencies in delivery of public services. This project will require minimal extension of utility infrastructure while utilizing existing transportation, public safety, and other City services. This allows the City to serve more residents on existing infrastructure which reduces the overall cost to all of the City's landowners.

Zoning-Rural Residential (RR-1): established to accommodate large-lot, single-family detached residential uses, typically surrounded by significant open space, on lots of at least 5 acres each.

Future Land Use: Open Space: High natural resource or scenic value, with substantial restrictions and development limitations. Primarily public lands but limited private use is anticipated subject to use and design controls.

History: The property is undeveloped.

Review and Discussion Items

Staff finds:

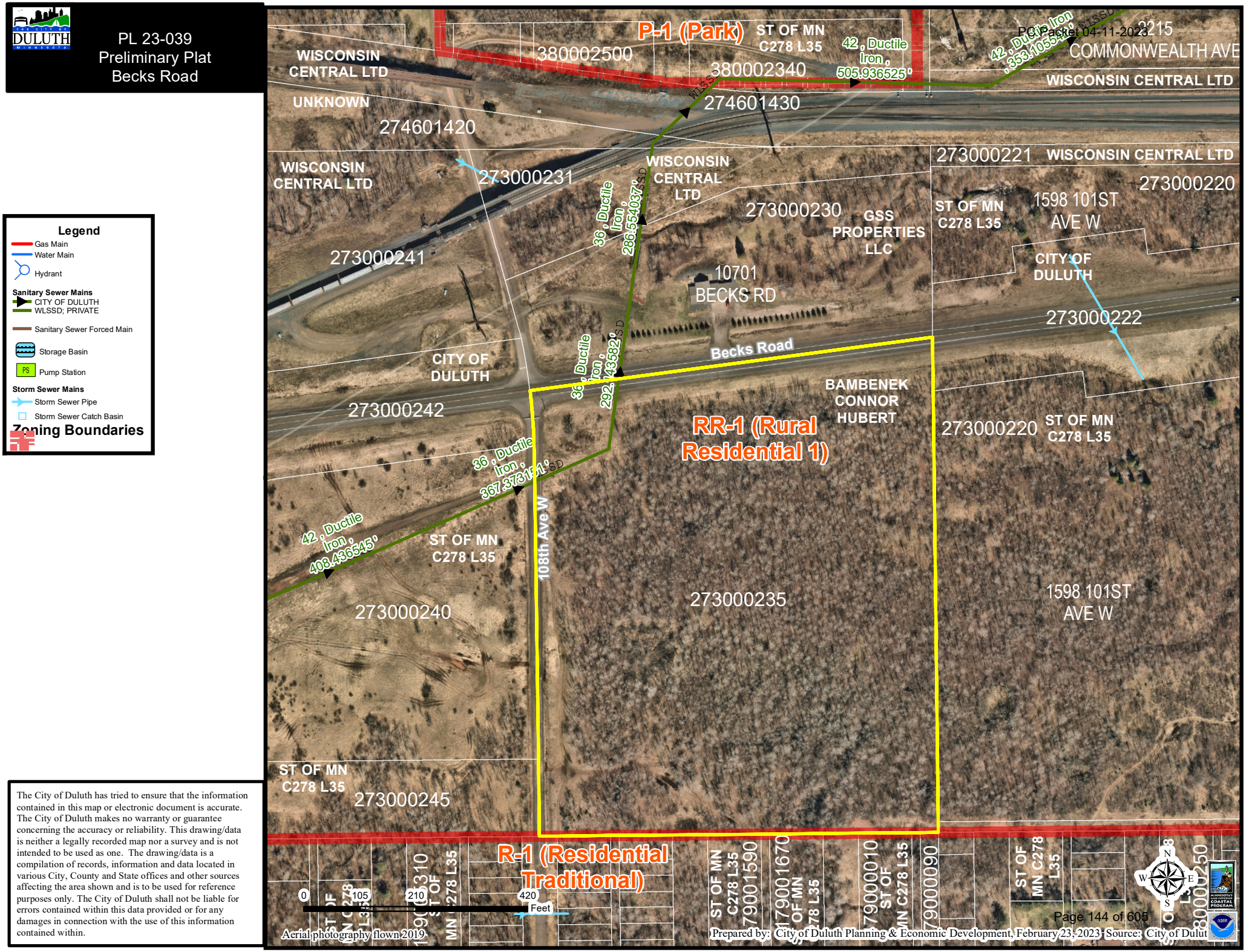
1) Lot 1 (5 acres), zoned RR-1 (Rural Residential), is proposed to remain vacant at this time.
2) Lot 2 (7.85 acres), zoned RR-1 (Rural Residential), is proposed to be developed in the future with a single family home.
3) The highest parts of the site (elevation 718 feet) are along the north western corner of the property with a gradual down slope grade toward the east property line.
4) A wetland delineation (PL22-151) found there are .93 acres of wetland on the site; .13 acres of Type 1 and .80 acres of type 6. These wetlands will not be impacted as part of the platting process or during future modifications to the property.
5) A tree inventory and replacement plan will need to be provided at time of site development if trees are to be impacted.
6) Lot 1 of the proposed plat will have 722 feet of frontage on Becks Road and 259 feet of frontage on 108th Avenue West. Lot 2 will have approximately 479 feet of frontage on 108 Avenue West. This meets the requirement in the RR-1 zone district of 250 feet of frontage.
7) Access to the lots will be from 108th Avenue West.
8) There is an existing sewer easement northwest corner of Lot 1.
9) A stormwater management report will need to be submitted to the City prior to any building permits or land disturbance permits being issued.
10) Staff finds there are no adverse material impacts to surrounding properties that cannot be adequately mitigated by permits required by this development and appropriate site design. Storm water permits will require appropriate treatment and attenuation of storm water before discharge, loss of tree cover will be mitigated through approval of tree preservation plans, and significant traffic impacts are not expected on local streets.
11) The preliminary plat is consistent with the comprehensive land use plan designation of this property as "open space." The proposed plat will retain the rural character of the area, and the balance of the land in this plat will remain as open and undeveloped, besides the one proposed home. The existing rural residential zoning provides for retention of open space and the area's rural character (UDC 50-14.3.A).
12) The preliminary plat is located in an area with adequate police, fire and emergency facilities available to serve the projected population.
13) Staff finds that, other than the items addressed above, the preliminary plat conforms to the requirements of Sec 50-37.5. and is consistent with all applicable requirements of MSA 462.358 and Chapter 505.
14) No other citizen, agency, or City comments have been received to date.

Staff Recommendation

Based on the above findings, staff recommends that Planning Commission approve the application with the following conditions:

1. That private utility and street easements be shown and correct on the final plat for Lot 1.
2. Applicant will provide a tree inventory and replacement plan as part of the final plat approval.
3. Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission; however, no such administration approval shall constitute a variance from the provisions of Chapter 50

PL 23-039
Preliminary Plat
Becks Road



Legend

- Gas Main
- Water Main
- Hydrant

Sanitary Sewer Mains

- CITY OF DULUTH
- WLSSD; PRIVATE
- Sanitary Sewer Forced Main
- Storage Basin
- Pump Station

Storm Sewer Mains

- Storm Sewer Pipe
- Storm Sewer Catch Basin

Zoning Boundaries

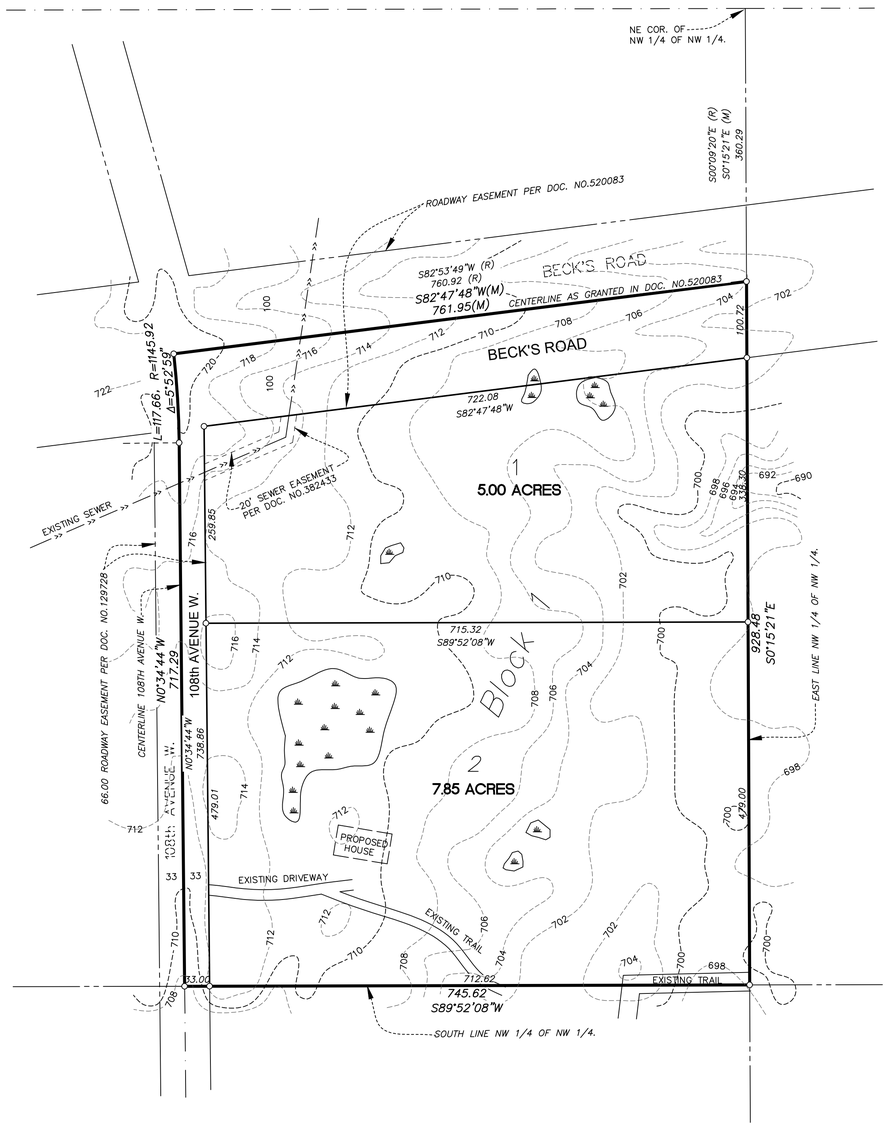
Aerial photography flown 2019

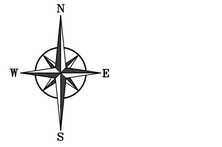
Prepared by: City of Duluth Planning & Economic Development, February 23, 2023 Source: City of Dulut

PRELIMINARY PLAT OF

BACKWOODS ADDITION

LOCATED IN PART OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 3,
TOWNSHIP 48 NORTH, RANGE 15 WEST OF THE FOURTH PRINCIPAL MERIDIAN ST. LOUIS COUNTY, MINNESOTA.





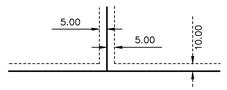
GRAPHIC SCALE

100 0 100 200

SCALE IN FEET
1 INCH = 100 FEET

● INDICATES FOUND 1/2 INCH OPEN IRON PIPE (UNLESS OTHERWISE NOTED)

○ INDICATES SET 1/2 INCH X 15 INCH REBAR WITH CAP (P.L.S. No. 57070)



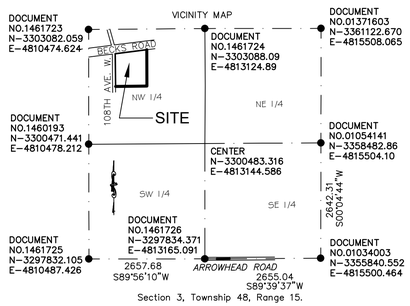
DRAINAGE AND UTILITY EASEMENTS TO BE 5.00 FEET ON EACH SIDE OF LOT LINES AND 10.00 FEET ADJACENT TO ROAD RIGHT-OF-WAYS.

(M) INDICATES MEASURED

(R) INDICATES RECORD

INDICATES WETLAND AS DELINEATED BY OTHERS

ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE ST.LOUIS COUNTY MINNESOTA TRANSVERSE MERCATOR COORDINATE SYSTEM NAD 83 (96 ADJ.) WITH THE SOUTH LINE OF SECTION 10 MEASURED TO BEAR S89°39'37"W



Section 3, Township 48, Range 15.

NW 1/4 of the NW 1/4 EXCEPT that part lying W of the centerline of 108th Avenue West extended, and ALSO EXCEPT
that part lying North of the line described as follows: Commencing at the NE corner of said NW 1/4 of NW 1/4, thence S 00 degrees 09 minutes 20 seconds E assumed bearing along the E line of said NW 1/4 of NW 1/4 a distance of 360.29 feet to the beginning of the line to be described; thence S 82 degrees 53 minutes 49 seconds W, along the centerline of the easement granted by Document Number 520083, a distance of 760.92 feet to said centerline of 108th Avenue West, ans said line there terminating, ALL in SECTION 3, TOWNSHIP 48, RANGE 15 W of the 4th Principal Meridian.

Notes:

1. Property intended for single family homes.
2. Access to both lots would be available via 108th Avenue W. If access to Beck's road is required additional permits and review with County and City Engineers may be required.
3. Wells and Private Sewers to be used until City water and and Sewer become available. a 10.00 foot utility easement will be dedicated adjacent to both right-of-ways for future connections.
4. Wetland Delineation and Tree inventory reports have been completed.
5. Notice Interceptor Sewer line in Northwesterly corner. currently we are proposing a 40' Utility easement 20' on each side of the main line.
6. We are still in need of a current Title Commitment to see if there are any existing easements on subject property.

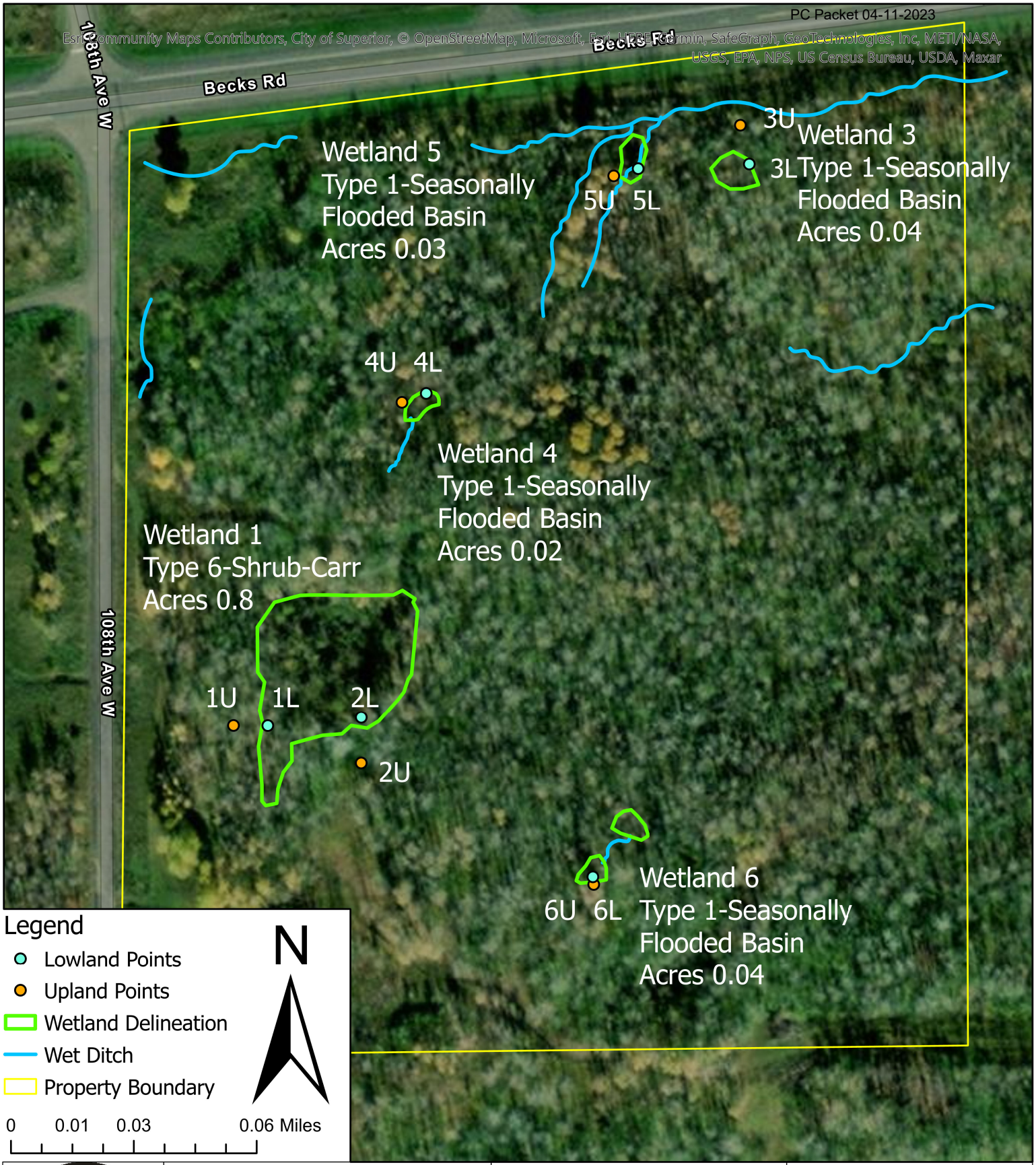
OWNER:
Connor Bambenek
1817 Woodland Avenue
Duluth, MN 55803
Email: bambenekconnor@gmail.com

Prepared By:
Northwestern Surveying and Engineering, Inc.
8962 Highway 37
Iron, MN 55751
Cell:612-501-0651
Email: Jason.Kadelbach@nwsmn.com

CERTIFICATION: I hereby certify that this survey was prepared by me or under my direct supervision and that I am a Professional Licensed Surveyor under the Laws of the State of Minnesota.

Michael Stang PLS #52591

NORTHWESTERN SURVEYING & ENGINEERING, INC.

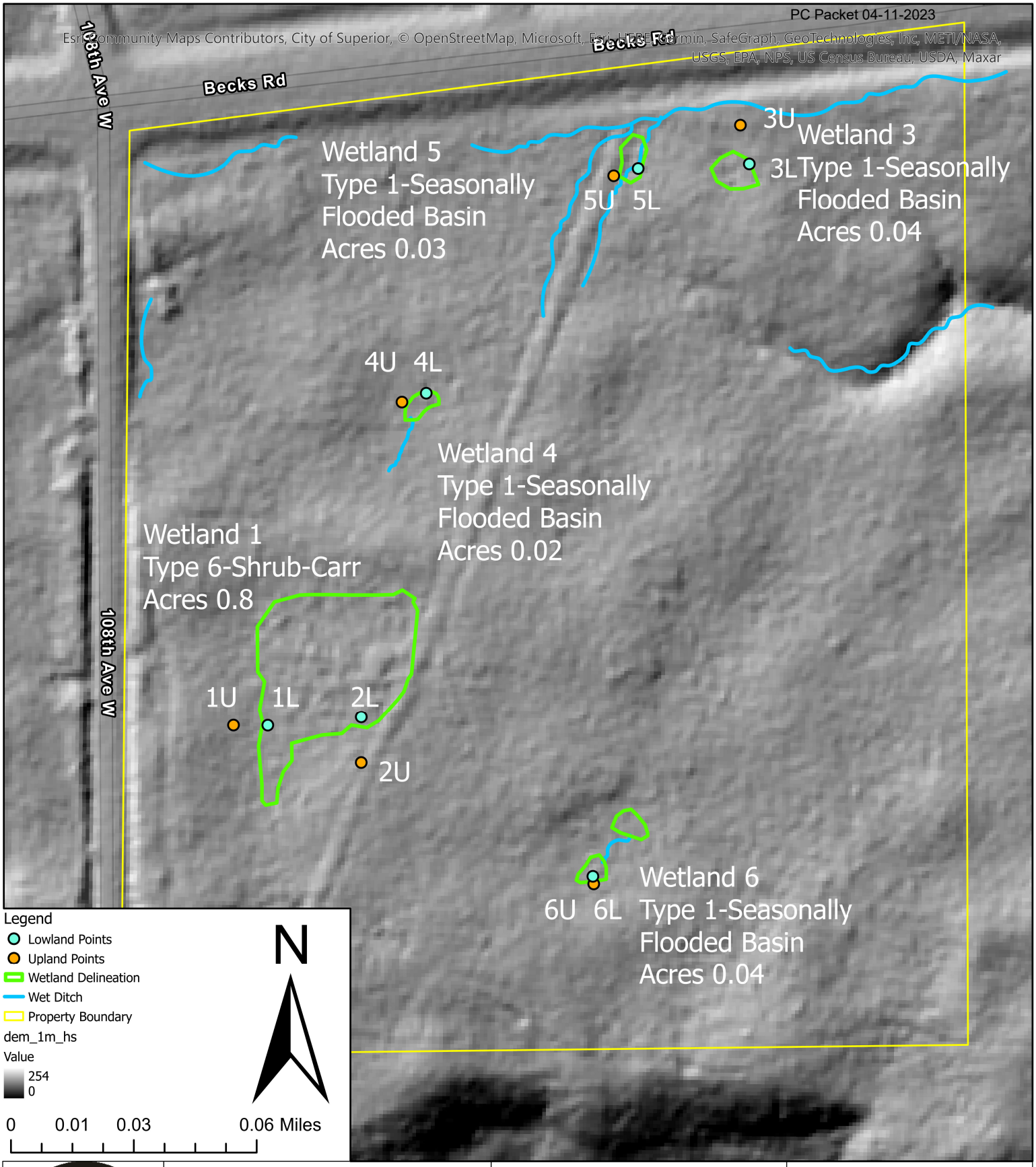


Rock Leaf Water Environmental
13230 Island View Drive NW
Elk River MN 55330
Phone: (833) 762-5532
www.rockleafwaterenvironmental.com/

Landowner: Connor Bambenek
Property Parcel #:010-2730-00235
Duluth, St Louis Cty, Minnesota

Map by: Kat Dickerson
Print Date:10/3/22
Source provided by ESRI

Figure 6
TEP Map Amendments



Rock Leaf Water Environmental
13230 Island View Drive NW
Elk River MN 55330
Phone: (833) 762-5532
www.rockleafwaterenvironmental.com/

Landowner: Connor Bambenek
Property Parcel #:010-2730-00235
Duluth, St Louis Cty, Minnesota

Map by: Kat Dickerson
Print Date:10/3/22
Source provided by ESRI

Figure 6
TEP Map Amendments

Basin ID	Size (acres)	Circular 39/ Cowardin Classification	Eggers and Reed Classification	Landscape Features
1	0.80	Type 6/ PSS1 EM1C	Shrub-Carr	Isolated/Concave
3	0.04	Type 1	Seasonally Flooded Basin	Isolated/Swale - hummock
4	0.02	Type 1	Seasonally Flooded Basin	Concave, Occasional outlet in high water
5	0.03	Type 1	Seasonally Flooded Basin	Concave basin
6	0.04	Type 1	Seasonally Flooded Basin	Concave basin
Total	**0.93**			

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

MEMORANDUM

DATE: April 3, 2023
TO: Planning Commission
FROM: Jenn Moses, Senior Planner
RE: Citizen Petition for An Environmental Assessment Worksheet (EAW) Related to the Kinseth Hotel Development

On March 10, 2023, the Minnesota Environmental Quality Board (EQB) notified the City of Duluth that a citizen petition for an Environmental Assessment Worksheet (EAW) had been submitted. The petition requests an EAW for the Kinseth Hotel project on Sundby Road, which Planning Commission reviewed as an MU-C Planning Review (PL 22-143) at its October 11, 2022 meeting. The Commission approved the Planning Review on a vote of 7-1. The Planning Commission decision was appealed to the City Council which affirmed the decision of the Planning Commission on December 19, 2022.

According to Section 2-41 of the City Code, the planning commission shall serve as the responsible governmental unit and conduct or oversee environmental reviews pursuant to Minnesota Statutes Chapter 116D and the applicable state regulations.

It is the Planning Commission's responsibility to review the submitted petition and the proposed Findings of Fact, and determine if an EAW is required. Per Section II of the attached Findings document, it is the recommendation of City Staff that an EAW is not needed and the petition should be denied. Minnesota Rules related to environmental reviews require a decision on whether an EAW is required no later than April 25, 2023. As such, the April 11th Planning Commission meeting is the last regular meeting before a decision is required. There is no provision of Minnesota Rules allowing for a further extension of this deadline, as it was already extended by the maximum 15 day extension to allow for a decision at the April 11th meeting.

Attached you will find:

- Planning Commission resolution
- Findings of Fact and related exhibits
- EQB Letter
- Citizens' Petition for an EAW

What is the purpose of the environmental review process?

The Minnesota Environmental Policy Act of 1973 established a formal process for reviewing the environmental impacts of major development projects. The purpose of the review is to provide information to units of government on the environmental impacts of a project before approvals or necessary permits are issued. After projects are completed, unanticipated environmental consequences can be very costly to undo, and environmentally sensitive areas can be impossible to restore. Environmental review creates the opportunity to anticipate and correct these problems before projects are built. The process operates according to rules (legally binding regulations) adopted by the EQB, but it is carried out by a local governmental unit or state agency (which is termed the RGU, for Responsible Governmental Unit). The Duluth City Planning Commission is the RGU for the City of Duluth. The primary role of the EQB is to advise local units and state agencies on the proper procedures for environmental review.

What is an Environmental Assessment Worksheet (EAW)?

An EAW is a document designed to provide a brief analysis and overview of the potential environmental impacts for a specific project and to help the RGU determine whether an Environmental Impact Statement (EIS) is necessary. The EAW consists of a standard list of questions and is meant to set out the basic facts of the project's environmental impacts. The EAW is not meant to approve or disapprove a project, but is simply a source of information to guide other approvals and permitting decisions. The information in the EAW process has two functions: to determine whether an EIS is needed, and to indicate how the project can be modified to lessen its environmental impacts; such modifications may be imposed as permit conditions by regulatory agencies.

What are significant environmental effects?

In deciding whether a project has the potential for significant environmental effects, the RGU "shall compare the impacts that may reasonably be expected to occur from the project with the criteria in this rule," considering the following factors (part 4410.1700, subparts 6 and 7):

A. Type, extent, and reversibility of environmental effects;

B. Cumulative potential effects of related or anticipated future projects;

C. The extent to which environmental effects are subject to mitigation by ongoing public regulatory authority; and

D. The extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other Environmental Impact Statements.

Can the RGU's decision be appealed?

The decision of the RGU to prepare or not prepare an EAW can be appealed in the county district court where the project would take place. The appeal must be filed within 30 days of the date on which the RGU makes its decision. There is no administrative appeal of an RGU; the EQB has no jurisdiction to review an RGU's decision.

Planning Commission

City of Duluth, Minnesota

Resolution No. 23-053

RESOLUTION OF THE CITY OF DULUTH PLANNING COMMISSION ADOPTING FINDINGS RELATED TO A CITIZEN PETITION FOR AN EAW, DENYING PETITON TO ORDER AN EAW FOR A PROPOSED HOTEL DEVELOPMENT ON SUNDBY ROAD

WHEREAS, on March 14, 2023, the Minnesota Environmental Quality Board (the "EQB") notified the City of Duluth that a citizen petition (the "Petition") meeting the requirements of Minn Rules 4410.1100 had been filed with the EQB requesting that an Environmental Assessment Worksheet ("EAW") be required for a proposed hotel development at Sundby Road; and

WHEREAS, that the EQB identified the City of Duluth as the Responsible Governmental Unit ("RGU") for the Petition; and

WHEREAS, pursuant to Section 2-41 of the City Code, the planning commission serves as the responsible governmental unit (the "RGU") pertaining to the conduct of environmental reviews pursuant to Minnesota Statutes Chapter 116D and the applicable state regulations; and

WHEREAS, exhaustive review of the Petition has been completed and findings made as described in Attachment A to this resolution.

NOW, THEREFORE, BE IT RESOLVED, by the Commission that the Findings of Fact, attached hereto as Attachment A, are adopted; and

BE IT FURTHER RESOLVED that the City Planning Commission determines that there is not the potential for significant environmental effects reasonably expected to occur from the Project, and that there is not sufficient basis to require the preparation of an EAW. The Petition is therefore denied.

April 11, 2023, City of Duluth Planning Commission meeting

Adopted on a vote of ___

CITY OF DULUTH FINDINGS ON

A CITIZENS' PETITION FOR THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT WORKSHEET

ON THE KINSETH HOTEL PROJECT

I. FINDINGS OF FACT

Pursuant to Minn. Statutes Chapter 116D and Minn. Rules Chapter 4410, the City of Duluth, Minnesota, (City) makes the following Findings of Fact and Conclusions (Findings) on a March 10, 2023, petition requesting the preparation of an Environmental Assessment Worksheet (EAW).

A. Project Description

1. Kinseth Hotel Corporation is a development group operating as Kinseth Invest 22 LLC with an address of 25 Main Place, Suite 400, Council Bluffs, Iowa, 51503 (Applicant). The Applicant is a registered corporate entity in Iowa. The Applicant's registered agent is Bruce Kinseth, 801 E. 2nd Ave., Suite 200, Coralville, Iowa, 52241.
2. The Applicant owns 6.7 acres of property in the City of Duluth, Minnesota, at Sundby Road and West Page Street in Section 18 of Township 50N, Range 14W, parcel identification numbers 010-2710-04594, 010-2710-04590, and 010-2710-04593 (the Property).
3. The current land cover of the Property is undeveloped open areas, hardwood forest, and wetlands. The Property was historically used for agricultural or residential uses.
4. The Applicant proposes to develop a 100-room, four-story extended stay hotel on the Property. In addition to the hotel, the site will include exterior surface parking with lighting, landscaping, stormwater management, and pedestrian circulation features (together, the Project). See Exhibit A – Planning Review Application.

B. Procedural History

Comprehensive Plan Guidance and Zoning

5. The Property is guided as a Central Business Secondary area by the City of Duluth comprehensive plan, Imagine Duluth 2035 https://imagineduluth.com/document. The future land use in Central Business Secondary areas is:

> "An area adjacent to and supporting the central business [CB] primary area or a stand-alone area providing a similar mix of destination land uses but at a lower intensity than the primary CB area. Includes mixed regional and neighborhood retail, employment centers, public spaces, medium density residential, and public parking facilities."

6. The City has adopted a Unified Development Code (UDC) (https://duluthmn.gov/planning-development/land-use-zoning-and-applications/zoning-regulations/) for the purpose of protecting public health, safety, and welfare; and to implement the goals and objectives of the

comprehensive land use plan through the development, redevelopment, use, and occupancy of land and structures, and protection of the environment (UDC Sec. 50-2).

7. The Property was rezoned in 2009 and is located in a Mixed Use-Commercial (MU-C) zoning district. See Exhibit B – City of Duluth Zoning Map. The purpose of the MU-C district (UDC Sec. 50-15.3) is to provide for community and regional commercial development along commercial corridors and nodal centers. Intended non-residential uses include retail, lodging, service, and recreational facilities needed to support the community and region. Development in an MU-C district should facilitate pedestrian connections between residential and non-residential uses.
8. In the MU-C zoning district, a hotel is a permitted use allowed by right with no use specific standards (UDC Sec. 50.19.8).

Wetland Application

9. Section 50-18.1 of the UDC establishes requirements for any development that may impact wetlands. The requirements include complying with state wetland statutes and regulations (Minn. Stat. chs. 103B and 103G, Minn. R. ch. 8420) (referred to as the Wetland Conservation Act or WCA), and review and formal approval by the designated City wetland representative.
10. On July 18, 2022, the Applicant submitted to the City an application for a wetland boundary and type concurrence for the Property (Wetland Application).
11. Included with the Wetland Application was a wetland delineation report for the Property completed by GEI Consultants, Inc. (GEI) on June 22, 2022 (Wetland Delineation Report). See Exhibit C – Wetland Delineation Application.
12. The Wetland Delineation Report was completed by GEI and signed by Rob Peterson, a Minnesota Certified Wetland Delineator.
13. Section 1. of the Wetland Delineation Report states that the purpose of the Wetland Delineation Report was to identify wetland and other aquatic resource boundaries and classify the wetland plant community types on the Property; and to identify potential aquatic resource impacts of the proposed development.
14. As described in section 2. of the Wetland Delineation Report, to delineate wetlands on the Property, GEI followed procedures in the *United States (U.S.) Army Corps of Engineers (USACE) Wetlands Delineation Manual* (Environmental Laboratory, Waterways Experiment Station, 1987, https://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (U.S. Army Engineer Research and Development Center, 2011, https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Website%20Organization/Northcentral%20and%20Northeast%20Regional%20Supplement.pdf). Delineated wetlands were classified in accordance with the classification systems set forth in *Wetlands of the United States* (Shaw and Fredine. 1971, no link provided, available in book form only), *Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979, https://digitalmedia.fws.gov/digital/collection/document/id/1653), and *Wetland Plants and Plant Communities of Minnesota and Wisconsin* (Eggers and Reed, 2014, https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/WetlandBook/Part%201%20-

%20Introduction,%20Key%20to%20Plant%20Communities,%20Shallow%20Open%20Water%20Communities.pdf).

15. Section 2. of the Wetland Delineation Report describes in detail the standard methodology used by GEI to identify wetland and other aquatic resource boundaries and classify the wetland plant community types on the Property; and to identify potential aquatic resource impacts of the proposed development.

16. Section 3. of the Wetland Delineation Report describes the results of GEI's investigation. In summary, GEI found the following wetland and aquatic resources on the Property:

    a. Wetland A – a Type 6 Alder Thicket wetland of approximately 1 acre;

    b. Wetland B – a Type 6 Alder Thicket wetland; and

    c. A Type 5 Shallow Open Water pond that is hydrologically connected to Wetland B.

17. As shown on the map on page 15 of the Wetland Delineation Report, Miller Creek does not pass through the Property/Project site, nor is the Creek adjacent to the site. Miller Creek does pass through properties to the west of the Project site. Sundby Road with adjacent road ditches lies between the Project site and Miller Creek.

18. The City's planning and economic development department has developed a robust process for reviewing planning applications for compliance with UDC Section 50-18.1.B and state and federal wetland laws (Wetland Review Process). See Exhibit D – City Wetland Review Process.

19. The designated City wetland representative reviewed the Wetland Application and other available information for compliance with UDC Section 50-18.1.B using the Wetland Review Process.

20. As required by the Wetland Review Process, the City wetland representative distributed the Wetland Application with the WCA required Notice of Application to the Wetland Technical Evaluation Panel (TEP) on July 20, 2022. The TEP is comprised of wetland experts from county, state, and federal agencies.

21. Members of the WCA Technical Evaluation Panel who received the Wetland Application included R.C. Boheim (South Saint Louis County Soil and Water Conservation District), David Demmer (Wetland Specialist, Minnesota Board of Water and Soil Resources), Samuel Martin (Minnesota Department of Natural Resources), Cliff Bentley (Minnesota Department of Natural Resources), Kristoffer Laman (U.S. Army Corps of Engineers), and Catherine Voce (U.S. Army Corps of Engineers).

22. The U.S. Army Corps of Engineers received the Wetland Application and responded to the applicant with a July 21, 2022, letter acknowledging the application. As of the date of these Findings, the City has not received, and does not anticipate receiving, notification from the U.S. Army Corps of Engineers that a federal Clean Water Act section 404 permit is needed.

23. The City wetland representative received comments from David Demmer on July 22, 2022, that he spoke with the wetland delineator (Rob Peterson) about the delineation report and stated the delineation is "straightforward."

24. The City wetland representative received comments from R.C. Boheim on July 22, 2022, that he reviewed the delineation in the office and in the field. He stated the delineation was "very straight forward" and he had no issues with the delineation and the City's approval.

25. The City wetland representative considered the comments from the Wetland Technical Evaluation Panel and approved the Wetland Application. The WCA required Notice of Decision was prepared on August 17, 2022, and signed by the City wetland representative on August 24, 2022. See Exhibit E – WCA Notice of Decision.

26. Subsequent to approval of the Wetland Application, the City received an application for Planning Review under UDC Sec. 50-15.3. As a part of Planning staff's review and recommendation to the Planning Commission, the potential for wetland impacts due to site development was evaluated. Staff found the site plan showed no wetland impacts and recommended approval of the Planning Review.

27. Subsequent to approval of the Wetland Application, the City Engineer initiated a process to change Sundby Road from a two-lane "rural-section" road (with ditches) and no sidewalk to an "urban-section" two-lane road with curb and gutter and sidewalk on one side. The result of this change is an estimated 2,550 square feet of wetland impact. The City will apply for any required wetland permits related to Sundby Road changes.

Planning Review Application

28. Section 50-37.11 of the UDC establishes the process for reviewing development proposals and applies to the Project. For applications for development in an MU-C zone district, the City Planning Commission shall review the application and conduct a public hearing pursuant to UDC Section 50-37.1.I, with public notice as required by UDC Section 50-37.1.H. The Planning Commission shall make a decision on the application based on the application's compliance with all applicable provisions of UDC Chapter 50 (UDC Sec. 50-37.11.C.). The Planning Commission decision may be appealed to the City Council (UDC Sections 50-36.I and 50-37.O.4).

29. On August 10, 2022, pursuant to Section 50.37.1.B of the UDC, the Applicant submitted to the City an application for planning review (Planning Review Application) for the Project (Exhibit A).

30. Pursuant to UDC Section 50-37.1.D, City staff reviewed the Planning Review Application and determined that the application was complete and complied with the standards of Chapter 50 of the UDC.

31. The City scheduled a public hearing on the Planning Review Application for the Planning Commission's September 13, 2022, meeting.

32. As required by UDC Section 50-37.1.I, and in accordance with UDC Section 50-37.1.H, the City mailed notification of the Planning Commission Public Hearing to surrounding property owners.

33. City staff prepared a report for the Planning Commission with findings and recommendation for approval. See Exhibit F – Staff Report. UDC requirements noted in the staff report relevant to environmental review were:

    a. UDC Section 50.18.1 relating to regulation of shorelands, flood plains, wetlands, and stormwater;

    b. UDC Section 50-25 relating to landscaping and tree preservation;

    c. UDC Section 50-29 relating to sustainability standards and including a sustainability point system for new development.

34. The Planning Commission held a public hearing on the Planning Application on September 13, 2022. Commenters expressed concerns about: screening/buffering of residential neighbors, lighting, and traffic.

35. After the close of the public hearing, the Planning Commission discussed the proposal, staff recommendation, and comments received during the public hearing portion of the meeting. After discussion, the Planning Commission voted 6-0 to table the Planning Review for further review by staff and to hear from the applicant regarding concerns raised during the public hearing. (https://duluthmn.gov/media/WebSubscriptions/99/20220913-99-14594.pdf).

36. As requested, City staff again reviewed the Planning Application, and on October 4, 2022, submitted a memorandum to the Planning Commission addressing the issues raised during the public hearing (i.e., buffering between differing land uses, lighting, and traffic impacts) (https://duluth-mn.legistar.com/LegislationDetail.aspx?ID=5809366&GUID=90C40CBC-4F60-4BE3-87F7-6939511AB170). The memorandum recommended approval of the Planning Application with findings as included in the staff report. See Exhibit G – Planning Memorandum.

37. Based on review of the Application by the City Engineer, the memorandum noted that a traffic impact is not required for the Project because the Project is expected to generate no more than 250 trips per day. The threshold for requiring a traffic impact study is a proposed development that will exceed 100 vehicles per hour at peak hour or 1,000 vehicles per day.

38. The memorandum also included a copy of a September 29, 2022, communication to the Planning Commission from Becca and Terry Mulenburg. The Mulenburg's expressed concern about the Project's potential impacts to wetlands, Miller Creek, wildlife, climate, loss of open space, traffic, noise, and lighting.

39. At its October 11, 2022, meeting, the Planning Commission removed the Planning Review from the table. The Applicant provided an overview of the Project, and public comment was taken. Commenters expressed concerns about: screening to residential neighbors, lighting, traffic, elimination of green space, sidewalks, removal and replacement of trees, and impact on wildlife and wetlands. After consideration of the information and comments and further discussion among the members, the Planning Commission approved the Application on a vote of 7-1 (https://duluthmn.gov/media/WebSubscriptions/99/20221011-99-14686.pdf).

40. The October 11, 2022, Planning Commission approval included the following findings of fact on issues relevant to environmental review (See Exhibit H – City of Duluth Planning Commission Action Letter):

    a. UDC section 50-15.3.E (Development Standards) - The hotel is not expected to generate more than 100 trips per hour/1,000 trips per day, an amount of traffic to warrant a traffic study.

    b. UDC section 50-18.1.B (Wetlands) - Site development has been positioned to avoid wetlands on the property, but some wetlands impacts are expected. The applicant will conduct a wetland delineation.

    c. UDC section 50-18.1.E (Stormwater Management) -The applicant's plans show storm water detention in two basins that discharge to adjacent wetlands. The City storm water engineer discussed the storm water treatment concepts with the developer's engineer. The site is in a trout stream watershed so storm water management will need to address the temperature of water leaving the site.

d. UDC section 50-25 (Landscaping)-The landscape plan shows 21 trees, exceeding the required 19 for parking lot coverage. The required frontage landscaping is met with 33 trees and 149 shrubs. The applicant will must provide details of interior parking lot landscaping that meets the UDC requirements in 50-25.4.B. A tree inventory has been conducted by a licensed landscape architect, but the tree replacement plan needs to be reviewed and approved by the City.

e. UDC section 50-29 (Sustainability) -This development will be required to obtain a minimum of 4 sustainability points

41. As allowed under UDC 50-37.1.O.4, and within the appeal period, two parties, Ben Fye (Fye) and a group of Duluth Heights neighbors (Neighbors), appealed the decision of the Planning Commission to the City Council. Fye appealed to request short-term rental licenses be granted to neighboring properties. The Neighbors appeal alleged multiple omissions and violations of Duluth City Code. See Exhibit I – Fye and Neighbors Appeal of October 11, 2022, Planning Commission Approval.

42. The Duluth City Council considered the appeals at its December 19, 2022, meeting at which it discussed the appeals and affirmed in Resolutions 22-1037R and 22-1040R the Planning Commission's decision to approve the planning review for the Project See Exhibit J – Duluth City Council December 19, 2022, Meeting Minutes with Resolutions 22-1037R and 22-1040R.

Building Permit Application

43. As detailed in UDC sections 50-36 and 50-37, procedurally, the next and final permit review of the Project by the City is reviewing a building permit application. As required by the UDC, when a complete building permit application is received, the Building Official will review the application for compliance with all applicable provisions of Chapter 50 of the UDC, which includes but is not limited to, compliance with impervious surface, buffering, shoreland, and stormwater and erosion control requirements.

44. On March 31, 2023, the City received a building permit application for the Project. The City determined on that date that the application is not complete.

45. As required by Minn. Rules 4410.3100, because of a pending decision on a petition for environmental review, the City is prohibited from making a final decision on the building permit application; however, as allowed by the same provision, the City may continue its review of the application.

Petition for Environmental Review

46. On March 8, 2023, the Environmental Quality Board (EQB) received a petition (the Petition) requesting that an EAW be prepared for the Project. See Exhibit K – Petition for EAW.

47. On March 10, 2023, the EQB made a determination that the City is the responsible governmental unit (RGU) to review the Petition See Exhibit L – EQB Determination of Responsible Governmental Unit.

48. On March 16, 2023, the EQB sent an email to the City confirming the City's designated recipient for EQB determinations received the Petition on March 14, 2023. In the same email, EQB also confirmed the City's request under Minn. Rules 4410.1100 for an additional 15 working days review time; and confirmed the deadline for the City's decision on the Petition as April 25, 2023. See Exhibit M – EQB Email Confirming Decision Deadline.

49. Duluth City Code section 2-41 grants to the City Planning Commission the authority to serve as the RGU and make final decisions on environmental reviews including a petition for an EAW (https://library.municode.com/mn/duluth/codes/legislative_code?nodeId=Chapter%202%20-%20Administration).

50. On March 14, 2023, the City was notified of alleged construction activity at the project site. To investigate the allegations, City staff visited and photographed the site on March 14, 2023. The City determined that someone had entered the site, plowed snow, and drilled several boring holes.

C. Determination of Environmental Review Requirements

51. As required by Minn. R. 4410.4300, subp. 1, the City finds that the Project does not require preparation of an EAW based on the mandatory EAW categories in Minn. R. 4410.4300, subp. 2 to 37.

52. The City finds that the Project does not require preparation of a mandatory Environmental Impact Statement (EIS) based on the thresholds in Minn. R. 4410.4400. 34.

53. The City finds that the Project is not exempt from environmental review as provided in Minn. R. 4410.4600.

54. As established in Minn. R. 4410.1100, subp. 6, to determine if an EAW shall be ordered, the City reviews all evidence presented to determine if the Project "may have the potential for significant environmental effects."

55. In making its determination, the City reviewed all evidence presented by the Petitioners and other evidence known to the City. Although not an exhaustive list, the City reviewed the following documents as part of its analysis in making its decision on the Petition:

    a. The Petition and attachments;

    b. The Application and Wetland Delineation Application;

    c. Applicable City Code provisions;

    d. Applicable state and federal law; and

    e. Other evidence referenced in these Findings.

D. Petition Identified Areas of Concern

56. The Petition raises the following areas of concern about the Project's potential to have significant environmental effects:

    a. Increase in impervious surface area impacts to Miller Creek and surrounding wetlands, specifically reduction in groundwater base flow, and increase in pollutants to Miller Creek (i.e., chloride, pathogens, and sediment);

b. Removal of vegetative buffer;
c. Increase in stream temperature of Miller Creek; and
d. Impact on a state-listed endangered plant species – floating marsh-marigold.

E. Statutory Evaluation Criteria

57. In considering the evidence of the potential for significant environmental effects, the City must take into account the factors listed in Minn. R. 4410.1700, supb. 7. The following factors shall be considered:
    a. Type, extent, and reversibility of environmental effects.
    b. Cumulative potential effects. The RGU shall consider the following factors:
        i. whether the cumulative potential effect is significant;
        ii. whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect;
        iii. the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effect; and
        iv. the efforts of the proposer to minimize the contributions from the project.
    c. The extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project.
    d. The extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs.

F. City Findings with Respect to Evaluation Criteria in Minn. R. 4410.1700, supb. 7

Type, Extent, and Reversibility of Environmental Effects

58. The first criterion that the City must consider when determining if a project has the potential for significant environmental effects is the "type, extent, and reversibility of environmental effects" Minn. R. 4410.1700, subp. 7(A). The City findings with respect to this criterion are set forth below.
59. The City finds the potential significant environmental effects identified in the Petition (impact of pollutants from increase in impervious surface, vegetative buffer removal, increase in stream temperature, and impact on endangered plant species) do fall within the definition of "environment" in Minn. R. 4410.0200 subp. 23: "Environment" means physical conditions existing in the area that may be affected by a proposed project. It includes land, air, water, minerals, flora, fauna, ambient noise, energy resources, and artifacts or natural features of historic, geologic, or aesthetic significance."
60. With respect to the type, extent, and reversibility of impacts that are reasonably expected to occur from the Project, the City makes the following findings.

Impacts of impervious surface increase, removal of vegetative buffer, and increase in stream temperature of Miller Creek

61. The Petition states concerns with the Project's potential for significant environmental effects to Miller Creek and surrounding wetlands from reduction in groundwater base flow and increase in pollutants (chloride, pathogens, sediment, and temperature) associated with runoff from impervious surfaces.

62. The Petition also states concerns with the Project's potential for significant environmental effects to Miller Creek caused by the removal of vegetative buffer. The potential impacts described in the Petition from the removal of vegetative buffer relate directly to the increase in pollutants as those are described in association with runoff from impervious surfaces.

63. In support of their concerns about the impact of runoff from impervious surfaces, Petitioners reference and rely upon several scientific studies, two total maximum daily load studies (TMDLs), and an Environmental Impact Statement prepared for a restoration project for Miller Creek, and general literature.

64. The City holds a Municipal Separate Storm Sewer System permit (MS4 Permit) issued by the Minnesota Pollution Control (MPCA). See Exhibit N – City of Duluth MS4 Permit. The MS4 permitting program (https://www.pca.state.mn.us/business-with-us/stormwater-permits) implements stringent stormwater discharge requirements under the Clean Water Act (33 United States Code §1251 et seq.) and state law (Minn. R. ch. 7090) to protect Minnesota's surface waters, which include waters of the United States, from pollution transported by stormwater runoff.

65. The MS4 permitting program is a well-established, robust program that requires cities to ensure that developers control runoff and erosion from project sites during construction; and manage the stormwater impacts of impervious surfaces after construction is complete (post-construction stormwater management).

66. The MS4 permitting program is designed to ensure state surface water quality standards (Minn. R. ch. 7050) for pollutants such as chloride, pathogens, sediment, and temperature are met.

67. The MS4 permitting program also requires cities to ensure any waste load allocation for applicable TMDLs are met.

68. The UDC section 50-18.1.E contains detailed provisions for stormwater management to control erosion and sediment control caused by stormwater runoff from development.

69. The City's stormwater management ordinance requires stormwater management that is more restrictive than the state and federal stormwater management requirements. For example, the City requires stormwater management on any site where 3,000 square feet of ground disturbance is proposed. The state and federal threshold is 1 acre of disturbance.

70. In addition, the City requires that all projects in areas that are "above bluff line" (where the Project is located) treat stormwater on site in exceedance of state and federal minimum standards in order to help water storage prior to discharge into waterways that, once they pass over the bluff line are unable to store water because of the steep slope.

71. Because the Project is above the bluff line, it is required to reduce stormwater leaving the Property to less than that amount of stormwater that left the property prior to development. This requirement is contained in UDC Table 50.18.1.E-4: Discharge Rate Limits. This table states

that the Project must reduce stormwater to 75% of predevelopment peak flow rates for 10- and 100-year events; and 90% of predevelopment peak flow rate for 2-year events.

72. The UDC section 50-18.1.E requires temperature controls for any project that discharges to, and are within one mile from, a trout/cold water stream. The Project must comply with this provision and provide temperature control for stormwater before it is discharged from the site. This requirement directly protects Miller Creek which is downslope from the Project.

73. To implement UDC section 50-18.1.E, the City has adopted Engineering Guidelines for the review of development applications for stormwater management (https://duluthmn.gov/media/12822/engineering-guidelines-2022.pdf).

74. Pages 16 and 17 of the Engineering Guidelines summarize the MS4 permit requirements as they are administered in the City.

> "The City of Duluth is an MPCA designated Municipal Separate Stormwater [sic] System (MS4) NPDES Permit holder with a special "selected-Non-Degradation" status that results in stringent requirements for stormwater discharge. Additionally, Lake Superior is a MCPA designated Outstanding Resource Value Water (ORVW), 16 trout streams within the City boundaries and the St. Louis River designated as an Area of Concern (AOC), which requires additional stormwater discharge restrictions. Duluth is required to minimize impervious surface so as to reduce the total runoff volume load of stormwater to the level that occurred prior to 1988. Duluth must also have specific methods to eliminate new and expanded (stormwater) discharges.
>
> "The current City of Duluth MS4 permit states that no "new or expanded" stormwater discharge to Lake Superior should occur. This implies that all stormwater runoff from newly installed impervious surfaces shall be fully contained on site and infiltrated whenever possible. When this is not possible, the developer must restrict discharges to the maximum extent possible (MEP). During site planning, preliminary design and final design, the developer shall document in the drainage report what actions were taken to avoid, minimize, and mitigate the volume of stormwater discharged to the MEP level. Utilization of Low Impact Development methods shall be evaluated for all projects. The MPCA reserves the right to make the final determination of all prudent and feasible alternatives and determine whether the methods proposed are significant enough to preserve the high quality of the ORVW.
>
> "The pollutants specifically identified in the MS4 permit are total stormwater Volume (TVOL), total suspended solids (TSS), total phosphorus (TP), and temperature (T). Proposed Projects must go through certain steps, beginning with initial planning, and use the most aggressive standards feasible to restrict pollutant discharge. Methods to restrict discharge include site planning to reduce the impervious footprint, utilizing Low Impact Development (LID) methods, designation of buffer areas/green spaces, and other methods and design approaches found in the Minnesota Stormwater Manual and other publications. Any and all projects that propose fully reconstructed impervious surfaces will provide treatment for a water quality volume to be determined.

> "Duluth has many impaired public waters with numerous MPCA TMDLs, this requires the proposed project to determine if there are additional requirements needed for the stormwater management plan."

75. Pages 17 and 18 of the Engineering Guidelines summarize the major steps in the process for obtaining approval of the stormwater management system for a project.

> "1. Preliminary Design Submittal and Meeting: Stormwater management requirements for development and redevelopment projects must be reviewed in the early phases of design. A preliminary design submittal worksheet shall be completed and a meeting with the stormwater engineer to discuss the project.
>
> "2. Drainage Report: A final drainage report with the proper format and content is required for all projects, and shall be submitted with the building permit application. This can be submitted to the stormwater engineer prior to the permit submittal to ensure timely review, revisions, and final approval.
>
> "3. Erosion Control Plan: Projects shall complete a City Erosion and Sediment Control Permit per the UDC. A complete temporary stormwater management plan (SWPPP) shall be submitted to and approved by the stormwater project engineer. All sites will be inspected by the City and MPCA. A SWPPP and erosion control permit will need to be completed as part of the permit package.
>
> "4. MS4 Statement of Compliance (MS4 SOC): Upon approval of the temporary and permanent stormwater management plans (Drainage Report), a MS4 Statement of Compliance shall be drafted by the stormwater engineer specific to the project, signed by the project's civil engineer and the owner. This will need to be completed prior to the issuance of any building permit(s).
>
> "5. Record Drawings: The design engineer shall provide record drawings of the constructed stormwater management system and provide a statement that the system was constructed to the project construction plan and specifications. See this document for submittal requirements for as-built/record drawings, for both public and private. The Certificate of Occupancy will not be issued until the record drawings have been submitted and approved.
>
> "6. Stormwater Management Facilities Operation and Maintenance Manual: A separate document to be submitted post-construction to the owner and the City."

76. As part of implementing its responsibilities under the MS4 Permit and following its Engineering Guidelines, the City engineering department reviews all development proposals for compliance with state and federal stormwater requirements.

77. In reviewing the Project as part of the Planning Review, City engineering staff followed all requirements specified in state and federal law and the Engineering Guidelines.

78. During their review, City staff engaged with the Applicant's professional design engineers in a pre-application meeting and a preliminary design meeting regarding stormwater management for the Project.

79. The applicant's plans show a below grade storm water storage and detention system that will meet Duluth's stringent requirements and treat stormwater for removal of pollutants, including temperature, and for groundwater recharge.

80. As part of the building permit application process which is currently pending, City engineering staff will also review final stormwater plans for the Project for compliance with state and federal law and the Engineering Guidelines.

81. As stated in Finding 40 c., above, the October 11, 2022, Planning Commission approval included a finding that "The site is in a trout stream watershed so storm water management will need to address the temperature of water leaving the site." The City will require the Applicant to commit to temperature mitigation prior to final city permitting approval.

82. The Project design has been reviewed by City engineering staff and meets all City shoreland setback requirements in the Natural Resource Overlay requirement of UDC Section 50-18.1.

83. City shoreland rules, including setbacks, meet the shoreland protection requirements set by the Minnesota Department of Natural Resources in Minn. Rules 6120.2500 - 6120.3900, which establish statewide minimum standards to protect habitat and water quality.

84. The City finds the information presented in the Petition and other information in the environmental review record does not demonstrate that the Project may have the potential for significant environmental effects to Miller Creek and surrounding wetlands from decreased groundwater base flow, removal of vegetative buffer, and increase in pollutants associated with increased runoff from impervious surfaces based on type, extent, and reversibility of environmental effects because the impacts are controlled through stringent city environmental and engineering requirements and detailed review of the Project plans by City staff for compliance with those requirements.

Impact on state-listed endangered plant species – floating marsh-marigold

85. The Petition states concerns with the Project's potential for significant environmental effects caused by impacts on a state-listed endangered plant species, the floating marsh-marigold.

86. Relying on the Minnesota Natural Heritage Information System (NHIS) (https://www.dnr.state.mn.us/nhnrp/nhis.html), the Petition asserts that because the floating marsh-marigold has been identified on a nearby property there may be floating marsh-marigold on the Applicant's Property.

87. The Petition does not represent that the floating marsh-marigold is present or has been known to be present in the past on the Property; only that it was documented in a shrub swamp and wet meadow on a site in the general area of the Project.

88. The floating marsh-marigold (caltha natans) is a Minnesota state endangered species.

89. When reviewing development applications for endangered species impacts, the City relies on the same source information, the NHIS, as the Petitioners. The NHIS is part of the Department of Natural Resources' (DNR) Minnesota Biological Survey of Native Plant Community and Rare Species County Maps (MBS) (https://www.dnr.state.mn.us/eco/mcbs/maps.html)

90. The City reviewed the Geographic Information System shapefiles from the DNR's MBS (https://www.dnr.state.mn.us/eco/mcbs/maps.html). The City determined that DNR has not identified any native plant communities or rare species on the Property.

91. The DNR's MBS survey procedures include the following steps. (https://www.dnr.state.mn.us/eco/mcbs/procedures/index.html)

a. Evaluation of existing inventory data for native plant communities and rare species. Rare species include endangered, threatened, and special concern species.
b. Selection and delineation of potential survey sites.
c. Consultation with resource managers and others knowledgeable about survey sites, and acquisition of permits and permission to conduct ground surveys.
d. Field assessment of the quality and condition of native habitats within selected sites.
e. Field surveys for targeted rare species and other species of conservation concern.
f. Entry of data into the Department of Natural Resources' Natural Heritage Information System.
g. Preparation of publications and summaries of results.

92. The City reasonably relies on the expertise of DNR in conducting the MBS to identify the presence of endangered species such as the floating marsh-marigold.

93. The City reasonably relies on the expertise of DNR to determine the time of year for biological surveys.

94. In addition, the Wetland Delineation Report did not identify the presence of the floating marsh-marigold on the Property.

95. On page 8, the Petition states "The best time to search for floating marsh-marigold is from May into September, when flowers or leaves are present [citation not included here]."

96. Section 2.4.1, page 4, of the Wetland Delineation Report states (emphasis added):

> "The on-site data collection activities occurred within the growing season as defined in the USACE Regional Supplement. GEI was on-site to conduct the wetland delineation on **May 21, 2022**. Normal circumstances were present during the time of the site visit."

97. The City finds that the Project wetland delineation was conducted during the best time to search for floating marsh-marigold.

98. The City finds that there are no native plant communities or rare species on the Property, including the floating marsh-marigold.

99. The City finds the information presented in the Petition and other information in the environmental review record does not demonstrate that the Project may have the potential for significant environmental effects associated with impacts on a state-listed endangered plant species, the floating marsh-marigold based on type, extent, and reversibility of environmental effects because there is no evidence in the record of the presence of the floating marsh-marigold on the Property.

Cumulative Potential Effects

100. The second criterion that the City must consider when determining if a project has the potential for significant environmental effects is "cumulative potential effects." In making this determination, the City must consider "whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effects;

and the efforts of the proposer to minimize the contributions from the project." Minn. R. 4410.1700 subp. 7(B).

101. With respect to the cumulative potential effects from the Project, the City makes the following findings.

102. Findings 61 through 99 are incorporated herein as part of the City's cumulative potential effects evaluation for the impacts of impervious surface increases on groundwater flow and pollutant load increases to Miller Creek and surrounding wetlands, including the removal of vegetative buffer.

103. The City finds there are no cumulative potential effects from the Project on groundwater flow and pollutant load increases to Miller Creek and surrounding wetlands, including the removal of vegetative buffer because the Project is above the bluff line and is required to treat stormwater for pollutants and reduce stormwater leaving the Property to less than that amount of stormwater that left the property prior to development.

104. The City finds there are no cumulative potential effects from the Project on the floating marsh-marigold because that plant is not present on the Property.

105. The City finds the information presented in the Petition and other information in the environmental review record does not demonstrate that the Project has the potential for significant environmental effects to Miller Creek and surrounding wetlands from an increase in impervious surface based on significant cumulative potential effects because stringent City requirements will result in a reduction in stormwater impacts including controlling pollutants and impacts from vegetative buffer removal and a reduction is, on its face, not an increase that can contribute to cumulative effects; and because the floating marsh-marigold is not present on the Property.

The Extent to Which the Environmental Effects Are Subject to Mitigation by Ongoing Public Regulatory Authority

106. The third criterion that the City must consider when determining if a project has the potential for significant environmental effects is "the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project." Minn. R. 4410.1700, subp. 7(C). The City's findings with respect to this criterion are set forth below.

107. The Project requires a zoning review and building permit from the City. As detailed in Findings 61 through 99, the City's processes are designed to anticipate and control impacts from the Project to surface waters, wetlands, groundwater, and endangered species.

108. The City finds that its zoning review and building permit processes include general and specific requirements for mitigation of environmental effects of the Project on the potential environmental effects described in the Petition. The City also finds those requirements are reasonably expected to effectively mitigate the identified potential environmental impacts of the Project. In summary, the City finds that the environmental effects of the Project are subject to mitigation, as explained in these Findings, by ongoing public regulatory authority.

The Extent to Which Environmental Effects can be Anticipated and Controlled as a Result of Other Available Environmental Studies Undertaken by Public Agencies or the Project Proposer, Including Other EISs

109. The fourth criterion the City must consider is "the extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs." Minn. R. 4410.1700, subp. 7(D). The City's Findings with respect to this criterion are set forth below.

110. The City reviewed the environmental studies included in the Petition.

111. The environmental studies include a TMDL for Duluth Urban Area Streams and a TMDL for Miller Creek Water Temperature.

112. As stated in Findings 64 through 83, the City's Planning Review process includes a review for the Project's compliance with MS4 stormwater management requirements. MS4 requirements include compliance with all applicable TMDLs. Therefore, the TMDLs are incorporated into the City's permitting process.

113. Also included in the Petition is an environmental impact statement (EIS) for a project to restore sections of Miller Creek.

114. As stated in Finding 17, Miller Creek does not cross the Property. As also stated in Findings 64 through 83, stormwater from the Property will be managed on-site as required by the City's MS4 permit, and stormwater will not leave the site before pollutants are removed, including managing temperature, in compliance with state and federal water quality standards.

115. The City finds that it has considered other environmental studies and the extent to which environmental effects can be anticipated and controlled as a result of those studies.

II. CONCLUSIONS

116. Based on the environmental review record, additional available information, and City staff expertise and experience on similar projects, the City finds that the potential significant environmental effects of the Project have been anticipated and will be controlled through provisions in the City zoning review and building permit process.

117. The EQB designated the City as the RGU for the decision to grant or deny the Petition.

118. The City followed all necessary procedures for the petition process.

119. The Duluth Planning Commission has the authority to make a decision in this matter.

120. The evidence presented by the petitioners or otherwise known to the City demonstrates that the Project does not have the potential for significant environmental effects.

121. The City concludes, based on the above Findings, that the preparation of an EAW, as requested in the Petition, is not warranted for the Project.

III. DECISION

122. The City determines that there is not the potential for significant environmental effects reasonably expected to occur from the Project, and that there is not sufficient basis to require the preparation of an EAW. The Petition is therefore denied.

Exhibit A

Planning Review Application

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580

planning@duluthmn.gov

Check One Box

- ____ Accessory Home Share-**$250**
- ____ Accessory Vacation Dwelling Unit, Limited **-$250**
- ____ Appeal to Planning Com. - **$407**
- ✓ Concurrent Use of Streets - **$797**
- ____ District Plan - **$1,144**
- ____ EAW or EIS- **$2,856,** plus any applicable professional fees
- ____ Historic
  - ____ Construction/Demolition - **$59**
  - ____ Resource Designation - **$103**
- ____ Interim Use Permit **$1,600**
- ✓ Planning Review - **$1,068**
- ____ Sidewalk Use Permit
  - ____ New Permit- **$171**
  - ____ Renewal Permit - **$86**
- ____ Special Use Permit, General - **$1,606**
- ____ Special Use Permit, Wireless Telecommunications*
  - ____ Modifying or Co-locating – **$2,856**
  - ____ New Facility or Tower – **$5,716**
  - ____ Escrow Deposit - **$9,717**
- ____ Subdivision Plat Approval or Amendment:
  - ____ Concept Plan - **$286**
  - ____ Preliminary Plat - **$1,138**
  - ____ Final Plat- **$857**
  - ____ Minor Subdivision-**$427**
  - ✓ Plat Amendment or Boundary Line Adjustment - **$286**
  - ____ Registered Land Survey-**$737**
- ____ Temporary Use Permit - **$275**
- ____ UDC Zoning Map Amendment/Rezoning
  - ____ General - **$912**
  - ____ MU-P or R-P **$2,578**
- ____ Vacation of Street or Utility Easement - **$905**
- ____ Variance - **$855**
- ____ Wetland,
  - ____ De Minimus, Delineation, or No Loss- **$227**
  - ____ Exemption-**$177**
  - ____ Replacement Plan - **$851**
- ____ Zoning Verification Letter-**$96**

APPLICATION COVER SHEET

CONTACT INFORMATION:

Applicant/Owner Aaron Mailey, Kinseth Hotel Corporation

Phone 712.796.1308 Email amailey@kinseth.com

Address 25 Main Place Suite 400

City Council Bluffs State Iowa Zip 51503

Owner's Agent (if applicable) David Bolf

Phone 218.727.5995 Email david@nce-duluth.com

Address 102 south 21st Ave West

City Duluth State MN Zip 55806

APPLICATION INFORMATION:

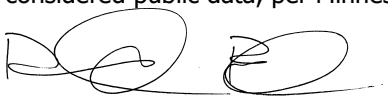
Street Address and Zoning of Property MU-C

Parcel ID Number 010-2710-04594

Reason for this Request (*Attach Additional Pages or Cover Letter if Necessary*)

Development of site for purpose of 4 story hotel. This requires a concurrent use permit for a private sanitary sewer, MU-C plan review and a boundary line adjustment.

The undersigned hereby represents upon all of the penalties of law for the purpose of inducing the City of Duluth to take the action herein requested, that all statements herein and attached are true and that all work herein mentioned will be done in accordance with the Ordinances of the City of Duluth and the laws of the State of Minnesota. Undersigned also understands that all documents provided to the City may be considered public data, per Minnesota Government Data Practices Act.



Signature of Applicant 8/9/22 Date

Reminder: include application checklist and all supporting information, including pre-application verification (if applicable). Submit completed information to Room 100, Construction Services and Inspections.

*Special Use Permit Checklist required to be submitted with this application coversheet.

LEGAL DESCRIPTION OF PID NO. 010-2710-04594 PER DOCUMENT NO. 1446541

Southeast Quarter of Northeast Quarter of Southwest Quarter (SE ¼ of NE ¼ of SW ¼), Section Eighteen (18), Township Fifty (50) North of Range Fourteen (14) West of the Fourth Principal Meridian EXCEPT the following parcels:

1. All that part of the SW ¼ of NE ¼ of SW ¼, Section 18, Township 50, Range 14 lying Southwesterly of the center line of the Sundby Road.

2. The Southerly 210 feet of the SE ¼ of NE ¼ of SW ¼, Section 18, Township 50, Range 14 lying Easterly of the center line of the Sundby Road, according to the United States Government Survey thereof, St. Louis County, Minnesota.

3. That part of Northeast Quarter of the Southwest Quarter, Section 18, Township 50 North, Range 14 West, shown as Parcel 222D on Minnesota Department of Transportation Right of Way Plat Numbered 69-92 as the same is on file and of record in the office of the County Recorder in and for St. Louis County, Minnesota.

LEGAL DESCRIPTION OF PID NO. 010-2710-04575 PER DOCUMENT NO. 1446541

That part of the Northeast Quarter of Northeast Quarter of Southwest Quarter (NE ¼ of NE ¼ of SW ¼), Section Eighteen (18), Township Fifty (50), North of Range Fourteen (14), West of the Fourth Principal Meridian, described as follows: Beginning at the Southeast corner of the said Northeast Quarter of Northeast Quarter of Southwest Quarter (NE ¼ of NE ¼ of SW ¼), (which is hereinafter referred to as "said parcel"), thence in a Westerly direction along the South line of said parcel to the Easterly line of the right-of-way of the County road known as the Sundby Road; thence Northerly and Westerly along the East line of said Sundby Road, a distance of One Hundred Feet (100'); thence in an Easterly direction on a line parallel to the South line of said parcel to a point on the Easterly line of said parcel; thence Southerly along the Easterly line of said parcel to the point of beginning, St. Louis County, Minnesota.

LEGAL DESCRIPTION OF COMBINED PARCELS

That part of the Northeast Quarter of the Southwest Quarter of Section 18, Township 50 North, Range 14 West of the Fourth Principal Meridian, St, Louis County, Minnesota described as follows:

Commencing at the South Quarter corner of said Section 18; thence on an assumed bearing of North 00 degrees 33 minutes 01 seconds West, along the East line of the Southwest Quarter of said Section 18 for a distance of 1528.74 feet to a line parallel with and distant 210.00 feet North of the South line of the Southeast Quarter of the Northeast Quarter of said Southwest Quarter, said point being the point of beginning of the parcel herein described; thence continue N 00 degrees 33 minutes 01 seconds West, along the East line of said Southwest Quarter 544.60 feet to a line parallel with and distant 100.00 feet North of the South line of the Northeast Quarter of the Northeast Quarter of said Southwest Quarter; thence North 89 degrees 50 minutes 18 seconds West, along said parallel line 448.81 feet to the Easterly right of way line of Sundby Road; thence South 01 degrees 29 minutes 47 seconds East, along said Easterly right of way line 82.55 feet; thence Southerly 17.50 feet, along said Easterly right of way line, along a non-tangential curve, concave to the East, said curve having a radius of 654.55 feet and a delta angle of 01 degrees 31 minutes 54 seconds, the chord of said curve bears South 02 degrees 15 minutes 36 seconds East for a chord distance of 17.50 feet to the South line of the Northeast Quarter of the Northeast Quarter of said Southwest Quarter; thence North 89 degrees 50 minutes 18 seconds West, along said South line 33.05 feet to the center line of said Sundby Road; thence Southeasterly 302.65 feet, along said center line, along a non-tangential curve, concave to the Northeast, said curve having a radius of 687.55 feet and a delta angle of 25 degrees 13 minutes 14 seconds, the chord of said bears South 15 degrees 28 minutes 59 seconds East for a chord distance of 300.21 feet; thence South 28 degrees 05 minutes 36 seconds East, along said center line 4.38 feet to the Northwesterly line of Parcel 222D, Minnesota Department of Transportation Right of Way Plat Numbered 69-92 and 69-104 as the same is on file and of record in the office of the County Recorder in and for St. Louis County, Minnesota; thence North 61 degrees 36 minutes 20 seconds East, along the Northwesterly line of said Parcel 222D 43.67 feet to the Northeasterly line of said Parcel 222D; thence South 28 degrees 23 minutes 40 seconds East, along said Northeasterly line 154.55 feet; thence Southeasterly 41.67 feet, along said Northeasterly line, along a non-tangential curve, concave to the Southwest, said curve having a radius of 294.11 feet and a delta angle of 08 degrees 07 minutes 05 seconds, the chord of said curve bears South 24 degrees 20 minutes 08 seconds East for a chord distance of 41.64 feet to a line parallel with and distant 210.00 feet North of the South line of the Southeast Quarter of the Northeast Quarter of said Southwest Quarter; thence North 89 degrees 55 minutes 14 seconds East, along said parallel line 272.98 feet to the point of beginning. Said parcel contains 224,011 square feet or 5.14 acres.

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

David R. Evanson
MN License #49505
DATE:08-04-2022

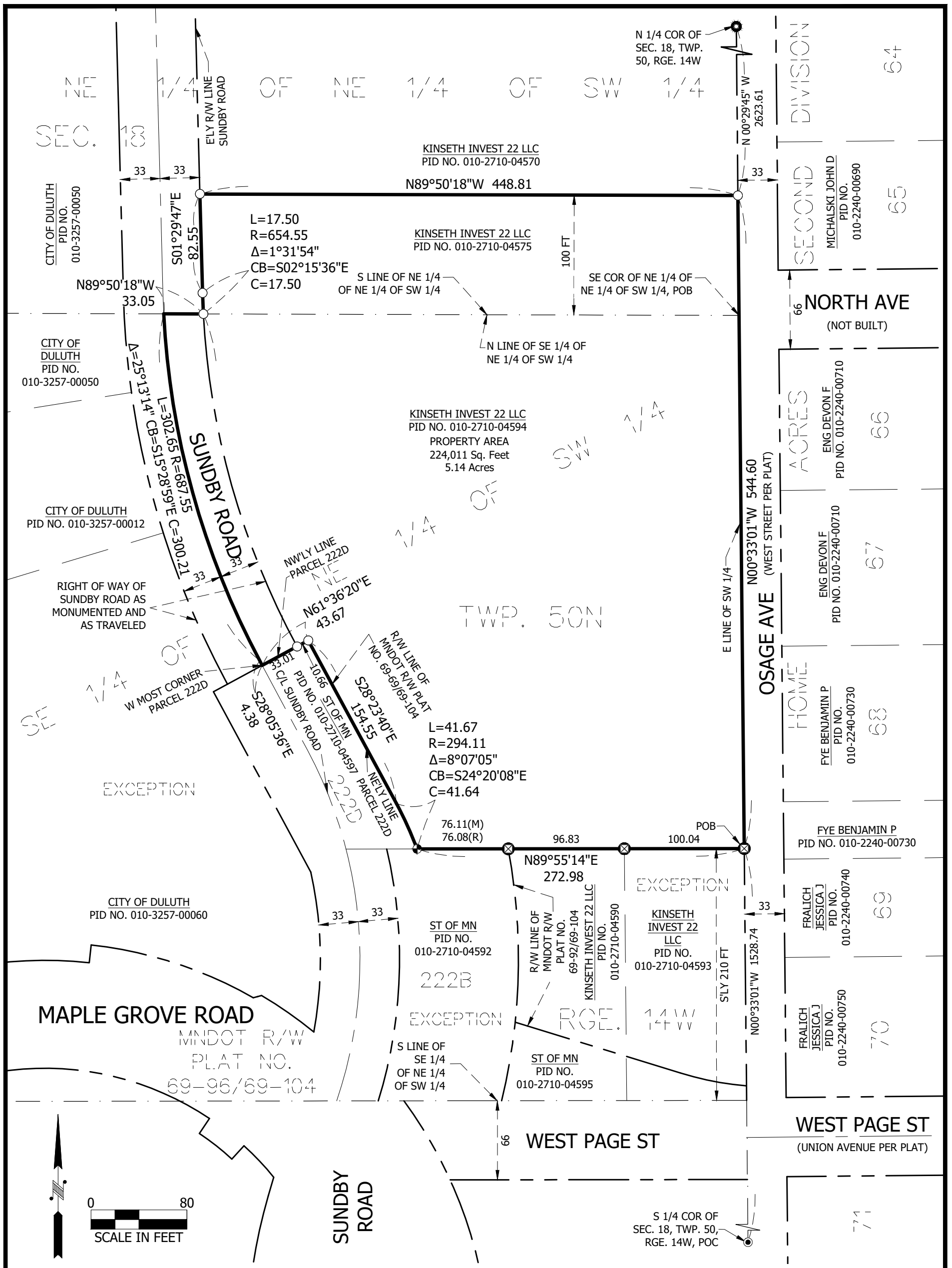
CERTIFICATE OF SURVEY

CLIENT:NORTHLAND CONSULTING ENGINEERS
ADDRESS:SUNDBY ROAD, DULUTH, MN 55811
DATE:08-04-2022 JOB NO:22-118

REVISIONS:

SHEET 1 OF 2

ALTA LAND SURVEY COMPANY
PHONE: 218-727-5211
LICENSED IN MN & WI
WWW. ALTALANDSURVEYDULUTH.COM



LEGEND

R/W-RIGHT OF WAY
(M)-FIELD MEASURED DIMENSION
(R)-RECORD DIMENSION
POC-POINT OF COMMENCEMENT
POB-POINT OF BEGINNING
C/L-CENTER LINE

SECTION SUBDIVISION LINE
CENTER LINE
RIGHT OF WAY LINE
BOUNDARY LINE AS SURVEYED
EXISTING PLAT/PARCEL LINE

CAST IRON MON
ALUM CAPPED MONUMENT
FOUND IRON PIPE
FOUND IRON ROD RLS. NO. 18877
CAPPED REBAR RLS. NO. 49505

SURVEYOR'S NOTES

1. BEARINGS ARE BASED ON THE ST. LOUIS COUNTY TRANSVERSE MERCATOR COORDINATE SYSTEM OF 1996. (NAD 83 2011)
2. NO SPECIFIC SOILS INVESTIGATION HAS BEEN COMPLETED ON THIS LOT BY ALTA LAND SURVEY COMPANY. THE SUITABILITY OF SOILS TO SUPPORT THE SPECIFIC STRUCTURE PROPOSED IS NOT THE RESPONSIBILITY OF ALTA LAND SURVEY COMPANY OR THE SURVEYOR.

CERTIFICATE OF SURVEY

CLIENT:NORTHLAND CONSULTING ENGINEERS	REVISIONS:
ADDRESS:SUNDBY ROAD, DULUTH, MN 55811	
DATE:08-04-2022 JOB NO:22-118	SHEET 2 OF 2

ALTA
LAND SURVEY COMPANY
PHONE: 218-727-5211
LICENSED IN MN & WI
WWW. ALTALANDSURVEYDULUTH.COM

OSAGE STREET

66'

33'

33'

SITE

RIGHT OF WAY TO BE DEDICATED TO CITY OF DULUTH

1352.0

1350.0

SEDIMENT REMOVAL STRUCTURE

1353.0

FLOW

NEW BUILDING
FFE=1351.00

DRAINAGE CONTROL STRUCTURE

TRASH ENCLOSURE
SEE ARCH

1352.0

1349.0

POND ELEV=1345.00

1350.5

SEDIMENT REMOVAL STRUCTURE

1348.5

1350.0

WEST PAGE STREET

SITE

FM

VAULT
EL=1343.66
INFO

1+00

2+00

3+00

4+00

5+00

6+00

7+00

8+00

MAPLE GROVE ROAD

SUNDBY ROAD

66' ROW

EXTEND URBAN SECTION OF SUNDBY ROAD

TOPOGRAPHIC SURVEY PROVIDED BY
ALTA LAND SURVEYING COMPANY, 2018

N E S W

0' 30' 60'

Northland
Consulting Engineers L.L.P.
Structural, Civil and Forensic Engineering Services
www.nce-engineers.com
Voice: (218)727-5995
Fax: (218)727-7779

KINSETH HOTEL CORPORATION
SITE DEVELOPMENT
SE 1/4 OF NE 1/4 SEC 18 T50N R14W

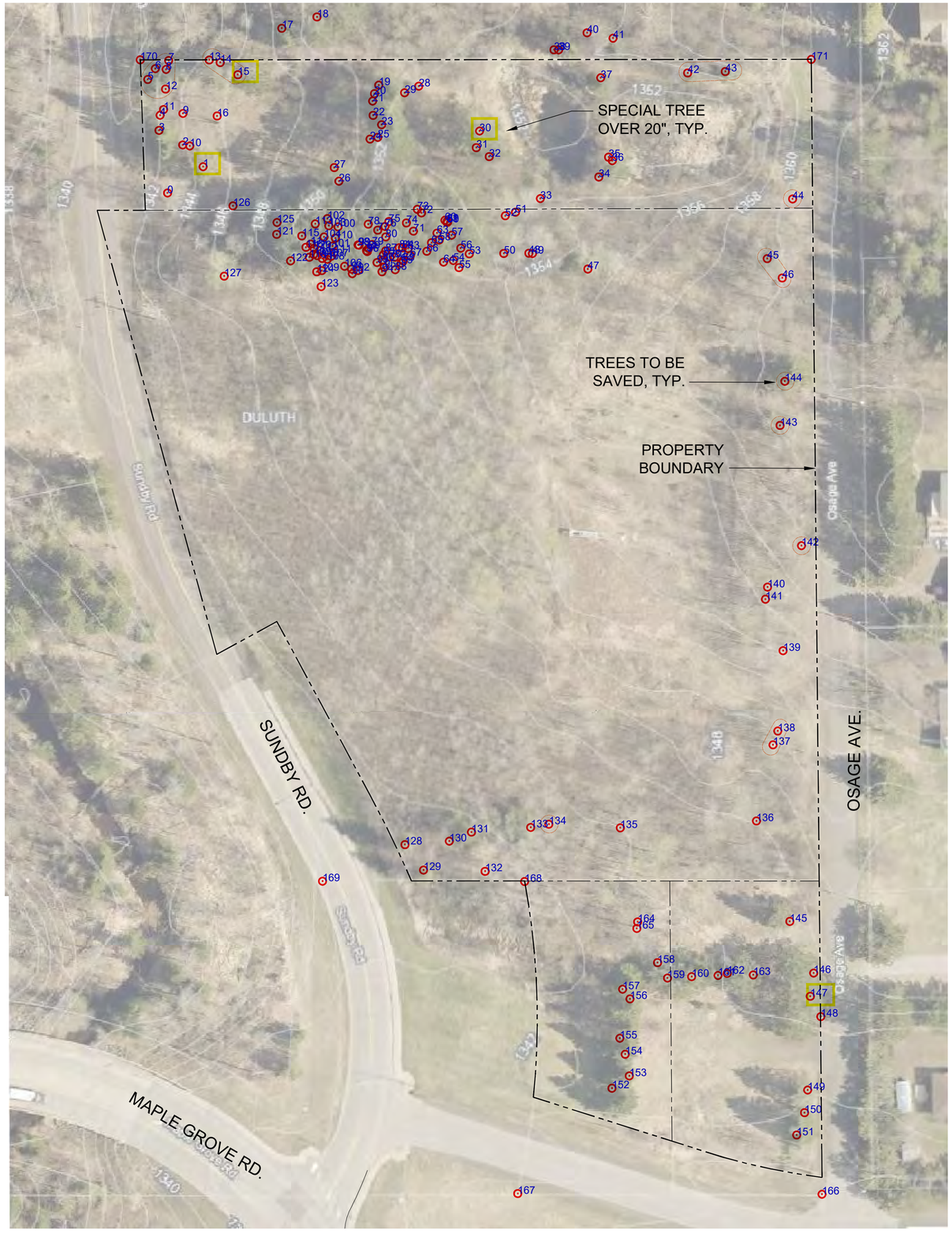
revision

Proj: 21-660
Date: 08/04/22
Drawn: JDO
Checked: DGB

SD SITE PLAN
Sheet Title

Sheet Number
1 OF 1

V:\Projects\21-660 - Kinseth Hotel Corporation\Design Engineering\DWG\SD_Exhibit_with_Contours_2022.05.23.dwg Aug 04, 2022 - 1:29pm chase



Pt ID	Species	Diameter	Comment	UDC Classification
0	White Birch	10.75	Removed	Tree of Interest
1	White Spruce	22.00	Removed	Special Tree
2	Balsam Fir	14.25	Removed	Tree of Interest
3	Balsam Fir	10.50	Removed	Tree of Interest
4	White Spruce	17.50	Removed	Special Tree
5	Balsam Fir	13.75	SAVED	Tree of Interest
6	White Spruce	13.50	SAVED	Special Tree
7	White Spruce	10.00	SAVED	Special Tree
8	White Spruce	12.50	SAVED	Special Tree
9	Silver Maple	16.25	Removed	Tree of Interest
10	Silver Maple	29.50	Removed	Tree of Interest
11	Silver Maple	11.25	Removed	Tree of Interest
12	Silver Maple	13.00	SAVED	Tree of Interest
13	White Spruce	15.25	SAVED	Special Tree
14	White Spruce	12.25	SAVED	Special Tree
15	Red Pine	23.25	SAVED	Special Tree
16	White Birch	14.00	Removed	Tree of Interest
17	Balsam Fir	13.50	*Off Property*	Tree of Interest
18	Red Pine	17.50	*Off Property*	Special Tree
19	White Spruce	16.25	Removed	Special Tree
20	White Spruce	12.75	Removed	Special Tree
21	White Spruce	12.50	Removed	Special Tree
22	White Spruce	15.75	Removed	Special Tree
23	Red Pine	15.75	Removed	Special Tree
24	Red Pine	15.50	Removed	Special Tree
25	Red Pine	18.25	Removed	Special Tree
26	Red Pine	19.00	Removed	Special Tree
27	Red Pine	17.50	Removed	Special Tree
28	Sugar Maple	15.25	Removed	Special Tree
29	Red Oak	7.00	Removed	Tree of Interest
30	Red Pine	22.50	Removed	Special Tree
31	Red Pine	19.75	Removed	Special Tree
32	Jack Pine	18.50	Removed	Tree of Interest
33	White Spruce	7.75	Removed	Tree of Interest
34	Red Pine	12.75	Wetland Tree	Special Tree
35	Tamarack	7.00	Wetland Tree	Tree of Interest
36	Jack Pine	8.50	Wetland Tree	Tree of Interest
37	White Spruce	8.50	Wetland Tree	Special Tree
38	White Spruce	13.00	*Off Property*	Special Tree
39	White Spruce	9.75	*Off Property*	Special Tree
40	White Birch	12.00	*Off Property*	Tree of Interest
41	White Spruce	12.75	*Off Property*	Special Tree
42	White Spruce	7.75	SAVED	Tree of Interest
43	White Spruce	7.50	SAVED	Tree of Interest
44	Tamarack	9.25	SAVED	Tree of Interest
45	White Birch	10.50	SAVED	Tree of Interest
46	Green Ash	11.25	SAVED	Tree of Interest
47	Quaking Aspen	16.00	Removed	Tree of Interest
48	Paper Birch	11.25	Removed	Tree of Interest
49	Quaking Aspen	17.00	Removed	Tree of Interest
50	Quaking Aspen	13.50	Removed	Tree of Interest
51	Quaking Aspen	10.25	Removed	Tree of Interest
52	Quaking Aspen	11.50	Removed	Tree of Interest
53	Red Pine	14.50	Removed	Special Tree
54	Red Pine	12.50	Removed	Special Tree
55	Red Pine	10.50	Removed	Special Tree
56	Red Pine	14.00	Removed	Special Tree
57	Red Pine	10.50	Removed	Special Tree
58	Red Pine	10.00	Removed	Special Tree
59	Red Pine	11.50	Removed	Special Tree
60	Red Pine	13.75	Removed	Special Tree
61	Red Pine	11.75	Removed	Special Tree
62	Red Pine	10.50	Removed	Special Tree
63	Red Pine	8.25	Removed	Special Tree
64	Red Pine	14.00	Removed	Special Tree
65	Red Pine	11.75	Removed	Special Tree
66	Red Pine	6.50	Removed	Tree of Interest
67	Red Pine	10.25	Removed	Special Tree
68	Red Pine	15.00	Removed	Special Tree
69	Red Pine	13.75	Removed	Special Tree
70	Red Pine	10.00	Removed	Special Tree
71	Red Pine	12.00	Removed	Special Tree
72	Red Pine	13.00	Removed	Special Tree
73	Red Pine	12.75	Removed	Special Tree
74	Red Pine	9.25	Removed	Special Tree
75	White Birch	13.00	Removed	Tree of Interest
76	Red Pine	12.25	Removed	Special Tree
77	Red Pine	10.50	Removed	Special Tree
78	Red Pine	13.25	Removed	Special Tree
79	Red Pine	9.50	Removed	Special Tree
80	Red Pine	7.25	Removed	Tree of Interest
81	Red Pine	7.75	Removed	Tree of Interest
82	Red Pine	8.00	Removed	Special Tree
83	Red Pine	8.00	Removed	Special Tree
84	Red Pine	8.75	Removed	Special Tree
85	Red Pine	9.25	Removed	Special Tree

Pt ID	Species	Diameter	Removed	UDC Classification
86	Red Pine	10.75	Removed	Special Tree
87	Red Pine	10.25	Removed	Special Tree
88	Red Pine	14.25	Removed	Special Tree
89	Red Pine	8.25	Removed	Special Tree
90	Red Pine	15.00	Removed	Special Tree
91	Red Pine	6.75	Removed	Special Tree
92	Red Pine	14.00	Removed	Special Tree
93	Red Pine	8.00	Removed	Special Tree
94	Red Pine	6.50	Removed	Tree of Interest
95	Red Pine	9.50	Removed	Special Tree
96	Red Pine	8.00	Removed	Special Tree
97	Red Pine	10.50	Removed	Special Tree
98	Red Pine	10.50	Removed	Special Tree
99	Red Pine	8.75	Removed	Special Tree
100	Red Pine	8.25	Removed	Special Tree
101	Red Pine	10.50	Removed	Special Tree
102	Red Pine	11.00	Removed	Special Tree
103	Red Pine	11.50	Removed	Special Tree
104	Red Pine	10.00	Removed	Special Tree
105	Red Pine	8.75	Removed	Special Tree
106	Red Pine	7.50	Removed	Tree of Interest
107	Red Pine	8.50	Removed	Special Tree
108	Red Pine	10.50	Removed	Special Tree
109	Red Pine	6.25	Removed	Tree of Interest
110	Red Pine	14.20	Removed	Special Tree
111	Red Pine	7.50	Removed	Tree of Interest
112	Red Pine	10.00	Removed	Special Tree
113	Red Pine	14.00	Removed	Special Tree
114	Red Pine	11.75	Removed	Special Tree
115	Red Pine	14.50	Removed	Special Tree
116	Red Pine	9.75	Removed	Special Tree
117	Red Pine	8.50	Removed	Special Tree
118	Red Pine	6.50	Removed	Tree of Interest
119	Red Pine	8.75	Removed	Special Tree
120	Red Pine	6.00	Removed	Tree of Interest
121	Red Pine	14.00	Removed	Special Tree
122	Red Pine	16.00	Removed	Special Tree
123	Red Pine	16.00	Removed	Special Tree
124	Red Pine	14.75	Removed	Special Tree
125	Balsam Fir	10.50	Removed	Tree of Interest
126	White Spruce	9.25	Removed	Special Tree
127	Quaking Aspen	14.75	Removed	Tree of Interest
128	White Spruce	12.50	Wetland Tree	Special Tree
129	White Spruce	9.50	Wetland Tree	Special Tree
130	White Spruce	8.25	Wetland Tree	Special Tree
131	White Spruce	11.50	Wetland Tree	Special Tree
132	Quaking Aspen	10.25	Wetland Tree	Tree of Interest
133	Quaking Aspen	10.25	Wetland Tree	Tree of Interest
134	Quaking Aspen	11.00	SAVED	Tree of Interest
135	Quaking Aspen	11.50	Wetland Tree	Tree of Interest
136	Quaking Aspen	12.25	Wetland Tree	Tree of Interest
137	Quaking Aspen	11.25	SAVED	Tree of Interest
138	Quaking Aspen	10.75	SAVED	Tree of Interest
139	Quaking Aspen	10.00	Removed	Tree of Interest
140	Quaking Aspen	10.75	Removed	Tree of Interest
141	Quaking Aspen	11.00	Removed	Tree of Interest
142	Quaking Aspen	11.75	SAVED	Tree of Interest
143	White Spruce	9.50	SAVED	Special Tree
144	White Spruce	17.75	SAVED	Special Tree
145	White Spruce	16.25	Out of Development Area	Special Tree
146	Red Pine	18.50	Out of Development Area	Special Tree
147	Red Pine	20.00	Out of Development Area	Special Tree
148	Red Pine	19.50	Out of Development Area	Special Tree
149	White Spruce	19.50	Out of Development Area	Special Tree
150	White Spruce	15.25	Out of Development Area	Special Tree
151	Balsam Fir	12.50	Out of Development Area	Tree of Interest
152	White Spruce	17.50	Out of Development Area	Special Tree
153	White Spruce	18.00	Out of Development Area	Special Tree
154	White Spruce	16.00	Out of Development Area	Special Tree
155	White Spruce	14.25	Out of Development Area	Special Tree
156	White Spruce	19.50	Out of Development Area	Special Tree
157	White Spruce	16.75	Out of Development Area	Special Tree
158	Red Pine	13.25	Out of Development Area	Special Tree
159	Red Pine	17.75	Out of Development Area	Special Tree
160	White Spruce	10.50	Out of Development Area	Special Tree
161	White Spruce	9.50	Out of Development Area	Special Tree
162	White Spruce	10.50	Out of Development Area	Special Tree
163	Red Pine	17.00	Out of Development Area	Special Tree
164	Balsam Poplar	11.50	Out of Development Area	Tree of Interest
165	Balsam Poplar	14.50	Out of Development Area	Tree of Interest
166		0.00	*Property Corner*	
167		0.00	*Property Corner*	
168		0.00	*Property Corner*	
169		0.00	*Property Corner*	
170		0.00	*Property Corner*	
171		0.00	*Property Corner*	

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

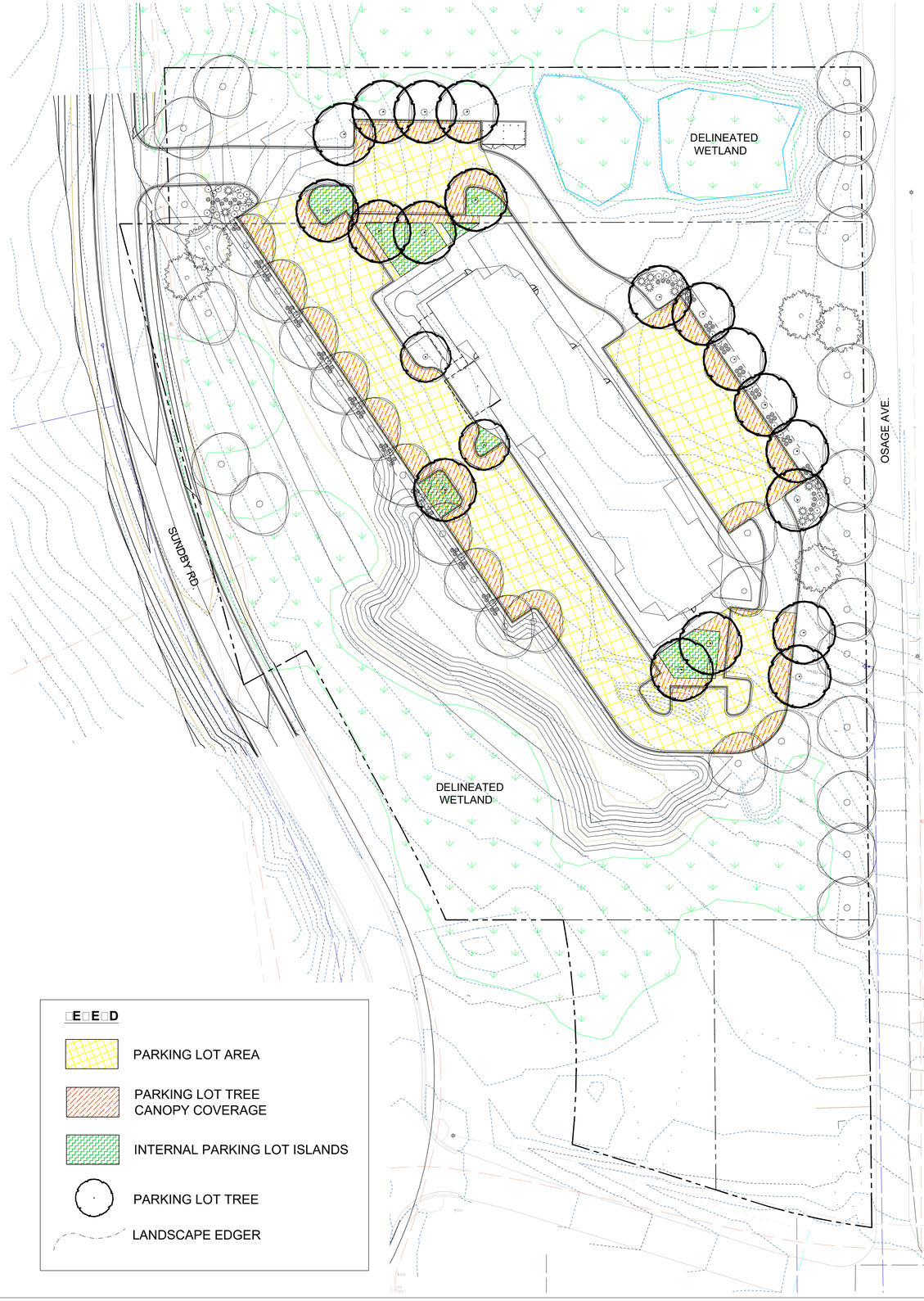
0 40' 80'
ONE INCH

Sheet Key

Sheet Title
TREE INVENTORY

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS
Project Number 22100
Sheet Number L-1.0

Aug 05, 2022 - 10:29am
P:\22100 - Sundby Road\Tree\Sht\L001 - 22100 - Sundby Rd Tree.dwg



UDC CALCULATIONS

PARKING LOT SIZE:	**45,545 SF (112 SPACES)**
INTERIOR LANDSCAPING:	45,545 SF PARKING AREA INTERNAL ISLANDS REQUIRED: 6,832 SF PROVIDED: 3,705 SF (8.1%) 1 TREE/300 SF INTERNAL LANDSCAPE AREA REQUIRED: 19 TREES PROVIDED: 21 TREES MINIMUM 30% TREE CANOPY REQUIRED REQUIRED: 13,664 SF PROVIDED: 14,014 SF
STREET FRONTAGE #1 LINEAR STREET FOOTAGE:	**SUNDBY RD.** 600 LF
TREES:	1 TREE/35 FT. LINEAR FRONTAGE REQUIRED: 17 TREES PROVIDED: 17 TREES
SHRUBS:	3 LARGE SHRUBS/25 FT. LINEAR FRONTAGE REQUIRED: 72 LARGE SHRUBS/GRASSES PROVIDED: 82 LARGE SHRUBS/GRASSES
STREET FRONTAGE #2 LINEAR STREET FOOTAGE:	**OSAGE AVE.** 550 LF
TREES:	1 TREE/35 FT. LINEAR FRONTAGE REQUIRED: 16 TREES PROVIDED: 16 TREES
SHRUBS:	3 LARGE SHRUBS/25 FT. LINEAR FRONTAGE REQUIRED: 66 LARGE SHRUBS/GRASSES PROVIDED: 67 LARGE SHRUBS/GRASSES
	ALL PLANT SELECTIONS WILL MEET UDC REQUIREMENTS
	ALL SHRUB PLANTING BEDS TO INCLUDE 3-4" SHREDDED HARDWOOD MULCH WITH LANDSCAPE FABRIC ALL DISTURBED AREAS NOT PLANTED WITH SHRUBS/ TREES ARE TO BE SODDED OR PLANTED WITH NATIVE GRASSES; SEE PLANS FOR DETAIL.

LANDSCAPE KEY

	Common Name	Scientific Name	Size	Type	Quantity	Height	Width
TREES							
AM	Apollo Maple	Acer saccharum 'Barrett Cole'	2.5"	B&B		25'	10-15'
BL	Boulevard Linden	Tilia americana 'Boulevard'	2.5"	B&B		50-60'	25-30'
FFM	Fall Fiesta Maple	Acer saccharum 'Bailsta'	2.5"	B&B		50-75'	50'
JE	Jefferson Elm	Ulmus americana 'Jefferson'	2.5"	B&B		70'	50'
MSO	Majestic Skies Oak	Quercus ellipsoidalis 'Bailskies'	2.5"	B&B		60'	45'
NFM	Northern Flare Maple	Acer saccharum 'Sisseton'	2.5"	B&B		40-50'	30-40'
NP	Norway Pine	Pinus resinosa	6'	B&B		50-80'	30-40'
PE	Princeton Elm	Ulmus americana 'Princeton'	2.5"	B&B		60'	40'
SL	Sentry Linden	Tilia americana 'McKSentry'	2.5"	B&B		40-45'	25-30'
SWO	Swamp White Oak	Quercus bicolor	2.5"	B&B		50-60'	40-50'
WS	White Spruce	Picea glauca	6'	B&B		40-60'	15-20'
SHRUBS							
APS	Acrocona Pusch Spruce	Picea abies 'Acrocona Pusch'	#3	Container		2-3'	3-4'
BBH	Butterfly Bush Honeysuckle	Diervilla sessilifolia 'Butterfly'	#2	Container		3-5'	3-4'
DPB	Double Play Big Bang Spirea	Spiraea japonica 'Tracy'	#2	Container		2-3'	2-3'
LGJ	Lime Glow Juniper	Juniperus horizontalis 'Lime Glow'	#3	Container		18"	3-5'
ORNAMENTAL GRASSES							
ORG	Overdam Feather Reed Grass	Calamagrostis x acutiflora 'Overdam'	#1	Container		24-36"	18"
SSG	Shenandoah Red Switch Grass	Panicum virgatum 'Shenandoah'	#1	Container		36"	24"
TPD	Tara Prairie Dropseed	Sporobolus heterolepis 'Tara'	#1	Container		18-24"	12"

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, Suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

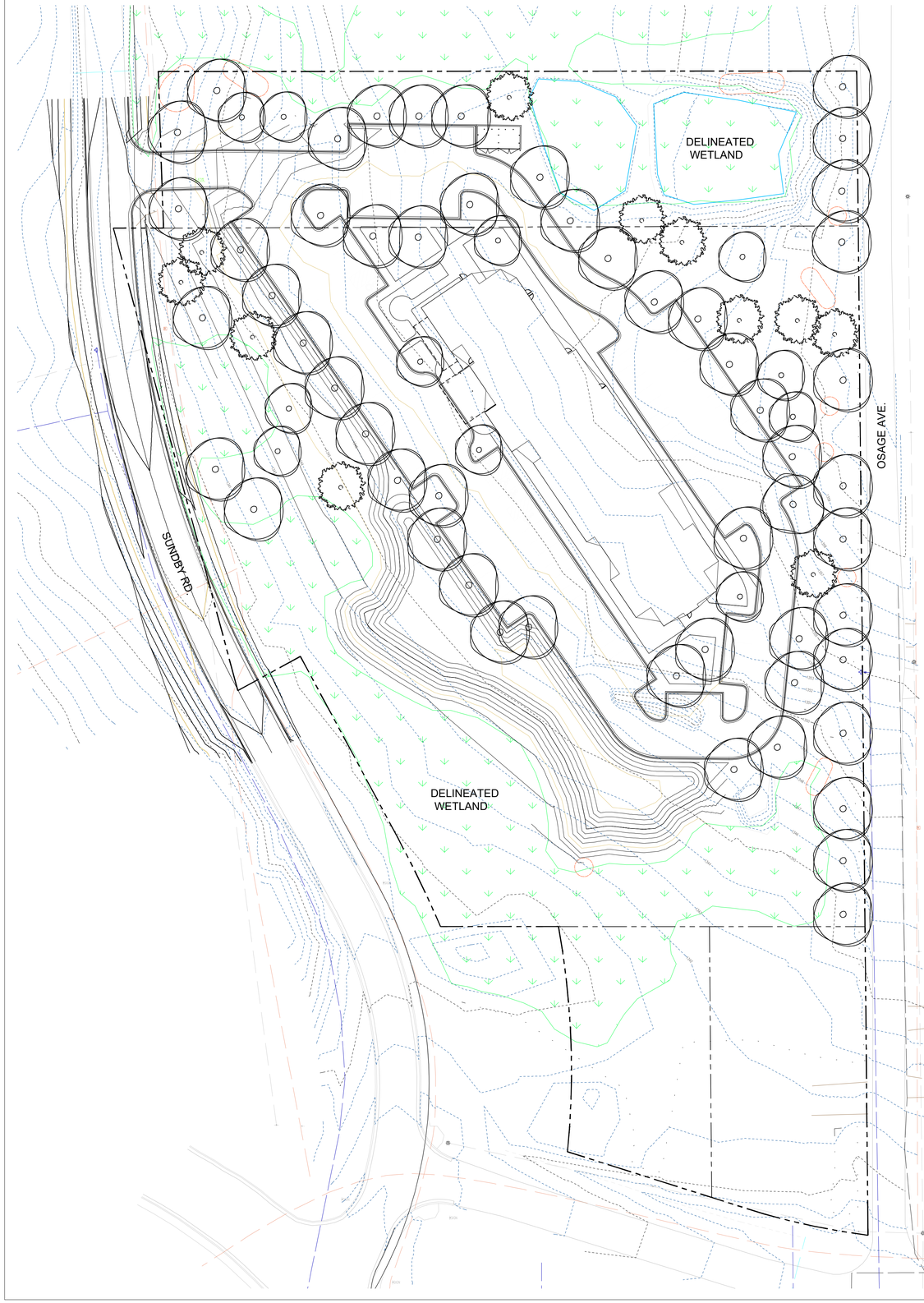
0 40' 80'
ONE INCH

Sheet Key

Sheet Title
UDC LANDSCAPE PLAN

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS
Project Number 22100
Sheet Number L-1.1

Aug 03, 2022 - 10:52am
P:\22100 - Sundby Road Hotel\Site\BP - 22100 - Sundby Rd Hotel.dwg



TREE PRESERVATION AND REPLACEMENT PLAN

TREE PRESERVATION CREDITS (50-25.6)			
DBH of Preserved Tree	**Quantity**	**# of Trees Credited**	**Total**
Over 12 in.	8	3	24
8 in. to 11.9 in.	9	2	18
5 in. to 7.9 in.	2	1	2
TOTAL TREE CREDITS		**44**	

TREES TO BE REMOVED

SPECIAL TREES

ID NO.	Species	DBH	UDC Designation
1	White Spruce	22.00	Special Tree
4	White Spruce	17.50	Special Tree
19	White Spruce	16.25	Special Tree
20	White Spruce	12.75	Special Tree
21	White Spruce	12.50	Special Tree
22	White Spruce	15.75	Special Tree
23	Red Pine	15.75	Special Tree
24	Red Pine	15.50	Special Tree
25	Red Pine	18.25	Special Tree
26	Red Pine	19.00	Special Tree
27	Red Pine	17.50	Special Tree
28	Sugar Maple	15.25	Special Tree
30	Red Pine	22.50	Special Tree
31	Red Pine	19.75	Special Tree
53	Red Pine	14.50	Special Tree
54	Red Pine	12.50	Special Tree
55	Red Pine	10.50	Special Tree
56	Red Pine	14.00	Special Tree
57	Red Pine	10.50	Special Tree
58	Red Pine	10.00	Special Tree
59	Red Pine	11.50	Special Tree
60	Red Pine	13.75	Special Tree
61	Red Pine	11.75	Special Tree
62	Red Pine	10.50	Special Tree
63	Red Pine	8.25	Special Tree
64	Red Pine	14.00	Special Tree
65	Red Pine	11.75	Special Tree
67	Red Pine	10.25	Special Tree
68	Red Pine	15.00	Special Tree
69	Red Pine	13.75	Special Tree
70	Red Pine	10.00	Special Tree
71	Red Pine	12.00	Special Tree
72	Red Pine	13.00	Special Tree
73	Red Pine	12.75	Special Tree
74	Red Pine	9.25	Special Tree
76	Red Pine	12.25	Special Tree
77	Red Pine	10.50	Special Tree
78	Red Pine	13.25	Special Tree
79	Red Pine	9.50	Special Tree
82	Red Pine	8.00	Special Tree
83	Red Pine	8.00	Special Tree
84	Red Pine	8.75	Special Tree
85	Red Pine	9.25	Special Tree
86	Red Pine	10.75	Special Tree
87	Red Pine	10.25	Special Tree
88	Red Pine	14.25	Special Tree
89	Red Pine	8.25	Special Tree
90	Red Pine	15.00	Special Tree
91	Red Pine	6.75	Special Tree
92	Red Pine	14.00	Special Tree
93	Red Pine	8.00	Special Tree
95	Red Pine	9.50	Special Tree
96	Red Pine	8.00	Special Tree
97	Red Pine	10.50	Special Tree
98	Red Pine	10.50	Special Tree
99	Red Pine	8.75	Special Tree
100	Red Pine	8.25	Special Tree
101	Red Pine	10.50	Special Tree
102	Red Pine	11.00	Special Tree
103	Red Pine	11.50	Special Tree
104	Red Pine	10.00	Special Tree
105	Red Pine	8.75	Special Tree
107	Red Pine	8.50	Special Tree
108	Red Pine	10.50	Special Tree
110	Red Pine	14.20	Special Tree
112	Red Pine	10.00	Special Tree
113	Red Pine	14.00	Special Tree
114	Red Pine	11.75	Special Tree
115	Red Pine	14.50	Special Tree
116	Red Pine	9.75	Special Tree
117	Red Pine	8.50	Special Tree
119	Red Pine	8.75	Special Tree
121	Red Pine	14.00	Special Tree
122	Red Pine	16.00	Special Tree
123	Red Pine	16.00	Special Tree
124	Red Pine	14.75	Special Tree
126	White Spruce	9.25	Special Tree
	Total DBH Removed	**944.2**	

TREES TO BE REMOVED

TREES OF INTEREST

ID NO.	Species	DBH	UDC Designation
0	White Birch	10.75	Tree of Interest
2	Balsam Fir	14.25	Tree of Interest
3	Balsam Fir	10.50	Tree of Interest
9	Silver Maple	16.25	Tree of Interest
10	Silver Maple	29.50	Tree of Interest
11	Silver Maple	11.25	Tree of Interest
16	White Birch	14.00	Tree of Interest
29	Red Oak	7.00	Tree of Interest
32	Jack Pine	18.50	Tree of Interest
33	White Spruce	7.75	Tree of Interest
47	Quaking Aspen	16.00	Tree of Interest
48	Paper Birch	11.25	Tree of Interest
49	Quaking Aspen	17.00	Tree of Interest
50	Quaking Aspen	13.50	Tree of Interest
51	Quaking Aspen	10.25	Tree of Interest
52	Quaking Aspen	11.50	Tree of Interest
66	Red Pine	6.50	Tree of Interest
75	White Birch	13.00	Tree of Interest
80	Red Pine	7.25	Tree of Interest
81	Red Pine	7.75	Tree of Interest
94	Red Pine	6.50	Tree of Interest
106	Red Pine	7.50	Tree of Interest
109	Red Pine	6.25	Tree of Interest
111	Red Pine	7.50	Tree of Interest
118	Red Pine	6.50	Tree of Interest
120	Red Pine	6.00	Tree of Interest
125	Balsam Fir	10.50	Tree of Interest
127	Quaking Aspen	14.75	Tree of Interest
139	Quaking Aspen	10.00	Tree of Interest
140	Quaking Aspen	10.75	Tree of Interest
141	Quaking Aspen	11.00	Tree of Interest
Removed		**351.0**	

DBH REPLACEMENT REQUIREMENTS (50-25.9)

Tree Type	# to be Removed	DBH to be Removed	% DBH to be Replaced	Replacement Requirement (in.)
Trees of Interest	31	351.0	20%	70.2
Special Trees	77	944.2	40%	377.7
TOTAL	*108*	*1295.2*	n/a	**447.9**

TREE REPLACEMENT CALCULATIONS: Trees to be Planted

IF REPLACING WITH:	Trees of Interest (1 in/ 1 in required)
Number of Trees	180
Caliper of Trees	2.5
TOTAL INCHES REPLACED	**450**
TOTAL INCHES REQUIRED	*447.9*

IF REPLACING WITH:	Special Trees (1 in/ 1.5 in required)
Number of Trees	120
Caliper of Trees	2.5
TOTAL INCHES REPLACED	**450**
TOTAL INCHES REQUIRED	*447.9*

TREE REPLACEMENT w/ TREE PRESERVATION CREDITS:

TOTAL TREE CREDITS=	**44**
SPECIAL TREES REQ'D=	120
TREES OF INTEREST REQ'D=	180

Per **UDC Section 50-25.6,** trees to be preserved will count towards the total number needed for replacement, up to 50%. With those factored in, the following are the final replacement numbers for both Special Trees and Trees of Interest:

SPECIAL TREES REQUIRED=	**76**
TREES OF INTEREST REQUIRED=	**136**

TREE REPLACEMENT NOTE:

REPLACEMENT TREE QUANTITY CAN BE REDUCED BY CONTRIBUTING CASH IN LIEU TO THE CITY TREE FUND. TREE QUANTITIES SHOWN ARE USING SPECIAL TREE SPECIES (USING OTHER SPECIES WOULD REQUIRE ADDITIONAL TREE PLANTINGS; SEE CHART 50-25.6).

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

0 40' 80'
ONE INCH

Sheet Key

Sheet Title
TREE REPLACEMENT PLAN

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS

Project Number 22100

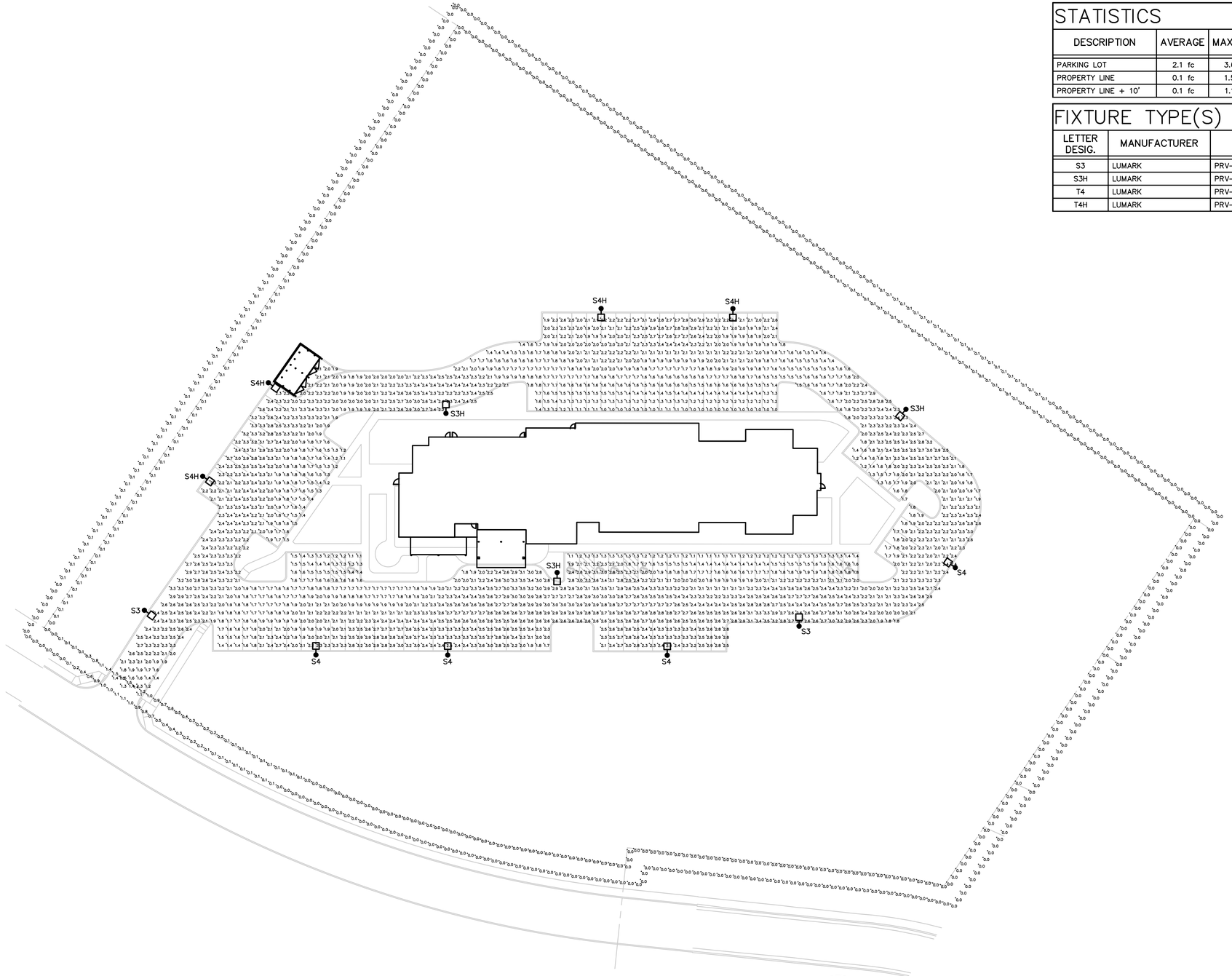
Sheet Number L-1.2

STATISTICS

DESCRIPTION	AVERAGE	MAXIMUM	MINIMUM	MAX/MIN	AVG/MIN
PARKING LOT	2.1 fc	3.6 fc	1.0 fc	3.6:1	2.1:1
PROPERTY LINE	0.1 fc	1.5 fc	0.0 fc	N/A	N/A
PROPERTY LINE + 10'	0.1 fc	1.1 fc	0.0 fc	N/A	N/A

FIXTURE TYPE(S)

LETTER DESIG.	MANUFACTURER	CATALOG NUMBER	LAMPS NO.	LAMPS TYPE	LUMENS	MOUNTING HEIGHT
S3	LUMARK	PRV-C40-D-UNV-T3-SA-BZ	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
S3H	LUMARK	PRV-C40-D-UNV-T3-SA-BZ-HSS	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
T4	LUMARK	PRV-C40-D-UNV-T4-SA-BZ	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
T4H	LUMARK	PRV-C40-D-UNV-T4-SA-BZ-HSS	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE



A SITE PHOTOMETRICS

1/32" = 1'-0"

NORTH

Project		Catalog #		Type	
Prepared by		Notes		Date	

Lumark

Prevail LED

Area / Site Luminaire

Product Features

Lumenfab Technology

Interactive Menu

Product Certifications

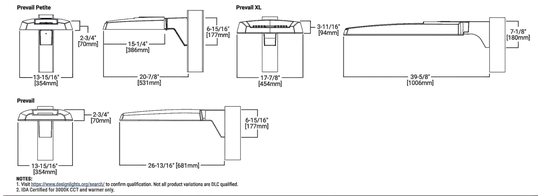
Quick Facts

- Lumen packages range from 4,800 - 52,300 lumens (35W - 350W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 160 lumens per watt
- Energy and maintenance savings up to 85% versus HID solutions
- Standard universal quick mount arm with universal drill pattern

Connected Systems

- WaveLinx

Dimensional Details



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

COOPER Lighting Solutions

PS500001EN page 1
February 14, 2022 11:56 AM

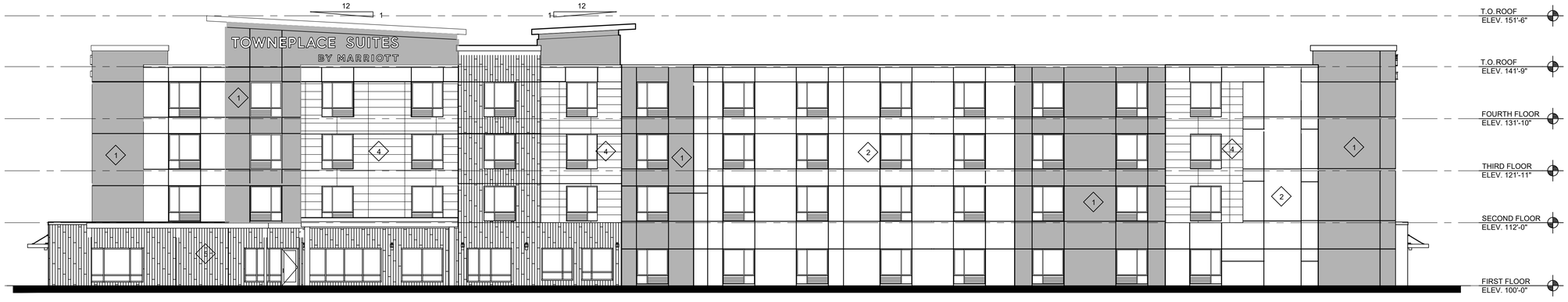
LK Architecture

August 9, 2022

TOWNEPLACE SUITES® BY MARRIOTT

Duluth, MN

SE1



B SOUTHWEST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'

A NORTHWEST ELEVATION

3/32" = 1'-0"

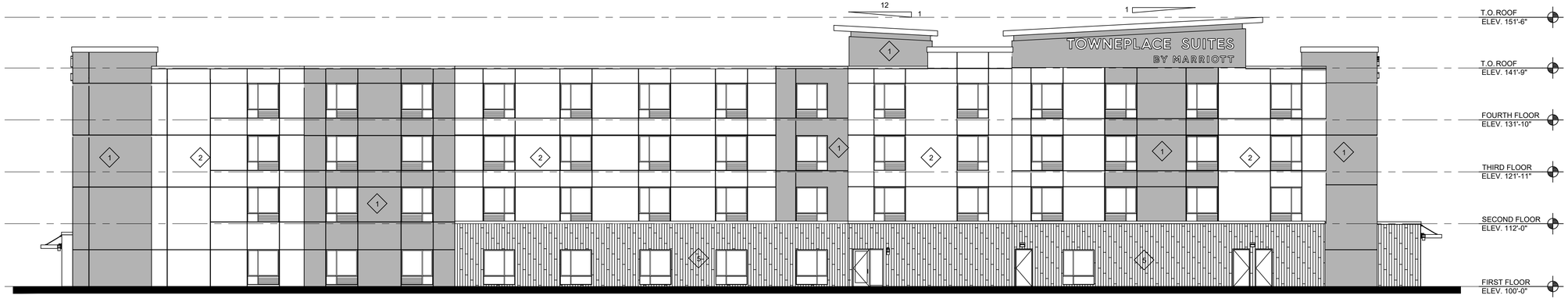
0' 5' 10' 20'

1 EIFS, COLOR : BENJAMIN MOORE "MANOR BLUE" No. 1627 (CLR13414)

2 EIFS, COLOR : BENJAMIN MOORE "NOVEMBER RAIN" No. 2142-60 (CLR13415)

4 EIFS, COLOR : MATCH CONTROL COLOR SW 6006 " BLACK BEAN"

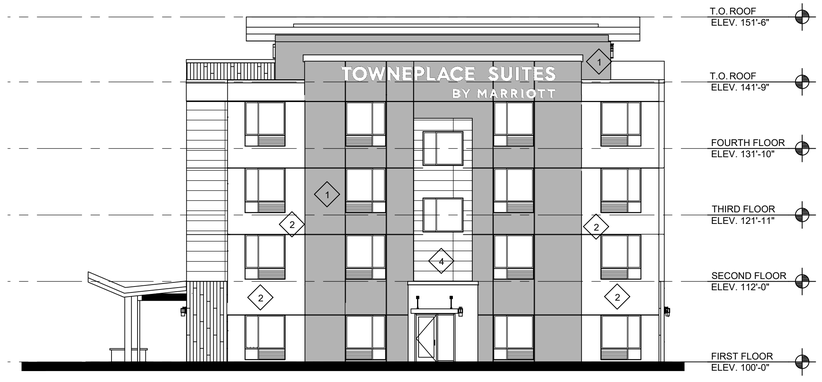
5 EIFS, COLOR : MATCH CONTROL COLOR SW 7045 "INTELLECTUAL GREY"



B NORTHEAST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'



A SOUTHEAST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'

1 EIFS, COLOR : BENJAMIN MOORE
"MANOR BLUE" No. 1627 (CLR13414)

2 EIFS, COLOR : BENJAMIN MOORE
"NOVEMBER RAIN" No. 2142-60 (CLR13415)

4 EIFS, COLOR : MATCH CONTROL
COLOR SW 6006 " BLACK BEAN"

5 EIFS, COLOR : MATCH CONTROL
COLOR SW 7045 "INTELLECTUAL GREY"

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

PL22-143

RECEIVED
AUG 9 2022
CONSTRUCTION SERVICES AND INSPECTIONS

APPLICATION COVER SHEET

Check One Box

- ____ Accessory Home Share-**$250**
- ____ Accessory Vacation Dwelling Unit, Limited -**$250**
- ____ Appeal to Planning Com. - **$407**
- ✓ Concurrent Use of Streets - **$797**
- ____ District Plan - **$1,144**
- ____ EAW or EIS- **$2,856,** plus any applicable professional fees
- ____ Historic
  - ____ Construction/Demolition - **$59**
  - ____ Resource Designation - **$103**
- ____ Interim Use Permit **$1,600**
- ✓ Planning Review - **$1,068**
- ____ Sidewalk Use Permit
  - ____ New Permit- **$171**
  - ____ Renewal Permit - **$86**
- ____ Special Use Permit, General - **$1,606**
- ____ Special Use Permit, Wireless Telecommunications*
  - ____ Modifying or Co-locating – **$2,856**
  - ____ New Facility or Tower – **$5,716**
  - ____ Escrow Deposit - **$9,717**
- ____ Subdivision Plat Approval or Amendment:
  - ____ Concept Plan - **$286**
  - ____ Preliminary Plat - **$1,138**
  - ____ Final Plat- **$857**
  - ____ Minor Subdivision-**$427**
  - ✓ Plat Amendment or Boundary Line Adjustment - **$286**
  - ____ Registered Land Survey-**$737**
- ____ Temporary Use Permit - **$275**
- ____ UDC Zoning Map Amendment/Rezoning
  - ____ General - **$912**
  - ____ MU-P or R-P **$2,578**
- ____ Vacation of Street or Utility Easement - **$905**
- ____ Variance - **$855**
- ____ Wetland,
  - ____ De Minimus, Delineation, or No Loss- **$227**
  - ____ Exemption-**$177**
  - ____ Replacement Plan - **$851**
- ____ Zoning Verification Letter-**$96**

CONTACT INFORMATION:

Applicant/Owner Aaron Mailey, Kinseth Hotel Corporation

Phone 712.796.1308 Email amailey@kinseth.com

Address 25 Main Place Suite 400

City Council Bluffs State Iowa Zip 51503

Owner's Agent (if applicable) David Bolf

Phone 218.727.5995 Email david@nce-duluth.com

Address 102 south 21st Ave West

City Duluth State MN Zip 55806

APPLICATION INFORMATION:

Street Address and Zoning of Property MU-C

Parcel ID Number 010-2710-04594

Reason for this Request (*Attach Additional Pages or Cover Letter if Necessary*)

Development of site for purpose of 4 story hotel. This requires a concurrent use permit for a private sanitary sewer, MU-C plan review and a boundary line adjustment.

The undersigned hereby represents upon all of the penalties of law for the purpose of inducing the City of Duluth to take the action herein requested, that all statements herein and attached are true and that all work herein mentioned will be done in accordance with the Ordinances of the City of Duluth and the laws of the State of Minnesota. Undersigned also understands that all documents provided to the City may be considered public data, per Minnesota Government Data Practices Act.

Signature of Applicant 8/9/22 Date

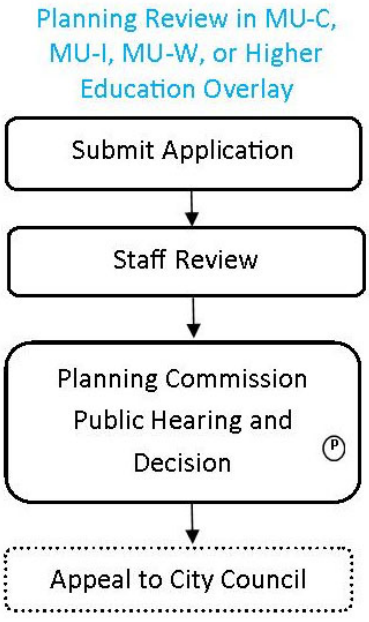
Reminder: include application checklist and all supporting information, including pre-application verification (if applicable). Submit completed information to Room 100, Construction Services and Inspections.

*Special Use Permit Checklist required to be submitted with this application coversheet.

3.13 Checklist

Planning Review

Planning review is needed for certain types of development and redevelopment activities in the MU-C, MU-I, MU-W, and HE-O zone districts. See UDC Section 50-37.11 for more information.



Starting the Application Process

☑ Call 218-730-5580 or email planning@duluthmn.gov to schedule a pre-application meeting. The pre-application meeting is intended to discuss the application process and general timeline. A comprehensive review of the proposed project is not possible at this meeting; detailed review of the project will occur once a complete application, with sufficient supporting information and exhibits, is submitted.

☑ Submit your application materials by the Planning Commission application deadline. There are numerous in-person and electronic application methods available; visit https://duluthmn.gov/planning-development/land-use-zoning-and-applications/applications-checklists/ for current information. Your application must include the following:

- ☑ Application Cover Sheet, available at https://duluthmn.gov/planning-development/land-use-zoning-and-applications/applications-checklists/, and applicable fee
- ☑ Survey of the property (recommended)
- ☑ Site plan showing existing structures and proposed structures
- ☑ Building elevation
- ☑ Grading plan
- ☑ Landscape plan (if required) detailing species type and number of trees and shrubs. The City may require an escrow fee to ensure that the landscape is installed and maintained as approved.

N/A ☐ Information on traffic control and improvements (to be determined at pre-application meeting depending on scope and location of project). Projects that may create more than 100 trips per hour or 1,000 trips may day will require a traffic study.

N/A ☐ If delineated wetlands are being impacted, a copy of the approved Notice of Decision for the Wetland Replacement Plan.

- ☑ Other materials as indicated in the below table:

Important Dates

Application Deadline: _____

Sign Notice Placed: _____

Planning Commission: _____

Effective*: _____

**Please note that these dates are approximate guidelines and may change*

If application:	Must submit:	UDC Section
Article 2		
Is within the **Skyline Parkway Overlay**	Materials showing: ▪ Boundary of the Skyline Parkway Overlay as described in UDC Section 50-18.4 ▪ Building footprints and setbacks ▪ The long-axis of the building footprint ▪ Driveway locations ▪ Building elevations when viewed from Skyline Parkway ▪ Maximum height of each structure in relation to the centerline of Skyline Parkway at its closest point ▪ Location, setbacks, height, and transparency of any fences or walls on the property ▪ Location, type, and height at maturity of all landscaping on the site.	Skyline Parkway Overlay, 50-18.4
Article 3		
Involves a **wireless telecommunications tower** and does not have a special use permit	See "Antenna and Wireless Communication Facilities" handout for information on materials to submit.	Use-Specific Standards, 50-20.4.E
Article 4		
Is in a **Form District**, if any of the following apply: ▪ New building construction ▪ Renovation of existing structures where the renovation includes an addition of more than 50% in building square footage ▪ Renovation affecting the front façade ▪ Renovation in the shape or style of the roof	▪ Site plan that includes building location, driveways, Build-to Zone and Setback Measurements, and parking and loading locations ▪ Building elevations showing compliance with UDC Section 50-22 ▪ Landscape plan	Building Form Standards, 50-22
ALL subdivisions, replatting, Registered Land Surveys, development, or redevelopment	Site plan showing paths, trails, sidewalks, pedestrian accesses, and public utility easements.	Connectivity and Circulation, 50-23.2
Is in any zone district other than the RC, RR-1, RR-2, MU-B, I-G, or I-W district **AND** is larger than 3 acres **AND** will contain more than one development parcel	Site plan showing that paths, trails, streets, and pedestrian accesses will comply with requirements in UDC Section 50-23.3.	Connectivity and Circulation, 50-23.3
Contains **more than one principal building**	Site plan showing that walkway(s) will be provided complying with Section 50-23.5.	Connectivity and Circulation, 50-23.5

Involves a **skywalk** remodeled at more than 50% of the assessed value	Elevations showing both vertical sides of the skywalk.	Connectivity and Circulation, 50-23
Is on a lot or parcel of more than 10,000 sq. ft., includes a primary structure with a multi-family, mixed use, commercial, institutional, industrial, or parking principal use, **and**: ▪ A new primary structure is constructed **OR** ▪ The floor area increases by more than 25% **OR** ▪ The primary structure is relocated **OR** ▪ The primary structure is renovated or redeveloped and the value of the renovation is more than 75% of the market value **OR** ▪ An existing lot is redesigned **OR** ▪ A new parking lot of 25 or more spaces is built	▪ A landscape plan demonstrating compliance with standards in UDC Section 50-25. ▪ Site plan showing parking.	Landscaping, 50-25
Is on a lot of more than 10,000 square feet with a multi-family, mixed use, commercial, institutional, industrial, or parking principal use **OR** a lot of record created after 11/19/10	Tree Preservation Report and, if necessary, Tree Replacement Plan (see Appendix).	Tree Preservation, 50-25.9
Contains any of the following **exterior mechanical features** on multi-family, commercial, institutional, industrial, or mixed use buildings (except those located in I-G and I-W districts): ▪ Electrical and gas-powered mechanical equipment and power systems equipment ▪ Heating, ventilating, and air conditioning equipment ductwork and lines ▪ Power systems equipment	▪ For roof-mounted equipment: building elevations and photo simulations showing compliance with Section 50.26-1-B (1). ▪ For ground-mounted equipment,: site plan, elevations showing views of equipment locations and, if landscaping is used for screening, a landscape plan.	Screening, Walls and Fences, 50-26.1
Contains **service areas or off-street loading areas** on properties containing multi-family, commercial, institutional, industrial, or mixed-use buildings	▪ Site plan ▪ Landscape plan ▪ Building elevations showing the service/loading areas	Screening, Walls and Fences, 50-26.2

(except those located in I-G and I-W districts)		
Contains **commercial containers EXCEPT** the following: ▪ Containers in I-G and I-W districts ▪ Containers behind a building and not visible from a public street or adjoining single-family, multi-family, mixed use, or public property ▪ Temporary containers meeting criteria in Section 50-26.3 (A)	▪ Site plan ▪ Building elevations or illustrations showing screening of containers that meets criteria of Section 50-26.3.	Screening, Walls and Fences, 50-26.3
Involves new construction or redevelopment/renovation where the building square footage is expanded by more than 50%	Building elevations demonstrating compliance with Section 50-30	Design Standards, 50-30
Includes installation of exterior lighting	Lighting Plan	Exterior Lighting, 50-31

After Submitting Your Application

1. Determination of Completeness. Within 15 business days of your application, you should expect to:

- Receive an "Applicant Letter," which acknowledges a complete application, shares the date of the Planning Commission meeting and the assigned staff person, and notifies you of State-mandated deadlines for the City to make a decision, **OR**
- Receive notification that your application is incomplete, with details on further information to submit.

2. Public Notice. A mailed notice will be sent by the City to property owners within 350 feet.

☐ **You are required to post a sign notice** on the property at least two weeks before the date of the public hearing. See UDC Section 50-37.1.H for information on size, placement, and content of each sign; you may want to contact a sign company or printing company to have the sign made. You must provide evidence that the signs were in place; ***submit photo(s) of the signs to the Planning Division at least two weeks before the date of the public hearing.***

3. Staff Review. Planning staff will evaluate your application and prepare a staff report. When considering a recommendation for Planning Review, Planning Staff generally review the zoning of the site (including overlay zones), the Comprehensive Plan (including the Future Land Use Map, Governing Principles, and Policies), surrounding land uses and zoning, individual factors that are unique or special to the proposal, any additional UDC criteria, and other related factors.

- ➢ You will receive an email with the Planning Commission agenda and a link to this staff report about 5 days prior to the meeting.

4. Planning Commission Hearing and Decision. Planning Commission meetings are scheduled at 5:00 pm on the second Tuesday of each month. **We ask that applicants or an agent attend this meeting.**

The Planning Commission will review the application, conduct a public hearing, and make a decision to adopt, adopt with modifications, or deny the application.

If approved, you will receive an Action Letter documenting approval.

Note that other City codes may apply to your project. Please be aware of any applicable Building code (Construction Services Division), Fire code (Life Safety Division), and stormwater/engineering (Engineering Division) regulations. The zoning approval may be only the first step in a several step process.

*If a **wetland delineation** is needed for the project to proceed, it must be reviewed and approved before any zoning application will be accepted.*

*If a **wetland replacement plan** is required for a project to proceed, it must have been submitted and accepted as a complete application before the project zoning application will be accepted.*

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

APPLICATION COVER SHEET

Check One Box

- ____ Accessory Home Share-**$250**
- ____ Accessory Vacation Dwelling Unit, Limited -**$250**
- ____ Appeal to Planning Com. - **$407**
- ✓ Concurrent Use of Streets - **$797**
- ____ District Plan - **$1,144**
- ____ EAW or EIS- **$2,856,** plus any applicable professional fees
- ____ Historic
  - ____ Construction/Demolition - **$59**
  - ____ Resource Designation - **$103**
- ____ Interim Use Permit **$1,600**
- ✓ Planning Review - **$1,068**
- ____ Sidewalk Use Permit
  - ____ New Permit- **$171**
  - ____ Renewal Permit - **$86**
- ____ Special Use Permit, General - **$1,606**
- ____ Special Use Permit, Wireless Telecommunications*
  - ____ Modifying or Co-locating – **$2,856**
  - ____ New Facility or Tower – **$5,716**
  - ____ Escrow Deposit - **$9,717**
- ____ Subdivision Plat Approval or Amendment:
  - ____ Concept Plan - **$286**
  - ____ Preliminary Plat - **$1,138**
  - ____ Final Plat- **$857**
  - ____ Minor Subdivision-**$427**
  - ✓ Plat Amendment or Boundary Line Adjustment - **$286**
  - ____ Registered Land Survey-**$737**
- ____ Temporary Use Permit - **$275**
- ____ UDC Zoning Map Amendment/Rezoning
  - ____ General - **$912**
  - ____ MU-P or R-P **$2,578**
- ____ Vacation of Street or Utility Easement - **$905**
- ____ Variance - **$855**
- ____ Wetland,
  - ____ De Minimus, Delineation, or No Loss- **$227**
  - ____ Exemption-**$177**
  - ____ Replacement Plan - **$851**
- ____ Zoning Verification Letter-**$96**

CONTACT INFORMATION:

Applicant/Owner Aaron Mailey, Kinseth Hotel Corporation

Phone 712.796.1308 Email amailey@kinseth.com

Address 25 Main Place Suite 400

City Council Bluffs State Iowa Zip 51503

Owner's Agent (if applicable) David Bolf

Phone 218.727.5995 Email david@nce-duluth.com

Address 102 south 21st Ave West

City Duluth State MN Zip 55806

APPLICATION INFORMATION:

Street Address and Zoning of Property MU-C

Parcel ID Number 010-2710-04594

Reason for this Request (*Attach Additional Pages or Cover Letter if Necessary*)

Development of site for purpose of 4 story hotel. This requires a concurrent use permit for a private sanitary sewer, MU-C plan review and a boundary line adjustment.

The undersigned hereby represents upon all of the penalties of law for the purpose of inducing the City of Duluth to take the action herein requested, that all statements herein and attached are true and that all work herein mentioned will be done in accordance with the Ordinances of the City of Duluth and the laws of the State of Minnesota. Undersigned also understands that all documents provided to the City may be considered public data, per Minnesota Government Data Practices Act.

8/9/22

Signature of Applicant Date

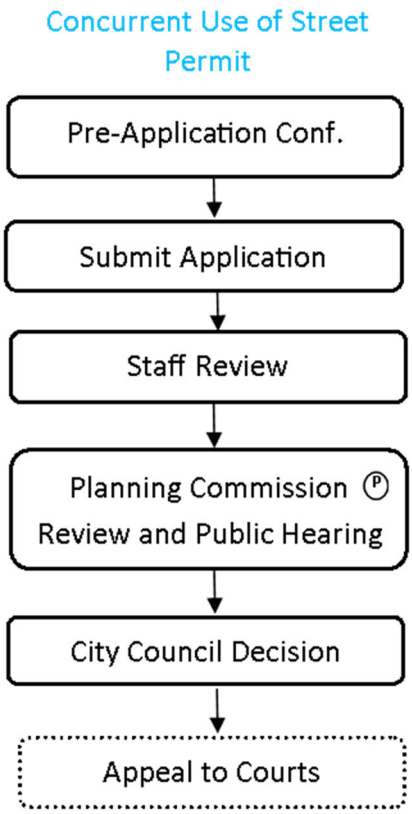
Reminder: include application checklist and all supporting information, including pre-application verification (if applicable). Submit completed information to Room 100, Construction Services and Inspections.

*Special Use Permit Checklist required to be submitted with this application coversheet.

3.7 Checklist

Concurrent Use of Streets Permit

This permit is needed for construction of a skywalk or any other application requesting concurrent use of the street surface, air rights above the street, or land beneath the street. It does not apply to applications for a sidewalk café or eating area or a bicycle parking area (see Sidewalk Use Permit). See UDC Section 50-37.7 for more information. Note: a concurrent use permit cannot be issued in order to satisfy the off-street parking spaces requirement of the UDC.



Starting the Application Process

☑ Call 218-730-5580 or email planning@duluthmn.gov to schedule a pre-application meeting. The pre-application meeting is intended to discuss the application process and general timeline. A comprehensive review of the proposed project is not possible at this meeting; detailed review of the project will occur once a complete application, with sufficient supporting information and exhibits, is submitted.

Your Application

☑ Submit your application materials by the Planning Commission application deadline. There are numerous in-person and electronic application methods available; visit https://duluthmn.gov/planning-development/land-use-zoning-and-applications/applications-checklists/ for current information. Your application must include the following:

- ☑ Application Cover Sheet, available at https://duluthmn.gov/planning-development/land-use-zoning-and-applications/applications-checklists/, and applicable fee
- ☑ Survey of the property (generally required unless explicitly waived by city staff); and a site plan with accurate depiction of the lot lines, existing and proposed structures, parking, and any other relevant features, and that clearly shows the portion of the right of way to be used or occupied by the applicant. **Important note: Until the exhibit has been reviewed, and approved, by the City Engineering, the application is considered incomplete.**
- ☑ Legal description of the proposed right of way to be used or occupied by the applicant
- ☑ Contact your insurance provider about the need, if the application is approved, of amending your insurance policy to list the City as an additional insured. The City will need proof before any concurrent use permit ordinance is effective (typically set at $1,500,000 for bodily injuries, $500,000 for property damage, $1,500,000 single limit coverage, but may be lower or higher based upon the scope and impacts of the project)

Important Dates

Application Deadline: _____

Sign Notice Placed: _____

Planning Commission: _____

City Council (1st read)*: _____

City Council (2nd read)*: _____

Effective*: _____

**Please note that these dates are approximate guidelines and may change*

N/A ☐ Applications for wireless cellar facilities in the public right of way (small cell/micro cell), regardless if located on city infrastructure (light poles, etc) or private or MnDOT/Minnesota Power/County etc infrastructure, must also submit:

- Engineering drawings signed by a professional engineer which show the location of all above and underground equipment or cabling to be installed, including the route and location for backhaul facilities. Plans should include information on restoration of the right-of-way, any temporary or permanent obstructions of the sidewalk or street, include any traffic control plans, and indicate any conflicts with field verified existing utilities. Plans shall include construction specifications and product specifications for all installations, including diagrams and shop drawings for the small wireless facility. Plans shall indicate ownership of existing and proposed equipment and wiring. Restoration and penalties shall be as required in city code Sec. 45. Hand hole or Pull/Splice Vaults shall be installed in accordance with city standards.
- Applicant shall obtain a radio frequency interference study carried out by an independent professional radio frequency engineer ("RF Engineer") that shows that the applicant's intended use will not interfere with any existing, licensed communications facilities, as well as any of the city's licenses or unlicensed communications facilities which are located on or near the structure. The RF Engineer shall provide said evaluation no later than 45 days after frequencies are provided by the city. Applicant shall not transmit or receive radio waves at the wireless support structure until such evaluation has been satisfactorily completed. If upon applicant's initial radio frequency transmissions, the city deems a radio frequency emissions survey is necessary, the applicant shall be responsible to hire a RF Engineer and pay for all costs of such survey.
- Applicant shall identify all power sources, and indicate connection and ownership of power source, providing evidence of approval by other entities besides the city when applicable. Indicate location of any new meters as may be required.
- Applicant will locate any underground items in accordance with Gopher State Once Call rules and the applicant or subsequent owner of the small wireless facility shall relocate any underground facilities found to be in conflict with existing or future city utility or street projects.
- Any other relevant information requested by the City Engineer.
- Statement indicating how the project is adhering to the small cellular wireless facilities aesthetic design criteria (19-0027R)

After Submitting Your Application

1. Determination of Completeness. Within 15 business days of your application, you should expect to:

- Receive an "Applicant Letter," which acknowledges a complete application, shares the date of the Planning Commission meeting and the assigned staff person, and notifies you of State-mandated deadlines for the City to make a decision, **OR**
- Receive notification that your application is incomplete, with details on further information to submit.

2. Public Notice.

☐ **You are required to post a sign notice** on the property at least two weeks before the date of the public hearing. See UDC Section 50-37.1.H for information on size, placement, and content of each sign; you may want to contact a sign company or printing company to have the sign made. You must provide evidence that the signs were in place; ***submit photo(s) of the signs to the Planning Division at least two weeks before the date of the public hearing.***

3. Staff Review. Planning staff will evaluate your application and prepare a staff report. When considering a recommendation for a concurrent use of streets permit, Planning Staff generally review the necessity of the request to protect the health, safety, and welfare of the city, how the proposal will only occupy the portion of the public easement not being physically used or occupied by the public, and that it will not inconvenience the public's use of the easement, as well as any additional UDC criteria and other related factors.

- You will receive an email with the Planning Commission agenda and a link to this staff report about 5 days prior to the meeting.

4. Planning Commission Hearing. Planning Commission meetings are scheduled at 5:00 pm on the second Tuesday of each month. **We ask that applicants or an agent attend this meeting.**
Planning Commission will hold a public hearing and make a recommendation to adopt, adopt with modifications, or deny the application.

5. City Council Decision. The Planning Commission decision will be forwarded to City Council in the form of an ordinance, which will require two readings. City Council will make a decision whether to approve the permit, approve it with modifications, or deny it.

If the City Council approves the ordinance, the Planning staff will send a copy of the certified document to the applicant once all the conditions have been met (such as proof of listing the City as an additional insured in the applicant's insurance policy). Annual updates of insurance coverage will be required from the applicant in most cases.

Note that other City codes may apply to your project. Please be aware of any applicable Building Code (Construction Services Division), Fire Code (Life Safety Division), and stormwater/engineering (Engineering Division) regulations. The zoning approval may be only the first step in a several step process.

*If a **wetland delineation** is needed for the project to proceed, it must be reviewed and approved before any zoning application will be accepted. If a **wetland replacement plan** is required for a project to proceed, it must have been submitted and accepted as a complete application before the project zoning application will be accepted.*

OSAGE STREET

RIGHT OF WAY TO BE DEDICATED TO CITY OF DULUTH

66'

WEST PAGE STREET

CONCURRENT USE
R.O.W. AREA

MAPLE GROVE ROAD

SUNDBY ROAD

1+00

2+00

3+00

4+00

5+00

6+00

0+00

VAULT
E=1343.66

TOPOGRAPHIC SURVEY PROVIDED BY
ALTA LAND SURVEYING COMPANY, 2018

0' 30' 60'

Northland
Consulting Engineers L.L.P.
Structural, Civil and Forensic Engineering Services
www.nce-engineers.com
Voice: (218)727-5995
Fax: (218)727-7779

KINSETH HOTEL CORPORATION
SITE DEVELOPMENT
SE 1/4 OF NE 1/4 SEC 18 T50N R14W

revision

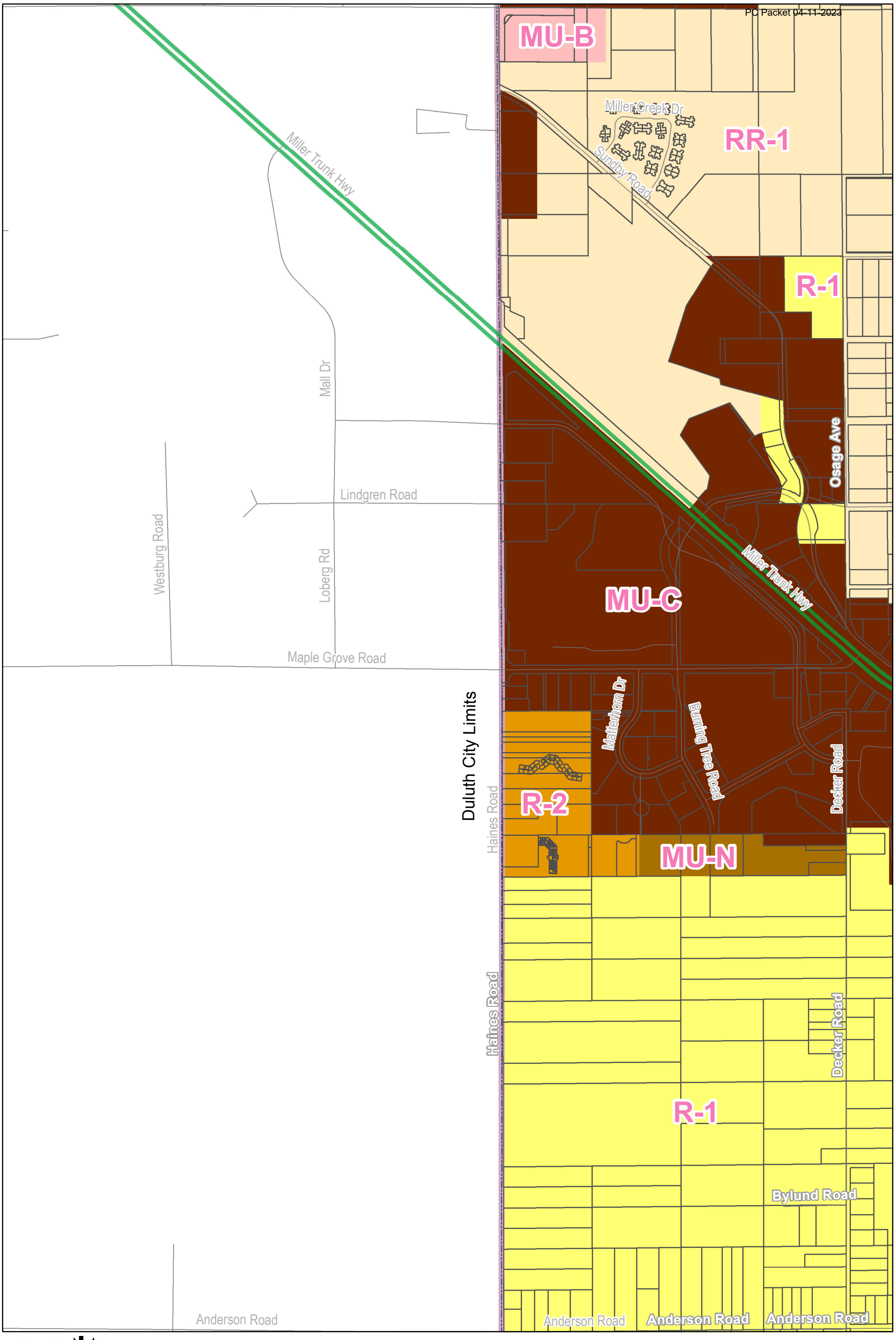
Proj: 21-660
Date: 08/04/22
Drawn: JDO
Checked: DGB

SD SITE PLAN
Sheet Title

Sheet Number
1 OF 1

Exhibit B

City of Duluth Zoning Map



Base Zoning Map: 19
Revised Date: August 19, 2011

0 0.125 0.25 0.5 Miles

N W E S

Exhibit C

Wetland Delineation Application

THE CITY OF DULUTH MINNESOTA

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

PL22-129

APPLICATION COVER SHEET

RECEIVED
JUL 18 2022
CONSTRUCTION SERVICES AND INSPECTIONS

Check One Box

- ____ Accessory Home Share-**$250**
- ____ Accessory Vacation Dwelling Unit, Limited **-$250**
- ____ Appeal to Planning Com. - **$407**
- ____ Concurrent Use of Streets - **$797**
- ____ District Plan - **$1,144**
- ____ EAW or EIS- **$2,856,** plus any applicable professional fees
- ____ Historic
  - ____ Construction/Demolition - **$59**
  - ____ Resource Designation - **$103**
- ____ Interim Use Permit **$1,600**
- ____ Planning Review - **$1,068**
- ____ Sidewalk Use Permit
  - ____ New Permit- **$171**
  - ____ Renewal Permit - **$86**
- ____ Special Use Permit, General - **$1,606**
- ____ Special Use Permit, Wireless Telecommunications*
  - ____ Modifying or Co-locating – **$2,856**
  - ____ New Facility or Tower – **$5,716**
  - ____ Escrow Deposit - **$9,717**
- ____ Subdivision Plat Approval or Amendment:
  - ____ Concept Plan - **$286**
  - ____ Preliminary Plat - **$1,138**
  - ____ Final Plat- **$857**
  - ____ Minor Subdivision-**$427**
  - ____ Plat Amendment or Boundary Line Adjustment - **$286**
  - ____ Registered Land Survey-**$737**
- ____ Temporary Use Permit - **$275**
- ____ UDC Zoning Map Amendment/Rezoning
  - ____ General - **$912**
  - ____ MU-P or R-P **$2,578**
- ____ Vacation of Street or Utility Easement - **$905**
- ____ Variance - **$855**
- X Wetland,
  - X De Minimus, Delineation, or No Loss- **$227**
  - ____ Exemption-**$177**
  - ____ Replacement Plan - **$851**
- ____ Zoning Verification Letter-**$96**

CONTACT INFORMATION:

Applicant/Owner Kinseth Hotel Corp.

Phone 712-796-1308 Email amailey@kinseth.com

Address 25 Main Place, Suite 400

City Council Bluffs State IA Zip 51503

Owner's Agent (if applicable) _____

Phone _____ Email _____

Address _____

City _____ State _____ Zip _____

APPLICATION INFORMATION:

Street Address and Zoning of Property Sundby Rd and West Page St, MU-C

Parcel ID Number 010-2710-04594, 010-2710-04590, & 010-2710-04593

Reason for this Request (*Attach Additional Pages or Cover Letter if Necessary*)

Wetland Delineation Review

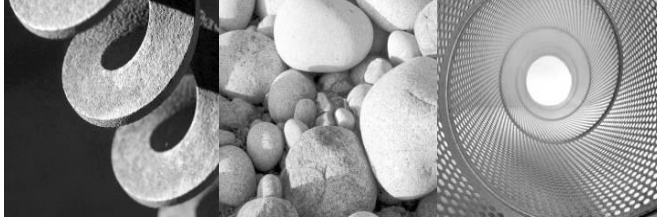
The undersigned hereby represents upon all of the penalties of law for the purpose of inducing the City of Duluth to take the action herein requested, that all statements herein and attached are true and that all work herein mentioned will be done in accordance with the Ordinances of the City of Duluth and the laws of the State of Minnesota. Undersigned also understands that all documents provided to the City may be considered public data, per Minnesota Government Data Practices Act.

7/13/2022

Signature of Applicant Date

Reminder: include application checklist and all supporting information, including pre-application verification (if applicable). Submit completed information to Room 100, Construction Services and Inspections.

*Special Use Permit Checklist required to be submitted with this application coversheet.



GEI Consultants

Consulting
Engineers and
Scientists

Wetland Delineation Report

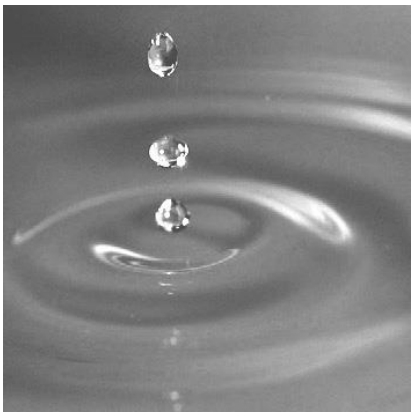
Townplace Suites

Parcel 010-2710-04594, 010-2710-04590, & 010-2710-04593
Duluth, MN

Submitted to:
Kinseth Hotel Corp.
25 Main Place, Suite 400
Council Bluffs, IA 51503

Submitted by:
GEI Consultants, Inc.
1710 Mall Drive
Duluth, MN 55811

6/22/2022
Project 2202038



Rob Peterson, PG, PWS
MN Certified Wetland Delineator

Ken Kytta, PE
Senior Consultant, Vice President

Table of Contents

Figures

Appendices

RP:KK:vj
https://geiconsultant-my.sharepoint.com/personal/rpeterson_geiconsultants_com/Documents/Projects/Kinseth Hotel Corp/Delineation Report/GEI-Kinseth_Wetland_Delineation Report_Final.docx

1. Introduction

1.1 Site Description

GEI Consultants, Inc. (GEI) completed a wetland delineation for the Townplace Suites project (Site) located northeast of the intersection of Sundby Road and West Page Street in Section 18 of Township 50N, Range 14W in Duluth, Minnesota (Figure 1). The delineation area covers a total of 6.7 acres within Duluth Parcel ID Numbers 010-2710-04594, 010-2710-04590, & 010-2710-04593 as shown in Figure 2. The primary land cover is former residential and undeveloped hardwood forest with some wetland. The adjacent land use is residential to the east, commercial to the south and west with undeveloped forested land to the north.

The purpose of the wetland delineation was to identify wetland and other aquatic resource boundaries and classify the wetland plant community types. The delineation will be used to aid in project planning and to identify potential wetland and aquatic resource impacts.

2. Delineation Methodology

2.1 Wetlands

Wetlands present within the Site were identified and delineated using the procedures described in the *United States (U.S.) Army Corps of Engineers (USACE) Wetlands Delineation Manual* (Environmental Laboratory, Waterways Experiment Station, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (U.S. Army Engineer Research and Development Center, 2011). These methods utilize the standard multi-parameter approach (vegetation, hydrology, and soils) for wetland identification as outlined in the *Corps of Engineers Wetland Determination Data Forms*. In general, an area is considered a wetland if hydrophytic vegetation, wetland hydrology, and hydric soils are present. Delineated wetlands were classified in accordance with the classification systems set forth in *Wetlands of the United States* (Shaw and Fredine. 1971), *Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979), and *Wetland Plants and Plant Communities of Minnesota and Wisconsin* (Eggers and Reed, 2014).

2.2 Other Aquatic Resources

The wetland delineation and report include other aquatic resources affected by regulated activities in waters of both the U.S. and Minnesota. The delineation area was specifically surveyed for wetlands (as defined under Section 404 of the Clean Water Act) and other aquatic resources such as seasonal ponds, seeps, springs, ditches, and streams (intermittent, ephemeral, and perennial). Other aquatic resources within the delineation area will be identified and delineated as described in the *Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and Wetland Conservation Act Local Governmental Units in Minnesota* (USACE, St. Paul District Regulatory, 2015). Observations and mapping of potential connections and flow paths between other aquatic resources and wetlands can provide information for determining regulatory jurisdiction.

2.3 Desktop Review

A desktop review was be completed for the delineation area prior to the on-site data collection and field delineation by reviewing a variety of available information to identify potential wetlands and aquatic resources. Resources reviewed include:

- USACE Antecedent Precipitation Tool (USACE 2022)
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2022)
- USGS Topographic Maps (USGS 2022)

- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) (USFWS 2022)
- NWI for Minnesota Update (Minnesota Department of Natural Resources (DNR) 2018)
- DNR PWI (DNR 2020)
- Aerial Imagery
- DNR Hydrography Dataset (DNR 2022)
- DNR MNTOPO Elevation Viewer and LiDAR Data (DNR 2022)

2.4 On-site Wetland Delineation

GEI's on-site wetland delineation followed the USACE procedure for identifying wetland boundaries by completing the appropriate number of sampling points, investigating the required wetland criteria, and identifying the boundary between wetland and upland areas. A soil sampling auger or tiling shovel was used to complete soil sampling points and check the soils and hydrology at periodic intervals throughout the delineated boundary to confirm accuracy and/or adjust the boundary accordingly. All wetland boundaries within the property were flagged with *Wetland Delineation* flagging tape and geolocated using a sub-foot accuracy global positioning system (GPS) and incorporated into a geographic information system (GIS) using ArcGIS 10.8 GIS software. The Site GPS data is being used to aid in Site planning.

In addition to wetlands, waterbodies (lakes or ponds), waterways (streams, rivers, and ditches), and other aquatic resources (seeps and springs) present within the area of investigation were assessed and mapped during fieldwork. The estimated ordinary high water mark of waterbodies, waterways, and ditches were identified and geolocated with GPS as polylines or polygons. Seeps and springs were identified and mapped as points. Observations of the other aquatic resource characteristics were recorded.

The on-site data collection focused on completing sampling points within identified sampling units. Sampling units were distinguished by differences in landscape position, vegetation, soils, hydrology and/or disturbance relevant to the aquatic resource. GEI typically uses plant communities as the primary sampling units. Plant community units typically reflect spatial variations in geomorphology, hydrology, soils, and other factors that are important to the formation and maintenance of wetlands. Plant community units were identified during the desktop review and were adjusted based on observed field conditions. Sampling point locations within the plant community units were selected to be representative of the plant community. At least one sampling point and NCNE Supplement Data Form was completed in each plant community. Sampling points were labeled with a project specific identifier, an alphabetical wetland identifier, followed by the sampling point number, then an upland or wetland designation (e.g. X-A1W is associated with project X, Wetland A, and is the first wetland sampling point).

2.4.1 Normal Circumstances and Antecedent Precipitation

The on-site data collection activities occurred within the growing season as defined in the USACE Regional Supplement. GEI was on-site to conduct the wetland delineation on May 21, 2022. Normal circumstances were present during the time of the site visit. Antecedent precipitation data will be obtained using the USACE Antecedent Precipitation Tool (APT) to determine if climatic/hydrologic conditions were considered dry, normal, or wet for the delineation area at the time of fieldwork. The APT reported wetter than normal antecedent precipitation for the preceding 90 days with approximately 0.88 inches of rain within the last 14 days prior to the on-site delineation (Appendix A).

2.4.2 Vegetation

The vegetation occurring at representative sampling point locations was assessed to determine the dominant species in the tree, woody vine, sapling/shrub, and herbaceous vegetation strata. Vegetation plot sizes were a 30-foot radius for tree and woody vine strata, a 15-foot radius for sapling/shrub stratum, and a 5-foot radius for herbaceous stratum. Depending on the community size encountered at each sampling point, the plot size for the tree/vine/shrub/herb strata was adjusted to restrict the sampled vegetation to the plant community being assessed. The percentage of absolute areal cover was visually estimated for each species within each plot and recorded on the NCNE Supplement Data Forms. Wetland indicator status was applied to each species from *The National Wetland Plant List: 2020 Wetland Rating* (USACE, 2020). The 50/20 rule was applied to determine dominant species within each stratum. The Rapid Test for Hydrophytic Vegetation, Dominance Test, and Prevalence Index was then be calculated, and a determination of the presence of hydrophytic vegetation was made.

2.4.3 Hydrology

Each sampling point was investigated for primary and secondary hydrology indicators listed on the NCNE Supplement Data Forms and as described in the USACE Wetlands Delineation Manual and Regional Supplement. Observations of surface water depth, depth to saturation and depth to water table were recorded. Observations of hydrology indicators were recorded on the NCNE Supplement Data Forms.

2.4.4 Soils

The presence or absence of hydric soils was assessed through use of a shovel or soil auger to observe and document the soil profile to a depth of at least 24 inches unless a restrictive layer is encountered, or a hydric soil indicator and hydrology was identified at a lesser depth. Soil profile descriptions of the hue, value, and chroma for each soil horizon were completed at each sampling point using Munsell soil color charts. The USDA NRCS soil texture, special features (e.g., redox concentrations, depletions, muck, sulfidic odor) along with horizon depths, were recorded for each soil horizon. Accepted field indicators (*NRCS 2018, Field Indicators of Hydric*

Soils in the United States, Version 8.2) were referenced to determine if the hydric soils technical criteria were met. Soil conditions and hydric soil indicators were recorded on the NCNE Supplement Data Forms for each sampling point.

3. Results

3.1 Wetlands

Two wetlands, Wetland A and Wetland B were identified within the delineation area.

Wetland A is located along the southwest property line and extends across the southern portion of the delineation area and covers approximately 1 acre. Five sampling points (K-A1U, K-A1W, K-A2U, K-A3U, and K-A3W) were completed along Wetland A to delineate the upland/wetland boundary. Wetland A is a Type 6 – Alder Thicket plant community dominated by *Populus tremuloides* and *Polulus balsamifera* in the tree layer, *Alnus incana* in the shrub layer with *Rubus pubescens, Carex gracillima,* and *Solanum dulcamara* in the herbaceous layer. The Wetland A sampling points met wetland hydrology criteria A3 – Saturation, B9 – Water-stained Leaves, D2 – Geomorphic Position, and D5 – FAC-Neutral Test. Hydric soil indicators S5 – Sandy Redox and F6 - Redox Dark Surface were present. Wetland A is not identified on the NWI. The source of hydrology for Wetland A appears to be from precipitation.

Wetland B is located along the northern property line and includes a Type 5 - Shallow Open Water pond that appears to have been excavated. Two sampling points (K-B1U, K-B1W) were completed along Wetland B to delineate the upland/wetland boundary. Wetland B is a Type 6 – Alder Thicket plant community dominated by *Polulus balsamifera* in the tree layer with *Phalaris arundinacea* and *Rubus idaeus* in the herbaceous layer. The Wetland B sampling point met wetland hydrology criteria A2 – High Water Table, A3 – Saturation, and D5 – FAC-Neutral Test. Hydric soil indicators A11 – Depleted Below Dark Surface and F1 – Loamy Mucky Mineral were present. The Wetland B is not identified on the NWI. The source of hydrology for Wetland A appears to be from precipitation.

3.2 Other Aquatic Resources

Wetland B is hydrologically connected to a Type 5 - Shallow Open Water pond that appears to have been excavated. Evidence of berms and spoil piles are located around the pond edge. The pond is identified on the NWI as PEM1F.

4. Reporting and Regulatory Concurrence

Based on GEI's best professional judgement, the delineated wetlands meet the criteria outlined in the USACE *Wetlands Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*. This Wetland Delineation Report will be submitted to the Local Government Unit (LGU) Technical Evaluation Panel (TEP) and USACE, along with a Minnesota Joint Application Form requesting delineation concurrence.

The wetlands and other aquatic resources identified in this report may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the Minnesota Wetland Conservation Act (WCA), and local jurisdiction under the local county, town, or city. Please note that, as with all wetland delineations, the regulatory agencies have final jurisdiction regarding the location of wetland boundaries and determination of jurisdictional status.

5. References

Eggers, S.D. and Reed, D.M. 2014. Wetland Plants and Plant Communities of Minnesota and Wisconsin, Version 3.1. U.S. Army Corps of Engineers, St. Paul District. 478pp.

Cowardin, L.M., V.M. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Biological Services Program, Washington, DC, USA. FWS/OBS-79/31. 103pp.

Minnesota Department of Natural Resources. National Wetland Inventory for Minnesota. 2018. Available online at the following link: https://gisdata.mn.gov/dataset/water-nat-wetlands-inv-2009-2014.

Minnesota Department of Natural Resources. Public Waters (PW) Basin and Watercourse Delineations. 2020. Available online at the following link: https://gisdata.mn.gov/dataset/water-mn-public-waters.

Minnesota Department of Natural Resources. Hydrography Dataset. 2022. Available online at the following link: https://gisdata.mn.gov/dataset/water-dnr-hydrography.

Minnesota Department of Natural Resources. MnTOPO. 2022. Available online at the following link: https://www.dnr.state.mn.us/maps/mntopo/index.html.

Shaw, S.P. and C.G. Fredine. 1971. Wetlands of the United States. U.S. Fish and Wildlife Circular 39. U.S. Department of the Interior, Washington, D.C. 67 pp.

U.S. Army Corps of Engineers. Antecedent Precipitation Tool Version 1.0. J.L. Gutenson, J.C.Deters. ERDC/TN WRAP-22-1. Engineer Research and Development Center. 2022. Available online at the following link: https://github.com/erdc/Antecedent-Precipitation-Tool/releases/tag/v1.0.20.

U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetlands Delineation Manual. Environmental Laboratory U.S. Army Corps of Engineers, Waterways Experiment Station, Wetlands Research Program Technical Report Y-87-1. Vicksburg, MS.

U.S. Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers. 2020. National Wetland Plant List, version 3.5. http://wetland-plants.usace.army.mil/. U.S. Army Corps of Engineers Engineer Research and Development Center Cold Regions Research and Engineering Laboratory, Hanover, NH.

U.S. Army Corps of Engineers. 2015. Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and Wetland Conservation Act Local Governmental Units in Minnesota, Version 2.0.

U.S. Department of Agriculture, Natural Resources Conservation Service. 2018. Field Indicators of Hydric Soils in the United States, Version 8.2. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

U.S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. Available online at the following link: https://websoilsurvey.sc.egov.usda.gov/.

U.S. Fish and Wildlife Service. National Wetlands Inventory. 2022. Available online at the following link: https://www.fws.gov/program/national-wetlands-inventory.

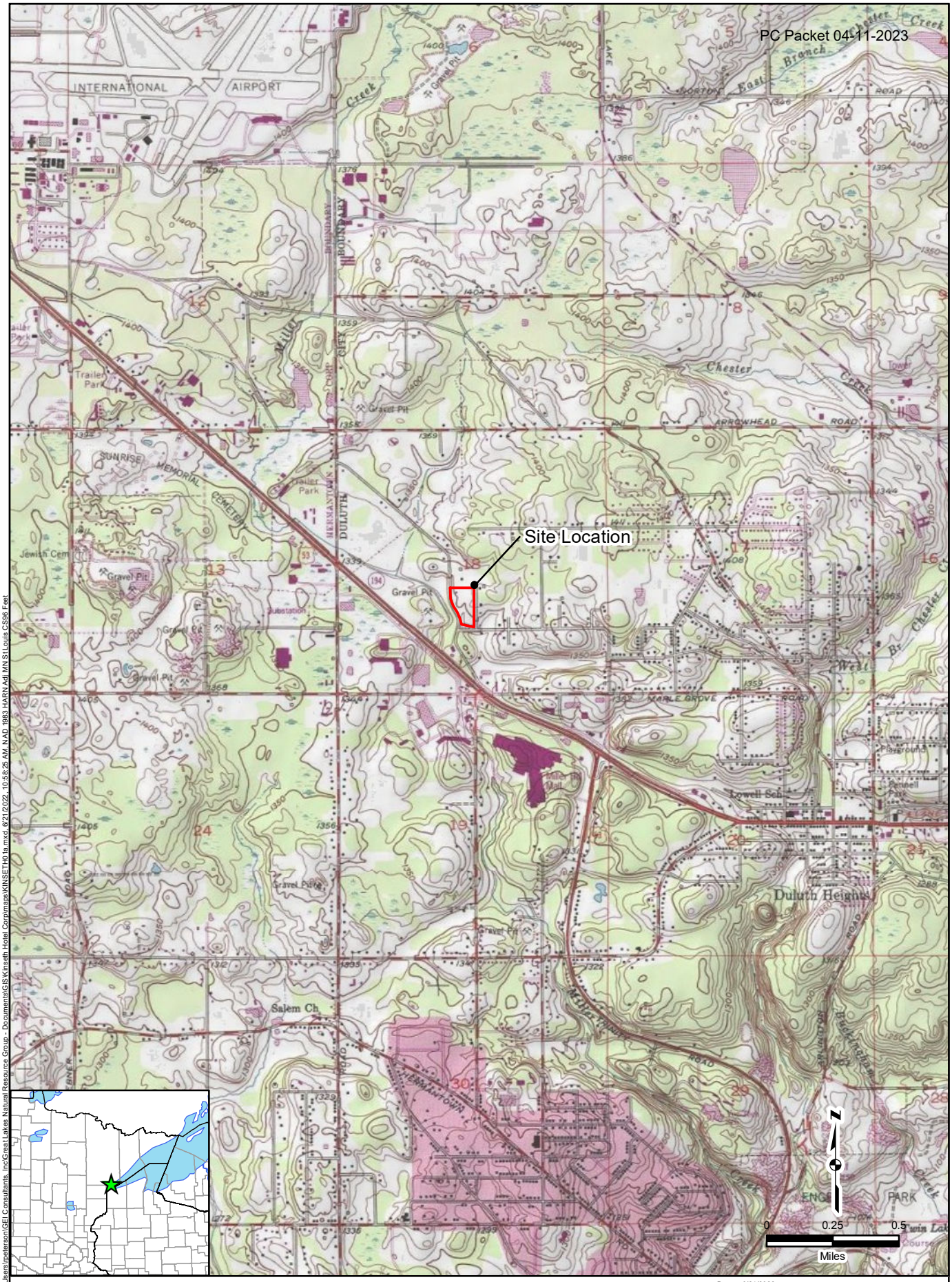
U.S. Geological Survey. National Geospatial Program. US Topo topographic maps. 2022. Available online at the following link: https://ngmdb.usgs.gov/topoview/.

Figures

Figure 1 – Site Location

Figure 2 – Wetland Boundary and Sampling Point Locations

Figure 3 – National Wetland Inventory and Public Waters Inventory



Drawn: 6/21/2022
Service Layer Credits: USGS Topographical Maps

GEI Office: Duluth, MN | Source: C:\Users\peterson\GEI Consultants, Inc\Great Lakes Natural Resource Group - Documents\GIS\Kinseth Hotel Corp\maps\KINSETH01a.mxd, 6/21/2022, 10:58:25 AM, NAD 1983 HARN Adj MN St Louis CS96 Feet

GEI Consultants
1710 Mall Drive
Duluth, MN 55811
www.geiconsultants.com

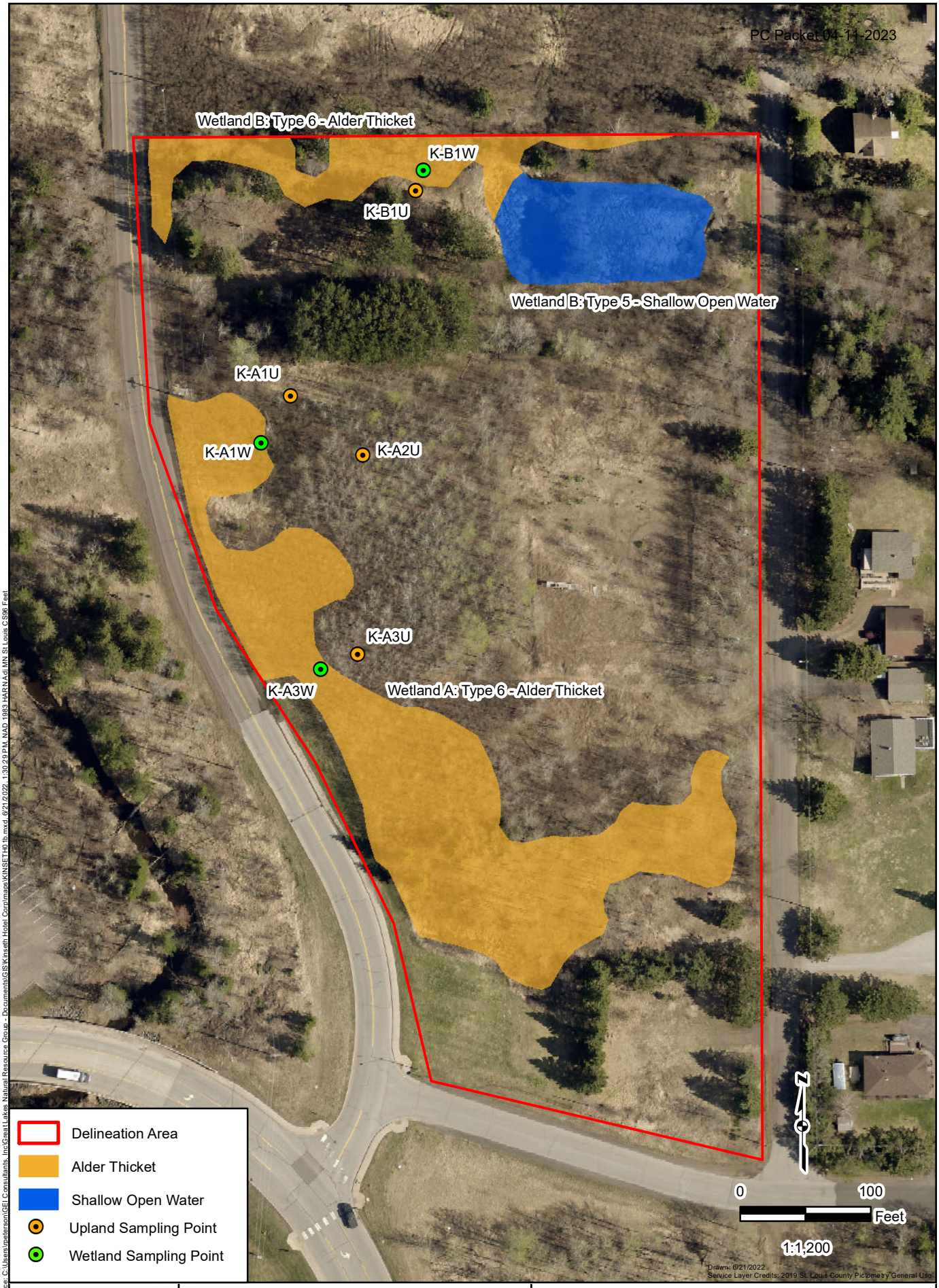
TOWNPLACE SUITES
DULUTH, MINNESOTA

PREPARED FOR

KINSETH HOTEL CORP.

FIGURE 01

SITE LOCATION
JUNE, 2022



GEI Office: Duluth, MN | Source: C:\Users\peterson\GEI Consultants, Inc\Great Lakes Natural Resource Group - Documents\GIS\Kinseth Hotel Corp\maps\KINSETH01b.mxd, 6/21/2022, 1:30:29 PM, NAD 1983 HARN Adj MN St Louis (ft) 596 Feet

GEI Consultants
1710 Mall Drive
Duluth, MN 55811
www.geiconsultants.com

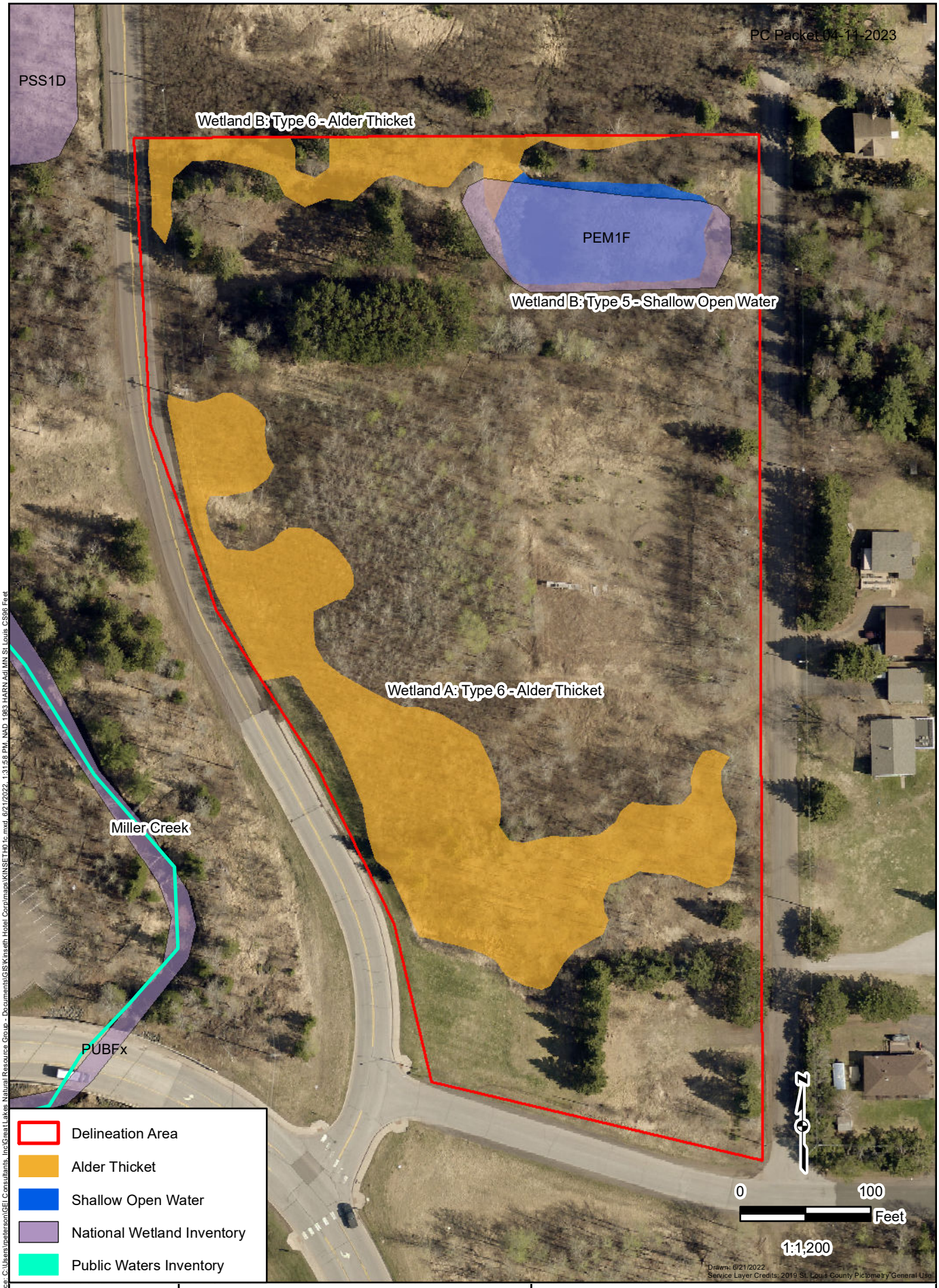
TOWNPLACE SUITES
DULUTH, MINNESOTA

PREPARED FOR

KINSETH HOTEL CORP.

FIGURE 2

WETLAND BOUNDARIES, PLANT COMMUNITIES AND SAMPLING POINT LOCATIONS
JUNE, 2022



GEI Office: Duluth, MN | Source: C:\Users\peterson\GEI Consultants, Inc\Great Lakes Natural Resource Group - Documents\GIS\Kinseth Hotel Corp\maps\KINSETH01fe.mxd, 6/21/2022, 1:31:58 PM, NAD 1983 HARN Adj MN St. Louis CS96 Feet

GEI Consultants
1710 Mall Drive
Duluth, MN 55811
www.geiconsultants.com

TOWNPLACE SUITES
DULUTH, MINNESOTA

PREPARED FOR

KINSETH HOTEL CORP.

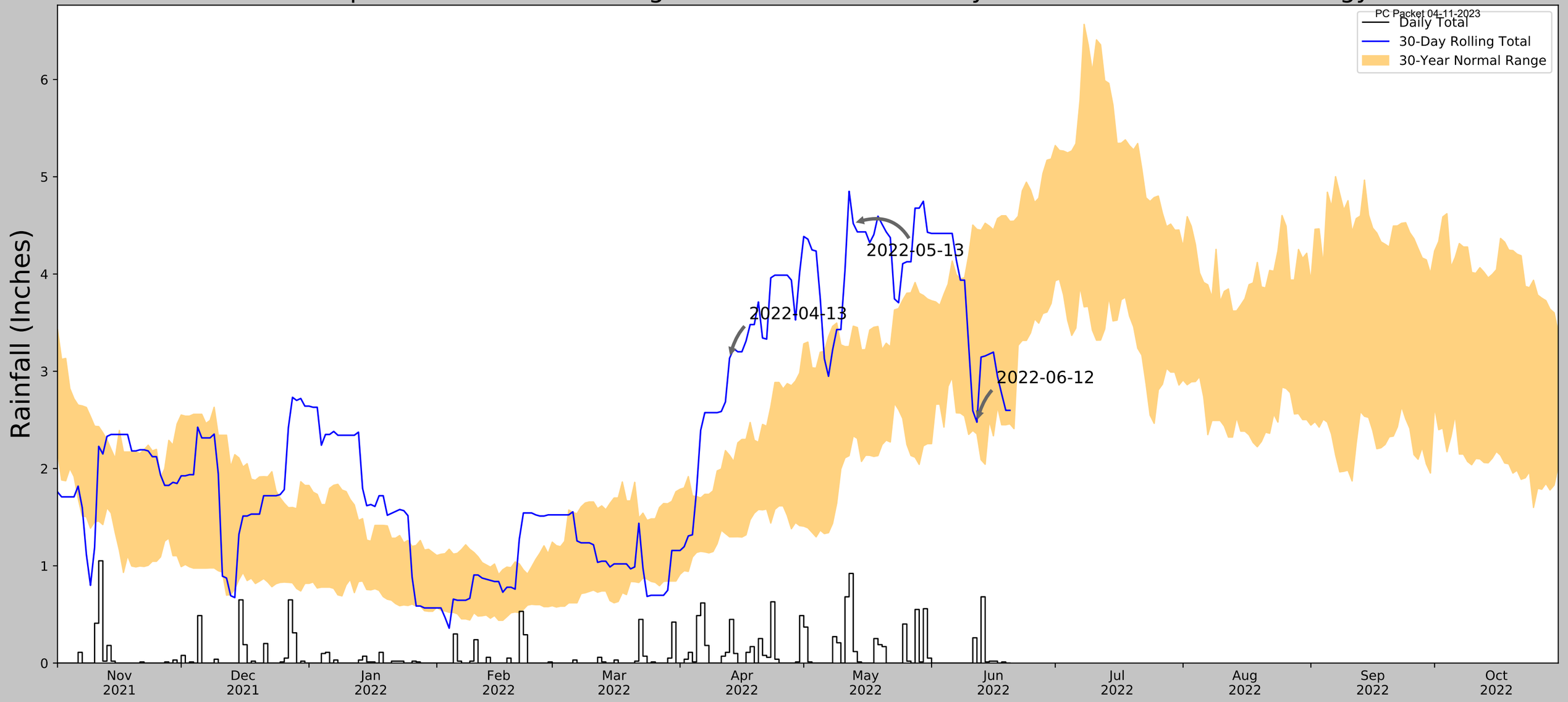
FIGURE 3

NATIONAL WETLAND INVENTORY AND
PUBLIC WATERS INVENTORY
JUNE, 2022

Appendix A

Antecedent Precipitation Tool

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	46.812300, -92.164841
Observation Date	2022-06-12
Elevation (ft)	1344.69
Drought Index (PDSI)	Severe wetness (2022-05)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2022-06-12	2.355906	4.459055	2.476378	Normal	2	3	6
2022-05-13	2.335827	3.464173	4.519685	Wet	3	2	6
2022-04-13	1.298032	2.135433	3.133858	Wet	3	1	3
Result							Wetter than Normal - 15

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
DULUTH	46.8369, -92.2097	1428.15	2.718	83.46	1.45	11353	90

Appendix B

USACE Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Townplace Suites City/County: Duluth Sampling Date: 06/12/22

Applicant/Owner: Kinseth Hotel Corp State: MN Sampling Point: A1U

Investigator(s): GEI - Rob Peterson Section, Township, Range: Section 18, T50N, R14W

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): linear Slope %: 3

Subregion (LRR or MLRA): LRR K Lat: 3352450.78 Long: 4828567.34 Datum: NAD83

Soil Map Unit Name: F135A - Hermantown-Canosia-Giese, depressional, complex, 0 to 3% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Hardwood forest upslope from alder thicket. Heavy thicket of early successional forest species. Heavy shade may be increasing hydrophyte development.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:
No wetland hydrology observed

VEGETATION – Use scientific names of plants. Sampling Point: A1U

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus tremuloides*	20	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1. *Populus tremuloides*	5	Yes	FAC
2. *Rhamnus cathartica*	5	Yes	FAC
3. *Acer negundo*	2	No	FAC
4. *Prunus virginiana*	2	No	FACU
5.			
6.			
7.			
	14	=Total Cover	
Herb Stratum (Plot size:)			
1. *Phalaris arundinacea*	90	Yes	FACW
2. *Cirsium flodmanii*	5	No	FACU
3. *Tanacetum vulgare*	2	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	97	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	7	x 3 =	21
FACU species	34	x 4 =	136
UPL species	0	x 5 =	0
Column Totals:	131 (A)		337 (B)

Prevalence Index = B/A = 2.57

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

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

SOIL

Sampling Point: A1U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	2.5YR 3/3	100					Loamy/Clayey	
14-26	7.5YR 3/2	90	7.5YR 4/4	10	C	PL	Loamy/Clayey	Charcoal at 22 inches

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Townplace Suites City/County: Duluth Sampling Date: 06/12/22

Applicant/Owner: Kinseth Hotel Corp State: MN Sampling Point: A1W

Investigator(s): GEI - Rob Peterson Section, Township, Range: Section 18, T50N, R14W

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave concave Slope %: 0-1

Subregion (LRR or MLRA): LRR K Lat: 3352450.78 Long: 4828567.34 Datum: NAD83

Soil Map Unit Name: F135A - Hermantown-Canosia-Giese, depressional, complex, 0 to 3% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Alder thicket downslope from hardwood forest. Old building foundation observed in a portion of this wetland basin.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Saturated to the surface

VEGETATION – Use scientific names of plants. Sampling Point: A1W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus tremuloides*	2	No	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	2	=Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1. *Alnus incana*	60	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	60	=Total Cover	
Herb Stratum (Plot size:)			
1. *Rubus pubescens*	20	Yes	FACW
2. *Solanum dulcamara*	20	Yes	FAC
3. *Calamagrostis canadensis*	10	No	OBL
4. *Carex scoparia*	5	No	FACW
5. *Teucrium canadense*	5	No	FACW
6. *Equisetum pratense*	2	No	FACW
7. *Heracleum maximum*	2	No	FACW
8.			
9.			
10.			
11.			
12.			
	64	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	94	x 2 =	188
FAC species	20	x 3 =	60
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Column Totals:	126 (A)		266 (B)

Prevalence Index = B/A = 2.11

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

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

SOIL

Sampling Point A1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/1	80	7.5YR 4/4	20	C	M	Loamy/Clayey	
8-13	7.5YR 4/1	70	7.5YR 4/4	30	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Rock/concrete

Depth (inches): 13

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Townplace Suites City/County: Duluth Sampling Date: 06/12/22

Applicant/Owner: Kinseth Hotel Corp State: MN Sampling Point: A2U

Investigator(s): GEI - Rob Peterson Section, Township, Range: Section 18, T50N, R14W

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): linear Slope %: 2-3

Subregion (LRR or MLRA): LRR K Lat: 3352450.78 Long: 4828567.34 Datum: NAD83

Soil Map Unit Name: F135A - Hermantown-Canosia-Giese, depressional, complex, 0 to 3% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Hardwood forest upslope from alder thicket. Heavy thicket of early successional forest species. Heavy shade may be increasing hydrophyte development.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:
No wetland hydrology observed

VEGETATION – Use scientific names of plants. Sampling Point: A2U

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus tremuloides*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1. *Populus balsamifera*	5	No	FACW
2. *Rhamnus cathartica*	20	Yes	FAC
3. *Alnus incana*	5	No	FACW
4. *Sambucus racemosa*	5	No	FACU
5.			
6.			
7.			
	35	=Total Cover	
Herb Stratum (Plot size:)			
1. *Maianthemum canadense*	20	Yes	FACU
2. *Solidago gigantea*	20	Yes	FACW
3. *Ribes americanum*	10	Yes	FACW
4. *Taraxacum officinale*	10	Yes	FACU
5. *Asarum canadense*	5	No	UPL
6. *Rubus pubescens*	5	No	FACW
7. *Carex gracillima*	5	No	FACU
8. *Rubus idaeus*	2	No	FAC
9. *Trientalis borealis*	2	No	FAC
10. *Eurybia macrophylla*	2	No	UPL
11. *Teucrium canadense*	2	No	FACW
12.			
	83	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	42	x 2 =	84
FAC species	24	x 3 =	72
FACU species	55	x 4 =	220
UPL species	7	x 5 =	35
Column Totals:	128 (A)		411 (B)

Prevalence Index = B/A = 3.21

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

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

SOIL

Sampling Point: A2U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	7.5YR 3/3	100					Loamy/Clayey	
16-24	7.5YR 4/3	90	7.5YR 4/6	10	C	PL	Loamy/Clayey	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Townplace Suites City/County: Duluth Sampling Date: 06/12/22

Applicant/Owner: Kinseth Hotel Corp State: MN Sampling Point: A3U

Investigator(s): GEI - Rob Peterson Section, Township, Range: Section 18, T50N, R14W

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): linear Slope %: 1-2

Subregion (LRR or MLRA): LRR K Lat: 3353035.66 Long: 4828634.92 Datum: NAD83

Soil Map Unit Name: F135A - Hermantown-Canosia-Giese, depressional, complex, 0 to 3% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Hardwood forest upslope from alder thicket. Heavy thicket of early successional forest species. Heavy shade may be increasing hydrophyte development. Alders exhibit upright growth form.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 22

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:
Saturation observed beginning at 22 inches

VEGETATION – Use scientific names of plants. Sampling Point: A3U

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	50	Yes	FACW
2. *Populus tremuloides*	10	No	FAC
3.			
4.			
5.			
6.			
7.			
	60	=Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1. *Populus balsamifera*	20	Yes	FACW
2. *Alnus incana*	10	Yes	FACW
3. *Rhamnus cathartica*	2	No	FAC
4.			
5.			
6.			
7.			
	32	=Total Cover	
Herb Stratum (Plot size:)			
1. *Carex gracillima*	30	Yes	FACU
2. *Solidago gigantea*	30	Yes	FACW
3. *Maianthemum canadense*	10	No	FACU
4. *Athyrium filix-femina*	2	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	72	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	110	x 2 =	220
FAC species	12	x 3 =	36
FACU species	40	x 4 =	160
UPL species	2	x 5 =	10
Column Totals:	164 (A)		426 (B)

Prevalence Index = B/A = 2.60

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Alders exhibit upright growth form.

SOIL

Sampling Point: A3U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5YR 4/3	100					Sandy	
9-22	7.5YR 4/3	90	7.5YR 4/6	10	C	M	Sandy	
22-28	5YR 4/3	80	5YR 4/4	20	C	M	Sandy	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Townplace Suites City/County: Duluth Sampling Date: 06/12/22

Applicant/Owner: Kinseth Hotel Corp State: MN Sampling Point: A3W

Investigator(s): GEI - Rob Peterson Section, Township, Range: Section 18, T50N, R14W

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave linear Slope %: 0-1

Subregion (LRR or MLRA): LRR K Lat: 3352286.69 Long: 4828535.12 Datum: NAD83

Soil Map Unit Name: F151A - Tacoosh mucky peat, dense substratum, 0 to 1% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Alder thicket downslope from hardwood forest.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)	X Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Drainage Patterns (B10)
___ Saturation (A3)	___ Marl Deposits (B15)	___ Moss Trim Lines (B16)
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)	___ Dry-Season Water Table (C2)
___ Sediment Deposits (B2)	___ Oxidized Rhizospheres on Living Roots (C3)	___ Crayfish Burrows (C8)
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)	___ Saturation Visible on Aerial Imagery (C9)
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)	___ Shallow Aquitard (D3)
___ Inundation Visible on Aerial Imagery (B7)	___ Other (Explain in Remarks)	X Microtopographic Relief (D4)
___ Sparsely Vegetated Concave Surface (B8)		X FAC-Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____	
Water Table Present?	Yes ____	No X	Depth (inches): ____	
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 18	**Wetland Hydrology Present?** **Yes** X **No** ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: A3W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	10	Yes	FACW
2. *Betula papyrifera*	2	No	FACU
3.			
4.			
5.			
6.			
7.			
	12	=Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1. *Alnus incana*	60	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	60	=Total Cover	
Herb Stratum (Plot size:)			
1. *Carex gracillima*	30	Yes	FACU
2. *Rubus pubescens*	25	Yes	FACW
3. *Rubus idaeus*	15	No	FAC
4. *Solidago gigantea*	10	No	FACW
5. *Equisetum pratense*	2	No	FACW
6. *Ranunculus acris*	2	No	FAC
7. *Sium suave*	2	No	OBL
8.			
9.			
10.			
11.			
12.			
	86	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	2	x 1 =	2
FACW species	107	x 2 =	214
FAC species	17	x 3 =	51
FACU species	32	x 4 =	128
UPL species	0	x 5 =	0
Column Totals:	158 (A)		395 (B)

Prevalence Index = B/A = 2.50

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

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

SOIL

Sampling Point: A3W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2	80	7.5YR 4/6	20	C	M	Sandy	Prominent redox concentrations
8-22	7.5YR 4/3	75	7.5YR 4/6	25	C	M	Sandy	Distinct redox concentrations

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Townplace Suites City/County: Duluth Sampling Date: 06/12/22

Applicant/Owner: Kinseth Hotel Corp State: MN Sampling Point: B1U

Investigator(s): GEI - Rob Peterson Section, Township, Range: Section 18, T50N, R14W

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Convex linear Slope %: 3-5

Subregion (LRR or MLRA): LRR K Lat: 3353035.66 Long: 4828634.92 Datum: NAD83

Soil Map Unit Name: F135A - Hermantown-Canosia-Giese, depressional, complex, 0 to 3% slopes NWI classification: PEM1B

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Hardwood forest upslope from fresh wet meadow.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 19

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: B1U

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	30	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	30	=Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Herb Stratum (Plot size:)			
1. *Rubus idaeus*	30	Yes	FAC
2. *Tanacetum vulgare*	30	Yes	FACU
3. *Phalaris arundinacea*	10	No	FACW
4. *Parthenocissus quinquefolia*	5	No	FACU
5. *Cirsium arvense*	2	No	FACU
6.			FACW
7.			
8.			
9.			
10.			
11.			
12.			
	77	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	30	x 3 =	90
FACU species	37	x 4 =	148
UPL species	0	x 5 =	0
Column Totals:	107 (A)		318 (B)

Prevalence Index = B/A = 2.97

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

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

SOIL

Sampling Point: B1U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/2	100					Sandy	with gravel (Fill)
12-19	7.5YR 4/3	100					Sandy	with gravel (Fill)
19-22	7.5YR 4/2	80	7.5YR 4/6	20	C	M	Sandy	with gravel (Fill)

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Townplace Suites City/County: Duluth Sampling Date: 06/12/22

Applicant/Owner: Kinseth Hotel Corp State: MN Sampling Point: B1W

Investigator(s): GEI - Rob Peterson Section, Township, Range: Section 18, T50N, R14W

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave concave Slope %: 2

Subregion (LRR or MLRA): LRR K Lat: 3353134.91 Long: 4828750.99 Datum: NAD83

Soil Map Unit Name: F135A - Hermantown-Canosia-Giese, depressional, complex, 0 to 3% slopes NWI classification: PEM1B

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Fresh wet meadow downslope from hardwood forest.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 10
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Saturated to the surface with water table at 10 inches.

VEGETATION – Use scientific names of plants. Sampling Point: B1W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	20	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Herb Stratum (Plot size:)			
1. *Phalaris arundinacea*	70	Yes	FACW
2. *Rubus idaeus*	20	Yes	FAC
3. *Teucrium canadense*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	120 (A)		260 (B)

Prevalence Index = B/A = 2.17

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

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

SOIL

Sampling Point: B1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/1	100					Mucky Loam/Clay	
12-18	7.5YR 4/2	75	7.5YR 4/6	25	C	M	Loamy/Clayey	Prominent redox concentrations

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- X Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

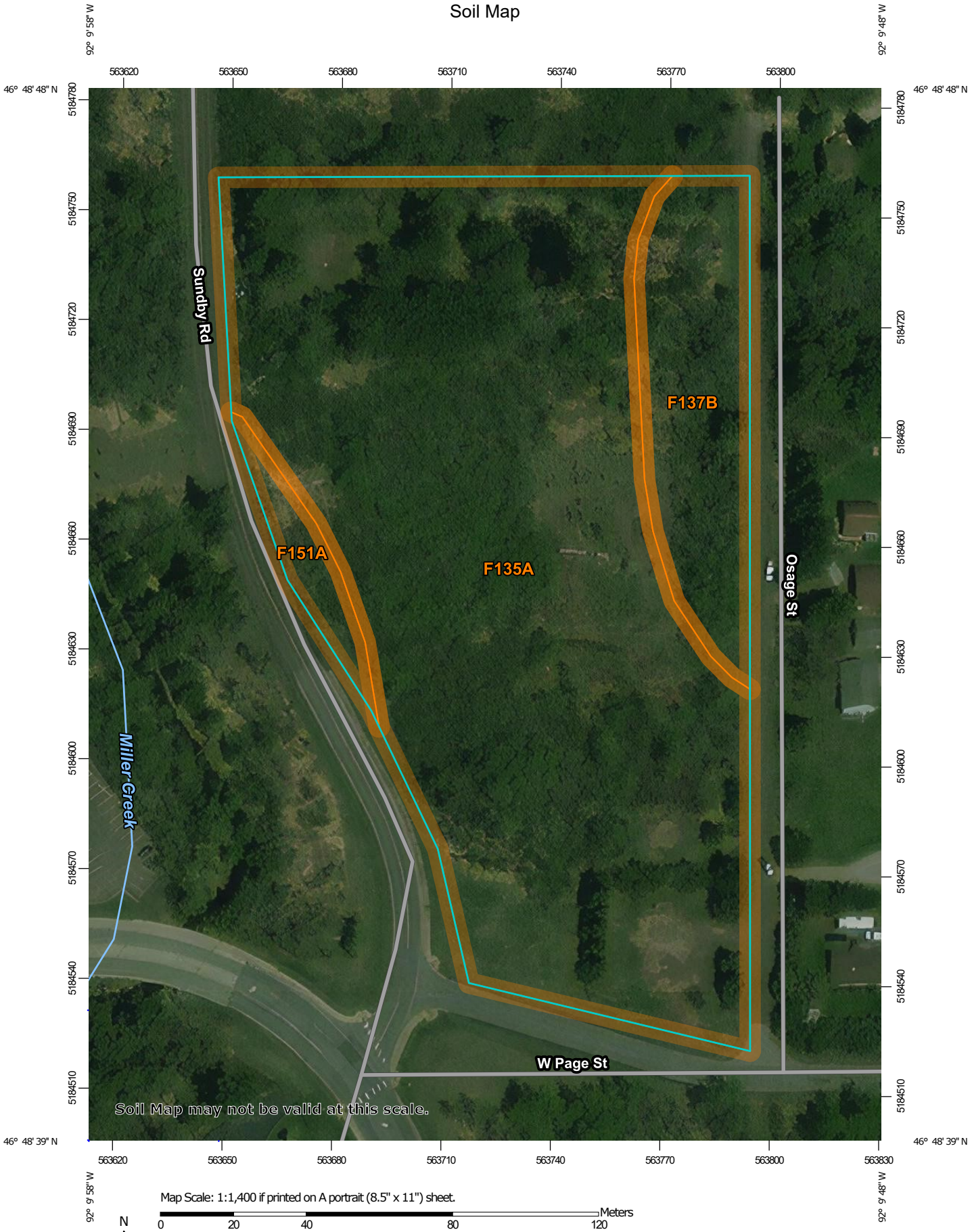
Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

Appendix C

USDA Soil Survey Information


92° 9' 58" W
92° 9' 48" W
563620
563650
563680
563710
563740
563770
563800
46° 48' 48" N
5184780
5184750
5184720
5184690
5184660
5184630
5184600
5184570
5184540
5184510
Sundby Rd
F137B
F151A
F135A
Osage St
Miller Creek
W Page St
Soil Map may not be valid at this scale.
46° 48' 39" N
563830
Map Scale: 1:1,400 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0
20
40
80
120
Feet
0
50
100
200
300
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

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

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

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

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

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

Soil Survey Area: St. Louis County, Minnesota, Duluth Part
Survey Area Data: Version 19, Sep 10, 2021

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

Date(s) aerial images were photographed: May 27, 2014—Sep 8, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
F135A	Hermantown-Canosia-Giese, depressional, complex, 0 to 3 percent slopes	5.6	83.6%
F137B	Normanna-Canosia-Hermantown complex, 0 to 8 percent slopes	0.9	13.4%
F151A	Tacoosh mucky peat, dense substratum, 0 to 1 percent slopes	0.2	3.0%
Totals for Area of Interest		**6.7**	**100.0%**

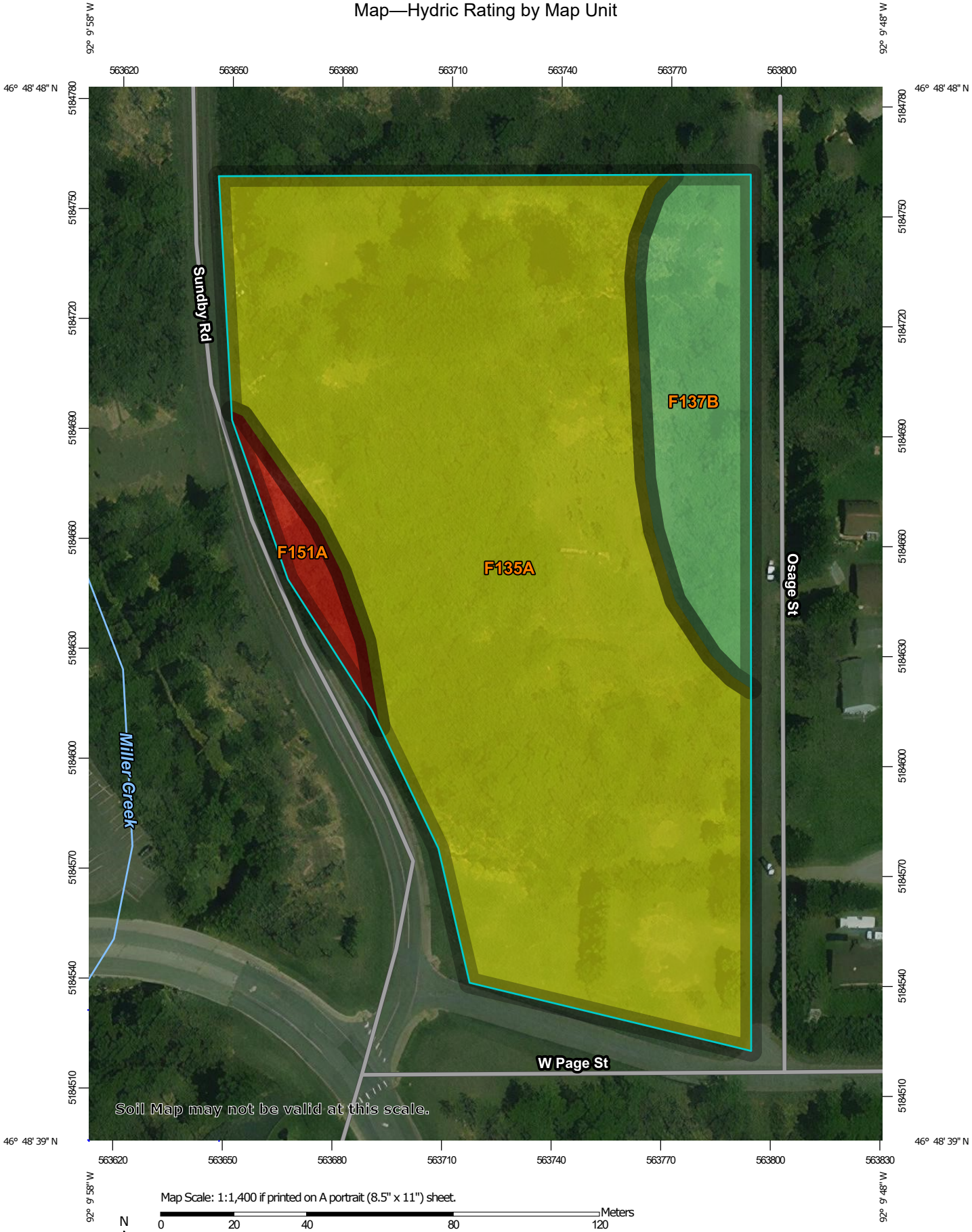
Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

Custom Soil Resource Report
Map—Hydric Rating by Map Unit



Map Scale: 1:1,400 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

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

Soils

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

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

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

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

Soil Survey Area: St. Louis County, Minnesota, Duluth Part
Survey Area Data: Version 19, Sep 10, 2021

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

Date(s) aerial images were photographed: May 27, 2014—Sep 8, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
F135A	Hermantown-Canosia-Giese, depressional, complex, 0 to 3 percent slopes	55	5.6	83.6%
F137B	Normanna-Canosia-Hermantown complex, 0 to 8 percent slopes	32	0.9	13.4%
F151A	Tacoosh mucky peat, dense substratum, 0 to 1 percent slopes	100	0.2	3.0%
Totals for Area of Interest			**6.7**	**100.0%**

Rating Options—Hydric Rating by Map Unit

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Exhibit D

City Wetland Review Process

Wetland Process

The Wetland Conservation Act rules are found in MN Rules 8420 - https://www.revisor.mn.gov/rules/8420/. Links to specific sections are found in the processes below.

Forms can be found on the BWSR web page - https://bwsr.state.mn.us/wca-forms-and-templates. Or you can find a previous action and reuse those forms.

BWSR tutorial video on WCA administrative process - WCA Application Procedures.

DELINEATION:

Determine whether there is a likelihood of wetlands on the property.

- Look at aerial photos, contours in ArcGIS, and wetland layer in GIS. Find areas where there are concentrated drainages.
- In cases where we aren't sure from remote information, a quick field visit can verify.
  - Planning staff can visit to determine – OR -
  - Can send a map with a box or circle drawn around the area you are looking at, and can seek technical assistance from a wetland specialist: RC Boheim at SWCD or David Demmer at BWSR have often been willing to help out.
- If it is questionable or on the fence, ask for a delineation.

Notify applicant a delineation is needed. Notify via email so it is in writing.

- Attach email to parcel record
- If it's a wetland professional they usually understand process.
- If not a wetland person, can give them link to our web site to understand process.
- They need to hire a wetland professional – cannot do this process themselves.
  - There is a link on our web site to wetland professional contact information.

Wetland professional will submit wetland delineation to city.

- Application cover sheet, Joint Application Form (footer of document says "Minnesota Interagency Water Resource Application Form") from BWSR, delineation report, fee.
- Application comes in via regular application process and gets assigned to planner.
- **IMPORTANT:** wetland review cannot be completed during the off season. State rule 8420 allows us to DENY an application as incomplete when we receive it during the off season (when soil/vegetation cannot be verified, roughly 2nd week in October to 1st week of June).

Planner:

- Verifies fee was paid.
- Does Completeness check during first 15 business days after application is received as with all 15.00 applications. Complete application includes:
  - City Application Cover Sheet, signed

  - Application fee, paid
  - Joint Application Form ("Minnesota Interagency Water Resource Application Form") from BWSR web page with the following sections completed:
    - Part 1
    - Part 2
    - Part 5 (need signature)
    - Attachment A
  - Delineation report – see previous delineation reports for examples
- Completes Notice of Application Form which acts as a cover sheet to the delineation. This is a BWSR form (Word doc). Can find the form in a previous wetland folder, File > Save As, and enter new information.
  - Date complete application was received: make sure this is not simply the date in TRAKiT, but the date all info and fee was received (subject to 15.99)
  - Date comments must be received. Minimum 15 business days. **Stick to 15 business days unless there are extenuating circumstances, in order to get back to applicant as soon as possible.**
  - Much information is contained within the delineation, so you'll need to read through the delineation report to fill this out.
  - Look at a few past examples if needed.
    - For check boxes under "who is being notified" – leave the same as previous.
      - FYI ACE and DNR don't have jurisdiction over all wetlands, but because this can be hard to determine send to them anyway. If they find they do not have jurisdiction they won't vote.
  - Can use electronic signature of planner.
- Forwards joint Notice of Application, Joint Wetland Notification Form, and delineation report to TEP, copying applicant and their representatives.
  - TEP information is found in a spreadsheet at: I:\DEVELOPMENT\PLAN_DEV\DEV & BUSINESS SVCS\Wetlands and WCA\Notice Contact List.
    - Include applicant, and agent/other parties as a cc: on the email.
  - TEP is familiar with process and all information is in the attachments so no need to include any specific information about the delineation itself in the body of your email.
    - Include this information in the email regarding deadlines:
      - The comment period for this application ends _____ [15 business day comment period]. Please let me know by _____ [at least 5 business days] if you would like a TEP site visit, which would normally be [date of the next scheduled TEP meeting, if one is scheduled]. Otherwise, no TEP will be scheduled and I welcome your comments on the application.
        - Alternatively, the City may elect to schedule a TEP meeting prior to sending the notice, and you can include the date and time of the TEP meeting in the email instead of letting them know they can request one.
  - After sending email, go to sent folder, **print to pdf** the email **showing attachments that were included** so you can document attachments were sent. Save this pdf to:
    - Project Folder in I: Drive

    - Project in TRAKiT

  You can then delete the email and attachments because of the large file size.

- TEP Meeting should be scheduled during 15-day comment period.
  - Coordinate with all TEP members (primarily BWSR [David Demmer], SWCD [R.C. Boheim], DNR [Sam Martin}, ACOE {Kris Laman]) to find a day and time that works. Will likely need the wetland professional who prepared the report to attend TEP meeting, so check their schedule.
  - Can be virtual or in person, and could also be on site. In order for TEP findings or recommendation to be made on the application at least one member of TEP must complete a site visit.
  - No public notice requirements for TEP meeting. We usually give applicant notice.
  - Meeting is to receive comments and recommendations from the experts to City. TEP is required to provide findings. LGU (Planner) to keep detailed minutes of all findings from meeting and save into wetlands folder. I:\DEVELOPMENT\PLAN_DEV\DEV & BUSINESS SVCS\Wetlands and WCA\TEP Meeting by Year.
  - Circulate minutes to TEP to ensure they are accurate. Ask TEP for any comments by a specific date (can choose a time frame that is reasonable, usually a few days to a week).
  - Simple delineations (like small wetland that is a ditch) may not need a TEP meeting, but almost all of them SHOULD have a meeting, preferably/usually on site.
- Prepare Notice of Decision (NOD)
  - Similar form to NOA, also from BWSR.
  - Include information from application, delineation report, findings etc.
- LGU makes decision to approve, approve with conditions, or deny the delineation, based on whether it is a correct depiction of existing wetlands or not.
  - Forward Notice of Decision, delineation report, BWSR Joint Form, and TEP minutes to Land Use Supervisor for decision.
  - Include brief recommendation in email such as “TEP has approved this and recommends approval.”
  - Adam notifies planner via email that he is ok approving.
  - Planner to print hard copy of NOD for Adam signature. Scan signed NOD into TRAKiT and project folder on I: drive.
- Notice appropriate parties via email.
  - TEP, Applicant, any other parties who commented.
  - Typically, the only attachments are the NOD. Could also include delineation particularly if it has been amended during process.
  - After sending email, go to sent folder, **print to pdf** the email **showing attachments that were included** so you can document attachments were sent. Save this pdf to:
    - Project Folder in I: Drive
    - Project in TRAKiT
- Close out file per Close Out Process.

DEVELOPMENT WITH NO WETLANDS IMPACTED

- For development on a site with wetlands, they should show boundaries of the delineated wetlands, per approved wetland delineation, on their site plan.
    - For small houses like driveways, garages, single family house, etc – planner may just compare site plan with approved delineation to confirm no impact.
- Planner confirms no wetlands impacts. Plan review in TRAKiT should include information such as PL # of wetland delineation, why no wetlands impacted, etc. If wetlands are close to house, construction boundary, etc. indicate to the applicant something like the below statement, either in permit document or other correspondence:
    - "According to the approved delineation, wetlands exist on your property. Please note that wetlands cannot be disturbed during construction or during future use of the property, or impacted through any means including placement of fill or debris, or removal of any vegetation, without following the regulations of the Wetland Conservation Act."
    - TBD with new Tyler software whether permit conditions can be added automatically in software.
    - Note that there may officially be **no wetland impacts** if the wetland has ***already been mitigated***. This can be true for newer plats (back to 1980s/90s), where a replacement plan (approved with platting action) allowed removal of wetlands with appropriate mitigation. To determine whether a specific wetland was already mitigated, you need to find the wetland replacement plan for that plat (using TRAKiT or previous planning department logs).
        - Wetlands can change over time, so for some plats that had originally approved replacement plans, if on-the-ground conditions have changed the boundaries of those wetlands, a new wetland replacement plan may be required.

DEVELOPMENT IMPACTING WETLANDS – EXEMPTIONS

- Wetland professional will estimate amount and type of wetland impacted to see if it can be considered exempt under rules.
- [Exemption worksheet used to be available from BWSR to help with calculations and may be available again.]
- Applicant can take the exemption without any paperwork/documentation – OR – follow the exemption process. (We always recommend they make application for exemption so we can document it, BWSR supports this).
- There are 8 types of exemptions (MN Rules 8420.0420 - https://www.revisor.mn.gov/rules/8420.0420/). Most are rare … the most common is de minimus exemption, which is discussed below. Other exemptions should be dealt with on a case-specific basis.
    - Applicant submits Joint Application Form ("Minnesota Interagency Water Resource Application Form"), explanation of how the project qualifies for the exemption (staff may want to review a De minimis Exemption Worksheet to verify), site plan, and fee to Construction Services.

- De Minimis Exemptions are often complicated and feel free to reach out to David Demmer or R.C. Boheim with questions.

- Planner:
  - Does Completeness check during first 15 business days after application is received as with all 15.00 applications. Complete application includes:
    - City Application Cover Sheet, signed
    - Application fee, paid
    - Joint Application Form ("Minnesota Interagency Water Resource Application") Form from BWSR web page with the following sections completed:
      - Part 1
      - Part 2
      - Part 3
      - Part 4
      - Part 5 (need signature)
      - Attachment B, including identification of which Exemption category they are applying under (should be a number 2 – 9)
    - Wetland delineation or supporting info. to document wetland conditions
    - Site plan showing overall site development, existing wetland boundaries, and impacted wetland with dimensions (area calc).
  - Forwards to TEP, copying applicant and their representatives.
    - TEP information is found in a spreadsheet at: I:\DEVELOPMENT\PLAN_DEV\DEV & BUSINESS SVCS\Wetlands and WCA\Notice Contact List.
      - Include applicant, and agent/other parties as a cc: on the email.
    - TEP is familiar with process and all information is in the attachments so no need to include any specific information about the application itself in the body of your email.
      - Include this information in the email regarding deadlines:
        - The comment period for this application ends _____ [15 business day comment period]. Please let me know by _____ [at least 5 business days] if you would like a TEP site visit, which would normally be [date of the next scheduled TEP meeting, if one is scheduled]. Otherwise, no TEP will be scheduled and I welcome your comments on the application.
          - Alternatively, the City may elect to schedule a TEP meeting prior to sending the notice, and you can include the date and time of the TEP meeting in the email instead of letting them know they can request one.
    - After sending email, go to sent folder, **print to pdf** the email **showing attachments that were included** so you can document attachments were sent. Save this pdf to:
      - Project Folder in I: Drive
      - Project in TRAKiT

      You can then delete the email and attachments because of the large file size.

- TEP Meeting should be scheduled during 15-day comment period, if the TEP wants to have a meeting.

  - Coordinate with all TEP members (primarily BWSR [David Demmer], SWCD [R.C. Boheim], DNR [Sam Martin}, ACOE {Kris Laman]) to find a day and time that works. Will likely need the wetland professional who prepared the report to attend TEP meeting, so check their schedule.
  - Can be virtual or in person, and could also be on site.
  - No public notice requirements. Give applicant notice.
  - Meeting is to receive comments and recommendations from the experts to city. TEP is required to provide findings. LGU (Planner) to keep detailed minutes of all findings from meeting and save into wetlands folder. I:\DEVELOPMENT\PLAN_DEV\DEV & BUSINESS SVCS\Wetlands and WCA\TEP Meeting by Year.
  - Circulate minutes to TEP to ensure they are accurate. Ask TEP for any comments by a specific date (can choose a time frame that is reasonable, usually a few days to a week).
- Prepare Notice of Decision (NOD)
  - Similar form to NOA, also from BWSR.
  - Include information from application, findings etc.
- LGU makes decision to approve, approve with conditions, or deny the exemption, based on whether or not the application meets the exemption criteria.
  - Forward Notice of Decision, BWSR Joint Form, and TEP minutes to Land Use Supervisor for decision.
  - Include brief recommendation in email such as "TEP has approved this and recommends approval."
  - Adam notifies planner via email that he is ok approving.
  - Planner to print hard copy of NOD for Adam signature. Scan signed NOD into TRAKiT and project folder on I: drive.
- Notice appropriate parties via email.
  - TEP, Applicant, any other parties who commented.
  - Typically, the only attachments are the NOD and joint wetland notification form.
  - After sending email, go to sent folder, **print to pdf** the email **showing attachments that were included** so you can document attachments were sent. Save this pdf to:
    - Project Folder in I: Drive
    - Project in TRAKiT
- Close out file per Close Out Process.

DEVELOPMENT IMPACTING WETLANDS – NO LOSS

- "No Loss" means no permanent loss of or impact to wetlands, i.e. temporary impact due to restoring wetland, or that the activity simply doesn't impact wetlands.
- Wetland professional will determine amount and type of wetlands impacted.
- There are 8 types of no loss determinations but most are rare … the most common is with governmental agencies doing restoration projects (MN Rule 8420.0415 - https://www.revisor.mn.gov/rules/8420.0415/).
- Application: Applicant submits joint wetland notification form, site plan, and fee to Construction Services.

- Planner:
    - Does Completeness check during first 15 business days after application is received as with all 15.00 applications. Complete application includes:
        - City Application Cover Sheet, signed
        - Application fee, paid
        - Joint Application Form ("Minnesota Interagency Water Resource Application Form") from BWSR web page with the following sections completed:
            - Part 1
            - Part 2
            - Part 3
            - Part 4
            - Part 5 (need signature)
            - Attachment B, including identification of which No Loss category they are applying under (should be a number letter A - H)
        - Wetland delineation or supporting info. to document wetland conditions
        - Site plan showing overall site development, existing wetland boundaries, and impacted wetland with dimensions (area calc).
- Forwards to TEP, copying applicant and their representatives.
    - TEP information is found in a spreadsheet at: I:\DEVELOPMENT\PLAN_DEV\DEV & BUSINESS SVCS\Wetlands and WCA\Notice Contact List.
        - Include applicant, and agent/other parties as a cc: on the email.
    - TEP is familiar with process and all information is in the attachments so no need to include any specific information about the application itself in the body of your email.
        - Include this information in the email regarding deadlines:
            - The comment period for this application ends _____ [15 business day comment period]. Please let me know by _____ [at least 5 business days] if you would like a TEP site visit, which would normally be [date of the next scheduled TEP meeting, if one is scheduled]. Otherwise, no TEP will be scheduled and I welcome your comments on the application.
                - Alternatively, the City may elect to schedule a TEP meeting prior to sending the notice, and you can include the date and time of the TEP meeting in the email instead of letting them know they can request one.
    - After sending email, go to sent folder, **print to pdf** the email **showing attachments that were included** so you can document attachments were sent. Save this pdf to:
        - Project Folder in I: Drive
        - Project in TRAKiT

      You can then delete the email and attachments because of the large file size.

- TEP Meeting should be scheduled during 15-day comment period, if the TEP wants to have a meeting.
    - Coordinate with all TEP members (primarily BWSR [David Demmer], SWCD [R.C. Boheim], DNR [Sam Martin}, ACOE {Kris Laman]) to find a day and time that works. Will

likely need the wetland professional who prepared the report to attend TEP meeting, so check their schedule.
    - Can be virtual or in person, and could also be on site.
    - No public notice requirements. We usually give applicant notice.
    - Meeting is to receive comments and recommendations from the experts to city. TEP is required to provide findings. LGU (Planner) to keep detailed minutes of all findings from meeting and save into wetlands folder. I:\DEVELOPMENT\PLAN_DEV\DEV & BUSINESS SVCS\Wetlands and WCA\TEP Meeting by Year.
    - Circulate minutes to TEP to ensure they are accurate. Ask TEP for any comments by a specific date (can choose a time frame that is reasonable, usually a few days to a week).
- Prepare Notice of Decision (NOD)
    - Similar form to NOA, also from BWSR.
    - Include information from application, findings etc.
- LGU makes decision to approve, approve with conditions, or deny the no loss, based on whether or not the application meets the criteria.
    - Forward Notice of Decision, BWSR Joint Form, and TEP minutes to Land Use Supervisor for decision.
    - Include brief recommendation in email such as "TEP has approved this and recommends approval."
    - Adam notifies planner via email that he is ok approving.
    - Planner to print hard copy of NOD for Adam signature. Scan signed NOD into TRAKiT and project folder on I: drive.
- Notice appropriate parties via email.
    - TEP, Applicant, any other parties who commented.
    - Typically, the only attachments are the NOD and joint wetland notification form.
    - After sending email, go to sent folder, **print to pdf** the email **showing attachments that were included** so you can document attachments were sent. Save this pdf to:
        - Project Folder in I: Drive
        - Project in TRAKiT
- Close out file per Close Out Process.

DEVELOPMENT IMPACTING WETLANDS – WETLAND REPLACEMENT PLAN

- A wetland replacement plan is needed if the site does not meet the criteria for exemption or no loss.
- Wetland professional will determine amount and type of wetlands impacted. The general sequencing of wetland protection requires the applicant to demonstrate avoidance, minimization, and/or mitigation, in this order. Often the TEP also expects an alternatives analysis that shows multiple development scenarios with various wetland impacts, and a description of why other alternatives were not chosen.
- The US Army Corps of Engineers (USACE) may need to issue a permit for the project as well. Recommend the applicant/agent consult with the Corps for their specific project.
- The MN DNR will take more seriously those wetlands located within a shoreland area.

- Application: Applicant submits joint wetland notification form, wetland replacement plan, site plan, copy of purchase agreement for wetland credits, and fee to Construction Services.
- Planner:
    - Does Completeness check during first 15 business days after application is received as with all 15.00 applications. Complete application includes:
        - City Application Cover Sheet, signed
        - Application fee, paid
        - Joint Application Form ("Minnesota Interagency Water Resource Application Form") from BWSR web page with the following sections completed:
            - Part 1
            - Part 2
            - Part 3
            - Part 4
            - Part 5 (need signature)
            - Attachment C, including a good description of the purpose and need for the project, avoidance and minimization attempts, including alternatives considered. This section is what you and the TEP will need to use for making the decision, so having well written and documented (including drawings, maps, etc.) is important. Ask R.C. or David Demmer if you're not sure if this section is good.
            - Attachment D with identification of the wetland bank account # and number of credits lines filled in.
        - Most applicants include the NOD for the wetland delineation, if it were approved previously (wetland delineations are only good for 5 years), or you should check to see if there was a delineation approved.
        - Site plan showing overall site development, existing wetland boundaries, and impacted wetland with dimensions (area calc).
        - A letter from the wetland bank owner indicating they are committed to selling them wetland credits or a copy of the purchase agreement.
    - Forwards to TEP, copying applicant and their representatives.
        - TEP information is found in a spreadsheet at: I:\DEVELOPMENT\PLAN_DEV\DEV & BUSINESS SVCS\Wetlands and WCA\Notice Contact List.
            - Include applicant, and agent/other parties as a cc: on the email.
        - TEP is familiar with process and all information is in the attachments so no need to include any specific information about the application itself in the body of your email.
            - Include this information in the email regarding deadlines:
                - The comment period for this application ends _____ [15 business day comment period]. Please let me know by _____ [at least 5 business days] if you would like a TEP site visit, which would normally be [date of the next scheduled TEP meeting, if one is scheduled]. Otherwise, no TEP will be scheduled and I welcome your comments on the application.
                    - Alternatively, the City may elect to schedule a TEP meeting prior to sending the notice, and you can include the date and time of

the TEP meeting in the email instead of letting them know they can request one.

- After sending email, go to sent folder, **print to pdf** the email **showing attachments that were included** so you can document attachments were sent. Save this pdf to:
  - Project Folder in I: Drive
  - Project in TRAKiT

  You can then delete the email and attachments because of the large file size.

- TEP Meeting should be scheduled during 15-day comment.
  - Coordinate with all TEP members (primarily BWSR [David Demmer], SWCD [R.C. Boheim], DNR [Sam Martin}, ACOE {Kris Laman]) to find a day and time that works. Will likely need the wetland professional who prepared the report to attend TEP meeting, so check their schedule.
  - Can be virtual or in person, and could also be on site.
  - No public notice requirements. We usually give applicant notice.
  - Meeting is to receive comments and recommendations from the experts to city. TEP is required to provide findings. LGU (Planner) to keep detailed minutes of all findings from meeting and save into wetlands folder. I:\DEVELOPMENT\PLAN_DEV\DEV & BUSINESS SVCS\Wetlands and WCA\TEP Meeting by Year.
  - Circulate minutes to TEP to ensure they are accurate. Ask TEP for any comments by a specific date (can choose a time frame that is reasonable, usually a few days to a week).
- Prepare Notice of Decision (NOD)
  - Similar form to NOA, also from BWSR.
  - Include information from application, findings etc.
- LGU makes decision to approve, approve with conditions, or deny the wetland replacement plan, based on whether or not the application meets the criteria.
  - Forward Notice of Decision, BWSR Joint Form, and TEP minutes to Land Use Supervisor for decision.
  - Include brief recommendation in email such as “TEP has approved this and recommends approval.”
  - Adam notifies planner via email that he is ok approving.
  - Planner to print hard copy of NOD for Adam signature. Scan signed NOD into TRAKiT and project folder on I: drive.
- Notice appropriate parties via email.
  - TEP, Applicant, any other parties who commented.
  - Typically, the only attachments are the NOD and joint wetland notification form.
  - After sending email, go to sent folder, **print to pdf** the email **showing attachments that were included** so you can document attachments were sent. Save this pdf to:
    - Project Folder in I: Drive
    - Project in TRAKiT
- Before construction work can commence (i.e. before erosion/fill/shoreland permits), planner needs to verify that credits were actually purchased. For this documentation the applicant will provide a Bank Withdrawal Form to the City (no application fee associated with this), where City

would verify correct type, replacement amount, etc. After this form is signed by LUS and returned to the wetland professional it should also be placed in I: Drive and TRAKiT.

- BWSR will respond in an email with a Wetland Bank Withdrawal Verification Letter, which should also be added to project files.
- Close out file per Close Out Process.

Exhibit E

WCA Notice of Decision

BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act
Notice of Decision

Local Government Unit: City of Duluth	**County:** St. Louis
Applicant Name: Kinseth Hotel Corp.	**Applicant Representative:** GEI, Rob Peterson
Project Name: Townplace Suites	**LGU Project No. (if any):** PL22-129
Date Application Received by LGU: 07/18/2022	
Date of LGU Decision: 08/17/2022	
Date this Notice was Sent: 08/18/2022	

WCA Decision Type - check all that apply

☒ Wetland Boundary/Type ☐ Sequencing ☐ Replacement Plan ☐ Bank Plan (not credit purchase)
☐ No-Loss (8420.0415) ☐ Exemption (8420.0420)
Part: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H Subpart: ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

Replacement Plan Impacts (replacement plan decisions only)

Total WCA Wetland Impact Area:
Wetland Replacement Type: ☐ Project Specific Credits: ☐ Bank Credits:
Bank Account Number(s):

Technical Evaluation Panel Findings and Recommendations (attach if any)

☒ Approve ☐ Approve w/Conditions ☐ Deny ☐ No TEP Recommendation
Conditions:

LGU Decision

☐ Approved with Conditions (specify below)[1] ☒ Approved[1] ☐ Denied
List Conditions:

Decision-Maker for this Application: ☒ Staff ☐ Governing Board/Council ☐ Other:

Decision is valid for: ☒ 5 years (default) ☐ Other (specify):

[1] *Wetland Replacement Plan approval is not valid until BWSR confirms the withdrawal of any required wetland bank credits. For project-specific replacement a financial assurance per MN Rule 8420.0522, Subp. 9 and evidence that all required forms have been recorded on the title of the property on which the replacement wetland is located must be provided to the LGU for the approval to be valid.*

LGU Findings – Attach document(s) and/or insert narrative providing the basis for the LGU decision[1].

☐ Attachment(s) (specify):
☒ Summary: **Approve a wetland boundary and type delination.**

[1] *Findings must consider any TEP recommendations.*

Attached Project Documents

☐ Site Location Map ☒ Project Plan(s)/Descriptions/Reports (specify): Application materials

Appeals of LGU Decisions

If you wish to appeal this decision, you must provide a written request within 30 calendar days of the date you received the notice. All appeals must be submitted to the Board of Water and Soil Resources Executive Director along with a check payable to BWSR for $500 *unless* the LGU has adopted a local appeal process as identified below. The check must be sent by mail and the written request to appeal can be submitted by mail or e-mail. The appeal should include a copy of this notice, name and contact information of appellant(s) and their representatives (if applicable), a statement clarifying the intent to appeal and supporting information as to why the decision is in error. Send to:

Appeals & Regulatory Compliance Coordinator
Minnesota Board of Water & Soils Resources
520 Lafayette Road North
St. Paul, MN 55155
travis.germundson@state.mn.us

Does the LGU have a local appeal process applicable to this decision?

☒ Yes[1] ☐ No

[1]*If yes, all appeals must first be considered via the local appeals process.*

Local Appeals Submittal Requirements (LGU must describe how to appeal, submittal requirements, fees, etc. as applicable)

Planning Commission 160 City Hall, 411 West First Street Duluth, MN 55802

Notice Distribution (include name)

Required on all notices:

☒ SWCD TEP Member: R.C. Boheim	☒ BWSR TEP Member: David Demmer
☐ LGU TEP Member (if different than LGU contact):	
☒ DNR Representative: Sam Martin, Cliff Bentley	
☐ Watershed District or Watershed Mgmt. Org.: NA	
☒ Applicant (notice only): Kinseth Hotel Group	☒ Agent/Consultant (notice only): Rob Peterson

Optional or As Applicable:

☒ Corps of Engineers: Kristoffer Laman, Catherine Voce	
☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications only):	
☐ Members of the Public (notice only):	☐ Other:

Signature: 	**Date:** 8/24/22

This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.

Exhibit F

Staff Report

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 22-143	**Contact**	Chris Lee, clee@duluthmn.gov	
Type	MU-C Planning Review	**Planning Commission Date**		September 13, 2022
Deadline for Action	**Application Date**	September 7, 2022	**60 Days**	September 19, 2022
	Date Extension Letter Mailed	September 7, 2022	**120 Days**	November 18, 2022
Location of Subject	Sundby Road and W Page Street			
Applicant	Kinseth Hotel Corporation	**Contact**	Aaron Mailey	
Agent	Northland Consulting Engineers	**Contact**	David Bolf	
Legal Description	Parcel ID Number 010-2710-04594			
Site Visit Date	September 1, 2022	**Sign Notice Date**		August 30, 2022
Neighbor Letter Date	August 31, 2022	**Number of Letters Sent**		15

Proposal

The applicant is proposing to construct a 4-story hotel with 112 parking stalls.

Staff Recommendation

Staff is recommending that planning commission approve the planning review.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	MU-C	Undeveloped	Central Business Secondary
North	MU-C	Undeveloped	Central Business Secondary
South	MU-C	Undeveloped	Central Business Secondary
East	MU-C	Undeveloped	Low Density Residential
West	RR-1	Commercial - Retail	Open Space

Summary of Code Requirements

50-15.3.E MU-C District – Planning review by the Planning Commission is required for most development and redevelopment. Development Standards:

1. The location, size and number of curb cuts shall be designed to minimize traffic congestion or hazard in the area. Any traffic control improvements required as a result of the proposal such as traffic signals, turning lanes, medians, signage and other types of improvements necessary to accommodate traffic flow to and from the proposed project shall be paid for by the property owner. Any additional right-of-way or easements needed shall be provided by the property owner at no cost to the city;
2. Any necessary public easements over the subject property shall be dedicated, and any necessary improvements within such easements or other easements adjacent to the subject property shall be made.

50-18.1 Shoreland, Flood Plains, Wetlands, Stormwater.
50-23 Connectivity and Circulation – Focuses on pedestrian and bicycle accommodations.
50-24 Parking and Loading – Addresses required parking spaces, loading docks, and snow storage.
50-25 Landscaping and Tree Preservation – Landscaping requirements and tree preservation
50-26 Screening, Walls, and Fences – Screening of equipment, loading areas, etc., plus fences & retaining walls.
50-29 Sustainability Standards – Sustainability point system for new development.
50-30 Design Standards – Building standards for multi-family, commercial, institutional, and industrial buildings.
50-31 Exterior Lighting – Directs the minimum and maximum illumination values and lighting fixtures for a site.

50-37.11 Planning Review – Planning Commission shall approve the Planning Review or approve it with modifications, if it is determined that the application complies with all applicable provisions of this Chapter.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principles
Governing Principle #4 – Support economic growth sectors, including tourism.

Future Land Use
Central Business Secondary: An area adjacent to and supporting the central business primary area or a stand -alone area providing a similar mix of destination land uses but at a lower intensity than the primary CB area. Includes mixed regional and neighborhood retail, employment centers, public spaces, medium density residential, and public parking facilities.

Review and Discussion Items

Staff finds:

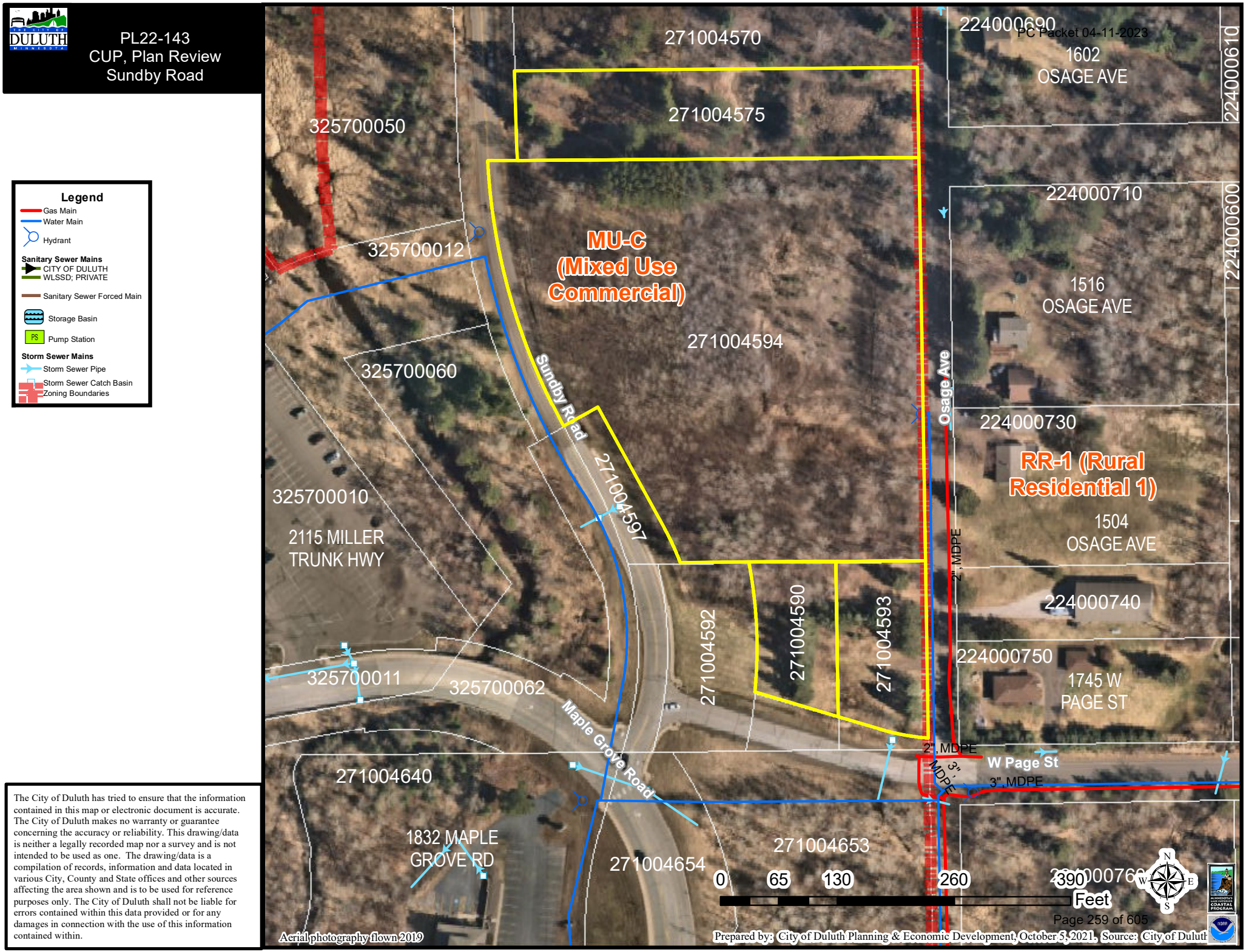
1) The applicant is proposing to construct a 4 story, 51' tall hotel. The applicant will be required to verify the maximum height of the structure at the time of building permit application.
2) 50-15.3 (MU-C District) –Not Applicable: The applicant is not proposing any public easements.
3) 50-18.1.B (Wetlands) – Wetland delineation performed June 2022 show that wetlands are present on site, but will not be impacted.
4) 50-18.1.E (Stormwater Management) –Storm water will be routed to two basins that will discharge to adjacent wetlands.
5) 50-23 (Connectivity) – Not applicable as Sundby Road does not have sidewalks nor is it shown on any bikeways, trail, or pedestrian plan.
6) 50-24 (Parking) – The plan shows 112 parking stalls which is the maximum (2 spaces per 3 guest rooms): 53 in the front, 58 in the rear and side.
7) 50-25 (Landscaping) – The landscape plan shows 21 trees, exceeding the required 19 for parking lot coverage. The required frontage landscaping is met with 33 trees and 149 shrubs. The applicant will must provide details of interior parking lot landscaping that meets the UDC requirements in 50-25.4.B
8) 50-26 (Screening) – The applicant proposes UDC compliant trash enclosure in the north corner of the parking lot. Any ground mounted or roof mounted mechanicals are required to be screened.
9) 50-27 (Signs) – None shown, but can be obtained via a separate permit.
10) 50-29 (Sustainability) – This development will be required to obtain a minimum of 4 sustainability points.
11) 50-30 (Design Standards) – The proposed plans meet requirements.
12) 50-31 (Exterior Lighting) – The applicant has submitted a photometric plan that indicates UDC compliant lighting.
13) No comments have been received from City or other agencies or the general public.
14) Per UDC 50-37.1.N, an approved Planning Review will expire if the project or activity authorized is not begun within one year, which may be extended for one additional year at the discretion of the Land Use Supervisor

Staff Recommendation

Based on the above findings, Staff recommends that Planning Commission the Planning Review with the following conditions:

1.) Applicant shall construct and maintain the project as identified in the attached exhibits.
2.) Applicant shall verify that the height meets the maximum allowed in the MU-C zone district.
3.) Applicant shall show on the landscaping plans that interior parking lot landscaping requirement is meet prior to staff approval of the building permit.
4.) Applicant shall submit details of any mechanical screening prior to approval of the building permit.
5.) Applicant shall submit plans that indicate a minimum of 4 sustainability points are achieved.
6.) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission approval; however, no such administrative approval shall constitute a variance from the provisions of Chapter 50.

PL22-143
CUP, Plan Review
Sundby Road



The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.

Aerial photography flown 2019

Prepared by: City of Duluth Planning & Economic Development, October 5, 2021, Source: City of Duluth

OSAGE STREET

66'

33'

33'

SITE

RIGHT OF WAY TO BE DEDICATED TO CITY OF DULUTH

1352.0

1350.0

SEDIMENT REMOVAL STRUCTURE

DRAINAGE CONTROL STRUCTURE

1353.0

FLOW

NEW BUILDING
FFE=1351.00

TRASH ENCLOSURE
SEE ARCH

1352.0

1349.0

POND ELEV=1345.00

SEDIMENT REMOVAL STRUCTURE

1350.5

1350.0

1348.5

WEST PAGE STREET

SITE

FM

VAULT
EL=1343.66
INFO

1+00

2+00

3+00

4+00

5+00

6+00

7+00

8+00

MAPLE GROVE ROAD

SUNDBY ROAD

66' ROW

EXTEND URBAN SECTION OF SUNDBY ROAD

TOPOGRAPHIC SURVEY PROVIDED BY
ALTA LAND SURVEYING COMPANY, 2018

N E S W

0' 30' 60'

Northland
Consulting Engineers L.L.P.
Structural, Civil and Forensic Engineering Services
www.nce-engineers.com
Voice: (218)727-5995
Fax: (218)727-7779

KINSETH HOTEL CORPORATION
SITE DEVELOPMENT
SE 1/4 OF NE 1/4 SEC 18 T50N R14W

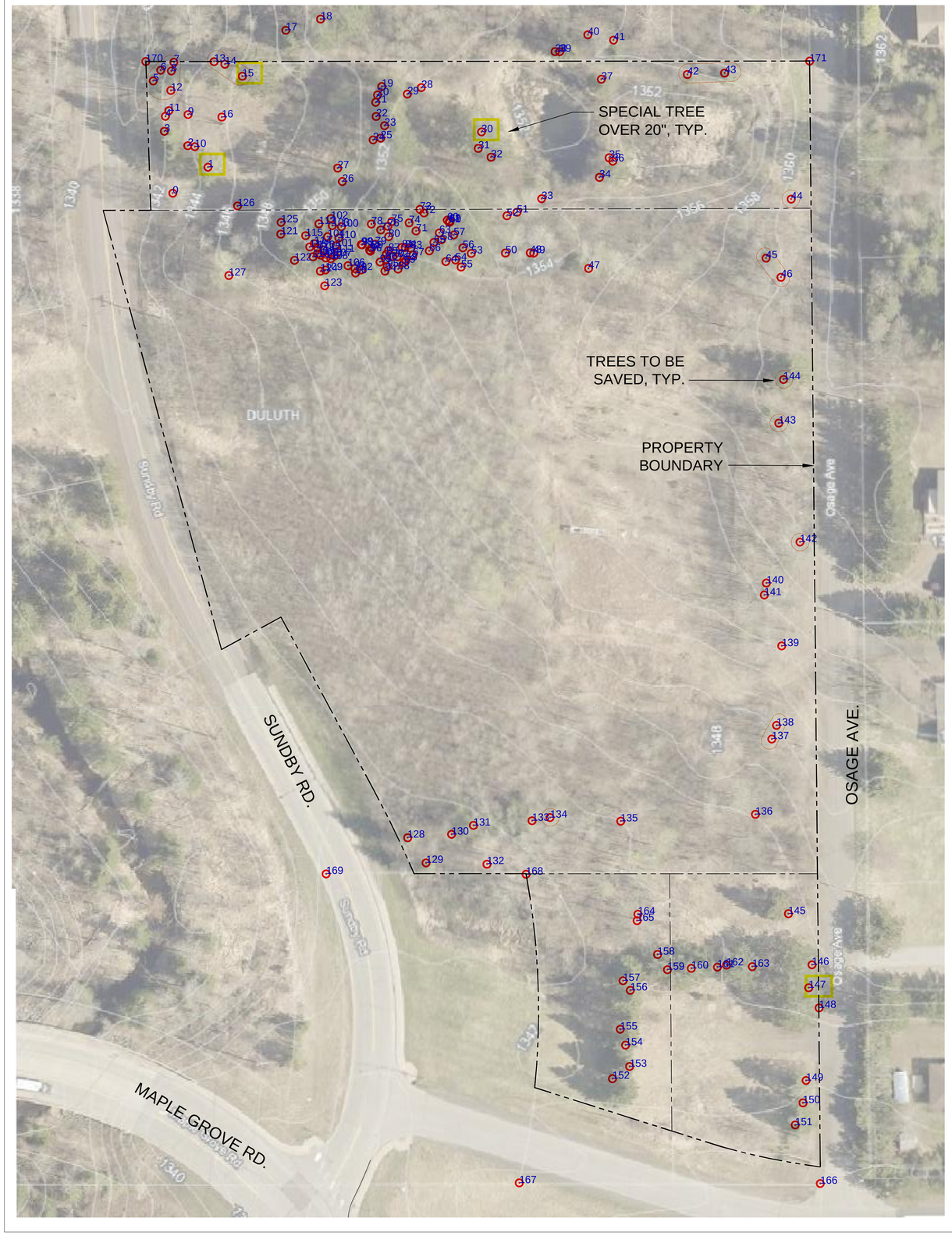
revision

Proj: 21-660
Date: 08/04/22
Drawn: JDO
Checked: DGB

SD SITE PLAN
Sheet Title

Sheet Number
1 OF 1

V:\Projects\21-660 - Kinseth Hotel Corporation\Design Engineering\DWG\SD_Exhibit_with_Contours_2022.05.23.dwg Aug 04, 2022 - 1:29pm chase



Pt ID	Species	Diameter	Comment	UDC Classification
0	White Birch	10.75	Removed	Tree of Interest
1	White Spruce	22.00	Removed	Special Tree
2	Balsam Fir	14.25	Removed	Tree of Interest
3	Balsam Fir	10.50	Removed	Tree of Interest
4	White Spruce	17.50	Removed	Special Tree
5	Balsam Fir	13.75	SAVED	Tree of Interest
6	White Spruce	13.50	SAVED	Special Tree
7	White Spruce	10.00	SAVED	Special Tree
8	White Spruce	12.50	SAVED	Special Tree
9	Silver Maple	16.25	Removed	Tree of Interest
10	Silver Maple	29.50	Removed	Tree of Interest
11	Silver Maple	11.25	Removed	Tree of Interest
12	Silver Maple	13.00	SAVED	Tree of Interest
13	White Spruce	15.25	SAVED	Special Tree
14	White Spruce	12.25	SAVED	Special Tree
15	Red Pine	23.25	SAVED	Special Tree
16	White Birch	14.00	Removed	Tree of Interest
17	Balsam Fir	13.50	*Off Property*	Tree of Interest
18	Red Pine	17.50	*Off Property*	Special Tree
19	White Spruce	16.25	Removed	Special Tree
20	White Spruce	12.75	Removed	Special Tree
21	White Spruce	12.50	Removed	Special Tree
22	White Spruce	15.75	Removed	Special Tree
23	Red Pine	15.75	Removed	Special Tree
24	Red Pine	15.50	Removed	Special Tree
25	Red Pine	18.25	Removed	Special Tree
26	Red Pine	19.00	Removed	Special Tree
27	Red Pine	17.50	Removed	Special Tree
28	Sugar Maple	15.25	Removed	Special Tree
29	Red Oak	7.00	Removed	Tree of Interest
30	Red Pine	22.50	Removed	Special Tree
31	Red Pine	19.75	Removed	Special Tree
32	Jack Pine	18.50	Removed	Tree of Interest
33	White Spruce	7.75	Removed	Tree of Interest
34	Red Pine	12.75	Wetland Tree	Special Tree
35	Tamarack	7.00	Wetland Tree	Tree of Interest
36	Jack Pine	8.50	Wetland Tree	Tree of Interest
37	White Spruce	8.50	Wetland Tree	Special Tree
38	White Spruce	13.00	*Off Property*	Special Tree
39	White Spruce	9.75	*Off Property*	Special Tree
40	White Birch	12.00	*Off Property*	Tree of Interest
41	White Spruce	12.75	*Off Property*	Special Tree
42	White Spruce	7.75	SAVED	Tree of Interest
43	White Spruce	7.50	SAVED	Tree of Interest
44	Tamarack	9.25	SAVED	Tree of Interest
45	White Birch	10.50	SAVED	Tree of Interest
46	Green Ash	11.25	SAVED	Tree of Interest
47	Quaking Aspen	16.00	Removed	Tree of Interest
48	Paper Birch	11.25	Removed	Tree of Interest
49	Quaking Aspen	17.00	Removed	Tree of Interest
50	Quaking Aspen	13.50	Removed	Tree of Interest
51	Quaking Aspen	10.25	Removed	Tree of Interest
52	Quaking Aspen	11.50	Removed	Tree of Interest
53	Red Pine	14.50	Removed	Special Tree
54	Red Pine	12.50	Removed	Special Tree
55	Red Pine	10.50	Removed	Special Tree
56	Red Pine	14.00	Removed	Special Tree
57	Red Pine	10.50	Removed	Special Tree
58	Red Pine	10.00	Removed	Special Tree
59	Red Pine	11.50	Removed	Special Tree
60	Red Pine	13.75	Removed	Special Tree
61	Red Pine	11.75	Removed	Special Tree
62	Red Pine	10.50	Removed	Special Tree
63	Red Pine	8.25	Removed	Special Tree
64	Red Pine	14.00	Removed	Special Tree
65	Red Pine	11.75	Removed	Special Tree
66	Red Pine	6.50	Removed	Tree of Interest
67	Red Pine	10.25	Removed	Special Tree
68	Red Pine	15.00	Removed	Special Tree
69	Red Pine	13.75	Removed	Special Tree
70	Red Pine	10.00	Removed	Special Tree
71	Red Pine	12.00	Removed	Special Tree
72	Red Pine	13.00	Removed	Special Tree
73	Red Pine	12.75	Removed	Special Tree
74	Red Pine	9.25	Removed	Special Tree
75	White Birch	13.00	Removed	Tree of Interest
76	Red Pine	12.25	Removed	Special Tree
77	Red Pine	10.50	Removed	Special Tree
78	Red Pine	13.25	Removed	Special Tree
79	Red Pine	9.50	Removed	Special Tree
80	Red Pine	7.25	Removed	Tree of Interest
81	Red Pine	7.75	Removed	Tree of Interest
82	Red Pine	8.00	Removed	Special Tree
83	Red Pine	8.00	Removed	Special Tree
84	Red Pine	8.75	Removed	Special Tree
85	Red Pine	9.25	Removed	Special Tree

Pt ID	Species	Diameter	Removed	UDC Classification
86	Red Pine	10.75	Removed	Special Tree
87	Red Pine	10.25	Removed	Special Tree
88	Red Pine	14.25	Removed	Special Tree
89	Red Pine	8.25	Removed	Special Tree
90	Red Pine	15.00	Removed	Special Tree
91	Red Pine	6.75	Removed	Special Tree
92	Red Pine	14.00	Removed	Special Tree
93	Red Pine	8.00	Removed	Special Tree
94	Red Pine	6.50	Removed	Tree of Interest
95	Red Pine	9.50	Removed	Special Tree
96	Red Pine	8.00	Removed	Special Tree
97	Red Pine	10.50	Removed	Special Tree
98	Red Pine	10.50	Removed	Special Tree
99	Red Pine	8.75	Removed	Special Tree
100	Red Pine	8.25	Removed	Special Tree
101	Red Pine	10.50	Removed	Special Tree
102	Red Pine	11.00	Removed	Special Tree
103	Red Pine	11.50	Removed	Special Tree
104	Red Pine	10.00	Removed	Special Tree
105	Red Pine	8.75	Removed	Special Tree
106	Red Pine	7.50	Removed	Tree of Interest
107	Red Pine	8.50	Removed	Special Tree
108	Red Pine	10.50	Removed	Special Tree
109	Red Pine	6.25	Removed	Tree of Interest
110	Red Pine	14.20	Removed	Special Tree
111	Red Pine	7.50	Removed	Tree of Interest
112	Red Pine	10.00	Removed	Special Tree
113	Red Pine	14.00	Removed	Special Tree
114	Red Pine	11.75	Removed	Special Tree
115	Red Pine	14.50	Removed	Special Tree
116	Red Pine	9.75	Removed	Special Tree
117	Red Pine	8.50	Removed	Special Tree
118	Red Pine	6.50	Removed	Tree of Interest
119	Red Pine	8.75	Removed	Special Tree
120	Red Pine	6.00	Removed	Tree of Interest
121	Red Pine	14.00	Removed	Special Tree
122	Red Pine	16.00	Removed	Special Tree
123	Red Pine	16.00	Removed	Special Tree
124	Red Pine	14.75	Removed	Special Tree
125	Balsam Fir	10.50	Removed	Tree of Interest
126	White Spruce	9.25	Removed	Special Tree
127	Quaking Aspen	14.75	Removed	Tree of Interest
128	White Spruce	12.50	Wetland Tree	Special Tree
129	White Spruce	9.50	Wetland Tree	Special Tree
130	White Spruce	8.25	Wetland Tree	Special Tree
131	White Spruce	11.50	Wetland Tree	Special Tree
132	Quaking Aspen	10.25	Wetland Tree	Tree of Interest
133	Quaking Aspen	10.25	Wetland Tree	Tree of Interest
134	Quaking Aspen	11.00	SAVED	Tree of Interest
135	Quaking Aspen	11.50	Wetland Tree	Tree of Interest
136	Quaking Aspen	12.25	Wetland Tree	Tree of Interest
137	Quaking Aspen	11.25	SAVED	Tree of Interest
138	Quaking Aspen	10.75	SAVED	Tree of Interest
139	Quaking Aspen	10.00	Removed	Tree of Interest
140	Quaking Aspen	10.75	Removed	Tree of Interest
141	Quaking Aspen	11.00	Removed	Tree of Interest
142	Quaking Aspen	11.75	SAVED	Tree of Interest
143	White Spruce	9.50	SAVED	Special Tree
144	White Spruce	17.75	SAVED	Special Tree
145	White Spruce	16.25	Out of Development Area	Special Tree
146	Red Pine	18.50	Out of Development Area	Special Tree
147	Red Pine	20.00	Out of Development Area	Special Tree
148	Red Pine	19.50	Out of Development Area	Special Tree
149	White Spruce	19.50	Out of Development Area	Special Tree
150	White Spruce	15.25	Out of Development Area	Special Tree
151	Balsam Fir	12.50	Out of Development Area	Tree of Interest
152	White Spruce	17.50	Out of Development Area	Special Tree
153	White Spruce	18.00	Out of Development Area	Special Tree
154	White Spruce	16.00	Out of Development Area	Special Tree
155	White Spruce	14.25	Out of Development Area	Special Tree
156	White Spruce	19.50	Out of Development Area	Special Tree
157	White Spruce	16.75	Out of Development Area	Special Tree
158	Red Pine	13.25	Out of Development Area	Special Tree
159	Red Pine	17.75	Out of Development Area	Special Tree
160	White Spruce	10.50	Out of Development Area	Special Tree
161	White Spruce	9.50	Out of Development Area	Special Tree
162	White Spruce	10.50	Out of Development Area	Special Tree
163	Red Pine	17.00	Out of Development Area	Special Tree
164	Balsam Poplar	11.50	Out of Development Area	Tree of Interest
165	Balsam Poplar	14.50	Out of Development Area	Tree of Interest
166		0.00	*Property Corner*	
167		0.00	*Property Corner*	
168		0.00	*Property Corner*	
169		0.00	*Property Corner*	
170		0.00	*Property Corner*	
171		0.00	*Property Corner*	

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

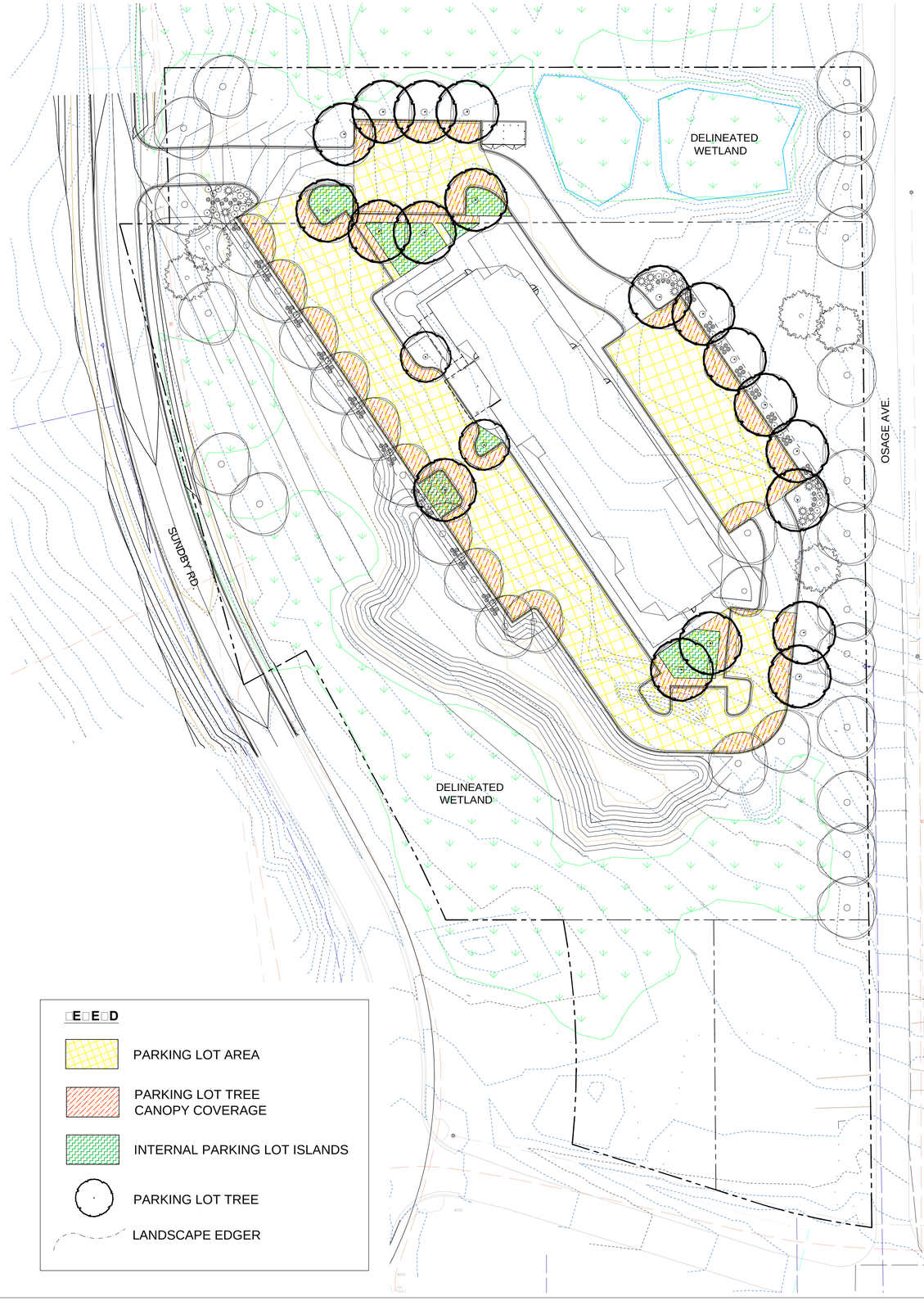
0 40' 80'
ONE INCH

Sheet Key

Sheet Title
TREE INVENTORY

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS
Project Number 22100
Sheet Number L-1.0

Aug 05, 2022 - 10:29am
P:\22100 - Sundby Road\Tree\Sht\SHT - 22100 - Sundby Rd Tree.dwg



UDC CALCULATIONS

PARKING LOT SIZE:	**45,545 SF (112 SPACES)**
INTERIOR LANDSCAPING:	45,545 SF PARKING AREA INTERNAL ISLANDS REQUIRED: 6,832 SF PROVIDED: 3,705 SF (8.1%) 1 TREE/300 SF INTERNAL LANDSCAPE AREA REQUIRED: 19 TREES PROVIDED: 21 TREES MINIMUM 30% TREE CANOPY REQUIRED REQUIRED: 13,664 SF PROVIDED: 14,014 SF
STREET FRONTAGE #1 LINEAR STREET FOOTAGE:	**SUNDBY RD.** 600 LF
TREES:	1 TREE/35 FT. LINEAR FRONTAGE REQUIRED: 17 TREES PROVIDED: 17 TREES
SHRUBS:	3 LARGE SHRUBS/25 FT. LINEAR FRONTAGE REQUIRED: 72 LARGE SHRUBS/GRASSES PROVIDED: 82 LARGE SHRUBS/GRASSES
STREET FRONTAGE #2 LINEAR STREET FOOTAGE:	**OSAGE AVE.** 550 LF
TREES:	1 TREE/35 FT. LINEAR FRONTAGE REQUIRED: 16 TREES PROVIDED: 16 TREES
SHRUBS:	3 LARGE SHRUBS/25 FT. LINEAR FRONTAGE REQUIRED: 66 LARGE SHRUBS/GRASSES PROVIDED: 67 LARGE SHRUBS/GRASSES
	ALL PLANT SELECTIONS WILL MEET UDC REQUIREMENTS ALL SHRUB PLANTING BEDS TO INCLUDE 3-4" SHREDDED HARDWOOD MULCH WITH LANDSCAPE FABRIC ALL DISTURBED AREAS NOT PLANTED WITH SHRUBS/ TREES ARE TO BE SODDED OR PLANTED WITH NATIVE GRASSES; SEE PLANS FOR DETAIL.

LANDSCAPE KEY

	Common Name	Scientific Name	Size	Type	Quantity	Height	Width
TREES							
AM	Apollo Maple	Acer saccharum 'Barrett Cole'	2.5"	B&B		25'	10-15'
BL	Boulevard Linden	Tilia americana 'Boulevard'	2.5"	B&B		50-60'	25-30'
FFM	Fall Fiesta Maple	Acer saccharum 'Bailsta'	2.5"	B&B		50-75'	50'
JE	Jefferson Elm	Ulmus americana 'Jefferson'	2.5"	B&B		70'	50'
MSO	Majestic Skies Oak	Quercus ellipsoidalis 'Bailskies'	2.5"	B&B		60'	45'
NFM	Northern Flare Maple	Acer saccharum 'Sisseton'	2.5"	B&B		40-50'	30-40'
NP	Norway Pine	Pinus resinosa	6'	B&B		50-80'	30-40'
PE	Princeton Elm	Ulmus americana 'Princeton'	2.5"	B&B		60'	40'
SL	Sentry Linden	Tilia americana 'McKSentry'	2.5"	B&B		40-45'	25-30'
SWO	Swamp White Oak	Quercus bicolor	2.5"	B&B		50-60'	40-50'
WS	White Spruce	Picea glauca	6'	B&B		40-60'	15-20'
SHRUBS							
APS	Acrocona Pusch Spruce	Picea abies 'Acrocona Pusch'	#3	Container		2-3'	3-4'
BBH	Butterfly Bush Honeysuckle	Diervilla sessilifolia 'Butterfly'	#2	Container		3-5'	3-4'
DPB	Double Play Big Bang Spirea	Spiraea japonica 'Tracy'	#2	Container		2-3'	2-3'
LGJ	Lime Glow Juniper	Juniperus horizontalis 'Lime Glow'	#3	Container		18"	3-5'
ORNAMENTAL GRASSES							
ORG	Overdam Feather Reed Grass	Calamagrostis x acutiflora 'Overdam'	#1	Container		24-36"	18"
SSG	Shenandoah Red Switch Grass	Panicum virgatum 'Shenandoah'	#1	Container		36"	24"
TPD	Tara Prairie Dropseed	Sporobolus heterolepis 'Tara'	#1	Container		18-24"	12"

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

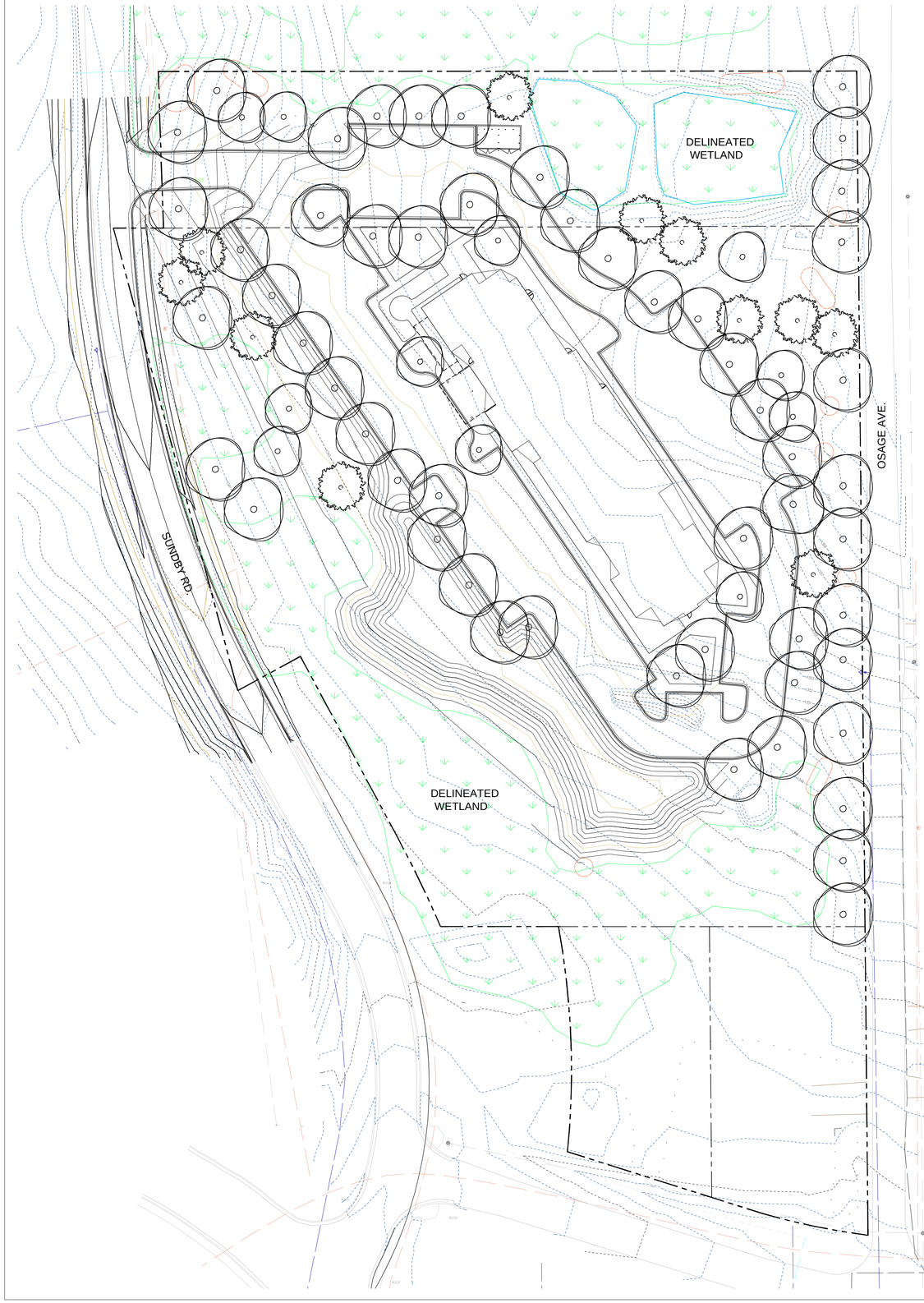
0 40' 80'
ONE INCH

Sheet Key

Sheet Title
UDC LANDSCAPE PLAN

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS
Project Number 22100
Sheet Number L-1.1

Aug 03, 2022 - 10:52am
P:\22100 - Sundby Road Hotel\Site\BS - 22100 - Sundby Rd Hotel.dwg



TREE PRESERVATION AND REPLACEMENT PLAN

TREE PRESERVATION CREDITS (50-25.6)			
DBH of Preserved Tree	**Quantity**	**# of Trees Credited**	**Total**
Over 12 in.	8	3	24
8 in. to 11.9 in.	9	2	18
5 in. to 7.9 in.	2	1	2
TOTAL TREE CREDITS		**44**	

TREES TO BE REMOVED

SPECIAL TREES

ID NO.	Species	DBH	UDC Designation
1	White Spruce	22.00	Special Tree
4	White Spruce	17.50	Special Tree
19	White Spruce	16.25	Special Tree
20	White Spruce	12.75	Special Tree
21	White Spruce	12.50	Special Tree
22	White Spruce	15.75	Special Tree
23	Red Pine	15.75	Special Tree
24	Red Pine	15.50	Special Tree
25	Red Pine	18.25	Special Tree
26	Red Pine	19.00	Special Tree
27	Red Pine	17.50	Special Tree
28	Sugar Maple	15.25	Special Tree
30	Red Pine	22.50	Special Tree
31	Red Pine	19.75	Special Tree
53	Red Pine	14.50	Special Tree
54	Red Pine	12.50	Special Tree
55	Red Pine	10.50	Special Tree
56	Red Pine	14.00	Special Tree
57	Red Pine	10.50	Special Tree
58	Red Pine	10.00	Special Tree
59	Red Pine	11.50	Special Tree
60	Red Pine	13.75	Special Tree
61	Red Pine	11.75	Special Tree
62	Red Pine	10.50	Special Tree
63	Red Pine	8.25	Special Tree
64	Red Pine	14.00	Special Tree
65	Red Pine	11.75	Special Tree
67	Red Pine	10.25	Special Tree
68	Red Pine	15.00	Special Tree
69	Red Pine	13.75	Special Tree
70	Red Pine	10.00	Special Tree
71	Red Pine	12.00	Special Tree
72	Red Pine	13.00	Special Tree
73	Red Pine	12.75	Special Tree
74	Red Pine	9.25	Special Tree
76	Red Pine	12.25	Special Tree
77	Red Pine	10.50	Special Tree
78	Red Pine	13.25	Special Tree
79	Red Pine	9.50	Special Tree
82	Red Pine	8.00	Special Tree
83	Red Pine	8.00	Special Tree
84	Red Pine	8.75	Special Tree
85	Red Pine	9.25	Special Tree
86	Red Pine	10.75	Special Tree
87	Red Pine	10.25	Special Tree
88	Red Pine	14.25	Special Tree
89	Red Pine	8.25	Special Tree
90	Red Pine	15.00	Special Tree
91	Red Pine	6.75	Special Tree
92	Red Pine	14.00	Special Tree
93	Red Pine	8.00	Special Tree
95	Red Pine	9.50	Special Tree
96	Red Pine	8.00	Special Tree
97	Red Pine	10.50	Special Tree
98	Red Pine	10.50	Special Tree
99	Red Pine	8.75	Special Tree
100	Red Pine	8.25	Special Tree
101	Red Pine	10.50	Special Tree
102	Red Pine	11.00	Special Tree
103	Red Pine	11.50	Special Tree
104	Red Pine	10.00	Special Tree
105	Red Pine	8.75	Special Tree
107	Red Pine	8.50	Special Tree
108	Red Pine	10.50	Special Tree
110	Red Pine	14.20	Special Tree
112	Red Pine	10.00	Special Tree
113	Red Pine	14.00	Special Tree
114	Red Pine	11.75	Special Tree
115	Red Pine	14.50	Special Tree
116	Red Pine	9.75	Special Tree
117	Red Pine	8.50	Special Tree
119	Red Pine	8.75	Special Tree
121	Red Pine	14.00	Special Tree
122	Red Pine	16.00	Special Tree
123	Red Pine	16.00	Special Tree
124	Red Pine	14.75	Special Tree
126	White Spruce	9.25	Special Tree
	Total DBH Removed	**944.2**	

TREES TO BE REMOVED

TREES OF INTEREST

ID NO.	Species	DBH	UDC Designation
0	White Birch	10.75	Tree of Interest
2	Balsam Fir	14.25	Tree of Interest
3	Balsam Fir	10.50	Tree of Interest
9	Silver Maple	16.25	Tree of Interest
10	Silver Maple	29.50	Tree of Interest
11	Silver Maple	11.25	Tree of Interest
16	White Birch	14.00	Tree of Interest
29	Red Oak	7.00	Tree of Interest
32	Jack Pine	18.50	Tree of Interest
33	White Spruce	7.75	Tree of Interest
47	Quaking Aspen	16.00	Tree of Interest
48	Paper Birch	11.25	Tree of Interest
49	Quaking Aspen	17.00	Tree of Interest
50	Quaking Aspen	13.50	Tree of Interest
51	Quaking Aspen	10.25	Tree of Interest
52	Quaking Aspen	11.50	Tree of Interest
66	Red Pine	6.50	Tree of Interest
75	White Birch	13.00	Tree of Interest
80	Red Pine	7.25	Tree of Interest
81	Red Pine	7.75	Tree of Interest
94	Red Pine	6.50	Tree of Interest
106	Red Pine	7.50	Tree of Interest
109	Red Pine	6.25	Tree of Interest
111	Red Pine	7.50	Tree of Interest
118	Red Pine	6.50	Tree of Interest
120	Red Pine	6.00	Tree of Interest
125	Balsam Fir	10.50	Tree of Interest
127	Quaking Aspen	14.75	Tree of Interest
139	Quaking Aspen	10.00	Tree of Interest
140	Quaking Aspen	10.75	Tree of Interest
141	Quaking Aspen	11.00	Tree of Interest
Removed		**351.0**	

DBH REPLACEMENT REQUIREMENTS (50-25.9)

Tree Type	# to be Removed	DBH to be Removed	% DBH to be Replaced	Replacement Requirement (in.)
Trees of Interest	31	351.0	20%	70.2
Special Trees	77	944.2	40%	377.7
TOTAL	*108*	*1295.2*	n/a	**447.9**

TREE REPLACEMENT CALCULATIONS: Trees to be Planted

IF REPLACING WITH:	**Trees of Interest (1 in/ 1 in required)**
Number of Trees	180
Caliper of Trees	2.5
TOTAL INCHES REPLACED	**450**
TOTAL INCHES REQUIRED	*447.9*

IF REPLACING WITH:	**Special Trees (1 in/ 1.5 in required)**
Number of Trees	120
Caliper of Trees	2.5
TOTAL INCHES REPLACED	**450**
TOTAL INCHES REQUIRED	*447.9*

TREE REPLACEMENT w/ TREE PRESERVATION CREDITS:

TOTAL TREE CREDITS=	**44**
SPECIAL TREES REQ'D=	120
TREES OF INTEREST REQ'D=	180

Per **UDC Section 50-25.6,** trees to be preserved will count towards the total number needed for replacement, up to 50%. With those factored in, the following are the final replacement numbers for both Special Trees and Trees of Interest:

SPECIAL TREES REQUIRED=	**76**
TREES OF INTEREST REQUIRED=	**136**

TREE REPLACEMENT NOTE:

REPLACEMENT TREE QUANTITY CAN BE REDUCED BY CONTRIBUTING CASH IN LIEU TO THE CITY TREE FUND. TREE QUANTITIES SHOWN ARE USING SPECIAL TREE SPECIES (USING OTHER SPECIES WOULD REQUIRE ADDITIONAL TREE PLANTINGS; SEE CHART 50-25.6).

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

0 40' 80'
ONE INCH

Sheet Key

Sheet Title
TREE REPLACEMENT PLAN

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS

Project Number 22100

Sheet Number L-1.2

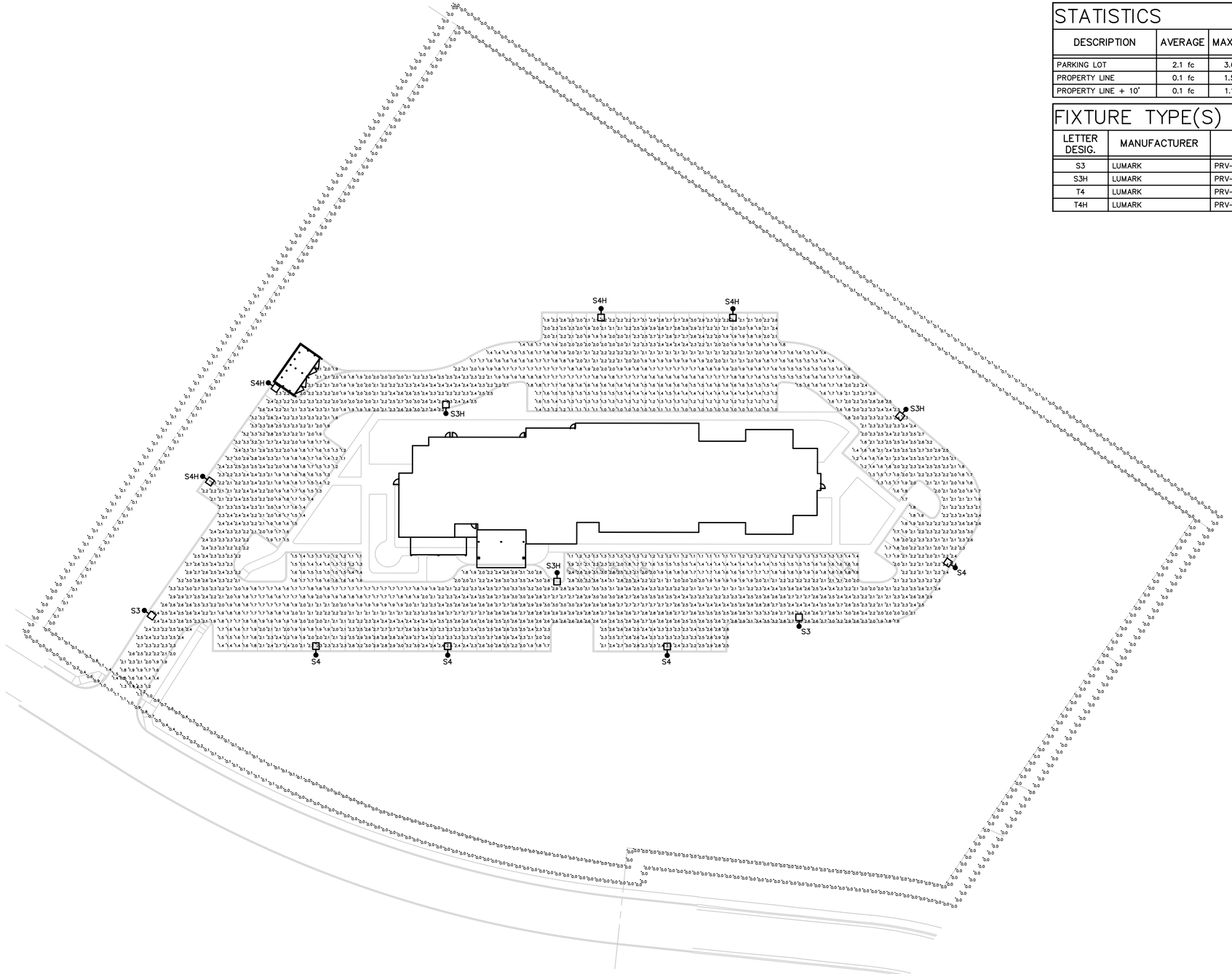
Aug 05, 2022 - 10:53am
P:\22100 - Sundby Road Hotel Site\RS - 22100 - Sundby Rd Hotel.dwg

STATISTICS

DESCRIPTION	AVERAGE	MAXIMUM	MINIMUM	MAX/MIN	AVG/MIN
PARKING LOT	2.1 fc	3.6 fc	1.0 fc	3.6:1	2.1:1
PROPERTY LINE	0.1 fc	1.5 fc	0.0 fc	N/A	N/A
PROPERTY LINE + 10'	0.1 fc	1.1 fc	0.0 fc	N/A	N/A

FIXTURE TYPE(S)

LETTER DESIG.	MANUFACTURER	CATALOG NUMBER	LAMPS NO.	LAMPS TYPE	LUMENS	MOUNTING HEIGHT
S3	LUMARK	PRV-C40-D-UNV-T3-SA-BZ	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
S3H	LUMARK	PRV-C40-D-UNV-T3-SA-BZ-HSS	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
T4	LUMARK	PRV-C40-D-UNV-T4-SA-BZ	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
T4H	LUMARK	PRV-C40-D-UNV-T4-SA-BZ-HSS	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE



A SITE PHOTOMETRICS

1/32" = 1'-0"

NORTH

Project		Catalog #		Type	
Prepared by		Notes		Date	

Lumark

Prevail LED

Area / Site Luminaire

Product Features

Luminaire Technology

Interactive Menu

Quick Facts

- Lumen packages range from 4,800 - 52,300 lumens (35W - 350W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 160 lumens per watt
- Energy and maintenance savings up to 85% versus HID solutions
- Standard universal quick mount arm with universal drill pattern

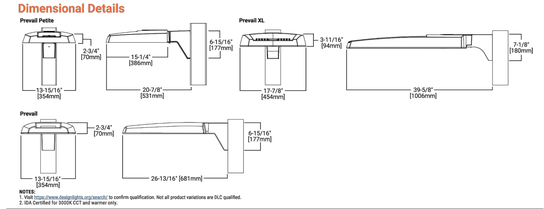
Product Certifications

RoHS, IP66, 5 YEAR, BAA

Connected Systems

- WaveLinx

Dimensional Details



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

COOPER Lighting Solutions

PSS00001EN page 1
February 14, 2022 11:56 AM

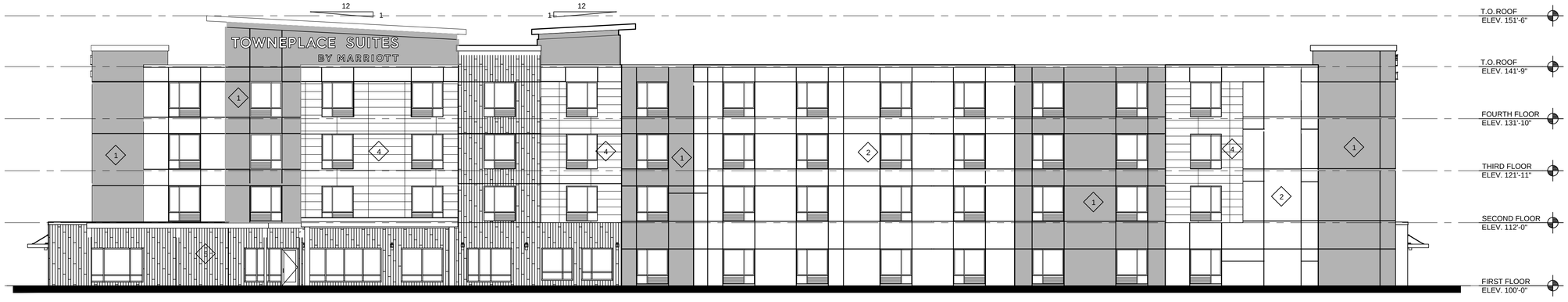
LK Architecture

August 9, 2022

TOWNEPLACE SUITES® BY MARRIOTT

Duluth, MN

SE1



B SOUTHWEST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'

A NORTHWEST ELEVATION

3/32" = 1'-0"

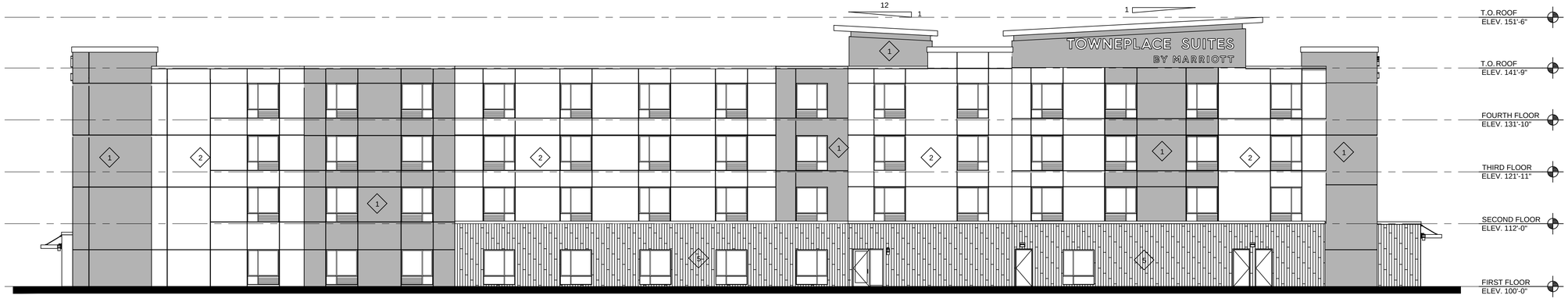
0' 5' 10' 20'

1 EIFS, COLOR : BENJAMIN MOORE "MANOR BLUE" No. 1627 (CLR13414)

2 EIFS, COLOR : BENJAMIN MOORE "NOVEMBER RAIN" No. 2142-60 (CLR13415)

4 EIFS, COLOR : MATCH CONTROL COLOR SW 6006 " BLACK BEAN"

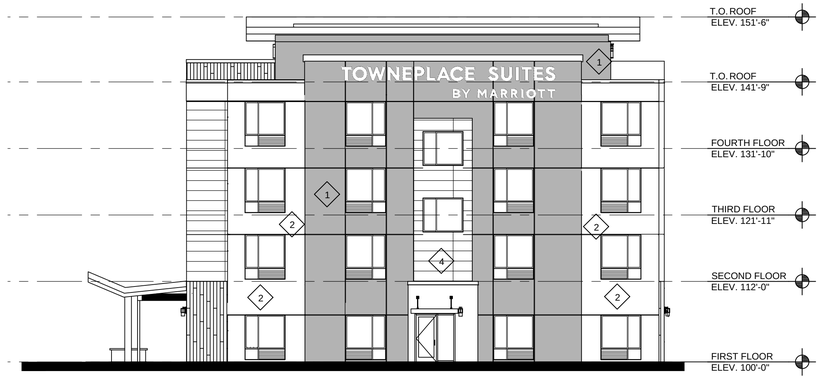
5 EIFS, COLOR : MATCH CONTROL COLOR SW 7045 "INTELLECTUAL GREY"



B NORTHEAST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'



A SOUTHEAST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'

1 EIFS, COLOR : BENJAMIN MOORE
"MANOR BLUE" No. 1627 (CLR13414)

2 EIFS, COLOR : BENJAMIN MOORE
"NOVEMBER RAIN" No. 2142-60 (CLR13415)

4 EIFS, COLOR : MATCH CONTROL
COLOR SW 6006 " BLACK BEAN"

5 EIFS, COLOR : MATCH CONTROL
COLOR SW 7045 "INTELLECTUAL GREY"

Exhibit G

Planning Memorandum

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

MEMORANDUM

DATE: October 4, 2022

TO: Planning Commission

FROM: Chris Lee, Planner II

SUBJECT: Tabled agenda item – PL 22-143 – MU-C Planning Review.

At the September 13, 2022 Planning Commission meeting you voted to table the proposed MU-C Planning Review for a new extended stay hotel on Sundby Road. It was understood that the Commission wished to speak to the applicant and have the applicant address the concerns brought up by the neighbors including: screening to residential neighbors, lighting, and other impacts.

As a Planning Review in the MU-C district, the criteria for approval is stated in Section 50-37.11 of the UDC: "The land use supervisor or planning commission shall approve the planning review or approve it with modifications, if it is determined that the application complies with all applicable provisions of this Chapter." That is, the proposal shall meet all zoning regulations.

Since this meeting, staff has reviewed the plans again, and would like to note the following:

<u>Buffering Between Land Uses</u>

- For buffering between commercial and residential uses, the UDC requires <u>either</u>
    - Option A: A landscape buffer at least 15 feet wide shall be provided by the commercial or institutional project on the shared border. The buffer area shall consist of natural landscape materials such as lawn, ground cover, shrubs, and trees, and shall not contain impervious materials. One tree shall be provided for every 35 feet of boundary lot line and three large shrubs per 25 feet of shared lot line, with spacing designed to minimize sound, light, and noise impacts on the residential use; <u>or</u>
    - Option B: An opaque wall, berm, fence or dense (at least 75 percent opacity) vegetative screen at least six feet shall be provided. If a fence or wall is provided, the side facing away from the commercial or institutional use shall be at least as finished in appearance as the side facing the commercial or institutional use, and

Planning & Development Division
Planning & Economic Development Department
Room 160
411 West First Street
Duluth, Minnesota 55802
218-730-5580
planning@duluthmn.gov

three small shrubs per 25 feet of boundary lot line shall be provided. If a vegetative screen is proposed, it shall be at least six feet in height at the time of planting.

- This project uses Option A. Under zoning regulation, a total of 15 trees and 22 shrubs are required. This application provides 15 trees and no shrubs in the 40 foot buffer.

Lighting

- The UDC requires that any lighting be a full cut-off fixture so that light does not trespass into the sky; specifies maximum illuminations on the site; and maximum pole heights at 25 feet.
- The photometric plan submitted with the plan shows that proposed lighting will not exceed any maximum illumination values at the property line or right-of way. All fixtures are full cut-off as shown in Drawing SE1 (page 9) and the pole height is 25 feet. The lighting will meet UDC requirements.

Traffic Impacts

- A traffic impact study is required whenever a proposed will exceed 100 vehicles per hour at peak hour or 1,000 vehicles per day. A 100-room extended stay hotel is expected to generate no more than 250 trips per day; a traffic impact study is not required.

Staff has confirmed that the applicant will be present at the Planning Commission meeting on October 11, 2022, for any further questions.

Staff recommends the Planning Commission approve the MU-C Planning Review with the findings in the staff report (attached) including adding 22 shrubs to the buffer.

Becca & Terry Mulenburg
1649 W Page St.
Duluth, MN 55811

September 29, 2022

Planning Commission
C/O Adam Fulton
411 West First Street, Room 160
Duluth, MN 55802

Dear Adam Fulton,

My name is Becca Mulenburg. My husband and I live at 1649 W Page St., Duluth, MN 55811. My husband works for Cirrus Aircraft and I am an artist. We both care deeply about our neighborhood, the environment, and the natural areas within the city of Duluth, our home.

As you may know, Kinseth Hospitality Companies wants to build a 4-story, 51-foot high hotel east of Sundby Road at the corner of Sundby Road and Osage Ave. within 31 acres alongside a rural residential area (my neighborhood). This area comprises of a wooded, natural area that also contains wetlands. Just feet away lies Miller Creek. Going forward with this development puts this decision on the wrong side of history. Let me explain.

First off, I would strongly encourage you to look at a satellite map of this proposed area of development before reading much further. By looking at the attached satellite view, you'll be able to see the forested, natural area that's being proposed for development. You'll see how the development ***diverts*** off of the main commercial roads (Burning Tree Rd/Maple Grove Rd) and settles *against* a rural residential neighborhood. By examining this exact placement on the map, you'll have a more thorough understanding. Secondly, if you've never driven down this road or through this area, please do so. You may be enlightened as to why our neighborhood strongly opposes this development. Okay, assuming you've peeked at the satellite view, please continue on.

I understand the city gravitating towards a development such as this. It would undoubtedly add to the city's tax revenue. But as a tax revenue *win* for the city of Duluth, would it be a *win* for the residents impacted by this? Is it a *win* for our environment when 31 acres of natural area that parallels Miller Creek could eventually be destroyed? I think the city of Duluth could do better.

This hotel would sit directly across the street from families living on Osage - zoned rural residential. No doubt, they would be affected the most. Noise pollution, light pollution, traffic and privacy concerns all are major issues.... and not only for those living on Osage but to families further east and north of this project as well. Our neighborhood will lose more dark skies, have more traffic down our residential streets, experience more noise pollution, and will lose beloved natural areas that hundreds, if not thousands, of species call home. Sadly, this natural buffer that has kept our neighborhood separated from the businesses west of Sundby Road will be gone. Many of us are desperately reaching out to you to act.

I'm aware that this area was slated for commercial use many years ago, but since then, times have changed. A lot! ImagineDuluth2035, which is the City of Duluth's current comprehensive land use plan adopted by our City Council says "We need to understand the nature and value of our existing resources in order to achieve a balance between development and open space preservation." Those words have great meaning today more than ever before. To help understand that, simply look at the headlines from the Star Tribune 9/22/22 and 9/27/22. (attached)

TownePlace Suites by Marriott is the projected hotel slated to be built. It has seven other locations in our state: Bloomington, St. Louis Park, Eagan, Eden Prairie, Minneapolis, and two in Rochester. Did you know that not one of these hotels is located adjacent to a rural residential neighborhood such as ours? Not one. Why is Duluth any different? No other city leaders in our state allowed it to happen in *their* cities? What's going on here in Duluth?

This property has been for sale a long time, and a lot has happened in the last 10-20 years. From 9/11 to the housing bubble/crash, the pandemic and more, but there is one thing that will outlast singular, memorable events and affect us all the rest of our lives and beyond….. and that is climate change. We are living in a different era now, one in which the planet is warming, sea levels are rising, and fossil fuels are being phased out. We all need to pay attention *to* and make decisions *based* on how land is developed, or remains undeveloped. It really matters. It shouldn't go without saying that climate change has become humankind's biggest existential threat.

Commercial buildings in this area will, on their *face*, contribute to climate change. Adding this hotel will contribute towards hotter summers in this area, no doubt. Urban areas are simply hotter than their outlying areas. The natural area will be gone, replaced with concrete and asphalt. Are these the decisions we're willing to accept from our city leaders? And for what? Another hotel, and quite possibly *even more hotels* in this area? Any development within our city **must** include methods to ***combat climate change***, not to support it. I'm asking our city leaders take bold action and embrace the future.

Tree planting initiatives have begun worldwide to help reverse some of the damage that's already been done and if this area is destroyed, with all of its wetlands, birds, insects, and wildlife, there's no going back. It's gone forever.

How many more natural areas of Duluth are going to be plowed under? Just in my neck of the woods, looking at Arrowhead/Arlington, the Kenwood shopping center, Costco, where does it end? And now, the city wants to encroach into our residential neighborhood? Far, far more should be demanded from developers who want to build in our city. They should be required to only build on previously developed land. Period. We have got to save our green spaces, for they add to the quality of life here in Duluth.

An example of a development success story I'd like to commend the city for is the conversion of the old Shopko into Ashley Furniture on Central Avenue. I was thrilled the building was repurposed. Congratulations! That was a win-win scenario for everyone in my view; but the hotel development proposed to go up in my neighborhood just isn't right.

I'm asking the City of Duluth back out of this deal and buy this land back from the developer. Why? Because it's the right thing to do. This is America where deals are made every day. Some go forward and some fall through. Let this one fall through. Find another location in a commercial district that doesn't impact family homes or an existing natural area.

Secondly, I would support and encourage a thorough review by the EPA to take a look at this land. What impacts would a development of this magnitude have on its ecosystem should it go through? Again, I hope it does not.

I'd also ask the City of Duluth to consider that the University of Minnesota Duluth might be interested in this land for ecological research and preservation. In addition to their Environmental and Outdoor Education major, they've just added a Childhood Nature Studies program, paving the way for future conservationists. As a nation, we simply have to keep these natural areas wild, and tackle every hurdle that threatens green spaces with creativity and ingenuity. There *has* to be another way, a better location.

I'm a nature lover and care deeply about our environment and the role each of us can play to preserve it. I've documented 111 species of birds in my yard since 2014, and this year, for the first time ever, on May 20th and June 9th, my husband and I received visits from a very special animal, one that is considered an indicator species. An indicator species is an animal or plant species that can be used to infer conditions in a particular habitat. Seeing this animal was a positive sign, a sign of hope, and in *our* case, improved watershed conditions. And that species was a river otter. I thought to myself, wow. Something is going so right here in this neighborhood's ecosystem. If this development goes through, will watershed conditions decline? No doubt there will be less biodiversity in our neighborhood, fewer areas for wildlife to call home, including coyotes, bears, fox, deer, raccoons, skunks, ermines, woodchucks, gray, red, and flying squirrels, rabbits, and birds galore. This development already has so many strikes against it from the start. *Please* take another look at this.

If the City of Duluth and its residents *really* wants, and sees the need for, another hotel, and Marriott *really* wants to have their hotel in our city, all things are possible. But this natural area is not the right fit for this, or any commercial development. This is **our** city. **Our** neighborhood. Not the tourists' city, or anybody else's. We live in this neighborhood, I live and speak for the wildlife, and our voices matter. Please keep this area wild, for it's already a fantastic commercial buffer for our neighborhood, providing much needed distance from Kohl's and La Quinta.

On a side note, the wooded area behind La Quinta should be left alone as well, another great buffer – but it's another wooded space that's sadly also for sale. Before La Quinta was built, it was home to a family of Green Herons.

For nature's sake and our planet's sake, we all have to do more to fight development that wants to plow down more and more green spaces within our city, including those next to rural residential neighborhoods.

Please do the right thing. Keep the area east of Sundby Road commercial-free.

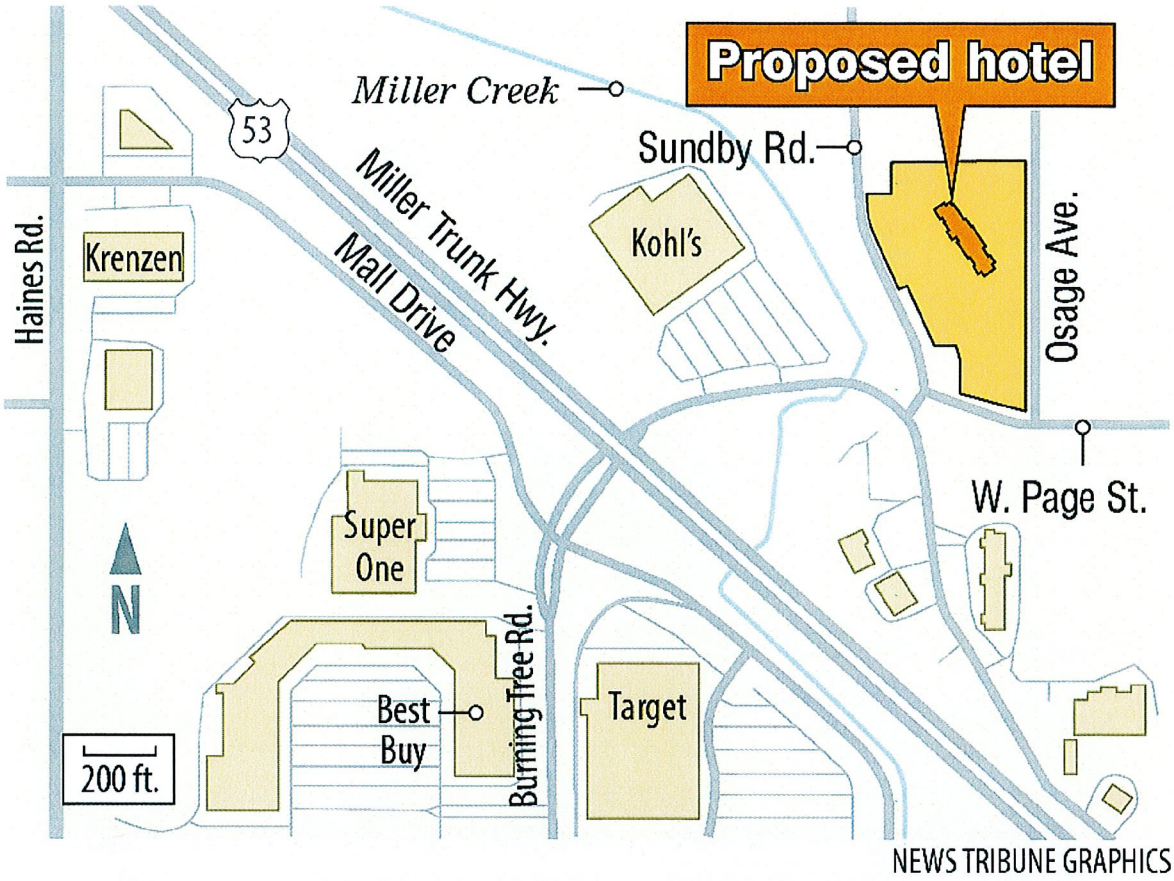
Sincerely,

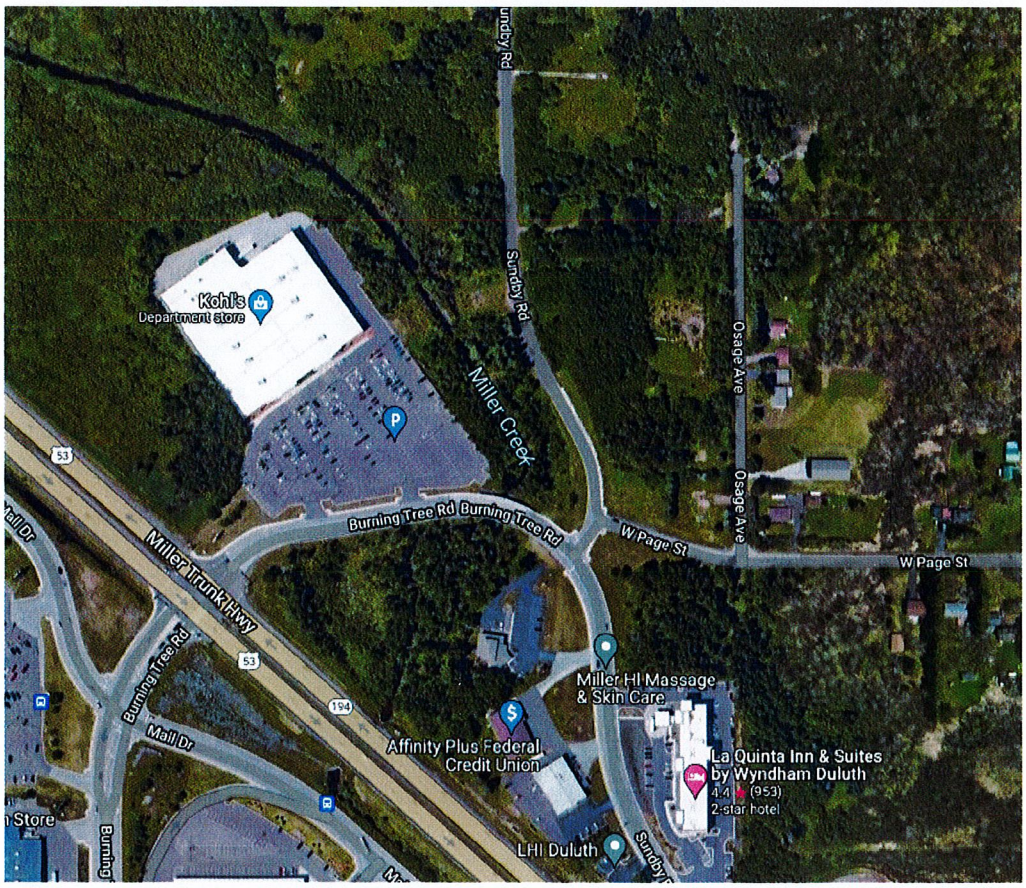
beccamulenburg

Becca Mulenburg

Cc: Emily Larson, Mayor
Hannah Alstead
Gary Anderson
Azrin Awal
Arik Forsman
Noah Hobbs
Janet Kennedy
Mike Mayou
Roz Randorf
Terese Tomanek
Andrea M Wedul
Michael Schraepfer
Jason R Hollinday
Margie Nelson
Danielle C Rhodes
Samuel Y Lobby
Gary Eckenberg
Jason E Crawford

Rural neighbors voice new hotel reservations





THURSDAY
September 22, 2022

StarTribune

2021 PULITZER PRIZE FOR BREAKING NEWS

Restoring our tree canopy: Neighborhoods with less natural shade face hotter summers, higher utility bills and more health troubles. Work is underway to repair this gap.

TUESDAY
September 27, 2022

StarTribune

2021 PULITZER PRIZE FOR BREAKING NEWS

Cities' hot streak sets record

It was 70 degrees or hotter for 118 days in a row in metro; this summer could be the 4th driest on record.

By CHLOE JOHNSON
chloe.johnson@startribune.com

The Twin Cities area saw its longest recorded streak of days that reached 70 degrees or hotter this summer.

The 118-day stretch, from May 27 to Sept. 21, beat out the previous length of 107 days set in 2018, according to the National Weather Service office in Chanhassen.

The heat, along with dry conditions through the summer, could also dull autumn colors. The temperature streak may be less noticeable than scorching days in the summer, but it's part of a larger pattern.

"We're extending the summer into September longer than we used to," said Pete Boulay, a climatologist with the Minnesota Department of Natural Resources.

Climate change is pushing temperatures higher across the globe. So far, that has shown up in Minnesota in warmer, shorter winters.

That won't always be the case. According to the Fourth National Climate Assessment, "Warm-season temperatures are projected to increase more in the Midwest than any other region of the United States."

In the Twin Cities, most of these long stretches of highs above 70 have happened in the past 20 years, said Weather Service meteorologist Jacob Beitlich.

Along with the unusually persistent warmth, this year also stands out for drought conditions that have lingered around the Twin Cities. The area is still in the severe drought category, according to the U.S. Drought Monitor.

This year is on track to be the fourth-driest summer, based on rainfall between June 1 and Sept. 30. It's unlikely that any significant rain will come

See **HEAT** on A3 ▸

An indicator species of improved watershed conditions, a River Otter at my home. What will happed to the watershed if this natural area is destroyed?
Photo ©Becca Mulenburg, June 9, 2022

There is a blanket solution: Actively support conservation efforts for grasslands, forests, wetlands, jungles — for any and all natural land and efforts to restore natural to our animal vocabulary.
Forever.

Lifelong birder Jim Williams can be reached at woodduck38@gmail.com.

-by Jim Williams, "Habitat shift favors some birds", *Special to the Star Tribune, E3, Wednesday, September 28, 2022.*

Exhibit H

City of Duluth Planning Commission Action Letter

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

ACTION OF THE CITY OF DULUTH PLANNING COMMISSION

Date: October 13, 2022

Subject Location: XXX Sundby Road, PIN: 010-2710-04594

Applicant:

Aaron Mailey
Kinseth Hotel Corporation
25 Main Place, Suite 400
Council Bluffs, IA 51503

David Bolf
Northland Consulting Engineers
102 S 21st Ave W
Duluth, MN 55806

Not Sent by U.S. Mail; sent via email to: amailey@kinseth.com; david@nce-duluth.com;

Planning Commission File Number: PL 22-143

Proposal: A Plan Review (MU-C) for a 4-story extended stay hotel and 112-stall parking lot on a 5.17 ac. site.

The above matter came for hearing before the City of Duluth Planning Commission ("Commission") on Tuesday, September 13, 2022, and again on October 11, 2022, notice of said hearing having been given to all interested parties in accordance with Section 50-37 of the Duluth Legislative Code. The Commission received a report from Planning and Development Division Staff and all other parties interested in the matter were given an opportunity to be heard. The Commission now makes the findings and conclusions:

Findings of Fact:

1. 50-15.3 (MU-C District) – Applicant has provided required plan documents.
2. 50-15.3.E (Development Standards) – The project will add a single driveway access to Sundby Road. The hotel is not expected to generate more than 100 trips per hour/1,000 trips per day, an amount of traffic to warrant a traffic study. No additional public easements are needed.
3. 50-18.1.B (Wetlands) – Site development has been positioned to avoid wetlands on the property, but some wetlands impacts are expected. The applicant will conduct a wetland delineation
4. 50-18.1.E (Stormwater Management) – The applicant's plans show storm water detention in two basins that discharge to adjacent wetlands. City storm water engineer Tom Johnson has discussed the storm water treatment concepts with the developer's engineer. The site is in a trout stream watershed so storm water management will need to address the temperature of water leaving the site.
5. 50-23 (Connectivity) – Not applicable as Sundby Road does not have sidewalks nor is it shown on any bikeways, trail, or pedestrian plan.
6. 50-24 (Parking) – The plan shows 112 parking stalls, which is the maximum parking allowed (2 spaces per 3 guest rooms). 53 parking stalls are located in the front with the remaining 58 located in the rear and side yards.
7. 50-25 (Landscaping) – The landscape plan shows 21 trees, exceeding the required 19 for parking lot coverage. The required frontage landscaping is met with 33 trees and 149 shrubs. The applicant will must provide details of interior

parking lot landscaping that meets the UDC requirements in 50-25.4.B. A tree inventory has been conducted by a licensed landscape architect, but the tree replacement plan needs to be reviewed and approved by the City.

8. 50-26 (Screening) – Trash screening details provided and comply. Details of mechanical screening can be evaluated at time of building permit.
9. 50-27 (Signs) – None shown, but can be obtained via a separate permit.
10. 50-29 (Sustainability) – This development will be required to obtain a minimum of 4 sustainability points
11. 50-30 (Design Standards) – The proposed plans meet requirements. The structure will be 51' in height to screen the roof top mechanicals.
12. 50-31 (Exterior Lighting) – The applicant has submitted a photometric plan that indicates UDC complaint lighting.
13. City Engineering has requested that a 33' easement be dedicated on the east side of the property to create buffer and create a 66' wide easement for Osage Road.
14. No other comments from City or other agencies or the general public.
15. Approved Planning Reviews shall lapse if the project or activity authorized by the permit or variance is not begun within one year of the permit date. The building official may extend this period one time for a period of up to one year if the property owner presents a written request showing the reasons for the delay was outside the owner's control.

Conclusions:

A. The request is in harmony with the purposes and intent of the UDC.
B. The request is consistent with the comprehensive plan.
C. The request will allow reasonable use of the land.
D. The request does not impact the health, safety, or welfare of the general public.

Decision:

Resolved that based on the findings above, application PL22-143, is approved (Planning Commission vote 7-1, 0 abstention), subject to the following conditions:

1) The project be limited to, constructed, and maintained according to plans submitted with this application subject to modifications to be approved by the Land Use Supervisor listed below.
2) Obtain approval on mechanical screening before building permit approval.
3) Obtain approval on the landscape plan before building permit approval.
4) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission; however, no such administration approval shall constitute a variance from the provisions of Chapter 50.

Decided at Duluth, Minnesota, on Tuesday, October 11, 2022.

BY ORDER OF THE LAND USE SUPERVISOR

Adam Fulton, Deputy Director, Planning and Economic Development

NOTICE OF PERMIT LAPSE

Planning Reviews approved by the Planning Commission shall lapse if the project or activity authorized by the review is not begun within 1 year of the permit date. The building official may extend this period one time for a period of up to 1 year if the property owner presents a written request showing the reasons for the delay was outside the owner's control (UDC Sec. 50-37.1.N).

NOTICE OF RIGHT TO APPEAL

Any person aggrieved by, or any department of the City affected by, any decision of the Commission may appeal the decision of the Commission to the Duluth City Council pursuant to Section 50-37.1O(4) of the Duluth Legislative Code. The appeal must be filed with the City Clerk within 10 days of the decision. The appeal should be addressed to the council and specify the grounds for the appeal. The fee for an appeal is $400.00. The appeal fee must be tendered when the appeal is filed.

Exhibit I

Fye and Neighbors appeal of October 11, 2022, Planning Commission Approval

To whom it may concern,

I, Ben Fye am formally appealing the approval of City of Duluth Plan PL22-143 (hotel planned for Sundby Rd).

Please see my attached letter that was sent to city councilors via email on 10/11/22. I am requesting that there is a provision on the plan dictating that the addresses of 1504 Osage, 1516 Osage, 1602 Osage and 1745 W Page have a one-time opportunity to pursue obtaining a short-term rental license. These houses, including mine are going to significantly be impacted by the hotel.

I welcome the opportunity to speak to anyone on this topic and will openly address city council when presented the opportunity.

Respectfully,

Ben Fye
1504 Osage Ave
Duluth, MN 55811
218-428-7723
benfye19@hotmail.com

To whom it may concern,

Thank you for the opportunity to speak at the planning and zoning meeting this evening. I want to take a few moments to highlight some key points I made last night regarding the construction of the hotel on Sundby Rd.

I live at 1504 Osage Ave in Duluth. An address that my family calls home. I am sad to hear about the proposed hotel plans on Sundby Rd. To my family, Duluth is a place we call home, a place that is unique by nature with charming neighborhoods.

The proposed plan literally has a 51ft tall 4 story hotel looming over my front living room picture window. Our privacy will be lost, our home value will be destroyed, our safety will be compromised. It is not an exaggeration when I say the hotel will literally be right across the street from my front yard. We are zoned RURAL RESIDENTIAL, and we will now have hotel windows looking down on our property.

I am sad that I only learned about the proposed hotel by seeing a sign laying down on the ground at the proposed site. The City of Duluth noted they sent letters out to area residences reference the proposed building with no feedback. Like all my neighbors (if we did receive letters) it was a week after the initial planning meeting that the letter was advising us of.

I am not naïve to the fact that big money talks and this hotel will likely be built. I am proposing that the three houses on Osage and the address of 1745 W Page St be granted short term rental licenses for their residences if the owners are so inclined to obtain one. A long-term rental license will not suffice as just like myself, the pool will be nonexistent for quality long term renters that are willing to endure the burdens of a hotel directly across the street. This would allow the homeowners flexibility regarding figuring out what their next move is. My family will be pushed out of our home in order to maintain the quality of life we are accustomed to.

I am begging you to please entertain my proposition with allowing short term rental licenses for the four mentioned properties. Please, try to put yourself in my position and do the right thing, grant the licenses if this hotel moves forward.

Thank you for your time on this matter and I would like to remind everyone that my property is zoned RURAL RESIDENTIAL.

Sincerely,

Ben Fye
1504 Osage Ave
Duluth, MN 55811
218-428-7723

The Duluth Heights Neighborhood with residents from

Osage St

Page St

Yosemite St

W Morgan St

are appealing the Planning Commission PL22-143 ruling issued on October 11th, 2022.

This appeal is on the following grounds:

- PL22-143 has been approved despite the omission of the following in the UDC guiding document:
  - Omission of zoning standards that properly address an MU-C sharing a property line with an RR-1
- PL22-143 has been approved in opposition to the following Governing Principles as listed in the Imagine Duluth 2035 document:
  - Principle #1: Reuse previously developed lands
  - Principle #2: Declare the necessity and secure the future of undeveloped places
  - Principle #5: Promote reinvestment in neighborhoods
  - Principle #6: Reinforce the place-specific
  - Principle #10: Take actions that enhance the environment, economic, and social well-being of the community
  - Principle #12: Create efficiencies in delivery of public services
- PL22-143 has been approved over the maximum allowed building height of 45'-0", per 50-15.3.
- PL22-143 has been approved without pedestrian connections, per 50-23, despite a partial sidewalk at the corner of Sundby Rd and Page St.
- PL22-143 has been approved without the required restoration of the natural vegetation buffer to the extent feasible within 300' of a natural shoreland, per 50-18.1 D.
- PL22-143 has been approved despite a petition of 101 Duluth citizen signatures in opposition, captured as of 10/11/2022.
- The 2009 City Council public hearing regarding the 2009 Planning Commission ruling to deny the rezoning of Sundby Rd from a R-1-B to a C-5 zone, was not properly communicated to neighboring properties.

The appellant requests the following from President Forsman and Councilor Randorf:

Suspend Rule 7 regarding the 3-minute time limit:

> Given the history of this property, three minutes does not allow the appellant adequate due process to present their case thoughtfully and thoroughly to the Council.

November 7, 2022

Dear President Forsman and Councilors,

The following document contains an appeal to the Planning Commission ruling on PL22-143. The document outlines seven grounds of appeal, though we believe there are more, and provides an Appendix of supporting information.

If you haven't already, we encourage you to drive down Sundby Road and through the neighboring Duluth Heights. Even better, park your vehicle and walk around. Explore the area around Miller Creek, walk the neighboring streets (Osage, Page, Yosemite, West Morgan), stand at 1516 Osage Street and look west, and imagine a four-story, fifty-one foot Marriott Towneplace directly across the street. And then ask yourself, *what doesn't belong here?*

A. An Impaired Trout Stream
B. A Rural Residential Neighborhood
C. A Commercial Building
D. Wetlands

The City's willingness to shoehorn commercial buildings between an impaired trout stream and a rural residential neighborhood, on a property full of wetlands is, to put it politely, bizarre. By not overturning this approval, the City is setting a precedent to approve development that is primarily guided by the applicant's financial gains and not by what is best for the property or what is stated in the City's guiding documents. This is a major concern for the neighborhood as the applicant owns 33 acres along Sundby Road, with the intent to develop.

In an attempt to understand how and why Sundby Road was rezoned from residential to commercial in 2009, we discovered significant information that helps highlight the long history of Sundby Road and its critical placement as a crossroads in Duluth's growth.

This appeal has been thoughtfully researched and reviewed by some of the most affected homeowners, of whom over 100 have signed a petition in opposition of this kind of development on Sundby Road. At the foundation of the appeal is a demand to our elected officials to uphold the values that are described in the Council's Imagine Duluth 2035 Plan; a comprehensive document supported by previous administrations, external reviewers, the Izaak Walton Foundation and by residents of Duluth, to ensure a healthy, fair and sustainable city is carried forward for residents and visitors of the North Shore.

Thank you,

Jill Crawford-Nichols
Jo Haubrich
Becca Mulenburg
Joyce Alworth

The Duluth Heights Neighborhood with residents from
Osage St.
Page St.
Yosemite St.
W Morgan St.
are appealing the Planning Commission PL22-143 ruling issued on October 11th, 2022.

This appeal is on the following grounds:

- PL22-143 has been approved over the maximum allowed building height of 45'-0", per 50-15.3.
- PL22-143 has been approved without pedestrian connections, per 50-23, despite a partial sidewalk at the corner of Sundby Rd and Page St.
- PL22-143 has been approved without the required restoration of the natural vegetation buffer to the extent feasible within 300' of a natural shoreland, per 50-18.1 D.
- PL22-143 has been approved despite the omission of the following in the UDC guiding document:
    - Omission of zoning standards that properly address an MU-C sharing a property line with an RR-1
- PL22-143 has been approved in opposition to the following Governing Principles as listed in the Imagine Duluth 2035 document:
    - Principle #1: Reuse previously developed lands
    - Principle #2: Declare the necessity and secure the future of undeveloped places
    - Principle #5: Promote reinvestment in neighborhoods
    - Principle #6: Reinforce the place-specific
    - Principle #10: Take actions that enhance the environment, economic, and social well-being of the community
    - Principle #12: Create efficiencies in delivery of public services
- The 2009 City Council public hearing regarding the 2009 Planning Commission ruling to deny the rezoning of Sundby Rd from a R-1-B to a C-5 zone, was not properly communicated to neighboring properties.
- PL22-143 has been approved despite a petition of 101 Duluth citizen signatures in opposition, captured as of 10/11/2022.

The appellant requests the following from President Forsman and Councilor Randorf:
Suspend Rule 7 regarding the 3-minute time limit:
Given the history of this property, three minutes does not allow the appellant adequate due process to present their case thoughtfully and thoroughly to the Council.

PL22-143 has been approved over the maximum allowed building height of 45'-0", per 50-15.3

Within this guideline, commercial buildings can not exceed a height of 45 feet when adjacent to a residential zone. Currently, the height of the proposed hotel is at 51'-6", 6'-6" above the allowed maximum building height. An argument was made by the applicant at the 10/11/2022 Planning Commission hearing that this additional 6'-6" was to allow screening of mechanical equipment located on the roof. However, per 50-21.3 Exceptions and Encroachments, the following is listed as exceptions to building heights:

> Television and radio towers, accessory communications towers for private use, religious assembly or ornamental spires and towers, belfries, monuments, tanks, water and fire towers, stage tower or scenery lofts, cooling towers, chimneys, elevator penthouses, air conditioning penthouses, skylights, smokestacks, conveyors, storage elevators and facilities, flagpoles, accessory wind power equipment or accessory rooftop solar collectors

Per the applicant drawings, dated August 9, 2022, the "screening" as described in the 10/11/2022 hearing, is depicted in all elevations not as a screen, but has a large roof structure. We argue that 50-21.3 does not suggest additional rooflines can exceed the maximum height limit. In addition, screening for mechanical equipment is only required if visible from the right-of-way of the street that fronts the property. The location of the necessary mechanical equipment is not notated on the drawings provided by the applicant, therefore necessity is difficult to determine.

In addition, per the 10/11/2022 Planning Commission meeting, the applicant indicated that the additional roof also served the purpose of hotel branding, which is reiterated in the drawings as the hotel's name is located on the height-exceeding roof structure on the Northeast and Southwest elevations.

Per 50-21.3, signage is not listed within the exception.

Per 50-27.3, roof signs are not permitted.

Per the drawings provided, the structure above the maximum allowed building height would not be defined as an awning, canopy, marque, or parapet.

We argue PL22-143 is in violation of UDC Development Standard 50-21.

PL22-143 has been approved without pedestrian connections, per 50-23, despite a partial sidewalk at the corner of Sundby Rd and Page St.

Per Planning staff notes, *50-23 (Connectivity) – Not applicable as Sundby Road does not have sidewalks nor is it shown on any bikeways, trail, or pedestrian plan.* However, Sundby Road does have a sidewalk, for approximately 300 feet from the corner of Page Street, north along Sundby, where it abruptly ends, forcing pedestrians into the street. This sidewalk comes to the edge of the applicant's property.

Section 50-23 shall apply to all new subdivision, replatting, registered land surveys (RLSs), development and redevelopment applications after November 19, 2010. General circulation requirements are listed in Section 50-23.2, but additional circulation requirements apply in some circumstances. Sites that are (a) located in any zone district other than the RC, RR-1, RR-2, MU-B, I-G, or I-W districts, and (b) larger than three acres, and (c) will contain more than one development parcel shall meet the connectivity index requirements of Section 50-23.3. All new subdivision, replatting, development, and redevelopment applications shall meet the requirements of Section 50-23.4.

Per 50-23.4, All “places of public accommodation,” as defined in the federal Americans with Disabilities Act (42 U.S.C. 12101 et. seq.) shall comply with the requirements of that act concerning on-site circulation and access.

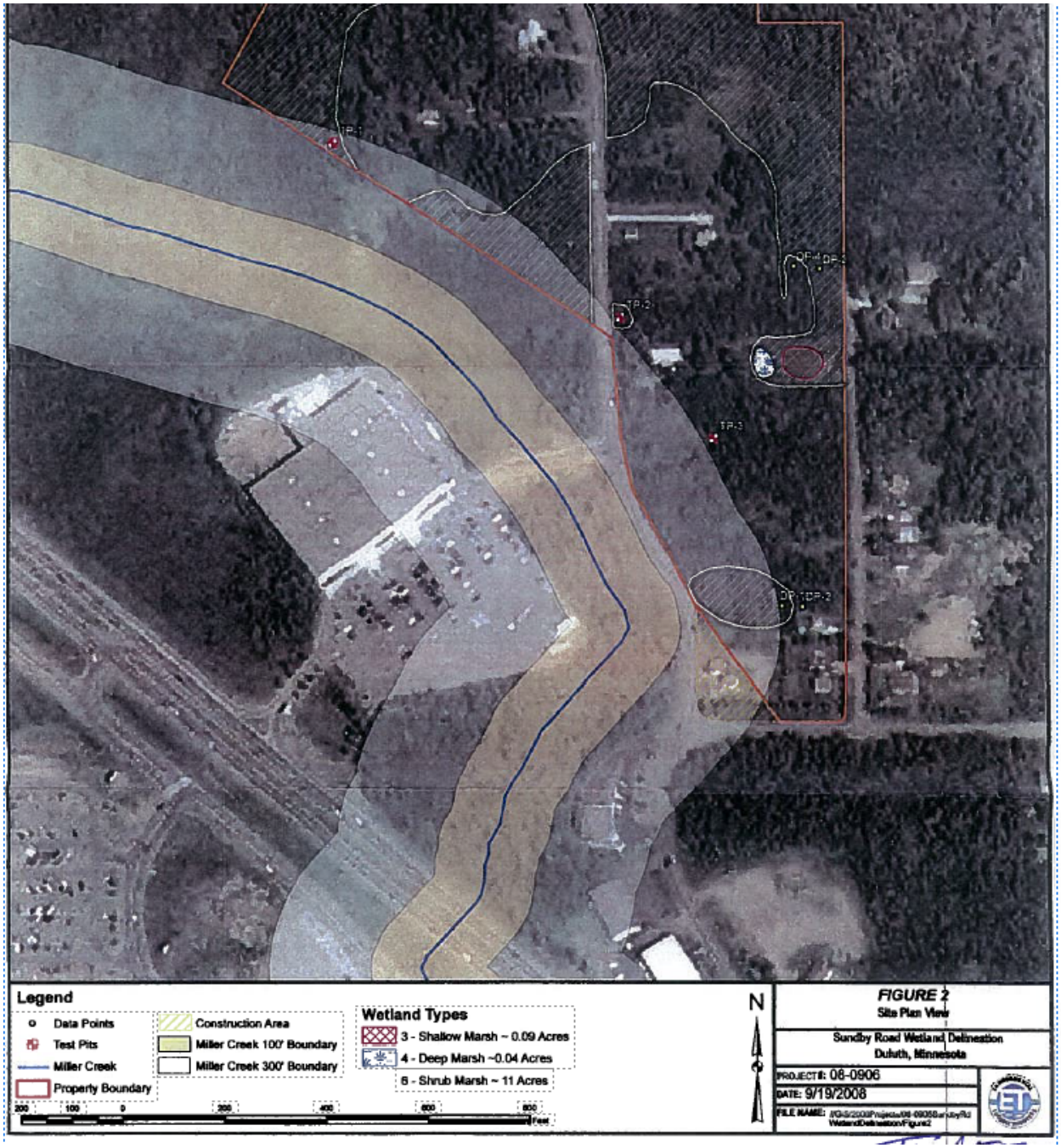
We argue PL22-143 is in violation of UDC Development Standard 50-23.

PL22-143 has been approved without the required restoration of the natural vegetation buffer to the extent feasible within 300' of a natural shoreland, per 50-18.1 D.

Per 50-18.1D, The shoreland overlay applies to lands within 1,000 feet of Lake Superior or within 300 feet of rivers, creeks, streams and tributaries and floodplains, as designated on the NR-O map.

> (d) Any removal of natural vegetation shall be designed to prevent erosion into regulated waters and to preserve shoreland aesthetics;
>
> (e) Removal of trees or shrubs in a contiguous patch, strip, row or block is prohibited in shore impact zones;
>
> (f) The project does not result in the proposed building being located in a shore or bluff impact zone;
>
> (g) Natural vegetation buffers shall be restored to the extent feasible after any project is complete;

Please note the following aerial, outlining the 300 foot shoreland buffer along Miller Creek.



2008 Wetland Delineation Report (Full report attached in Appendix A)

On October 31, 2022 a request was made to the Planning & Development department to provide the Overlay Maps as described in the UDC. To date, this request has gone unanswered.

We argue PL22-143 is in violation of UDC Development Standard 50-18.

PL22-143 has been approved despite the omission of the following in the UDC guiding document: Omission of zoning standards that properly address an MU-C sharing a property line with an RR-1

The Unified Development Chapter (UDC) does not mention, outline or guide an MU-C bordering an RR-1 zone. Within the UDC, there is miniscule acknowledgement of other neighboring residential zones (R-1 and R-2), but it fully neglects to highlight or acknowledge an MU-C sharing a property line with an RR-1. Without this documentation, as should be standard when conflicting zones share property lines, how can the City fairly and equitably guide development?

During the 2010 update of the UDC; the same time Sundby Road was rezoned from residential to commercial; despite opposition from the 2009 Planning Commission and staff, the City Council failed to include proper guidance on how commercial zones should fairly border an opposing zone type. Simple strategies should have been implemented that make it harder to clear cut the land; for example lot coverage limits and buffer zones should have been introduced to the UDC, especially where differing zones border. This oversight opens up negative effects to the neighboring residential zones, including unfairly passing costs specific to property investment damage and safety concerns to the individual homeowner.

This omission of guidelines should have triggered a more prudent review of the applicants request by the Planning and Development department and the Planning Commission. Without it, the City is setting a precedent to approve development that is primarily guided by the applicant's financial gains and not by what is best for the property.

In 2009, the City of Duluth spent $25,000 of taxpayer dollars to hire a third party, MXD Development Strategists, to advise them on how to address commercial needs, specifically on Sundby Road. However, none of the suggested elements or warning signs were taken into consideration at the time of the 2010 UDC update, or since.

This oversight has gone ignored for 13 years because despite rezoning in 2009, this is the first commercial building application the City has reviewed for this property. For more than a decade, Sundby Road has continued to be a green space and an important buffer for the RR-1 zone and Miller Creek from the commercial sprawl of the Miller Hill Corridor. Since the City was not proactive in 2010, you are now having to react to the situation that was created 13 years ago, despite warnings at that time of the same issues presented today.

This omission within the City's guiding document guarantees future conflict between these two zones and missed opportunities for the City. By neglecting to guide commercial developers to design properties that fit into the fabric of the immediate neighborhood and satisfy the City's long term vision of "place-specific", the City is missing an opportunity to secure

tactful commercial progress without sacrificing the personal investments and freedoms of their citizens and taxpayers.

In our attempt to understand how and why Sundby Road was rezoned to commercial, we uncovered significant information that helps highlight the long history of Sundby Road and its critical placement as a nexus in Duluth's growth.

Please see Appendix A.

We argue PL22-143 is in violation of the Unified Development Chapter as applicable history of the parcels were not vetted by the Planning & Development staff, nor provided to the Planning Commission for consideration.

PL22-143 has been approved in opposition to the following Governing Principles as listed in the Imagine Duluth 2035 document:

- **Principle #1: Reuse previously developed lands**
- **Principle #2: Declare the necessity and secure the future of undeveloped places**
- **Principle #5: Promote reinvestment in neighborhoods**
- **Principle #6: Reinforce the place-specific**
- **Principle #10: Take actions that enhance the environment, economic, and social well-being of the community**
- **Principle #12: Create efficiencies in delivery of public services**

The Planning staff's report notes that PL22-143 meets a single Governing Principle, number 4, *Support Economic Growth Sectors*. However, they neglect to note the many principles the applicant is in direct opposition to. As stated in the Imagine Duluth 2035 Comprehensive Plan's Executive Summary, *Imagine Duluth 2035 is more than a land use plan or simple road map for future development. It envisions a holistic, engaged, inclusive community with all its complexity and diversity…All of these issues are viewed through the lenses of health, fairness, sustainability, and accessibility for everyone.*

Given the *holistic approach* and *through the lens of fairness*, these 6 principles should have been presented to the Planning Commission by the staff and for consideration.

We argue PL22-143 was approved contrary to Duluth's Comprehensive Land Use plan as it does not properly address concerns highlighted in the following Principles:

Principle #6: Reinforce the place-specific

Duluth is a steward of the environment. As a city, a great deal of emphasis and pride is placed on the natural environment that the City benefits from. The commerce that funds Duluth, either through shipping or tourism, can be directly attributed to the place; Lake Superior and the

North Shore, emphasizing the importance of the place-specific. Natural surroundings are embedded within the fabric of Duluth's identity. However, the City loses sight of this identity along the Miller Hill Corridor. Once you begin to move away from the lake or the bordering green spaces, this identity cripples; not because the views disappear or nature is lost, but because it is no longer enforced.

As stated within this principle, *place-specific also defines commercial areas providing neighborhood goods and services, ravine parks and other natural features that define neighborhood edges*. This statement encourages that commercial areas are required to participate in the "place-specific" identity of Duluth. However, this is frequently ignored in commercial sectors.

The disregard of "place-specific" is perpetuated with the false notion that when you allow for commercial spaces, you must adopt their identity. Commercial partners will follow the place-specific guidelines if they're specified and enforced, as is evident in other municipalities. When the City allows commercial and industry partners to clear cut green space that borders rural homes and sits directly across the street from The Miller Creek restoration project, the City is telling those industry partners "Your needs and the taxes you attract are more important than our place or our people." The City needs to follow their own documents and reinforce them within the UDC. Send the message to our industry partners, "Please fit within the framework of our place-specific needs."

While at times difficult to achieve, balance should at least be what we strive for. Sundby Road is the nexus of balance, and by allowing commercial projects to ignore the place-specific is a failure by the City and a precedent set that you will not recover from.

Principle #10: Take actions that enhance the environment, economic, and social well-being of the community

Community well-being is at the heart of this principle, which reinforces the overall goals of the Imagine Duluth initiative. Site specific design with emphasis on local needs and environmental concerns suggests a more thoughtful approach from the Planning Commission should have occurred; specifically for Sundby Road. When an international Fortune 500 company proposes to build on a sensitive site; both in neighborhood proximity and among heavily debated ecological factors, nothing less than the highest level of due diligence by the City is expected.

As this development lies upwards of Miller Creek, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. Additionally, current forested acreage will be lost, resulting in a warmer, ground-level microclimate due to the

extension of the commercial urban heat island into this green space with the addition of concrete and asphalt.

The Planning & Development department and the Planning Commission represent Duluth citizens and the Minnesota land and water this commercial property will inhabit. Actions should be taken to ensure *enhancement* to the environment and social well-being takes place within our communities. Focus and action directed only towards the economic values of a hotel will ultimately fail the citizens of Duluth.

Principle #12: Create efficiencies in delivery of public services

Per the Imagine Duluth 2035 Comprehensive Plan, *Infrastructure should help direct development location rather than react to it.*

The neighborhood's negative reaction to the commercial building on Sundby Road has not only been in response to the complete misalignment of previous zoning decisions, but has served as a stark reminder to the lack of infrastructure in this area, giving some residents a feeling of being ignored by the City. Sundby Road, among others, is a rural residential street without public utilities (sewer) and consistent sidewalks.

The fact that the City is allowing a hotel, that has ADA requirements, to be built where the City itself has yet to put infrastructure has raised a number of eyebrows. The question has been asked among some neighbors, “Is this the City’s way to get a large company to pay for necessary public infrastructure?” Yet, while big business bankrolls the city’s infrastructure, homeowners in this area continue to face large bills to replace onsite, aging septic systems, a concern among many that Duluth's planning decisions don't reflect putting its citizens first.

In case you’re not aware, the majority of the 100 signatures on the petition do not have city sewer, a standard public utility. These citizens have built, paid for, and managed their own septic systems for years, and will continue to do so.

This principle only reiterates the message that Sundby Road should never have been rezoned commercially since the City has no intention to support its infrastructure.

Principle #1: Reuse previously developed lands

As the first principle in the Imagine Duluth document, it sets a tone for how the City projects its development goals and is very applicable to the Duluth Heights neighborhood surrounding the Miller Hill corridor. In particular, the emphasis to use “existing public infrastructure” continues to reiterate that streets, such as Sundby Road, are not prepared for commercial infrastructure.

To quote MXD Development’s 2009 review document of Sundby Road:

The MXD evaluation of the Miller Hill - Central Entrance Corridor revealed a very sprawling land use pattern lacking connectivity and concentration of functions.

From an aerial perspective, the area at Haines Road and Miller Trunk Hwy around Kohls would seem to be a logical commercial development site. However, a closer perspective reveals environmental sensitivities that must be weighed in favor of better land utilization along the Miller Trunk Hwy…Commercial land uses do not offer an appropriate nor compatible land use buffer for a project that proposes to encroach upon a sensitive wetlands area.

…there are other existing commercially zoned areas that could accommodate development and should be prioritized ahead of rezoning residentially zoned lands. By targeting redevelopment 'greyfield' sites as opposed to larger new 'greenfield' sites, supply can be kept in balance with demand for retail space while also providing the types of development capable of attracting new tenants to the market.

We acknowledge this principle could not have directly applied to the applicant's commercial project, seeing as Sundby Road is currently zoned MU-C. However, we do believe that the lack of historical information provided to the Planning Commission by staff is in direct conflict to this principle as this is historically relevant data that would have better informed the Planning Commission.

Principle #2: Declare the necessity and secure the future of undeveloped places

Undeveloped areas are an essential part of Duluth's municipal fabric…these areas contribute to Duluth's cultural, health, recreational, and economic value and community identity. This open space system provides vistas, encourages active recreation, supplies natural infrastructure such as storm water retention, plant and animal habitat, and water quality, and is the strongest visual element defining Duluth's sense of place. Securing the future for key parcels of open space is critical to Duluth's identity and economic base.

Anyone suggesting that Sundby is not an undeveloped place is wrong. Sundby Road might be one of the most important undeveloped spaces within Duluth, as it actively supplies natural infrastructure, plant and animal habitat and is an essential location within Duluth's municipal fabric. Sundby Road contains many undeveloped acres full of wetlands that actively keep the balance in an area of Duluth that desperately needs a sensory break from the constant pollutants (noise, light, air, water) of the airport, US-53 and Arrowhead Road. This road declares its necessity as a critical place to keep nature and commerce in balance.

In addition, when heavy rainfall or snowmelt occurs, these undeveloped places frequently temper the worst of a natural disaster. Flooding disasters are more detrimental to citizens and its tax dollars when vegetation is removed and replaced with hardscape, straining the drainage infrastructure and creating imbalance. The Miller Creek corridor is well on its way to being out

of balance, especially once Sundby Road's natural space is officially gone, and hardscape is all that remains.

Principle #5: Promote reinvestment in neighborhoods

An argument can be made that this development does not impact the core of our neighborhood. But as the edges begin to fray, in time the core will crumble. At the 10/11/2022 Planning Commission meeting, a neighborhood resident most affected by the MU-C zoning, spoke up and clearly stated his intent to immediately move his family in an attempt to preserve his privacy and investment. Osage Street is the first street to be impacted by the commercial zoning, as it represents the edge of our neighborhood. As stated in this principle, *Duluth is strongly defined by its neighborhoods.*

As the five homeowners of Osage leave in an effort to avoid the negative impacts of the commercial interests on Sundby Road, what will happen to Osage Street? History dictates that the city will rezone it to mixed-use. So will this commercial creep not then continue up Page Street; slowly fraying the neighborhood until the core, the rural residential identity, unravels? We can't help but wonder, is this the City's goal? Is it your intent to quietly and slowly manipulate our neighborhood until our personal investments have dwindled away in value, only to cash in on commercial tax dollars from Fortune 500 companies? How does this align with a principle dedicated to neighborhood investment?

The Miller Hill Corridor is just that, a corridor, a hallway intersecting and connecting neighborhoods. When a corridor intersects a neighborhood it should be respectful to that neighborhood and its identity. The easiest way for the City to manage this is by conscientious zoning. We state again, Sundby Road should not have been rezoned an MU-C. And when it was, efforts should have been made to minimize the negative impacts to the neighborhood.

A neighborhood's character should never be sacrificed for the blank face of a Big Box, and the spirit of Duluth Heights should not be forfeited for the parking lot character of the Miller Hill corridor.

The 2009 City Council public hearing regarding the 2009 Planning Commission ruling to deny the rezoning of Sundby Rd from a R-1-B to a C-5 zone, was not properly communicated to neighboring properties.

All City Council meeting minutes from 2006-2019 have been reviewed for rulings and hearings regarding the rezoning of Sundby Road. On 01/30/2009, the city's Planning Department notified neighboring properties of the proposed rezoning of Sundby Road from residential to commercial. A number of those residents spoke up in opposition to this zoning change. The 2009 Planning staff review recommended against rezoning to commercial use, and

the Planning Commission followed their advice and denied the rezoning. All of this provided the concerned citizens of the area peace of mind.

However, within that same calendar year, rezoning Sundby Road was presented to the City Council in the form of a new ordinance. This discussion was tabled twice before the hearing occurred. In the months leading up to this hearing, there is no evidence of a newspaper posting or a letter to the affected neighboring properties informing them of this reversal of a previous decision. On October 14th of this year, a request was made to the City for any documentation showing communication to the concerned public. None has been provided, to date.

We argue that the City of Duluth did not fairly and properly inform its citizens of the potential reversal of the 2009 Planning Commission decision.

PL22-143 has been approved despite a petition of 101 Duluth citizen signatures in opposition, captured as of 10/11/2022.

We argue that given the number of residents in direct opposition to the proposed plan, the Planning Commission should have strictly enforced the Imagine Duluth 2035 Comprehensive Plan and provided concessions to protect the neighboring properties and the impaired trout stream, Miller Creek. The current ruling to allow the applicant to proceed as requested diverts all extraneous costs to Duluth and Minnesota taxpayers:

- Duluth Heights property owners will lose value on their personal investments and will incur additional costs to protect their homes' privacy and security.
- The State of Minnesota is actively restoring Miller Creek via taxpayer money. The South St. Louis Soil and Water Conservation District, which is a governmental and political subdivision of the state of Minnesota, is actively working to restore Miller Creek in order to remove it from the EPA's State & Federal Impaired Waters List. Additional impervious structures bordering Miller Creek will only exacerbate these efforts and raise the cost of the taxpayer-funded restoration.

APPENDIX A

Page 3-31
2009 Planning Staff Documentation

Page 32-36
City Council Meeting Minutes, 2006-2019

Page 37-40
Pollution Control Agency Article, 2020

Page 41-43
Duluth News Tribune Amity Creek Article, 2021

CITY OF DULUTH
Community Resources Department
Planning Division
411 W 1st St, Rm 402 * Duluth, Minnesota 55802-1197
Phone: 218/730.5580 Fax: 218/730.5904

STAFF REPORT

File Number	09004		**Contact**	Cindy Petkac; cpetkac@duluthmn.gov	
Application Type	Rezone from R-1-b and S to C-5		**Planning Commission Date**	2-18-09	
Deadline for Action	**Application Date**	12-4-08	**60 Days**	2-2-09	
	Date Extension Letter Mailed	12-18-08	**120 Days**	4-3-09	
Location of Subject	Property on both sides of Sundby Road, north of Page Street				
Applicant	Mission Development/Arrowhead Comm.		**Contact**	marshall@missiondevelopment.net	
Agent	William Burns		**Contact**	wmb@hanftlaw.com; 218/722.4766	
Legal Description	See attached				

Proposal

Applicant is proposing to rezone property on both sides of Sundby Road, north of Page Street, from R-1-b (one-family residential) and Suburban to C-5 (planned commercial). The area is approximately 26.66 acres. The applicant is requesting the rezoning to develop "an environmentally friendly commercial campus" with 105,000 sf to 230,000 sf of commercial development.

Discussion (use numbered or bullet points; summarize and attach department, agency and citizen comments):

The City is currently developing a small area plan for the Central Entrance - Miller Hill Corridor. One of the reasons for doing the plan is to determine if the current improvements to Miller Trunk Highway, including the extension of Burning Tree Rd and new connection to Sundby Rd, will result in new areas opening up for development as well as any changes in market conditions. As part of the planning process, the City has hired MXD Development Strategists to conduct a comprehensive market analysis and positioning strategy for the area. Based on extensive fieldwork and their initial market demand findings, MXD recommends that the subject land be retained in its current residential zoning. While they indicate that there is demand in the Miller Hill area for 450,000 sf of additional retail, MXD recommends that priority should be placed on infilling and redeveloping existing commercially zoned areas. The conversion of the land from R-1-b & S to C-5 would restrict the opportunity to redevelop more compatible sites by unnecessarily absorbing demand and that any current undersupply of retail space can and should be targeted for existing commercially zoned areas (e.g. Kmart, Village Square, Gander Mountain/Miller Plaza, Miller Trunk Hwy & Maple Grove Road and Miller Hill Mall). In addition, allowing the land in question to be rezoned from R-1-b & S to C-5 would put unnecessary pressure on adjacent wetlands for commercial development that could further exacerbate the current sprawling development pattern. (See attached memo from MXD)

Miller Creek borders the site on the southwest. It is a protected trout stream and listed on the state impaired waters list. (See attached web excerpts)

This site contains 11.13 acres of wetlands: 11 acres of Type 6 (Shrub Swamp), 0.09 acres of Type 3 (Shallow Marsh), and 0.04 acres of Type 4 (Deep Marsh). (See attached Wetland Delineation Report by Environmental Troubleshooters)

Staff received two public comments against the rezoning. The City Engineer's office also submitted comments regarding water and gas extensions. (see attached emails)

III A 1

Staff Recommendation (include Planning Commission findings, i.e., recommend to approve):

Planning Commission recommend to City Council that the rezoning of property on both sides of Sundby Rd, north of Page St, from R-1-b and S to C-5, be denied for the following reasons: 1) commercial development at this site is not in keeping with the Comprehensive Plan's designation of the area as Urban Residential and environmentally sensitive; 2) there is already sufficient land commercially zoned in the Miller Hill area to capture the future market demand; and 3) rezoning to commercial would result in additional wetland impacts and could cause further degradation of Miller Creek.

Current Zoning, Existing Land Use and Future Land Use Map Designation

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	R-1-b and Suburban	Undeveloped/Residential	Urban Residential/Preserv./Sensitive Lands
North	R-1-b and Suburban	Undeveloped/Residential	Preservation/Sensitive Lands Overlay
South	R-1-b and C-5	Residential/Commercial	Low-Density Neigh/Large-Scale Commercial
East	Suburban	Residential	Low-Density Neighborhood
West	R-1-b, Suburban and C-5	Miller Cr/Undeveloped/Kohl's	Preservation/Large-Scale Comm/Sensitive La

Summary of Code Requirements (reference section with a brief description):

Article XXI. Amendment of Chapter. Sec. 50-114. Authority of City Council to rezone.

Comprehensive Plan Findings (Governing Principle and/or Policies) and Current History (if applicable):

Governing Principle # 1 - Reuse previously developed lands. Reuse of previously developed lands ... directs new investment to sites which have the potential to perform at a higher level than their current state. This ... is preferred to a dispersed development pattern with attendant alteration of natural landscapes and extensions of public services.

Urban Residential includes the greatest variety of building types, medium to high densities. May include student housing areas, live/work units and limited neighborhood retail (i.e., commercial uses that serve neighborhood market).

Sensitive Land Overlay (p 32) - Duluth has identified areas where natural functions and systems need to be preserved or restored, yet can also sustain some development.

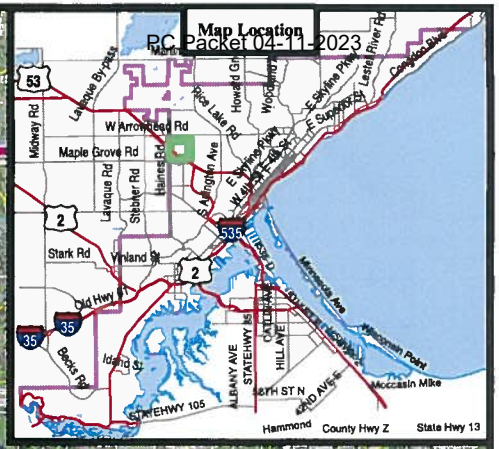
History - Three special use permits, covering much of the area, were approved by City Council in 2003. They allow for 47 rental units, 32 townhomes and 20-27 four to six unit cooperative housing buildings for low to moderate income seniors.

Attachments (aerial photo with zoning; site plan; copies of correspondence)

III A2

FN 09004
Mission Development Rezone from R-1-b and Suburban to C-5

Area to be Rezoned



Aerial photography flown 2007

Prepared by: City of Duluth Planning and Development Department, January 27, 2009. Source: City of Duluth, MnDNR, MnDOT

MXD
DEVELOPMENT STRATEGISTS
Creating Multi-Purpose Places

MXD
DEVELOPMENT STRATEGISTS LTD.
200 11120 Horseshoe Way
Riverside Place
Richmond, B.C.
Canada. V7A 5H7

Tel: +1-604-272-6937
Fax:: +1-604-272-6934
www.MXDdevelopmment.com

February 11th, 2009

Cindy Petkac, Land Use Supervisor
Kyle Deming, Planner II
Community Resources Department
City Planning Division
City of Duluth,
411 W. 1st St, Rm. 402,
Duluth, MN 55802
218-730-5331

Re: Mission Development LLC Rezoning Application Memorandum

Dear Cindy & Kyle

MXD Development Strategists have been retained to conduct a comprehensive Market Analysis and Positioning Strategy for the Miller Hill – Central Entrance Corridor. As part of this assignment, land uses are being examined along the corridor to determine how growth should be managed and positioned to accommodate current and future demand, while creating an identity for the Miller Hill - Central Entrance Corridor and a stronger sense of place for the residents of Duluth. The MXD Team recently visited the City of Duluth and conducted detailed area and competitive assessments of the entire corridor including neighboring Hermantown, as well as the regional Duluth market.

The purpose of this extensive evaluation was to understand the composition and allocation of land uses along the corridor and any associated development pressures. The MXD Team also participated in meetings with a range of Stakeholders to gauge overall market strengths, weaknesses, opportunities and threats relating to economic development initiatives and commercial activities. Such groups included the Duluth Area Chamber of Commerce, Greater Downtown Council, Duluth Airport Authority, Visit Duluth, Duluth Center for Economic Development and the Area Partnership for Economic Expansion (APEX).

As part of the Miller Hill – Central Entrance Corridor Study, MXD has been asked to review a rezoning application by Mission Development LLC. The purpose of this review is to provide input on whether the 29.66 acre site located north of Page Street on either side of Sundby Road should be re-zoned from its current zoning of Residential R1b & Suburban S to Commercial C5. An examination of the Development Overview, as provided by Mission Development LLC, was undertaken and any recommendations are based on information contained in the rezoning application, most notably a total commercial area ranging from 105,000 sf to 230,000 sf.

Recommendations are based on MXD's initial Market Findings and Preliminary Supply/Demand estimates. These findings are allocated in the following sub-sections:

III 434

1. ***Political / Economic Evaluation;***
2. ***Demand and Growth-Based Evaluation;***
3. ***Citywide Positioning & Social Evaluation;***
4. ***Development Trends Evaluation; and***
5. ***Environmental Evaluation.***

1. Political / Economic Evaluation:

Duluth is the center of the Northland region for commerce, at the center of which is the Miller Hill – Central Entrance Corridor. In terms of retail sales tax, the Miller Hill – Central Entrance Corridor is the most significant retail sales tax revenue generator for the City of Duluth. In recent years however, the role of Hermantown has increased significantly to a point whereby Hermantown has now become a major player in attracting commercial developments, notably Wal-Mart, Sam's Club, Menards and Gander Mountain. As a result, this has contributed to likely sales outflow from Duluth to Hermantown. It is therefore incumbent upon the City of Duluth to ensure that retail development recognize the parasitic and opportunistic evolution that is occurring, while at the same time ensure the need to maintain balanced and pragmatic growth within its own city limits. The rezoning application is valid in its assertion that "*potential*" short term tax benefits and sales could occur. Additionally, Hermantown does have active commercial development opportunities available, such as at Hermantown Center, which do pose a competitive threat for Duluth. However, the current economic slowdown must now also be considered as demand for commercial development slows and retailers hold off on expansion plans suggesting that now is an ideal time to prioritize developments.

Hermantown is following in Duluth's footsteps with haphazard, uncohesive commercial developments. The City of Duluth should now take the lead in establishing and promoting more compact urban/suburban developments that prioritize areas already zoned for commercial land uses. Retail Sales Taxes are a critical component of revenues for the City, however by allowing development to occur away from the existing critical mass of retail could have the negative impact of reducing foot traffic in the core shopping area around the Miller Hill Mall, while also encouraging Hermantown to further densify their retail concentration along Haines Road resulting in additional retail sales tax revenues for Hermantown. Consumers are not concerned with the boundary between Duluth and Hermantown, but they will shop and patronize those areas that are more compact, have the stores they are looking for and offer more services in close proximity of one another.

On the basis of the project's proximity and access to Haines Road, new commercial development in the proposed location could have the unintended effect of placing significant development pressure on the adjacent wetlands and could act as a further catalyst for Hermantown to develop and infill along Haines Road in the short term, as opposed to being catalytic for Duluth's existing retail. This development pattern could result in further retail sales outflow from Duluth to Hermantown. Alternatively, if development is more focused and concentrated around the Miller Hill Mall then the result would be to create demand in an area that is already zoned commercial which would benefit existing Duluth retailers and residents.

With respect to historical rezoning applications and approvals (as documented in the Mission Development LLC Rezoning Application), many of the rezoning approvals profiled were in commercially compatible areas and did not have environmental concerns or wetland encroachment issues. From a future land use allocation perspective, historical rezoning applications do not take into account the need to incorporate a new planning direction and focus for development that is more consistent with current development trends for prioritization, intensification and densification of properties.

III A 36

MXD DEVELOPMENT STRATEGISTS

2. Demand and Growth-Based Evaluation:

An assessment of the population growth dynamics and current performance metrics of retail in the City of Duluth indicate a slow growth market, which must be considered when evaluating any potential addition of commercially zoned land, particularly since future demand is largely a function of population and economic growth factors.

According to the Minnesota State Demographic Center, the City of Duluth's population is estimated at 85,380 (2008) and is forecast to grow at only 0.12% per annum over the period 2008 to 2015. Similarly, the Duluth MSA region is estimated at 234,397 (2008) and this too is forecast to grow at only 0.27% per annum over the period 2008 to 2015.

The City of Duluth has approximately 3.2 million sf of retail space (**Table 1**), of which it is estimated that over half is located in the Miller Hill area. This allocation of retail space illustrates a significant amount of retail space in the Miller Hill area, with a vacancy estimated to be in the range of 4%.

The vacancy figure for the Miller Hill area notably includes the 36,000 sf former Gander Mountain store site, which is significant to recognize in the context of any future development activity or proposals that could include larger format retail. From an industry perspective, larger format vacancies typically present a greater challenge for re-leasing as well as promoting a negative image to the consumers. Before any additional new large format users of comparable size are added to the inventory every effort should be made to try to re-lease current empty boxes or target these lands as redevelopment sites. Such could be the case with the former Gander Mountain/Miller Plaza site, which is already commercially zoned.

TABLE 1
CITY OF DULUTH RETAIL INVENTORY

CITY RETAIL DISTRICT	APPROXIMATE RETAIL INVENTORY (excluding auto dealers)	Est. Vacancy
DOWNTOWN	500,000 sq. ft.	15.0%
EAST DULUTH	250,000 sq. ft.	1.0%
CANAL PARK (incl Duluth 10)	150,000 sq. ft.	0.0%
WEST DULUTH	400,000 sq. ft.	5.0%
CENTRAL ENTRANCE	100,000 sq. ft.	20.0%
MILLER HILL	1,800,000 sq. ft.	4.0%
TOTAL	**3,200,000 sq. ft.**	**5.9%**

Source: MXD Development Strategists 2009
Estimates from Market Fieldwork Feb 3 - 6, 2009

III A 28

When measuring the current retail demand against the current retail supply for the City of Duluth (**Table 2**), it is estimated there is currently residual demand for retail space in the City in the range of 800,000 sf. This demand for space is Citywide, but assuming the same ratio of retail space as currently exists, the Miller Hill area could justify current demand in the magnitude of 450,000 sf of retail space.

TABLE 2
CITY OF DULUTH ESTIMATED RESIDUAL DEMAND & RETAIL SPACE PER CAPITA

RESIDUAL DEMAND SUMMARY	ALL RETAIL CATEGORIES (Excluding Auto Sales, Service & Repair)
Total Inventory Estimate (Year End 2008 estimate)	3,200,000 sq. ft.***
Total City of Duluth Retail Spending (Year End 2008 estimate)	$1,331,928,000 (YE 2008)
Estimated Retail Sales Outflow Factor (To Hermantown & Twin Cities)	10% (YE 2008)
Net Total City of Duluth Retail Spending (Year End 2008 estimate)	$1,198,735,200 (YE 2008)
Estimated Retail Sales Productivity for all Retail Categories (excluding auto)	$300 /sq. ft.
Estimated Retail Floorspace Demand for all Retail Categories (excluding auto)	3,995,784 sq. ft.
Residual Demand	795,784 sq. ft.
CURRENT RETAIL SPACE PER CAPITA	**37.5 sf/capita**

Sources:
Dollars & Cents of Shopping Centres 2007
Inventory augmented by MXD Development Strategists Ltd. fieldwork inventory February, 2009

The retail spending figures outlined in **Table 2** represent the amount of retail spending potential by all residents in the City of Duluth and is a calculation derived by applying the population multiplied by the per capita retail spending, which is estimated at $15,600. However, not all of this spending takes place in the City, therefore a conservative figure of 10% sales outflow is applied to recognize spending that occurs in Hermantown or in the Twin Cities. As a result, the net total City spending is applied as that figure which is spent in the City of Duluth (~ $1.2 Billion).

Based on the current estimated retail inventory (3.2 million sf), Duluth has approximately 37.5 sf of retail space per capita, which exceeds the National average or optimal average of approximately 20 to 25 sf per capita. As a comparison, if a ratio of 25 sf per capita were applied this would suggest that the optimal amount of retail space for Duluth could be in the range of 2.1 million sf. It is worth noting however, that this per capita retail space figure is slightly skewed as larger regional markets and those with significant tourism components (such as Duluth) can typically support a larger amount of retail space per capita beyond that which their city population base alone would suggest. However, this figure does nonetheless indicate that additional new commercially zoned land should be carefully examined to ensure that the ratio of supply to demand does not go too far beyond that which is supportable by the wider market.

III A 37

Slow population growth and minimal migration over the same period (2008 to 2015), combined with an optimal retail space per capita ratio of 25.0 could equate to total new retail demand for the Duluth MSA of approximately 110,069 sf by 2015. This would result in approximately 15,724 sf of annual incremental new demand for the City. It is important to state that these figures represent the forecasted growth of additional new retail space driven by population growth. Accordingly, the Mission Development LLC Rezoning Application, which proposes a range of development scenarios totaling 150,000 sf to 230,000 sf, could potentially absorb all the 'new' retail demand for the next 5 to 10 years.

The optimal retail inventory equilibrium for the City of Duluth should be in the range of 3.5 to 4.0 million sf (excluding auto dealerships). As a result, any commercial rezoning applications should be carefully scrutinized to ensure they not only fill demand, but they are also compatible with the longer term development vision and identity for the Miller Hill – Central Entrance Corridor as well as other important City retail districts.

From the evaluation of the current retail inventory and preliminary demand figures, there is sufficient demand to warrant a project size as outlined by Mission Development LLC. However, demand is not of such a magnitude to require the addition of new commercial land and warrant rezoning of the site at this time, as there are other existing commercially zoned areas that could accommodate development and should be prioritized ahead of rezoning residentially zoned lands.

3. *Citywide Positioning & Social Evaluation*

Another important consideration in evaluating the Mission Development LLC Rezoning Application is how the project fits within the greater Citywide retail hierarchy in accommodating consumers' needs and establishing development priorities. From the MXD evaluation of the entire Duluth market, it has become evident that there must be a sensitivity for future development/redevelopment opportunities along the Miller Hill - Central Entrance Corridor that promote smart growth and help to encourage more compact, vehicle and pedestrian-friendly developments.

While the Mission Development LLC Rezoning Application does propose to be a more "*attractive*" commercial development, its lack of connectivity to the existing critical mass of commercial functions around the Miller Hill Mall area suggest that consumers will still be forced to drive further to access the majority of goods and services. Consumers are increasingly expecting a higher standard for commercial developments and are also seeking developments that have more options available to them within walking distance of their homes or vehicles. The Mission Development LLC Project, if developed, would be an isolated development and would not meet the latter objective of consumers as there would be a limited critical mass and critical mix of retail.

The Mission Development LLC Rezoning Application proposes to create a new cluster of commercial activity around Kohls. Though the project could represent a site capable of accommodating retailers looking for a more attractive development, the location would represent a distinct shift in the critical mass/center of gravity of retail along the Corridor, further away from the optimal location of where development should be concentrated, which is at or around the Miller Hill Mall. Also, the location would not benefit from visibility from either Haines Road or Miller Trunk Highway and this would therefore necessitate the likely request for major signage along the Miller Trunk Highway.

Future redevelopment and repositioning of the Downtown Core must also be considered when examining development opportunities. In this respect, the local hierarchy of retail for the City is important. If new additional commercial development land is prioritized in the Miller Hill – Central Entrance corridor ahead of existing commercially-zoned lands, then demand for targeted areas in Downtown could be taken away from other important areas of the City.

II 438

MXD DEVELOPMENT STRATEGISTS

4. Development Trends Evaluation

The MXD evaluation of the Miller Hill - Central Entrance Corridor revealed a very sprawling land use pattern lacking connectivity and concentration of functions. From this initial assessment, infill, densification and redevelopment sites should be prioritized to avoid further unnecessary sprawl and promote more compact urban development. A more pragmatic approach to development will help encourage better vehicular, pedestrian and transit connectivity and access.

It is estimated that there is currently in excess of 300,000 sf of obsolete, dated retail space in and around the Miller Hill Mall area. By targeting redevelopment 'greyfield' sites as opposed to larger new 'greenfield' sites, supply can be kept in balance with demand for retail space while also providing the types of development capable of attracting new tenants to the market.

For example, the current Kmart site occupies an approximate land area of 18 acres, which with denser new urbanist development guidelines could accommodate commercial development in the magnitude of 200,000 sf. If the surrounding Village Square and Wendy's restaurant cluster are combined, the total land area could reach approximately 34 acres, which is larger than the Mission Development LLC site. Moreover, the Kmart location would provide better visibility from a retailer's perspective than that offered at the Mission Development LLC site. Other examples of areas along the Corridor that are more compatible and should be prioritized for redevelopment or infill include the former Gander Mountain/Miller Plaza site, the land directly opposite Miller Hill Mall fronting Miller Trunk Hwy and either side of Maple Grove Road as well as the land surrounding Home Depot in Duluth Heights and behind the Miller Hill Mall.

From a potential traffic and transit perspective, by concentrating development in and around the Miller Hill Mall, the movement of people would also be more efficient as would transportation planning. It is also worth noting that the current site plan alternatives provided in the Mission Development LLC Rezoning Application indicate a very strategic access point from Sundby Road into the east side of Kohls. However, this access will not be made available since a new access point is currently nearing completion at the south end of Kohls. This new access/egress point will provide more direct and convenient access to/from existing commercially zoned lands to the south, which themselves could become optimal areas for redevelopment and infill ahead of the Mission Development LLC site.

The Miller Hill – Central Entrance Corridor does not require additional new commercially zoned land, but rather more intense use and efficient utilization of existing commercially zoned lands. The redevelopment of existing sites with modern development standards would also act as a catalyst for improvements to surrounding properties. This is consistent with the City of Duluth's Comprehensive Plan Governing Principles, which state among the following:

> *"…redevelop sites for more intensive housing and mixed-use development in areas where existing development is underperforming its potential."*
>
> *"…Priority for public investment should be in existing systems that promote reuse of developed land and infill projects, including mixed-neighborhood redevelopment."*

Reflecting on the previous demand figures, the Mission Development LLC project could absorb a significant amount of justified demand in an area not compatible with commercial land uses, when compared to the current amount of land available for infill development elsewhere along the Miller Hill – Central Entrance Corridor.

III A 439

MXD DEVELOPMENT STRATEGISTS

5. Environmental Evaluation

From an aerial perspective, the area at Haines Road and Miller Trunk Hwy around the Kohls would seem to be a logical commercial development site. However, a closer perspective reveals environmental sensitivities that must be weighed in favor of better land utilization along the Miller Trunk Hwy.

Commercial land uses do not offer an appropriate nor compatible land use buffer for a project that proposes to encroach upon a sensitive wetlands area. The approximate 30 acre site, because of its layout, configuration and need to respect environmental issues in fact occupies a larger land area than would typically be required for a comparably sized commercial mix, if it were developed in an existing commercially zoned or redevelopment site.

There is a need to ensure that any new development does not unnecessarily encroach on sensitive land areas. It is incumbent and responsible to protect and contribute to more livable and sustainable communities. Duluth is as much a steward of the environment as it is a center for commerce and these fundamentals must be maintained in balance. Only at such time in the future, which at this point is not foreseeable, should this site be considered for re-zoning from Residential to Commercial.

It should be acknowledged and recognized that while the rezoning application and site planning "*used LEED and Green principles*", this is only a rezoning application and not a development application. Moreover, the application does not propose to be a LEED-Certified development, which should at a minimum be required for areas of the site that directly impact the wetlands area.

Recognizing the adjacency of the wetlands area, the current zoning of R1b & S represents a more compatible land use than commercial C5 for this area. Residential uses would have less impact on the area in terms of vehicular movements and overall land requirements for parking. Before any development is approved in wetlands or R1b & S zoning is changed to C5 zoning, development should be prioritized on existing commercially zoned lands.

Conclusion & Recommendations

As a result of the extensive fieldwork conducted by MXD and our initial market demand findings, it the recommendation of MXD that the subject land in question be retained in its current zoning as Residential R1b & Suburban S.

From a strictly empirical standpoint, there is justified demand in the market for the amount of commercial space proposed in the Mission Development LLC Rezoning Application. However, there are other salient factors that must be considered in determining whether the current land should be re-zoned from Residential R1b & Suburban S to Commercial C5.

On this basis, the key findings in support of the MXD recommendation are articulated in the following:

III A 4b

MXD DEVELOPMENT STRATEGISTS

- → Though the residential market has softened, so too has the commercial market and accordingly, priority should be placed on infilling and redeveloping existing commercially zoned areas.
- → Forecasted growth in Duluth is not significant enough to justify the rezoning of land from Residential to Commercial, particularly when existing sites are available through redevelopment and infill. The conversion of the land from R1b & S to C5 would restrict the opportunity to redevelop more compatible sites by unnecessarily absorbing demand.
- → Any current undersupply of retail space can and should be targeted for existing commercially zoned areas along the Miller Hill – Central Entrance Corridor. Population and economic growth forecasts do not necessitate the addition of 30 acres of new commercially zoned land, but rather focus should be placed on re-development and repositioning of existing, obsolete retail inventory and commercially zoned sites (e.g. Kmart, Village Square, Gander Mountain/Miller Plaza, Miller Trunk Hwy & Maple Grove Road, Duluth Heights and Miller Hill Mall).
- → Although much of the surrounding land uses may have transitioned to commercial, particularly on the Hermantown side of Haines Road, it should nonetheless be recognized that the most compatible and complementary land use for the land in question remains Residential R1b & Suburban S.
- → The objective of future commercial land use along the Miller Hill – Central Entrance Corridor should be to promote a stronger and more compact critical mix and critical mass of uses incorporating leading edge principles of place making that would have appeal to local and regional residents as well as tenants. The initial focus should prioritize lands in the immediate proximity of the Miller Hill Mall, where pedestrian, vehicle and transit can coexist.
- → In an age of environmental responsibility, it is important that the City be a leader in preserving its sensitive lands, particularly when other areas exist that can accommodate demand over the next 5 to 7 years. Allowing the land in question to be rezoned from R1b & S to C5 would put unnecessary pressure on adjacent wetlands for commercial development that could further exacerbate the current sprawling development pattern.
- → Larger retail developments should be allocated for sites along the south side of Miller Trunk Hwy, except where they are not directly adjacent to residential areas (e.g. Former Gander Mountain). Any retail on the north side that is adjacent to residential areas should be smaller scale and locally oriented to more appropriately serve as a transition from commercial to residential.
- → Duluth is a City comprised of retail districts, each with its own unique potential market positioning. The Miller Hill – Central Entrance should be maintained as the core commercial area with focused concentrated sub areas, as opposed to replicating history by continuing a sprawling development pattern.

MXD Development Strategists have reviewed the rezoning application and the eight sight plans provided therein and have carefully assessed the rezoning application against the extensive market study and fieldwork that has been conducted thus far. We trust that the findings and recommendations provided in this memorandum help you in your decision-making process.

Respectfully submitted

Kieron Hunt, Vice President

Martin Anstey, Senior Vice President

III/III

Excerpt from Duluth Streams.org Web Page:

Miller Creek is on the State & Federal Impaired Waters List and suffers from rising temperatures, high sediment and turbidity levels, elevated levels of chlorides (from road salt), and elevated levels of mercury in fish tissue. Since 1998 when a Joint Powers Agreement was signed between Duluth and Hermantown (expired in 2005) and the Miller Creek Task Force was formed, a number of studies have investigated the causes for these problems and there has been considerable volunteer and agency work to try and prevent further degradation although intense development continues in the upper watershed. A **TMDL** study is now (early 2007) in its initial stages. Source: http://www.duluthstreams.org/streams/millerTMDL.html

Excerpt from South St. Louis County Soil & Water Conservation District Web Page:

Miller Creek Total Maximum Daily Load

Listed: 2002

Impairment(s): Biota (Absence of Trout) and Temperature

Current Status: The Quality Assurance Plan and Monitoring Plan are done. The first of two years of monitoring was completed in September 2007.

Source:
http://www.southstlouisswcd.org/miller_TMDL.html

Excerpt from Regional Storm Water Protection Team's "Creek News" newsletter:

Every two to three years, the City of Duluth clears the mouth of the creek of sediment. This can be as much as 500 cubic yards of material (50 truck loads) per year. A lot of this mud is from winter road sanding and individuals raking sand and debris into the streets where it enters the storm drain system. These feed directly into the stream at many points on its route to Lake Superior. Another significant portion is debris from erosion due to increased velocity and volume of runoff coming off paved surfaces during rainstorms and spring runoff that erodes the streambanks and channel. During summer, rainwater runoff is heated by running over impervious asphalt surfaces warmed by the sun. The warm water increases the temperature of the stream placing additional stress on the fish. Trout cannot tolerate warm water for very long. The more development that occurs in the watershed, the more the creek heats up and the greater the stress. Notice also that in developed areas the natural shade trees and shrubs along the stream corridor are gone, further increasing summer temperatures. Source: **Regional Stormwater Protection Team Presents "Creek News"**, Creek news is a weekly press release of happenings along our streams, lakes and rivers. For more information contact the Regional Stormwater Protection Team c/o Chris Kleist, City of Duluth (218) 730-4063 or visit www.lakesuperiorstreams.org.

III A42

Wetland Delineation Report

Sundby Road
Duluth, MN

September 2008

Prepared For:
Marshall Weems
Mission Development
603 20th Street North
Sartell, MN 56377

Prepared By:
Environmental Troubleshooters, Inc.
3825 Grand Avenue
Duluth, Minnesota 55807

ET Project #08-0906

III A43

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

Environmental Troubleshooters, Inc. (ET) performed a wetland delineation for Mr. Marshall Weems of Mission Development for a parcel of property ("subject site") located east and west of Sundby Road in Duluth, Minnesota. The site location is visually depicted on Figure 1, attached. The property's legal description is the SE ¼ of the NW ¼, Sec. 18, T 50 N, R 14 W, (St. Louis County). Marshall Weems called to request a wetland delineation as part of future site development. The subject site encompasses the east and west sides of Sundby Road. The subject site is an irregularly shaped parcel. The subject site is approximately twenty-eight (28) acres in size. Sundby intersects the subject site on the east and west, Page Street borders the subject property on the east, Kohl's Department store borders the subject site on the southwest, residential property borders the subject site on the north and east, Miller Creek borders the subject site on the southwest, and undeveloped property borders the subject site to the south, west, and east.

The subject property is currently developed with residential homes and also has undeveloped portions. The subject site consists of mature forest with wetland areas on the northwestern, northeastern, and southeastern portions of the property. The approximate property size is twenty-eight (28) acres.

Based on visual observations and data collected along various points, the subject property contains three (3) wetland areas, consisting of three (3) wetland types. The wetlands are classified as a Type 6 (Shrub Swamp), Type 3 (Shallow Marsh), and Type 4 (Deep Marsh). Approximately fifty (50) percent of the property is wetlands. The Type 6 wetland is located on the northwestern, northeastern, and southwestern portions of the subject site, the Type 3 (Shallow Marsh) is located on the east central portion of the subject site, and the Type 4 (Deep Marsh) is located on the east central portion of the subject site adjacent to the Type 3 (Shallow Marsh) wetland. The approximate wetland sizes and locations are visually depicted on Figure 2, attached. Because these wetlands are located in the Miller Creek Floodplain and Shore land boundary, the following City of Duluth rules apply:

- No Building, Roads, Parking within 150 feet of Miller Creek.
- No greater than 30% Impervious Areas within 300 feet of Miller Creek

2.0 INTRODUCTION

The following is a report documenting the wetland delineation completed at the subject site located on Sundby Road in Duluth, Minnesota. The wetland delineation was conducted on behalf of Mr. Marshall Weems of Mission Development as part of future site development. ET performed the wetland delineation on September 5, 16, and 17 of 2008 and determined the wetland/upland boundaries on the subject site. Approximate wetland sizes, wetland/upland boundaries and data point locations are illustrated on Figure 2, attached.

III A 45

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The subject site is located on Sundby Road in Duluth, Minnesota (Figure 2). The property's legal description is the SE ¼ of the NW ¼, Sec. 18, T 50 N, R 14 W, (St. Louis County). The site location is visually depicted on Figure 1, attached. The property is approximately 28 acres in size.

3.2 Site and Vicinity Characteristics

The subject site contains wooded areas and three (3) wetland areas. The subject site is made up of Upland, Type 6, Type 3, and Type 4 wetlands, which are part of the Miller Creek minor watershed and the St. Louis River major watershed. Sundby intersects the subject site on the east and west, Page Street borders the subject property on the east, Kohl's Department store borders the subject site on the southwest, residential property borders the subject site on the north and east, Miller creek borders the subject site on the southwest, and undeveloped property borders the subject site to the south, west, and east. The Western and southwestern portions of the subject property are within the 100 foot flood plain boundary and the 300 foot shore land boundary of Miller Creek, which is visually depicted on Figure 2, Attached.

3.3 Geologic and Hydrologic/ Hydrogeologic Information

Local site geology, from information collected during data point collection in wetland and upland areas, consists primarily of reddish brown, silty clays, and clay loams [0 to 13 inches below ground surface (bgs)].

Regional surficial geology consists of Quaternary deposits overlying bedrock. Bedrock at the site is composed of anorthositic gabbro and other mafic intrusive rocks of the Duluth Complex (Morey, 1996). Outcrops are common regionally due to variation in drift deposit thickness, and present locally (Lindholm et. al, 1979). Quaternary geology consists of sandy and stony till associated with the Mille Lacs-Highland Moraine Association of the of the Late Wisconsinan advance of the Superior Lobe (Hobbs and Goebel, 1982).

Regional Quaternary hydrogeology consists of admixed, unstratified and compact silt and clay with minor sand, gravel and boulders (Kanivetsky, 1979). The sustained yield rating from this unit is reported to be less than one (1) gallon per minute (Kanivetsky, 1979).

The subject site water is supplied by the City of Hermantown. The regional direction of groundwater flow in the vicinity of the subject site is inferred to be south/southeast (towards Lake Superior), reflecting the topography and natural drainage. Presumed groundwater flow direction is based on the assumption that groundwater flow closely parallels ground surface topography. This does not take

into account any historic cut and fill activity, shallow bedrock or unobserved artificial conditions.

4.0 METHODS

ET conducted a thorough property walk-through observing the vegetation, soils, landforms and hydrology that defined the subject site.

ET personnel collected data points throughout the subject site to determine the wetland/upland boundaries. Wetland delineation flags were placed around each wetland/upland boundary. The approximate wetland and upland locations are outlined on the Wetland Location Map, attached as Appendix 2.

Plant species, hydrology and the soil profile were described for each data point. Uplands occur where the soil profile, vegetation, and hydrology reflect upland or non-hydric characteristics. Plant species were identified within the following visual radii:

- Twenty (20) feet for Trees (T);
- Twenty (20) feet for Saplings/Shrubs (S/S); and
- Five (5) feet for Herbaceous (H).

Dominant plant species are those that compose greater than twenty percent (20%) coverage for each layer. The methodology for describing hydric soils is outlined in Field Indicators of Hydric Soils In The United Sates Version 4, March, 1998 by Wetlands Science Institute and Soils Division – Natural Resources Conservation Service (NRCS) and Field Book for Describing Soils, 1998 by National Soil Survey Center – NRCS. The methodology used to describe hydrology, and sample and document vegetation strata for the transects was the standard releve plot method as described in the Corps of Engineers Wetlands Delineation Manual, 1987. Routine Method Data Sheets were used to record the vegetation, soils, and hydrology. These Method Data Sheets are attached as Appendix 3. ET mapped the site and inclusive wetlands.

5.0 RESULTS

The subject site contains three (3) wetland areas. The wetlands are located in the Miller Creek minor watershed and the St. Louis River major watershed. The wetland types observed at the subject site are classified as a Type 6 (Shrub Swamp), Type 3 (Shallow Marsh) , and Type 4 (Deep Marsh). The Type 6 wetland is located on the northwestern, northeastern, and southwestern portions of the subject site, the Type 3 (Shallow Marsh) is located on the east central portion of the subject site, and the Type 4 (Deep Marsh) is located on the east central portion of the subject site adjacent to the Type 3 (Shallow Marsh) wetland. The following sections summarize the results gathered from each data point. The summaries include a description of vegetation, soil types and hydrology. Wetland plant species that were observed at the subject site are shown for reference in Appendix 5, attached. The data and descriptions provided are based on visual observations and procedures performed at the time of the site walk-through and may

III A47

change over time. Wetland data point collection forms are included in Appendix 3, attached. Approximate wetland/upland boundaries and data collection point locations are visually depicted on the wetland location map, attached as Appendix 2.

5.1 Type 6 – Shrub Swamp

Data Points #1, #3, #5, and #6 along with Test Pits #1 and #2 are representative of a Type 6 wetland. These Data Points were collected within a low-lying Shrub Swamp, which occupies approximately forty-five (45) percent of the subject property. The dominant vegetation consists of Speckled Alder (*Alnus rugosa*), Black Ash (*Fraxinus nigra*), Quaking Aspen (*Populus tremuloides*), and Missouri Goldenrod (*Solidago missouriensis*), Dwarf Raspberry (*Rubus pubescens*), Flat Topped Aster (*Aster umbellatus*), and Canada Bluejoint Grass (*Calamagrostis Canadensis*).

The soils collected from these Data Points consisted of Reddish Brown to Black, silty clays, sandy clay loams and mucky loams, from the surface to thirteen (13) inches bgs. Soils met the F6 NRCS indicator, the TF2 NRCS indicator, and the F1 NRCS Indicator, for further description of the indicators please see Appendix 6, Attached. Free water was not observed at the data points or test pit locations. Saturated soils were found between two (2) and ten (10) inches below ground surface. Data Points #1, #3, #5, and #6 along with Test Pits #1 and #2 are indicative of a Type 6 shrub Swamp.

5.2 Type 3 – Shallow Marsh

A Data Point was not collected for the Type 3 (Shallow Marsh) wetland, however visual observation of hydrology and vegetation are consistent with a Type 3 (Shallow Marsh) wetland. The dominant vegetation consisted of Broad leaf Cattails (*Typha latifolia*), and Sedges (sp?).

The Type 3 (Shallow Marsh) wetland was inundated with up to 12 inches of water. The visual observations made were indicative of a Type 3 (Shallow Marsh) wetland.

5.3 Type 4 – Deep Marsh

A Data Point was not collected for the Type 4 (Deep Marsh) wetland, however visual observation of hydrology and vegetation are consistent with a Type 4 (Deep Marsh) wetland. Due to the amount of water found within the Type 4 wetland, vegetation was only present along the edges between the wetland/upland boundaries. The dominant vegetation consisted of Broad leaf Cattails (*Typha latifolia*).

III A48

The Type 4 (Deep Marsh) wetland was inundated with approximately three (3) feet of water. The visual observations made were indicative of a Type 4 (Deep Marsh) wetland.

5.4 Upland

Data Points #2, #4 and #7 along with Test Pit #3 are representative of an Upland area, which is located throughout the northwestern and central portions of the subject site. Topographic relief and distinct changes of vegetation and soils establish the wetland/upland boundary. The dominant vegetation located in this area consists of Quacking Aspen (*Populus tremuloides*), Big Leaf Aster (*Aster macrophyllus*), Paper Birch (*Betula papyrifera*), Dwarf raspberry (*Rubus pubescens*), Missouri Goldenrod (*Solidago missouriensis*), Speckled Alder (*Alnus incana*), Tansy (*Tanacetum vulgare*), Black Ash (*Fraxinus nigra*), and Bracken Fern (*Pteridium aquilinum*).

The soils at Data Points #2 #4 and #7 along with Test Pit #3 consisted of brown to reddish brown silty clays extending from the surface to thirteen (13) inches bgs. Soils at these data points did not meet any NRCS indicators for hydric soils. No free water or saturated soils were observed at these Data Points. Data Points #2, #4 and #7 along with Test Pit #3 were classified as Upland areas.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on visual observations and data collected at various points, the subject site contains three (3) wetland areas. The wetlands are located in the Miller Creek minor watershed and the St. Louis River major watershed. The wetland types observed at the subject site are classified as a Type 6 (Shrub Swamp), Type 3 (Shallow Marsh) and Type 4 (Deep Marsh). The predominant wetlands are classified as Type 6 (Shrub Swamp) wetlands, and they border Miller creek to the north south and west. The wetlands occupy approximately fifty percent (50%) of the subject site. Because these wetlands are located in the Miller Creek Floodplain and Shore land boundary, the following City of Duluth rules apply:

- No Building, Roads, Parking within 150 feet of Miller Creek.
- No greater than 30% Impervious Areas within 300 feet of Miller Creek

ET recommends that this wetland delineation report and approximated wetland map be submitted to members of the jurisdictional Technical Evaluation Panel (TEP) for the subject site. The TEP consists of The City of Duluth, Army Corps of Engineers, Soil and Water Conservation District, Minnesota Department of Natural Resources, and the Board of Water and Soil

III A449

Resources (BWSR). The property owner is responsible to maintain the wetland flags. The wetland delineation flags should be maintained until the TEP meeting occurs and until the property is surveyed.

Once the Delineation is approved, the construction plan should be reviewed to determine if wetland impacts exist. Based on the site plan the following wetland permits/mitigation options exist:

- If greater than 400 square feet of the Type 6, Type 3, or Type 4 wetlands are impacted than a wetland permit is required from LGU, SWCD, BWSR, and Army Corps of Engineers and a wetland mitigation plan is required.

ET has qualified wetland permitting and mitigation specialists to assist you with completing the wetland mitigation process.

III A50

7.0 SIGNATURE PAGE

This wetland delineation report and supporting documentation have been prepared in accordance with generally accepted wetland determination/ delineation practices and principles of this time and location. Interpretations and recommendations in this report are based on available data, and additional data may result in revised interpretations and recommendations. This report is intended for use by the client, applicable governmental agents, and ET for its intended purpose only at the time of preparation. The report may be unsuitable for other uses, and reliance on its contents by anyone other than the client and the applicable governmental agents is done at the sole risk of the user. ET accepts no responsibility for application or interpretation of the results by anyone other than the client and applicable governmental agents. This Wetland Delineation Report was prepared by Environmental Troubleshooters, Inc.

Jessica M. Roth
Environmental Scientist
Report Preparer

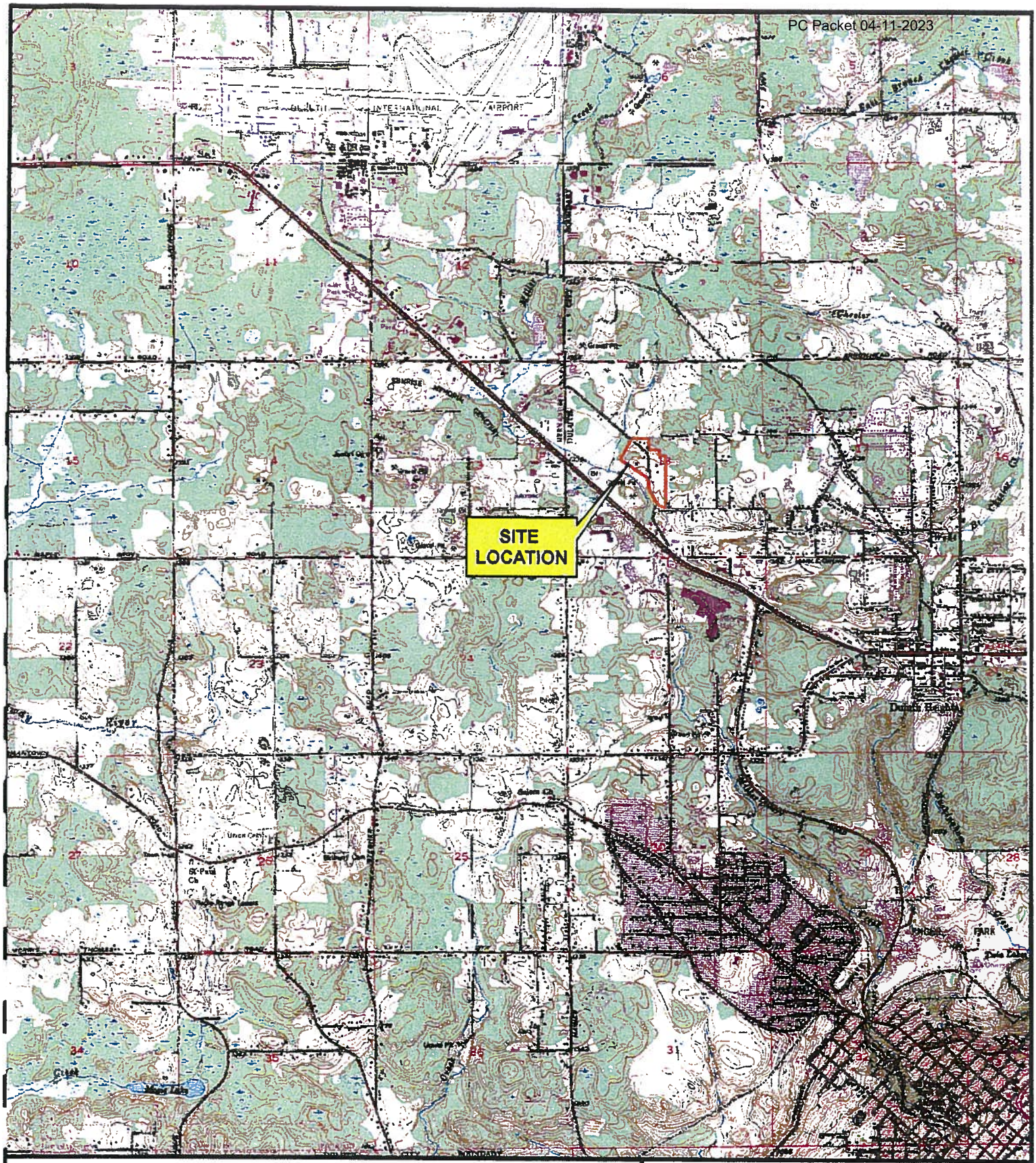
Craig P. Wilson, CHMM
President
Report Reviewer

III A57

APPENDIX 1

Site Location Map

III A52



2,000 1,000 0 2,000 4,000 6,000 8,000 Feet

SCALE: 1/24,000

Source: USGS Duluth Heights 7 1/2" Quadrangle

N

FIGURE 1

Site Location Map

Sundby Road Wetland Delineation
Duluth, Minnesota III A 53

PROJECT #: 08-0906

DATE: 9/18/2008

FILE NAME: //GIS/2008Projects/08-0906SundbyRd WetlandDelineation/Figure1

APPENDIX 2

Wetland Location Map

III A-54


DP-7
DP-6
DP-5
TP-1
DP-4
DP-3
TP-2
TP-3
DP-1
DP-2
Legend
Data Points
Test Pits
Miller Creek
Property Boundary
Construction Area
Miller Creek 100' Boundary
Miller Creek 300' Boundary
Wetland Types
3 - Shallow Marsh ~ 0.09 Acres
4 - Deep Marsh ~0.04 Acres
6 - Shrub Marsh ~ 11 Acres
200 100 0 200 400 600 800
Feet
N
FIGURE 2
Site Plan View
Sundby Road Wetland Delineation
Duluth, Minnesota
PROJECT #: 08-0906
DATE: 9/19/2008
FILE NAME: /GIS/2008Projects/08-0905SundbyRd WetlandDelineation/Figure2

III A55

Cindy Petkac - Sundby Road Re-Zoning

From: "Northstar"
To: "Cindy Petkac"
Date: 2/3/2009 7:06 PM
Subject: Sundby Road Re-Zoning

To: Duluth Planning Commission

C/O: Cindy Petkac

Regarding: Sundby Road Rezoning

From: David & Pam Sorenson

1820 W. Morgan St

Duluth, MN 55811

February 3, 2009

To Whom it may Concern:

As neighbors with property contiguous to the proposed re-zoning (parcel 2710-04560), we ask that the Planning Commission recommend AGAINST the proposed re-zoning along Sundby Road for the following reasons.

1. All of the proposed re-zoning area is designated as housing in the Duluth Comprehensive Plan. To change this land use is to ignore the long and diligent efforts of this community in adopting the Comprehensive Plan not long ago.

2. A significant portion of the proposed re-zoning area is a major natural drain-way for the neighborhoods to the east. This drainage makes it way to nearby Miller Creek. To level the site and build upon it would cause major disruption to the watershed of the greater neighborhood.

3. Significant portions of the proposed re-zoning area are wetlands. Building anything there will again damage the ecology of the area.

4. Arrowhead Commercial Partners is another paper corporation of Mr. Mike Saxton who has a long record of ill repute in Duluth. Former Mayor Bergson once vowed that Mr. Saxton would never do business in Duluth. Though we have a new mayor, Mr. Saxton and company remain the same.

Sincerely,

David & Pam Sorenson

III A56

Cindy Petkac - TO THE PLANNING COMMISSION

From: Candy Lee
To:
Date: 2/4/2009 9:28 AM
Subject: TO THE PLANNING COMMISSION

LETTER TO THE PLANNING COMMISSION C/O CINDY PETKAC. (please forward to them)

TO WHOM IT MAY CONCERN:

I am a neighbor who has property that touches the property on Sundby rd that is looking at a zoning change. I am **totally against** this for many reasons:

1. This area has many acres of wet land and is the main water shed area that is left for Miller Creek.

2. I feel we have more than enough commercial zoning already in place in this area.

3. Traffic is already a major problem in this area with all the area businesses so crammed together in a small area (Mall, Target, K-mart, Kohls, BestBuy etc.)

4. Does any one have any respect at all for the comprehensive plan that was put in place for this area?

5. What happens to all the wildlife in the area? Yes, I am sure most people don't give that much thought, but I do, and you should also.

6. I hope you look further into who this developer really is and make sure you know who you are dealing with. I have had some first hand experience with this developer and did not have a good feeling about a lot of the things that transpired in dealing with them.

Thank you for listening, feel free to contact me if you would like.
Please vote no on this!! :)

Candy Lee, 1819 W Morgan St. 591-6452

III A57

> Date: Mon, 2 Feb 2009 16:07:55 -0600
> From: cpetkac@duluthmn.gov
> To: candylee29@hotmail.com
> Subject: Re: Sundby rd.
>
> Candy,
>
> I'll email you the staff report once it's completed.
>
> Thanks,
> Cindy
>
> Cindy Petkac, AICP
> Land Use Supervisor
> City of Duluth
> Community Resources Department
> Planning Division
> 411 W. 1st Street, Room 402
> Duluth, MN 55802-1197
> Phone: 218/730.5331
> Web: www.duluthmn.gov
> Email: cpetkac@duluthmn.gov
>
>
>
>
> >>> Candy Lee <candylee29@hotmail.com> 2/2/2009 3:39 PM >>>
>
> Hello, I got the letter about the change in zoning on Sundby rd. I am interested in getting the staff report when it is available. Is there any way you could e-mail that to me when you have it? or is there a link to it? If not, I will go to the library that day to get it. I am super concerned about this because of miller Creek and that whole area being a water shed area for the creek, I feel with so much stuff going on in the whole miller hill area that this creek is already hanging on by a thread. Thank you, and please let me know about the staff report. I will be at the meeting also and I will be getting you a letter very soon. thanks
> Candy Lee, 1819 W Morgan St.
>

III A58

From: Larry Winner
To: Benning, Jim; Bergen, Kathy; Bushey, Bryan; Carlson, Todd; Cox, Jeff...
Date: 2/2/2009 10:14 AM
Subject: Re: Rezone at Sundby Rd & Page St

CC: Petkac, Cindy

Please note that the utility extensions that would be required as referenced below would be at the developer's expense.

Thank You

It should be noted that this area proposed for commercial rezoing is in need of water and gas extensions to develop the site. The exisitng 10" water main and 3" gas main in the area of Sundby Road and Miller Creek Drive would need to be extended southeasterly in Sundby Road to the existing 8" water main in Sundby Road at the Kohl's entrance and the existing 3" gas main in W. Page Street at Sundby Road. There is also an existing 8" water main and 2" gas main in Osage Avenue north of W. Page Street that could provide connections to the south end of the site.

>>> Terri Fitzgibbons 1/30/2009 2:00 PM >>>
Memo attached for your review and comment. Thank you.

Terri Fitzgibbons,
Administrative Specialist
City of Duluth Administration
tfitzgibbons@duluthmn.gov
218.730.5315

III A 59

City Council Meeting Minutes 2006-2019 Regarding Rezoning Sundby Road

2006

Resolution 06-0005, of intent to reconstruct Sundby Road from Page Street northerly 1,415± feet and construct utilities per plans prepared by SEH, Inc., for City Project 0390TR01, dated August 28, 2005, by Councilor Stover, from the table, which motion was seconded and unanimously carried.

Heather Odden and Randy Budisalovich questioned why all of Sundby Road is not being redone because of the increased traffic of Kohl's store and the potential development that will bring more residents living on the road. Planning and Development Department Director Bruce explained that one of the conditions placed on the developer for this project to be built was the improvement of Sundby Road, which has not yet happened. He continued by saying that the developer is trying to use the assessment process which would help finance the construction of the road. Mr. Bruce stated that the question that needs to be answered is why should the city finance the improvement that was a condition of the petitioner's original permission. Councilor Krause reviewed that once this project goes forward, the next steps do not allow the residents of the area to submit a remonstrance petition because this individual owns 77 percent of this section of the road that is to be improved. Resolution 06-0005 failed upon the following vote (Public Document No. 06-0123-12):

Yeas: Councilors Stewart and Stover -- 2

Nays: Councilors Gilbert, Krause, Little, Ness, Stauber and President Reinert -- 6

Absent: Councilor Johnson -- 1

2008

A petition was filed with City Council in October (no date provided in documentation)

08-1215-02 Mission Development, LLC/Arrowhead Commercial Partners, LLC, et al. (seven signatures), by William M. Burns, attorney, petition to reclassify from R-1 to C-5 property north and east of Sundby Road at 2115 Miller Trunk Highway. -- Assessor

2009

Petitions received

09-0223-08 The following communications regarding the proposed rezoning of both sides of Sundby Road, north of Page Street (09-0131R and 09-006-O): (a) Candy Lee; (b) Tom and Maryann Salmonson; (c) David and Pamela Sorenson. -- Received

Resolution 09-0131, denying a request to amend Chapter 50 of the Duluth City Code, 1959, as amended, Zoning District Map No. 27 as contained in the Appendix to Chapter 50, to provide for the reclassification from R-1-b, One Family Residential, and S, Suburban, to C-5, Planned Commercial, for property located on both sides of Sundby Road, north of Page Street (Mission Development, LLC/Arrowhead Commercial Partners, LLC), was introduced by Councilor Stauber. Councilor Stauber moved to table the resolution for consideration with companion Ordinance 09-006 at the next meeting, which motion was seconded and unanimously carried.

The following entitled ordinance was read for the first time: INTRODUCED BY COUNCILOR STAUBER 09-006 - AN ORDINANCE AMENDING CHAPTER 50 OF THE DULUTH CITY CODE, 1959, AS AMENDED, ZONING DISTRICT MAP NO. 27 AS CONTAINED IN THE APPENDIX TO CHAPTER 50, TO PROVIDE FOR THE RECLASSIFICATION FROM R-1-B, ONE-FAMILY RESIDENTIAL, AND S, SUBURBAN, TO C-5, PLANNED COMMERCIAL, FOR PROPERTY LOCATED ON BOTH SIDES OF SUNDBY ROAD, NORTH OF PAGE STREET (MISSION DEVELOPMENT, LLC/ARROWHEAD COMMERCIAL PARTNERS, LLC).

09-0309-25 Janet Draper communication regarding the proposed rezoning of both sides of Sundby Road, north of Page Street (09-0131R and 09-006-O). -- Received

The following entitled ordinance was read of the second time: INTRODUCED BY COUNCILOR STAUBER 09-006 - AN ORDINANCE AMENDING CHAPTER 50 OF THE DULUTH CITY CODE, 1959, AS AMENDED, ZONING DISTRICT MAP NO. 27 AS CONTAINED IN THE APPENDIX TO CHAPTER 50, TO PROVIDE FOR THE RECLASSIFICATION FROM R-1-B, ONE-FAMILY RESIDENTIAL, AND S, SUBURBAN, TO C-5, PLANNED COMMERCIAL, FOR PROPERTY LOCATED ON BOTH SIDES OF SUNDBY ROAD, NORTH OF PAGE STREET (MISSION DEVELOPMENT, LLC/ARROWHEAD COMMERCIAL PARTNERS, LLC). Councilor Stauber moved to table the ordinance for a committee meeting, which motion was seconded and unanimously carried.

The following communications regarding the proposed rezoning of property on both sides of Sundby Road (09-0131R and 09-006-O): (a) Aaron Brockman; (b) Janet Draper; (c) Alex M. Johnson; (d) Jan Karon. -- Received

09-0413-20 The following communications regarding the proposed rezoning of property on both sides of Sundby Road (09-0131R and 09-006-O): (a) Al Bugge; (b) Sandy Johnson; (c) Mike and Robyn Jones; (d) Candy Lee. -- Received

Councilor Stauber moved to remove Resolution 09-0131, denying a request to amend Chapter 50 of the Duluth City Code, 1959, as amended, Zoning District Map No. 27 as contained in the Appendix to Chapter 50, to provide for the reclassification from R-1-b, One-family Residential, and S, Suburban, to C-5, Planned Commercial, for property located on both sides of Sundby

Road, north of Page Street (Mission Development LLC/arrowhead Commercial Partners, LLC), from the table, which motion was seconded and unanimously carried.

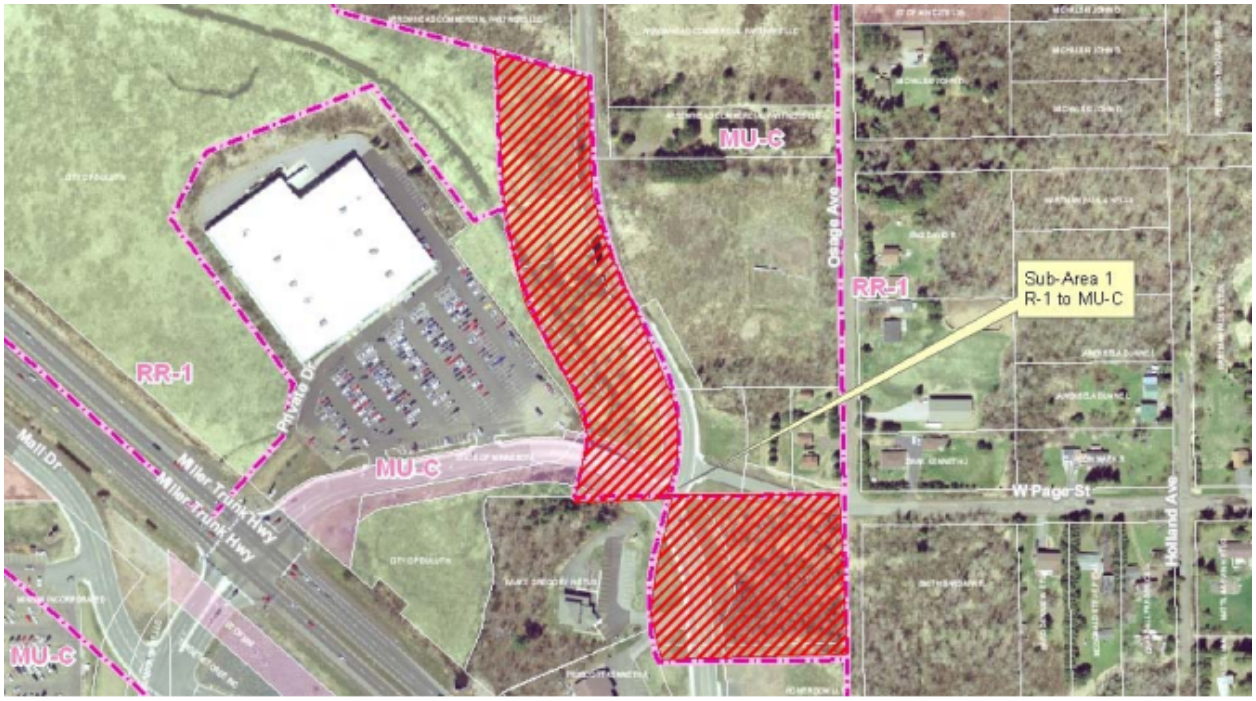
INTRODUCED BY COUNCILOR STAUBER 09-006 (9963) - AN ORDINANCE AMENDING CHAPTER 50 OF THE DULUTH CITY CODE, 1959, AS AMENDED, ZONING DISTRICT MAP NO. 27 AS CONTAINED IN THE APPENDIX TO CHAPTER 50, TO PROVIDE FOR THE RECLASSIFICATION FROM R-1-B, ONE-FAMILY RESIDENTIAL, AND S, SUBURBAN, TO C-5, PLANNED COMMERCIAL, FOR PROPERTY LOCATED ON BOTH SIDES OF SUNDBY ROAD, NORTH OF PAGE STREET (MISSION DEVELOPMENT, LLC/ARROWHEAD COMMERCIAL PARTNERS, LLC). At this time, Councilor Stauber moved to remove the ordinance from the table, which motion was seconded and unanimously carried. The rules were suspended upon a unanimous vote to hear from speakers on the issue. The following speakers urged support of the rezoning of Sundby Road for the following reasons: David Ross, representing the Duluth Area Chamber of Commerce, Craig Olson, representing the building trades, Ken Truscott and Dave Holappa stated there is too little commercial development in Duluth; this development would add to the tax base to keep and restore our public services; Duluth needs more businesses that generate tax revenue through property and sales taxes; Duluth needs to find a way to keep developers and help to become a better retail center; this project will create construction and retail jobs; very few neighbors would be impacted by this development; there are reasons to change and update the comprehensive plan when needed and this is a large piece of property for a large development to happen. Councilor Krause reviewed that this is a challenged piece of property with 11 acres of wetland and a long downgrade slope to Miller Creek that will require a lot of mitigation, and this request would convert the property to a high density box development with no idea of what that box development would be or what tax base would be. He voiced concern that this is a blind piece of land with no definition of what is coming and could even be sectioned off and sold. Councilor Krause also stated that there is concern from the neighbors, and city staff and the planning commission are not in support of this development. He also explained that the development model around the country for malls is going from a high density model to a more modern development that is a mixed use model that is more user and family friendly, removing the impact of high density to a residential area. Councilor Stauber moved passage of the ordinance and the same was adopted upon the following vote: Yeas: Councilors Anderson, Cuneo, Eckenberg, Fedora, Fosle, Gardner, Stauber and President Gilbert -- 8 Nays: Councilor Krause -- 1

ORDINANCE NO. 9963 AN ORDINANCE AMENDING CHAPTER 50 OF THE DULUTH CITY CODE, 1959, AS AMENDED, ZONING DISTRICT MAP NO. 27 AS CONTAINED IN THE APPENDIX TO CHAPTER 50, TO PROVIDE FOR THE RECLASSIFICATION FROM R-1-B, ONE-FAMILY RESIDENTIAL, AND S, SUBURBAN, TO C-5, PLANNED COMMERCIAL, FOR PROPERTY LOCATED ON BOTH SIDES OF SUNDBY ROAD, NORTH OF PAGE STREET (MISSION DEVELOPMENT, LLC/ARROWHEAD

COMMERCIAL PARTNERS, LLC). The city of Duluth does ordain: Section 1. That the 29.66 acres of the subject property located on both sides of Sundby Road, north of Page Street, be reclassified from R-1-b, one-family residential, and S, suburban, to C-5, planned commercial, and that Plate No. 27 of the zoning district map as contained in the Appendix to Chapter 50 of the Duluth City Code, 1959, is amended to read as follows: [MAP] [see map at end of meeting] (Reference File No. 09004) Section 2. That this ordinance shall take effect 30 days after its passage and publication. (Effective date: May 24, 2009) Councilor Stauber moved passage of the ordinance and the same was adopted upon the following vote: Yeas: Councilors Anderson, Cuneo, Eckenberg, Fedora, Fosle, Gardner, Stauber and President Gilbert -- 8 Nays: Councilor Krause -- 1 Passed April 13, 2009

2012

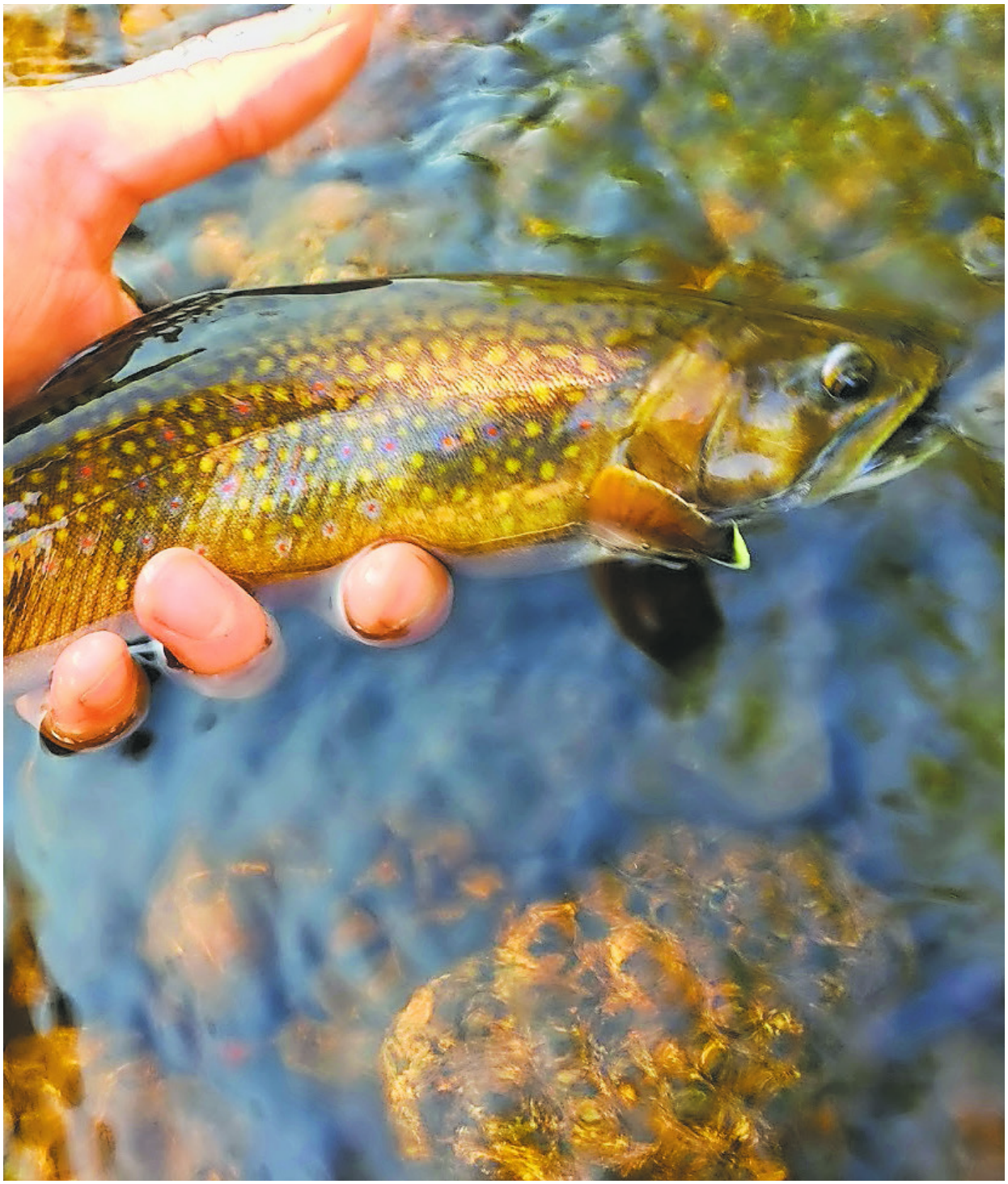
AN ORDINANCE AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF DULUTH AS REFERENCED IN CHAPTER 50 OF THE DULUTH CITY CODE, 1959, AS AMENDED, TO PROVIDE FOR THE RECLASSIFICATION FROM R-1 AND R-2 TO MU-N, AND R-1 TO MU-C, PROPERTIES IN THE MILLER HILL AREA (CITY OF DULUTH). The city of Duluth does ordain: Section 1. That the 6.6 acres of the subject property located south of Page Street, and east and west of Sundby Road, and as more particularly described in Exhibit A and by the following: The below parcels and area, along Page Street and Sundby Road, where these parcels and site abut roadways: 010-2710-04653 010-2710-04654 an area beginning at the centerline of Sundby Road to the northwest corner of Parcel 010-3257- 00050, then northwest 200 feet, then south 315 feet, then southeast 270 feet, then south southeast 200 feet, then south 150 feet, then east 190 feet to centerline of Sundby Road, then north to point of beginning following centerline of Sundby Road; be reclassified from R-1, to MU-C, and that the official zoning map of the city of Duluth as referenced in Chapter 50 of the Duluth City Code, 1959, is amended to read as follows:



2013

Parcel 2: 1624 Sundby Road, Tax Parcel Number 010-2710-04555. Notification of order for condemnation for demolition to owner, Arrowhead Commercial Partners, delivered by registered mail on February 3, 2012

Stream of consciousness



With wealth of streams, Duluth considers improving habitat.

There aren't many cities that can claim 50 streams running through their boundaries, like Duluth can, let alone a dozen or more clear and cool enough to hold native, wild trout.

From Mission Creek on the west to the Lester River on the east, the city is crossed by streams that start high over the hill and tumble down to the St. Louis River or Lake Superior.

Jeff Jasperson of Duluth likes to snorkel in these shallow, cool streams and look behind old logs in the water. He's finding not only small brook trout babies but also some bigger, breeding stock fish, in places that don't necessarily look like the trout streams we see in fly-fishing magazines or movies.

"I don't think many people in Duluth realize how many of these local streams still have wild trout in them,'' said Jasperson, a biologist for the Minnesota Pollution Control Agency in Duluth. "It's not just the bigger rivers. We're finding trout in tiny, coldwater tributaries you could jump across in one step."

When Jasperson isn't snorkeling for fun or monitoring streams as part of his day job, he likes catching trout with his kids. He's even captured some great underwater video of urban trout on his Go-Pro.

"The fact we can walk from our house in Duluth and catch a few trout and cook them up for dinner, the kids think that's so cool. So do I,'' he said.

But most of Duluth's urban trout streams are impaired, in some sort of trouble caused by the trappings of city life: Too much sediment from runoff, salt from winter road clearing and E. coli bacteria contamination from people and animals.

All that concrete and blacktop in town means water runs off, doesn't soak in, and is often too warm and too dirty, or turbid, to meet trout standards. Some Duluth streams are already too warm at times for trout to live. Worse, most are forecast by midcentury — just 30 years from now — to warm to levels that are fatal to trout, thanks to a warming climate.

That's why the PCA has developed a report on the status of those streams and released a plan on how to make 11 of them more hospitable to fish. The 11 are the streams with enough long-term data available to show what impairments are an issue.

The name is a mouthful — the Duluth Urban Streams Total Maximum Daily Load — part of the sometimes-obtuse federal mandate to apply the Clean Water Act to ground-level waterways. The effort establishes the amount of each pollutant, the load, that each stream can accept and still meet water quality standards. The process provides a snapshot of where streams are today and lays out a road map on how to improve water quality over the next 10-30 years. But it's going to take more than a plan to get there.

Local governments, watershed districts and especially residents will have to spend time, money and effort.

"It's not saying that by 2030 or even 2050 everything is going to be fine. But it's identifying the issues and offering a plan on how to improve,'' said Karen Evens, who is leading the effort for the PCA. "And it gives us a way to measure the progress along the way."

There are no trout police to enforce the effort.

"It's not prescriptive. We can't order the community to do these things,'' Evens noted. "It has to be collaborative."

Fixes included more and better street sweeping by cities to keep polluted sediment from flushing into the streams with each rain; better stormwater storage and management; cleaning sediment traps in storm sewers; protecting small, cold-water tributaries that keep the bigger streams cold and oxygenated enough for trout; limiting or at least better planning for development near streams; and preserving vegetation along the waterways.

E.coli bacteria in streams washes in not just from humans, but also pets and wild animals. On

the human side, fixing leaking sewer pipes and replacing failing septic systems are key. Adding more and better restrooms in city parks would help. Reducing pet waste remains a huge issue. There may be areas where nuisance wild animal populations — raccoons, deer, beaver, etc. need to be reduced or where birds like geese and ducks need to be encouraged to stay away.

While many people perceive brook trout to be a hyper-sensitive species that needs pristine waters to survive, Jasperson says Duluth brook trout have adapted over the last century of intense development, with the strongest fish passing on their genes.

“The surviving fish know where the cold water springs and tributaries are; I’ve seen fish really packed around those. They also know where to go in August, or in a drought year like right now, to hang out when the flows are really low,’’ he said.

That’s how Miller Creek can flow right through the uber-developed Miller Hill Mall district and still have a viable population of wild brook trout. But fluctuations in the creek’s population — from as high as 448 trout per 1,000 feet in 1993 to just 34 in 2005 — show problems remain: Salt, sediment, a lack of coldwater hiding places and runoff from the massive parking lots and ribbons of road in the area.

“When people realize that these aren’t just drainage ditches running through town. When you show them they are a functioning, living systems with real fish — maybe not functioning as well as they could be — most people are willing to help,’’ Jasperson said. “But a lot of people don’t know.

I’ve talked to landowners who didn’t even know they had a cold-water stream on their land, let alone a population of wild brook trout. Some of them are just floored when I tell them.”

Over 30 years, to do all the suggested work in the PCA plan could cost the community between $100 and $130 million to save its trout streams, Evens said. But it’s not an all-ornothing proposition.

“We want to target efforts to where they are going to have the most bang for the buck,’’ she said. “That’s why we want to incorporate stream (protections) into projects that are already going to happen.”

That means UMD plans ahead to improve campus stormwater control efforts as part of its new dormitory construction project. City officials incorporate stream protection efforts as they rebuild city streets and sewers. Slowing and storing warm, dirty water on developed sites is a big step toward cleaner streams. So is protecting wetlands and springs high on Duluth’s hill, the sources of each stream, using conservation easements and tougher construction rules.

Deserae Hendrickson, Minnesota Department of Natural Resources Duluth area fisheries supervisor, said reclaiming more natural stream channels also is key for trout, and restoration projects that followed the massive 2012 flood have done wonders.

Chester Creek, for example, has seen a transformation from a dammed, channeled stream slowed by a pond to a more natural, freeflowing waterway thanks to a project by the South St. Louis County Soil and Water Conservation District.

The effort also has helped the stream stay within its natural floodplain during major flood events.

The flood itself has some surprising benefits. When a man-made debris barrier blew out of Mission Creek in western Duluth during the flood, it opened up the upper stream for fish.

Now, steelhead trout from Lake Superior are spawning far upstream for the first time in half a

century, Hendrickson said.

“The flood did a lot of damage, certainly. But where it blew out (small culverts and small bridges) it allowed us to get larger passages replaced in those areas. So we saw a lot of re-connectivity there, opening up new areas for trout,’’ she said.

In a few western Duluth streams, the DNR found cool water but no wild trout remaining. So they stocked the creeks and now the trout are reproducing on their own.

But problem areas remain.

Tischer Creek just below Hartley Nature Area now is a warm water dead zone for trout, Hendrickson noted, in large part because the creek is dammed to create Hartley Pond. Removing the dam would help trout but destroy the pond, a favorite spot for local residents. There are possible solutions, such as separating the creek from the pond so the stream water can flow faster.

“We have stretches of streams that are impaired and need attention,”

Hendrickson said. “But we also have a lot of stream runs that, despite what we’ve done to them over the years, somehow hang on and support trout.”

The PCA’s Evens agreed.

“These trout, even if you don’t fish for them, are part of Duluth’s identity, part of the quality of life,’’ she said. “Having trout streams in our city is part of why people want to live here.”

11 Duluth trout streams and their major problems

Keene Creek — E. coli bacteria Kingsbury Creek — Poor invertebrate population

Miller Creek — Salt; poor invertebrate population; warm water; E.coli

Sargent Creek — E. coli bacteria

Stewart Creek — E. coli bacteria

Merritt Creek — E. coli bacteria

Tischer Creek — E. coli bacteria

Chester Creek — E. coli bacteria

Amity Creek — Sediment turbidity

Amity Creek East Branch — Sediment turbidity

Lester River — Sediment turbidity

Comment on the plan:

The PCA is asking for public comments on the TMDL report, which is available on the project’s web page at www.pca.state.mn.us/water/ total-maximum-daily-load-tmdlprojects or at PCA’s Duluth office. You can get more information or send written comments to Karen Evens 218-302-6644, PCA, 525 Lake Avenue South, Suite 400, Duluth, MN 55802, by July 22.

Duluth City Council considers zoning amendment to better protect Amity Creek

The proposed zoning change is intended to address neighbors' fears that development could pose a threat to a neighboring trout stream.

By Peter Passi
July 22, 2021 03:21 PM

A controversial request to rezone property next to Amity Creek in Duluth's Woodland neighborhood has been reshaped to allay concerns that the proposed development could threaten the health of the designated trout stream.

Kevin Christiansen of Midwest Properties LLC proposes to develop 25-30 residential lots on about 26 acres of land, but 16 acres of the property are currently zoned for rural residential use, allowing for residential lots no smaller than 5 acres.

To build the Amity Bluffs subdivision that Christiansen envisions, a change to a traditional neighborhood residential R-1 zoning will be required.

But a number of neighbors have objected to rezoning the property, noting the negative impact it could have on the adjacent stream and the additional traffic new development could bring to their quiet corner of Duluth, especially the residents of Vassar Street — what's now a sleepy dead-end road that could be extended to provide access to Amity Bluffs.

To address fears that rezoning the area could imperil the stream and the steep wooded valley that enfolds it, the Duluth City Council amended the rezoning proposal earlier this week to ensure that property near Amity Creek would be off limits to anything but the lowest-density development.

"What this does is it excludes a portion of the property that was proposed for rezoning from the rezoning," said 2nd District Councilor Joel Sipress, explaining the revised rezoning proposal. "There are significant ecological impacts from having a higher-density zoning along Amity Creek. And that is why on the (city's) future land use map, that area was designated as 'open space.'

“When we did the comp plan — the Imagine Duluth plan — along all of our waterways, there were areas designated along those waterways as ‘open space,’ in recognition of the need to protect our waters,” he said.

Councilor Gary Anderson, who represents the Woodland neighborhood along with the rest of Duluth’s 1st District, expressed his support of the amendment, which he said will “expand the 150 feet of shoreland protection that is traditional around our waterways.”

At large Councilor Arik Forsman noted that it was unusual to rezone only part of an established legal land parcel and asked if it was appropriate.

At large Councilor Zack Filipovich acknowledged that the partial rezoning is a bit out of the ordinary.

“But this can be done and has been vetted by staff,” he said.

The Duluth Planning Commission had earlier voted 6-3 to recommend rezoning the whole property, as requested, and 5th District Councilor Janet Kennedy, a former Planning Commission member, questioned why the council shouldn’t follow that lead.

“The commission is the body that does this work, and we need to support them and trust that the decision they made was vetted,” she said.

Anderson noted the split vote by the Planning Commission.

“I really do believe this amendment does two things: I think it honors the spirit of the vote of the Planning Commission, which was to find a way to let a potential development dialogue go forward, and at the same time, to work to protect that watershed there," he said.

Kennedy suggested sufficient protection mechanisms are already in place to ensure any future development would not harm the creek and the proposed amendment was simply an attempt to appease nervous neighbors.

“I think those safety nets are in place, and we’re just building an amendment that I think is going to make the neighborhood feel good,” she said.

The motion to amend the rezoning ordinance passed 7-2, with councilors Kennedy and Derek Medved voting in the minority. Monday's meeting represented the first reading of the revised zoning ordinance. It is expected to go to a final vote Aug. 16, when the council returns from its summer break.

The idea of allowing development in close proximity to the headwaters of Amity Creek stirred concern about the health of what’s already considered an impaired trout stream, said Rich Staffon, president of the W.J. McCabe Chapter of the Izaak Walton League of America

“I think we’re pretty happy with the compromise they came up with. If I understand it right, it should keep the R-1 traditional neighborhood zoning about an eighth of a mile away from the creek. So, that should be enough to provide it with pretty good protection,” he said.

Some neighbors continue to have concerns beyond the health of the creek, however.

Katey Ferguson, a resident of Vassar Street, suggested street improvements necessitated by further development could deprive people of property and result in assessments that might ultimately price people out of the neighborhood.

Christiansen, the would-be developer of Amity Bluffs, did not respond to calls from the News Tribune following the council’s action on his zoning request, but Filipovich expressed confidence that the downsized rezoning should still leave plenty of land to accommodate the scale of the proposed project.

“There are delicate woodland areas all over Duluth that make this city a special place to live in and enjoy. But at the same time, we do need to balance the need to protect those areas with the desperate need for housing. And I think this gets at that,” Filipovich said.

Exhibit J

Duluth City Council December 19, 2022, Meeting Minutes with Resolutions 22-1037R and 22-1040R

411 West First Street
Duluth, Minnesota 55802

City of Duluth

Minutes - Final

City Council

MISSION STATEMENT: The mission of the Duluth City Council is to develop effective public policy rooted in citizen involvement that results in excellent municipal services and creates a thriving community prepared for the challenges of the future.

TOOLS OF CIVILITY: The Duluth City Council promotes the use and adherence of the tools of civility in conducting the business of the council. The tools of civility provide increased opportunities for civil discourse leading to positive resolutions for the issues that face our city. We know that when we have civility, we get civic engagement, and because we can't make each other civil and we can only work on ourselves, we state that today I will: pay attention, listen, be inclusive, not gossip, show respect, seek common ground, repair damaged relationships, use constructive language, and take responsibility. [Approved by the council on May 14, 2018]

Monday, December 19, 2022 **7:00 PM** **Council Chamber**

ROLL CALL

Present: 9 - Councilor Hannah Alstead, Councilor Gary Anderson, Councilor Azrin Awal, Councilor Noah Hobbs, Councilor Mike Mayou, Councilor Roz Randorf, Councilor Terese Tomanek, Vice President Janet Kennedy and President Arik Forsman

PLEDGE OF ALLEGIANCE

APPROVAL OF MINUTES

1. 22-091 Meeting Minutes of the Duluth City Council

Indexes:

Attachments: 2022-12-05, Minutes

These Minutes were approved.

PUBLIC HEARING

2. 22-088 PUBLIC HEARINGS ON PROPOSED CAPITAL IMPROVEMENT PLAN AMENDMENT AND ON INTENTION BY THE CITY OF DULUTH, MINNESOTA, TO ISSUE GENERAL OBLIGATION CAPITAL IMPROVEMENT BONDS UNDER MINNESOTA STATUTES, SECTION 475.521 - NOTICE OF INTENT TO ISSUE BONDS

Indexes:

Attachments: Public Hearing - General Obligation

This Public Hearing was held

PUBLIC HEARING

3. 22-090 Spending Plan for DEDA Tax Increment Financing District Nos. 16, 19, 21, 22, 23, 24, 25, 27, 28, and 29, and the City of Duluth's Tax Increment Financing District No. 26 (collectively, the "TIF Districts").

Indexes:

Attachments: TIF District Spending Plan
Public Hearing - DEDA

This Public Hearing was held.

REPORTS FROM THE ADMINISTRATION

REPORTS FROM OTHER OFFICERS

REPORTS OF COUNCIL COMMITTEES

REPORTS OF COUNCIL OPEN ISSUES

OPPORTUNITY FOR CITIZENS TO BE HEARD

RESOLUTIONS TABLED

BY VICE PRESIDENT KENNEDY (FINANCE)

4. 22-0962R RESOLUTION APPROVING THE FISCAL YEAR JANUARY 1, 2023 TO DECEMBER 31, 2023 BUDGETS OF THE DULUTH ECONOMIC DEVELOPMENT AUTHORITY.

Indexes:

Attachments: Exhibit A to Resolution #22-0962R

This Resolution was pulled from the table - Passed Unanimously.
This Resolution was adopted unanimously.

5. 22-0971R RESOLUTION APPROVING THE FISCAL YEAR JANUARY 1, 2023 TO DECEMBER 31, 2023, OPERATION BUDGET OF THE DULUTH TRANSIT AUTHORITY.

Indexes:

Attachments: Exhibit A

This Resolution was pulled from the table - Passed Unanimously.
This Resolution was adopted unanimously.

CONSENT AGENDA

BY VICE PRESIDENT KENNEDY (FINANCE)

6. 22-0941R RESOLUTION ADOPTING THE 2023 FEE SCHEDULE FOR LICENSE, PERMIT, FINE, PENALTY AND OTHER CHARGES.

Indexes:

Attachments: Exhibit A
Exhibit B
Exhibit C

This Resolution was adopted unanimously.

7. 22-1007R RESOLUTION ESTABLISHING ANNUAL BONDING PLAN FOR 2023.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

8. 22-1008R RESOLUTION AUTHORIZING AN AGREEMENT WITH THE DEPOT FOUNDATION IN THE AMOUNT OF $220,000.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

9. 22-1009R RESOLUTION AUTHORIZING AN AGREEMENT WITH SPIRIT MOUNTAIN RECREATION AREA AUTHORITY FOR 2023 IN THE AMOUNT OF $440,000 FOR OPERATING ASSISTANCE AND $145,700 FOR ADVENTURE PARK LEASE PAYMENTS.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

10. 22-1010R RESOLUTION AUTHORIZING AN AGREEMENT WITH GREAT LAKES AQUARIUM IN THE AMOUNT OF $340,000.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

11. 22-1012R RESOLUTION APPROVING BUDGET AND COST SHARING FORMULA OF MINNEAPOLIS-DULUTH/SUPERIOR AND PASSENGER RAIL ALLIANCE AND AUTHORIZING PAYMENT OF CITY'S COST SHARE OF $20,000.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

12. 22-1026R RESOLUTION APPROVING CAPITAL IMPROVEMENT PLAN AND STATING INTENT TO ISSUE GENERAL OBLIGATION CAPITAL IMPROVEMENT BONDS UNDER MINNESOTA STATUTES, SECTION 475.521.

This Resolution was adopted unanimously.

13. 22-1027R RESOLUTION OF THE CITY OF DULUTH, MINNESOTA, STATING THE INTENT TO ISSUE GENERAL OBLIGATION CAPITAL EQUIPMENT NOTES, SERIES 2023, IN THE APPROXIMATE AMOUNT OF $3,700,000 AND APPROVING THE CAPITAL EQUIPMENT LIST ASSOCIATED WITH THE NOTES.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

14. 22-1031R RESOLUTION AUTHORIZING 2023-2025 PROFESSIONAL SERVICES AGREEMENT WITH DULUTH-SUPERIOR PUBLIC ACCESS COMMUNITY TELEVISION, INC., FOR COMMUNITY ACCESS CABLECASTING, TRAINING, PRODUCTION AND ADMINISTRATIVE SERVICES AT ANNUAL COST OF $182,000.

Indexes:

Attachments: Exhibit A- PACT 2023-2025 Professonal Services Agreement

This Resolution was adopted unanimously.

15. 22-1035R RESOLUTION AUTHORIZING AN AGREEMENT WITH THE GARY NEW DULUTH DEVELOPMENT ALLIANCE TO SUPPORT THE CONSTRUCTION OF A SKATE PARK IN THE AMOUNT OF $40,000.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

16. 22-1036R RESOLUTION AUTHORIZING AN AGREEMENT WITH THE HAWK RIDGE BIRD OBSERVATORY IN THE AMOUNT OF $40,000.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

17. 22-1038R RESOLUTION AUTHORIZING AN AGREEMENT WITH THE MINNESOTA LAND TRUST IN THE AMOUNT OF $50,000.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

18. 22-1043R RESOLUTION AUTHORIZING AN AGREEMENT WITH THE DULUTH CHILDREN'S MUSEUM IN THE AMOUNT OF $50,000.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

19. 22-1045R RESOLUTION AUTHORIZING AN AGREEMENT WITH DULUTH & NORTH SHORE RR DBA NORTH SHORE SCENIC RAILROAD/LAKE SUPERIOR RAILROAD MUSEUM IN THE AMOUNT OF $50,000.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

20. 22-1051R RESOLUTION AUTHORIZING AN AMENDMENT TO AGREEMENT 23787 WITH THE GREATER DOWNTOWN COUNCIL FOR AN INCREASE OF $10,000 TOURISM TAX FUNDING FOR A NEW AMOUNT OF $230,000 FOR THE YEAR 2023.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

21. 22-1058R RESOLUTION AUTHORIZING AN INTERFUND TRANSFER TO THE BROADBAND ENTERPRISE FUND IN THE AMOUNT OF $936,397 FROM TIF DISTRICT DECERTIFICATION FUNDS.

This Resolution was adopted unanimously.

22. 22-1063R RESOLUTION APPROVING A COLLECTIVE BARGAINING AGREEMENT BETWEEN THE CITY OF DULUTH AND INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS LOCAL 101 FOR THE YEARS 2022-2024.

Indexes:

Attachments: 20221207_IAFF Local 101 2022-2024 CBA with changes marked .pdf

Exhibit A - 2023-2025 IAFF Local 101 CBA

This Resolution was adopted unanimously.

23. 22-1069R RESOLUTION AUTHORIZING THE CITY TO ENTER INTO A JOINT POWERS AGREEMENT WITH THE STATE OF MINNESOTA, DEPARTMENT OF PUBLIC SAFETY, BUREAU OF CRIMINAL APPREHENSION, FOR CITY ATTORNEY ACCESS TO THE CRIMINAL JUSTICE DATA COMMUNICATION NETWORK FOR A PERIOD OF FIVE YEARS AT AN ANNUAL COST TO THE CITY OF $600 AND A TOTAL AMOUNT NOT TO EXCEED $3,000 AND FURTHER AUTHORIZING EXECUTION OF THE COURT DATA SERVICES SUBSCRIBER AMENDMENT TO CJDN SUBSCRIBER AGREEMENT.

Indexes:

Attachments: Document A

Document B

This Resolution was adopted unanimously.

BY COUNCILOR HOBBS (PURCHASING & LICENSING)

24. 22-1013R RESOLUTION AUTHORIZING AN AGREEMENT WITH MARSH & MCLENNAN AGENCY LLC FOR PROFESSIONAL SERVICES RELATING TO INSURANCE MATTERS FOR AN ESTIMATED ANNUAL AMOUNT OF $60,000, AND A TOTAL FIVE-YEAR AMOUNT NOT TO EXCEED $300,000.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

25. 22-1048R RESOLUTION AUTHORIZING AN AGREEMENT WITH SANITARY

BOARD OF THE WESTERN LAKE SUPERIOR SANITARY DISTRICT FOR SOLID WASTE DISPOSAL SERVICES FOR AN ANNUAL ESTIMATED AMOUNT OF $30,000 AND A TOTAL NOT TO EXCEED $60,000 OVER THE TERM OF THE AGREEMENT.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

BY COUNCILOR ALSTEAD (PERSONNEL)

26. 22-1014R RESOLUTION APPROVING PROPOSED AMENDMENTS TO THE SPECIFICATIONS FOR THE EXISTING CIVIL SERVICE CLASSIFICATION OF DEPUTY FIRE MARSHAL.

Indexes:

Attachments: Exhibit A

This Resolution was adopted unanimously.

27. 22-1042R RESOLUTION CONFIRMING THE APPOINTMENT OF SHARI MARSHIK TO THE DULUTH PUBLIC ARTS COMMISSION.

This Resolution was adopted unanimously.

BY COUNCILOR RANDORF (PLANNING & ECONOMIC DEVELOPMENT)

28. 22-1011R RESOLUTION AUTHORIZING FIRST AMENDMENT TO CITY CONTRACT NO. 23791 WITH SMDC MEDICAL CENTER FOR THE DEMOLITION AND RECONSTRUCTION OF THE MEDICAL DISTRICT PARKING RAMP SKYWALK IN THE REGIONAL EXCHANGE DISTRICT.

Indexes:

Attachments: 12-5-22-Exhibit A

This Resolution was adopted unanimously.

29. 22-1037R RESOLUTION AFFIRMING THE PLANNING COMMISSION'S DECISION TO APPROVE A PLANNING REVIEW FOR A HOTEL AT SUNDBY ROAD AND W PAGE STREET.

Indexes:

Attachments: Attachment 1

Attachment 2

Attachment 3

This Resolution was removed from the Consent Agenda.
This Resolution passed with the following vote:
Yea: Councilors Anderson, Awal, Hobbs, Mayou, Radorf, Tomanek and President Forsman
Nay: Councilors Alstead and Vice President Kennedy

30. 22-1039R RESOLUTION REVERSING THE PLANNING COMMISSION'S DECISION TO APPROVE A PLANNING REVIEW FOR A HOTEL AT SUNDBY ROAD AND W PAGE STREET.

Indexes:

Attachments: Attachment 1
Attachment 2
Attachment 3

This Resolution was removed from the Consent Agenda.
This Resolution failed with the following vote:
Yea: Councilors Alstead and Vice President Kennedy
Nay: Councilors Anderson, Awal, Hobbs, Mayou, Radorf, Tomanek and President Forsman

31. 22-1040R RESOLUTION AFFIRMING THE PLANNING COMMISSION'S DECISION TO APPROVE A PLANNING REVIEW FOR A HOTEL AT SUNDBY ROAD AND W PAGE STREET.

Indexes:

Attachments: Attachment 1
Attachment 2
Attachment 3

This Resolution was removed from the Consent Agenda.
This Resolution passed by the following vote:
Yea: Councilors Alstead, Anderson, Awal, Hobbs, Mayou, Randorf, Tomanek and President Forsman
Nay: Vice President Kennedy

32. 22-1041R RESOLUTION REVERSING THE PLANNING COMMISSION'S DECISION TO APPROVE A PLANNING REVIEW FOR A HOTEL AT SUNDBY ROAD AND W PAGE STREET.

Indexes:

Attachments: Attachment 1
Attachment 2
Attachment 3

This Resolution was removed from the Consent Agenda.
This Resolution failed by the following vote:
Yea: Vice President Kennedy
Nay:: Councilors Alstead, Anderson, Awal, Hobbs, Mayou, Randorf, Tomanek and

President Forsman

33. 22-1044R RESOLUTION AUTHORIZING A FUNDING AGREEMENT WITH THE DULUTH ECONOMIC DEVELOPMENT AUTHORITY, GRANTING $500,000 FOR THE PURPOSE OF SUPPORTING ECONOMIC DEVELOPMENT EFFORTS, INCLUDING LOANS AND GRANTS FOR PROGRAMS SUPPORTING ECONOMIC REVITALIZAITON

Indexes:

Attachments: 22D-69-EXHIBIT A - City and DEDA Funds Transfer Agreement

This Resolution was adopted unanimously.

34. 22-1068R RESOLUTION OF INTENT TO SELL OR CONVEY CERTAIN REAL PROPERTY AT DULUTH INTERNATIONAL AIRPORT.

Indexes:

Attachments: Exhibit A

Exhibit B

This Resolution was adopted unanimously.

35. 22-1053R RESOLUTION AUTHORIZING AN AGREEMENT WITH LHB, INC FOR PROFESSIONAL ENGINEERING SERVICES TO PROVIDE DESIGN SERVICES FOR THE SIXTH AVENUE EAST EXTENSION PROJECT IN THE AMOUNT OF $726,159.40.

Indexes:

Attachments: 22-1053R Map

PROFESSIONAL ENGINEERING SERVICES AGREEMENT-PROPOSAL (002)

This Resolution was adopted unanimously.

BY PRESIDENT FORSMAN (COMMITTEE OF THE WHOLE)

36. 22-1002R RESOLUTION DESIGNATING POLLING PLACES FOR THE AUGUST 8, 2023 PRIMARY ELECTION AND THE NOVEMBER 7, 2023 GENERAL ELECTION.

This Resolution was adopted unanimously.

BY COUNCILOR MAYOU (PUBLIC WORKS & UTILITIES)

37. 22-1004R RESOLUTION OF INTENT FOR RECONSTRUCTION OF FIFTH STREET ALLEY BEGINNING AT 21ST AVENUE EAST AND EXTENDING TO 22ND AVENUE EAST AND TO ASSESS THE COSTS THEREOF.

Indexes:

Attachments: 22-1004R Map

22-1004R Map 2

This Resolution was adopted unanimously.

38. 22-1005R RESOLUTION AUTHORIZING THE SOLE SOURCE PURCHASE OF REPLACEMENT PUMPS FOR LIFT STATIONS 10, 11, 12 AND 25 FROM QUALITY FLOW SYSTEMS IN THE AMOUNT OF $46,070.

This Resolution was adopted unanimously.

39. 22-1015R RESOLUTION AUTHORIZING APPLICATION TO THE MINNESOTA DEPARTMENT OF TRANSPORTATION FOR A $586,027 TRANSPORTATION ALTERNATIVE GRANT TO BUILD SEGMENT 6 OF THE CAMPUS CONNECTOR SHARED USE PATH.

Indexes:

Attachments: 22-1015R MAP

22-1015R Map 2

This Resolution was adopted unanimously.

40. 22-1016R RESOLUTION AWARDING A CONTRACT TO UNIVAR USA INC. FOR THE PURCHASE AND DELIVERY OF 70,000 GALLONS OF LIQUID CAUSTIC SODA IN YEAR 2023 FOR A TOTAL COST OF $268,800.

This Resolution was adopted unanimously.

41. 22-1017R RESOLUTION AWARDING A CONTRACT TO THUNDER BAY CHEMICALS LTD FOR THE PURCHASE AND DELIVERY OF 125,400 GALLONS OF LIQUID ALUMINUM SULFATE IN YEAR 2023 FOR A TOTAL COST OF $172,500.24.

This Resolution was adopted unanimously.

42. 22-1018R RESOLUTION AWARDING A CONTRACT TO HAWKINS, INC FOR THE PURCHASE AND DELIVERY OF WATER TREATMENT CHEMICALS IN YEAR 2023 FOR A TOTAL COST OF $288,450.00.

This Resolution was adopted unanimously.

43. 22-1025R RESOLUTION APPROVING DULUTH ENERGY SYSTEM'S THERMAL

ENERGY HOT WATER RATE FOR EASTERN CANAL PARK.

This Resolution was adopted unanimously.

44. 22-1032R RESOLUTION AUTHORIZING AN AGREEMENT WITH LHB, INC. FOR ENGINEERING SERVICES FOR THE CHESTER CREEK CULVERT REPLACEMENT PROJECT ON NORTON AND THURBER ROADS FOR AN AMOUNT NOT TO EXCEED $104,651.25.

This Resolution was adopted unanimously.

45. 22-1046R RESOLUTION AUTHORIZING AN AGREEMENT WITH SHORT ELLIOTT HENDRICKSON, INC. FOR PROFESSIONAL ENGINEERING SERVICES TO PROVIDE DESIGN SERVICES FOR THE WEST SUPERIOR STREET RECONSTRUCTION PROJECT IN THE AMOUNT OF $2,411,000.00.

Indexes:

Attachments: 22-1046R Map

This Resolution was adopted unanimously.

46. 22-1047R RESOLUTION AUTHORIZING APPLICATION TO THE MINNESOTA DEPARTMENT OF TRANSPORTATION FOR A $440,000 TRANSPORTATION ALTERNATIVE GRANT TO BUILD SEGMENT 4 OF THE CAMPUS CONNECTOR SHARED USE PATH.

Indexes:

Attachments: 22-1047R Map

This Resolution was adopted unanimously.

47. 22-1049R RESOLUTION AUTHORIZING THE PURCHASE TWO NEW 2023 ELGIN PELICAN STREET SWEEPERS FROM MACQUEEN EQUIPMENT IN THE AMOUNT OF $290,472.58 EACH AND A TOTAL PRICE OF $580,495.16.

This Resolution was adopted unanimously.

48. 22-1050R RESOLUTION AUTHORIZING APPLICATION TO THE MINNESOTA DEPARTMENT OF TRANSPORTATION FOR A $500,000 ACTIVE TRANSPORTATION GRANT TO PROVIDE THE LOCAL MATCH TO THE CITY'S HISTORIC PRESERVATION GRANT FOR THE AERIAL LIFT BRIDGE.

Indexes:

Attachments: 22-1050 Map

This Resolution was adopted unanimously.

49. 22-1052R RESOLUTION AUTHORIZING AN AGREEMENT WITH LHB INC. FOR ENGINEERING SERVICES FOR THE HILLSIDE TUNNEL INSPECTION PROJECT, ON CREEK TUNNELS LOCATED UNDER THE DULUTH CENTRAL HILLSIDE, FOR AN AMOUNT NOT TO EXCEED $304,159.38.

This Resolution was adopted unanimously.

BY COUNCILOR ANDERSON (PUBLIC SAFETY)

50. 23-0001R RESOLUTION AUTHORIZING THE SOLE SOURCE PURCHASE OF DOOR HARDWARE AND INFRASTRUCTURE CABLING SERVICES FOR THE TECHNOLOGY VILLAGE RAMP FROM PREMIER ELECTRICAL CORPORATION IN THE AMOUNT OF $88,750.

This Resolution was adopted unanimously.

51. 22-1030R RESOLUTION AUTHORIZING PROPER CITY OFFICIALS TO ACCEPT AN ADDITIONAL $22,485 GRANT AWARD FROM THE OFFICE OF NATIONAL DRUG CONTROL POLICY, HIGH INTENSITY DRUG TRAFFICKING AREAS (HIDTA) PROGRAM, TO BE USED FOR EXPENSES INCURRED DURING PARTICIPATION IN THE LAKE SUPERIOR DRUG CORRIDOR INITIATIVE, FOR A TOTAL FY 2021 GRANT AWARD OF $122,845.

Indexes:

Attachments: Document A - Grant Award

This Resolution was adopted unanimously.

BY COUNCILOR TOMANEK (RECREATION, LIBRARIES & AUTHORITIES)

52. 22-1056R RESOLUTION AUTHORIZING ACCEPTANCE OF A SUSTAIN OUR GREAT LAKES GRANT OF $201,430 FOR ONGOING SUPPORT FOR HABITAT RESTORATION IN THE ST. LOUIS RIVER CORRIDOR AND HARTLEY PARK.

Indexes:

Attachments: Exhibit A: SOGL Grant Agreement

This Resolution was adopted unanimously.

53. 22-1057R RESOLUTION AUTHORIZING AN AMENDMENT TO EXTEND THE NATIONAL PARK SERVICE GRANT AGREEMENT C23577-01 TO IMPLEMENT THE LINCOLN PARK MINI-MASTER PLAN.

Indexes:

Attachments: Exhibit A: Amendment

This Resolution was adopted unanimously.

54. 22-1059R RESOLUTION AUTHORIZING AN AMENDMENT TO EXTEND THE USEPA GREAT LAKES RESTORATION INITIATIVE GRANT AGREEMENT C23954 FOR ACQUISITION AND RESTORATION OF ECOLOGICALLY VALUABLE TAX FORFEIT PROPERTY ALONG THE ST. LOUIS RIVER.

Indexes:

Attachments: Exhibit A: Amendment

This Resolution was adopted unanimously.

55. 22-1060R RESOLUTION AUTHORIZING CITY OFFICIALS TO EXECUTE A MEMORANDUM OF UNDERSTANDING TO FORMALIZE THE FORMATION OF THE LAKE SUPERIOR HEADWATERS SUSTAINABILITY PARTNERSHIP.

Indexes:

Attachments: Exhibit A: Headwaters Partnership MOU

This Resolution was adopted unanimously.

END OF CONSENT AGENDA

The following entitled resolutions are also to be considered:

BY PRESIDENT FORSMAN (COMMITTEE OF THE WHOLE)

56. 22-1054R RESOLUTION ESTABLISHING THE CITY OF DULUTH 2023 TOP LEGISLATIVE PRIORITIES

This Resolution was adopted as amended unanimously.

57. 22-1055R RESOLUTION ESTABLISHING THE CITY OF DULUTH 2023 ADDITIONAL LEGISLATIVE PRIORITIES

Indexes:

Attachments: Motion to Amend: Randorf and Mayou - Passed unanimously.
Motion to Amend: Tomanek and Awal - Passed unanimously.
Motion to Amend: Kennedy - Passed unanimously.

This Resolution was adopted as amended unanimously.

The following entitled ordinances are to be read for the first time:

BY COUNCILOR RANDORF (PLANNING & ECONOMIC DEVELOPMENT)

58. 22-034-O AN ORDINANCE GRANTING KINSETH HOTEL CORPORATION, A CONCURRENT USE PERMIT FOR UNDERGROUND UTILITIES WITHIN THE PLATTED RIGHT OF WAY OF WEST PAGE STREET AND SUNDBY ROAD.

Indexes:

Attachments: Exhibit A
Exhibit B

This Ordinance was read for the first time.

59. 22-045-O AN ORDINANCE AUTHORIZING THE CONVEYANCE OF REAL PROPERTY AT DULUTH INTERNATIONAL AIRPORT TO THE DULUTH ECONOMIC DEVELOPMENT AUTHORITY FOR NOMINAL CONSIDERATION.

Indexes:

Attachments: Exhibit A
Exhibit B

This Ordinance was read for the first time.

BY COUNCILOR TOMANEK (RECREATION, LIBRARIES & AUTHORITIES)

60. 22-044-O ORDINANCE AMENDING CHAPTER 2, ARTICLE XXVIII, SEC. 2-148, OF THE DULUTH CITY CODE BY DELETING THE PROHIBITION AGAINST MEMBERS OF THE DULUTH INDIGENOUS COMMISSION SERVING MORE THAN TWO CONSECUTIVE TERMS.

This Ordinance was read for the first time.

The following entitled ordinances are to be read for the second time:

BY VICE PRESIDENT KENNEDY (FINANCE)

61. 22-036-O AN ORDINANCE DETERMINING THE SUM TO BE RAISED BY TAXATION FOR THE SPECIAL TAXING DISTRICT, DULUTH TRANSIT AUTHORITY, FOR THE YEAR 2023

Indexes:

Attachments: Motion to Amend 22-036-O Randorf.pdf

This Ordinance was adopted unanimously.

62. 22-037-O AN ORDINANCE DETERMING THE SUM TO BE RAISED BY TAXATION FOR THE SPECIAL PARKS FUND LEVY FOR THE YEAR 2023

This Ordinance was adopted as amended unanimously.

63. 22-040-O AN ORDINANCE DETERMINING THE SUM TO BE RAISED BY TAXATION FOR GENERAL PURPOSES FOR THE YEAR 2023.

Indexes:

Attachments: Exhibit A - 2023 Tax Levy (002).pdf

Motion to Amend: Randorf (Withdrawn 12/5 9 - 0)

Motion to Amend: Kennedy (Failed 3 (Councilor Awal, Vice President Kennedy and President Forsman) -6 on 12/5)
Motion to Amend Randorf (2) (Passed 7-2 (Councilor Hobbs and Vice President Kennedy))

This Ordinance was adopted as amended unanimously.

64. 22-041-O AN ORDINANCE SETTING THE BUDGET FOR THE FISCAL YEAR 2023 APPROPRIATING MONIES FOR THE SUPPORT OF THE CITY GOVERNMENT, PUBLIC UTILITIES, AND PUBLIC ENTERPRISE FUNDS AND FOR OTHER PURPOSES.

Indexes:

Attachments: Motion to Amend: Randorf

Revised Motion to Amend_2022.12.5 Revised and Passed 7-2 (Councilor Alstead and Councilor Hobbs on 12/5)
22-041-O (Original)

This Ordinance was approved as amended unanimously.

BY COUNCILOR RANDORF (PLANNING & ECONOMIC DEVELOPMENT)

65. 22-038-O AN ORDINANCE GRANTING ESSENTIA HEALTH A CONCURRENT USE PERMIT FOR A RETAINING WALL AND STAIRCASE HANDRAIL IN THE PLATTED STREET RIGHT OF WAY OF EAST SUPERIOR STREET.

Indexes:

Attachments: Attachment 1

Attachment 2

This Ordinance was adopted unanimously.

66. 22-039-O AN ORDINANCE GRANTING ESSENTIA HEALTH A CONCURRENT USE PERMIT FOR A PRIVATE SANITARY SEWER LINES IN THE PLATTED STREET RIGHT OF WAY OF NORTH FOURTH AVENUE EAST AND FIRST STREET ALLEY.

Indexes:

Attachments: Attachment 1

Attachment 2

This Ordinance was adopted unanimously.

COUNCILOR QUESTIONS AND COMMENTS

COUNCILOR PREVIEW OF UPCOMING BUSINESS

City of Duluth
Planning Commission

September 13, 2022 – City Hall Council Chambers
Meeting Minutes

Call to Order

President Margie Nelson called to order the meeting of the city planning commission at 5:00 p.m. on Tuesday, September 13th, 2022 in the Duluth city hall council chambers.

Roll Call

Attendance:

Members Present: Jason Crawford, Gary Eckenberg, Samuel Lobby, Margie Nelson, Danielle Rhodes, and Michael Schraepfer
Members Absent: Jason Hollinday, and Andrea Wedul

Staff Present: Adam Fulton, Robert Asleson, Kyle Deming, Chris Lee, and Cindy Stafford

Approval of Planning Commission Minutes -

Planning Commission Meeting – August 9, 2022

MOTION/Second: Eckenberg/Crawford approved

VOTE: (6-0)

Public Comment on Items Not on Agenda

None

Consent Agenda

PL 22-139 Interim Use Permit for a Vacation Dwelling Unit at 130 Charlotte Place by Daniel Frank
PL 22-142 Concurrent Use Permit for an Underground Private Sanitary Sewer in the Right of Way of Sundby Road and Page Street by Kinseth Hotel Group
PL 22-140 Final Plat for Force 1 Commercial Development on Arrowhead Road, west of Rice Lake Road, by Force 1, LLC
PL 22-145 Variance to the Corner Side Setback for an Entry Deck at 431 E Skyline Parkway by Ed Oman Construction

Public: Item PL 22-142 - Jill Crawford-Nichols, 1505 W. Morgan Street, asked for clarification and noted her area doesn't have public sewer access. Chris Lee stated the applicant is paying to hook up to the public main.
MOTION/Second: Schraepfer/Rhodes approved as per staff recommendations

VOTE: (6-0)

Public Hearings

PL 22-141 Preliminary Plat for Rearranement of Part of Western Woods on the east side of Decker Road south of Anderson Road by Lon Hovland

Staff: Kyle Deming introduced the applicants' proposal for the approval of the preliminary plat of Rearrangement of Part of Western Woods Division to provide for replatting of 17 lots and a 3 acre unplatted parcel totaling 11.3 acres into 19 lots on a shortened street. The proposal includes construction of a new public street with sidewalks and utilities. Staff recommended approval with the conditions listed in the staff report.

Applicant: Adam Zwak, the civil engineer for the project welcomed questions. Commissioner Gary Eckenberg asked if the proposed new street was previously called Westwood Drive (now Westwood Circle). Zwak affirmed and noted they will sort through options and come up with a name.

Public: Jacob Ulvi, 3502 Decker Rd., addressed the commission. He lives south of the development. He is concerned about the stormwater drainage. Per Deming, the stormwater will be collected in two ponds and then will let water out to the wetlands in the south. He believes storm water design rules require that run-off not exceed what it is at the present time. Zwak affirmed. They are not increasing the run-off, and it will actually be reduced. Sherri Dunbar, 1911 Denim St., addressed the commission. She bought her home seven years ago, and was told by her realtor that nobody could build on that land due to the wetlands. She questions the development. Phillip Hooper, 1912 Anderson Rd., addressed the commission. He noted the easement had been vacated, but that part of an easement still existing next to his property. Will there be pedestrian access? He also asked about the row of trees on the property and would like to keep them. Deming stated there is a 30 foot wide half a street next to Hooper's property that still exists and the developer is being required to give a pedestrian easement to connect to it. UDC platting requirements call for a pedestrian easement to exit any cul du sac. He also noted no buildings will be allowed in the wetland areas.

Commissioners: Danielle Rhodes asked if screening is planned. Deming noted screening is not part of the preliminary plat. The lots are largely left uncleared. The final plat will require a tree replacement plan. Deputy Direct Fulton added this area is fairly rural. Jason Crawford would like to make a motion, but asked if they could add a condition to verify any alteration to the wetlands will not affect the neighbor's property who spoke and had concerns. Commissioner Samuel Lobby agreed. Deputy Director Fulton noted that the technical evaluation panel approved the wetland delineation, but the commission can add a condition if they so choose. Commissioner Gary Eckenberg noted the updated wetland delineation in 2022. Was the delineation City sponsored, or owner requested? Per Fulton, wetland delineation is a private request. The delineation is good for five years. The technical document is reviewed for accuracy and is not subject to debate. The commissioners decided a condition was not needed.

MOTION/Second: Crawford/Lobby approved as per staff recommendation

VOTE: (6-0)

PL 22-143 MU-C Planning Review for a Hotel on Sundby Road north of Maple Grove Road by Kinseth Hotel Group

Staff: Chris Lee introduced the applicant's proposal to construct a 4-story hotel with 112 parking stalls. The hotel will be 51' tall, and the applicant will be required to verify the maximum height of the structure at the time of the building permit application. The landscape plan shows 21 trees, exceeding the required 19 for parking lot coverage. The required frontage

landscaping is met with 33 trees and 149 shrubs. Staff recommends approval with the conditions listed in the staff report.

Applicant: Chase Ernste of Northland Consulting Engineers welcomed questions.

Public: Troy Fralich, 1745 W Page St, addressed the commission. He is concerned about the removal of trees and the added lighting. He would like to see their privacy maintained. Per Lee, there is a significant amount of trees in the landscaping plan. The lighting on the site will be downcast. Pedestrian movement will be up to hotel management. Ben Frye, 1504 Osage Ave, addressed the commission. He is concerned about privacy. This hotel is commercial, and yet they are rural. What prevents the hotel windows from looking directly down at them? Per Lee, he can't speak for the developer, and it is up to the applicant to determine. Frye asked why the applicant isn't here tonight. Per Lee, the applicant is out of town, and unable to attend. Jill Crawford-Nichols, 1505 W Morgan St, addressed the commission. She noted the adjacent properties to the proposed hotel are zoned rural RR-1, which are five acre lots. These are very different uses, and will directly affect them. Has an impact study been done? Has a need study been done? How will it effect Miller Creek? She also asked if a minimum tree size is required. She added that four guiding principles (2, 5, 7 & 10) are in conflict with the development. Joan Haubrich, 1513 W Morgan St, addressed the commission. She is opposed to the proposal. She is retired from a career of building hotels. There will be an impact to the area. Traffic will increase. She asked at what cost to we allow development. There are four hotels in a small radius. She also noted the need for an impact study. Lee added an impact study is not typically performed. The tree, landscaping plan, meets UDC requirements. President Nelson asked if it is common to have MU-C zoning next to RR-1 zoning. Per Lee, there are restrictions added including building height. Deputy Director Fulton noted this area was subject to significant study in the 1990's. The RR-1 areas by the mall are rural for preservation. Areas along Sundby Road are slated for development. He noted the need for another hotel is not up to staff. They are tasked to make sure plans are consistent with the UDC. Engineering is closely scrutinizing conditions for stormwater treatment in proximity to Miller Creek. Crawford-Nichols noted the hotel **can** be built here, but **should** it? This contradicts the purpose of the home she bought. The 1990's study is almost older than she is. She asked commissioners to take into consideration the impact it will have. Joyce Alworth, 1818 Yosemite Ave, addressed the commission. She has been a resident here since 1984. She is concerned there will be more traffic, noise (including construction noise). This project will change the feeling of her rural home. She feels less safe, and it will be a negative impact to their neighborhood. She noted little trees take a long time to grow. She noted the pond on the end of Osage, which will also be impacted. This proposal makes her sad, and she feels the hotel can be built further away from this rural neighborhood. She is opposed.

Commissioners: Rhodes asked if the developer considered other sites. Per Lee, their task today is to focus on this particular site. Eckenberg stated he has concerns. He questioned why the applicant wasn't present to address neighbors' concerns. Deputy Director Fulton noted this zoning has been in place for many years. The MU-C zone wraps around the RR-1 neighborhoods. Eckenberg would like to table until the applicant can address the neighbors' concerns. Commissioner Michael Schraepfer asked if a hotel is a permitted use in an MU-C zone, then why is this item before them. Deputy Director Fulton noted a planning review is needed for a permitted use to look at the plan, and evaluate it.

MOTION/Second: Eckenberg/Rhodes tabled

VOTE: (6-0)

(Commissioner Schraepfer recused himself from the next agenda item, due to a conflict of interest. His company is the applicant's managing agent.)

PL 22-146 Variance to the Form District Driveway Location Requirement at 915 E 4th Street by Lunar Legacy, LLC

Staff: Chris Lee introduced the applicant's proposal for a variance to allow a multi-family dwelling to be constructed that has two driveways in alternate locations from the requirements per UDC Section 50-22. The applicant is proposing to construct a 6-story multi-family structure with 121 residential units and 97 covered parking stalls. The applicant is proposing to have one driveway on East 4th Street and one on 10th Avenue East. The extreme topography makes it difficult to have a single driveway from the alley that can access two floors of parking. The need for a variance is caused by site constraints unique to this site and not caused by the applicant. Staff recommends approval with the conditions listed in the staff report.

Applicant: Nick Adams of Heirloom Properties addressed the commission. He noted the variance will allow for 97 indoor covered parking stalls. He welcomed questions. Commissioner Eckenberg asked about the rental cost of the units. Adams noted of the 121 units – there will only be 20 2-bedroom units. The market demand is for smaller units at a more affordable price point.

Public: No speakers.

MOTION/Second: Crawford/Eckenberg approved as per staff recommendation

VOTE: (5-0, Schraepfer Abstained)

Other Business

PL 22-134 Conformance to the Comprehensive Plan for a TIF District at Grand Avenue, Carlton Street, and 34th Avenue West

Staff: Deputy Director Fulton introduced the city's proposal for a TIF District. Tax Increment Financing (TIF) is a financing tool that uses the increase in property taxes generated from site improvements to pay for a portion of those improvements. The proposed development of the 80-unit residence apartments meets the intent of future land use. The role of the planning commission is to make sure the proposed development and its uses are consistent with the Comprehensive plan.

MOTION/Second: Rhodes/Lobby TIF is in Conformance with the Comprehensive Plan

VOTE: (6-0)

Correspondence – Commissioner Eckenberg noted that it was brought to his attention that a special use permit that the planning commission passed in 2017 for a restaurant has received a complaint. The letter addressed to the Duluth, MN Alcohol, Gambling and Tobacco Commission from a resident – James Matheson was shared with the planning commission on page 80 of their packet. He noted the last paragraph on page 81 which states, "The lack of a kitchen is perplexing, since on August 8, 2017, the planning commission…… voted to approve … the special use permit for a restaurant…." Eckenberg would like staff to do some research on PL 17-079 which was a special use permit granted for the Golden Bulldog on 318 N 18th Ave East.

MOTION/Second: Eckenberg/Lobby – staff to research the Special Use Permit conditions to determine if there is a need to revisit it.

VOTE: (6-0)

Appointment of HPC Representative – Deputy Director Fulton noted the HPC needs a representative from the planning commission and asked for volunteers. Commissioner Rhodes volunteered, but noted she may have to miss a few meetings. Commissioner Eckenberg stated he is willing to take on the task. Rhodes thankfully withdrew her offer.

Communications

Land Use Supervisor (LUS) Report – Deputy Director Fulton gave an overview. He introduced city councilor Noah Hobbs who discussed parking policies and the need for more discussion. A brown bag will be offered for planning commission input. Fulton noted there will be an HPC conference and an APA conference in Duluth in the next weeks. Staff is in the process of hiring a manager for the planning and development division.

Heritage Preservation Commission – Deputy Director Fulton noted the city council overturned the HPC decision to deny the certificate of appropriateness for the demo of 102 E. Superior St.

Joint Airport Zoning Board – No update.

Duluth Midway Joint Powers Zoning Board – No update.

Adjournment

Meeting adjourned at 6:44 p.m.

Respectfully,

DocuSigned by:
Adam Fulton
6F120D73DC4F4F5...

Adam Fulton – Deputy Director
Planning & Economic Development

City of Duluth
Planning Commission

October 11, 2022 – City Hall Council Chambers
Meeting Minutes

Call to Order

President Margie Nelson called to order the meeting of the city planning commission at 5:00 p.m. on Tuesday, October 11th, 2022 in the Duluth city hall council chambers.

Roll Call

Attendance:

Members Present: Jason Crawford, Gary Eckenberg, Jason Hollinday, Samuel Lobby, Margie Nelson, Danielle Rhodes, Michael Schraepfer, and Andrea Wedul
Members Absent: N/A

Staff Present: Adam Fulton, Robert Asleson, Chris Lee, and Cindy Stafford

Approval of Planning Commission Minutes -

Planning Commission Meeting – September 13, 2022

MOTION/Second: Rhodes/Crawford approved

VOTE: (8-0)

Public Comment on Items Not on Agenda

None

(Commissioner Danielle Rhodes recused herself from the consent agenda items due to a conflict of interest on Item PL 22-154. Her client is purchasing the property.)

Consent Agenda

PL 22-153 Interim Use Permit for a Vacation Dwelling Unit at 325 Lake Ave S #1313 by Tiegen Brickson
PL 22-154 Minor Subdivision at 405 Elk St by Devin and Ebony Nelson
PL 22-157 Interim Use Permit for a Vacation Dwelling Unit at 1035 Berwick Ct by Don Washington
PL 22-164 Interim Use Permit Renewal for a Vacation Dwelling Unit at 241 W Arrowhead Rd by Susan Yunis
MOTION/Second: Lobby/Schraepfer approved as per staff recommendations

VOTE: (7-0, Rhodes Abstained)

Old Business

MU-C Planning Review for a Hotel on Sundby Road north of Maple Grove rd by Kinseth Hotel Group

Staff: Chris Lee gave an overview. At the September planning commission meeting the commission voted to table the proposed MU-C Planning Review for a new extended stay hotel on Sundby Road. The commission wanted to speak to the applicant to have him address the concerns brought up by the neighbors including: screening to residential neighbors, lighting, and other impacts. The planning commission is tasked with approving the planning review or approve it with modifications if it is determined that the application complies with all applicable provisions. Staff recommends the planning commission approve the MU-C planning review with the findings in the staff report including adding 22 shrubs to the buffer.
Applicant: Ben Kinseth of Iowa addressed the commission, and gave an overview of the proposed project. They have seven additional extended stay hotels in Minnesota. He stated it is common to have residential areas butting up against commercial areas. He understands emotions are involved, and welcomed questions.
Public: Jo Haubrich, 1513 W. Morgan, addressed the commission. She represents 100 people who all voice their opposition to this hotel development. The hotel will cut into the green space, and invade people's privacy. There are no sidewalks in the area. She feels the negative impact will be enormous. Brenda Rose, 1609 W. Morgan, addressed the commission. She is a two-year resident of the area, and lives on the corner of Yosemite and Morgan. Traffic will increase and be dangerous. She is opposed. Joe Poppernickels addressed the commission. He is concerned that the replacement trees will not be of the same caliper as the trees they will be removing. He feels this change is radical and would be setting a massive precedent by telling big corporations they can shoe-horn their development in a residential neighborhood. This Project requires more thought. Devin Eng, 1516 Osage St., addressed the commission. She lives across the street from the proposed new hotel. She bought this family home from her father, and would like to some day pass it on to her daughter. Her daughter walks to the bus stop, and Eng is concerned about the safety due to increased traffic. Ben Fye, 1504 Osage Ave., addressed the commission. He noted there has been increased traffic in the area ever since the opening of the LaQuinta hotel. The new hotel will look directly into his window. The trees they are proposing are too sparse. His property will lose value. He asked if the four properties on Osage be granted a short-term rental license. Diana Mullberg addressed the commission. Looking from a satellite view, a hotel here doesn't make sense. It will disrupt wetlands and wildlife. There are lots of other properties for sale. Humans need nature. Once wildlife areas are gone, they aren't coming back. A hotel here just isn't right.
Commissioners: Andrea Wedul asked how does this proposal align with the Imagine Duluth 2035 Comprehensive Plan. Per Lee, the staff report lays out the alignment in more detail, but noted economic factors including tourism. The mall area is good for redevelopment and goes back to the 1970's. The land of the proposed hotel is deemed commercial. Commissioner Michael Schraepfer asked about the hotel height. David Bohlf of Northland Consulting Engineering addressed the commission. He noted the elevation is 51'6". There is a ten-foot façade on top of the building for branding, but mostly to screen mechanical equipment. Commissioner Gary Eckenberg asked if the planning commission vote will be the final decision. Deputy Director Adam Fulton affirmed, but noted it could be appealed to the city council with ten-days of tonight's decision. Commissioner Schraepfer noted both sides of this development have a valid argument. The current property owners have rights, but so does the new property owner. He sees this as a zoning issue where is was zoned commercial back in 2009. He would like to see a compromise and suggests adding more trees as a buffer. Commissioner Rhodes asked if the homes surrounding the hotel should be zoned commercial. Deputy Director Fulton noted they have no application before them, and have not evaluated the future land use for those properties. Eckenberg reiterates that the public could file an appeal to the city council. Commissioner Wedul asked how typical is this for neighboring zoning differences. Fulton noted a study was done in the 1990's, which identified sites for expansion of activity in the mall area.

He noted Sundy Road functions as a commercial road. This site has lots of MU-C areas surrounding the RR-1 area due to no utilities. This is not a-typical and compared it to Spirit Valley and Lincoln Park.

Applicant: Bohlf addressed Commissioner Schraepfer's comment to increase the buffer. Engineering required the 33' of right of way to the east of the property. This means the applicant will have a 33' buffer over the 33' buffer in place. He noted the stormwater needs to be cooled before it goes into a holding pond. He welcomed additional questions. Commissioner Eckenberg asked about the 22 additional shrubs. Per Lee, the shrubs need to be placed on the applicant's property. Bolf noted minor adjustments could be done and noted the re-allocation of parking towards Sundy Road.

Commissioners: Commissioner Rhodes noted the commission is not deciding on if they like hotels, only if the hotel meets the criteria. Wedul noted this is a hard topic, and appreciates the applicant's willingness to increase the buffer if possible. Bohlf noted their intent is to build a 4' berm to black automobile headlights from the neighbors. Crawford asked if they could increase the height of the buffer. Per Bolhf more area would need to be cleared to increase the berm height.

MOTION/Second: Wedul/Eckenberg approved as per staff recommendations

VOTE: (7-1, Lobby Opposed)

Communications

Land Use Supervisor (LUS) Report – Deputy Director Fulton gave an overview.
Golden Bulldog, 318 N 18th Ave E – Chris Lee stated their hours of operation appear to be outside of the agrees upon 9 p.m. close. An enforcement letter was sent, and they have 14 days to comply. Lee noted that a bar falls into the definition of a bar even if food is not the main focus. Eckenberg thanked staff for following-up.

Discuss Brown Bag Date

Heritage Preservation Commission – Gary Eckenberg noted there was no meeting this month.
Joint Airport Zoning Board – No update.

Duluth Midway Joint Powers Zoning Board – No update.

Adjournment

Meeting adjourned at 6:24 p.m.

Respectfully,

DocuSigned by:
Adam Fulton
6F120D73DC4F4F5...

Adam Fulton – Deputy Director
Planning & Economic Development

Exhibit K

Petition for EAW

CITIZENS' PETITION FOR AN EAW

Duluth, Minnesota

Photo mprnews.org, 2012 flood, Duluth, MN

"It is especially critical to preserve all remaining wetlands and forested areas at the headwaters and along the streams to help buffer water quality."

– Minnesota Pollution Control Agency referencing Miller Creek's watershed in Duluth, MN. Duluth News-Tribune, March 19, 2018.

A large-scale, hotel development in wetlands, 150-200 feet away from Miller Creek aims to violate environmental rules and regulations.

Project Description

Marriott Hotel is a proposed commercial development on six acres located at the northeast corner of the intersection of Sundby Road and W. Page St. in Duluth, MN. The subject site consists of mature forest with wetlands on the northeast and southwest portions of the property. Miller Creek, an impaired trout stream, is approximately 150-200 feet to the west adjacent to Sundby Road. The developer owns a total of 33 acres along Miller Creek situated amongst wetlands.

- Developer's Proposal [EXHIBIT 1]
- Location of Development [EXHIBIT 2]

> ***"In the end, it's going to take action by city residents to affect any real change."***[1] *-Brian Frederickson, MPCA Project Manager, Duluth's impaired streams restoration*

Protections under the Clean Water Act and "Water of the United States"

[EXHIBIT 3]. Summarizing arguments, under the regulations of the Clean Water Act as per the newly revised definition of "Waters of the United States", effective March 20, 2023, interstate waterways, their tributaries, and adjacent wetlands designated as WOTUS receive CWA protection. Miller Creek, as a tributary of an (a)(1) interstate waterway, the St. Louis River, and its adjacent wetlands are to be afforded all protections provided by the Clean Water Act. Proceeding with the development, Miller Creek and its adjacent wetlands will be negatively impacted, a violation of the main objective of the Clean Water Act which is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

Protections under Minnesota's Wetland Conservation Act (WCA)

Per the Minnesota Legislature's Wetland Conservation Act, the purpose is to maintain and protect Minnesota's wetlands and the benefits they provide, and to reach the legislature's goal of no-net-loss of wetlands. This act is administered statewide by the Board of Water and Soil Resources (BWSR), and enforced by the Minnesota Department of Natural Resources (DNR).[2]

How will the waters and wetlands in this area be negatively impacted?

1. **An increase to the impervious surface area adjacent to Miller Creek and its wetlands.**
   Impervious surfaces prohibit the infiltration of water from the land into the underlying soil. The location of this hotel will exponentially increase impervious area next to Miller creek and its wetlands. It is the most critical indicator for analyzing

[1] Meyers, John. *Duluth streams hard-hit by development*. Duluth News-Tribune, March 19, 2018.

[2] The Minnesota Wetland Conservation Act Manual, A comprehensive implementation guide to Minnesota's wetland law. Minnesota Board of Water & Soil Resources. [online]. Available from: https://www.leg.mn.gov/docs/2007/other/070605.pdf Accessed 27 Feb 2023.

impacts of urbanization on the water environment.[3] Miller Creek's watershed contains a high degree (49%) of disturbed and developed land cover.[4] [EXHIBIT 4]

Stream quality starts to degrade if more than 10% of the watershed is impervious. Around 2003, 22% of Miller Creek's watershed was listed as impervious.[5] [EXHIBIT 5]. Development in this area has only increased in the last 20 years with the construction of Costco, Kohl's, Menards, Sam's Club, and Target's recent expansion, to name a few.

Why is a high impervious rate so detrimental to Miller Creek and its adjacent wetlands?

A. Reduces base flow. When infiltration into the ground is prevented by impervious surfaces such as buildings and parking lots, the groundwater recharge and base flow will be reduced. Because all of that water has to go somewhere, it stays above ground and leads to flooding and storm flow.

In 2012, Duluth experienced its worst flooding in recorded history. Chief meteorologist of Minnesota Public Radio, Paul Huttner said, "Over 10 inches of rain triggered the worst flood in the history of Duluth left more than 100 million in damages to infrastructure as it washed out streets, sidewalks and swallowed cars in massive sinkholes. Many have asked me if events like the Duluth Flood can happen again. The answer is not if…but when."[6]

Duluth, MN, 2012 flood. *mprnews.org*

"One of the reasons this mega flood happened in Duluth is the unique 'flood geography' of the North Shore. Think of quickly dumping a bucket of water down a steep driveway."

– Paul Huttner,
Chief Meteorologist,
Minnesota Public Radio

[3] Chithra, S.V., et. al. May 2015. Impacts of Impervious Surfaces on the Environment. [online]. Available from: https://www.ijesi.org/papers/Vol(4)5/E045027031.pdf [Accessed 27 Feb, 2023].

[4] MPCA. October 2020. *Duluth Urban Area Streams Total Maximum Daily Load.* [online]. Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-11e.pdf [Accessed 27 Feb, 2023].

[5] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022. Also *Impervious Surfaces Hinder Infiltration and Increase Runoff.* [online). Available from: https://www.lakesuperiorstreams.org/understanding/impact_impervious.html [Accessed 27 Feb 2023].

[6] Huttner, Paul. June 2013. *Anatomy of the 2012 Duluth flood.* [online]. Available from: https://www.mprnews.org/story/2013/06/19/anatomy-of-the-2012-duluth-flood [Accessed 28 Feb 2023].

It matters where and how close to waterways impervious surfaces are built.

"Increases in impervious surfaces increases the runoff volumes and also shortens the time of water delivery to the stream, sending large pulses of water and related urban pollutants into the stream (e.g., sediments, chloride). Impervious surface has been used as an indicator of stream water quality; the more imperviousness, the greater the likelihood for degraded water quality. Development of lands can reduce temporary water storage by grading the land surface, typically resulting in less pervious surfaces, more impervious surfaces, more turf grass and fewer trees. Incremental degradation of remaining natural resources, such as wetlands and natural areas adjacent to the development is common."[7] *– Tom Estabrooks, MPCA, Project Mgr., Watershed Division, Duluth, MN*

In 2009, MXD Development Strategists was hired by the City of Duluth to conduct a comprehensive Market Analysis and Positioning Strategy for the Miller Hill – Central Entrance Corridor. Specifically, to this 30+ acre site along Sundby Rd, the survey stated, "Commercial land uses do not offer an appropriate nor compatible land use buffer for a project that proposes to encroach upon a sensitive wetlands area. There is a need to ensure that any new development does not unnecessarily encroach on sensitive land areas. It is incumbent and responsible to protect and contribute to more livable and sustainable communities. Duluth is as much a steward of the environment as it is a center for commerce and these fundamentals must be maintained in balance."[8] [Exhibit 5.1]

B. Pollutants are added to the drainage basin and its receiving streams, lakes, and ponds.

Stretches of streams are impaired and need attention. Pollutants already find their way into Miller Creek. Over 30 years, to do all the suggested work could cost the community between $100 and $130 million to save its trout streams.[9]

> ***"…efforts have been underway for years to slow and filter parking lot runoff near Miller Creek."***[10]

Which pollutants are of primary concern?

i. **Road Salt** – "Chloride is a permanent pollutant that'll stick around forever in water, according to the Minnesota Pollution Control Agency, or MPCA. Chloride is actually toxic to our freshwater fish and insects living in our lakes our wetlands our streams. The time to address this is now and to get ahead of this so we can keep our fresh waters fresh and not salty."[11]

---

[7] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022.

[8] Mission Development LLC Rezoning Application Memorandum, 2/12/2009.

[9] Meyers, John. *Duluth's Wild Trout Streams Hanging on, But Need Help*. Duluth News-Tribune, June 28, 2020.

[10] Meyers, John. *Duluth streams hard-hit by development*. Duluth News-Tribune, March 19, 2018.

[11] Vang, Gia. February 2022. *The state of Minnesota's salt dilemma*. [online]. Available from: https://www.kare11.com/article/news/local/kare11-sunrise/minnesota-road-salt-impact/89-b7faf673-a406-4e28-a831-b6f1c51dac62 [Accessed 27 Feb 2023].

This large-scale development will exponentially add to the sodium chloride applications in the area (Sundby Rd, W. Page St.) and the hotel's 112 parking stalls.

"There's plenty of scientific evidence to suggest that freshwater ecosystems are being contaminated by salt from the use of things like road salt beyond the concentration which is safe for freshwater organisms and for human consumption. There are consequences for wildlife, too," said Dr. Bill Hintz, Assistant Professor of Environmental Sciences, University of Toledo. Elevated salinity levels in freshwater ecosystems cause a reduction in the abundance and growth of freshwater organisms and a reduction in their reproduction outputs.[12]

Sodium chloride will runoff into both the wetlands and Miller Creek. When snow and ice melt on roads, the salt washes into the soil, lakes and streams, in some cases contaminating drinking water reservoirs and wells. It has killed or endangered wildlife in freshwater ecosystems, with high chloride levels toxic to fish, bugs and amphibians, according to the Environmental Protection Agency.[13]

ii. **Pathogens** - any organism or agent that can produce disease. The majority of commonly occurring waterborne pathogens in the United States are linked to fecal sources on land. Less ground infiltration near Miller Creek and its wetlands will result in an increased opportunity for pathogens to reach Miller Creek, the St. Louis River, and Lake Superior. There is the potential for increased water quality impairment and the risk of human exposure.[14] Currently, **Miller Creek has four water quality impairments,** two of which have approved studies (total maximum daily loads (TDMLs)). *E. coli* bacteria is one of them, approved by the EPA in 2020.[15] [EXHIBIT 4, pg. 21] Also, in an article by John Myers of the Duluth News-Tribune, "Miller Creek has *E. coli*, too, but also faces compounded problems from too much chloride, or road salt, too warm of water and a lack of invertebrates that make up the base of the food chain for trout."[16]

[12] Gross, Jenny. January 2022. *Road salt works. But it's also bad for the environment.* [online]. Available from: https://www.nytimes.com/2022/01/07/climate/road-salt-water-supply.html [Accessed 27 Feb 2023].

[13] Environmental Protection Agency. Updated February 8, 2023. *Winter is coming! And with it, tons of salt on our roads*. [online]. Available from: https://www.epa.gov/snep/winter-coming-and-it-tons-salt-our-roads [Accessed 28 Feb 2023].

[14] Environmental Protection Agency. Updated April 14, 2022. *Water Quality Topics: Pathogens*. [online]. Available from: https://www.epa.gov/wqclr/water-quality-topics-pathogens [Accessed 27 Feb 2023].

[15] MPCA. October 2020. *Duluth Urban Area Streams Total Maximum Daily Load.* [online]. Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-11e.pdf [Accessed 27 Feb, 2023].

[16] Meyers, John. *Duluth streams hard-hit by development*. Duluth News-Tribune, March 19, 2018.

iii. **Sediment Pollution** - Sediment moves from one place to another through the process of erosion. Similar to green spaces, sediment absorbs microorganisms except it's on the move! Using *E. coli* as an example, pathogens can be transported downstream in sediment. They can survive for up to several months in a sediment reservoir, presenting the risk of re-suspension in the waterway.[17]

Entering pollutants into wetlands and Miller Creek is a violation of the Clean Water Act's objective to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

2. The Importance of Wetland and Shoreland Buffers to Remove Pollutants

[Exhibit 6] When it comes to large developments, the larger the buffer, the better the effectiveness of removing sediments, nutrients, bacteria, and other pollutants from surface water runoff. However, the developer's proposal does not have the required restoration of the natural buffer to the extent feasible, per 50-18.1 D (Duluth's UDC code). In addition, since a linear measurement of 300 feet crosses the impervious surface of Sundby Road, even *less* vegetative buffer lies within that distance. In other words, there are no plans to remove Sundby Road to increase vegetative buffer. To retain wetland-dependent wildlife in important wildlife areas, buffers need to retain plant structure hundreds of feet beyond the wetland.[18] Again, this is not in the developer's proposal.

Per City of Duluth rules, no greater than 30% impervious areas within 300 feet of Miller Creek are allowed.[19] Furthermore, per Duluth's zoning regulations, land located within 300' from a river or stream is subject to shoreland regulations. Note that [Exhibit 6.1] illustrates Miller Creek's shoreland area as cutting the proposed development area of 6 acres in half. See also [Exhibit 6.2], the Shoreland Overlay Map showing the 300' required buffer around Miller Creek.

> ***"The proposed development may be too large for the site, given the existing environmental constraints (wetlands). The proposal doesn't provide an adequate naturally vegetated buffer between the project and the adjacent wetlands, based on the figures in the Staff Report."***[20]

---

[17] Environmental Protection Agency. Updated April 14, 2022. *Water Quality Topics: Pathogens*. [online]. Available from: https://www.epa.gov/wqclr/water-quality-topics-pathogens [Accessed 27 Feb 2023].

[18] https://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Wetland_Buffers_Use_and_Effectiveness.pdf [Accessed 27 Feb 2023].

[19] Environmental Troubleshooters, Inc., Wetland Delineation Report, Sundby Road, Duluth, MN. September 2008.

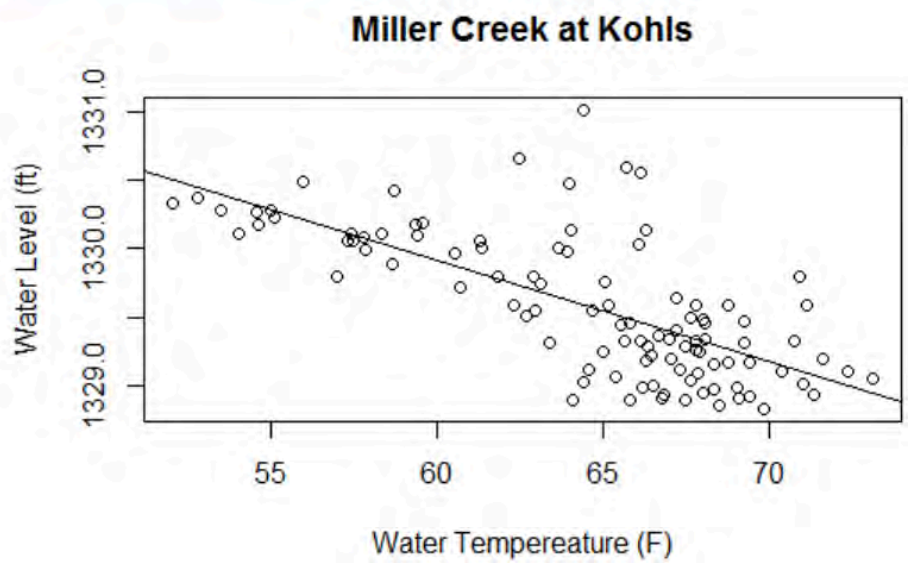
[20] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022.

3. An increase to the stream temperature of Miller Creek

Another water quality impairment of Miller Creek, in addition to *E. coli,* is excessive stream temperature.[21] How will the development impact stream temperature?

[Exhibit 7] Consider the impacts to the area around Kohl's Department Store in Duluth, of which there is ample data indicating a warming Miller Creek. Since this development would be adjacent to Kohl's, warming temperatures will be compounded. The strongest correlations occur during low flow periods, resulting in higher stream temperatures. Wetlands nearest the entrance may become drier, resulting in lower creek flow which correlates to increased temperatures.[22]

Figure 6: Water temperatures versus water levels at Kohl's 2016 (Labuz 2017).



The developer will be removing well over 100 trees and wetland vegetation from undeveloped, mostly forested land, which will contribute to the urban heat island (UHI) that already exists in this heavily-developed commercial area. For example, low levels of riparian shading from upstream of Kohl's to Miller Hill Mall led to much of the current temperature impairments of Miller Creek.[23] The increase in atmospheric heat transfer due to reduced shading, especially from the impacted wetland upstream of Kohl's down to Miller Hill Mall, already has caused maximum daily stream temperatures to increase

[21] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022. Also, MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023].

[22] MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023]. Estabrooks, Tom. Email to the author. 3 Nov. 2022.

[23] Herb, William R. et al. *Stream Temperature Modeling of Miller Creek, Duluth, Minnesota.* University of Minnesota, St. Anthony Falls Laboratory. October 2009, pgs. 5, 6. [online]. Available from: https://conservancy.umn.edu/bitstream/handle/11299/117637/pr535.pdf?sequence=1&isAllowed=y [Accessed 28 Feb 2023].

by up to one degree Celsius.[24] Adding this large hotel would influence the UHI and the health of Miller Creek because when warm water from the UHI ends up flowing into the stream, it will stress the native species that have adapted to life in a cooler aquatic environment.[25] A warming planet due to climate change will only exacerbate the issue.

Currently, extensive wetlands in the upper portion of the watershed are believed to supply much of the hydrologic storage for the watershed.[26] [Exhibit 7.1] "There is a possibility that the development could alter the site hydrology by cutting-off surface and subsurface drainage to the wetlands located between the development and Sundby Road. The stormwater discharge directed to some of the wetlands may replace some of that drainage, but volumes, timing, and duration of the stormwater discharges may alter wetland vegetation and type."[27]

In a study conducted by the Minnesota Pollution Control Agency on Miller Creek, "Elevated stream temperatures are believed to also be negatively affecting the fish and aquatic insect communities."[28] Miller Creek is a naturally-reproducing, brook trout stream. The study goes on to say, "Improvement efforts should be focused on the lower flow conditions, and especially within the stream segment from Haines Road and U.S. Highway 53 to below Miller Hill Mall, to have the greatest temperature mitigation impact."

Restoration began in 2022 to address the aquatic life impairment of Miller Creek behind Kohl's. The primary purpose of the project was to restore the hydrologic and ecologic functions with the goal of reducing stream temperatures and improving aquatic habitat. [Exhibits 8, 9][29]

---

[24] Herb, William R. et al. *Stream Temperature Modeling of Miller Creek, Duluth, Minnesota.* University of Minnesota, St. Anthony Falls Laboratory. October 2009, pg. 60. [online]. Available from: https://conservancy.umn.edu/bitstream/handle/11299/117637/pr535.pdf?sequence=1&isAllowed=y [Accessed 28 Feb 2023].

[25] National Geographic. *Urban Heat Island.* Available from: https://education.nationalgeographic.org/resource/urban-heat-island/ [Accessed 28 Feb 2023].

[26] Herb, William R. et al. *Stream Temperature Modeling of Miller Creek, Duluth, Minnesota.* University of Minnesota, St. Anthony Falls Laboratory. October 2009, pg. 4. [online]. Available from: https://conservancy.umn.edu/bitstream/handle/11299/117637/pr535.pdf?sequence=1&isAllowed=y [Accessed 28 Feb 2023].

[27] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022.

[28] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022. Email to the author. 3 Nov. 2022. Also MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023].

[29] South St. Louis Soil and Water Conservation District, Miller Creek Channel and Floodplain Restoration Project. [online]. Available from: https://www.southstlouisswcd.org/wp-content/uploads/2022/03/Miller-Creek-Channel-and-Floodplain-Restoration-Project-EAW.pdf [Accessed 28 Feb 2023].

"Wetlands provide an important role in Miller Creek through supplying the baseflow to the stream. The rapid recession in the storm hydrographs points to channel storage and surface storage in wetlands rather than in aquifers as the source of water during low flow periods."[30]

"The wetlands in the upper reaches of Miller Creek therefore need to be protected because they play a key role in the hydrology during low flow periods (Erickson et al. 2010)."[31]

4. Unacceptable Query Timeline for the MN Natural Heritage Information System (NHIS)

The Natural Heritage Information System provides information on Minnesota's rare plants, animals, native plant communities and other rare features. Its purpose is to foster better understanding and conservation of these features. Due to the expediency of the development project, ample time has not been allowed to determine the presence of any rare species or other significant natural features in this area.

[Exhibit 10]. In 1994, floating marsh-marigold (*Caltha natans*), a state-listed endangered plant, was documented by NHIS in a shrub swamp and wet meadow along Miller Creek nearby Kohl's in the same general area as the proposed development (within a 1-mile radius).

The best time to search for floating marsh-marigold is from May into September, when flowers or leaves are present.[32] The hotel application was filed early September, 2022. Two appeals against the proposal were heard in December, 2022. Project planning should take into account that botanical surveys need to be conducted during the appropriate time of the year. Since construction is scheduled to begin in the Spring of 2023, an acceptable timeline for an NHIS review is out of reach.

An EAW would address whether the proposed project has the potential to adversely affect the above rare species or any others in the area, and, if so, any avoidance, minimization, or other mitigation measures that will be implemented.

---

[30] MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* Pg. 17. [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023].

[31] MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* Pg. 17. [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023].

[32] South St. Louis Soil and Water Conservation District, Miller Creek Channel and Floodplain Restoration Project. [online]. Available from: https://www.southstlouisswcd.org/wp-content/uploads/2022/03/Miller-Creek-Channel-and-Floodplain-Restoration-Project-EAW.pdf [Accessed 28 Feb 2023].

Conclusion

The purpose of an EAW is to provide information about a project that may have the potential for significant environmental effects. If an EAW was required to *improve* the conditions of Miller Creek near Kohl's approximately 200 feet away from the development site [Exhibit 12], why wouldn't an EAW be required to study the *detrimental impacts* of a large-scale hotel on Miller Creek and its wetlands?[33]

The construction of this hotel would negatively impact the health of Miller Creek and its adjacent wetlands, a violation of "Waters of the United States" under the Clean Water Act (CWA) and the Minnesota Wetland Conservation Act (WCA).

Increases to impervious areas adjacent to wetlands and Miller Creek will add pollutants to the water, increase the temperature of Miller Creek and decrease the quality of Duluth's water. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Minnesota's WCA is designed to achieve no-net-loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands.

Violations exceeding the maximum allowable impervious area in proximity to Miller Creek, in addition to the City directly impacting wetlands for a sidewalk extension, are more indicators this development's location is not being adequately regulated.

On behalf of the Duluth Heights neighborhood and petitioners, the aforementioned arguments provide ample criteria to warrant the implementation of an EAW prior to construction of the hotel at Sundby Rd. and W. Page St., in Duluth, Minnesota.

"… once a green space is developed, that conversion is permanent and constitutes a loss to the watershed, regardless of the mitigating measures put in place through zoning and permitting. So, while efforts to restore the stream are ongoing, so are the impacts."[34]

[Exhibit 13] Source materials for inclusion.

Petitioners' Representative,

Becca Mulenburg
1649 W Page St., Duluth, MN 55811 • email: beccamulenburg@yahoo.com • 218-380-7349 (c)

[33] Miller Creek Channel and Floodplain Restoration Project EAW. [online]. Available from: https://www.southstlouisswcd.org/wp-content/uploads/2022/03/Miller-Creek-Channel-and-Floodplain-Restoration-Project-EAW.pdf [Accessed 2 March 2023.]

[34] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022.

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 22-143	**Contact**	Chris Lee, clee@duluthmn.gov	
Type	MU-C Planning Review	**Planning Commission Date**		September 13, 2022
Deadline for Action	**Application Date**	September 7, 2022	**60 Days**	September 19, 2022
	Date Extension Letter Mailed	September 7, 2022	**120 Days**	November 18, 2022
Location of Subject	Sundby Road and W Page Street			
Applicant	Kinseth Hotel Corporation	**Contact**	Aaron Mailey	
Agent	Northland Consulting Engineers	**Contact**	David Bolf	
Legal Description	Parcel ID Number 010-2710-04594			
Site Visit Date	September 1, 2022	**Sign Notice Date**		August 30, 2022
Neighbor Letter Date	August 31, 2022	**Number of Letters Sent**		15

Proposal

The applicant is proposing to construct a 4-story hotel with 112 parking stalls.

Staff Recommendation

Staff is recommending that planning commission approve the planning review.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	MU-C	Undeveloped	Central Business Secondary
North	MU-C	Undeveloped	Central Business Secondary
South	MU-C	Undeveloped	Central Business Secondary
East	MU-C	Undeveloped	Low Density Residential
West	RR-1	Commercial - Retail	Open Space

Summary of Code Requirements

50-15.3.E MU-C District – Planning review by the Planning Commission is required for most development and redevelopment. Development Standards:

1. The location, size and number of curb cuts shall be designed to minimize traffic congestion or hazard in the area. Any traffic control improvements required as a result of the proposal such as traffic signals, turning lanes, medians, signage and other types of improvements necessary to accommodate traffic flow to and from the proposed project shall be paid for by the property owner. Any additional right-of-way or easements needed shall be provided by the property owner at no cost to the city;
2. Any necessary public easements over the subject property shall be dedicated, and any necessary improvements within such easements or other easements adjacent to the subject property shall be made.

50-18.1 Shoreland, Flood Plains, Wetlands, Stormwater.
50-23 Connectivity and Circulation – Focuses on pedestrian and bicycle accommodations.
50-24 Parking and Loading – Addresses required parking spaces, loading docks, and snow storage.
50-25 Landscaping and Tree Preservation – Landscaping requirements and tree preservation
50-26 Screening, Walls, and Fences – Screening of equipment, loading areas, etc., plus fences & retaining walls.
50-29 Sustainability Standards – Sustainability point system for new development.
50-30 Design Standards – Building standards for multi-family, commercial, institutional, and industrial buildings.
50-31 Exterior Lighting – Directs the minimum and maximum illumination values and lighting fixtures for a site.

50-37.11 Planning Review – Planning Commission shall approve the Planning Review or approve it with modifications, if it is determined that the application complies with all applicable provisions of this Chapter.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principles
Governing Principle #4 – Support economic growth sectors, including tourism.

Future Land Use
Central Business Secondary: An area adjacent to and supporting the central business primary area or a stand -alone area providing a similar mix of destination land uses but at a lower intensity than the primary CB area. Includes mixed regional and neighborhood retail, employment centers, public spaces, medium density residential, and public parking facilities.

Review and Discussion Items

Staff finds:

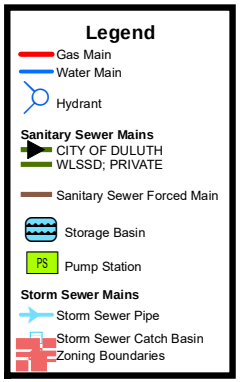
1) The applicant is proposing to construct a 4 story, 51' tall hotel. The applicant will be required to verify the maximum height of the structure at the time of building permit application.
2) 50-15.3 (MU-C District) –Not Applicable: The applicant is not proposing any public easements.
3) 50-18.1.B (Wetlands) – Wetland delineation performed June 2022 show that wetlands are present on site, but will not be impacted.
4) 50-18.1.E (Stormwater Management) –Storm water will be routed to two basins that will discharge to adjacent wetlands.
5) 50-23 (Connectivity) – Not applicable as Sundby Road does not have sidewalks nor is it shown on any bikeways, trail, or pedestrian plan.
6) 50-24 (Parking) – The plan shows 112 parking stalls which is the maximum (2 spaces per 3 guest rooms): 53 in the front, 58 in the rear and side.
7) 50-25 (Landscaping) – The landscape plan shows 21 trees, exceeding the required 19 for parking lot coverage. The required frontage landscaping is met with 33 trees and 149 shrubs. The applicant will must provide details of interior parking lot landscaping that meets the UDC requirements in 50-25.4.B
8) 50-26 (Screening) – The applicant proposes UDC compliant trash enclosure in the north corner of the parking lot. Any ground mounted or roof mounted mechanicals are required to be screened.
9) 50-27 (Signs) – None shown, but can be obtained via a separate permit.
10) 50-29 (Sustainability) – This development will be required to obtain a minimum of 4 sustainability points.
11) 50-30 (Design Standards) – The proposed plans meet requirements.
12) 50-31 (Exterior Lighting) – The applicant has submitted a photometric plan that indicates UDC compliant lighting.
13) No comments have been received from City or other agencies or the general public.
14) Per UDC 50-37.1.N, an approved Planning Review will expire if the project or activity authorized is not begun within one year, which may be extended for one additional year at the discretion of the Land Use Supervisor

Staff Recommendation

Based on the above findings, Staff recommends that Planning Commission the Planning Review with the following conditions:

1.) Applicant shall construct and maintain the project as identified in the attached exhibits.
2.) Applicant shall verify that the height meets the maximum allowed in the MU-C zone district.
3.) Applicant shall show on the landscaping plans that interior parking lot landscaping requirement is meet prior to staff approval of the building permit.
4.) Applicant shall submit details of any mechanical screening prior to approval of the building permit.
5.) Applicant shall submit plans that indicate a minimum of 4 sustainability points are achieved.
6.) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission approval; however, no such administrative approval shall constitute a variance from the provisions of Chapter 50.

PL22-143
CUP, Plan Review
Sundby Road



271004570
224000690
1602
OSAGE AVE
224000610
325700050
271004575
224000710
MU-C
(Mixed Use
Commercial)
325700012
1516
OSAGE AVE
224000600
271004594
325700060
Sundby Road
Osage Ave
224000730
RR-1 (Rural
Residential 1)
271004597
325700010
2115 MILLER
TRUNK HWY
1504
OSAGE AVE
2", MDPE
224000740
271004592
271004590
271004593
224000750
325700011
325700062
1745 W
PAGE ST
Maple Grove Road
2", MDPE
3", MDPE
W Page St
3", MDPE
271004640
1832 MAPLE
GROVE RD
271004654
271004653
0 65 130 260 390 Feet

Aerial photography flown 2019

Prepared by: City of Duluth Planning & Economic Development, October 5, 2021, Source: City of Duluth

OSAGE STREET

66'

33'

33'

SITE

RIGHT OF WAY TO BE DEDICATED TO CITY OF DULUTH

1352.0

1350.0

SEDIMENT REMOVAL STRUCTURE

1353.0

FLOW

FLOW

FLOW

DRAINAGE CONTROL STRUCTURE

NEW BUILDING
FFE=1351.00

TRASH ENCLOSURE
SEE ARCH

1352.0

1349.0

POND ELEV=1345.00

1350.5

SEDIMENT REMOVAL STRUCTURE

1350.0

1348.5

WEST PAGE STREET

SITE

SITE

FM

FM

FM

FM

VAULT
EL=1343.66
INFO

2+00

1+00

3+00

4+00

MAPLE GROVE ROAD

5+00

SUNDBY ROAD

6+00

7+00

8+00

66' ROW

EXTEND URBAN SECTION OF SUNDBY ROAD

TOPOGRAPHIC SURVEY PROVIDED BY
ALTA LAND SURVEYING COMPANY, 2018

N

E

S

W

0' 30' 60'

Northland
Consulting Engineers L.L.P.
Structural, Civil and Forensic Engineering Services
www.nce-engineers.com
Voice: (218)727-5995
Fax: (218)727-7779

KINSETH HOTEL CORPORATION
SITE DEVELOPMENT
SE 1/4 OF NE 1/4 SEC 18 T50N R14W

revision

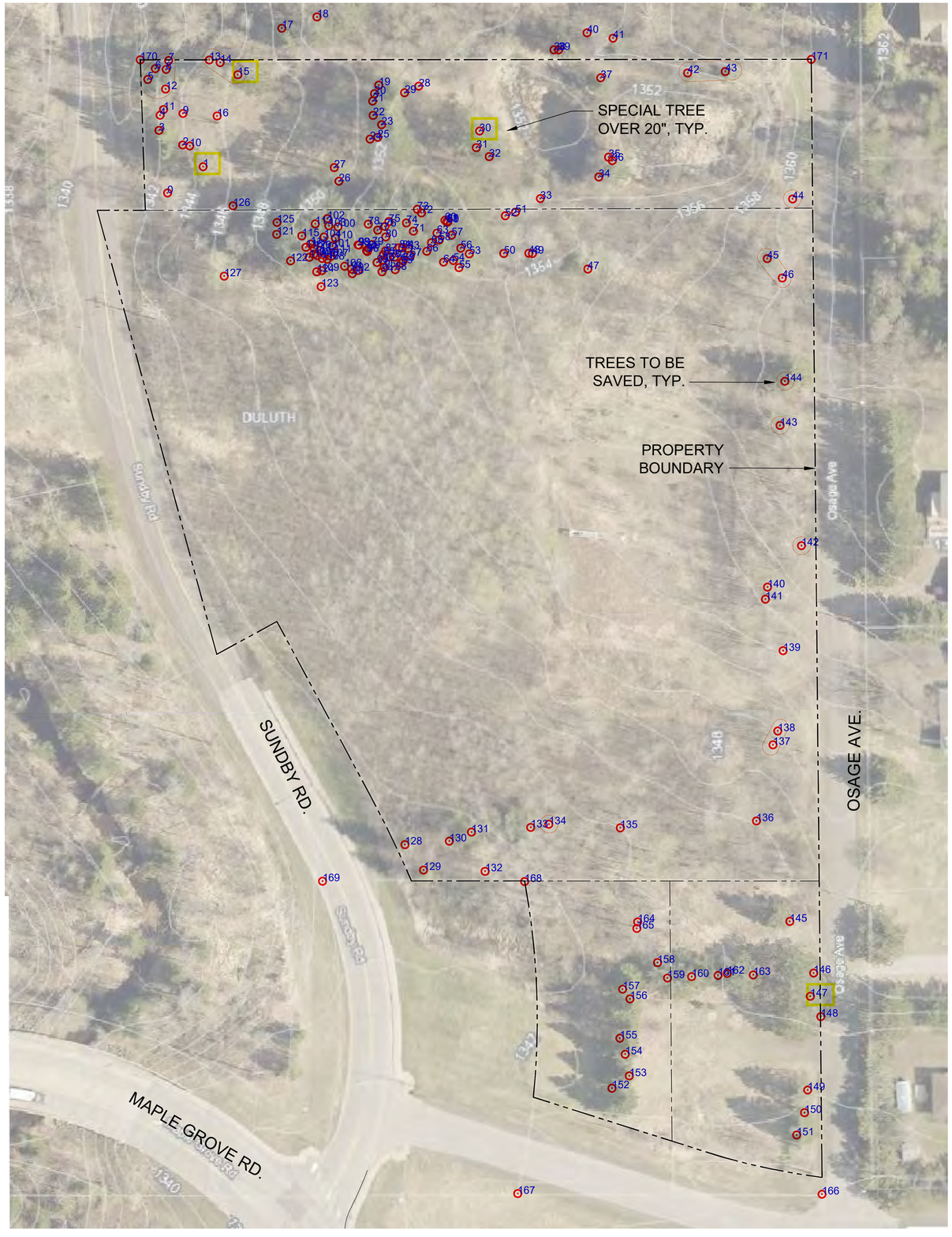
Proj: 21-660
Date: 08/04/22
Drawn: JDO
Checked: DGB

SD SITE PLAN

Sheet Title

Sheet Number

1 OF 1



Pt ID	Species	Diameter	Comment	UDC Classification
0	White Birch	10.75	Removed	Tree of Interest
1	White Spruce	22.00	Removed	Special Tree
2	Balsam Fir	14.25	Removed	Tree of Interest
3	Balsam Fir	10.50	Removed	Tree of Interest
4	White Spruce	17.50	Removed	Special Tree
5	Balsam Fir	13.75	SAVED	Tree of Interest
6	White Spruce	13.50	SAVED	Special Tree
7	White Spruce	10.00	SAVED	Special Tree
8	White Spruce	12.50	SAVED	Special Tree
9	Silver Maple	16.25	Removed	Tree of Interest
10	Silver Maple	29.50	Removed	Tree of Interest
11	Silver Maple	11.25	Removed	Tree of Interest
12	Silver Maple	13.00	SAVED	Tree of Interest
13	White Spruce	15.25	SAVED	Special Tree
14	White Spruce	12.25	SAVED	Special Tree
15	Red Pine	23.25	SAVED	Special Tree
16	White Birch	14.00	Removed	Tree of Interest
17	Balsam Fir	13.50	*Off Property*	Tree of Interest
18	Red Pine	17.50	*Off Property*	Special Tree
19	White Spruce	16.25	Removed	Special Tree
20	White Spruce	12.75	Removed	Special Tree
21	White Spruce	12.50	Removed	Special Tree
22	White Spruce	15.75	Removed	Special Tree
23	Red Pine	15.75	Removed	Special Tree
24	Red Pine	15.50	Removed	Special Tree
25	Red Pine	18.25	Removed	Special Tree
26	Red Pine	19.00	Removed	Special Tree
27	Red Pine	17.50	Removed	Special Tree
28	Sugar Maple	15.25	Removed	Special Tree
29	Red Oak	7.00	Removed	Tree of Interest
30	Red Pine	22.50	Removed	Special Tree
31	Red Pine	19.75	Removed	Special Tree
32	Jack Pine	18.50	Removed	Tree of Interest
33	White Spruce	7.75	Removed	Tree of Interest
34	Red Pine	12.75	Wetland Tree	Special Tree
35	Tamarack	7.00	Wetland Tree	Tree of Interest
36	Jack Pine	8.50	Wetland Tree	Tree of Interest
37	White Spruce	8.50	Wetland Tree	Special Tree
38	White Spruce	13.00	*Off Property*	Special Tree
39	White Spruce	9.75	*Off Property*	Special Tree
40	White Birch	12.00	*Off Property*	Tree of Interest
41	White Spruce	12.75	*Off Property*	Special Tree
42	White Spruce	7.75	SAVED	Tree of Interest
43	White Spruce	7.50	SAVED	Tree of Interest
44	Tamarack	9.25	SAVED	Tree of Interest
45	White Birch	10.50	SAVED	Tree of Interest
46	Green Ash	11.25	SAVED	Tree of Interest
47	Quaking Aspen	16.00	Removed	Tree of Interest
48	Paper Birch	11.25	Removed	Tree of Interest
49	Quaking Aspen	17.00	Removed	Tree of Interest
50	Quaking Aspen	13.50	Removed	Tree of Interest
51	Quaking Aspen	10.25	Removed	Tree of Interest
52	Quaking Aspen	11.50	Removed	Tree of Interest
53	Red Pine	14.50	Removed	Special Tree
54	Red Pine	12.50	Removed	Special Tree
55	Red Pine	10.50	Removed	Special Tree
56	Red Pine	14.00	Removed	Special Tree
57	Red Pine	10.50	Removed	Special Tree
58	Red Pine	10.00	Removed	Special Tree
59	Red Pine	11.50	Removed	Special Tree
60	Red Pine	13.75	Removed	Special Tree
61	Red Pine	11.75	Removed	Special Tree
62	Red Pine	10.50	Removed	Special Tree
63	Red Pine	8.25	Removed	Special Tree
64	Red Pine	14.00	Removed	Special Tree
65	Red Pine	11.75	Removed	Special Tree
66	Red Pine	6.50	Removed	Tree of Interest
67	Red Pine	10.25	Removed	Special Tree
68	Red Pine	15.00	Removed	Special Tree
69	Red Pine	13.75	Removed	Special Tree
70	Red Pine	10.00	Removed	Special Tree
71	Red Pine	12.00	Removed	Special Tree
72	Red Pine	13.00	Removed	Special Tree
73	Red Pine	12.75	Removed	Special Tree
74	Red Pine	9.25	Removed	Special Tree
75	White Birch	13.00	Removed	Tree of Interest
76	Red Pine	12.25	Removed	Special Tree
77	Red Pine	10.50	Removed	Special Tree
78	Red Pine	13.25	Removed	Special Tree
79	Red Pine	9.50	Removed	Special Tree
80	Red Pine	7.25	Removed	Tree of Interest
81	Red Pine	7.75	Removed	Tree of Interest
82	Red Pine	8.00	Removed	Special Tree
83	Red Pine	8.00	Removed	Special Tree
84	Red Pine	8.75	Removed	Special Tree
85	Red Pine	9.25	Removed	Special Tree

Pt ID	Species	Diameter	Removed	UDC Classification
86	Red Pine	10.75	Removed	Special Tree
87	Red Pine	10.25	Removed	Special Tree
88	Red Pine	14.25	Removed	Special Tree
89	Red Pine	8.25	Removed	Special Tree
90	Red Pine	15.00	Removed	Special Tree
91	Red Pine	6.75	Removed	Special Tree
92	Red Pine	14.00	Removed	Special Tree
93	Red Pine	8.00	Removed	Special Tree
94	Red Pine	6.50	Removed	Tree of Interest
95	Red Pine	9.50	Removed	Special Tree
96	Red Pine	8.00	Removed	Special Tree
97	Red Pine	10.50	Removed	Special Tree
98	Red Pine	10.50	Removed	Special Tree
99	Red Pine	8.75	Removed	Special Tree
100	Red Pine	8.25	Removed	Special Tree
101	Red Pine	10.50	Removed	Special Tree
102	Red Pine	11.00	Removed	Special Tree
103	Red Pine	11.50	Removed	Special Tree
104	Red Pine	10.00	Removed	Special Tree
105	Red Pine	8.75	Removed	Special Tree
106	Red Pine	7.50	Removed	Tree of Interest
107	Red Pine	8.50	Removed	Special Tree
108	Red Pine	10.50	Removed	Special Tree
109	Red Pine	6.25	Removed	Tree of Interest
110	Red Pine	14.20	Removed	Special Tree
111	Red Pine	7.50	Removed	Tree of Interest
112	Red Pine	10.00	Removed	Special Tree
113	Red Pine	14.00	Removed	Special Tree
114	Red Pine	11.75	Removed	Special Tree
115	Red Pine	14.50	Removed	Special Tree
116	Red Pine	9.75	Removed	Special Tree
117	Red Pine	8.50	Removed	Special Tree
118	Red Pine	6.50	Removed	Tree of Interest
119	Red Pine	8.75	Removed	Special Tree
120	Red Pine	6.00	Removed	Tree of Interest
121	Red Pine	14.00	Removed	Special Tree
122	Red Pine	16.00	Removed	Special Tree
123	Red Pine	16.00	Removed	Special Tree
124	Red Pine	14.75	Removed	Special Tree
125	Balsam Fir	10.50	Removed	Tree of Interest
126	White Spruce	9.25	Removed	Special Tree
127	Quaking Aspen	14.75	Removed	Tree of Interest
128	White Spruce	12.50	Wetland Tree	Special Tree
129	White Spruce	9.50	Wetland Tree	Special Tree
130	White Spruce	8.25	Wetland Tree	Special Tree
131	White Spruce	11.50	Wetland Tree	Special Tree
132	Quaking Aspen	10.25	Wetland Tree	Tree of Interest
133	Quaking Aspen	10.25	Wetland Tree	Tree of Interest
134	Quaking Aspen	11.00	SAVED	Tree of Interest
135	Quaking Aspen	11.50	Wetland Tree	Tree of Interest
136	Quaking Aspen	12.25	Wetland Tree	Tree of Interest
137	Quaking Aspen	11.25	SAVED	Tree of Interest
138	Quaking Aspen	10.75	SAVED	Tree of Interest
139	Quaking Aspen	10.00	Removed	Tree of Interest
140	Quaking Aspen	10.75	Removed	Tree of Interest
141	Quaking Aspen	11.00	Removed	Tree of Interest
142	Quaking Aspen	11.75	SAVED	Tree of Interest
143	White Spruce	9.50	SAVED	Special Tree
144	White Spruce	17.75	SAVED	Special Tree
145	White Spruce	16.25	Out of Development Area	Special Tree
146	Red Pine	18.50	Out of Development Area	Special Tree
147	Red Pine	20.00	Out of Development Area	Special Tree
148	Red Pine	19.50	Out of Development Area	Special Tree
149	White Spruce	19.50	Out of Development Area	Special Tree
150	White Spruce	15.25	Out of Development Area	Special Tree
151	Balsam Fir	12.50	Out of Development Area	Tree of Interest
152	White Spruce	17.50	Out of Development Area	Special Tree
153	White Spruce	18.00	Out of Development Area	Special Tree
154	White Spruce	16.00	Out of Development Area	Special Tree
155	White Spruce	14.25	Out of Development Area	Special Tree
156	White Spruce	19.50	Out of Development Area	Special Tree
157	White Spruce	16.75	Out of Development Area	Special Tree
158	Red Pine	13.25	Out of Development Area	Special Tree
159	Red Pine	17.75	Out of Development Area	Special Tree
160	White Spruce	10.50	Out of Development Area	Special Tree
161	White Spruce	9.50	Out of Development Area	Special Tree
162	White Spruce	10.50	Out of Development Area	Special Tree
163	Red Pine	17.00	Out of Development Area	Special Tree
164	Balsam Poplar	11.50	Out of Development Area	Tree of Interest
165	Balsam Poplar	14.50	Out of Development Area	Tree of Interest
166		0.00	*Property Corner*	
167		0.00	*Property Corner*	
168		0.00	*Property Corner*	
169		0.00	*Property Corner*	
170		0.00	*Property Corner*	
171		0.00	*Property Corner*	

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

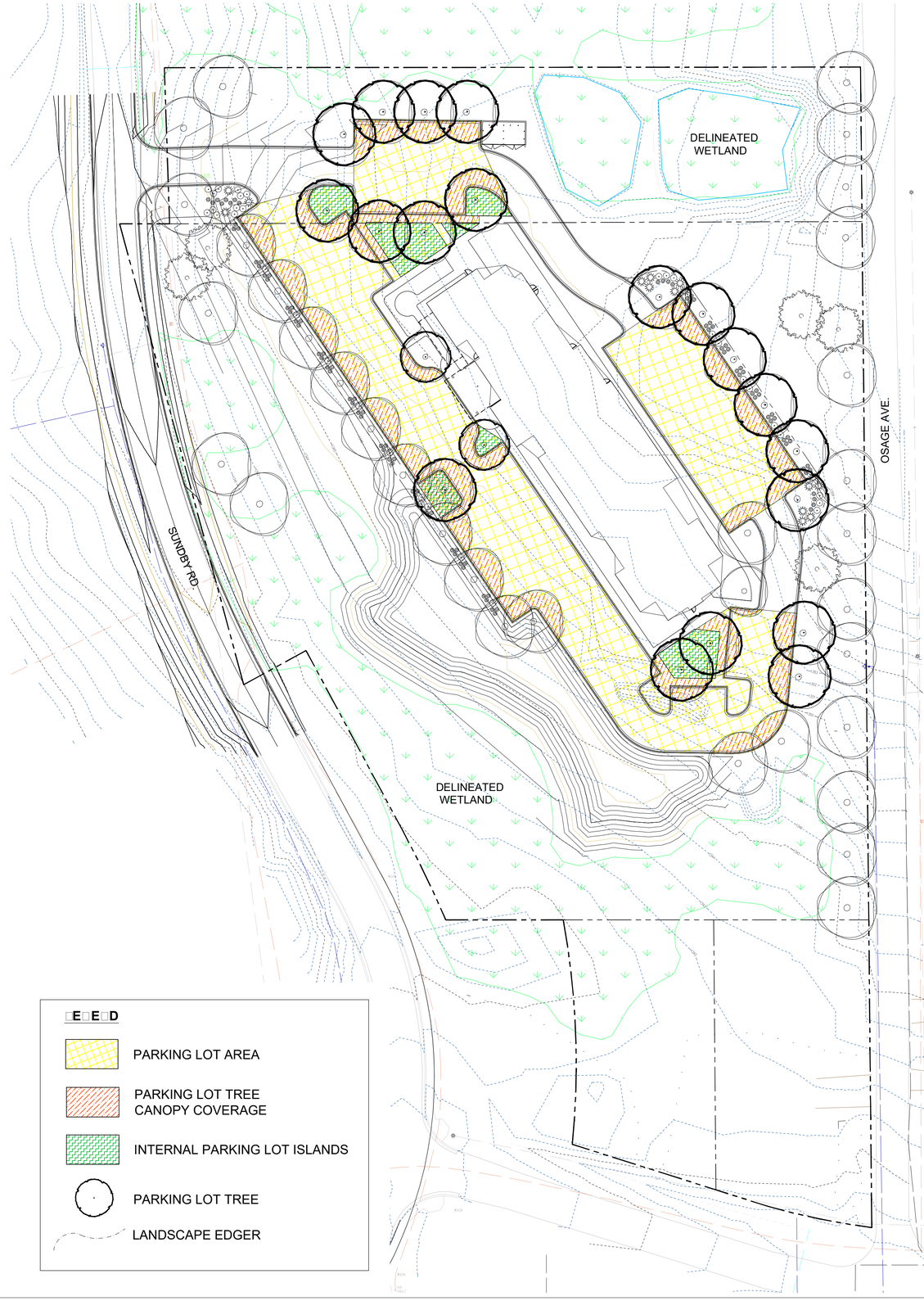
0 40' 80'
ONE INCH

Sheet Key

Sheet Title
TREE INVENTORY

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS
Project Number 22100
Sheet Number L-1.0

Aug 05, 2022 - 10:29am
P:\22100 - Sundby Road Hotel\Set\BS - 22100 - Sundby Rd Hotel.dwg



UDC CALCULATIONS

PARKING LOT SIZE:	**45,545 SF (112 SPACES)**
INTERIOR LANDSCAPING:	45,545 SF PARKING AREA INTERNAL ISLANDS REQUIRED: 6,832 SF PROVIDED: 3,705 SF (8.1%) 1 TREE/300 SF INTERNAL LANDSCAPE AREA REQUIRED: 19 TREES PROVIDED: 21 TREES MINIMUM 30% TREE CANOPY REQUIRED REQUIRED: 13,664 SF PROVIDED: 14,014 SF
STREET FRONTAGE #1 LINEAR STREET FOOTAGE:	**SUNDBY RD.** 600 LF
TREES:	1 TREE/35 FT. LINEAR FRONTAGE REQUIRED: 17 TREES PROVIDED: 17 TREES
SHRUBS:	3 LARGE SHRUBS/25 FT. LINEAR FRONTAGE REQUIRED: 72 LARGE SHRUBS/GRASSES PROVIDED: 82 LARGE SHRUBS/GRASSES
STREET FRONTAGE #2 LINEAR STREET FOOTAGE:	**OSAGE AVE.** 550 LF
TREES:	1 TREE/35 FT. LINEAR FRONTAGE REQUIRED: 16 TREES PROVIDED: 16 TREES
SHRUBS:	3 LARGE SHRUBS/25 FT. LINEAR FRONTAGE REQUIRED: 66 LARGE SHRUBS/GRASSES PROVIDED: 67 LARGE SHRUBS/GRASSES
	ALL PLANT SELECTIONS WILL MEET UDC REQUIREMENTS ALL SHRUB PLANTING BEDS TO INCLUDE 3-4" SHREDDED HARDWOOD MULCH WITH LANDSCAPE FABRIC ALL DISTURBED AREAS NOT PLANTED WITH SHRUBS/ TREES ARE TO BE SODDED OR PLANTED WITH NATIVE GRASSES; SEE PLANS FOR DETAIL.

LANDSCAPE KEY

	Common Name	Scientific Name	Size	Type	Quantity	Height	Width
TREES							
AM	Apollo Maple	Acer saccharum 'Barrett Cole'	2.5"	B&B		25'	10-15'
BL	Boulevard Linden	Tilia americana 'Boulevard'	2.5"	B&B		50-60'	25-30'
FFM	Fall Fiesta Maple	Acer saccharum 'Bailsta'	2.5"	B&B		50-75'	50'
JE	Jefferson Elm	Ulmus americana 'Jefferson'	2.5"	B&B		70'	50'
MSO	Majestic Skies Oak	Quercus ellipsoidalis 'Bailskies'	2.5"	B&B		60'	45'
NFM	Northern Flare Maple	Acer saccharum 'Sisseton'	2.5"	B&B		40-50'	30-40'
NP	Norway Pine	Pinus resinosa	6'	B&B		50-80'	30-40'
PE	Princeton Elm	Ulmus americana 'Princeton'	2.5"	B&B		60'	40'
SL	Sentry Linden	Tilia americana 'McKSentry'	2.5"	B&B		40-45'	25-30'
SWO	Swamp White Oak	Quercus bicolor	2.5"	B&B		50-60'	40-50'
WS	White Spruce	Picea glauca	6'	B&B		40-60'	15-20'
SHRUBS							
APS	Acrocona Pusch Spruce	Picea abies 'Acrocona Pusch'	#3	Container		2-3'	3-4'
BBH	Butterfly Bush Honeysuckle	Diervilla sessilifolia 'Butterfly'	#2	Container		3-5'	3-4'
DPB	Double Play Big Bang Spirea	Spiraea japonica 'Tracy'	#2	Container		2-3'	2-3'
LGJ	Lime Glow Juniper	Juniperus horizontalis 'Lime Glow'	#3	Container		18"	3-5'
ORNAMENTAL GRASSES							
ORG	Overdam Feather Reed Grass	Calamagrostis x acutiflora 'Overdam'	#1	Container		24-36"	18"
SSG	Shenandoah Red Switch Grass	Panicum virgatum 'Shenandoah'	#1	Container		36"	24"
TPD	Tara Prairie Dropseed	Sporobolus heterolepis 'Tara'	#1	Container		18-24"	12"

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, Suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

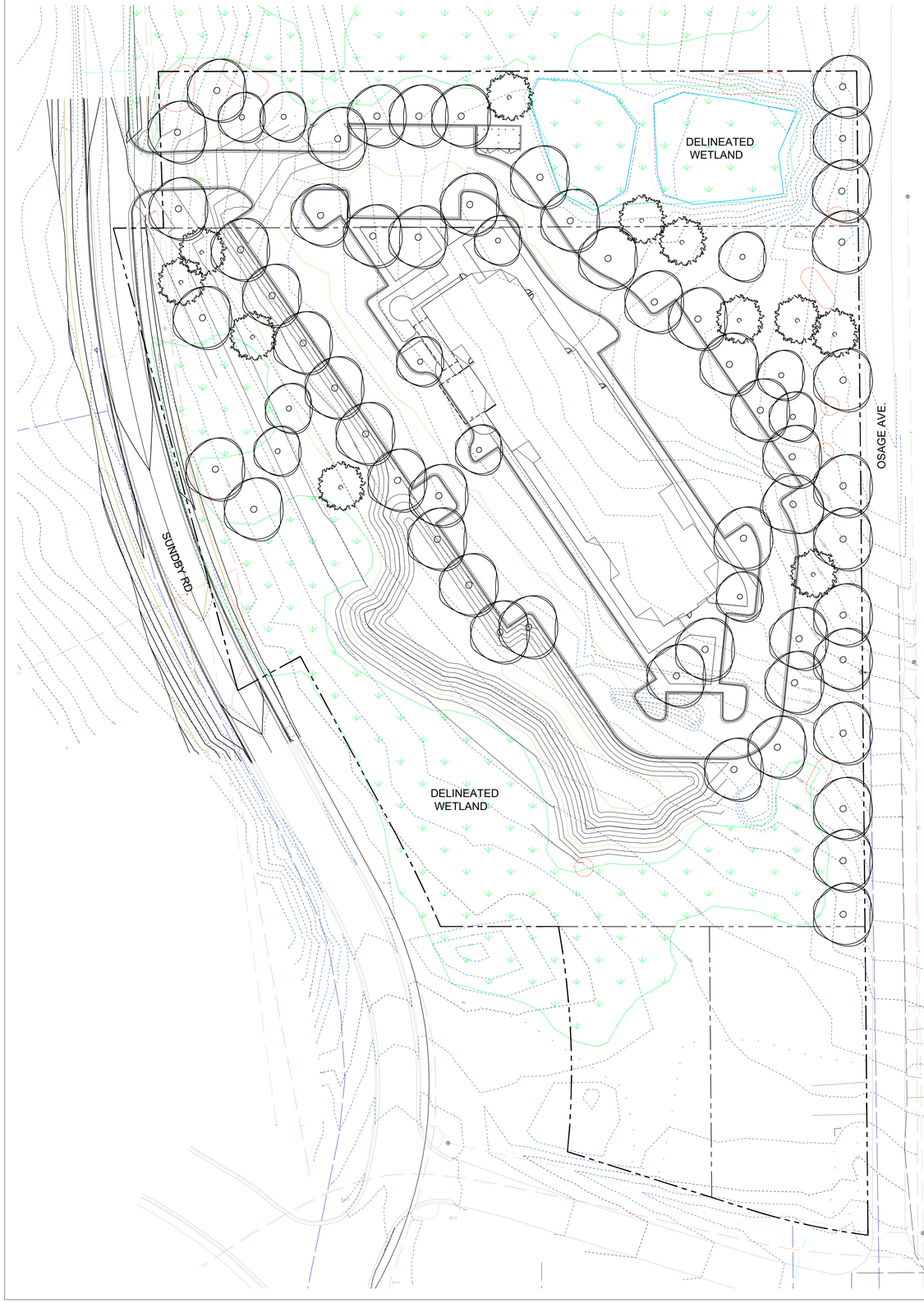
0 40' 80'
ONE INCH

Sheet Key

Sheet Title
UDC LANDSCAPE PLAN

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS
Project Number 22100
Sheet Number L-1.1

Aug 03, 2022 - 10:52am
P:\22100 - Sundby Road Hotel\Site\BP - 22100 - Sundby Rd Hotel.dwg



TREE PRESERVATION AND REPLACEMENT PLAN

TREE PRESERVATION CREDITS (50-25.6)			
DBH of Preserved Tree	**Quantity**	**# of Trees Credited**	**Total**
Over 12 in.	8	3	24
8 in. to 11.9 in.	9	2	18
5 in. to 7.9 in.	2	1	2
TOTAL TREE CREDITS		**44**	

TREES TO BE REMOVED

SPECIAL TREES

ID NO.	Species	DBH	UDC Designation
1	White Spruce	22.00	Special Tree
4	White Spruce	17.50	Special Tree
19	White Spruce	16.25	Special Tree
20	White Spruce	12.75	Special Tree
21	White Spruce	12.50	Special Tree
22	White Spruce	15.75	Special Tree
23	Red Pine	15.75	Special Tree
24	Red Pine	15.50	Special Tree
25	Red Pine	18.25	Special Tree
26	Red Pine	19.00	Special Tree
27	Red Pine	17.50	Special Tree
28	Sugar Maple	15.25	Special Tree
30	Red Pine	22.50	Special Tree
31	Red Pine	19.75	Special Tree
53	Red Pine	14.50	Special Tree
54	Red Pine	12.50	Special Tree
55	Red Pine	10.50	Special Tree
56	Red Pine	14.00	Special Tree
57	Red Pine	10.50	Special Tree
58	Red Pine	10.00	Special Tree
59	Red Pine	11.50	Special Tree
60	Red Pine	13.75	Special Tree
61	Red Pine	11.75	Special Tree
62	Red Pine	10.50	Special Tree
63	Red Pine	8.25	Special Tree
64	Red Pine	14.00	Special Tree
65	Red Pine	11.75	Special Tree
67	Red Pine	10.25	Special Tree
68	Red Pine	15.00	Special Tree
69	Red Pine	13.75	Special Tree
70	Red Pine	10.00	Special Tree
71	Red Pine	12.00	Special Tree
72	Red Pine	13.00	Special Tree
73	Red Pine	12.75	Special Tree
74	Red Pine	9.25	Special Tree
76	Red Pine	12.25	Special Tree
77	Red Pine	10.50	Special Tree
78	Red Pine	13.25	Special Tree
79	Red Pine	9.50	Special Tree
82	Red Pine	8.00	Special Tree
83	Red Pine	8.00	Special Tree
84	Red Pine	8.75	Special Tree
85	Red Pine	9.25	Special Tree
86	Red Pine	10.75	Special Tree
87	Red Pine	10.25	Special Tree
88	Red Pine	14.25	Special Tree
89	Red Pine	8.25	Special Tree
90	Red Pine	15.00	Special Tree
91	Red Pine	6.75	Special Tree
92	Red Pine	14.00	Special Tree
93	Red Pine	8.00	Special Tree
95	Red Pine	9.50	Special Tree
96	Red Pine	8.00	Special Tree
97	Red Pine	10.50	Special Tree
98	Red Pine	10.50	Special Tree
99	Red Pine	8.75	Special Tree
100	Red Pine	8.25	Special Tree
101	Red Pine	10.50	Special Tree
102	Red Pine	11.00	Special Tree
103	Red Pine	11.50	Special Tree
104	Red Pine	10.00	Special Tree
105	Red Pine	8.75	Special Tree
107	Red Pine	8.50	Special Tree
108	Red Pine	10.50	Special Tree
110	Red Pine	14.20	Special Tree
112	Red Pine	10.00	Special Tree
113	Red Pine	14.00	Special Tree
114	Red Pine	11.75	Special Tree
115	Red Pine	14.50	Special Tree
116	Red Pine	9.75	Special Tree
117	Red Pine	8.50	Special Tree
119	Red Pine	8.75	Special Tree
121	Red Pine	14.00	Special Tree
122	Red Pine	16.00	Special Tree
123	Red Pine	16.00	Special Tree
124	Red Pine	14.75	Special Tree
126	White Spruce	9.25	Special Tree
	Total DBH Removed	**944.2**	

TREES TO BE REMOVED

TREES OF INTEREST

ID NO.	Species	DBH	UDC Designation
0	White Birch	10.75	Tree of Interest
2	Balsam Fir	14.25	Tree of Interest
3	Balsam Fir	10.50	Tree of Interest
9	Silver Maple	16.25	Tree of Interest
10	Silver Maple	29.50	Tree of Interest
11	Silver Maple	11.25	Tree of Interest
16	White Birch	14.00	Tree of Interest
29	Red Oak	7.00	Tree of Interest
32	Jack Pine	18.50	Tree of Interest
33	White Spruce	7.75	Tree of Interest
47	Quaking Aspen	16.00	Tree of Interest
48	Paper Birch	11.25	Tree of Interest
49	Quaking Aspen	17.00	Tree of Interest
50	Quaking Aspen	13.50	Tree of Interest
51	Quaking Aspen	10.25	Tree of Interest
52	Quaking Aspen	11.50	Tree of Interest
66	Red Pine	6.50	Tree of Interest
75	White Birch	13.00	Tree of Interest
80	Red Pine	7.25	Tree of Interest
81	Red Pine	7.75	Tree of Interest
94	Red Pine	6.50	Tree of Interest
106	Red Pine	7.50	Tree of Interest
109	Red Pine	6.25	Tree of Interest
111	Red Pine	7.50	Tree of Interest
118	Red Pine	6.50	Tree of Interest
120	Red Pine	6.00	Tree of Interest
125	Balsam Fir	10.50	Tree of Interest
127	Quaking Aspen	14.75	Tree of Interest
139	Quaking Aspen	10.00	Tree of Interest
140	Quaking Aspen	10.75	Tree of Interest
141	Quaking Aspen	11.00	Tree of Interest
Removed		**351.0**	

DBH REPLACEMENT REQUIREMENTS (50-25.9)

Tree Type	# to be Removed	DBH to be Removed	% DBH to be Replaced	Replacement Requirement (in.)
Trees of Interest	31	351.0	20%	70.2
Special Trees	77	944.2	40%	377.7
TOTAL	*108*	*1295.2*	n/a	**447.9**

TREE REPLACEMENT CALCULATIONS: Trees to be Planted

IF REPLACING WITH:	Trees of Interest (1 in/ 1 in required)
Number of Trees	180
Caliper of Trees	2.5
TOTAL INCHES REPLACED	**450**
TOTAL INCHES REQUIRED	*447.9*

IF REPLACING WITH:	Special Trees (1 in/ 1.5 in required)
Number of Trees	120
Caliper of Trees	2.5
TOTAL INCHES REPLACED	**450**
TOTAL INCHES REQUIRED	*447.9*

TREE REPLACEMENT w/ TREE PRESERVATION CREDITS:

TOTAL TREE CREDITS=	**44**
SPECIAL TREES REQ'D=	120
TREES OF INTEREST REQ'D=	180

Per **UDC Section 50-25.6,** trees to be preserved will count towards the total number needed for replacement, up to 50%. With those factored in, the following are the final replacement numbers for both Special Trees and Trees of Interest:

SPECIAL TREES REQUIRED=	**76**
TREES OF INTEREST REQUIRED=	**136**

TREE REPLACEMENT NOTE:

REPLACEMENT TREE QUANTITY CAN BE REDUCED BY CONTRIBUTING CASH IN LIEU TO THE CITY TREE FUND. TREE QUANTITIES SHOWN ARE USING SPECIAL TREE SPECIES (USING OTHER SPECIES WOULD REQUIRE ADDITIONAL TREE PLANTINGS; SEE CHART 50-25.6).

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

0 40' 80'
ONE INCH

Sheet Key

Sheet Title
TREE REPLACEMENT PLAN

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS

Project Number 22100

Sheet Number L-1.2

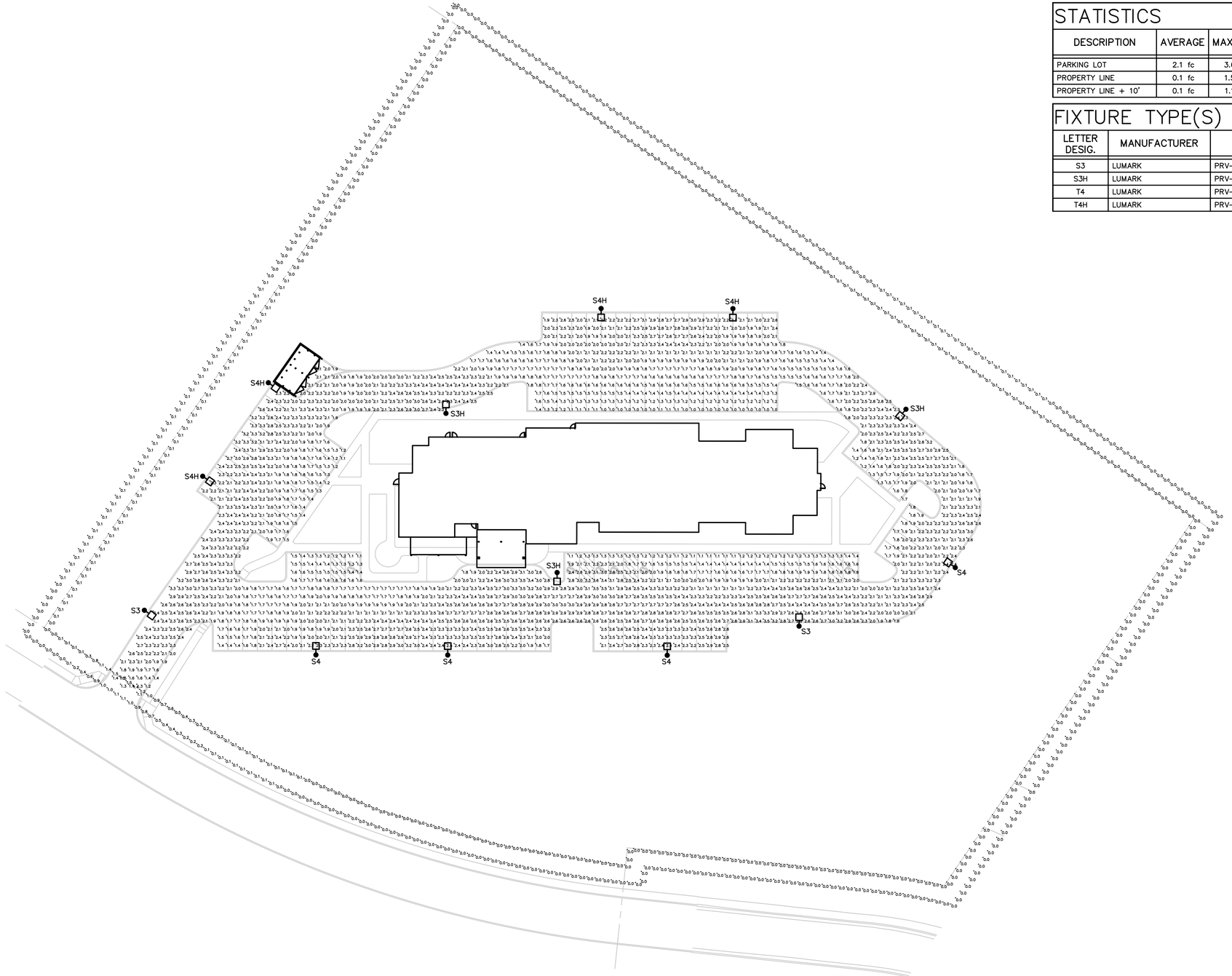
Aug 05, 2022 - 10:33am
P:\22100 - Sundby Road Hotel Site\RS - 22100 - Sundby Rd Hotel.dwg

STATISTICS

DESCRIPTION	AVERAGE	MAXIMUM	MINIMUM	MAX/MIN	AVG/MIN
PARKING LOT	2.1 fc	3.6 fc	1.0 fc	3.6:1	2.1:1
PROPERTY LINE	0.1 fc	1.5 fc	0.0 fc	N/A	N/A
PROPERTY LINE + 10'	0.1 fc	1.1 fc	0.0 fc	N/A	N/A

FIXTURE TYPE(S)

LETTER DESIG.	MANUFACTURER	CATALOG NUMBER	LAMPS NO.	LAMPS TYPE	LUMENS	MOUNTING HEIGHT
S3	LUMARK	PRV-C40-D-UNV-T3-SA-BZ	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
S3H	LUMARK	PRV-C40-D-UNV-T3-SA-BZ-HSS	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
T4	LUMARK	PRV-C40-D-UNV-T4-SA-BZ	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
T4H	LUMARK	PRV-C40-D-UNV-T4-SA-BZ-HSS	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE



A SITE PHOTOMETRICS

1/32" = 1'-0"

NORTH

Project		Catalog #		Type	
Prepared by		Notes		Date	

Lumark

Prevail LED

Area / Site Luminaire

Product Features

Lumascape Technology

Interactive Menu

Product Certifications

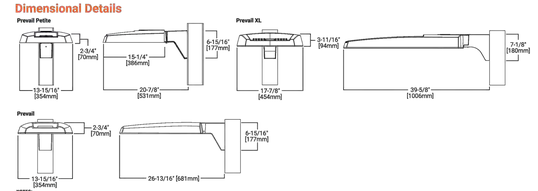
Quick Facts

- Lumen packages range from 4,800 - 52,300 lumens (35W - 350W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 160 lumens per watt
- Energy and maintenance savings up to 85% versus HID solutions
- Standard universal quick mount arm with universal drill pattern

Connected Systems

- WaveLinx

Dimensional Details



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

COOPER Lighting Solutions

PS500001EN page 1
February 14, 2022 11:56 AM

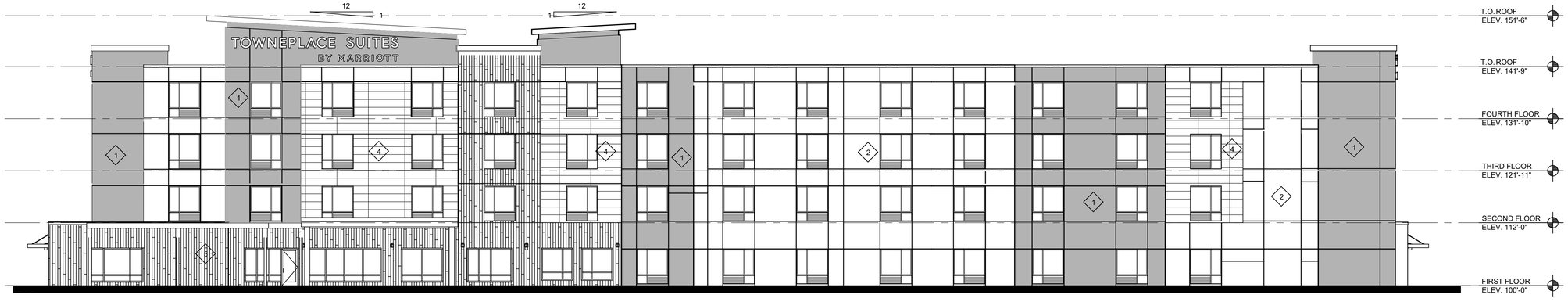
LK Architecture

August 9, 2022

TOWNEPLACE SUITES® BY MARRIOTT

Duluth, MN

SE1



B SOUTHWEST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'

A NORTHWEST ELEVATION

3/32" = 1'-0"

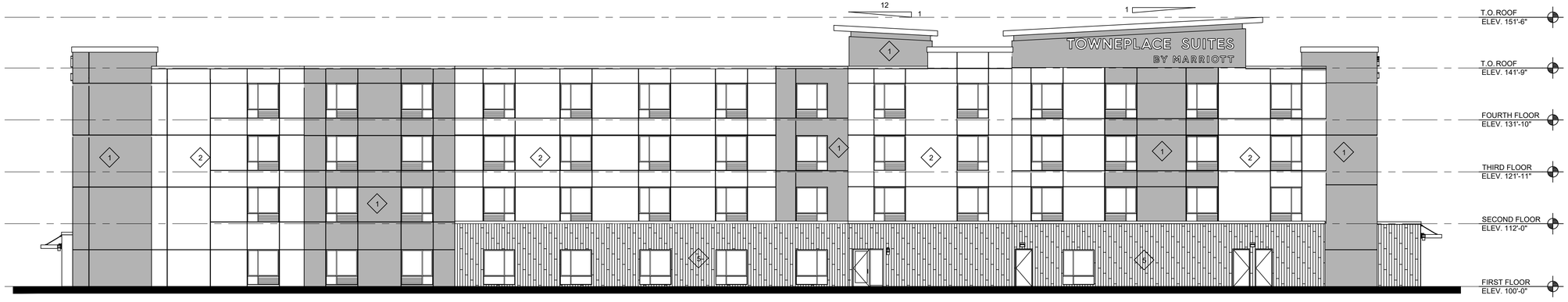
0' 5' 10' 20'

1 EIFS, COLOR : BENJAMIN MOORE "MANOR BLUE" No. 1627 (CLR13414)

2 EIFS, COLOR : BENJAMIN MOORE "NOVEMBER RAIN" No. 2142-60 (CLR13415)

4 EIFS, COLOR : MATCH CONTROL COLOR SW 6006 " BLACK BEAN"

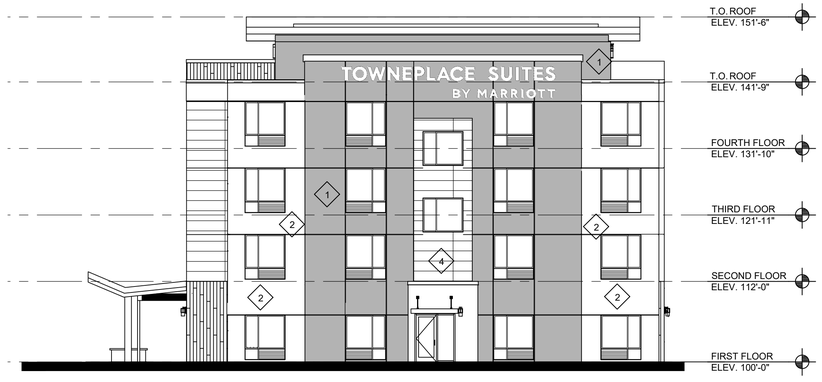
5 EIFS, COLOR : MATCH CONTROL COLOR SW 7045 "INTELLECTUAL GREY"



B NORTHEAST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'



A SOUTHEAST ELEVATION

3/32" = 1'-0"

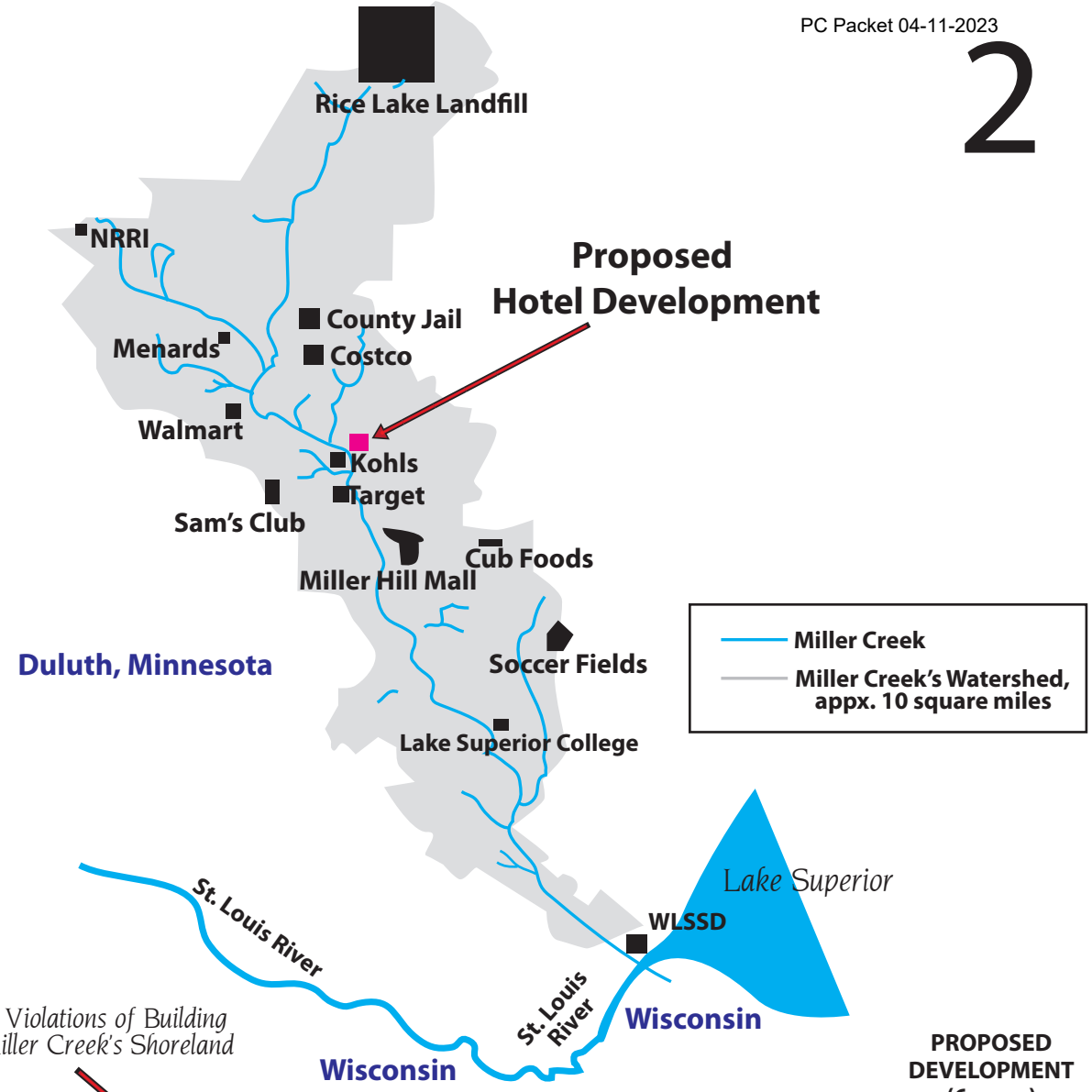
0' 5' 10' 20'

1 EIFS, COLOR : BENJAMIN MOORE
"MANOR BLUE" No. 1627 (CLR13414)

2 EIFS, COLOR : BENJAMIN MOORE
"NOVEMBER RAIN" No. 2142-60 (CLR13415)

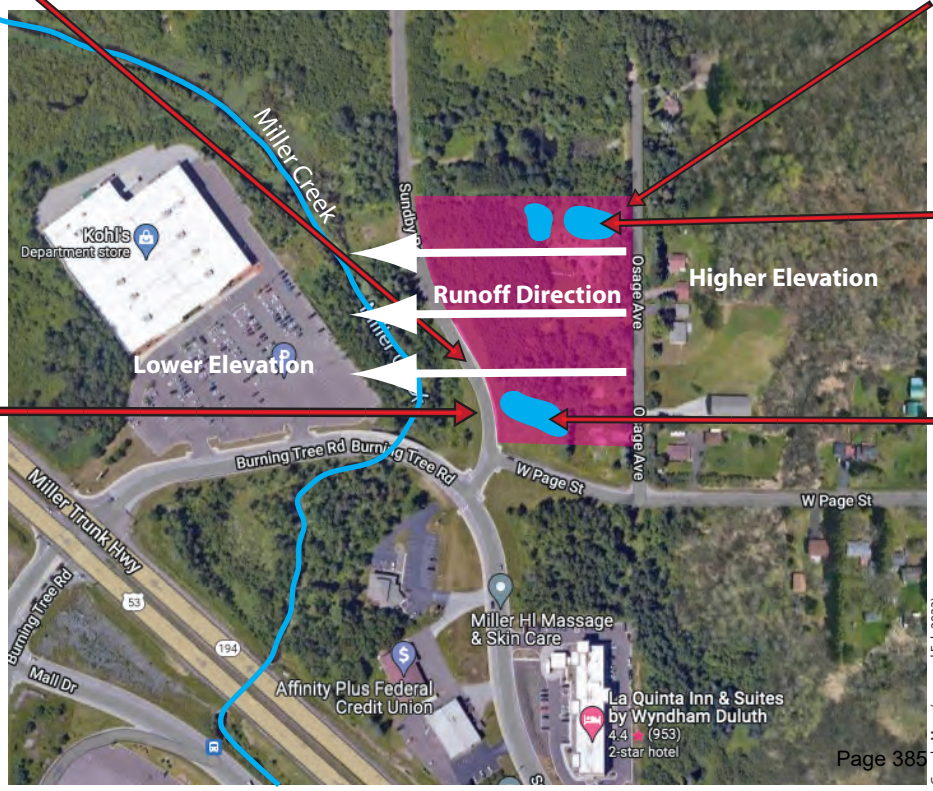
4 EIFS, COLOR : MATCH CONTROL
COLOR SW 6006 " BLACK BEAN"

5 EIFS, COLOR : MATCH CONTROL
COLOR SW 7045 "INTELLECTUAL GREY"



Possible Violations of Building within Miller Creek's Shoreland

Direct wetland impacts to extend sidewalk per City of Duluth. (Exhibit 11)



3

Supporting documents:

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

33 CFR Part 328

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 120

[EPA-HQ-OW-2021-0602; FRL–6027.4-01-OW]

RIN 2040-AG19

Revised Definition of "Waters of the United States"

AGENCY: Department of the Army, Corps of Engineers, Department of Defense; and Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) and the Department of the Army ("the agencies") have finalized a rule defining the scope of waters protected under the Clean Water Act. In developing this rule, the agencies considered the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, relevant Supreme Court case law, and the agencies' experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining "waters of the United States." This final rule advances the objective of the Clean Water Act and ensures critical protections for the nation's vital water resources, which support public health, environmental protection, agricultural activity, and economic growth across the United States.[1]

[1] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pgs. 1-2.

St. Louis River as a "paragraph (a)(1) waters", a federally protected interstate water

In this rule, consistent with the general framework of the 1986 regulations, the agencies interpret the term "waters of the United States" to include:

• traditional navigable waters, the territorial seas, and interstate waters ("paragraph (a)(1) waters");[2]

The agencies interpret interstate waters under this rule to mean "all rivers, lakes, and other waters that flow across, or form a part of, State boundaries" based on precursor water protection statutes and practice.[3]

The St. Louis River borders Minnesota and Wisconsin, and is a "paragraph (a)(1) water", specifically an interstate water.

Miller Creek as a tributary to the St. Louis River

"Waters of the United States" include

• tributaries to traditional navigable waters, the territorial seas, interstate waters, or paragraph (a)(2) impoundments when the tributaries meet either the relatively permanent standard or the significant nexus standard ("jurisdictional tributaries");[4]

Wetlands adjacent to Miller Creek

"Waters of the United States" include

• wetlands adjacent to paragraph (a)(1) waters, wetlands adjacent to and

[2] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 8.
[3] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 248.
[4] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 8.

with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments, wetlands adjacent to tributaries that meet the relatively permanent standard, and wetlands adjacent to paragraph (a)(2) impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard ("jurisdictional adjacent wetlands"); [5]

Comments

Impacted wetlands by the large, proposed, hotel development are approximately 500 feet away from Miller Creek, a tributary of the St. Louis River, a federally protected (a)(1) "Waters of the United States." Miller Creek is jurisdictional as a tributary to the St. Louis River.

"The Court concluded that "the Corps' ecological judgment about the relationship between waters and their adjacent wetlands provides an adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act."[6]

Wetlands provide several purposes such as drainage, filtering, purifying, slowing surface runoff, preventing flooding and erosion, and providing food chain production and healthy stream biota, all contingent to the health of Miller Creek, an impaired trout stream currently subjected to high sediment runoff, salt from winter roads and parking lot clearing, and E. coli bacteria contamination from people and animals. Since this large hotel development is proposed to be 4-stories with at least 112 parking stalls *upstream* from Miller Creek (≤500 feet away), its construction will significantly affect Miller Creek and its wetlands. Building in this location would be contrary to the central framework and protections afforded by the Clean Water Act.

[5] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pgs. 8-9.
[6] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 90.

('[T]he Corps has concluded that wetlands adjacent to lakes, rivers, streams, and other bodies of water may function as integral parts of the aquatic environment even when the moisture creating the wetlands does not find its source in the adjacent bodies of water. . . . [W]e therefore conclude that a definition of 'waters of the United States' encompassing all wetlands adjacent to other bodies of water over which the Corps has jurisdiction is a permissible interpretation of the Act.').[7]

Reasonably Close – Defined

Wetlands can be jurisdictional if they are reasonably close to the proximity of a jurisdictional water. While this rule does not explicitly identify regional factors that influence what is "reasonably close" for purposes of adjacency, the agencies recognize there may be site-specific factors (*e.g.*, topography) that influence what is "reasonably close." This rule does not establish specific distance limitations for adjacency, which helps ensure that site-specific and regional factors can be considered when a wetland is being evaluated…[8]

In addition, the longstanding regulation properly defines the term "adjacent" for purposes of the Clean Water Act because it is based on the concept of both reasonable proximity and scientific connections.[9]

[7] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pgs. 418-419.
[8] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 322.
[9] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 419.

Comments

Wetlands directly impacted by the hotel development are to be considered reasonably close to Miller Creek since those wetlands are ≤500 ft. from Miller Creek, closer when the distance to Miller Creek's shore land is considered.

Final Conclusion and Summary

Miller Creek in Duluth, Minnesota, is a tributary of the St. Louis River, a paragraph (a)(1) interstate water that is Federally protected under the definition "Waters of the United States" in conjunction with the Clean Water Act. Miller Creek's wetlands are positioned to be negatively impacted by the large hotel slated to be built in-between wetlands and close to Miller Creek, contrary to the protections afforded by the recently revised WOTUS rules under the Clean Water Act.

Hotel construction set to begin in the Spring of 2023 at Sundby Road and Page Street in Duluth, Minnesota, on plats 010-2710-04594 and 010-2710-04575 (PL22-143), would ostensibly violate the Clean Water Act. This environmentally-sensitive area includes wetlands and an impaired trout stream, Miller Creek, a tributary to the federally protected interstate water, the St. Louis River. It is crucial to examine their protections under the jurisdiction of all applicable environmental and regulatory statutes including the Clean Water Act.

Authority

"The authority for this action is the Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.*, including sections 301, 304, 311, 401, 402, 404, and 501."[10]

[10] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 15.

Duluth Urban Area Streams Total Maximum Daily Load

Restoring and protecting urban streams in Duluth and surrounding areas.

MINNESOTA POLLUTION CONTROL AGENCY

wq-iw10-11e **October 2020**

Table 6. Land cover/land use (source: University of Minnesota 2013)

Percent rounded to nearest whole number.

Water Body Name (AUID)	Watershed Areas	Percent of Watershed (%)													
		Natural Land Covers								Developed/Disturbed Land Covers					
		Deciduous Forest	Conifer Forest	Mixed Forest	Managed/Natural Grass	Forested and Shrub Wetlands	Emergent Wetlands	Lakes, Ponds, and Rivers	*Total Natural Land Cover*	Hay and Pasture	0 – 25% Impervious	26 – 50% Impervious	51 – 75% Impervious	76 – 100% Impervious	*Developed/Disturbed Land Cover*
Amity Creek (04010102-511)	10,568	55	17	0	2	8	1	1	*84*	3	7	5	1	0	*16*
Chester Creek (04010102-545)	4,315	37	15	0	1	14	3	0	*70*	2	13	9	4	2	*30*
E Br Amity Creek (04010102-540)	5,237	59	15	0	2	9	2	1	*88*	2	5	4	1	0	*12*
Keene Creek (04010201-627)	4,029	39	14	0	2	13	2	1	*71*	2	7	8	7	5	*29*
Kingsbury Creek (04010201-626)	6,012	35	11	1	2	20	1	1	*71*	2	3	6	9	9	*29*
Lester River (04010102-549)	34,240	48	20	0	2	15	2	2	*89*	3	4	3	1	0	*11*
Merritt Creek (04010201-987)	1,412	42	11	0	4	7	0	0	*64*	1	13	8	6	8	*36*
Miller Creek (04010201-512)	6,212	19	14	0	2	13	2	1	*51*	4	15	11	9	10	*49*
Sargent Creek (04010201-848)	1,964	73	3	6	3	4	0	0	*89*	1	1	3	3	3	*11*
Stewart Creek (04010201-884)	1,108	74	2	2	0	9	1	0	*88*	0	3	5	3	1	*12*
Tischer Creek (04010102-544)	4,767	28	23	0	1	8	2	1	*63*	2	18	12	4	1	*37*

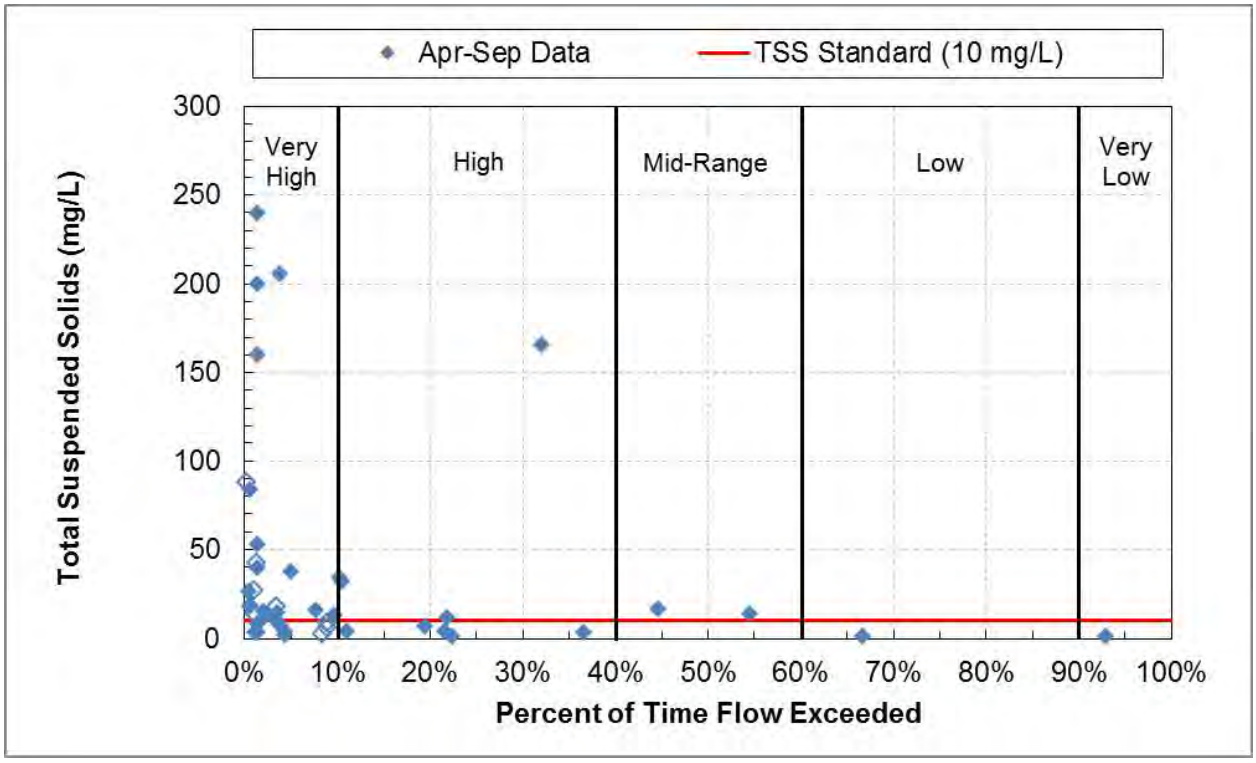


Figure 8. TSS water quality duration plot, Kingsbury Creek.
(AUID 04010201-626), 2008–2010, 2012, 2014. Hollow points indicate samples during months when the standard does not apply.

3.3.3 Miller Creek (04010201-512) *E. coli*

There are five monitoring stations on Miller Creek (Figure 5). The *E. coli* concentration exceeded the individual sample standard in one or more samples in four of the five monitored years (Table 11). Exceedances of the monthly geometric mean standard were observed in June through September, and concentrations on average were highest in July (Table 12). The individual sample standard was exceeded during mid-range to very high flows, with higher concentrations occurring under high and very high flows (Figure 9).

Table 11. Annual Summary of *E. coli* data for Miller Creek.
(AUID 04010201-512, sites S001-169, S003-070, S003-071, S004-973 and S008-484, Apr–Oct)

Year	Sample Count	Geometric Mean (org/100 mL)	Minimum (org/100 mL)	Maximum (org/100 mL)	Number of Individual Sample Standard Exceedances (>1,260 org/100 mL)	Percent of Individual Sample Standard Exceedances (%)
2008	22	116	21	1,046	0	0
2009	32	237	46	1,733	3	9
2010	11	186	68	2,400	1	9
2015	20	829	67	2,400	10	50
2016	12	723	56	≥2,420[a]	6	50

a. 2,420 org/100mL is the method's maximum recordable value

Table 12. Monthly Summary of *E. coli* data for Miller Creek.

(AUID 04010201-512, sites S001-169, S003-070, S003-071, S004-973 and S008-484; 2008–2010, 2015–2016). Values in red indicate months in which the monthly geometric mean standard of 126 org/100 mL was exceeded or the individual sample standard of 1,260 org/100 mL was exceeded in greater than 10% of the samples.

Month	Sample Count	Geometric Mean (org/100 mL)	Minimum (org/100 mL)	Maximum (org/100 mL)	Number of Individual Sample Standard Exceedances (>1,260 org/100 mL)	Percent of Individual Sample Standard Exceedances (%)
March	2	53	13	220	NA	NA
April	2[a]	176	67	460	0	0
May	3[a]	304	96	1,400	1	33
June	23	196	26	≥2,420[b]	5	22
July	28	418	46	≥2,420[b]	6	21
August	29	275	21	≥2,420[b]	4	14
September	10	305	27	2,400	4	40
October	2[a]	535	260	1,100	0	0

a. Not enough samples to assess compliance with the monthly geometric mean standard

b. 2,420 org/100mL is the method's maximum recordable value

NA: not applicable because the *E. coli* standard does not apply during this month

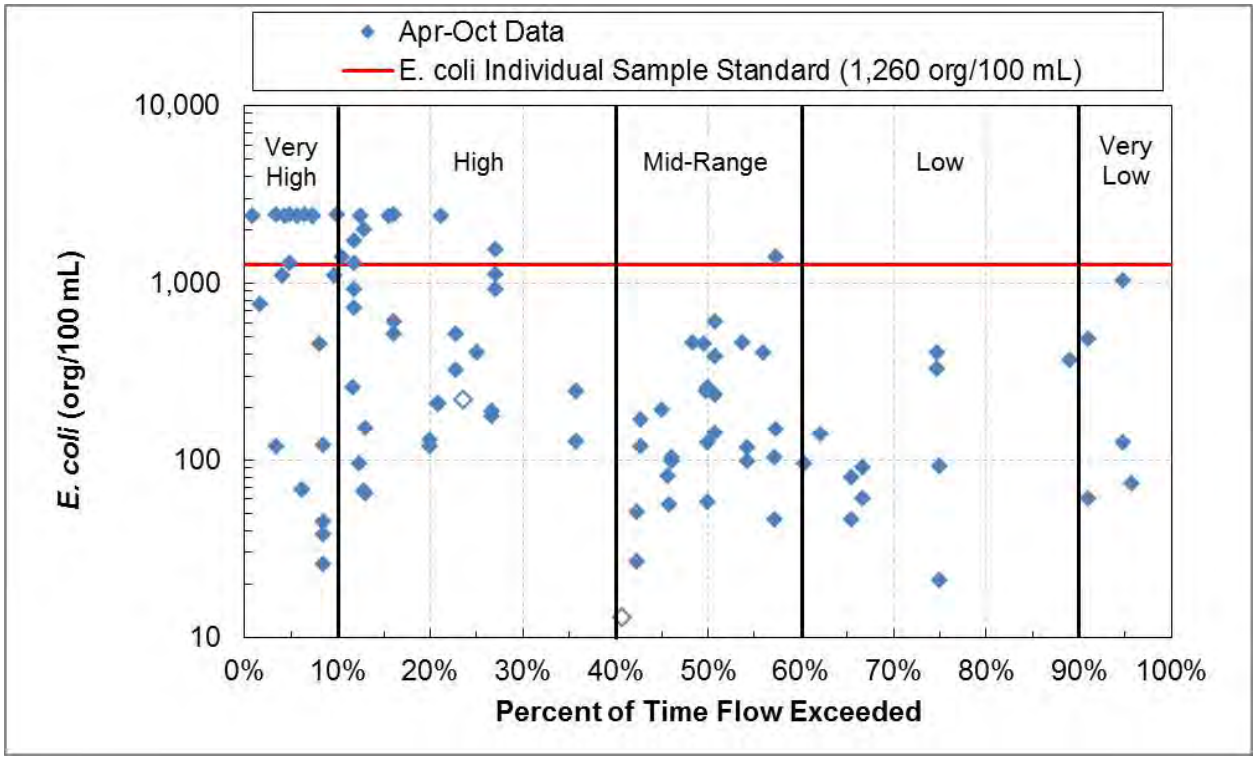


Figure 9. *E. coli* water quality duration plot, Miller Creek.

(AUID 04010201-512), 2008–2010, 2015–2016. Hollow points indicate samples during months when the standard does not apply.

E. coli concentrations at the most downstream site, S008-484, were generally higher than at the other sites; however, these data are from a different time period (2015 through 2016) and therefore cannot be compared directly.

E. coli results on Miller Creek were also evaluated with daily precipitation records from the Duluth International Airport. Results for four sites sampled in 2008 through 2010 are presented in Figure 60, and results for site S004-484 for 2015 and 2016 are presented in Figure 61. Similar to other water bodies in the Duluth area, elevated *E. coli* concentrations were detected at all five sites on days with or immediately following a precipitation event.

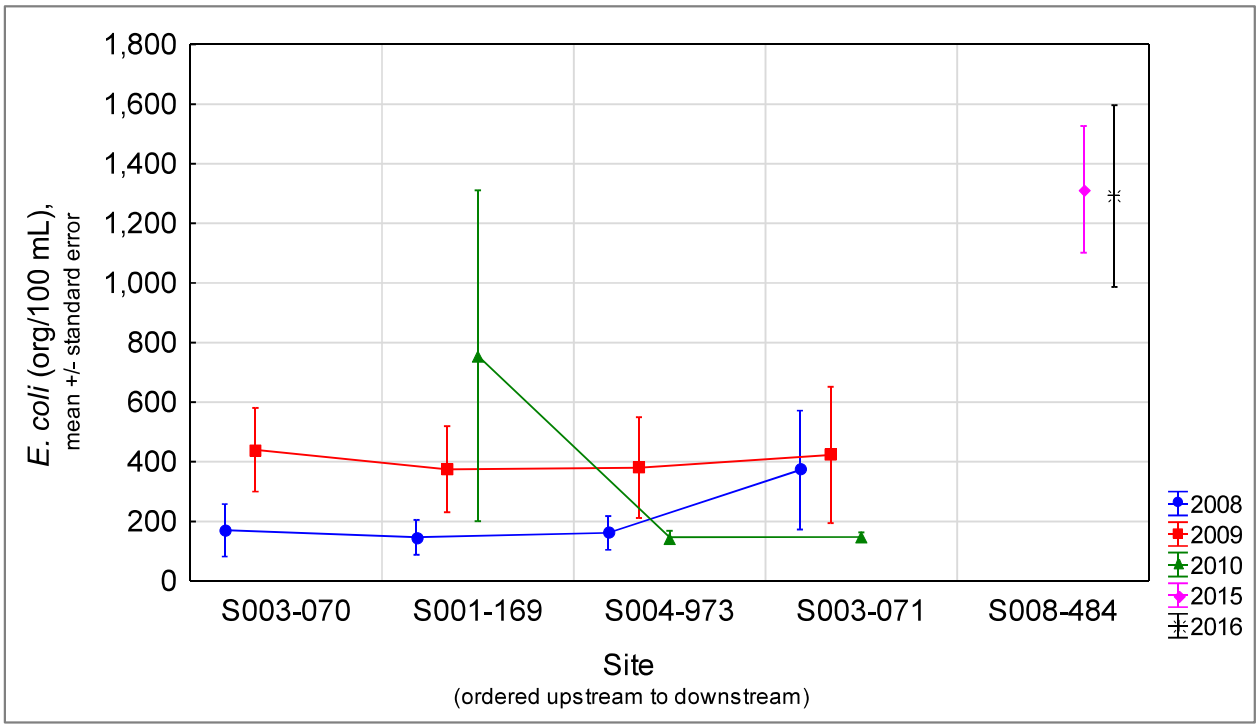


Figure 59. Summary of *E. coli* results at five sites on Miller Creek.
Only data collected between April 1 and October 30 in the specified years are presented in this figure. See Figure 53 for monitoring site names.

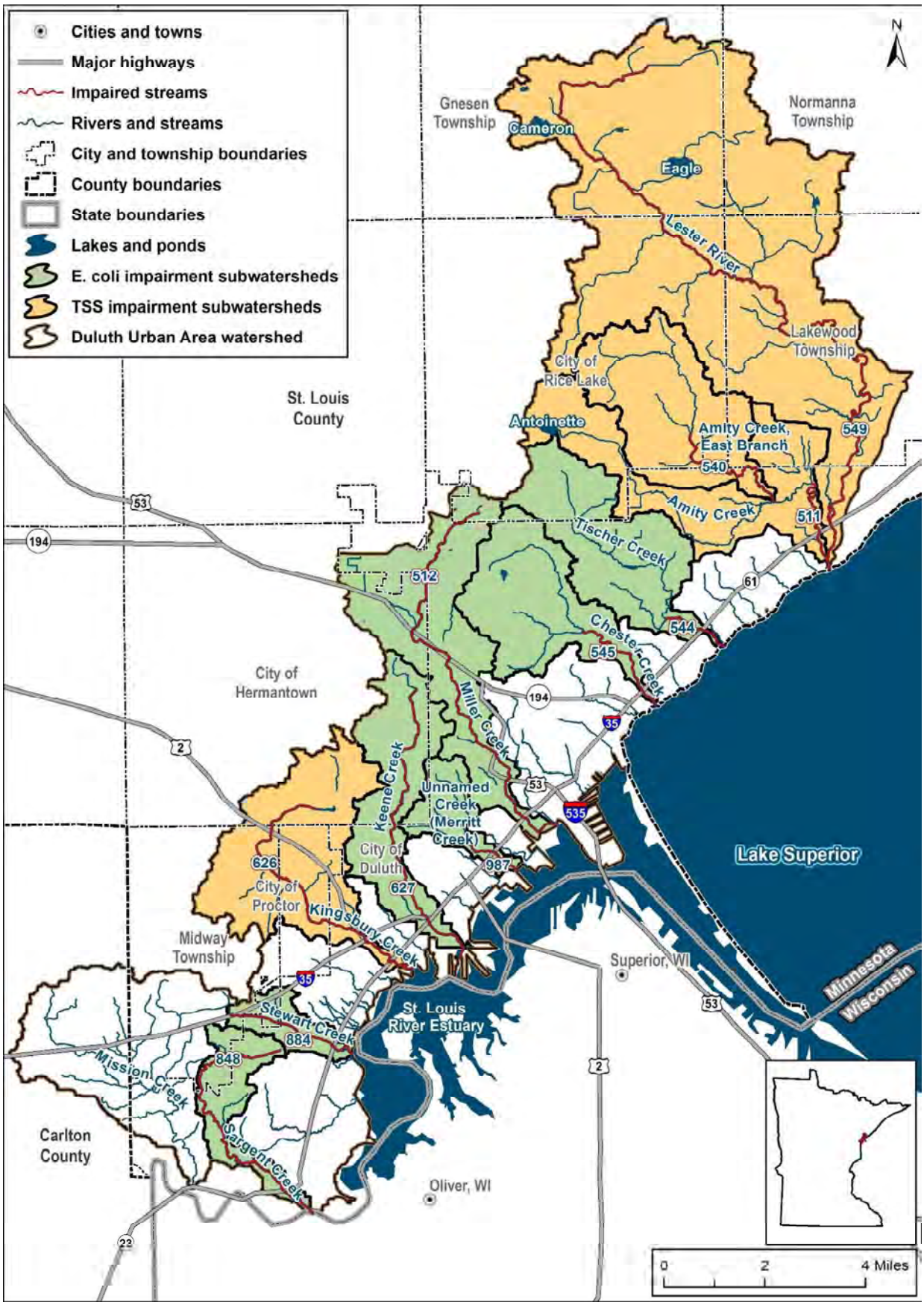


Figure 64. Impaired segments receiving TMDLs.

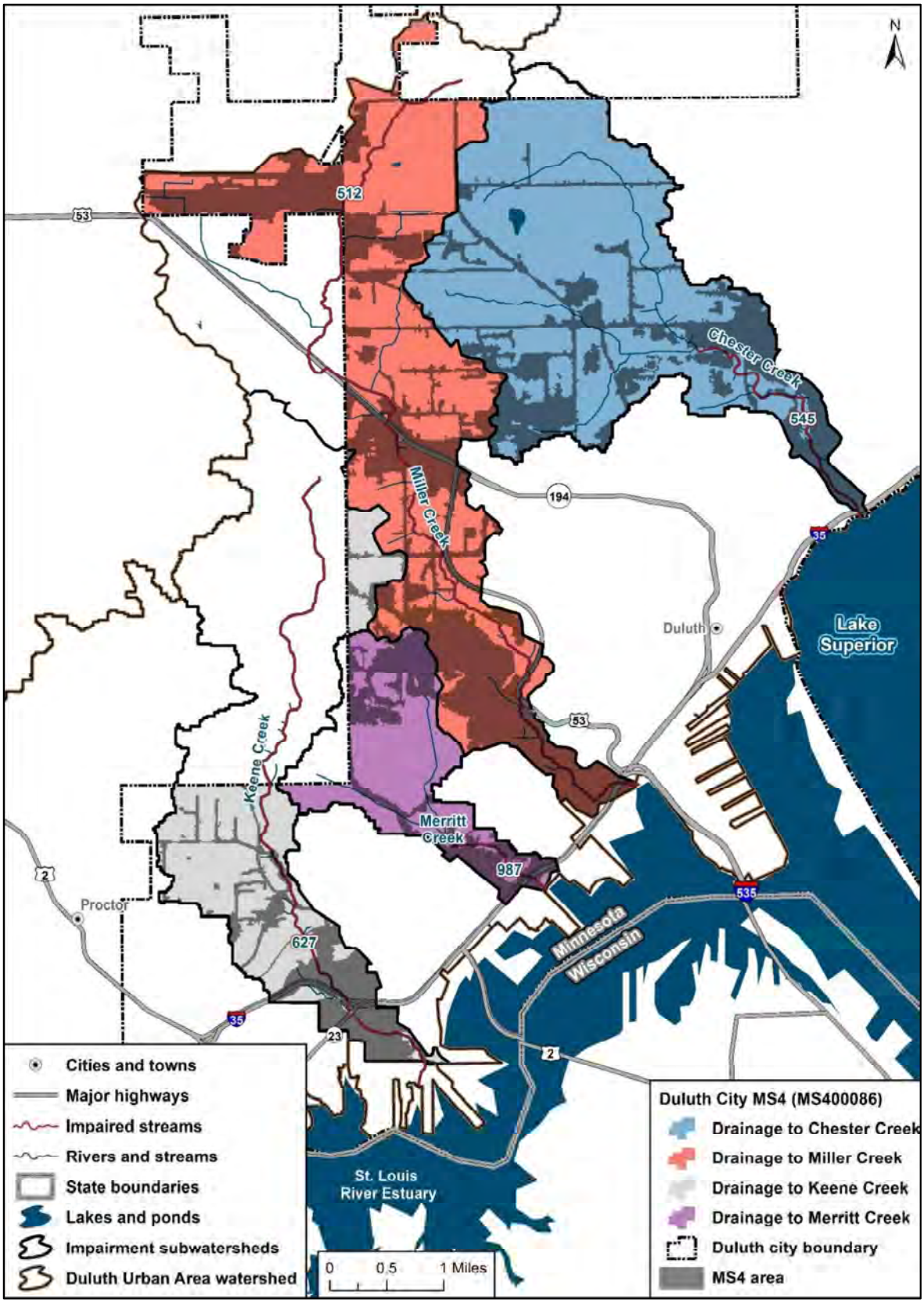
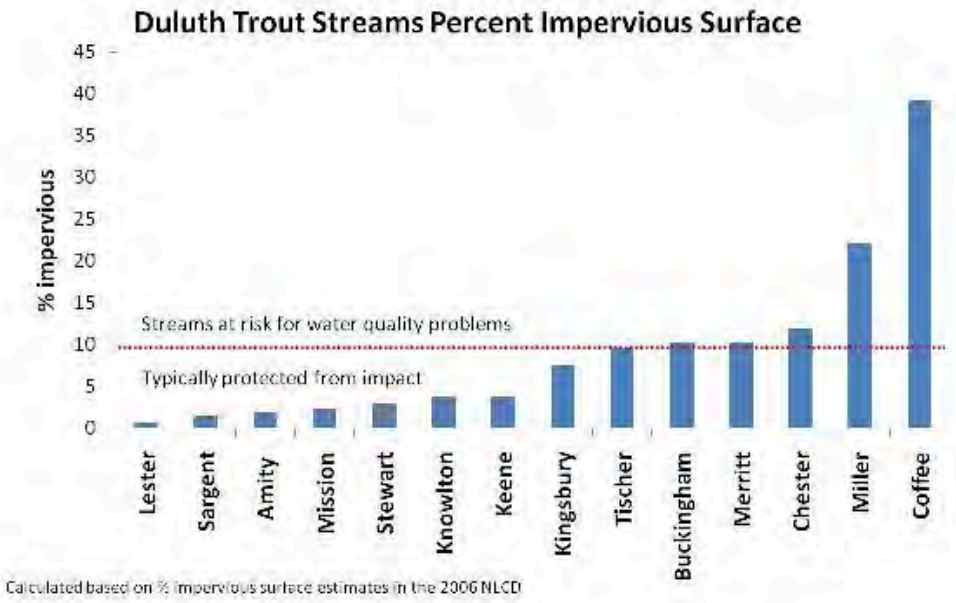


Figure 88. Duluth MS4 (middle).

The MS4 area does not include MS4 areas designated to MnDOT, St. Louis County, University of Minnesota, or Lake Superior College.



The red line follows a convention used by the National NEMO program (nemo.uconn.edu), and is associated with studies showing that when impervious surface values are greater than 10%, streams are likely to have water quality problems.

Source: lakesuperiorstreams.org/understanding/impact_impervious.html Accessed Feb 2023.

1. ***Political / Economic Evaluation;***
2. ***Demand and Growth-Based Evaluation;***
3. ***Citywide Positioning & Social Evaluation;***
4. ***Development Trends Evaluation; and***
5. ***Environmental Evaluation.***

1. Political / Economic Evaluation:

Duluth is the center of the Northland region for commerce, at the center of which is the Miller Hill – Central Entrance Corridor. In terms of retail sales tax, the Miller Hill – Central Entrance Corridor is the most significant retail sales tax revenue generator for the City of Duluth. In recent years however, the role of Hermantown has increased significantly to a point whereby Hermantown has now become a major player in attracting commercial developments, notably Wal-Mart, Sam's Club, Menards and Gander Mountain. As a result, this has contributed to likely sales outflow from Duluth to Hermantown. It is therefore incumbent upon the City of Duluth to ensure that retail development recognize the parasitic and opportunistic evolution that is occurring, while at the same time ensure the need to maintain balanced and pragmatic growth within its own city limits. The rezoning application is valid in its assertion that "*potential*" short term tax benefits and sales could occur. Additionally, Hermantown does have active commercial development opportunities available, such as at Hermantown Center, which do pose a competitive threat for Duluth. However, the current economic slowdown must now also be considered as demand for commercial development slows and retailers hold off on expansion plans suggesting that now is an ideal time to prioritize developments.

Hermantown is following in Duluth's footsteps with haphazard, uncohesive commercial developments. The City of Duluth should now take the lead in establishing and promoting more compact urban/suburban developments that prioritize areas already zoned for commercial land uses. Retail Sales Taxes are a critical component of revenues for the City, however by allowing development to occur away from the existing critical mass of retail could have the negative impact of reducing foot traffic in the core shopping area around the Miller Hill Mall, while also encouraging Hermantown to further densify their retail concentration along Haines Road resulting in additional retail sales tax revenues for Hermantown. Consumers are not concerned with the boundary between Duluth and Hermantown, but they will shop and patronize those areas that are more compact, have the stores they are looking for and offer more services in close proximity of one another.

On the basis of the project's proximity and access to Haines Road, new commercial development in the proposed location could have the unintended effect of placing significant development pressure on the adjacent wetlands and could act as a further catalyst for Hermantown to develop and infill along Haines Road in the short term, as opposed to being catalytic for Duluth's existing retail. This development pattern could result in further retail sales outflow from Duluth to Hermantown. Alternatively, if development is more focused and concentrated around the Miller Hill Mall then the result would be to create demand in an area that is already zoned commercial which would benefit existing Duluth retailers and residents.

With respect to historical rezoning applications and approvals (as documented in the Mission Development LLC Rezoning Application), many of the rezoning approvals profiled were in commercially compatible areas and did not have environmental concerns or wetland encroachment issues. From a future land use allocation perspective, historical rezoning applications do not take into account the need to incorporate a new planning direction and focus for development that is more consistent with current development trends for prioritization, intensification and densification of properties.

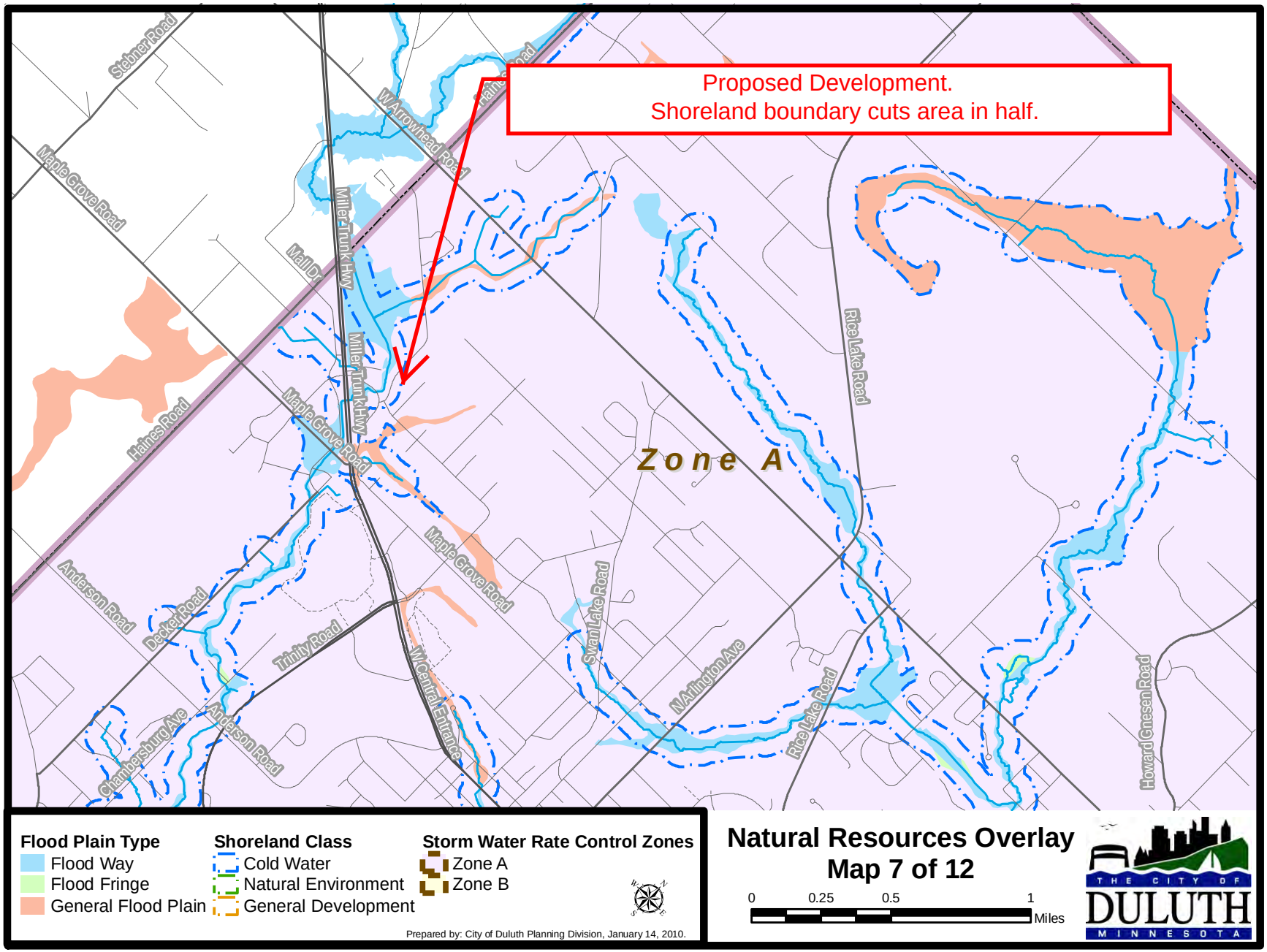
Diagram of Proposed Hotel and Adjacent Wetlands

Locations Approximate
Drawn in Revit 2023
Crawford-Nichols
3/2023

Source:
PL22-143 Project Application
UDC Landscape Plan
Sheet L-1.1
8/5/2022

Scale: 1" = 100'

6.1



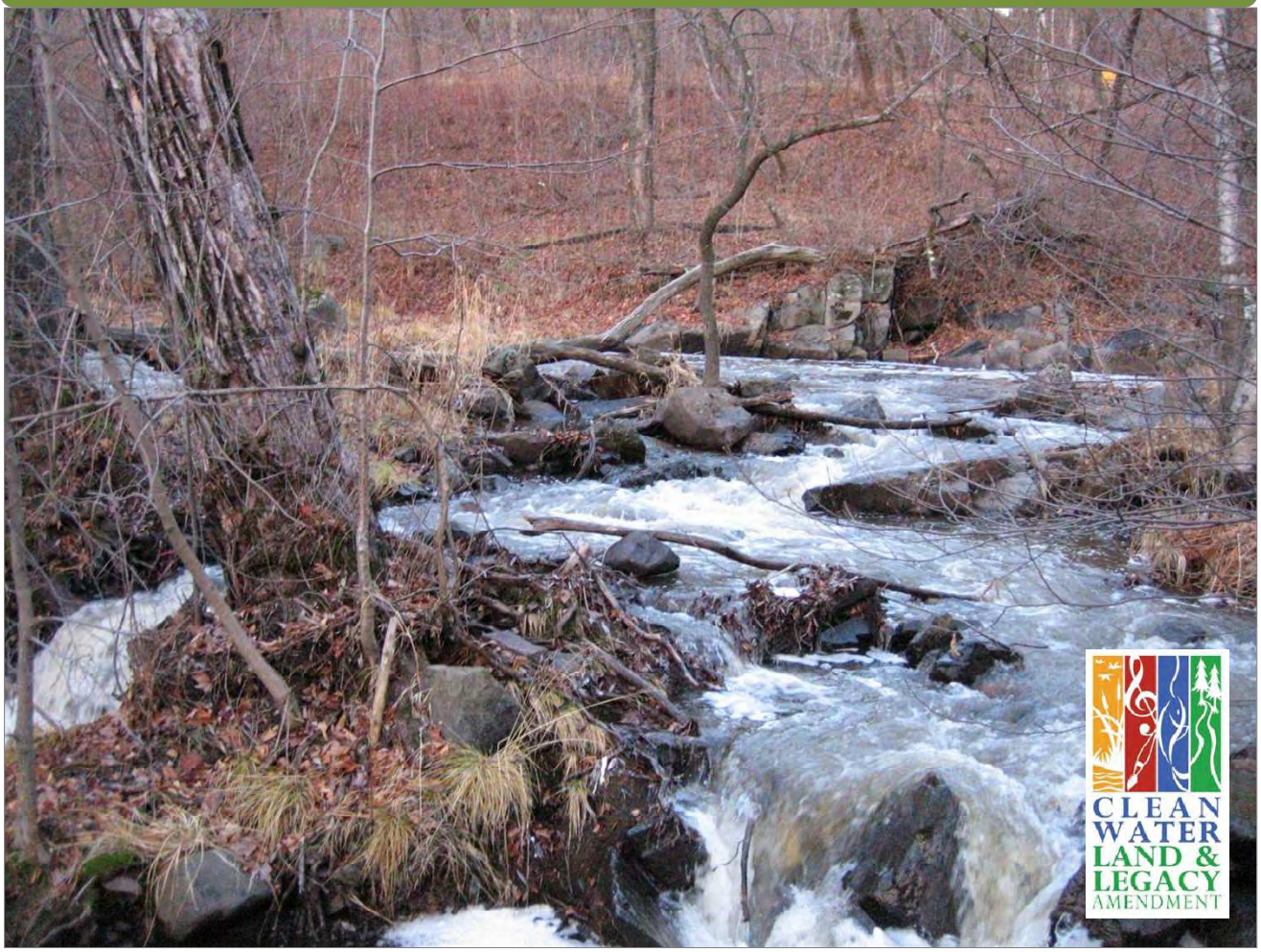
Source: City of Duluth. Email to the author. Feb. 23, 2023.

November 7, 2022

2008 Wetland Delineation Report
300-foot Buffer Requirements Surrounding Miller Creek.

Miller Creek Water Temperature Total Maximum Daily Load

A report to address impairment of aquatic life due to elevated stream temperature.



MINNESOTA POLLUTION CONTROL AGENCY

October 2017

wq-iw10-07e

Source: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb, 2023].

Executive Summary

This report addresses the impairment of aquatic life in Miller Creek due to elevated water temperature. Miller Creek is a small, urban trout stream flowing through the cities of Duluth and Hermantown in northeastern Minnesota. The watershed includes parks, trails and residential neighborhoods, but also crisscrosses the regions retail, commercial and transportation corridors. The importance of the stream, along with other streams and natural resources of this area, is continually reinforced by the many efforts and activities undertaken by citizens, businesses, schools, and community and government organizations to protect and restore stream water quality and ecology.

Water temperature data demonstrate that problems occur in summer months, mostly from high air temperatures during periods of lower stream flows, or less frequently from runoff from summer rains that occur after high air temperatures. Elevated stream temperatures are believed to also be negatively affecting the fish and aquatic insect communities.

The Clean Water Act (CWA) requires a process to analyze and correct water problems. This is called a Total Maximum Daily Load (TMDL) study. The TMDL establishes the maximum amount of a pollutant a water body can receive on a daily basis and still meet water quality standards. The TMDL is divided into wasteload allocations (WLA) for point or permitted sources, and load allocations (LA) for nonpoint sources, which includes natural background, and a margin of safety (MOS). The heat load (pollutant) and load reductions in this TMDL are in gigajoules (GJ), a measure of energy, per day (GJ/day). An energy-based allocation was used in order to express temperature as a load-based TMDL.

This study used a variety of methods including a temperature model, a heat export model and a stormwater model. The models evaluated overall heat inputs to the stream, contributions of heat from all sources, and determined the heat limits to achieve a healthy stream. The heat analysis:

- determined actual and allowable heat inputs as a function of flow conditions;
- estimated the contributions from atmospheric heating and stormwater to the overall heat budget; and
- determined the contributions of each Municipal Stormwater Permit.

The TMDL and associated WLAs and LAs were further divided into five flow regimes: high, moist, mid, dry and low. Most heat violations occurred under “dry” flow conditions. Improvement efforts should be focused on the lower flow conditions, and especially within the stream segment from Haines Road and U.S. Highway 53 to below Miller Hill Mall, to have the greatest temperature mitigation impact. Moderate reductions of heat input from stormwater (40%) are required, under dry flow conditions. A summary of the heat loading, WLAs and LAs can be found in Table 6 in Section 4.1.7.

1. Project Overview

1.1 Purpose

The CWA Section 303(d) requires states to publish, every two years, a list of surface waters that do not meet water quality standards and do not support their designated uses. These waters are classified as impaired. Once a water body is placed on the impaired waters list, a TMDL must be developed for it. The TMDL provides a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and allocates pollutant loads to the various sources of the pollutant.

This study serves to address the federal CWA requirement to establish a TMDL for the temperature impairment in Miller Creek. In addition, the report will serve as a resource to be used by water quality agencies, individual citizens, watershed planners, and local and state government officials to identify the key causes and implement solutions for these impairments.

Miller Creek was placed on Minnesota's 2002 Impaired Waters List for not meeting the assigned beneficial uses for aquatic life, based upon elevated water temperatures for Class 2A waters. Minnesota's chronic standard for temperature in Class 2A waters is "no material increase". For this TMDL, a numeric target for water temperature was set at 19 degrees Celsius (°C), which is equivalent to 66 degrees Fahrenheit (°F). This study focuses on temperature (heat) as a primary factor that is affecting the coldwater biotic communities. The TMDL study was completed through analysis of existing and newly collected data and field measurements, watershed modeling, calculation of loading capacity, and through developing implementation strategies to meet TMDL goals.

- **Analysis of Stream Temperature Data from Miller Creek, Duluth, Minnesota**, University of Minnesota, SAFL, Project Report 529, October 2009.
- **Stream Temperature Modeling of Miller Creek, Duluth, Minnesota**, University of Minnesota, SAFL, Project Report No. 535, October 2009.
- **Streamflow Modeling of Miller Creek, Duluth, Minnesota**, University of Minnesota, SAFL, Project Report No. 536, January 2010.
- **Miller Creek Macroinvertebrate, Habitat, and Temperature Report**, Natural Resources Research Institute (NRRI), University of Minnesota Duluth, NRRI Technical Report Number NRRI/TR2010/11, June 2010.
- **Characterization of Stream Temperature and Heat Loading for Miller Creek, Duluth, Minnesota**, University of Minnesota, SAFL, Project Report No. 552, August 2011.

Key findings, conclusions and recommendations from these studies include:

- Only 5% to 10% of all temperature exceedances appear to be associated with surface runoff due to rainfall, and even fewer were caused exclusively by runoff (Herb and Stephan 2009b).
- The temperature of Miller Creek is driven by atmospheric heat transfer during dry weather periods, by surface runoff during wet weather with substantial runoff, and by both mechanisms during small rainfall events (Herb et al. 2011).
- Temperature changes are most apparent in the stream from reaches with low shading, but persist for several kilometers downstream into reaches of higher shading (Herb et al. 2011).
- The temperature of Miller Creek was found to be relatively sensitive to air temperature, e.g., a 1 degree C increase in air temperature led to a 0.6 C increase in stream temperature. This sensitivity is likely due to low groundwater inputs, which tend to buffer diurnal and seasonal changes in air temperature (Herb et al. 2011).
- Wetlands provide an important role in Miller Creek through supplying the baseflow to the stream. The rapid recession in the storm hydrographs points to channel storage and surface storage in wetlands rather than in aquifers as the source of water during low flow periods. The wetlands in the upper reaches of Miller Creek therefore need to be protected because they play a key role in the hydrology during low flow periods (Erickson et al. 2010).

Please note that the supporting reports include calculations and discussions for splitting Miller Creek into two sections and developing two separate temperature TMDLs. For the purposes of submitting this Water Temperature TMDL to EPA for approval, a single TMDL was completed for the entire stream reach (headwaters to mouth). The detailed work in these reports has been and will continue to be very useful in planning and targeting implementation activities. The reports can be access through links in Appendix B or through the Miller Creek TMDL web page:
https://www.pca.state.mn.us/water/tmdl/miller-creek-water-temperature-tmdl-project

Temperature is a measure of the concentration of thermal energy (heat) in a substance such as water. Heat can enter a stream from atmospheric heat transfer and heat conduction, through the sediment, and by inputs of surface water or groundwater (Herb 2011). Figure 7 depicts the major heat flux processes in streams. The temperature impairment indicates that the stream is receiving excess heat

energy for particular climate, flow conditions, and for the prescribed designated uses (for Miller Creek, as a coldwater fishery). Recent data from 2016 demonstrated a strong correlation between stream temperatures and water levels, with the strongest correlations during low flow periods and higher stream temperatures (Labuz 2017) (Figure 6).

Figure 6: Water temperatures versus water levels at Kohl's 2016 (Labuz 2017).

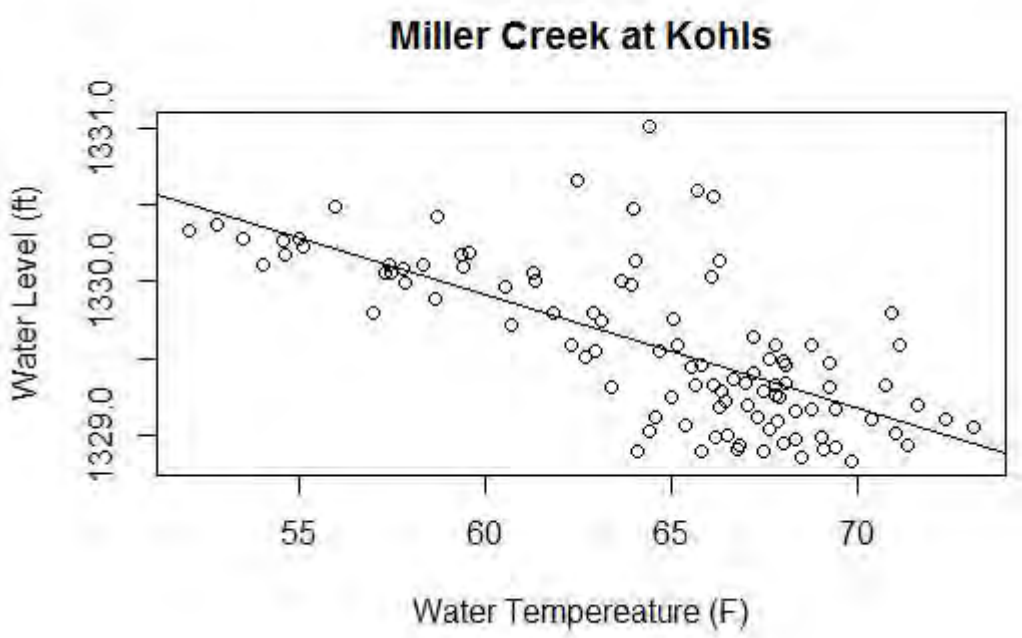
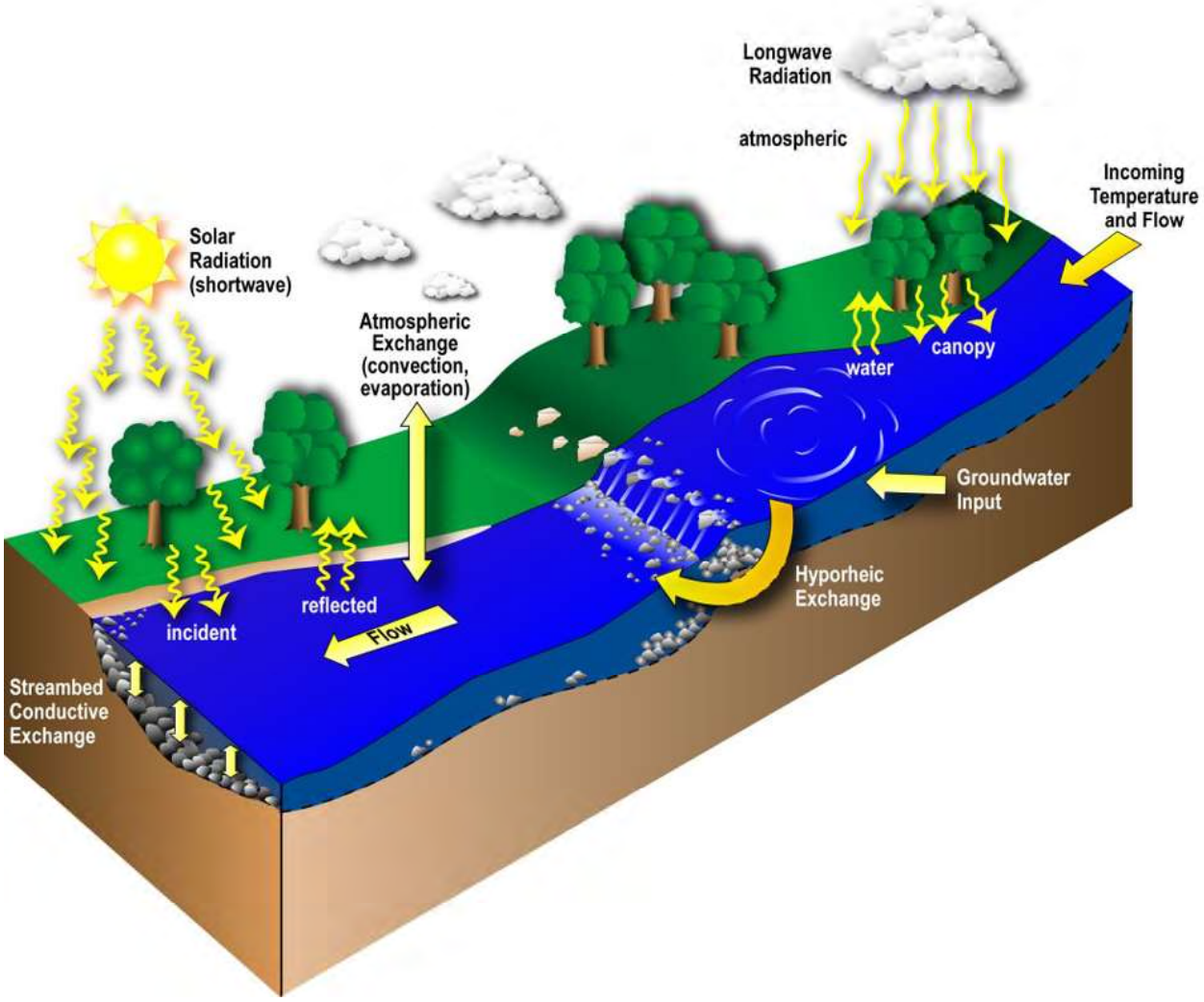


Figure 7: Major heat fluxes in streams (EPA 2010 Release, CADDIS)



Herb and Stefan (2009b) found stream temperature in Miller Creek to be highly correlated to air temperatures at daily to annual time scales (Figure 8). This relationship was found to become stronger as stream flows become lower, less than 5 cubic feet per second (cfs), and suggests low groundwater inputs into the stream (Herb et al. 2009). Water temperature exceedances above 20 °C (68 °F) are caused mainly from strong heat transfer from the atmosphere to the stream. This is especially true for the middle reaches with low channel shading, such as the channelized section above Kohl's Department Store in Duluth (Herb 2011).

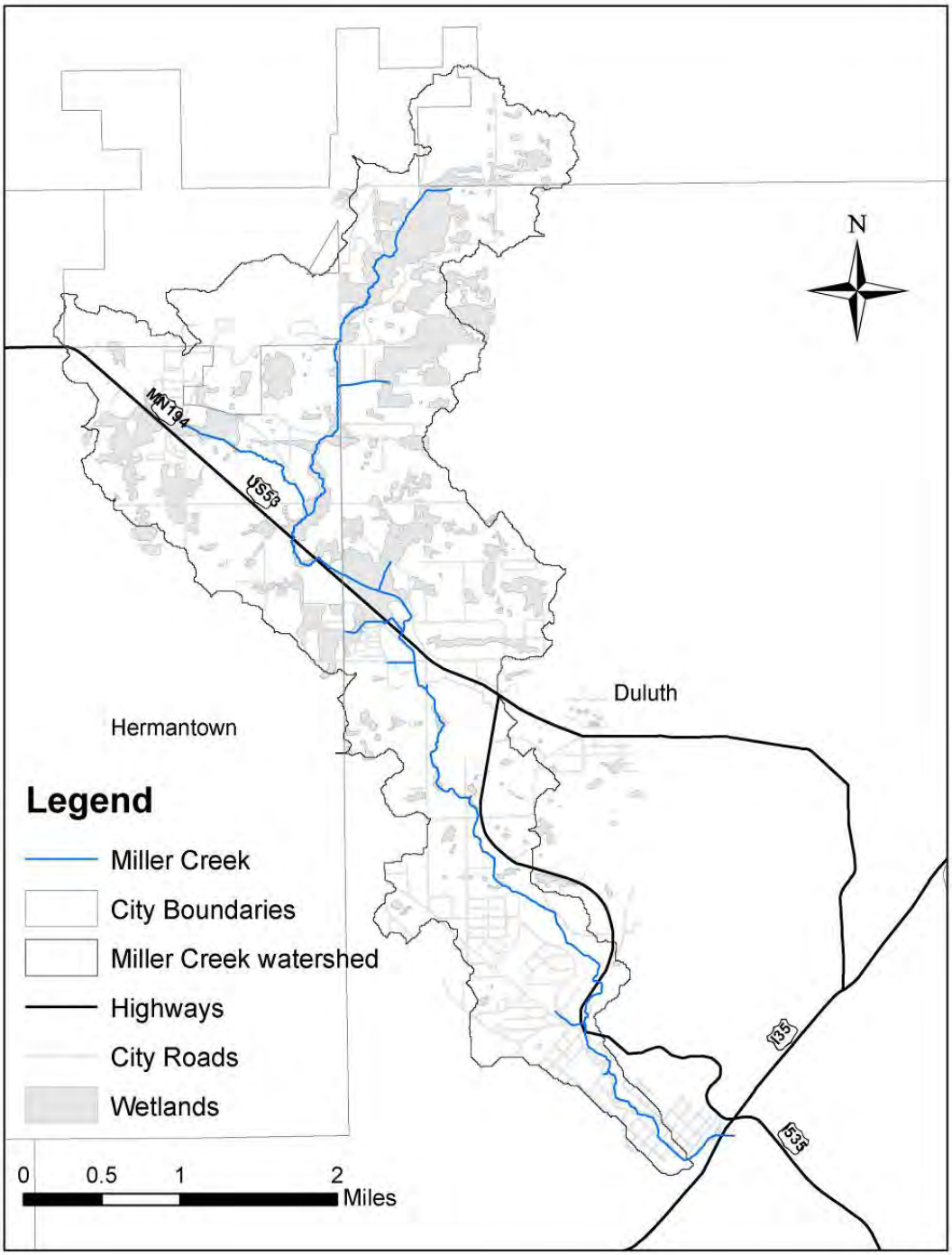
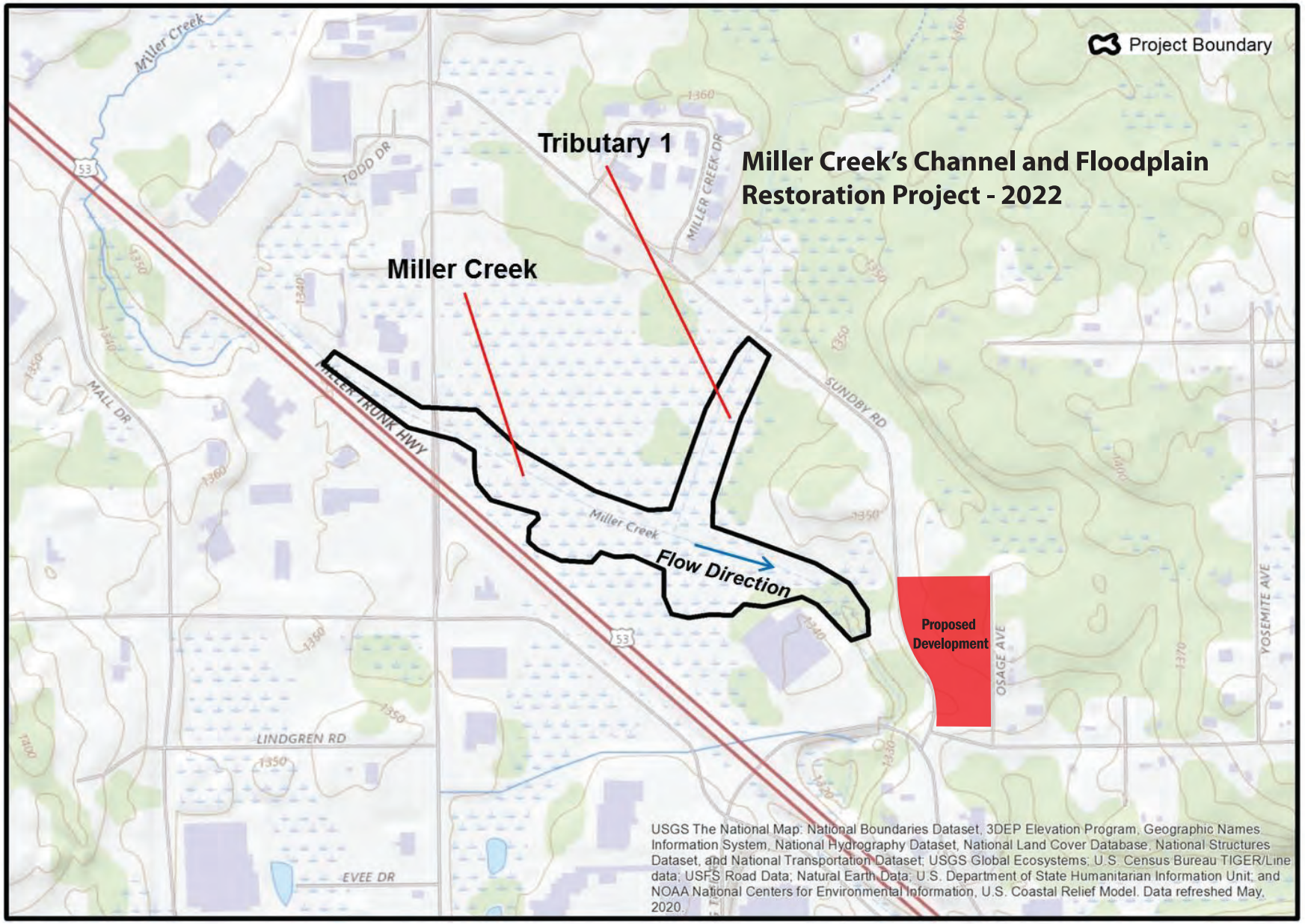


Figure 1.1. Map of the Miller Creek watershed, including wetland delineations.

Source: https://conservancy.umn.edu/bitstream/handle/11299/117637/pr535.pdf?sequence=1&isAllowed=y

8



Project Boundary Map

Source: https://www.southstlouisswcd.org/wp-content/uploads/2022/03/Miller-Creek-Channel-and-Floodplain-Restoration-Project-EAW.pdf [Accessed 28 Feb 2023].

6. Project Description:

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

This project will restore a straightened section of Miller Creek and Miller Creek Tributary 1 to a more stable, meandering channel. Miller Creek is a designated trout stream impaired for lack of coldwater assemblage due to temperature. The project will re-establish natural stream processes, re-connect the creek to its floodplain, and create quality habitat.

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, 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.

Introduction

Miller Creek begins in wetlands within the City of Hermantown, runs through a heavily commercial part of the City of Duluth, cascades down the hillside in Duluth and eventually drains into the St. Louis River estuary near 22nd Ave. West. In 2003 it was placed on Minnesota's Impaired Waters (303d) list for Lack of Coldwater Assemblage due to temperature. The temperature and other water quality monitoring work that was completed in 2009 for the Total Maximum Daily Load Study showed that the most heat input exceedances occurred with the project area.

Restoring this section of Miller Creek has been a high-priority water quality project among local natural resources professionals for many years. Funding to complete the project was finally granted to the South St. Louis SWCD by the MN Department of Natural Resources in 2019. It is presumed that this section was straightened to accommodate agriculture in the 1930s (see Attachment 3). At that time, conventional engineering advocated getting water off the land as quickly as possible, which led to ditching and straightening projects such as what was done to this stretch of Miller Creek and Tributary 1. Today, we know that this approach initiates channel evolution and incision, negatively impacting water quality, aquatic habitat, and flood retention.

This project is designed to improve the ecologic/hydrologic function of the stream channel and adjacent floodplain by creating a sinuous channel that is hydrologically connected to its floodplain and has diverse in-stream habitat for trout and other cold-water species. The project will replace 4,000 feet of low-quality, ditched stream habitat with 7,100 feet of high quality, functioning stream habitat.

The restoration methodology for this project is Natural Channel Design (Applied River Morphology, Rosgen, 1996). Using these methods, the design for the new channel and floodplain emulates the forms and processes that exist in a nearby stable river, called a "reference reach", which shares similar boundary conditions (slope, floodplain width, channel substrate, drainage area, etc.) with the disturbed project site. The cross-section, pattern, and profile dimensions of the reference channel are scaled to the impacted reach based on the riffle bankfull cross-sectional dimensions of the impacted reach. The design methodology is laid out in detail in Chapter 11 of the Natural Resources Conservation Service (NRCS) Stream Restoration and Design National Handbook. South St. Louis SWCD uses this approach on all stream restoration projects. Two reference reaches were used for the Miller Creek portion of this project: the Lester River upstream of Arnold Rd north of Duluth and the Sucker River downstream of Fox Farm Rd northeast of Duluth. East Amity Creek downstream of W. Tischer Rd is the reference reach for the Tributary 1 portion of the project.

Natural channel design uses natural materials, such as root wads, brush and boulders placed in specific arrangements and elevations in the stream channel and along the stream banks to provide aquatic habitat and stabilize the channel until floodplain vegetation can establish itself and provide long-term stabilization. Six different types of natural structures and sub-structures including toewood, toe-brush, gravel riffles, and habitat logs are being used in this project. See design plan set (Attachment 10) for more detail.

Construction methods that will cause physical manipulation of the environment

Mobilization/Construction of temporary access trails and staging areas off of Sundby Rd, with secondary access areas off of Haines Rd and Hwy 53, will be necessary to construct the project. No permanent infrastructure will be constructed.

A bulldozer and an excavator with a hydraulic thumb will be used to install the in-stream structures and to dig and shape the new channel, floodplain and stream banks. Articulated dump trucks and trailers will be used to transport materials, equipment and other items needed to construct the project and to decommission the access trails once the stream channel is restored. The riparian areas will be planted with native vegetation and will be stabilized with erosion control mats and blankets to allow vegetation to become established. Plantings will include transplanted mats of sod from the project site, as well as native flower and grass seed, shrubs and trees. See Attachment 10 for detailed information on the planting plan.

The stream will be temporarily diverted around the active construction areas using an engineer-approved stream diversion plan. Any stockpiles will have erosion and perimeter control and other best management practices implemented according to the Storm Water Pollution Prevention Plan to ensure that sediment does not enter the stream during construction. A balance of fill and cut will occur so that excess material will not be hauled on or off site.

Timing and duration of construction activities:

The proposed project is scheduled to take place over four months with the following approximate timeline:

July 1 – September 15, 2022:
- Construction of the re-meandered channel, including grading and excavating.
- Placement of all in-stream structures and habitat features
- Placement and stabilization of vegetated sod mats
- Stabilization of all near-stream areas with erosion control blanket.

September 1 – October 31, 2022:
- Planting of all disturbed areas with native forbs and grasses, shrubs and trees.
- Installation of erosion control matting to protect the newly seeded area.
- Restoration of any access trails and/or staging areas.

Exact dates will be determined by stream flow/condition, weather and contractor availability.

c. Project magnitude:

Total Project Acreage	11.2
Linear project length	4,000' existing stream length, 7,100' restored stream length
Number and type of residential units	0
Commercial building area (in square feet)	0
Industrial building area (in square feet)	0
Institutional building area (in square feet)	0
Other uses – specify (in square feet)	Access Trails – 2,100 sq. ft.
Structure height(s)	N/A

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 project is being carried out by the South St. Louis SWCD, which is the Local Government Unit. This project is needed because the conditions within this ditched, over-wide reach of Miller Creek contribute significantly to the aquatic life impairment of Miller Creek. The primary purpose of this project is to restore the hydrologic and ecologic function of this reach, with the goals of reducing stream temperatures and improving aquatic habitat. This project will address the five components of stream health (MN DNR Watershed Health Assessment Framework) as follows:

1. Connectivity:
Restore lateral connectivity of the stream to its floodplain, longitudinal connectivity by removing thermal stress and low water barriers, and vertical connectivity of the stream to the groundwater table by raising the stream channel.

2. Water Quality:
Improve stream temperature by increasing groundwater input, narrowing the steam channel to the correct dimension, and re-establishing native vegetation to provide shading. Reduce sediment input by restoring the correct pattern and profile to the channel which will reduce shear stress to the stream banks and bed.

3. Hydrology:
Improve base flow conditions by raising the groundwater table. Potentially create oxbow ponds to further mitigate floods and capture flood flows to improve storage capacity of the floodplain. The Miller Creek Watershed is moderately developed including many impervious surfaces such as airports, roads and parking lots. Impervious surfaces have led to increased flashiness and the restoration project would re-connect the river to its floodplain reducing the impacts of high flow events.

4. Geomorphology:
Restore channel stability by addressing dimension, pattern and profile of the channel. The design will be based on the form of a stable reference reach.

5. Biology:
Improve habitat diversity with geomorphic stability and improved cover. Deep pools providing thermal refuge will be created and gravel riffles and glides will be constructed to provide spawning habitat for native brook trout. Native vegetation and a restored channel will improve invertebrate populations. The coldwater fish community will also benefit from the decrease in overall water temperatures and a decrease in sediment input. Wildlife will benefit from a reforested riparian zone.

6. Other:
The property is owned by the City of Duluth and improved aesthetic appearance of stream would improve the recreational and educational potential of the area.

The beneficiaries for the project are the trout and other cold-water aquatic species living in the creek; species that live in this area of high biodiversity significance; local anglers who will be able to utilize this unique urban resource; and the citizens of Duluth, as healthy creeks and watersheds are a goal for the City and its residents (City of Duluth Comprehensive Plan, 2016).

e. Are future stages of this development including development on any other property planned or likely to happen?
☐ Yes X No
If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

f. Is this project a subsequent stage of an earlier project? ☐ Yes X No
If yes, briefly describe the past development, timeline and any past environmental review.

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

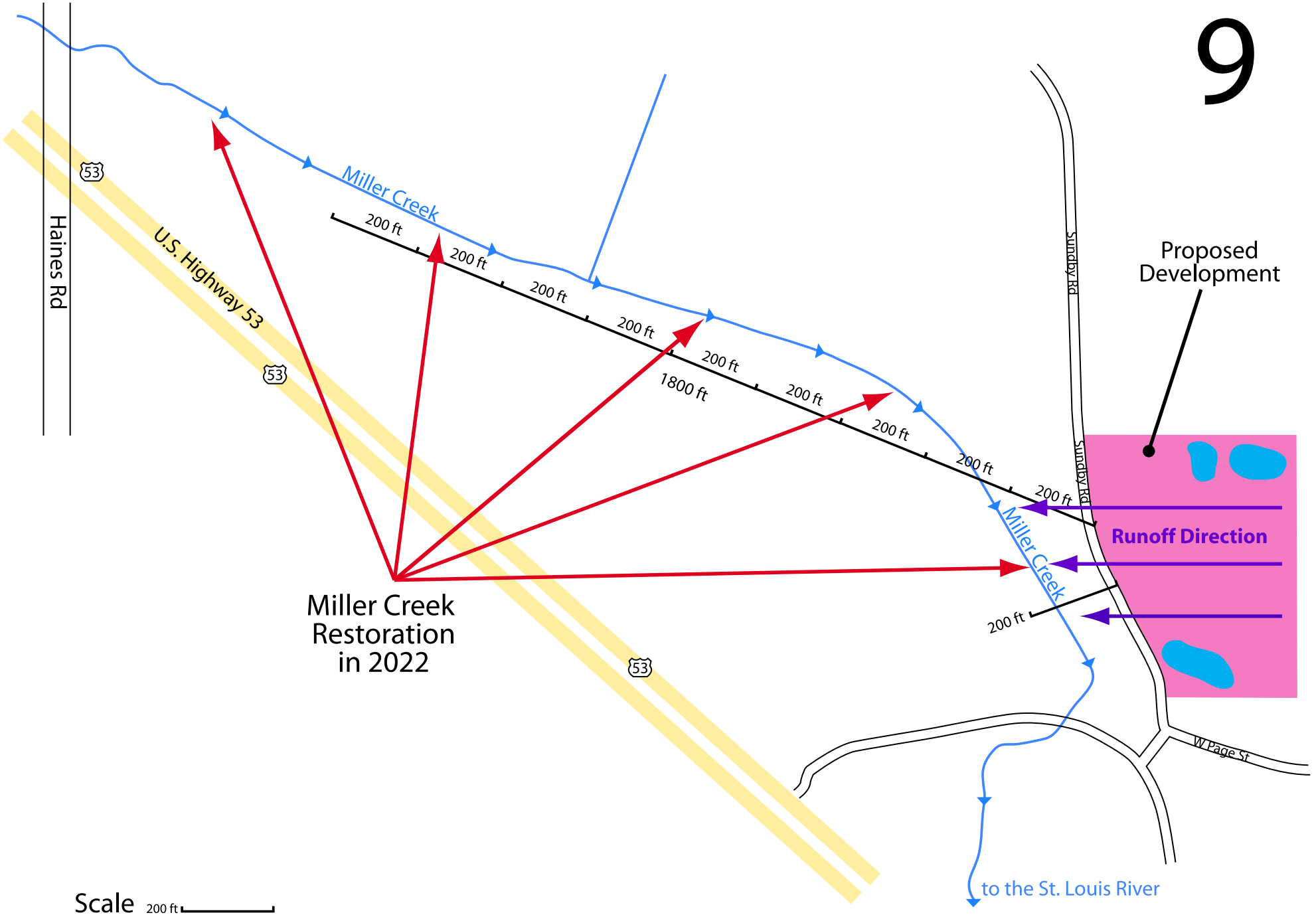
	Before	After		Before	After
Wetlands	9.8	8.9	Lawn/landscaping	0	0
Deep water/streams	1.4	2.3	Impervious surface	0	0
Wooded/forest	0	0	Stormwater Pond	0	0
Brush/Grassland	0	0	Other	0	0
Cropland	0	0			
			TOTAL	**11.2**	**11.2**

8. 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.*

Approvals Required

Unit of government	Type of application	Status
MN DNR – Ecological Services	Public Waters Permit	Incomplete

9


Haines Rd
U.S. Highway 53
53
Miller Creek
200 ft
200 ft
200 ft
200 ft
1800 ft
200 ft
200 ft
200 ft
200 ft
Sundby Rd
Sundby Rd
Proposed Development
Runoff Direction
Miller Creek
200 ft
Miller Creek Restoration in 2022
W Page St
to the St. Louis River
Scale 200 ft
Source: Google Maps

Minnesota Department of Natural Resources
Division of Ecological and Water Resources, Box 25
500 Lafayette Road
St. Paul, Minnesota 55155-4025
Phone: (651) 259-5109 E-mail: lisa.joyal@state.mn.us

July 25, 2012 **Correspondence # ERDB 20120321**

Ms. Kate Kubiak
South St. Louis SWCD
215 N 1st Avenue E, Room 301
Duluth, MN 55802

RE: Natural Heritage Review of the proposed Miller Creek Restoration (Outlot B),
T50N R14W Section 18, St. Louis County

Dear Ms. Kubiak,

As requested, the Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, rare features have been documented within the search area (for details, see the enclosed database reports). Please note that the following **rare features *may* be adversely affected** by the proposed project:

- In 1994, floating marsh-marigold (*Caltha natans*), a state-listed endangered plant, was documented within the project boundary in a shrub swamp and wet meadow along Miller Creek. Floating marsh-marigold is an aquatic species that occurs in shallow slow-moving water in streams, creeks, ditches, swamps, pools, beaver ponds, and sheltered lake margins. There are only a few records of floating marsh-marigold in Minnesota, all within St. Louis County. While the restoration of the creek alignment will be beneficial in the long term, the proposed project does have the potential to result in the taking of a protected plant.

  Minnesota's endangered species law (*Minnesota Statutes*, section 84.0895) and associated rules (*Minnesota Rules*, part 6212.1800 to 6212.2300 and 6134) prohibit the taking of threatened or endangered species without a permit. Given the protected status of this species and the potential for it to still occur within the project boundary, a qualified surveyor (see attached list) will need to conduct a survey for this species prior to any construction activities. The purpose of the survey would be to delineate the current extent of the population in order to inform the takings permit process, and to provide information for the Environmental Assessment Worksheet in order to adequately assess the environmental effects of the proposed project. P**lease contact me before any survey work is initiated**, as the DNR would like the opportunity to provide feedback on surveyor qualifications and survey protocol in order to prevent any potential project delays. Project planning should take into account that the botanical survey needs to be conducted during the appropriate time of the year, which may be limited (the best time to search for floating marsh-marigold is from May into September, when flowers or leaves are present). Please visit the DNR Rare Species Guide at http://www.dnr.state.mn.us/rsg/index.html for more information on the biology, phenology, habitat use, and conservation measures of this rare plant.

- The Environmental Assessment Worksheet should address whether the proposed project has the potential to adversely affect the above rare species and, if so, any avoidance, minimization, or other mitigation measures that will be implemented.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

The enclosed results include an Index Report and a Detailed Report of records in the Rare Features Database, the main database of the NHIS. To control the release of specific location information, which might result in the destruction of a rare feature, both reports are copyrighted.

The Index Report provides rare feature locations only to the nearest section, and may be reprinted, unaltered, in an environmental review document (e.g., EAW or EIS), municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the index report for any other purpose, please contact me to request written permission. **The Detailed Report is for your personal use only as it may include specific location information that is considered nonpublic data under *Minnesota Statutes*, section 84.0872, subd. 2. If you wish to reprint or publish the Detailed Report for any purpose, please contact me to request written permission.**

For environmental review purposes, the Natural Heritage letter and database reports are valid for one year; they are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or if an updated review is needed.

Please note that locations of the gray wolf (*Canis lupus*), state-listed as special concern, and the Canada lynx (*Lynx canadensis*), federally-listed as threatened, are not currently tracked in the NHIS. As such, the Natural Heritage Review does not address these species.

Furthermore, the Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. Additional rare features for which we have no data may be present in the project area, or there may be other natural resource concerns associated with the proposed project. For these concerns, please contact your DNR Regional Environmental Assessment Ecologist (contact information available at http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html). Please be aware that additional site assessments or review may be required.

Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources. An invoice will be mailed to you under separate cover.

Sincerely,

Lisa Joyal

Lisa Joyal
Endangered Species Review Coordinator

enc. Rare Features Database: Index Report
Rare Features Database: Detailed Report
Rare Features Database Reports: An Explanation of Fields
DNR List of Surveyors

cc: Rian Reed
Bruce Carlson
Patricia Fowler
Rich Baker

Steven Robertson <srobertson@duluthmn.gov>
To: Becca Mulenburg
Cc: Chris Fleege, Adam Fulton

Tue, Feb 21 at 8:46 AM

Good morning. I talked to my colleague Kyle in Planning on Friday who is more involved than I am with wetlands. The hotel itself will have no direct wetland impacts...the project proposer was placing the hotel on the property to avoid any direct wetland impacts. There will be minor wetland impacts by the city when there is work to extend the sidewalk adjacent to the road, but these are expected to be about 2,500 square feet.

Thank you, and I hope you have a good day.

July 2013 version

ENVIRONMENTAL ASSESSMENT WORKSHEET

This Environmental Assessment Worksheet (EAW) form and EAW Guidelines are available at the Environmental Quality Board's website at: http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm. The EAW form provides information about a project that may have the potential for significant environmental effects. The EAW Guidelines provide additional detail and resources for completing the EAW form.

Cumulative potential effects can either be addressed under each applicable EAW Item, or can be addresses collectively under EAW Item 19.

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:** Miller Creek Channel and Floodplain Restoration Project

2. **Proposer:** South St. Louis Soil & Water Conservation District
Contact person: Tim Beaster
Title: Conservation Specialist
Address: 4215 Enterprise Circle
City, State, ZIP: Duluth, MN 55811
Phone: 218-723-4867
Fax:
Email: tim.beaster@southstlouisswcd.org

3. **RGU:** South St. Louis Soil & Water Conservation District
Contact person: Tim Beaster
Title: Conservation Specialist
Address: 4215 Enterprise Circle
City, State, ZIP: Duluth, MN 55811
Phone: 218-723-4867
Fax:
Email: tim.beaster@southstlouisswcd.org

4. **Reason for EAW Preparation:** (check one)

Required:
☐ EIS Scoping
X Mandatory EAW

Discretionary:
☐ Citizen petition
☐ RGU discretion
☐ Proposer initiated

If EAW or EIS is mandatory give EQB rule category subpart number(s) and name(s):
The proposed project will re-align some sections of Miller Creek and an unnamed tributary to Miller Creek (hereafter referred to as Tributary 1). Both are designated trout streams. The EAW is mandatory under the following rule category: Minnesota Rule: part 4410.4300, subpart 26. **Stream diversion.** For a diversion, realignment, or channelization of any designated trout stream, or affecting greater than 500 feet of natural watercourse with a total drainage area of ten or more square miles unless exempted by part 4410.4600, subpart 14, item E, or 17, the local government unit shall be the RGU. The South St. Louis Soil & Water Conservation District is the Local Government Unit and will serve as the RGU.

5. **Project Location:**
County: St. Louis
City/Township: Duluth
PLS Location (¼, ¼, Section, Township, Range): Located in part of the West Half of Section 18, Township 50 North, Range 14 West of the Fourth Principle Meridian, Platted as Outlot B of the Miller Creek Division. Certificate No. 285237.
Watershed (81 major watershed scale): St. Louis River
GPS Coordinates: 46.81403, -92.16993 (center of reach)
Tax Parcel Numbers: 010-3257-00050

International Journal of Engineering Science Invention
ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726
www.ijesi.org ||Volume 4 Issue 5 || May 2015 || PP.27-31

Impacts of Impervious Surfaces on the Environment

Chithra S.V. [1,*], Dr. M.V. Harindranathan Nair[2], Amarnath A[3], Anjana N.S.[4]
[1,2,3,4]*School of Environmental Studies, Cochin University of Science and Technology, Kochi, Kerala, India.*

Abstract: *Anthropogenic surfaces that prevent the infiltration of water into the underlying soil such as buildings and paved surfaces (asphalt, concrete), roads, parking lots are called impervious surfaces. Increasing urbanization and pressure of population stimulates the growth of impervious surfaces in the cities. Tremendous increase in impervious surfaces has far reaching effects on the landscape and environment of the region. Impacts of impervious surfaces on climate and hydrology are reviewed here. This review suggests that increasing impervious surfaces strongly alters the hydrology by reducing infiltration and increasing surface run-off. It increases the Land Surface Temperature (LST) by creating Urban Heat Islands (UHI).*

Keywords: *Impervious surfaces, pollution, water quality, Land Surface Temperature, Urban Heat Islands.*

I. INTRODUCTION

Impervious surfaces are defined as the surfaces that prohibit the infiltration of water from the land surface into the underlying soil. Imperviousness is the most critical indicator for analyzing impacts of urbanization on the water environment.[1,2] With the advent of urban sprawl, impervious surfaces have also become a key issue in growth management and watershed planning due to their impact on habitat health.[2] Impervious surface increases the frequency and intensity of downstream runoff and decreases water quality. Increasing urbanization has resulted in increased amounts of impervious surfaces - roads, parking lots, roof tops, and so on - and a decrease in the amount of forested lands, wetlands, and other forms of open space that absorb and clean storm water in the natural system.[3,4] This change in the impervious-pervious surface balance has caused significant changes to both the quality and quantity of the storm water runoff, leading to degraded stream and watershed systems.[5,6,7,8] Stream quality starts to degrade, if more than 10 percent of the watershed is impervious.[1]

A good number of researchers attempted to find the watersheds' response to land use/ land cover changes over time.[9,10] Many authors[11,12,13] have noted that an increase in impervious surface reduces base flow. This is because impervious surfaces prevent infiltration, thereby reducing groundwater recharge and base flow.[14] Impervious surfaces can be used as an alternate measure for the cumulative impact of urbanization on water resources without having to consider specific factors. The other benefit is that it can be measured by a variety of procedures.[2] Watersheds with large amounts of impervious cover may experience an overall decrease of groundwater recharge and base flow and an increase of storm flow and flood frequency.[8,15] Furthermore, imperviousness is related to the water quality of a drainage basin and it's receiving streams, lakes, and ponds. Increase in impervious cover and runoff directly impact the transport of non-point source pollutants including pathogens, nutrients, toxic contaminants, and sediment.[16] Increases in runoff volume and discharge rates together with non-point source pollution, will predictably alter in-stream and riparian habitats, and the loss of some critical aquatic habits.[17] In addition, the areal extent and spatial occurrence of impervious surfaces may significantly influence urban climate by altering sensible and latent heat fluxes within the urban areas.[18] As impervious cover increases within a watershed/administrative unit, vegetation cover would decrease.

Four basic qualities of imperviousness that make it an important indicator of environmental quality are:

(1) Although the impervious surface does not directly generate pollution, a clear link has been made between impervious surfaces and the hydrologic changes that degrade water quality;
(2) An impervious surface is a characteristic of urbanization;
(3) An impervious surface prevents natural pollutant processing in the soil by preventing percolation; and
(4) Impervious surfaces convey pollutants into the waterways, typically through the direct piping of stormwater[2].

The development of the scientific basis to establish the relationship between land use changes and the amount of impervious surfaces took place in the field of urban hydrology primarily during the 1970s. The majority of current impervious surface analyses rely on the methods of these original studies and subsequent studies that correlated percentage of impervious surfaces to land use largely by using estimates of the proportion of imperviousness within each class. A good number of studies estimate the percentage of Total Impervious Area (TIA) as well as Effective Impervious Area (EIA) by coupling remote sensing and GIS[10, 19].

II. HYDROLOGIC EFFECTS OF IMPERVIOUS SURFACES

The water cycle is the most critical processes in supporting life on this planet, and fresh water is central to all aspects of our lives. Hydrology is the study of the movement, distribution and quality of water on earth and urban hydrology is the interdisciplinary science of water and its interrelationships with man in an urban watershed. In urban areas, due to the intense alteration of natural environmental processes by human activity, the watershed response to precipitation are also significantly altered (e.g. reduced infiltration, decreased travel time, higher runoff, urban flooding etc.). Although urban areas are quiet small relative to un-urbanized land, they significantly alter hydrology, biodiversity, biogeochemistry and climate at local, regional and global scales. Land development causes pervious soft surfaces such as grass lands, water bodies and green vegetation being replaced by hard impervious surfaces. While forests capture much precipitation through interception and infiltration, even more is evapotranspired by the trees.[20] Open land, such as a pasture or cultivated land, allows less infiltration than forest, and is often more prone to runoff. Water enters into the soil through infiltration and the velocity with which water enters the soil is infiltration rate. Land use can have significant impacts on the amount and speed of infiltration in a basin. Impermeable surfaces, such as roofs, parking lots, and roads allow zero infiltration, forcing all water that falls onto them to runoff. The changing proportions of these land use types within a basin can have serious effects on discharge and response to storms, either increasing total yield of water, or decreasing and smoothing the hydrograph.[21] Increased impervious cover generally results in more storm water runoff and less ground water recharge. More runoff, in turn, increases stream flows during storm periods. Stream banks erode, more sediment is carried into the streams from surrounding lands, and aquatic habitats are disrupted and degraded. Less recharge means less ground water discharges to streams during dry periods. High levels of impervious cover are associated with dense development, which sends greater pollutant loads to runoff flow channels.

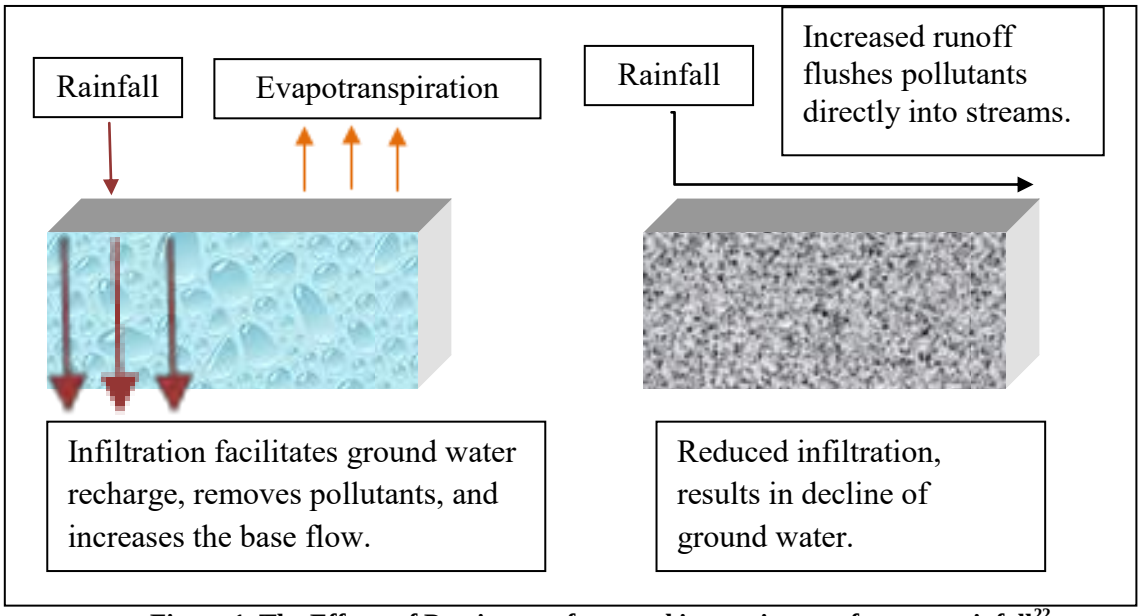


Figure 1. The Effects of Pervious surfaces and impervious surfaces on rainfall[22].

III. IMPERVIOUSNESS AND WATER QUALITY

Impervious surfaces serve as a key indicator for health of aquatic ecosystems.[2] Increased impervious cover is strongly related to increased degradation of aquatic ecosystems. Impervious surfaces collect and accumulate pollutants deposited from the atmosphere, leaked from vehicles or derived from other line and point sources. During storms, accumulated pollutants are quickly washed off and rapidly delivered to aquatic systems. As the area under impervious cover increases, more water reaches the ocean as surface water run-off. Storm water runoff is the rain or snowmelt that runs off streets, rooftops, parking lots, lawns and other land surfaces and eventually runs into our streams. Storm water also picks up pollutants as it flows across land surfaces. Pollutants include sediment, pesticides, asphalt, fertilizers, bacteria and disease-causing organisms from failing septic systems; petroleum products such as oil and grease. Sometimes pollutants (e.g., used oil, paint thinners, etc.) are illegally dumped directly into storm drains and waterways. Urban pollutant loads are linked to watershed imperviousness and it serves as a key predictive variable in most simulations and empirical models used to estimate pollutant loads. The simple method assumes that pollutant loads are a direct function of watershed imperviousness.[23]

Impervious surface affects the hydrology of a watershed, the geomorphology of stream beds, temperature, fish populations, macro invertebrates, microbes, algae, and macrophytes. Nutrients, toxins and sediment disrupt aquatic ecosystems and contribute to degraded water quality. The reduced stream flow and more extreme stream temperatures will stress aquatic ecosystems. The abundance and diversity of fish and macro invertebrate populations is harmed as the concentration of impervious surfaces increase.[24] A few works studied the impacts of urbanization on stream insect communities by taking Impervious Surface Area as an indicator.[25] They noticed a steep decrease in stream insect community structure as impervious surfaces increase above 6% of the total catchment area. Water temperature increased as total percentage of impervious surface increases.[26]

The expansion of urban areas is creating more impervious surfaces, such as roofs, roads, and parking lots, which collect pathogens, heavy metals, sediment, and chemical pollutants and quickly transmit them to streams, rivers, estuaries or sea downstream during rain. This non-point source pollution is one of the major threats to water quality and is linked to chronic and acute illnesses from exposure through drinking water, seafood, and contact recreation. Impervious surfaces also lead to pooling of storm water, thus increasing the potential breeding areas for mosquitoes, the disease vectors for dengue hemorrhagic fever, Chikungunya and other infectious diseases. Traditional strategies to manage storm water and treat drinking water require large infrastructure investments and face difficult technical challenges. Reducing storm water runoff and associated non-point source pollution is a potentially valuable component of an integrated strategy to protect public health at the least cost. Runoff from roofs, roads, and parking lots can contain significant concentrations of copper, zinc, and lead, which can have toxic effects in humans. Bioaccumulation of insecticides at levels considered harmful to organisms, raises concern about carcinogenic effects and disruption of hormonal systems in humans.

When storm water moves more quickly into streams, it also has a greater capacity to carry non-point source pollutants into the streams. Community drinking water supplies are commonly disinfected with chlorine and, if the source is surface water, it is filtered to remove sediment and associated pollutants. Several common disease carrying microorganisms are resistant to treatment with chlorine and filtration, although the effectiveness of the filters varies with their pore size. Suspended sediment in source waters further reduces the effectiveness of chlorine. Nitrogen also poses direct health threats. Exposure to nitrate in drinking water increases the risk of methemoglobinemia, causing shortness of breath and blueness of the skin, especially for infants. Consumption of water with elevated nitrate is also suspected to increase miscarriage risk. Major sources of nitrogen from urban and suburban areas may include fertilizers carried by storm water, vehicle exhaust, and septic systems. Fecal coliform bacteria in surface waters commonly exceed standards for recreation, and exposure to bacteria and parasites from swimming and other forms of recreation in water contaminated with urban runoff has caused numerous cases of illness, including ear and eye discharges, skin rashes, and gastrointestinal problems. Increasing impervious surface without storm water controls leads to increased runoff. Elevated fecal coliform levels also have been detected in suburban streams.

Impervious surfaces both absorb and reflect heat. During the summer months, impervious areas can have local air and ground temperatures that are 10 to 12 degrees warmer than the fields and forests that they replace. In urban areas, trees that could provide shade to offset the effects of solar radiation are usually absent. Other factors such as lack of riparian cover and ponds, were also demonstrated to amplify stream warming, but the primary contributing factor was impervious cover.[26]

IV. IMPERVIOUSNESS AND WEATHER CHANGE

Urban heat islands (UHI) refer to the phenomenon of higher atmospheric and surface temperatures occurring in urban areas than in the surrounding rural areas due to urbanization.[27] The prime driving force behind UHI is impervious surfaces. The UHI occurs due to differences in thermal, and radiative properties of urban surface materials from the ones of natural surfaces, multiple reflection and absorption of sunlight by urban surfaces (due to specific geometry), anthropogenic heat sources and lack of evapotranspiration in urban areas.[28] The Thermal properties of various urban surface types are given in Table 1. The UHI may greatly change the local climate and thus should be captured by climate models on local and regional scales.

Sl.No.	Surface Type	Emissivity	Absorptivity
1	Highly reflective roof	0.85-0.9	0.3-0.4
2	Galvanized roof sheets	0.25-0.28	0.85-0.9
3	Grass	0.97-0.98	0.7-0.75
4	White tile	0.9-0.95	0.1-0.5
5	Tar and Gravel	0.28	0.82-0.97
6	Brick or Stone	0.87	0.6-0.8
7	Asphalt	0.92	0.8-0.95
8	Concrete	0.9	0.65-0.9
9	Dense Canopy trees	0.95-0.99	0.82-0.85
10	Water	0.99	0.95-0.98
11	Black loamy soil	0.66	0.82-0.87

Table 1. The Thermal properties of various urban surface types[29]

Fei Yuan and Marvin E Bauer compared the Normalised Difference Vegetation Index (NDVI) and percent impervious surface as indicators of surface urban heat island effects by investigating the relationships between the Land Surface Temperature (LST), percent impervious surface area and the NDVI.[30] Landsat TM and ETM data were used for the study. They reported a strong linear relationship between LST and percent impervious surface for all seasons, whereas the relationship between LST and NDVI is less strong. Hua Li and Qinhuo Liu (2008) compared the normalized difference built-up index (NDBI) and Normalised Difference Vegetation Index (NDVI) as indicator of Surface Urban Heat Island (SUHI) effects in MODIS imagery by investigating the relationships between the Land Surface Temperature (LST), NDBI, NDVI from four different seasons for Changsha-Zhu zhou- Ziangtan (China) metropolitan area.[31] Scatterplots of NDBI, NDVI and LST for all the images were compared to find the relationships of LST to NDBI and NDVI. Results suggest that NDBI is an accurate indicator of SUHI effects and can be used as a complimentary method to the traditional NDVI. A good number of works reported the prevalence of heat island effect in various cities throughout the world.[29, 32]

Some authors have questioned the accuracy of impervious surface measures with regard to their impact on water quality and quantity.[33] For example, Total Impervious Area (TIA) includes all of the impervious surfaces in a watershed, regardless of what kind of connection exists between the impervious surfaces and the basin's water bodies. Most of the satellite based estimates calculates the TIA only. Effective Impervious Area (EIA) includes only the portion of a watershed that allows water to cross only an impervious pathway to reach the water. Years of scientific inquiry has firmly established impervious surface coverage as a "reliable and integrative indicator of the impact of development on water resources".[2] This combined with the fact that impervious surface is a measurable parameter, makes it an ideal substitute for measuring water quality in an urban environment.

Conclusion:

A good number of studies have commented on the impacts of impervious surfaces on urban hydrology. Impervious surfaces significantly reduce the water quantity and quality in a watershed. It is reported that the impervious surface degrades the watershed quality by greatly reducing the stream flow and increasing the stream temperature. They carry huge pollutant loads downstream, causing due harm to aquatic life. Surface urban heat islands are another phenomenon caused by impervious surfaces. Attempts have been reported from all over the world to quantify the area under impervious surfaces as well as its impacts.

Acknowledgement:

We acknowledge CSIR, for the financial support provided in the form of CSIR-JRF. Also we thank DST-FIST for the financial support provided for the school.

REFERENCES

[1]. Schueler T.R. The importance of impervious surfaces, Watershed Protection Techniques, 1994, 1, 100-111.
[2]. Arnold, C.A. Jr. and Gibbons, C.J, "Impervious Surface Coverage: the Emergence of a Key Urban Environmental Indicator", Journal of the American Planning Association, 1996, 62(2), 243-258.
[3]. Leopold, L.B., Hydrology for urban land planning: a guide book on the hydrologic effects of urban land use, U.S. Geological Survey Circular, 1968, 554.
[4]. Carter, R. W. Magnitude and Frequency of Floods in Suburban Areas. Short Papers in the Geologic and Hydrologic Sciences, 1961, 424-B: B9-B11.
[5]. Morisawa, M., LaFlure, E., 'Hydraulic geometry, stream equilibrium and urbanization. In adjustments of the fluvial systems'. In: Rhodes, DD; Williams, GP, editors. Proceedings of 10th Annual Geomorphology Symposium Series. Binghamton. New York: 1979.
[6]. Arnold, D. G., Boison, P. J. and Patton, P. C. 'Sawmill Brook: An example of rapid geomorphic change related to urbanization', J. Geol., 1982, 90, 155–166.
[7]. Bannerman, R.T., Ownes, D.W., Dobbs, R.B., Hornewer, N.J., 'Sources of pollutants in Wisconsin stormwater', Water Science and Technology, 1993, 28 (35), 241–259.
[8]. Girija, D., Environmental Impact Assessment of Surface Water Drainage System in the Central Area of Cochin using GIS and Remote Sensing, M.Tech. Thesis, CUSAT, 2005.
[9]. Shekhar K.R. and Rao B.V., Evaluation of sediment yield by using Remote Sensing and GIS: a case study from the Phulang Vagu watershed, Nizamaba District (A.P), International Journal of Remote Sensing, 2002, 23(20), 4449-4509.
[10]. Santillan, J.R., Makinano, M.M., and Paringit, E.C. Integrating remote sensing, GIS and Hydrologic models for predicting Land Cover Change Impacts on surface runoff and sediment yield in a critical watershed in Mindanao, Philippines, International archives of the Photogrammetry, Remote Sensing and Spatial Information Services, XXXV111, 8, Kyoto Japan, 2010.
[11]. Harbor, and Jonathan M., A practical method for estimating the impact of land-use change on surface runoff, groundwater recharge and wetland hydrology. American Planning Association. Journal of the American Planning Association, 1994, 60 (1).
[12]. Pappas, E. A., D. R. Smith, C. Huang, W. D. Shuster, and J.V. Bonta. Impervious surface impacts to runoff and sediment discharge under laboratory rainfall simulation Catena, 2008, 72:146-152,.
[13]. Schueler T. R., Mc Neal, L.F., and Cappiella K. Is impervious cover still important? Review of Recent Research, Journal of Hydrologic Engineering, ASCE, 2009, 4, 309-315.
[14]. Klein, R. Urbanization and stream quality impairment. American Water Resources Association, Water Resources Bulletin, 1979, 15(4).
[15]. Brun, S. E., and L. E. Band. Simulating runoff behavior in an urbanizing watershed, Computers, Environment and Urban Systems, 2000, 24 (1):5-22.

[16]. Hurd J.D., and Civco D.L., Temporal characteristics of impervious surfaces for the state of Connecticut, ASPRS Annual conference proceedings, 2004.
[17]. Gillies R., Box J.B., J. Symanzic, and Rodmaker, E.J., Effects of urbanization on the aquatic fauna of the Line Creek watershed, Atlanta- A satellite perspective. Remote sensing of environment, 2003, 86:411-422.
[18]. Yang, L, C. Huang, C. Homer, B. Wylie, and M. Coan., An approach for mapping large-area impervious surfaces: Synergistic use of Landsat 7 ETM+ and high spatial resolution imagery, Canadian Journal of Remote Sensing 2002, 29(2), 230-240.
[19]. Chithra S.V., Amarnath A., Smitha S.V., Harindranathan Nair M.V., Estimation of Effective Impervious Area of Cochin using Satellite Images, Research Journal of Recent Sciences,2013, Vol. 2(ISC-2012), 241-24.
[20]. Hough, J., Management alternatives for increasing dry season base flow in the Miombo woodlands of Southern Africa. Ambio, 1986, 15(6), 341-346.
[21]. Zheng, H., Chen, F., Ouyang, Z., Tu, N., Xu, Weihua, Wang, X., Miao, H., Li, X., Tian, Y., Impacts of reforestation approaches on runoff control in the hilly red soil region of Southern China. Journal of Hydrology, 2008, 356, 174-184.
[22]. Ferguson, B. K., Introduction to Stormwater: Concept, Purpose, Design. New York, NY: John Wiley and Sons, Inc., 1998.
[23]. Schueler, T.R., Controlling urban runoff–a practical manual for planning and designing urban best management practices, Metro. Wash. Counc. Gov., Washington, DC 240, 1987.
[24]. Paul M.J and J.L. Meyer, Streams in the urban landscape. Annual review of Ecology and Systematics. 2001, 32, 333-365.
[25]. Chandler C. M., Huryn, A.D., Cronan, C., Impervious Surface Area As A Predictor of the Effects of Urbanization On Stream Insect Communities In maine, U.S.A., Environmental Monitoring and Assessment, 2002, 89: 95–127.
[26]. Galli, J., Thermal Impacts Associated with Urbanization and Stormwater Management Best Management Practices. Washington, DC. Metropolitan Washington Council of Governments for the Sediment and Stormwater Administration of the Maryland Department of the Environment, 1990.
[27]. Voogt J A, Oke T R, Thermal Remote Sensing of Urban Areas, Rem. Sensing of Environment, 2003, 86, 370-384.
[28]. Oke, T. R., The energetic basis of the urban heat island, Quarterly Journal of Royal Meteorology Society, 1982, 108, 1 – 24.
[29]. Minni S., M. Mili, K. Pradeep, and D E V S Kiran K., "Sustainable Urban Development: Minimising Urban Heat Island Effect and Imperviousness Factor", SANEI Working Paper Series No. 13-03, South Asia Network of Economic Research Institutes, Dhaka, 2013.
[30]. Fei Yuan, Marvin E Bauer. Comparison of impervious surface area and normalized difference vegetation index as indicators of surface heat island effects in Landsat imagery, Rem. Sensing.of Environment, 106, 375-386; 2007.
[31]. H. Li, Q. Liu, Comparison of NDBI and NDVI as indicators of surface urban heat island effects in MODIS imagery, Proc. Of SPIE. 2008, 7285, 728503-3.
[32]. Shabeer, A. M., & Mahesha D., estimation of land surface temperature in urbanized area and microclimate change using spatial technique –a MODIS based approach for Cochin City, Papeles de Geografía, 2011, 53-54, 241-245.
[33]. Brabec, E., Schulte, S., and Richards, P., Impervious Surfaces and Water Quality: A Review of Current Literature and Its Implications for Watershed Planning, Journal of Planning Literature, 2002, 16 (4) 499-514.

Meeting summary & additional information, discussion on hotel proposal at Sundby Road & Osage Street

From: Estabrooks, Tom (MPCA) (tom.estabrooks@state.mn.us)

To: beccamulenburg@yahoo.com

Date: Thursday, November 3, 2022 at 03:37 PM CDT

Hi Becca, Here's a summary of my notes on the things we talked about earlier today. I have also included links to references and to other addi. onal informa. on, as you requested.

Notes on Miller Creek Water Quality & Watershed Conditions
Miller Creek is a designated trout stream with a naturally reproducing brook trout popula on (i.e., brook trout are not stocked by the DNR).

The watershed contains a high degree (49%) of disturbed & developed land cover in watershed (MPCA Duluth Urban Area Streams TMDL, Table 6/PDF 23 h. ps://www.pca.state.mn.us/sites/default/files/wq-iw10-11e.pdf summarizes the land cover in the Duluth Streams watersheds).

Miller Creek watershed contains a high degree of impervious surfaces in the watershed, with an es□mate in ~ 2003 to be at least 22% (Lake Superior Streams web site h. ps://www.lakesuperiorstreams.org/understanding/impact_impervious.html). Note that studies on impervious surfaces have documented nega□ve effects/degrada□on to stream biota, when impervious surfaces reach 10%, but degrada□on can be detected even at approximately 4% impervious surfaces in a watershed.

Miller Creek has four water quality impairments, two of which have approved studies (total maximum daily loads (TMDLs)) from U.S. EPA. Each impairment requires detailed studies to understand the factors (stressors) that are causing and contribu□ng to the water quality impairments and to set needed reduc□on goals to restore the water quality. There are numerous studies and reports completed by MPCA and local partners (e.g., South St. Louis SWCD, UMD-NRRI) available on MPCA's web site that describe strategies and ac□ons that are needed/could be taken to contribute to restoring the stream water quality and can be found here:

h. ps://www.pca.state.mn.us/watershed-informa□on/duluth-urban-area-watershed
https://www.pca.state.mn.us/watershed-informa□on/st-louis-river

The four water quality impairments on Miller Creek are:

- Stream Temperature (approved by EPA in 2018)
- E. coli bacteria (approved by EPA in 2020)
- Macroinvertebrates
- Chloride (source = Minnesota's 2022 Impaired Waters List: https://www.pca.state.mn.us/air-water-land-climate/minnesotas-impaired-waters-list).

Development of urban watersheds, especially coldwater streams like Miller Creek can cause and/or contribute to a mul□tude of factors that nega□vely affect the stream water quality – biology and chemistry (commonly referred to as urban stream syndrome). Some examples include:

- channeliza□on/ditching of the stream channel speeds up the stream flow and contributes to stream channel erosion & degrada□on. It also nega□vely affects recharge of the shallow groundwater and water storage in the streambanks.
- increases in impervious surfaces increases the runoff volumes and also shortens the □me of water delivery to the stream, sending large pulses of water and related urban pollutants into the stream (e.g., sediments, chloride). Impervious surface has been used as an indicator of stream water quality; the more imperviousness, the greater the likelihood for degraded water quality.

- Filling of wetlands has diminished the water storage capacity in the watershed, which contributes to less water available for the stream, especially during extended dry periods.
- Smaller water volumes in the stream can warm more quickly and reduce the favorable condi□ons necessary for brook trout survival.
- Development of lands can reduce temporary water storage by grading the land surface, typically resul□ng in less pervious surfaces, more impervious surfaces, more turf grass and fewer trees.
- Incremental degrada□on of remaining natural resources, such as wetlands and natural areas adjacent to development is common.

Notes on observations discussed

There is a possibility that the development could alter the site hydrology by cutting-off surface and subsurface drainage to the wetlands located between the development and Sundby Road. The stormwater discharge directed to some of the wetlands may replace some of that drainage, but volumes, □ming, and dura□on of the stormwater discharges may alter wetland vegeta□on and type. The wetlands nearest the entrance may affected by the development (e.g., become drier), while the hydrology of the wetlands downgradient of the development may be maintained or could become drier or wetter, depending on precipita□on factors.

The proposed development may be too large for the site, given the exis□ng environmental constraints (wetlands). The proposal doesn't provide an adequate naturally vegetated buffer between the project and the adjacent wetlands, based on the figures in the Staff Report.

At the same □me that there is a large-scale stream restora□on project occurring very near the proposed project to restore degraded stream func□ons and contribute to improving water quality, more green spaces in the watershed will be developed through this project and other projects. So, while efforts to restore the stream are ongoing, so are the impacts.

Ul□mately, there is a maximum level (carrying capacity/sustainability) of the watershed to be able to absorb/withstand the effects from development and s□ll func□on as a healthy stream and watershed. Given the high percentages of past development and disturbed land cover in Miller Creek watershed (especially those undertaken during early development of the watershed), one could easily argue that we are beyond that point. There is no indica□on that development pressures will decrease, and even if it does there exists a high degree of developed and disturbed land surfaces, and degraded water quality in Miller Creek. For the most part, once a green space is developed, that conversion is permanent and cons□tutes a loss to the watershed, regardless of the mi□ga□ng measures put in place through zoning and permitting.

Requested links to resources

You also asked about the Environmental Assessment Worksheet (EAW), Alterna□ve Urban Area Review (AUAR) and the pe□□on process. Addi□onal resources can be found here:

https://www.eqb.state.mn.us/content/environmental-review-guidance-ci□zens
https://www.eqb.state.mn.us/content/eaw-process
https://www.eqb.state.mn.us/sites/default/files/documents/Quick%20Reference-Alterna□ve%20Urban%20Areawide%20Review%20-%20Updated%20Dec2015.pdf
https://www.eqb.state.mn.us/content/ci□zen-pe□□on-prepara□on-process

Lastly, here's a link to the Duluth News Tribune ar□cle on Duluth streams that I men□oned:
https://www.wctrib.com/sports/duluths-urban-trout-streams-hanging-on-but-need-help

Please feel free to contact me if you have addi□onal ques□ons or want clarifica□on on the informa□on and resources I have provided. Thanks! – Tom Estabrooks

Tom Estabrooks | Project Manager | Watershed Division | Minnesota Pollu on Control Agency | 525 South Lake Avenue, Suite 400, Duluth, MN 55802 | Phone: (218) 302-6608 | Email: tom.estabrooks@state.mn.us | Web: www.pca.state.mn.us

Wetland Delineation Report

Sundby Road
Duluth, MN

September 2008

Prepared For:
Marshall Weems
Mission Development
603 20th Street North
Sartell, MN 56377

Prepared By:
Environmental Troubleshooters, Inc.
3825 Grand Avenue
Duluth, Minnesota 55807

ET Project #08-0906

1.0 EXECUTIVE SUMMARY

Environmental Troubleshooters, Inc. (ET) performed a wetland delineation for Mr. Marshall Weems of Mission Development for a parcel of property ("subject site") located east and west of Sundby Road in Duluth, Minnesota. The site location is visually depicted on Figure 1, attached. The property's legal description is the SE ¼ of the NW ¼, Sec. 18, T 50 N, R 14 W, (St. Louis County). Marshall Weems called to request a wetland delineation as part of future site development. The subject site encompasses the east and west sides of Sundby Road. The subject site is an irregularly shaped parcel. The subject site is approximately twenty-eight (28) acres in size. Sundby intersects the subject site on the east and west, Page Street borders the subject property on the east, Kohl's Department store borders the subject site on the southwest, residential property borders the subject site on the north and east, Miller Creek borders the subject site on the southwest, and undeveloped property borders the subject site to the south, west, and east.

The subject property is currently developed with residential homes and also has undeveloped portions. The subject site consists of mature forest with wetland areas on the northwestern, northeastern, and southeastern portions of the property. The approximate property size is twenty-eight (28) acres.

Based on visual observations and data collected along various points, the subject property contains three (3) wetland areas, consisting of three (3) wetland types. The wetlands are classified as a Type 6 (Shrub Swamp), Type 3 (Shallow Marsh), and Type 4 (Deep Marsh). Approximately fifty (50) percent of the property is wetlands. The Type 6 wetland is located on the northwestern, northeastern, and southwestern portions of the subject site, the Type 3 (Shallow Marsh) is located on the east central portion of the subject site, and the Type 4 (Deep Marsh) is located on the east central portion of the subject site adjacent to the Type 3 (Shallow Marsh) wetland. The approximate wetland sizes and locations are visually depicted on Figure 2, attached. Because these wetlands are located in the Miller Creek Floodplain and Shore land boundary, the following City of Duluth rules apply:

- No Building, Roads, Parking within 150 feet of Miller Creek.
- No greater than 30% Impervious Areas within 300 feet of Miller Creek

2.0 INTRODUCTION

The following is a report documenting the wetland delineation completed at the subject site located on Sundby Road in Duluth, Minnesota. The wetland delineation was conducted on behalf of Mr. Marshall Weems of Mission Development as part of future site development. ET performed the wetland delineation on September 5, 16, and 17 of 2008 and determined the wetland/upland boundaries on the subject site. Approximate wetland sizes, wetland/upland boundaries and data point locations are illustrated on Figure 2, attached.

DULUTH'S WILD TROUT STREAMS HANGING ON, BUT *NEED HELP*

PCA has cataloged issues, developed long-term plan to restore trout stream water quality.

By John Myers
jmyers@duluthnews.com

There aren't many cities that can claim 50 streams running through their boundaries, like Duluth can, let alone a dozen or more clear and cool enough to hold native, wild trout.

From Mission Creek on the west to the Lester River on the east, the city is crossed by streams that start high over the hill and tumble down to the St. Louis River or Lake Superior.

Jeff Jasperson of Duluth likes to snorkel in these shallow, cool streams and look behind old logs in the water. He's finding not only small brook trout babies but also some bigger, breeding stock fish, in places that don't necessarily look like the trout streams we see in fly-fishing magazines or movies.

"I don't think many people in Duluth realize how many of these local streams still have wild trout in them,'' said Jasperson, a biologist for the Minnesota Pollution Control Agency in Duluth. "It's not just the bigger rivers. We're finding trout in tiny, cold-water tributaries you could jump across in one step."

When Jasperson isn't snorkeling for fun or monitoring streams as part of his day job, he likes catching trout with his kids. He's even captured some great underwater video of urban trout on his Go-Pro.

"The fact we can walk from our house in Duluth and catch a few trout and cook them up for dinner, the kids think that's so cool. So do I,'' he said.

But most of Duluth's urban trout streams are impaired, in some sort of trouble caused by the trappings of city life: Too much sediment from runoff, salt from winter road clearing and E. coli bacteria contamination from people and animals.

All that concrete and blacktop in town means water runs off, doesn't soak in, and is often too warm and too dirty, or turbid, to meet trout standards. Some Duluth streams are already too warm at times for trout to live. Worse, most are forecast by mid-century — just 30 years from now — to warm to levels that are fatal to trout, thanks to a warming climate.

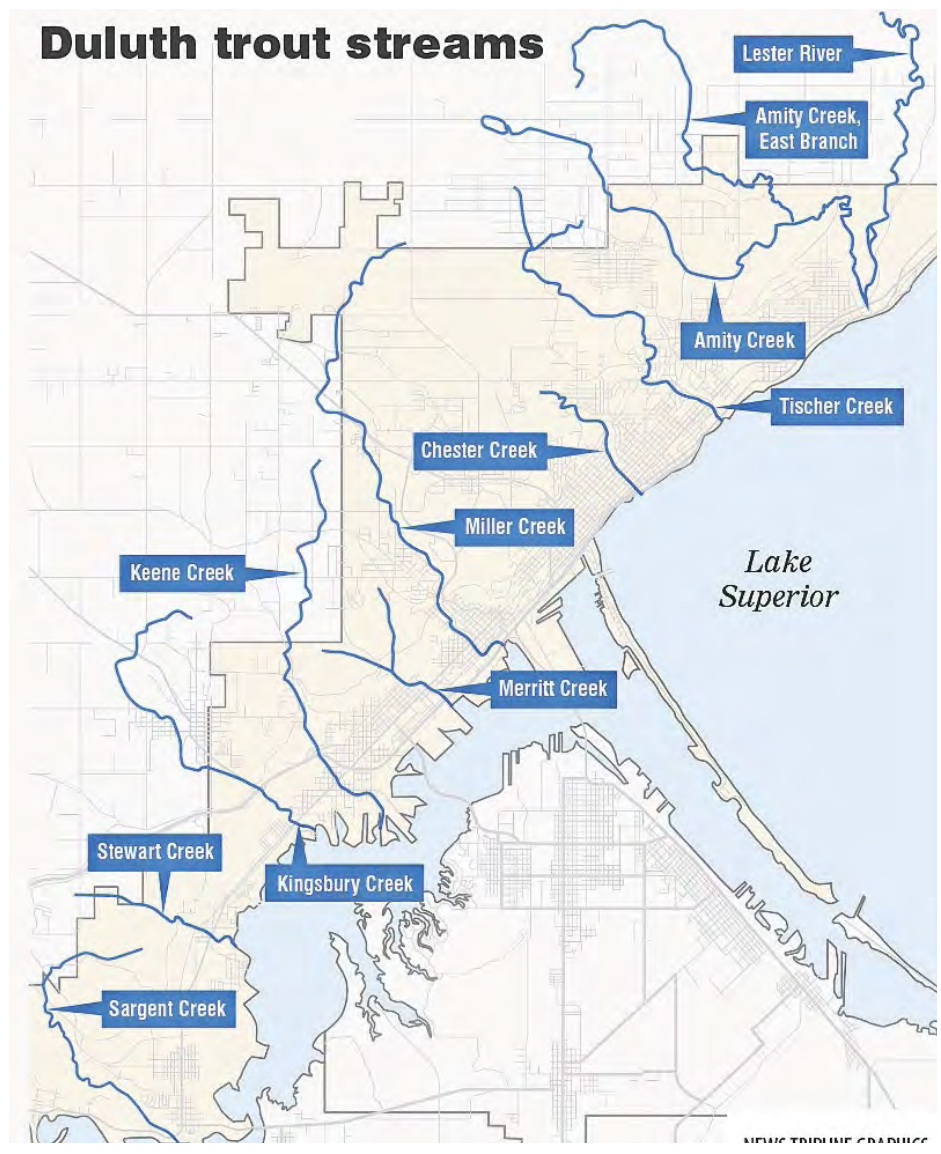
That's why the PCA has developed a report on the status of those streams and released a plan on how to make 11 of them more hospitable to fish. The 11 are the streams with enough long-term data available to show what impairments are an issue.

Jeff Jasperson photo
Jeff Jasperson of Duluth releases a nice brook trout on Amity Creek in Duluth. Jasperson, a biologist with the PCA, says he's surprised by how trout are hanging on in the city despite water quality issues.

Jeff Jasperson photo
Owen Jasperson of Duluth releasing a brook trout on Tischer Creek in Duluth.

The name is a mouthful — the Duluth Urban Streams Total Maximum Daily Load — part of the sometimes-obtuse federal mandate to apply the Clean Water Act to ground-level waterways. The effort establishes the amount of each pollutant, the load, that each stream can accept and still meet water quality standards. The process provides a snapshot of where streams are today and lays out a road map on how to improve water quality over the next 10-30 years. But it's going to take more than a plan to get there. Local governments, watershed districts and especially residents will have to spend time, money and effort.

TROUT: Page D3



Hidden lake produces fish and memories

By Steve Kuchera
skuchera@duluthnews.com

Minnesota is naturally known as the land of lakes, and over the years I've been on many of them. As a fisherman, several are more clearly fixed in my memories.

One of the foremost is a small, undeveloped lake surrounded by forests, beaver ponds and wetlands. The only access is up a small, log-choked stream or down a dirt road that likely hasn't seen a lick of maintenance since neighboring parcels of land covered with grown trees were last logged.

When Dad and I first fished here perhaps 20 years ago, we could, in dry weather, drive a truck or SUV to the lake. Then one wet fall a bear hunter tore out the bottom of the track, leaving ruts that became streams and holes that became pits of clinging mud. Now getting to the lake requires dry weather and an UTV pulling a small boat.

The difficulties getting there ensure that we almost always have the lake to ourselves. And over the years, we have had some great days of fishing. One early fall visit, we each caught the largest northern pike either of us ever boated in Minnesota.

But what really makes the fishing memorable are the panfish, especially in the fall when the aspen and tamarack around the lake are dressed in gold and the air has a nip to it. Then the slabside crappies are biting, sometimes so quickly that Dad and I will double up, each reeling in a fish. Such action adds to our friendly and traditional debate about who is the better fisherman. (Just as me losing a fish can bring forth Dad's

LAKE: Page D3

Steve Kuchera / skuchera@duluthnews.com
A morning mist burns off an undeveloped lake that over the years has produced nice fish and great memories.

Steve Kuchera / skuchera@duluthnews.com
A small northern is netted and soon after returned to the lake. The lake holds far bigger fish.

TROUT

From Page D1

"It's not saying that by 2030 or even 2050 everything is going to be fine. But it's identifying the issues and offering a plan on how to improve,'' said Karen Evens, who is leading the effort for the PCA. "And it gives us a way to measure the progress along the way."

There are no trout police to enforce the effort.

"It's not prescriptive. We can't order the community to do these things,'' Evens noted. "It has to be collaborative."

Fixes included more and better street sweeping by cities to keep polluted sediment from flushing into the streams with each rain; better stormwater storage and management; cleaning sediment traps in storm sewers; protecting small, cold-water tributaries that keep the bigger streams cold and oxygenated enough for trout; limiting or at least better planning for development near streams; and preserving vegetation along the waterways.

E.coli bacteria in streams washes in not just from humans, but also pets and wild animals. On the human side, fixing leaking sewer pipes and replacing failing septic systems are key. Adding more and better restrooms in city parks would help. Reducing pet waste remains a huge issue. There may be areas where nuisance wild animal populations — raccoons, deer, beaver, etc. need to be reduced or where birds like geese and ducks need to be encouraged to stay away.

While many people perceive brook trout to be a hyper-sensitive species that needs pristine waters to survive, Jasperson says Duluth brook trout have adapted over the last century of intense development, with the strongest fish passing on their genes.

"The surviving fish know where the cold water springs and tributaries are; I've seen fish really packed around those. They also know where to go in August, or in a drought year like right now, to hang out when the flows are really low,'' he said.

That's how Miller Creek can flow right through the uber-developed Miller Hill Mall district and still have a viable population of wild brook trout. But fluctuations in the creek's population — from as high as 448 trout per 1,000 feet in 1993 to just 34 in 2005 — show problems remain: Salt, sediment, a lack of cold-water hiding places and runoff from the massive parking lots and ribbons of road in the area.

Comment on the plan:

The PCA is asking for public comments on the TMDL report, which is available on the project's web page at www.pca.state.mn.us/water/total-maximum-daily-load-tmdl-projects or at PCA's Duluth office. You can get more information or send written comments to Karen Evens 218-302-6644, PCA, 525 Lake Avenue South, Suite 400, Duluth, MN 55802, by July 22.

"When people realize that these aren't just drainage ditches running through town. When you show them they are a functioning, living systems with real fish — maybe not functioning as well as they could be — most people are willing to help,'' Jasperson said. "But a lot of people don't know. I've talked to landowners who didn't even know they had a cold-water stream on their land, let alone a population of wild brook trout. Some of them are just floored when I tell them."

Over 30 years, to do all the suggested work in the PCA plan could cost the community between $100 and $130 million to save its trout streams, Evens said. But it's not an all-or-nothing proposition.

"We want to target efforts to where they are going to have the most bang for the buck,'' she said. "That's why we want to incorporate stream (protections) into projects that are already going to happen."

That means UMD plans ahead to improve campus stormwater control efforts as part of its new dormitory construction project. City officials incorporate stream protection efforts as they rebuild city streets and sewers. Slowing and storing warm, dirty water on developed sites is a big step toward cleaner streams. So is protecting wetlands and springs high on Duluth's hill, the sources of each stream, using conservation easements and tougher construction rules.

Deserae Hendrickson, Minnesota Department of Natural Resources Duluth area fisheries supervisor, said reclaiming more natural stream channels also is key for trout, and restoration projects that followed the massive 2012 flood have done wonders. Chester Creek, for example, has seen a transformation from a dammed, channeled stream slowed by a pond to a more natural, free-flowing waterway thanks to a project by the South St. Louis County Soil and Water Conservation District. The effort also has helped the stream stay within its natural floodplain during major flood events.

The flood itself has some surprising benefits. When a man-made debris barrier blew out of Mission Creek in western Duluth during the flood, it opened up the upper stream for fish. Now, steelhead trout from Lake Superior are spawning far upstream for the first time in half a century, Hendrickson said.

"The flood did a lot of damage, certainly. But where it blew out (small culverts and small bridges) it allowed us to get larger passages replaced in those areas. So we saw a lot of re-connectivity there, opening up new areas for trout,'' she said.

In a few western Duluth streams, the DNR found cool water but no wild trout remaining. So they stocked the creeks and now the trout are reproducing on their own.

But problem areas remain. Tischer Creek just below Hartley Nature Area now is a warm water dead zone for trout, Hendrickson noted, in large part because the creek is dammed to create Hartley Pond. Removing the dam would help trout but destroy the pond, a favorite spot for local residents. There are possible solutions, such as separating the creek from the pond so the stream water can flow faster.

"We have stretches of streams that are impaired and need attention," Hendrickson said. "But we also have a lot of stream runs that, despite what we've done to them over the years, somehow hang on and support trout."

The PCA's Evens agreed.

"These trout, even if you don't fish for them, are part of Duluth's identity, part of the quality of life,'' she said. "Having trout streams in our city is part of why people want to live here."

Jeff Jasperson photo

A brook trout caught on Tischer Creek in Duluth.

Jeff Jasperson photo

Jeff Jasperson likes to snorkel in small Duluth streams to find out where the fish hang out, such as near old logs. Here he found several small brook trout near where a coldwater spring seeps into the stream.

11 Duluth trout streams and their major problems

Keene Creek — E. coli bacteria
Kingsbury Creek — Poor invertebrate population
Miller Creek — Salt; poor invertebrate population; warm water; E.coli
Sargent Creek — E. coli bacteria
Stewart Creek — E. coli bacteria
Merritt Creek — E. coli bacteria
Tischer Creek — E. coli bacteria
Chester Creek — E. coli bacteria
Amity Creek — Sediment turbidity
Amity Creek East Branch — Sediment turbidity
Lester River — Sediment turbidity

LAKE

From Page D1

comment "Stupid kid. I taught you everything I know and you still don't know anything.")

Even when nothing but deer flies and mosquitoes are biting, it is good to be on the lake. Undeveloped and remote, it is home or magnet to wildlife. Beaver and otters have swum by us as we fished. Eagles have soared overhead looking for their own catch. Morning mists have faded to reveal a dozen swans in a corner of the lake. We've watched deer come to the water to drink and been watched by a loon hiding on its nest.

We were last on the lake earlier this month, fishing two evenings. The first night the only fish we caught was a small northern I hooked late in the day.

Steve Kuchera / skuchera@duluthnews.com

A common loon sits on its nest, watching as Dad and I troll by.

The next evening it looked like we were skunked as we trolled back to the landing when Dad hooked a snag. Then the snag started moving in the jerking and diving manner of a northern. I sat back and watched as Dad played a combative pike on a panfish rig. Two, three times he brought the fish close to the boat only for the northern to drive again, rod bending over and line pulling out.

When Dad got the seven-pound northern alongside the boat I netted it, quickly unhooked it, and returned it to the lake.

"You don't need big hooks to catch big fish," Dad said.

Or special times on the water that will long be remembered.

Steve Kuchera / skuchera@duluthnews.com

A deer walks across the lake's outlet.

Steve Kuchera / skuchera@duluthnews.com

A nice-sized sunfish lays on top a five gallon pail.

Duluth streams hard-hit by development

Duluth News Tribune
By John Myers
March 19, 2018 05:53 PM

Duluth's bounty of urban streams have been hard-hit by development, pollution and other human impacts, according to a report released Monday by the Minnesota Pollution Control Agency.

All 11 trout streams tested in Duluth have at least one impairment for water quality, the PCA reported Monday, including Miller Creek, pictured here. Problems include too much sediment, warm water, road salt and E. coli bacteria. News Tribune file photo.

Duluth's bounty of urban streams have been hard-hit by development, pollution and other human impacts, according to a report released Monday by the Minnesota Pollution Control Agency.

All 11 of the designated trout streams that were assessed recently had at least one form of "impairment," the PCA noted.

The city's network of paved roads, parking lots and roofs send water into streams that's often too dirty and too warm for trout to thrive. There's also E. coli bacteria and pollutants such as road salt. Several of the streams don't have the diversity of invertebrates and other creatures that should be seen in a healthy stream.

Keene, Sargent, Merritt, Tischer and Chester creeks all have high levels of E. coli bacteria that could be coming from wildlife, pets, failing septic systems and leaking sewer lines, said Brian Fredrickson, PCA project manager.

Miller Creek has E. coli, too, but also faces compounded problems from too much chloride, or road salt, too warm of water and a lack of invertebrates that make up the base of the food chain for trout. Kingsbury Creek also lacks invertebrates.

Both branches of Amity Creek and the Lester River have too much turbidity, or sediment, in the water.

Still, most of the 11 streams studied continue to hold populations of stocked and naturally reproducing brook trout - even Miller Creek, which winds through the Miller Hill shopping corridor - lending hope that the streams can be saved if they can be buffered from human activity on land.

Duluth has 43 named streams in all - 16 of which are designated trout streams - that drain 141 square miles, from Mission Creek in the far west to Lester River on the east. Most of the streams start in wetlands and boggy headwater areas on top of the hill before dropping some 600 feet, often carrying clay and other sediment down to either the St. Louis River estuary or Lake Superior.

The PCA reports on Duluth streams are part of the statewide effort to assess and report back on what's stressing all of Minnesota's 80 major watersheds. The reports list the type and quantity of pollutants, identify where the pollution comes from and propose ways to return water quality to an acceptable level. A similar report was released last month on some North Shore streams.

The PCA is now asking for public comments on the reports before sending them on to the Environmental Protection Agency for approval. The reports are intended to be the basis to develop projects that solve the water quality impairments, with the PCA calling in help from the Board of Water and Soil Resources, the Soil and Water Conservation District, the city of Duluth and other agencies.

In the end it's going to take action by city residents to affect any real change, Fredrickson said.

The report notes that it is especially critical to preserve all remaining wetlands and forested areas at the headwaters and along the streams to help buffer water quality. Other projects include stream bank and channel stabilization, minimizing grass lawns, minimizing impervious areas such as paved parking lots, planting trees and shrubs and establishing conservation easements.

Several projects already have occurred, such as stream channel restoration along Chester Creek and bluff stabilization along several creeks, and efforts have been underway for years to slow and filter parking lot runoff near Miller Creek.

"There's no way we're going to fix these problems without engaging pretty much everyone who lives in the watershed," Fredrickson told the News Tribune. "The actions of one landowner, good or bad, can have an impact on these streams."

Even then, larger forces also are in play. At least 10 of Duluth's trout streams are projected to have summer water temperatures that are lethal to brook trout by 2050 as the region's climate warms.

The reports can be seen at www.pca.state.mn.us/duluth-urban-area-streams-watershed . Public comments on the reports will be accepted through April 18 at Brian.Fredrickson@state.mn.us

UNIVERSITY OF MINNESOTA
ST. ANTHONY FALLS LABORATORY
Engineering, Environmental and Geophysical Fluid Dynamics

Project Report No. 535

Stream Temperature Modeling of Miller Creek, Duluth, Minnesota

by

William R. Herb, Timothy Erickson and Heinz G. Stefan

Prepared for

Minnesota Pollution Control Agency
St. Paul, Minnesota

October 2009
Minneapolis, Minnesota

Table of Contents

1. Introduction

Miller Creek is a trout stream which originates near Duluth International Airport, flows through the cities of Hermantown and Duluth, MN and discharges into St. Louis Bay of Lake Superior. Despite a highly urbanized watershed, Miller Creek has a naturally reproducing Brook Trout fishery. Prominent hydrologic features of the 9.4 square mile watershed include relatively high levels of impervious surfaces (22%) and extensive wetlands in the upper portion of the watershed (Figure 1.1) that are believed to supply much of the hydrologic storage for the watershed. Miller Creek is temperature impaired and was recently put on the list of impaired waters by the Minnesota Pollution Control Agency (MPCA).

Temperature impairment of a stream implies that the stream is receiving excessive loading of heat energy for particular climate and flow conditions. The main sources of heat energy for a stream include atmospheric heat transfer (solar radiation, long wave radiation, evaporation, convection), surface runoff and local inputs, e.g. of treatment effluent. Previous temperature TMDLs for Pacific Northwest salmon rivers (e.g. USEPA 2000) have treated atmospheric heat transfer as a non-point source of heat and local inputs of treatment effluent as point sources of heat. Atmospheric heat inputs are further classified into natural and anthropogenic sources,

then used to generate daily runoff volumes for each of 41 sub-watersheds of Miller Creek for the period June 1, 2008 to October 10, 2008.

Runoff temperatures were simulated using MINUHET for a commercial and residential development in Miller Creek, and calibrated to observed stormwater discharge temperatures in 2008, as described in Section 2. In Section 4, these runoff temperatures are generalized for the entire watershed, based on the level of impervious land use, and combined with the volumes determined by the SWMM model to give the resulting heat loading due to stormwater for the entire watershed. Runoff volumes and heat loadings from stormwater were calculated for a continuous period (June 15 to September 15, 2008), so that the heat loading from a variety of storms over the period is captured. The simulated runoff volumes and temperatures from each sub-watershed were then used to estimate stormwater heat inputs to Miller Creek from the MS4 permit areas (Section 4.2). These estimated heat loadings did not, in general, take into account possible best management practices (BMPs) of stormwater. The effect of stormwater BMPs such as wet ponds, infiltration practices, and underground vaults on heat loading is examined for a commercial development in Section 5.1. At the time of this report draft, allowable stormwater heat loadings have not been calculated, because the temperature standard to be used for the TMDL has not been finalized.

Finally, conclusions are given in Section 6 for managing stream temperature impairments in Miller Creek. There are several pressing issues to resolve for the Miller Creek temperature impairment. Low levels of riparian shading from upstream of Kohl's to Miller Hill Mall lead to much of the current stream temperature impairments. If shading is improved, then stormwater inputs may give more noticeable impacts of stream temperature. While infiltration practices are the most effective means to reduce stormwater heat loading, rate control practices (wet ponds, underground vaults) slow down the flow water and heat energy, and reduce the magnitude of stream temperature spikes. Increasing summer baseflow in Miller Creek through, e.g., wetland restoration will likely improve trout habitat, but baseflow increases may not, alone, give substantial reductions in stream temperature. Beyond this TMDL study, the high sensitivity of stream temperature to air temperature in Miller Creek makes future climate change effects a major concern.

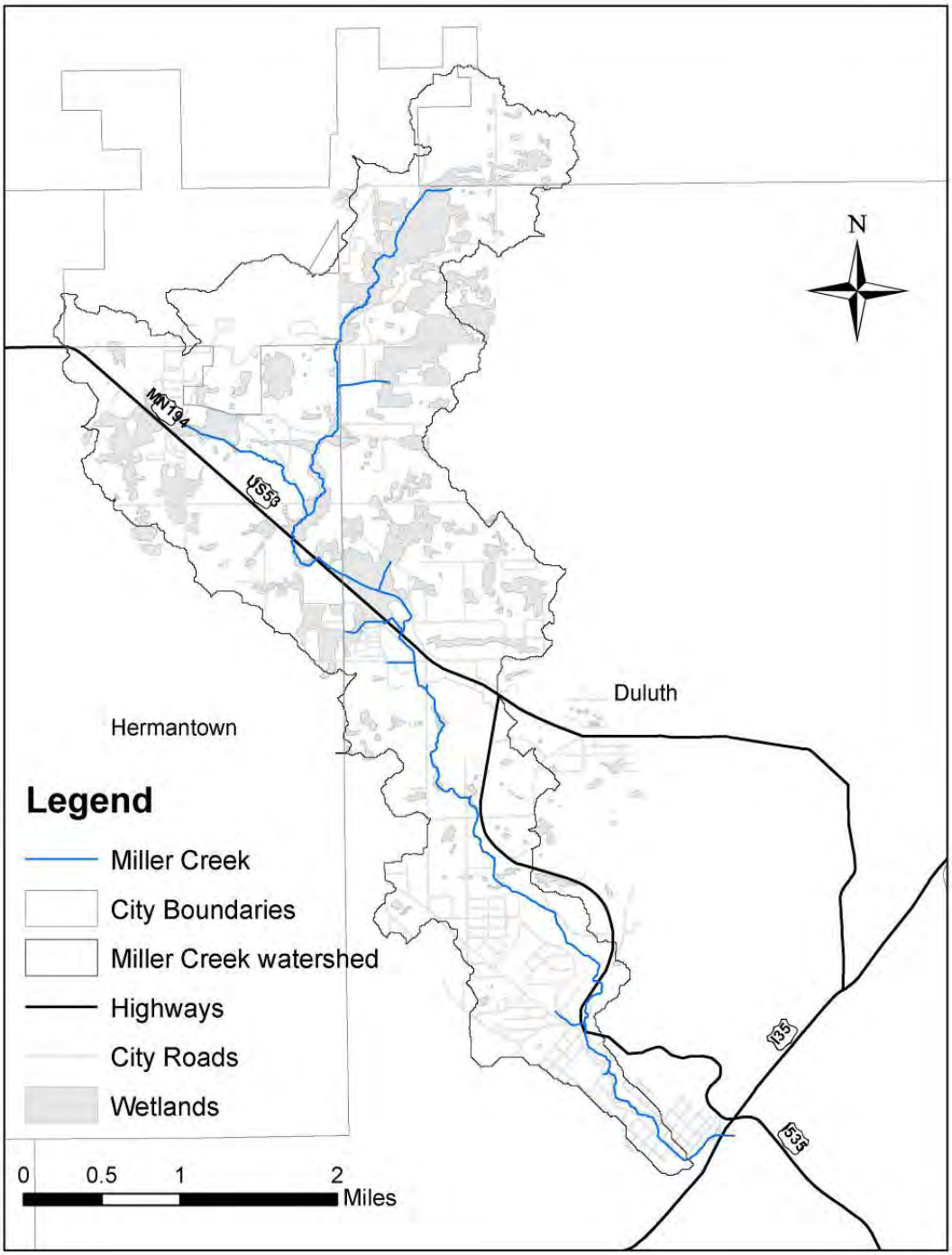


Figure 1.1. Map of the Miller Creek watershed, including wetland delineations.

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

196

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Rebecca Mulenburg	1649 W Page St, Duluth, MN 55811	
2	Terrance Mulenburg	1649 W Page St, Duluth, MN 55811	
3	Patricia Hughes	1014 N 11th Ave E Duluth, MN 55805	
4	Lisa Konicek	3509 N Blackman Ave, Duluth MN 55811	
5	JOSEPH KONICEK	3509 N BLACKMAN AVE, DULUTH MN 55811	
6	Jeff Hughes	1014 N 11th Ave E Duluth MN 55805	
7	Lucas Trea	1014 N 11th Ave E Duluth MN 55805	
8	Dan Nees	3230 Maple Grove Rd Hermantown, MN 55811	
9	Annette McDonald	1710 W Page St. Duluth MN 55811	
10	Marilyn Duncan	1512 Yosemite Ave Duluth, MN 55811	

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Julie Sexton	3827 Oxford Echo Woodbury, MN 55125	Julie Sexton
2	Sydney Sexton	3827 Oxford Echo Woodbury, MN 55125	Sydney Sexton
3	Hannah Paulsen	3444 White Oaks Lane Woodbury, MN 55125	Hannah Paulsen
4	Brigid Baumer	1748 Spinaker Drive 55125 Woodbury MN	Brigid E Baumer
5	Katie Musser	1355 Jurdy Rd Eagan, MN 55121	Katie Musser
6	Savira Sisneros	8949 197th St W, Lakeville, MN 55044	Savira Sisneros
7	Claire Rice	7926 9th Street circle North Oakdale, MN 55128	Claire Rice
8	Katie Sexton	3827 Oxford Echo Woodbury, MN 55125	Katie Sexton
9	Ron Sexton	3827 Oxford Echo, Woodbury, MN 55125	Ronald Sexton
10	Ruth Littmann	4014 Trinity Rd - Duluth, MN 55811	Ruth Littmann

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Lisa Cardinal	450-15th Ave-No. So. St Paul Mn 55075	
2	John Bjorklund	450 15th Ave, South St. Paul, MN 55075	
3	Connor Bjorklund	450 15th Ave No So St Paul MN 55075	Connor Bjorklund
4	Jillie Nesstedt	27020 Petesthill Jr. Elko New Market MN 55020	
5	Rick Jones	456 15th Ave N So St Paul 55075	
6	Rachel Casey	2920 E 38th St Mpls 55406	
7	Scott Mehlhorn	3860 - Upper 149th St W Rosemount MN 55068	
8	Steve Elliott	4132 Lyndale Av S Mpls MN 55409	
9	Laura Marker	3700 Woodddale Ave. So (unit 15) St Louis Pk, MN 55416	Laura Marker
10	Jennifer Montain	2609 W. 2nd St. Apt 1 Duluth MN 55806	

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Molly Watson	4014 Trinity Road Duluth, MN 55811	Molly Watson
2	Latoya Houston	218 E 5th St. Duluth, MN 55811	Latoya Houston
3	Rachel Durand	4014 Trinity Rd. Duluth, MN 55811	Rachel Durand
4	Sarah Klande	4014 Trinity Rd Duluth, MN 55811	Sarah K
5	Denise Austin	4962 Anderson Rd. Hermantown, MN 55811	DA
6	Cody Kalkbrenner	4014 Trinity Rd. Duluth, MN 55811	Cody
7	Harlekruger	317 1/2 e 6th St Duluth MN 55805	Harle Kruger
8	Trevon Pille	327 102nd Ave W Duluth MN 55808	
9	Jessica Mullen	3919 Chambersburg Ave Duluth, MN 55811	Jessica Mullen
10	Taylor Shaw	6417 Petre St. Duluth, MN 55807	

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Julie Mattila	1648 W. Page St. Duluth, MN 55811	Julie Mattila
2	Betty Mattila	1650 W. Morgan Duluth, MN 55811	Betty A. Mattila
3	JMattila	824 N 41st Ave W 55807 Duluth MN	JMattila
4	Katie Brooks	227 W. Mulberry St 55811 Duluth, MN	Kat
5	Tyler Mattila	8756 Pine Dr Cloquet 55720 MN	Tyler M
6	Brook Mattila	5041 Stuberud Rd Duluth MN 55803	Brook Mattila
7	Travis Allen	4877 Munger Shaw Rd Saginaw MN 55779	Travis Allen
8	Heidi Engstro	6040 Lavaque Rd Duluth 55803	Heidi Engstro
9	Kellen Talbot	512 4th ave NE Aitkin MN 56431	Kellen Talbot
10	Jean Peak	328 W. Morgan St Dlh, MN 55811	Jean R Peak

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Casandra Mulenburg	3717 11th Ave S, Minneapolis MN 55407	Casandra Mulenburg
2	Loren Heine	1425 Walnut St, Duluth 55811 MN	Loren Heine
3	Jason Miller	1500 Walnut St Duluth 55811 MN	
4	Mark Glad	912 Rodburd St, Duluth, MN 55811	
5	Steve Ludolph	857 W Morgan St. Duluth MN 55811	
6			
7			
8			
9			
10			

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Jen Kolquist	1954 Middle Ln. Duluth, MN 55811	
2	Ann Ballinger	4190 Stockton Rd Duluth, MN 55803	
3	Dan Mattila-Sour	5306 Glendale St Duluth MN 55804	
4	Roger Sour	5306 Glendale St. Duluth MN 55804	
5	Kevin Mattila	1648 W Page St Duluth MN 55811	
6			
7			
8			
9			
10			

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Robert Mulenburg	5099 Camden Rd Baxter MN 56425	
2	Clio Mulenburg	5099 Camden Road Baxter MN 56425	
3			
4			
5			
6			
7			
8			
9			
10			

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Mike Littmann	9172 Utica Ave S. Bloomington MN 55437	Mike Littmann
2	Chris Littmann	9172 Utica Ave S. Bloomington MN 55437	Chris Littmann
3			
4			
5			
6			
7			
8			
9			
10			

Online Petition Signatures - www.imagine-dn.org

#	Date & Time	First Name	Last Name	Signature	I hereby give my consent to count my signature towards the EAW petition regarding application PL22-143.	Street Address	City, State	Zip Code
1	2/27/23-13:14:20	jo	haubrich	jo m haubrich	TRUE	1513 w Morgan st	Duluth, MN	55811
2	2/27/23-17:05:43	jill	widness	jill widness	TRUE	2112 ponderosa cir	Duluth, MN	55811
3	2/27/23-17:11:29	Richard	Staffon	Richard Carlyle Staffon	TRUE	1405 Lawrence Rd	Cloquet, MN	55720
4	2/27/23-17:38:28	Jill	Crawford-Nichols	Jill N. Crawford-Nichols	TRUE	1505 W Morgan St	Duluth, MN	55811
5	2/27/23-17:38:52	Lucas	Crawford-Nichols	Lucas M. Crawford-Nichols	TRUE	1505 W Morgan St	Duluth, MN	55811
6	2/27/23-18:47:58	Pamela	Preston	Pamela Preston	TRUE	4953 Parkview Rd	Duluth, MN	55804
7	2/28/23-00:43:38	Julius	Salinas	Julius Salinas	TRUE	95 Stillmeadow Road	Esko, MN	55733
8	2/28/23-00:46:40	Celeste E	Kawulok	Celeste E Kawulok	TRUE	6588 East Hunter Lake Road	Duluth, MN	55803
9	2/28/23-00:46:51	Matt	Paulson	Matt Paulson	TRUE	5569 East grandview rd	Duluth, MN	55810
10	2/28/23-01:00:49	Amy	Westbrook	Amy C. Westbrook	TRUE	4015 Robinson Street	Duluth, MN	55804
11	2/28/23-01:23:42	Carol	Staffon	Carol A Staffon	TRUE	1405 Lawrence Rd.	Cloquet, MN	55720
12	2/28/23-01:29:07	Steven	Schulstrom f	Steven Schulstrom	TRUE	2631 county road 4 Carlton MN	Carlton, MN	55718
13	2/28/23-02:48:43	Linda	Crumpton	Linda Jean Crumpton	TRUE	1701 E 6th St	Duluth, MN	55812-1212
14	2/28/23-02:53:41	Craig	Sterle	Craig R. Sterle	TRUE	2676 County Road 104	Barnum, MN	55707
15	2/28/23-03:16:00	Gene	Kremer	Gene Kremer	TRUE	3938 Cannon Ball Lake Road	Duluth, MN	55803
16	2/28/23-03:44:34	Libby	Bent	Libby Bent	TRUE	2423 E 2nd Street	Duluth, MN	55812
17	2/28/23-04:01:36	Robert	Stodola	Robert Stodola	TRUE	131 N Hawthorne Rd	Duluth, MN	55812
18	2/28/23-04:07:58	Gary	Meier	Gary I Meier	TRUE	2940 Acquire Lane	Duluth, MN	55804
19	2/28/23-04:09:35	Zabelle	Stodola	Zabelle Stodola	TRUE	131 N Hawthorne Road	Duluth, MN	55812
20	2/28/23-04:45:27	Mark	Baker	Mark A. Baker	TRUE	1721 E 3rd St, Apt 207	Duluth, MN	55812
21	2/28/23-12:34:03	Janet	Keough	Janet Keough	TRUE	2787 Northwoods Ln	Duluth, MN	55803
22	2/28/23-12:59:27	Daniel	Rau	Daniel Rau	TRUE	204 E 6TH ST	Duluth, MN	55805
23	2/28/23-14:11:15	Virginia	Snarski	Virginia M. Snarski	TRUE	3325 MEDIN RD	Duluth, MN	55804-2673
24	2/28/23-14:36:26	Paul	O'Brien	Paul A. O'Brien	TRUE	4089 reinke road	Duluth, MN	55811
25	2/28/23-14:52:51	Stephanie	Hemphill	Stephanie J Hemphill	TRUE	3614 Prindle Rd	Duluth, MN	55803
26	2/28/23-15:17:20	Lori	Andresen	Lori Beth Andresen	TRUE	3025 E Superior St	Duluth, MN	55812
27	2/28/23-15:39:13	Donna	Andrews	Donna J Andrews	TRUE	1020 Glen place drive	Duluth, MN	55806
28	2/28/23-16:57:04	Molly	Thompson	Molly Thompson	TRUE	5922 N Tischer Rd	Duluth, MN	55804
29	2/28/23-21:17:26	Rich	Axler	Richard Axler	TRUE	201 FAIRMONT ST	Duluth, MN	55803
30	3/1/23-15:00:54	Tom	Richards	Thomas C. Richards	TRUE	3333 Red Oak Lane	Barnum, MN	55707
31	3/1/23-22:02:58	Rita	Vavrosky	Rita M. Vavrosky	TRUE	2631 COUNTY ROAD 4	Carlton, MN	55718-9101
32	3/2/23-13:41:34	Al	Bugge	Albert Peter Bugge	TRUE	1612 W Page St	Duluth, MN	55811
33	3/2/23-13:59:50	William	Redmond	William Robert Redmond	TRUE	1110 w morgan st duluth mn	Duluth, MN	55811
34	3/2/23-14:29:51	Sarah	Dahle	Sarah K Dahle	TRUE	1715 W Morgan St	Duluth, MN	55811-183
35	3/2/23-15:02:16	Patricia	Willis	Patricia Corrine Willis	TRUE	1504 Wet Page	Duluth, MN	55811
36	3/3/23-02:51:50	Deb	Bugge	Debra L Bugge	TRUE	1612 W Page St	Duluth, MN	55811
37	3/3/23-14:20:50	Cody	Blossom	Cody Blossom	TRUE	1715 W Morgan ST	Duluth, MN	55811
38	3/4/23-16:07:29	NJ	Deever	Nancy J Deever	TRUE	3868 Getchell Rd.	Duluth, MN	55811
39	3/4/23-17:49:27	Marjorie	Lemke	Marjorie Lynn Lemke	TRUE	2933 Tuxedo Blvd	Mound, MN	55364

Online Petition Signatures - www.imagine-dn.org

#	Date & Time	First Name	Last Name	Signature	I hereby give my consent to count my signature towards the EAW petition regarding application PL22-143.	Street Address	City, State	Zip Code
40	3/5/23-16:55:39	Randall	Hicks	Randall Hicks	TRUE	2601 Northwoods Lane	Duluth, MN	55803
41	3/5/23-17:27:17	Thomas	Szukis	Thomas D. Szukis	TRUE	1722 Swan Lake Road	Duluth, MN	55811
42	3/5/23-17:37:06	Cindy	Peterson-Wlosinski	Cindy Peterson-Wlosinski	TRUE	1121 W Morgan Street	Duluth, MN	55811
43	3/5/23-17:51:04	Barbara	Guenterberg	Barbara Guenterberg	TRUE	2232 WOODLAND AVE.	Duluth, MN	55803
44	3/5/23-18:01:04	JoAnne	Axtell	JoAnne Axtell	TRUE	710 West 2nd St.	Duluth, MN	55806
45	3/5/23-18:21:30	Paul	Collins	Paul Collins	TRUE	4844 Terrace Cir	Duluth, MN	55811
46	3/5/23-18:30:38	Stacey	Solem	Stacey Solem	TRUE	707 N 46th Ave W	Duluth, MN	55807
47	3/5/23-18:54:17	William	Sommernes	William D. Sommernes	TRUE	3800 London Road, #108	Duluth, MN	55804
48	3/5/23-19:30:33	V	Anderson	V Anderson	TRUE	5775 Kehtel Rd	Duluth, MN	55811
49	3/5/23-19:38:31	Melinda	Cummins	Melinda Amy Cummins	TRUE	4023 Cooke Street	Duluth, MN	55804
50	3/5/23-20:28:08	Toni	Mattson	Toni Mattson	TRUE	314 Wildwood Drive	Duluth, MN	55811
51	3/5/23-20:28:52	Erin	Sheets	Erin Dayle Sheets	TRUE	2302 Selkirk St	Duluth, MN	55811
52	3/5/23-21:03:13	Scott	Nelson	Scott R. Nelson	TRUE	2806 Wellington St	Duluth, MN	55806
53	3/5/23-21:47:43	Eric	Rost	Eric Rost	TRUE	829 Maple Grove Rd.	Duluth, MN	55811
54	3/5/23-21:53:17	Rebecca	Pederson	Rebecca Pederson	TRUE	829 Maple Grove Rd.	Duluth, MN	55811
55	3/5/23-22:12:29	Heather	Theisen	Heather Theisen	TRUE	5425 Avondale Street	Duluth, MN	55804
56	3/5/23-22:36:09	Catherine	Farrell	Catherine Grace Farrell	TRUE	3660 E 3rd St	Duluth, MN	55804
57	3/5/23-22:53:33	Darin	Golden	Darin Robert Golden	TRUE	4873 2nd Ave N	Duluth, MN	55803
58	3/5/23-22:55:12	Teresa	Piskoty	Teresa Marie Piskoty	TRUE	4873 2nd Ave N	Duluth, MN	55803
59	3/5/23-23:00:42	Linda	Peplinski	Linda Peplinski	TRUE	4231 Luverne Street	Duluth, MN	55804
60	3/5/23-23:13:24	Kathleen	Hills	Kathleen Hills	TRUE	1052 Greysolon Rd	Duluth, MN	55812
61	3/5/23-23:23:53	Stephen	Wlosinski	Stephen Wlosinski	TRUE	1121West Morgan St.	Duluth, MN	55811
62	3/5/23-23:32:53	Meghan	Zetah	Meghan Zetah	TRUE	6022 Raleigh St	Duluth, MN	55807
63	3/5/23-23:57:49	Genevieve	Stark	Genevieve A. Stark	TRUE	120 E Wabasha St	Duluth, MN	55803
64	3/6/23-00:11:06	Yuliya	Mader	Yuliya I Mader	TRUE	5877 Kehtel Rd	Duluth, MN	55811
65	3/6/23-00:33:01	Jasmine	Phoenix	Jasmine Phoenix	TRUE	2113 W 5th St	Duluth, MN	55806
66	3/6/23-00:52:30	Lacey	Parr	Lacey Parr	TRUE	5101 Dodge st	Duluth, MN	55804
67	3/6/23-00:53:03	Nathan	Parr	Nathan Parr	TRUE	5101 Dodge st	Duluth, MN	55804
68	3/6/23-01:05:06	Jacquelyn	Wiermaa	Jacquelyn Wiermaa	TRUE	43 Amy Lane	Esko, MN	55733
69	3/6/23-01:06:07	Molly	Goldfine	Molly Goldfine	TRUE	3925 South Lake Avenue	Duluth, MN	55802
70	3/6/23-01:13:07	Tim	Kratz	Timothy K. Kratz	TRUE	3660 E 3RD ST	Duluth, MN	55804
71	3/6/23-01:30:10	Kim	Knuth	Kim Knuth	TRUE	5178 Arnold Rd	Duluth, MN	55803
72	3/6/23-01:44:24	Suzanne	Cervin	Suzanne M Cervin	TRUE	5301 IVANHOE ST	Duluth, MN	55804-1141
73	3/6/23-01:45:44	Jason	Beagle	Jason beagle	TRUE	5587 Martin Road	Duluth, MN	55811
74	3/6/23-01:46:36	Ann	Miller	Ann Miller	TRUE	808 W Arrowhead Rd	Duluth, MN	55811
75	3/6/23-02:27:52	Kevin	Jones	Kevin w Jones	TRUE	424whouse st	Duluth, MN	55808
76	3/6/23-02:32:59	Jennifer	Johnson	Jennifer K. Johnson	TRUE	4200 Chambersburg Ave	Duluth, MN	55811
77	3/6/23-02:38:32	Martha	Cole	Martha Ann Cole	TRUE	36 Bell Circle	Duluth, MN	55614
78	3/6/23-03:28:29	Wendy	Olson	Wendy Olson	TRUE	8019 Congdon Blvd	Duluth, MN	55804

Online Petition Signatures - www.imagine-dn.org

#	Date & Time	First Name	Last Name	Signature	I hereby give my consent to count my signature towards the EAW petition regarding application PL22-143.	Street Address	City, State	Zip Code
79	3/6/23-03:38:25	James	Dusheck	James Reid Dusheck	TRUE	3998 Lavaque Rd.	Duluth, MN	55811
80	3/6/23-03:40:17	Emily	Marshall	Emily Marshall	TRUE	3998 Lavaque Rd.	Duluth, MN	55811
81	3/6/23-03:41:28	Sabrina	Dusheck	Sabrina Dusheck	TRUE	3998 Lavaque Rd.	Duluth, MN	55811
82	3/6/23-05:33:25	Scott	Laderman	Scott Laderman	TRUE	4014 McCulloch Street	Duluth, MN	55804
83	3/6/23-05:54:01	Summer	Allen	Summer Allen	TRUE	1408 Maple Grove Rd, #614	Duluth, MN	55811
84	3/6/23-06:58:07	Tess	Dornfeld	Tess Dornfeld	TRUE	159 Elysian Trail 418	Grand Marais, MN	55604-0418
85	3/6/23-08:54:03	Louise	Guggisberg	Louise M Guggisberg	TRUE	2301 W 2nd St	Duluth, MN	55806
86	3/6/23-10:59:32	Jeff	Asfoor	Jeff Asfoor	TRUE	5426 E. Superior St.	Duluth, MN	55804
87	3/6/23-11:02:05	Abeeda	Asfoor	Abeeda Asfoor	TRUE	5426 E. Superior St.	Duluth, MN	55804
88	3/6/23-12:57:21	Susan	Marturano	Susan Miller Marturano	TRUE	231 W Morgan St	Duluth, MN	55811
89	3/6/23-13:04:19	Dudley	Edmondson	Dudley Edmondson	TRUE	4302 Cooke St	Duluth, MN	55804
90	3/6/23-13:04:55	Christine	Ostby	Christine Ostby	TRUE	727 S 64th Ave W	Duluth, MN	55807
91	3/6/23-13:07:21	Jack	Jacobson	Jack A. Jacobson	TRUE	912 Spring Lake Rd	Cloquet, MN	55720
92	3/6/23-13:24:24	Linda	Herron	Linda L Herron	TRUE	2617 E. Fifth St.	Duluth, MN	55812
93	3/6/23-13:41:40	Candy	Lee	Candy Lee	TRUE	1819 W Morgan St.	Duluth, MN	55811
94	3/6/23-13:50:41	Norman	Herron	Norman W Herron	TRUE	2617 E. Fifth St.	Duluth, MN	55812
95	3/6/23-13:51:48	Susan	Turk	Susan Turk	TRUE	301 Maple Grove Road	Duluth, MN	55811
96	3/6/23-13:53:53	Thomas	Turk	Thomas Turk	TRUE	301 Maple Grove Road	Duluth, MN	55811
97	3/6/23-13:57:29	John	McDonald	John McDonald	TRUE	118 Coffee Creek Blvd, Apt 104	Duluth, MN	55812
98	3/6/23-14:02:19	Wade	Lee	Wade Lee	TRUE	1819 w Morgan st.	Duluth, MN	55811
99	3/6/23-14:02:33	Jason	Eder	Jason Eder	TRUE	2921 N 22nd Ave W	Duluth, MN	55811
100	3/6/23-14:05:04	John	Thoennes	John W Thoennes	TRUE	231 E Owatonna St	Duluth, MN	55803
101	3/6/23-14:29:53	Janice	Hille	Janice Hille	TRUE	1002 Grandview Ave.	Duluth, MN	55812
102	3/6/23-14:55:51	Brian	Bergeron	Brian Bergeron	TRUE	5164 Country Lane	Duluth, MN	55811
103	3/6/23-14:57:11	Bradley	Flynn	Bradley Flynn	TRUE	2711 E 7th ST	Duluth, MN	55812
104	3/6/23-15:00:30	Alyssa	Friesen	Alyssa Friesen	TRUE	4013 Gladstone St	Duluth, MN	55804
105	3/6/23-15:16:46	Matthew	Miller	Matthew S Miller	TRUE	1128 7th St	Two Harbors, MN	55616
106	3/6/23-15:25:28	Daniel	Mettner	Daniel L Mettner	TRUE	19 N. 44th Ave. E.	Duluth, MN	55804
107	3/6/23-15:41:05	Jennie	WABROWETZ	Jennifer L. Wabrowetz	TRUE	5506 W ARROWHEAD RD	Duluth, MN	55811
108	3/6/23-16:08:44	Jill	Crafton	Jill Crafton	TRUE	10351 Decatur Ave S	Minneapolis, MN	55438
109	3/6/23-16:26:17	Kyle	Scherz	Kyle Scherz	TRUE	1524 e 7th St	Duluth, MN	55812
110	3/6/23-16:42:53	Sheri	Bergeron	Sheri Boril Bergeron	TRUE	5164 Country Lane	Duluth, MN	55810
111	3/6/23-16:48:09	Mary	Gaidis	Mary Louise Gaidis	TRUE	3820 Minnesota Ave.	Duluth, MN	55802
112	3/6/23-17:51:11	Sandra	Carlson	Sandra Ann Carlson	TRUE	1900 St. Louis Ave., 116	Duluth, MN	55802
113	3/6/23-18:06:53	Grace	Leppink	Grace Leppink	TRUE	2850 County Road 1	Wrenshall, MN	55797
114	3/6/23-18:44:41	Wil	Chapple	Wil Chapple	TRUE	309 Wadena St	Duluth, MN	55803
115	3/6/23-18:55:21	Janice	Erickson	Janice Erickson	TRUE	1824 Edoka St	Welch, MN	55089
116	3/6/23-20:27:27	Susan	Bourgoyne	Susan L Bourgoyne	TRUE	421 E Oxford St	Duluth, MN	55803
117	3/6/23-20:39:00	Mark	Furo	Mark Steven Furo	TRUE	323 W Superior St, STE300	Duluth, MN	55802

Online Petition Signatures - www.imagine-dn.org

#	Date & Time	First Name	Last Name	Signature	I hereby give my consent to count my signature towards the EAW petition regarding application PL22-143.	Street Address	City, State	Zip Code
118	3/6/23-20:42:47	Julie	Heine	Julie ann heine	TRUE	1425 walnut st	Duluth, MN	55811
119	3/6/23-20:58:29	chris	susnik	chris susnik	TRUE	10009 e 7th st	Duluth, MN	55805
120	3/6/23-21:26:12	Deanna	Torfin	Deanna J Torfin	TRUE	202 Proco Court	Duluth, MN	55808
121	3/6/23-21:27:56	John	Prouse	John Otto Prouse	TRUE	202 Proco Court	Duluth, MN	55808
122	3/6/23-21:41:19	Steve	Glowacki	Stephen Paul Glowacki	TRUE	1923 Greysolon Rd	Duluth, MN	55812
123	3/6/23-21:56:19	Christine	Post	Christine Post	TRUE	114 Pleasant View Road	Duluth, MN	55803
124	3/6/23-22:23:46	Eleanor	Brandt	EleanorBrandt	TRUE	4715 Dodge Street	Duluth, MN	55804
125	3/6/23-22:55:07	Kristin	Regas	Kristin Regas	TRUE	1645 W Morgan St	Duluth, MN	55811
126	3/6/23-22:55:47	Steve	Regas	Steve Regas	TRUE	1645 W Morgan St	Duluth, MN	55811
127	3/7/23-01:15:12	Drake	Peterson	Drake D Peterson	TRUE	2723 Minnesota Ave	Duluth, MN	55802
128	3/7/23-01:53:16	Jennifer	Hudyma	Jennifer A Hudyma	TRUE	1410 W PAGE ST	Duluth, MN	55811
129	3/7/23-04:58:33	Joyce	Ellis	Joyce Ellis	TRUE	516 Farrell Rd	Duluth, MN	55811
130	3/7/23-05:01:53	William	Ellis	William Ellis	TRUE	516 Farrell rd	Duluth, MN	55811
131	3/7/23-07:02:08	Troy	Woodcock	Troy Woodcock	TRUE	5207 North Shore Drive	Duluth, MN	55804
132	3/7/23-07:03:37	Mark	Woodcock	Mark Woodcock	TRUE	5207 North Shore Drive	Duluth, MN	55804

Exhibit L

EQB Determination of Responsible Governmental Unit

MINNESOTA
ENVIRONMENTAL QUALITY BOARD

Minnesota Environmental Quality Board
520 Lafayette Road North
Saint Paul, MN 55155

VIA E-MAIL (cover letter & petition)

March 10, 2023

Chris Lee
City of Duluth Planning & Development Division
411 West First Street
Room 160
Duluth, MN 55802
clee@duluthmn.gov

RE: Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Corporation Project

Dear Mr. Lee,

The Environmental Quality Board (EQB) received a petition on March 8, 2023 requesting that an Environmental Assessment Worksheet (EAW) be prepared for the project described in the petition, and has determined that the City of Duluth is the appropriate governmental unit to decide the need for an EAW.

All requirements for Minnesota's Environmental Review Program, including when review is required and when review is exempt can be found in Minnesota Rules, chapter 4410. Please note, a project may not be started, and a final governmental decision may not be made to grant a permit, approve a project, or begin a project, until a decision has been made for this petition. Project construction includes any activities which directly affect the environment, including preparation of land.

The procedures to be followed in making the decision on the enclosed petition (EAW need decision) are found in part 4410.1100. Key points in the procedures include:

1. As the designated RGU, you are required to decide the need for preparation of an EAW, considering the evidence presented by the petitioners or otherwise known to you about the nature and location of the project. In making your decision, you should consider the evidence submitted and take into account the factors listed in part 4410.1700, subpart 7. Note that these procedures require that a record of decision, including specific findings of fact, be maintained.

2. You have 15 working days from the date of the receipt of this petition to decide on the need for an EAW. (See part 4410.1100.)
   - For RGU decisions made by a board, council, or other body which meets on a periodic basis, the time period may be extended by the RGU for an additional 15 days.
   - For RGU decisions not made by a board, council, or other body, the RGU may request an extension from the EQB of up to an additional 15 days.

3. You must provide written notification of your decision to the proposer, the petitioners' representative, and the EQB, within 5 working days.
    - To notify the EQB of your decision on the need for an EAW, complete the EQB *Monitor* submission form found on the EQB website. The EQB requests that you upload a copy of your record of decision using the same electronic submission form, including instances where environmental review is mandatory, voluntary, or exempt.

4. If for any reason you are unable to act on the petition at this time (e.g., no application has yet been filed or the application has been withdrawn or denied), the petition will remain in effect for a period of one year and must be acted upon prior to any final decision concerning the project identified in the petition. It is recommended that you notify in writing both the petitioners' representative and the EQB if you are unable to act on the petition at the time it is received.

Notice of the petition and its assignment to your unit of government will be published in the *EQB Monitor* on March 14, 2023.

If you have any questions or need any assistance, please do not hesitate to contact us at env.review@state.mn.us or 651-757-2873.

Sincerely,

Jesse Krzenski

Jesse Krzenski
Environmental Review Program
Environmental Quality Board

cc: Becca Mulenburg, Petitioner's Representative
Denise Wilson, Director of EQB's Environmental Review Program

Exhibit M

EQB Email Confirming Decision Deadline

Adam Fulton

From: Krzenski, Jesse W (EQB) <Jesse.Krzenski@state.mn.us>
Sent: Thursday, March 16, 2023 7:40 AM
To: Adam Fulton
Subject: RE: RGU Designation on a petition for an Environmental Assessment Worksheet for Kinseth Hotel Corp. Project

Adam,

It looks as though you have interpreted the timeline correctly. Feel free to contact with any further questions.

Jesse Krzenski *(he/him/his)*
Environmental Review Program Administrator
651-757-2223

Minnesota Environmental Quality Board
520 Lafayette Road
St. Paul, MN, 55155

From: Adam Fulton <afulton@DuluthMN.gov>
Sent: Wednesday, March 15, 2023 12:12 PM
To: Krzenski, Jesse W (EQB) <Jesse.Krzenski@state.mn.us>
Subject: RE: RGU Designation on a petition for an Environmental Assessment Worksheet for Kinseth Hotel Corp. Project

---

Jesse,

I confirm receipt of this petition by the City of Duluth as of yesterday, effective 3/14/2023. As such, it is my initial determination that the 15 working day deadline for the decision on a need for an EAW, as described in your 3/10/2023 letter, is 4/4/2023 (Tuesday, April 4th).

At this time, because the decision regarding the petition will be made by the City of Duluth Planning Commission which does not meet until April 11, 2023, I am extending the deadline for response to Minnesota EQB by the additional 15 working days consistent with Minnesota Rules 4410.1100. As such, the deadline for City of Duluth response to this petition is 4/25/2023 (Tuesday, April 25th).

If you have any questions or concerns related to the dates outlined within this email, please notify me as soon as possible. I would also appreciate it if you could acknowledge receipt of this email and confirm for me that the City of Duluth is following the correct EQB process and procedure related to this matter.

Respectfully,

Adam Fulton | Deputy Director, Planning & Economic Development | he/him/his | **City of Duluth** | 411 West First Street, Duluth, MN 55802 | 218-730-5325 | afulton@duluthmn.gov

---

From: Krzenski, Jesse W (EQB) <Jesse.Krzenski@state.mn.us>
Sent: Tuesday, March 14, 2023 2:09 PM
To: Adam Fulton <afulton@DuluthMN.gov>
Subject: FW: RGU Designation on a petition for an Environmental Assessment Worksheet for Kinseth Hotel Corp. Project

Adam,

Please see attached for petition and letter from EQB.

Jesse Krzenski *(he/him/his)*
Environmental Review Program Administrator
651-757-2223

Minnesota Environmental Quality Board
520 Lafayette Road
St. Paul, MN, 55155

MINNESOTA ENVIRONMENTAL QUALITY BOARD

From: Krzenski, Jesse W (EQB)
Sent: Friday, March 10, 2023 8:44 AM
To: clee@duluthmn.gov
Cc: Wilson, Denise (EQB) <denise.wilson@state.mn.us>
Subject: RGU Designation on a petition for an Environmental Assessment Worksheet for Kinseth Hotel Corp. Project

Dear Mr. Lee,

The Environmental Quality Board (EQB) has received a petition requesting that an Environmental Assessment Worksheet (EAW) be prepared for the Kinseth Hotel Corp. project in the City of Duluth and has determined that the City of Duluth is the appropriate governmental unit to decide the need for an EAW.

Attached to this email you will find the petition as submitted to the EQB, as well as a letter with information on how to proceed with the petition according to Minnesota Rules 4410.

MN Rules 4410.3100 subpart 1. “Prohibitions” outlines when the project prohibitions begin and end.

Here is a link to the EQB Monitor schedule.

If you need additional information, please contact our team at 651-757-2873 or at env.review@state.mn.us

Jesse Krzenski *(he/him/his)*
Environmental Review Program Administrator
651-757-2223

Minnesota Environmental Quality Board
520 Lafayette Road
St. Paul, MN, 55155

MINNESOTA
ENVIRONMENTAL QUALITY BOARD

Exhibit N

City of Duluth MS4 Permit

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

MS4 Part 2 Permit Application

Authorization to discharge stormwater associated with small Municipal Separate Storm Sewer System (MS4)

Stormwater Pollution Prevention Program (SWPPP) Document

Doc Type: Permit Application

Instructions: Submitting this application confirms your intent to receive authorization to discharge stormwater under the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) MS4 General Permit (MNR040000). This application is due within 150 days from the issuance date of the MS4 General Permit (MNR040000). Throughout this application there are text fields with a typical maximum limit of four lines. If you need to provide information in a text field that exceeds the maximum limit, please submit an attachment(s) with supplemental information that is labeled with the corresponding field number (e.g., *9.J.*).

Submittal: This application form and any associated documents (i.e., total maximum daily load (TMDL) application, any supplemental information) must be submitted electronically. To submit this form electronically, open the form using Internet Explorer Web browser or Adobe Acrobat Reader in order for the submit button to work properly. (If you do not have Acrobat Reader, you can download a free version at https://get.adobe.com/reader/.) Send the form to the Minnesota Pollution Control Agency (MPCA) by clicking the submit button at the end of the form (a "send email" window should open with the form attached), you can click on "Send" and then close the form. If you do not see a "send email", save the form to your computer and attach the form to an email message, using "MS4 Part 2 Permit Application" as the subject line to ms4permitprogram.pca@state.mn.us.

Review/Public Notice process: The MPCA will review the application for completeness. Incomplete applications will be returned. If the MPCA determines the application is complete, the MPCA will make a preliminary determination to issue permit coverage and place the application on public notice for 30 days. Once the applicant addresses any applicable comments or hearing requests, the MPCA will make a final determination to issue permit coverage to the applicant.

Please note, this application is intended to provide information about an applicant's existing SWPPP. An applicant that receives permit coverage is responsible for complying with all new applicable requirements set forth in the MS4 General Permit (MNR040000) by deadlines specified in Appendix B of the reissued permit.

Questions: If you have any questions, need additional information, contact MPCA staff. To find the staff assigned to your MS4, refer to the https://stormwater.pca.state.mn.us/index.php?title=MS4_staff_contact_information_and_staff_assignments; or see the staff contact information on the MPCA's MS4 webpage at https://www.pca.state.mn.us/water/municipal-stormwater-ms4.

Note: All questions with an asterisk(*) are **required** fields, and the form will not submit without the fields completed.

General contact information

1. **MS4 Owner** (with ownership or operational responsibility, or control of the MS4)

*MS4 permittee name: 1.A. City of Duluth *County: 1.B. St. Louis
(City, county, municipality, government agency or other entity)

*Mailing address: 1.C. 411 W 1st St

*City: 1.D. Duluth *State: 1.E. MN *Zip code: 1.F. 55802

2. **MS4 General contact** (with SWPPP implementation responsibility)

*Last name: 2.A. Granlund *First name: 2.B. Ryan
(Department head, MS4 coordinator, consultant, etc.)

*Title: 2.C. Utility Programs Coordinator

*Mailing address: 2.D. 411 W 1st St

*City: 2.E. Duluth *State: 2.F. MN *Zip code: 2.G. 55802

*Phone (including area code): 2.H. 218-730-4088 *Email: 2.I. rgranlund@duluthmn.gov

3. **Preparer information** (complete if SWPPP application is prepared by a party other than MS4 General contact)

Last name: 3.A. First name: 3.B.
(Department head, MS4 coordinator, consultant, etc.)

Title: 3.C. Organization: 3.D.

Mailing address: 3.E.

City: 3.F. State: 3.G. Zip code: 3.H.

Phone (including area code): 3.I. Email: 3.J.

4. **Certification** (All fields are required)

☒ *Yes - *I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted.*

I certify that based on my inquiry of the person, or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of civil and criminal penalties.

I have read, understood, and accepted all terms and conditions of the NPDES/SDS MS4 General Permit.

This certification is required by Minn. Stat. §§ 7001.0070 and 7001.0540. The authorized person with overall, MS4 legal responsibility must certify the application (principal executive officer or a ranking elected official).

By typing/signing my name below, I certify the above statements to be true and correct, to the best of my knowledge, and that this information can be used for the purpose of processing my application.

*Signature: 4.A. Noah Schuchman
(This document has been electronically signed)

*Title: 4.B. Chief Administrative Officer *Date: 4.C. April 8, 2021

*Mailing address: 4.D. 411 W. 1st Street, Room 418

*City: 4.E. Duluth *State: 4.F. MN *Zip code: 4.G. 55802

*Phone (including area code): 4.H. 218-730-5039 *Email: 4.I. nschuchman@duluthmn.gov

***Note:** The application will not be processed without certification.*

*5. **Which type of MS4 do you represent?** (Check one)

5.A. ☒ City
5.B. ☐ County
5.C. ☐ Corrections
5.D. ☐ Education
5.E. ☐ Healthcare
5.F. ☐ Township
5.G. ☐ Transportation (i.e., Minnesota Department of Transportation [MnDOT])
5.H. ☐ Watershed District

*6. **Permit item 12.3:** Do you have any partnerships with another regulated small MS4(s) to satisfy one or more requirements of the General Permit?

☒ Yes
☐ No (skip to Q8)

7. **If yes in Q6, provide a description of the partnership(s): (Maximum 10 lines of text)**

The City of Duluth is actively engaged in a partnership with other Twin Ports area MS4s through a collaborative group named the Regional Stormwater Protection Team (RSPT). The City also engaged with the Duluth Urban Watershed Advisory Committee (DUWAC). DUWAC is an advisory committee that was formed as a resource for stakeholders within the watersheds of the Duluth area.

MCM 1: Public education and outreach

*8. **Permit item 16.3:** Do you distribute educational materials or equivalent outreach focused on at least two (2) specifically selected stormwater-related issues of high priority? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☒ Yes
☐ No (skip to Q11)

9. **If yes in Q8, what are your high-priority topics?** (Check all that apply)

9.A. ☐ Specific TMDL reduction targets
9.B. ☐ Changing local business practices
9.C. ☐ Promoting adoption of residential best management practices (BMPs)
9.D. ☐ Lake improvements through lake associations
9.E. ☐ Household chemicals
9.F. ☒ Yard waste
9.G. ☐ Construction activities
9.H. ☐ Post-construction activities
9.I. ☒ Other (describe below):
9.J. Reducing litter.

Additional information for checked items (optional):

9.K. The City of Duluth is engaged with RSPT on a combined effort to distribute educational materials and outreach around the priority topics of reducing litter and proper disposal of yard waste. These are the focus areas for 2021 and will be adjusted throughout the duration of the permit. Adjustments will be noted in the SWPPP. This is in addition to other focused outreach related to specifically required high-priority topics.

10. **If yes in Q8, how do you educate the public about stormwater-related issues?** (Check all that apply)

10.A. ☐ Brochure
10.B. ☐ Newsletter
10.C. ☐ Utility bill insert
10.D. ☐ Newspaper ad
10.E. ☒ Radio ad
10.F. ☒ Television ad
10.G. ☐ Cable access channel
10.H. ☒ Website
10.I. ☒ Stormwater-related event
10.J. ☒ Other (describe below):
10.K. Social media campaign in partnership with RSPT as well as City of Duluth Social Media pages.

Additional information for checked items (optional):

10.L. The City of Duluth will continue to actively engage in a social media campaign to distribute educational materials and topics about stormwater-related issues. This partnership may also utilize TV and Radio ads to distribute messaging. The City of Duluth website will also be a platform to hold and distribute educational materials.

*11. **Permit item 16.4:** At least once each calendar year, do you distribute educational outreach focused on illicit discharge recognition and reporting illicit discharges? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☒ Yes
☐ No (skip to Q13)

12. **If yes in Q11, how do you educate the public about illicit discharge recognition and reporting?** (Check all that apply)

12.A. ☐ Brochure
12.B. ☐ Newsletter
12.C. ☒ Utility bill insert

12.D. ☐ Newspaper ad
12.E. ☐ Radio ad
12.F. ☐ Television ad
12.G. ☐ Cable access channel
12.H. ☒ Website
12.I. ☐ Stormwater-related event
12.J. ☒ Other (describe below):
12.K. Social Media pages

Additional information for checked items (optional):
12.L. The City of Duluth will utilize utility bill inserts and social media pages to distribute educational topics as it relates to IDDE. The City will also partner with RSPT on any community wide messaging around IDDE.

If you represent a city or township, please answer questions 13-16; ***if you do not*** *represent a city or township, skip to question 17.*

13. **Permit item 16.5:** At least once each calendar year, do you distribute educational materials or equivalent outreach to residents, businesses, commercial facilities, and institutions, focused on deicing salt use? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☒ Yes
☐ No (skip to Q15)

14. **If yes in Q13, what does your education or outreach cover?** (Check all that apply)
14.A. ☒ The impacts of salt use on receiving waters
14.B. ☒ Methods to reduce salt use
14.C. ☒ Proper storage of salt or other deicing materials
14.D. ☐ Other (describe below):
14.E.

Additional information for checked items (optional):
14.F. This requirement will be met by continuing to be an active partner with RSPT on the smart salting campaign employed by RSPT and its members.

15. **Permit item 16.6:** At least once each calendar year, do you distribute educational materials or equivalent outreach focused on pet waste? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☒ Yes
☐ No (skip to Q17)

16. **If yes in Q15, what do your educational materials or equivalent outreach on pet waste include?** (Check all that apply)
16.A. ☒ Impacts of pet waste on receiving waters
16.B. ☒ Proper management of pet waste
16.C. ☒ Any existing regulatory mechanism(s) for pet waste
16.D. ☐ Other (describe below):
16.E.

Additional information for checked items (optional):

16.F. This requirement will be met by continuing to be an active partner with RSPT on the pet waste campaign employed by RSPT and its members. City of Duluth Code Chapter 6-38 provides regulatory mechanisms for controlling pet waste.

---

*17. **Permit item 16.7:** Do you have an education and outreach plan?

☒ Yes

☐ No (skip to Q19)

18. **If yes in Q17, which components does your education and outreach plan include?** (Check all that apply)

18.A. ☒ Target audience(s) ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)*** If checked, specify your target audiences:

18.A.1. ☒ Residents

18.A.2. ☒ Businesses

18.A.3. ☒ Commercial facilities

18.A.4. ☒ Institutions

18.A.5. ☒ Local organizations

18.A.6. ☐ Low income residents

18.A.7. ☐ People of color

18.A.8. ☐ Non-native English speaking residents

18.A.9. ☐ Other (describe below):

18.A.10.

18.B. ☒ Name or position title of responsible person(s) for overall plan implementation.

18.B.1. If checked, specify the name(s) or position title(s):

Ryan Granlund, Utility Programs Coordinator, City of Duluth

18.C. ☒ Specific activities and schedules to reach each target audience.

18.C.1. If checked, provide any additional information (optional):

The City of Duluth works with the RSPT to distribute messaging to community citizens and organizations on stormwater pollution prevention through pet waste management, litter reduction, smart salting, IDDE and proper yard waste disposal in accordance with the schedules in MCM 1. The City will also revise the SWPPP, within 12 months of permit coverage, to be more inclusive of all the audiences in Question 18A.

18.D. ☒ A description of any coordination with and/or use of stormwater education and outreach programs implemented by other entities, if applicable.

18.D.1. If checked, provide any additional information (optional):

The City of Duluth actively partners with other local authorities, agencies and institutions through the RSPT to distribute education and outreach focused on stormwater pollution prevention.

*19. **Permit item 16.8:** Do you document information relating to MCM 1?

☒ Yes

☐ No (skip to Q21)

20. **If yes in Q19,** what do you document? (Check all that apply)

20.A. ☒ A description of all specific stormwater-related issues you identified in item 16.3

20.B. ☒ All information required under your education and outreach plan in item 16.7

20.C. ☒ Activities held, including dates, to reach each target audience

20.D. ☒ Quantities and descriptions of educational materials distributed, including dates distributed

20.E. ☒ Estimated audience (e.g., number of participants, viewers, readers, listeners, etc.) for each completed education and outreach activity ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

*21. **Permit item 12.4:** Who is responsible for implementation of this MCM? List name(s) or position title(s):

Utility Programs Coordinator, Ryan Granlund

22. **Provide any additional information about your current education and outreach program that you would like to share (optional): (Maximum 10 lines of text)**

The City of Duluth will continue to be actively engaged with RSPT in an effort to provide stormwater pollution prevention materials and messaging to the public. This messaging will focus on MCM 1 related requirements of pet waste, smart salting, IDDE and will include the additional 2 high-priority stormwater issues. The high priority topics developed for 2021 will be around yard waste and litter. These topics may change within the permit cycle to include other or additional topics. There will always be at least 2 additional high-priority stormwater issues that will be focused on per requirement of MCM 1. The new permit items required under this permit cycle will also be revised and improved upon within 12 months of coverage under this permit, revisions will be made in the City of Duluth SWPPP. Also, the education and outreach program will be revised within 12 months of coverage, to be more inclusive of all communities represented in Permit Item 16.7.

MCM 2: Public participation/involvement

*23. **Permit item 17.3:** Do you provide a minimum of one (1) annual opportunity for the public to provide input on the adequacy of the SWPPP?

☒ Yes
☐ No (skip to Q25)

24. **If yes in Q23, describe the opportunity(ies):**

Annually the City of Duluth will post an overview of its SWPPP on the City of Duluth web page to incite comment on the adequacy of the program. The City may also annually hold a joint public meeting with other area MS4s to present an overview of the SWPPP and incite comment.

*25. **Permit item 17.4:** Do you provide access to the SWPPP Document, annual reports, and other documentation that supports or describes the SWPPP (e.g., regulatory mechanism(s), etc.) for public review, upon request?

☒ Yes
☐ No (skip to Q27)

26. **If yes in Q25, how can the public access this information?** (Check all that apply)

26.A. ☐ Hardcopy upon request
26.B. ☒ Our website
26.C. ☐ Available at public event
26.D. ☐ Other (describe below):
26.E.

*27. **Permit item 17.5:** Do you consider oral and written input regarding the SWPPP submitted by the public?

☒ Yes
☐ No

*28. **Permit item 17.6:** Each calendar year, do you provide a minimum of one (1) public involvement activity that includes a pollution prevention or water quality theme? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☒ Yes
☐ No (skip to Q30)

29. **If yes in Q28, what are the themes of your public involvement activity/activities?** (Check all that apply)

29.A. ☐ Rain barrel distribution event
29.B. ☐ Rain garden workshop
29.C. ☒ Cleanup event
29.D. ☐ Storm drain stenciling

29.E. ☐ Volunteer water quality monitoring
29.F. ☐ Adopt a storm drain program
29.G. ☐ Household hazardous waste collection day
29.H. ☒ Other (describe below):
29.I. River Quest, Road Sand Pick-Up event, Clean and Green, etc.

Additional information for checked items (optional):
29.J. The City will continue to engage the public in community stormwater pollution prevention initiatives in a programmatic way through a variety of events.

*30. **Permit item 17.7:** Do you document information relating to MCM 2?
☒ Yes
☐ No (skip to Q32)

31. **If yes in Q30, what do you document?** (Check all that apply)
31.A. ☒ All relevant written input submitted by persons regarding the SWPPP
31.B. ☒ All of your responses to written input received regarding the SWPPP, including any modifications made to the SWPPP as a result of the written input received
31.C. ☒ Date(s), location(s), and estimated number of participants at events held for purposes of compliance with permit item 17.3
31.D. ☒ Notices provided to the public of any events scheduled to meet permit item 17.3, including any electronic correspondence (e.g., website, email distribution lists, notices, etc.)
31.E. ☒ Date(s), location(s), description of activities, and estimated number of participants at events held for the purpose of compliance with permit item 17.6 ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

*32. **Permit item 12.4:** Who is responsible for implementation of this MCM? List name(s) or position title(s):
Utility Programs Coordinator, Ryan Granlund

33. **Provide any additional information about your current public participation/involvement program that you would like to share (optional): (Maximum 10 lines of text)**
The City of Duluth will continue to incite public participation and involvement in stormwater pollution prevention activities through the means listed above. Additionally the City will report on joint efforts with RSPT on community involvement events and activities. The City's SWPPP will be made available to anyone who requests it and a request can be made via our website. The City will continue to provide an overview of the SWPPP annually to incite comment and will look to other means to gain additional participation in events around inciting comment on the SWPPP. The new permit items required under this permit cycle may also be revised and improved upon within 12 months of coverage under this permit, revisions will be made in the City of Duluth SWPPP.

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

*34. **Permit item 18.3:** Do you maintain a storm sewer system map?
☒ Yes
☐ No (skip to Q36)

35. **If yes in Q34, which of the following does your storm sewer map include?** (Check all that apply)
35.A. ☒ All pipes 12 inches or greater in diameter, including stormwater flow direction in those pipes
35.B. ☒ Outfalls, including a unique identification (ID) number, and an associated geographic coordinate
35.C. ☒ Structural stormwater BMPs that are part of your small MS4
35.D. ☒ All receiving waters

*36. **Permit item 18.4:** Do you have a regulatory mechanism(s) that prohibits non-stormwater discharges into your MS4?
☒ Yes
☐ No (skip to Q39)

37. **If yes in Q36, what does your regulatory mechanism(s) consist of?** (Check all that apply)
37.A. ☐ Contract language
37.B. ☒ Ordinance
37.C. ☒ Permits
37.D. ☐ Standards
37.E. ☐ Written policies
37.F. ☐ Operational plans
37.G. ☐ Legal agreements
37.H. ☐ Other mechanism(s) (describe below):
37.I.

38. **If yes in Q36,** provide a website address to the regulatory mechanism(s). If the regulatory mechanism is not available online, briefly describe how a copy of the regulatory mechanism can be obtained**:**

Chapter 43 A Illicit Discharges to the City Storm Sewer System can be viewed online at
https://library.municode.com/mn/duluth/codes/legislative_code
Additonally, the City of Duluth Unified Development Code can be viewed at duluthmn.gov

If you represent a **city, township, or county** please answer question 39. ***If you do not*** *represent a city, township, or county skip to question 42.*

39. **Permit item 18.5:** Do you have a regulatory mechanism(s) that requires owners or custodians of pets to remove and properly dispose of feces from permittee owned land areas? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☒ Yes
☐ No

If you represent a **city or township**, please answer questions 40-41. ***If you do not*** *represent a city or township, skip to question 42.*

40. **Permit item 18.6:** Do you have a regulatory mechanism(s) that requires proper salt storage at commercial, institutional, and non-NPDES permitted industrial facilities? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☐ Yes
☒ No (Skip to Q42)

41. **If yes in Q40,** what does your regulatory mechanism(s) require? (Check all that apply)
41.A. ☐ Designated salt storage areas must be covered or indoors
41.B. ☐ Designated salt storage areas must be located on an impervious surface
41.C. ☐ Implementation of practices to reduce exposure when transferring material in designated salt storage areas (e.g., sweeping, diversions, and containment)
41.D. ☐ Other (describe below):
41.E.

*42. **Permit item 18.7:** Do you incorporate illicit discharge detection into all inspection and maintenance activities conducted in permit items 21.9, 21.10, and 21.11?
☒ Yes
☐ No (Skip to Q44)

43. **If yes in Q42**: where feasible, do you conduct illicit discharge inspections during dry-weather conditions (e.g., periods of 72 or more hours of no precipitation)?
☒ Yes
☐ No

*44. **Permit item 18.8:** At least once each calendar year, do you train all field staff in illicit discharge recognition (including conditions which could cause illicit discharges), and reporting illicit discharges for further investigation? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes
☒ No (Skip to Q47)

45. **If yes in Q44, which field staff do you train?** (Check all that apply)

45.A. ☐ Police
45.B. ☐ Fire department
45.C. ☐ Public works
45.D. ☐ Parks staff
45.E. ☐ Other (describe below):
45.F.

46. **If yes in Q44, how do you train staff?** (Check all that apply)

46.A. ☐ Videos
46.B. ☐ In-person presentations
46.C. ☐ Webinars
46.D. ☐ Training documents
46.E. ☐ Emails
46.F. ☐ Other (describe below):
46.G.

*47. **Permit item 18.9:** Do you ensure that individuals receive training commensurate with their responsibilities as they relate to your IDDE program? Individuals includes, but is not limited to, individuals responsible for investigating, locating, eliminating illicit discharges, and/or enforcement. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes
☒ No (Skip to Q50)

48. **If yes in Q47, how are these individuals trained?** (Check all that apply)

48.A. ☐ Videos
48.B. ☐ In-person presentations
48.C. ☐ Webinars
48.D. ☐ Training documents
48.E. ☐ Emails
48.F. ☐ Other (describe below):
48.G.

49. **If yes in Q47, do previously trained individuals attend a refresher-training every three (3) calendar years following the initial training?**

☐ Yes
☐ No

*50. **Permit item 18.10:** Do you maintain a written or mapped inventory of priority areas you identify as having a higher likelihood for illicit discharges? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes
☒ No

*51. **Permit item 18.11:** To the extent allowable under state or local law, do you conduct additional illicit discharge inspections in priority areas?

☐ Yes

☒ No (Skip to Q53)

52. **If yes in Q51,** how often do you conduct illicit discharge inspections in priority areas**:**

*53. **Permit item 18.12:** Do you have written procedures for investigating, locating, and eliminating the source of illicit discharges? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes

☒ No (Skip to Q55)

54. **If yes in Q53, what do your procedures include? Check all that apply:** ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

54.A. ☐ A timeframe in which you will investigate a reported illicit discharge

54.A.1. If checked, describe:

54.B. ☐ Use of visual inspections to detect and track the source of an illicit discharge

54.C. ☐ Tools to investigate and locate an illicit discharge

If checked, what tools do you use? (Check all that apply)

54.C.1. ☐ Mobile cameras

54.C.2. ☐ Collecting and analyzing water samples

54.C.3. ☐ Smoke testing

54.C.4. ☐ Dye testing

54.C.5. ☐ Other (describe below):

54.C.6

54.D ☐ Cleanup methods to remove an illicit discharge or spill:

54.D.1. If checked, describe:

54.E ☐ Name or position title of responsible person(s) for investigating, locating, and eliminating an illicit discharge

54.E.1. If checked, specify the name(s) or position title(s):

*55. **Permit item 18.13:** Do you have written procedures for responding to spills, including emergency response procedures to prevent spills from entering the MS4?

☒ Yes

☐ No (Skip to Q57)

56. **If yes in Q55, do your written procedures include the immediate notification of the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (Metro area), if the source of the illicit discharge is a spill or leak as defined in Minn. Stat. § 115.061?**

☒ Yes

☐ No

*57. **Permit item 18.14:** Do you maintain written enforcement response procedures (ERPs) to compel compliance with your regulatory mechanism(s) in Section 18? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☒ Yes
☐ No (Skip to Q60)

58. **If yes in Q57, which of the following enforcement tools are available to you?** (Check all that apply)

58.A. ☒ Verbal warning
58.B. ☒ Notice of violation
58.C. ☒ Fine
58.D. ☒ Criminal action
58.E. ☐ Civil penalty
58.F. ☒ Other (describe below):
58.G. The City of Duluth retains the ability to respond to and clean up Illicit Discharges and collect staff time and equipment costs associated with the clean up from the responsible party.

59. **If yes in Q57, do your ERPs include the following?** (Check all that apply)

59.A. ☒ Timeframes to complete corrective actions
59.B. ☒ Name or position title of responsible person(s) for conducting enforcement

*60. **Permit item 18.15:** Do you document information relating to MCM 3?

☒ Yes
☐ No (Skip to Q62)

61. **If yes in Q60, what do you document?** (Check all that apply)

61.A. ☒ Date(s) and location(s) of IDDE inspections conducted in accordance with permit items 18.7 and 18.11
61.B. ☒ Reports of alleged illicit discharges received, including date(s) of the report(s), and any follow-up action(s) you take
61.C. ☒ Date(s) of discovery of all illicit discharges
61.D. ☒ Identification of outfalls, or other areas, where illicit discharges have been discovered
61.E. ☒ Sources (including a description and the responsible party) of illicit discharges (if known)
61.F. ☒ Action(s) you take, including date(s), to address discovered illicit discharges

*62. **Permit item 18.16:** Do you document training relating to permit item 18.8 and 18.9?

☐ Yes
☒ No (Skip to Q64)

63. **If yes in Q62, what training information do you document?** (Check all that apply)

63.A. ☐ General subject matter covered
63.B. ☐ Names and departments of individuals in attendance
(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)
63.C. ☐ Date of each event

*64. **Permit item 18.17:** Do you document enforcement conducted pursuant to the ERPs in item 18.14, including verbal warnings?

☒ Yes
☐ No (Skip to Q66)

65. **If yes in Q64, what do you document relating to ERPs for MCM 3?** (Check all that apply)

65.A. ☒ Name of the person responsible for violating the terms and conditions of your regulatory mechanism(s)
65.B. ☒ Date(s) and location(s) of the observed violation(s)
65.C. ☒ Description of the violation(s)
65.D. ☒ Corrective action(s) (including completion schedule) that you issued
65.E. ☒ Referrals to other regulatory organizations (if any)
65.F. ☒ Date(s) violation(s) resolved

*66. **Permit item 12.4:** Who is responsible for implementation of this MCM? List name(s) or position title(s):

Ryan Granlund, Utility Programs Coordinator; Andy Swanson, Utility Programs Coordinator; Chris Kleist, Utility Operations Supervisor.

67. **Provide any additional information about your current illicit discharge detection and elimination program that you would like to share (optional): (Maximum 10 lines of text)**

Permit Items 18.6, 18.10 and 18.12 will be addressed within 12 months of coverage from this new permit and be added to the City's SWPPP to maintain compliance. Permit Items 18.8, 18.9, and 18.16 are being revised and will be added to the City's SWPPP to maintain compliance.

MCM 4: Construction site stormwater runoff control

*68. **Permit item 19.3:** Do you have a regulatory mechanism(s) that establishes requirements for erosion, sediment, and waste controls?

☒ Yes
☐ No (skip to Q73)

69. **If yes in Q68, what does your regulatory mechanism(s) consist of?** (Check all that apply)

69.A. ☐ Contract language
69.B. ☒ Ordinance
69.C. ☒ Permits
69.D. ☐ Standards
69.E. ☐ Written policies
69.F. ☐ Operational plans
69.G. ☐ Legal agreements
69.H. ☐ Other mechanism(s) (describe below):
69.I.

70. **If yes in Q68, provide a website address to the regulatory mechanism(s). If the regulatory mechanism is not available online, briefly describe how a copy of the regulatory mechanism can be obtained:**

The City's Erosion and Sediment Control Permit can be accessed at
https://duluthmn.gov/csi/permits-applications/apply-on-paper-or-online/
Chapter 43 A Illicit Discharges to the City Storm Sewer System can be viewed online at
https://library.municode.com/mn/duluth/codes/legislative_code ; Additonally provisions are in the UDC at duluthmn.gov

71. **If yes in Q68, is your regulatory mechanism(s) at least as stringent as the MPCA's most current Construction Stormwater General Permit (MNR100001) for erosion, sediment, and waste controls by incorporating the Construction Stormwater General Permit by reference, or by incorporating all items in Q72?**

☒ Yes (skip to Q73)
☐ No

72. **If no in Q71, which of the following requirements are incorporated into your regulatory mechanism(s)?** (Check all that apply)

72.A. Erosion prevention practices:

72.A.1. ☐ Before work begins, owner(s)/operator(s) must delineate the location of areas not to be disturbed.

72.A.2. ☐ Owner(s)/operator(s) must minimize the need for disturbance of portions of the project with steep slopes. When steep slopes must be disturbed, owner(s)/operator(s) must use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing).

72.A.3. ☐ Owner(s)/operator(s) must stabilize all exposed soil areas, including stockpiles. Stabilization must be initiated immediately to limit soil erosion when construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed no later than 14 calendar days after the construction activity has ceased. Stabilization is not required on constructed base components of roads, parking lots and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but owner(s)/operator(s) must provide sediment controls at the base of the stockpile.

72.A.4. ☐ For Public Waters that the Minnesota Department of Natural Resources (DNR) has promulgated "work in water restrictions" during specified fish spawning time frames, owner(s)/operator(s) must complete stabilization of all exposed soil areas within 200 feet of the water's edge, and that drain to these waters, within 24 hours during the restriction period.

72.A.5. ☐ Owner(s)/operator(s) must stabilize the normal wetted perimeter of the last 200 linear feet of temporary or permanent drainage ditches or swales that drain water from the site within 24 hours after connecting to a surface water or property edge. Owner(s)/operator(s) must complete stabilization of the remaining portions of temporary or permanent ditches or swales within 14 calendar days after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases.

72.A.6. ☐ Temporary or permanent ditches or swales that are being used as a sediment containment system during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized. Owner(s)/operator(s) must stabilize these areas within 24 hours after their use as a sediment containment system ceases.

72.A.7. ☐ Owner(s)/operator(s) must not use mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices within any portion of the normal wetted perimeter of a temporary or permanent drainage ditch or swale section with a continuous slope of greater than two percent.

72.A.8. ☐ Owner(s)/operator(s) must provide temporary or permanent energy dissipation at all pipe outlets within 24 hours after connection to a surface water or permanent stormwater treatment system.

72.A.9. ☐ Owner(s)/operator(s) must not disturb more land (i.e., phasing) than can be effectively inspected and maintained.

72.B. Sediment control practices:

72.B.1. ☐ Owner(s)/operator(s) must establish sediment control BMPs on all down gradient perimeters of the site and downgradient areas of the site that drain to any surface water, including curb and gutter systems. Owner(s)/operator(s) must locate sediment control practices upgradient of any buffer zones. Owner(s)/operator(s) must install sediment control practices before any upgradient land-disturbing activities begin and must keep the sediment control practices in place until they establish permanent cover.

72.B.2. ☐ If the downgradient sediment controls are overloaded, based on frequent failure or excessive maintenance requirements, owner(s)/operator(s) must install additional upgradient sediment control practices or redundant BMPs to eliminate the overloading and amend the site plans to identify these additional practices.

72.B.3. ☐ Temporary or permanent drainage ditches and sediment basins designed as part of a sediment containment system (e.g., ditches with rock-check dams) require sediment control practices only as appropriate for site conditions.

72.B.4. ☐ A floating silt curtain placed in the water is not a sediment control BMP to satisfy perimeter control requirements in this part except when working on a shoreline or below the waterline. Immediately after the short term construction activity (e.g. installation of rip rap along the shoreline) in that area is complete, owner(s)/operator(s) must install an upland perimeter control practice if exposed soils still drain to a surface water.

72.B.5. ☐ Owner(s)/operator(s) must re-install all sediment control practices adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity is completed. Owner(s)/operator(s) must re-install sediment control practices before the next precipitation event even if the short-term activity is not complete.

72.B.6. ☐ Owner(s)/operator(s) must protect all storm drain inlets using appropriate BMPs during construction until they establish permanent cover on all areas with potential for discharging to the inlet.

72.B.7. ☐ Owner(s)/operator(s) may remove inlet protection for a particular inlet if a specific safety concern (e.g., street flooding/freezing) is identified by owner(s)/operator(s) or the jurisdictional authority (e.g., city/county/township/MnDOT engineer). Owner(s)/operator(s) must document the need for removal in the site plans.

72.B.8. ☐ Owner(s)/operator(s) must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter.

72.B.9. ☐ Owner(s)/operator(s) must locate stockpiles outside of natural buffers or surface waters, including stormwater conveyances such as curb and gutter systems unless there is a bypass in place for the stormwater.

72.B.10. ☐ Owner(s)/operator(s) must install a vehicle tracking BMP to minimize the track out of sediment from the construction site or onto paved roads within the site.

72.B.11. ☐ Owner(s)/operator(s) must use street sweeping if vehicle tracking BMPs are not adequate to prevent sediment tracking onto the street.

72.B.12. ☐ In any areas of the site where final vegetative stabilization will occur, owner(s)/operator(s) must restrict vehicle and equipment use to minimize soil compaction.

72.B.13. ☐ Owner(s)/operator(s) must preserve topsoil on the site, unless infeasible.

72.B.14. ☐ Owner(s)/operator(s) must direct discharges from BMPs to vegetated areas unless infeasible.

72.B.15. ☐ Owner(s)/operator(s) must preserve a 50 foot natural buffer or, if a buffer is infeasible on the site, provide redundant (double) perimeter sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water. Owner(s)/operator(s) must install

perimeter sediment controls at least 5 feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, owner(s)/operator(s) must document the reasons in the site plans. Sheet piling is a redundant perimeter control if installed in a manner that retains all stormwater.

72.B.16. ☐ Owner(s)/operator(s) must use polymers, flocculants, or other sedimentation treatment chemicals in accordance with accepted engineering practices, dosing specifications and sediment removal design specifications provided by the manufacturer or supplier. Owner(s)/operator(s) must use conventional erosion and sediment controls prior to chemical addition and must direct treated stormwater to a sediment control system for filtration or settlement of the floc prior to discharge.

72.C. Dewatering and basin draining:

72.C.1. ☐ Owner(s)/operator(s) must discharge turbid or sediment-laden waters related to dewatering or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) to a temporary or permanent sediment basin on the project site unless infeasible. Owner(s)/operator(s) may dewater to surface waters if they visually check to ensure adequate treatment has been obtained and nuisance conditions (see Minn. R. 7050.0210, subp. 2) will not result from the discharge. If owner(s)/operator(s) cannot discharge the water to a sedimentation basin prior to entering a surface water, owner(s)/operator(s) must treat it with appropriate BMPs such that the discharge does not adversely affect the surface water or downstream properties.

72.C.2. ☐ If owner(s)/operator(s) must discharge water that contains oil or grease, owner(s)/operator(s) must use an oil-water separator or suitable filtration device (e.g. cartridge filters, absorbents pads) prior to discharge.

72.C.3. ☐ Owner(s)/operator(s) must discharge all water from dewatering or basin-draining activities in a manner that does not cause erosion or scour in the immediate vicinity of discharge points or inundation of wetlands in the immediate vicinity of discharge points that causes significant adverse impact to the wetland.

72.C.4. ☐ If owner(s)/operator(s) use filters with backwash water, they must haul the backwash water away for disposal, return the backwash water to the beginning of the treatment process, or incorporate the backwash water into the site in a manner that does not cause erosion.

72.D. Inspection and maintenance:

72.D.1. ☐ Owner(s)/operator(s) must ensure that a trained person will inspect the entire construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than one-half inch in 24 hours.

72.D.2. ☐ Owner(s)/operator(s) must inspect and maintain all permanent stormwater treatment BMPs.

72.D.3. ☐ Owner(s)/operator(s) must inspect all erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness. Owner(s)/operator(s) must repair, replace, or supplement all nonfunctional BMPs with functional BMPs by the end of the next business day after discovery unless another time frame is specified below. Owner(s)/operator(s) may take additional time if field conditions prevent access to the area.

72.D.4. ☐ During each inspection, owner(s)/operator(s) must inspect surface waters, including drainage ditches and conveyance systems but not curb and gutter systems, for evidence of erosion and sediment deposition. Owner(s)/operator(s) must remove all deltas and sediment deposited in surface waters, including drainage ways, catch basins, and other drainage systems and restabilize the areas where sediment removal results in exposed soil. Owner(s)/operator(s) must complete removal and stabilization within seven (7) calendar days of discovery unless precluded by legal, regulatory, or physical access constraints. Owner(s)/operator(s) must use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. Owner(s)/operator(s) are responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters.

72.D.5. ☐ Owner(s)/operator(s) must inspect construction site vehicle exit locations, streets and curb and gutter systems within and adjacent to the project for sedimentation from erosion or tracked sediment from vehicles. Owner(s)/operator(s) must remove sediment from all paved surfaces within one (1) calendar day of discovery or, if applicable, within a shorter time to avoid a safety hazard to users of public streets.

72.D.6. ☐ Owner(s)/operator(s) must repair, replace, or supplement all perimeter control devices when they become nonfunctional or the sediment reaches one-half of the height of the device.

72.D.7. ☐ Owner(s)/operator(s) must drain temporary and permanent sedimentation basins and remove the sediment when the depth of sediment collected in the basin reaches one-half of the storage volume.

72.D.8. ☐ Owner(s)/operator(s) must ensure that at least one individual present on the site (or available to the project site in three (3) calendar days) is trained in the job duties of overseeing the implementation of, revising and/or amending the site plans and performing inspections for the project.

72.D.9. ☐ Owner(s)/operator(s) may adjust the inspection schedule as follows:

a. inspections of areas with permanent cover can be reduced to once per month, even if construction activity continues on other portions of the site; or
b. where construction sites have permanent cover on all exposed soil areas and no construction activity is occurring anywhere on the site, inspections can be reduced to once per month and, after 12 months, may be suspended completely until construction activity resumes. The MPCA may require inspections to resume if conditions warrant; or

c. where construction activity has been suspended due to frozen ground conditions, inspections may be suspended. Inspections must resume within 24 hours of runoff occurring, or upon resuming construction, whichever comes first.

72.D.10 ☐ Owner(s)/operator(s) must record all inspections and maintenance activities within 24 hours of being conducted and these records must be retained with the site plans. These records must include:

a. date and time of inspections; and

b. name of person(s) conducting inspections; and

c. accurate findings of inspections, including the specific location where corrective actions are needed; and

d. corrective actions taken (including dates, times, and party completing maintenance activities); and

e. date of all rainfall events greater than one-half inch in 24 hours, and the amount of rainfall for each event. Owner(s)/operator(s) must obtain rainfall amounts by either a properly maintained rain gauge installed onsite, a weather station that is within one (1) mile of owner(s)/operator(s)r location, or a weather reporting system that provides site specific rainfall data from radar summaries; and

f. if owner(s)/operator(s) observe a discharge during the inspection, they must record and should photograph and describe the location of the discharge (i.e., color, odor, settled or suspended solids, oil sheen, and other obvious indicators of pollutants); and

g. any amendments to the site plans proposed as a result of the inspection must be documented within seven (7) calendar days.

72.E. Inspection and maintenance:

72.E.1. ☐ Owner(s)/operator(s) must place building products and landscape materials under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. Owner(s)/operator(s) are not required to cover or protect products which are either not a source of contamination to stormwater or are designed to be exposed to stormwater.

72.E.2. ☐ Owner(s)/operator(s) must place pesticides, fertilizers and treatment chemicals under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater.

72.E.3. ☐ Owner(s)/operator(s) must store hazardous materials and toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) in sealed containers to prevent spills, leaks or other discharge. Storage and disposal of hazardous waste materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable.

72.E.4. ☐ Owner(s)/operator(s) must properly store, collect, and dispose of solid waste in compliance with Minn. R. ch. 7035.

72.E.5. ☐ Owner(s)/operator(s) must position portable toilets so they are secure and will not tip or be knocked over. Owner(s)/operator(s) must dispose of sanitary waste in accordance with Minn. R. ch. 7041.

72.E.6. ☐ Owner(s)/operator(s) must take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. Owner(s)/operator(s) must ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. Owner(s)/operator(s) must report and clean up spills immediately as required by Minn. Stat. § 115.061, using dry clean up measures where possible.

72.E.7. ☐ Owner(s)/operator(s) must limit vehicle exterior washing and equipment to a defined area of the site. Owner(s)/operator(s) must contain runoff from the washing area in a sediment basin or other similarly effective controls and must dispose of waste from the washing activity properly. Owner(s)/operator(s) must properly use and store soaps, detergents, or solvents.

72.E.8. ☐ Owner(s)/operator(s) must provide effective containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. Owner(s)/operator(s) must prevent liquid and solid washout wastes from contacting the ground and must design the containment so it does not result in runoff from the washout operations or areas. Owner(s)/operator(s) must properly dispose of liquid and solid wastes in compliance with Minn. R. ch. 7035. Owner(s)/operator(s) must install a sign indicating the location of the washout facility.

72.F. Temporary sediment basins:

72.F.1. ☐ Where ten (10) or more acres of disturbed soil drain to a common location, owner(s)/operator(s) must provide a temporary sediment basin to provide treatment of the runoff before it leaves the construction site or enters surface waters. Owner(s)/operator(s) may convert a temporary sediment basin to a permanent basin after construction is complete. The temporary basin is no longer required when permanent cover has reduced the acreage of disturbed soil to less than ten (10) acres draining to a common location.

72.F.2. ☐ The temporary basin must provide live storage for a calculated volume of runoff from a two (2)-year, 24-hour storm from each acre drained to the basin or 1,800 cubic feet of live storage per acre drained, whichever is greater.

72.F.3. ☐ Where owner(s)/operator(s) have not calculated the two (2)-year, 24-hour storm runoff amount, the temporary sediment basin must provide 3,600 cubic feet of live storage per acre of the basin's drainage area.

72.F.4. ☐ Owner(s)/operator(s) must design basin outlets to prevent short-circuiting and the discharge of floating debris.

72.F.5. ☐ Owner(s)/operator(s) must design the outlet structure to withdraw water from the surface to minimize the discharge of pollutants. Owner(s)/operator(s) may temporarily suspend the use of a surface withdrawal mechanism during frozen conditions. The basin must include a stabilized emergency overflow to prevent failure of pond integrity.

72.F.6. ☐ Owner(s)/operator(s) must provide energy dissipation for the basin outlet within 24 hours after connection to a surface water.

72.F.7. ☐ Owner(s)/operator(s) must locate temporary basins outside of surface waters and any required buffer zones.

72.F.8. ☐ Owner(s)/operator(s) must construct temporary basins prior to disturbing (10) or more acres of soil draining to a common location.

72.F.9. ☐ Where a temporary sediment basin meeting the requirements of this part is infeasible, owner(s)/operator(s) must install effective sediment controls such as smaller sediment basins and/or sediment traps, silt fences, vegetative buffer strips or any appropriate combination of measures as dictated by individual site conditions. In determining whether installing a sediment basin is infeasible, owner(s)/operator(s) must consider public safety and may consider factors such as site soils, slope, and available area on-site. Owner(s)/operator(s) must document this determination of infeasibility in the site plans.

72.G. Termination conditions:

72.G.1. ☐ Owner(s)/operator(s) must complete all construction activity and must install permanent cover over all areas. Vegetative cover must consist of a uniform perennial vegetation with a density of 70 percent of its expected final growth. Vegetation is not required where the function of a specific area dictates no vegetation, such as impervious surfaces or the base of a sand filter.

72.G.2. ☐ Owner(s)/operator(s) must clean the permanent stormwater treatment system of any accumulated sediment and must ensure the system meets all applicable requirements and is operating as designed.

72.F.3. ☐ Owner(s)/operator(s) must remove all sediment from conveyance systems.

72.G.4. ☐ Owner(s)/operator(s) must remove all temporary synthetic erosion prevention and sediment control BMPs. Owner(s)/operator(s) may leave BMPs designed to decompose on-site in place.

72.G.5. ☐ For residential construction only, permit coverage terminates on individual lots if the structure(s) are finished and temporary erosion prevention and downgradient perimeter control is complete and the residence sells to the homeowner.

72.G.6. ☐ For construction projects on agricultural land (e.g., pipelines across cropland), owner(s)/operator(s) must return the disturbed land to its preconstruction agricultural use.

72.H. If applicable, additional requirements for discharges to special and impaired waters:

72.H.1. ☐ Owner(s)/operator(s) must immediately initiate stabilization of exposed soil areas, and complete the stabilization within seven (7) calendar days after the construction activity in that portion of the site temporarily or permanently ceases.

72.H.2. ☐ Owner(s)/operator(s) must provide a temporary sediment basin for common drainage locations that serve an area with five (5) or more acres disturbed at one time.

72.H.3. ☐ Owner(s)/operator(s) must include an undisturbed buffer zone of not less than 100 linear feet from a special water (not including tributaries) and must maintain this buffer zone at all times, both during construction and as a permanent feature post construction, except where a water crossing or other encroachment is necessary to complete the project. Owner(s)/operator(s) must fully document the circumstance and reasons the buffer encroachment is necessary in the site plans and include restoration activities. Owner(s)/operator(s) must minimize all potential water quality, scenic and other environmental impacts of these exceptions by the use of additional or redundant (double) BMPs and must document this in the site plans for the project.

72.H.4. ☐ Owner(s)/operator(s) must conduct routine site inspections once every three (3) days for projects that discharge to prohibited waters.

*73. **Permit item 19.5:** Does your regulatory mechanism(s) require that owners and operators of construction activity develop site plans that must be submitted to you for review and confirmation that regulatory mechanism(s) requirements have been met, prior to the start of construction activity?

☒ Yes
☐ No

*74. **Permit item 19.6:** Do you have written procedures for site plan reviews to ensure compliance with requirements of the regulatory mechanism(s)? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes
☒ No (Skip to Q76)

75. **If yes in Q74, do your procedures include the following?** (Check all that apply)

75.A. ☐ Written notification to owners and operators of the need to apply for and obtain coverage under the CSW Permit.

75.B. ☐ Use of a written checklist, consistent with the requirements of the regulatory mechanism(s), to document the adequacy of each site plan required.

*76. **Permit item 19.7:** Do you have written procedures for conducting site inspections to determine compliance with your regulatory mechanism(s)?

☒ Yes

☐ No

*77. **Permit item 19.8:** Do you maintain written procedures for identifying high-priority and low-priority sites for inspection? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes

☒ No (Skip to Q79)

78. **If yes in Q77, do your procedures include the following?** (Check all that apply)

78.A. ☐ A detailed explanation describing how sites will be categorized as either high-priority or low-priority.

If checked, how do you prioritize sites for inspection? (Check all that apply)

78.A.1. ☐ Site topography

78.A.2. ☐ Soil characteristics

78.A.3. ☐ Types of receiving water(s)

78.A.4. ☐ Stage of construction

78.A.5. ☐ Compliance history

78.A.6. ☐ Weather conditions

78.A.7. ☐ Citizen complaints

78.A.8. ☐ Project size

78.A.9. ☐ Other (describe below):

78.A.10.

78.B. ☐ A frequency at which you will conduct inspections for high-priority sites.

If checked, how often will you inspect high-priority sites? (Check only one)

78.B.1. ☐ More than once every seven (7) days

78.B.2. ☐ Once every seven (7) days

78.B.3. ☐ Once every 14 days

78.B.4. ☐ Once every 21 days

78.B.5. ☐ Once every 30 days

78.B.6. ☐ Other (describe below):

78.B.7.

78.C. ☐ A frequency at which you will conduct inspections for low-priority sites.

If checked, how often will you inspect low-priority sites? (Check only one)

78.C.1. ☐ More than once every seven (7) days

78.C.2. ☐ Once every seven (7) days

78.C.3. ☐ Once every 14 days

78.C.4. ☐ Once every 21 days

78.C.5. ☐ Once every 30 days

78.C.6. ☐ Other (describe below):

78.C.7.

78.D. ☐ The name(s) of individual(s) or position title(s) responsible for conducting site inspections:

*79. **Permit item 19.9:** Do you use a written checklist to document each site inspection when determining compliance with your regulatory mechanism(s)? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes
☒ No (Skip to Q82)

80. **If yes in Q79, are the following items incorporated in your written checklist?** (Check all that apply)

80.A. ☐ Stabilization of exposed soils (including stockpiles)
80.B. ☐ Stabilization of ditch and swale bottoms
80.C. ☐ Sediment control BMPs on all downgradient perimeters of the project and upgradient of buffer zones
80.D. ☐ Storm drain inlet protection
80.E. ☐ Energy dissipation at pipe outlets
80.F. ☐ Vehicle tracking BMPs
80.G. ☐ Preservation of a 50 foot natural buffer or redundant sediment controls where stormwater flows to a surface water within 50 feet of disturbed soils
80.H. ☐ Owner/operator of construction activity self-inspection records
80.I. ☐ Containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds, and other construction materials)
80.J. ☐ BMPs maintained and functional

81. **Provide any additional information on your process to document site inspections (optional):**

*82. **Permit item 19.10:** Do you have written procedures for receipt and consideration of reports of noncompliance or other stormwater related information on construction activity submitted to you by the public?

☒ Yes
☐ No (Skip to Q84)

83. **If yes in Q82, please provide your procedures or a description of your procedures (e.g., how the public may submit concerns, typical timeframe for you to investigate reports):**

The City treats reports of non-compliance as a report of illicit discharge. Reports can be submitted in the same manner as illicit discharge and is typically investigated immediately by City staff.

*84. **Permit item 19.11:** Do individuals receive training commensurate with their responsibilities as they relate to your Construction Site Stormwater Runoff Control program? Individuals includes, but is not limited to, individuals responsible for conducting site plan reviews, site inspections, and/or enforcement.

☒ Yes
☐ No (Skip to Q87)

85. **If yes in Q84, do previously trained individuals attend a refresher-training every three (3) calendar years following the initial training?** ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☒ Yes
☐ No

86. **If yes in Q84, what training do your staff who perform site inspections receive?** (Check all that apply)

86.A. ☒ University of Minnesota Erosion and Stormwater Management Certification Program
86.B. ☐ Qualified Compliance Inspector of Stormwater
86.C. ☐ Minnesota Laborers Training Center Stormwater Pollution Prevention Plan Installer or Supervisor
86.D. ☐ Minnesota Utility Contractors Association Erosion Control Training
86.E. ☐ Certified Professional in Erosion and Sediment Control
86.F. ☐ Certified Professional in Stormwater Quality
86.G. ☐ Certified Erosion Sediment and Storm Water Inspector
86.H. ☐ Other (describe below):
86.I.

*87. **Permit item 19.12:** Do you maintain written ERPs to compel compliance with your regulatory mechanism(s) in Section 19? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☒ Yes
☐ No (Skip to Q89)

88. **If yes in Q87, which enforcement tools are included in your ERPs?** (Check all that apply)

88.A. ☒ Verbal warning
88.B. ☒ Notice of violation
88.C. ☐ Administrative order
88.D. ☒ Stop work order
88.E. ☒ Fine
88.F. ☐ Forfeit of security bond money
88.G. ☐ Withholding of certificate of occupancy
88.H. ☐ Criminal action
88.I. ☐ Civil penalty
88.J. ☒ Other (describe below):
88.K. The City retains the ability to perform maintenance and repairs to impacted conveyances and bill the owner of the construction site.

*89. **Please specify name or position title of responsible person(s) for conducting enforcement:**

Utility Programs Coordinator, Ryan Granlund

*90. **Permit item 19.13:** Do you document each site plan review you conduct?

☒ Yes
☐ No (Skip to Q92)

91. **If yes in Q90, what do you document in your site plan review process?** (Check all that apply)

91.A. ☒ Project name
91.B. ☒ Location
91.C. ☒ Total acreage to be disturbed
91.D. ☒ Owner and operator of the proposed construction activity
91.E. ☐ Proof of notification to obtain coverage under the CSW Permit or proof of coverage under the CSW Permit ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
91.F. ☐ Any stormwater related comments and supporting completed checklist, to determine project approval or denial ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

*92. **Permit item 19.14:** Do you document training related to permit item 19.11?
☒ Yes
☐ No (Skip to Q94)

93. **If yes in Q92, what do you document?** (Check all that apply)
93.A. ☒ General subject matter covered
93.B. ☐ Name(s) and departments of individuals in attendance
(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)
93.C. ☒ Date of each event

*94. **Permit item 19.15:** Do you document enforcement conducted pursuant to your ERPs in item 19.12, including verbal warnings?
☒ Yes
☐ No (Skip to Q96)

95. **If yes in Q94, what do you document relating to ERPs for MCM 4?** (Check all that apply)
95.A. ☒ Name of the person responsible for violating the terms and conditions of your regulatory mechanism(s)
95.B. ☒ Date(s) and location(s) of the observed violation(s)
95.C. ☒ Description of the violation(s)
95.D. ☒ Corrective action(s) (including completion schedule) that you issued
95.E. ☒ Referrals to other regulatory organizations (if any)
95.F. ☒ Date(s) violation(s) resolved

*96. **Permit item 12.4: Who is responsible for implementation of this MCM? List name(s) or position title(s):**
Utility Programs Coordinator, Ryan Granlund
Utility Resources Specialists, City of Duluth Public Works and Utilities

97. **Provide any additional information about your current construction site stormwater runoff control program that you would like to share (optional): (Maximum 10 lines of text)**
The City of Duluth SWPPP will be revised within 12 months of coverage of this permit to include measures that will better compel compliance with Permit Items 19.6, 19.8 and19.9. The City of Duluth will also update existing procedures to more closely align with the requirements stated within MCM 4 of this Permit.

MCM 5: Post-construction stormwater management

*98. **Permit item 20.3:** Do you have a post-construction stormwater management regulatory mechanism(s)?
☒ Yes
☐ No (skip to Q102)

99. **If yes in Q98, what does your regulatory mechanism(s) consist of?** (Check all that apply)
99.A. ☐ Contract language
99.B. ☒ Ordinance
99.C. ☒ Permits
99.D. ☐ Standards
99.E. ☒ Written policies
99.F. ☒ Operational plans
99.G. ☒ Legal agreements
99.H. ☐ Other mechanism(s) (describe below):
99.I.

100. **If yes in Q98, provide a website address to the regulatory mechanism(s). If the regulatory mechanism is not available online, briefly describe how a copy of the regulatory mechanism can be obtained:**
www.duluthmn.gov Unified Development Chapter and Engineering Guidelines document.

101. **If yes in Q98, which of the following requirements are incorporated into your regulatory mechanism?** (Check all that apply)

101.A. ☒ **Permit item 20.4:** You must require owners of construction activity to submit site plans with post-construction stormwater management BMPs designed with accepted engineering practices to you for review and confirmation that regulatory mechanism(s) requirements have been met, prior to start of construction activity.

101.B. ☒ **Permit item 20.5:** You must require owners of construction activity to treat the water quality volume on any project where the sum of the new impervious surface and the fully reconstructed impervious surface equals one or more acres. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

101.C. ☐ **Permit item 20.6:** For construction activity (excluding linear projects), the water quality volume must be calculated as one (1) inch times the sum of the new and the fully reconstructed impervious surface. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

101.D. ☐ **Permit item 20.7:** For linear projects, the water quality volume must be calculated as the larger of one (1) inch times the new impervious surface or one-half (0.5) inch times the sum of the new and the fully reconstructed impervious surface. Where the entire water quality volume cannot be treated within the existing right-of-way, a reasonable attempt to obtain additional right-of-way, easement, or other permission to treat the stormwater during the project planning process must be made. Volume reduction practices must be considered first, as described in item 20.8. Volume reduction practices are not required if the practices cannot be provided cost effectively. If additional right-of-way, easements, or other permission cannot be obtained, owners of construction activity must maximize the treatment of the water quality volume prior to discharge from the MS4. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

101.E. ☒ **Permit item 20.8:** Volume reduction practices (e.g., infiltration or other) to retain the water quality volume on-site must be considered first when designing the permanent stormwater treatment system. This permit does not consider wet sedimentation basins and filtration systems to be volume reduction practices. If this permit prohibits infiltration as described in item 20.9, other volume reduction practices, a wet sedimentation basin, or filtration basin may be considered.

101.F. ☒ **Permit item 20.9:** Infiltration systems must be prohibited when the system would be constructed in areas:

a. That receive discharges from vehicle fueling and maintenance areas, regardless of the amount of new and fully reconstructed impervious surface. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
b. Where high levels of contaminants in soil or groundwater may be mobilized by the infiltrating stormwater. To make this determination, the owners and/or operators of construction activity must complete the MPCA's site screening assessment checklist, which is available in the Minnesota Stormwater Manual, or conduct their own assessment. The assessment must be retained with the site plans. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
c. Where soil infiltration rates are more than 8.3 inches per hour unless soils are amended to slow the infiltration rate below 8.3 inches per hour. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
d. With less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock.
e. Of predominately Hydrologic Soil Group D (clay) soils. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
f. In an Emergency Response Area (ERA) within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, Subp. 13, classified as high or very high vulnerability as defined by the Minnesota Department of Health. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
g. In an ERA within a DWSMA classified as moderate vulnerability unless you perform or approve a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
h. Outside of an ERA within a DWSMA classified as high or very high vulnerability unless you perform or approve a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
i. Within 1,000 feet up-gradient or 100 feet down gradient of active karst features.
(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)

j. That receive stormwater runoff from these types of entities regulated under NPDES for industrial stormwater: automobile salvage yards; scrap recycling and waste recycling facilities; hazardous waste treatment, storage, or disposal facilities; or air transportation facilities that conduct deicing activities.

101.G. ☐ **Permit item 20.10:** For non-linear projects, where the water quality volume cannot cost effectively be treated on the site of the original construction activity, you must identify, or may require owners of the construction activity to identify, locations where off-site treatment projects can be completed. If the entire water quality volume is not addressed on the site of the original construction activity, the remaining water quality volume must be addressed through off-site treatment and, at a minimum, ensure the requirements of permit items 20.11 through 20.14 are met.

101.H. ☐ **Permit item 20.11:** You must ensure off-site treatment project areas are selected in the following order of preference:

a. Locations that yield benefits to the same receiving water that receives runoff from the original construction activity
b. Locations within the same DNR catchment area as the original construction activity
c. Locations in the next adjacent DNR catchment area up-stream
d. Locations anywhere within your jurisdiction

101.I. ☐ **Permit item 20.12:** Off-site treatment projects must involve the creation of new structural stormwater BMPs or the retrofit of existing structural stormwater BMPs, or the use of a properly designed regional structural stormwater BMP. Routine maintenance of structural stormwater BMPs already required by this permit cannot be used to meet this requirement.

101.J. ☐ **Permit item 20.13:** Off-site treatment projects must be completed no later than 24 months after the start of the original construction activity. If you determine that more time is needed to complete the treatment project, you must provide the reason(s) and schedule(s) for completing the project in the annual report.

101.K. ☐ **Permit item 20.14:** If you receive payment from the owner of a construction activity for off-site treatment, you must apply any such payment received to a public stormwater project, and all projects must comply with permit items 20.11 through 20.13.

101.L. ☒ **Permit item 20.15:** You must include the establishment of legal mechanism(s) between you and owners of structural stormwater BMPs not owned or operated by you, that have been constructed to meet the requirements in Section 20. The legal mechanism(s) must include provisions that, at a minimum:

a. Allow you to conduct inspections of structural stormwater BMPs not owned or operated by you, perform necessary maintenance, and assess costs for those structural stormwater BMPs when you determine the owner of that structural stormwater BMP has not ensured proper function.
b. Are designed to preserve your right to ensure maintenance responsibility, for structural stormwater BMPs not owned or operated by you, when those responsibilities are legally transferred to another party.
c. Are designed to protect/preserve structural stormwater BMPs. If structural stormwater BMPs change, causing decreased effectiveness, new, repaired, or improved structural stormwater BMPs must be implemented to provide equivalent treatment to the original BMP.

*102. **Permit item 20.16:** Do you maintain a written or mapped inventory of structural stormwater BMPs that you do not own or operate that meet all of the following criteria? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

a. The structural stormwater BMP includes an executed legal mechanism(s) between you and owners responsible for the long-term maintenance, as required in item 20.15; and
b. The structural stormwater BMP was implemented on or after August 1, 2013.

☒ Yes
☐ No

*103. **Permit item 20.17:** Do you to have written procedures for site plan reviews to ensure compliance with requirements of your regulatory mechanism(s)?

☒ Yes
☐ No

*104. **Permit item 20.18:** Do individuals receive training commensurate with their responsibilities as they relate to your Post-Construction Stormwater Management program? Individuals include, but is not limited to, individuals responsible for conducting site plan reviews and/or enforcement.

☒ Yes
☐ No (Skip to Q106)

105. **If yes in Q104,** do previously trained individuals attend a refresher training every three (3) calendar years following the initial training? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☒ Yes
☐ No

*106. **Permit item 20.19:** Do you maintain written ERPs to compel compliance with your regulatory mechanism(s) required in Section 20? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes
☒ No (Skip to Q108)

107. **If yes in Q106, what enforcement tools are included in your ERPs?** (Check all that apply)

107.A. ☐ Verbal warning
107.B. ☐ Notice of violation
107.C. ☐ Administrative order
107.D. ☐ Fine
107.E. ☐ Criminal action
107.F. ☐ Civil penalty
107.G. ☐ Other (describe below):
107.H.

*108. **Please specify name or position title of responsible person(s) for conducting enforcement:**
Tom Johnson, Senior Engineer, City of Duluth

*109. **Permit item 20.20:** Do you document each site plan review you conduct?

☒ Yes
☐ No (Skip to Q111)

110. **If yes in Q109, what do you document in your site plan review process?** (Check all that apply)

110.A. ☒ Supporting documentation used to determine compliance, including any calculations for the permanent stormwater treatment system.
110.B. ☒ The water quality volume that will be treated through volume reduction practices compared to the total water quality volume required to be treated. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
110.C. ☐ Documentation associated with off-site treatment projects you authorize, including rationale to support the location of permanent stormwater treatment projects in accordance with items 20.10 and 20.11. ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
110.D. ☐ Payments received and used in accordance with permit item 20.14.
110.E. ☒ All legal mechanisms drafted in accordance with permit item 20.15, including date(s) of the agreement(s) and name(s) of all responsible parties involved.

*111. **Permit item 20.21:** Do you document training related to your Post-Construction Stormwater Management program?

☒ Yes
☐ No (Skip to Q113)

112. **If yes in Q111, what are you documenting?** (Check all that apply)

112.A. ☒ General subject matter covered
112.B. ☒ Names and departments of individuals in attendance ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
112.C. ☒ The date of each event

*113. **Permit item 20.22:** Do you document enforcement conducted pursuant to your ERPs in item 20.19, including verbal warnings?

☐ Yes
☒ No (Skip to Q115)

114. If yes in Q113, what do you document relating to ERPs for MCM 5? (Check all that apply)

114.A. ☐ The name of the person responsible for violating the terms and conditions of your regulatory mechanism(s)
114.B. ☐ The date(s) and location(s) of the observed violation(s)
114.C. ☐ A description of the violation(s)
114.D. ☐ Corrective action(s) issued
114.E. ☐ Referrals to other regulatory organizations
114.F. ☐ The date(s) violation(s) are resolved

*115. **Permit item 12.4:** Who is responsible for implementation of this MCM? List name(s) or position title(s):
Tom Johnson, Senior Engineer, City of Duluth
Ryan Granlund,Utility Programs Coordinator, City of Duluth

116. **Provide any additional information about your current post-construction stormwater management program that you would like to share (optional): (Maximum 10 lines of text)**
The City of Duluth uses a threshold of 3,000 square feet of impervious surface area - new development or redevelopment as the trigger for our storm water management rules, both for temporary construction storm water management - Erosion and Sediment Control (MCM4), and post construction storm water management requirements (MCM5). In regards to Permit Items 20.10-20.14 and 20.20c-d, the City of Duluth does not allow offsite treatment of stormwater and subsequently requires all stormwater management facilities to be within the boundaries of the project site.

MCM 6: Pollution prevention/Good housekeeping for municipal operations

*117. **Permit item 21.3:** Do you maintain a written or mapped inventory of your owned/operated facilities that contribute pollutants to stormwater discharges?
☒ Yes
☐ No (skip to Q119)

118. **If yes in Q117, which of the following facilities do you own and/or operate?** (Check all that apply)
118.A. ☒ Composting
118.B. ☒ Equipment storage and maintenance
118.C. ☐ Hazardous waste disposal
118.D. ☐ Hazardous waste handling and transfer
118.E. ☐ Landfill(s)
118.F. ☐ Solid waste handling and transfer
118.G. ☒ Park(s)
118.H. ☒ Pesticide storage
118.I. ☒ Public parking lot(s)
118.J. ☒ Public golf course(s)
118.K. ☐ Public swimming pool(s)
118.L. ☒ Public works yard(s)
118.M. ☐ Recycling
118.N. ☒ Salt storage
118.O. ☒ Snow storage
118.P. ☒ Vehicle storage and maintenance (e.g., fueling and washing) yard(s)
118.Q. ☒ Materials storage yard(s)
118.R. ☒ Other (describe below):
118.S. City Clean Fill Site

*119. **Permit item 21.4:** Do you implement BMPs to prevent or reduce pollutants in stormwater discharges from municipal operations?
☒ Yes
☐ No (Skip to Q121)

120. **If yes in Q119, provide additional information on the BMPs you implement to address stormwater discharges from municipal operations (e.g., waste disposal, management of stockpiles, road maintenance):**
The City implements water quality structures, nonstructural BMPs and structural BMPs to manage stormwater discharges.

*121. **Permit item 21.5:** Do you implement BMPs at your owned/operated salt storage areas? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☒ Yes
☐ No (Skip to Q123)

122. **If yes in Q121, what BMPs do you have in place at salt storage areas?** (Check all that apply)
122.A. ☒ Salt is covered or stored indoors
122.B. ☒ Salt stored on an impervious surface
122.C. ☒ Implementation of practices to reduce exposure when transferring material from salt storage areas
122.D. ☐ Other (describe below):
122.E.

*123. **Permit item 21.6:** Do you implement a written snow and ice management policy for individuals that perform winter maintenance activities for you? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☒ Yes
☐ No (Skip to Q125)

124. **If yes in Q123, what practices and procedures for snow and ice control operations are included?** (Check all that apply)
124.A. ☒ Plowing or other snow removal practices
124.B. ☒ Sand use
124.C. ☒ Application of deicing compounds
124.D. ☐ Other (describe below):
124.E.

*125. **Permit item 21.7:** Each calendar year, do all individuals that perform winter maintenance activities for you receive training? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☐ Yes
☒ No (Skip to Q127)

126. **If yes in Q125, what does the winter maintenance training include?** (Check all that apply)
126.A. ☐ The importance of protecting water quality
126.B. ☐ BMPs to minimize the use of deicers
126.C. ☐ Tools and resources to assist in winter maintenance (e.g., deicing application rate guidelines, calibration charts, Smart Salting Assessment Tool)
126.D. ☐ Other (describe below):
126.E.

*127. **Permit item 21.8:** Do you maintain written procedures for determining TSS and total phosphorus (TP) treatment effectiveness of all owned/operated ponds constructed and used for the collection and treatment of stormwater?
☐ Yes
☒ No

*128. **Permit item 21.9:** Do you inspect structural stormwater BMPs (excluding stormwater ponds, which are under a separate schedule) each calendar year to determine structural integrity, proper function, and maintenance needs (excluding structural stormwater BMPs where the inspection frequency has been adjusted)?

☒ Yes
☐ No

*129. **Do you have a different inspection frequency (i.e., more or less than each calendar year) for any of your structural stormwater BMPs?**

☒ Yes
☐ No (Skip to Q131)

130. **If yes in Q129, what led to your adjusted inspection frequency?** (Check all that apply)

130.A. ☒ Complaints received or patterns of maintenance indicated a greater frequency was necessary.
130.B. ☒ Determined maintenance or sediment removal was not required after completion of the first two calendar year inspections.
130.C. ☐ Other (describe below):
130.D.

*131. **Permit item 21.10:** Do you inspect all ponds and outfalls (excluding underground outfalls) each permit term in order to determine structural integrity, proper function, and maintenance needs?

☒ Yes
☐ No (Skip to Q133)

132. **If yes in Q131,** describe the frequency of inspections:

20% of outfalls and ponds are inspected annually.

*133. **Permit item 21.12:** Do you implement a stormwater management training program commensurate with individual's responsibilities as they relate to your SWPPP, including reporting and assessment activities? Training materials can be from the U.S. Environmental Protection Agency (EPA), state and regional agencies, or other organizations as appropriate to meet this requirement.

☐ Yes
☒ No (Skip to Q135)

134. **If yes in Q133, what does your stormwater management training program include?** (Check all that apply)

134.A. ☐ The importance of protecting water quality.
134.B. ☐ Cover the requirements of the permit relevant to the responsibilities of the individual.
134.C. ☐ A schedule that establishes initial training for individuals, including new and/or seasonal employees, and recurring training intervals to address changes in procedures, practices, techniques, or requirements.
134.D. ☐ Other (describe below):
134.E.

134.F. Additional information for checked items (optional):

*135. **Permit item 21.13:** Do you document information associated with the operations and maintenance program?

☒ Yes
☐ No (Skip to Q137)

136. **If yes in Q135, what are you documenting?** (Check all that apply)

136.A. ☒ Date(s) and description of findings, including whether or not an illicit discharge is detected, for all inspections conducted in accordance with items 21.9 and 21.10.
136.B. ☒ Any adjustments to inspection frequency as authorized in item 21.9.
136.C. ☒ Date(s) and a description of maintenance conducted as a result of inspection findings, including whether or not an illicit discharge is detected.

136.D. ☐ Schedule(s) for maintenance of structural stormwater BMPs and outfalls when necessary maintenance cannot be completed within one year of discovery ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

136.E. ☐ Stormwater management training events, including general subject matter covered, names and departments of individuals in attendance, and date of each event.

*137. **Permit item 21.14:** Do you document pond sediment excavation and removal activities?

☒ Yes

☐ No (Skip to Q139)

138. **If yes in Q137, what pond sediment excavation and removal activity information is documented?** (Check all that apply)

138.A. ☒ A unique ID number and geographic coordinate of each stormwater pond from which sediment is removed.

138.B. ☒ The volume (e.g., cubic yards) of sediment removed from each stormwater pond.

138.C. ☒ Results from any testing of sediment from each removal activity.

138.D. ☒ Location(s) of final disposal of sediment from each stormwater pond.

138.E. Additional information for checked items (optional):

*139. **Permit item 12.4:** Who is responsible for implementation of this MCM? List name(s) or position title(s).

Utility Programs Coordinator, Ryan Granlund, City of Duluth

140. **Provide any additional information about your current pollution prevention/good housekeeping for municipal operations program that you would like to share (optional): (Maximum 10 lines of text)**

The City of Duluth will amend it's SWPPP to include a programmatic approach to compliance for Permit Items 21.8 and 21.12 within 12 months after receiving permit coverage.

Discharges to Impaired Waters with an EPA-Approved TMDL that Includes an Applicable Waste Load Allocation (WLA)

To determine if you have an applicable WLA(s), please reference the MPCA's MS4 Permit TMDL Application Form webpage at https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_completing_the_MS4_Permit_TMDL_Application_Form.

*141. **Permit item 22.3:** Do you have an applicable WLA where a reduction in pollutant loading is required for bacteria?

☐ Yes

☒ No (Skip to Q146)

142. **If yes in Q141, do you maintain a written or mapped inventory of potential areas and sources of bacteria (e.g., dense populations of waterfowl or other bird, dog parks)? *(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes

☐ No (Skip to Q145)

143. **If yes in Q142, do you maintain a written plan to prioritize reduction activities to address the areas and sources identified in the inventory? The written plan must include BMPs you will implement over the permit term. *(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes

☐ No (Skip to Q145)

144. **If yes in Q143, which of the following are included in your written plan?** (Check all that apply)

144.A. ☐ Water quality monitoring to determine areas of high bacteria loading.

144.B. ☐ Installation of pet waste pick-up bags in parks and open spaces.

144.C. ☐ Elimination of over-spray irrigation at permittee land owned areas.

144.D. ☐ Removal of organic matter via street sweeping.
144.E. ☐ Implementation of infiltration structural stormwater BMPs.
144.F. ☐ Management of areas that attract dense populations of waterfowl (e.g., riparian plantings).
144.G. ☐ Other (describe below):
144.H.

145. **Permit item 12.9:** If yes in Q141, who is or will be responsible for implementation of this required component (i.e., inventory, plan, and BMP implementation)? List name(s) or position title(s):

*146. **Permit item 22.5:** Do you have an applicable WLA where a reduction in pollutant loading is required for chloride?
☐ Yes
☒ No (Skip to Q151)

147. **If yes in Q146, do you document the amount of deicer applied each winter maintenance season to all your owned/operated surfaces?** ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☐ Yes
☐ No

148. **If yes in Q146, each calendar year do you conduct an assessment of your winter maintenance operations to reduce the amount of deicing salt applied to your owned/operated surfaces and determine current and future opportunities to improve BMPs? You may use the MPCA's Smart Salting Assessment Tool or other available resources and methods to complete this assessment. The assessment must be documented.** ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☐ Yes
☐ No (Skip to Q150)

149. **If yes in Q148, what does your winter maintenance operations assessment include?** (Check all that apply)
149.A. ☐ Operational changes such as pre-wetting, pre-treating the salt stockpile, increasing plowing prior to deicing, monitoring of road surface temperature, etc.
149.B. ☐ Implementation of new or modified equipment providing pre-wetting, or other capability for minimizing salt use.
149.C. ☐ Regular calibration of equipment.
149.D. ☐ Optimizing mechanical removal to reduce use of deicers.
149.E. ☐ Designation of no salt and/or low salt zones.
149.F. ☐ Other (describe below):
149.G.

149.H. Additional information for checked items (optional):

150. **Permit item 12.9: If yes in Q146, who is or will be responsible for implementation of this required component (i.e., documenting deicer applied and winter maintenance operations assessment)? List name(s) or position title(s):**

*151. **Permit item 22.7:** Do you have an applicable WLA where a reduction in pollutant loading is required for temperature?
☒ Yes
☐ No (Skip to Q155)

152. If yes in Q151, do you maintain a written plan that identifies specific activities you will implement to reduce thermal loading during the permit term? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***

☐ Yes
☒ No (Skip to Q154)

153. **If yes in Q152, what activities does the plan include?** (Check all that apply)

153.A. ☐ Implementation of infiltration BMPs such as bioinfiltration practices
153.B. ☐ Disconnection and/or reduction of impervious surfaces
153.C. ☐ Retrofitting existing structural stormwater BMPs
153.D. ☐ Improvement of riparian vegetation
153.E. ☐ Other (describe below):
153.F.

153.G. Provide any additional information about your written plan (optional):

154. **Permit item 12.9: If yes in Q151, who is or will be responsible for implementation of this required component? List name(s) or position title(s):**

Utility Programs Coordinator, Ryan Granlund, City of Duluth

*155. **Permit item 12.8:** Do you have an applicable WLA(s) for oxygen demand, nitrate, TSS, or TP?

☐ Yes - If yes, you **must complete** the corresponding tabs in the *MS4 Permit TMDL Application* (available on the MPCA's website at https://stormwater.pca.state.mn.us/index.php?title=Guidance_for_completing_the_MS4_Permit_TMDL_Application_Form) and submit it with this application.
☒ No

Alum or Ferric Chloride Phosphorus Treatment Systems

*156. **Permit Section 23:** Do you own and/or operate an Alum or Ferric Chloride Phosphorus Treatment System within your MS4?

☐ Yes - If yes, complete questions 157-173 as directed.
☒ No (Skip to Q174)

157. Provide the geographic coordinates of the alum or ferric chloride phosphorus treatment system, in decimal degrees. (Approximate centroid of treatment system within five-foot accuracy):

157.A. Latitude: _____
157.B. Longitude: _____

158. **Who is responsible for the operation of the treatment system? List name(s) or position title(s):**

159.A. **Provide the date the system first became operational (mm/dd/yyyy):** _____

For question 159.B-G, provide information for calendar year 2020.

159.B. **For each month, provide the number of days the system was operational:**

159.B.1. January: _____
159.B.2. February: _____
159.B.3. March: _____
159.B.4. April: _____
159.B.5. May: _____
159.B.6. June: _____
159.B.7. July: _____
159.B.8. August: _____
159.B.9. September: _____
159.B.10. October: _____
159.B.11. November: _____
159.B.12. December: _____

159.C. **What chemical(s) was used for treatment:**

159.C.1. ☐ Alum
159.C.2. ☐ Ferric Chloride

159.D. **Provide the number of gallons of water treated:** _____

159.E. **Provide the number of gallons of alum or ferric chloride treatment used:** _____

159.F. **Provide the calculated pounds of phosphorous removed:** _____

159.G. **Describe any performance issue(s) and the corrective action(s), including the date(s) when corrective action(s) were taken:**

160. **Permit item 23.3: Which of the following requirements are you meeting?** (Check all that apply)

160.A. ☐ Your treatment system is for the treatment of phosphorus in stormwater. Non-stormwater discharges must not be treated by this system.
160.B. ☐ Your treatment system is contained within the conveyances and structural stormwater BMPs of the MS4. The utilized conveyances and structural stormwater BMPs do not include any receiving waters.
160.C. ☐ Phosphorus treatment systems utilizing chemicals other than alum or ferric chloride receive written approval from the MPCA.
160.D. ☐ In-lake phosphorus treatment activities are not authorized.

161. **Permit item 23.3: Which of the following design parameters does your treatment system include?** (Check all that apply)

161.A. ☐ The treatment system is constructed in a manner that diverts the stormwater flow to be treated from the main conveyance system.
161.B. ☐ A high flow bypass is part of the inlet design.
161.C. ☐ A flocculent storage/settling area is incorporated into the design, and adequate maintenance access is provided (minimum of eight feet wide) for the removal of accumulated sediment.

162. **Permit item 23.5:** Do you have a designated person perform visual monitoring of the treatment system for proper performance at least once every seven (7) days, and within 24 hours after a rainfall event greater than 2.5 inches in 24 hours?

☐ Yes
☐ No (Skip to Q164)

163. **If yes in Q162, please list the name(s) of the individual(s) or position title(s):**

164. **Permit item 23.5:** Following visual monitoring which occurs within 24 hours after a rainfall event, do you conduct the next visual monitoring of your system seven (7) days after that rainfall event?
☐ Yes
☐ No

165. **Permit item 23.6:** Does your treatment system utilize three (3) benchmark monitoring stations? Table 1 in Appendix A in the permit must be used for the parameters, units of measure, and frequency of measurement for each station.
☐ Yes
☐ No

166. **Permit item 23.7:** Do you collect grab samples or flow-weighted 24-hour composite samples at your treatment system?
☐ Yes
☐ No

167. **Permit item 23.8:** Are your treatment system samples, excluding potential of hydrogen (pH) samples, analyzed by a laboratory certified by the Minnesota Department of Health and/or the MPCA?
☐ Yes
☐ No

168. **Which of the following do your sample tests include?** (Check all that apply)
168.A. ☐ Sample preservation and test procedures for the analysis of pollutants that conform to 40 CFR Part 136 and Minn. R. 7041.3200.
168.B. ☐ Detection limits for dissolved phosphorus, dissolved aluminum, and dissolved iron that are a minimum of 6 micrograms per liter (µg/L), 10 µg/L, and 20 µg/L, respectively.
168.C ☐ pH that is measured within 15 minutes of sample collection using calibrated and maintained equipment.

169. **Permit item 23.9:** In the following situation(s) do you perform corrective action(s) and immediately notify the Minnesota Department of Public Safety Duty Officer? (Check all that apply)
169.A. ☐ The pH of the discharged water is not within the range of 6.0 and 9.0.
169.B. ☐ Indications of toxicity or measurements exceeding water quality standards which could endanger human health, public drinking water supplies, or the environment.
169.C. ☐ A spill or discharge or alteration resulting in water pollution, as defined in Minn. Stat. § 115.01, subd. 13, of alum or ferric chloride.

170. **Permit item 23.13:** Do you conduct site-specific jar testing using typical and representative water samples in accordance with the most current approved version of ASTM D2035? ***(Note: All or some of this item is a new permit requirement. Compliance with new requirements is required within 12 months after receiving permit coverage.)***
☐ Yes
☐ No

171. **Permit item 23.14:** Do you have baseline concentrations of the following parameters in the influent and receiving waters at your treatment system location? (Check all that apply)
171.A. ☐ Aluminum or iron
171.B. ☐ Phosphorus

172. **Permit item 23.15:** Do you have the following system parameters and how each was determined at your treatment system location? (Check all that apply)
172.A. ☐ Flocculant settling velocity
172.B. ☐ Minimum required retention time
172.C. ☐ Rate of diversion of stormwater into the system
172.D. ☐ The flow rate from the discharge of the outlet structure
172.E. ☐ Range of expected dosing rates

173. **Permit item 23.16:** Have you developed the following site-specific procedures? (Check all that apply)
173.A. ☐ Procedures for the installation, operation and maintenance of all pumps, generators, control systems, and other equipment.
173.B. ☐ Specific parameters for determining when the solids must be removed from the system and how the solids will be handled and disposed of.
173.C. ☐ Procedures for cleaning up and/or containing a spill of each chemical stored on site.

Complete last page and submit using Adobe Acrobat Reader.

(If you do not have Acrobat Reader, you can download a free version at https://get.adobe.com/reader/.)

Additional information

174. **Provide any additional information about your current Stormwater Pollution Prevention Program (SWPPP) that you would like to share (optional): (Maximum 30 lines of text)**

The City of Duluth SWPPP tasks a wide variety of City departments, divisions and staff with stormwater pollution prevention. Currently City staff are in the process of revising the existing SWPPP to further compel compliance with the new provisions of this permit, as well as, improving compliance with the existing provisions. These revisions will be completed within 12 months of new MS4 General Permit coverage. The City of Duluth is highly committed to the protection of its valuable water resources through compliance with the measures laid out in this new MS4 General Permit.

The City of Duluth has begun to take steps to address several of the future TMDLs for it's impaired water bodies. The City also plans to partner with other local area organizations and agencies to address these impairments and water quality concerns where appropriate. The City will continue to implement tactics that focus on recognizing, mitigating and eliminating pollutant sources with the goal of improving water quality, de-listing impaired water bodies and preventing additional water-bodies from becoming impaired.

Additionally, the City of Duluth is invested in working with fellow DUWAC communities and universities in creation of an implementation plan for Miller Creek's temperature impairment. We know that by working together and sharing resources, we are able to provide optimal support for Miller Creek and its valuable water resource, bolstering fish and wildlife habitat, as well as recreational opportunities, and working towards restoration and revitalization of this urbanized stream and watershed. We value this opportunity to work across political boundaries to restore and protect our local water resources, and will utilize the work on the Miller Creek Temperature TMDL to lay the foundation for continued collaboration in addressing other stream impairments across the region.

Complete last page and submit using Adobe Acrobat Reader.

(If you do not have Acrobat Reader, you can download a free version at https://get.adobe.com/reader/.)

Submit Reset

MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

September 30, 2021

Noah Schuchman
City of Duluth
411 West 1st Street
Duluth, MN 55802-1102

RE: Issuance of Coverage under the Small Municipal Separate Storm Sewer Systems General Permit MNR040000 for city of Duluth MS4

Dear Noah Schuchman:

In accordance with Minn. R. 7001.0140, the Minnesota Pollution Control Agency (MPCA) is issuing coverage under the Small Municipal Separate Storm Sewer System (MS4) General Permit MNR040000 (MS4 General Permit) to the city of Duluth MS4, effective September 30, 2021. Enclosed is your official Notice of Coverage, which includes the above referenced MS4 General Permit requirements.

Our final decision to issue permit coverage was based on the following:

- You submitted a complete application; and
- No applicable comments were received or all applicable comments received have been addressed.

If you were covered under the August 1, 2013, MS4 General Permit, coverage under that permit is immediately terminated as of the date on this letter.

You must:

- Comply with the requirements of the MS4 General Permit and your Stormwater Pollution Prevention Program (SWPPP) Document;
- Meet the new requirements in the MS4 General Permit within 12 months of the date of receiving permit coverage;
- Retain your SWPPP Document and all records pertinent to it for at least three (3) years beyond the term of the MS4 General Permit;
- Report on activities that were required or committed to under the previous permit. Your annual report, due June 30 of each year, must cover all activities and permit requirements of the previous calendar year regardless which permit those activities are conducted under; and
- Retain this letter as documentation of your coverage under the MS4 General Permit.

The issuance of coverage does not preclude the MPCA from conducting inspections or audits.

If you have questions, please contact Carlee Kjeldahl at 651-757-2171 or carlee.kjeldahl@state.mn.us.

Sincerely,

Duane Duncanson

This document has been electronically signed.

Duane Duncanson
Supervisor
Municipal Stormwater Unit
Municipal Division

DD/CK:map

cc: GEN20180001 @ 90804

MINNESOTA POLLUTION CONTROL AGENCY

AUTHORIZATION TO DISCHARGE STORMWATER
ASSOCIATED WITH SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)/
STATE DISPOSAL SYSTEM (SDS) PROGRAM
MS400086

Permittee:	City of Duluth
Coverage issuance date:	September 30, 2021
Expiration date:	November 15, 2025

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee to operate a small municipal separate storm sewer system (MS4) and to discharge from the small MS4 to receiving waters, in accordance with the requirements of the Small Municipal Separate Storm Sewer Systems General Permit MNR040000 (General Permit).

The goal of the General Permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statutes and rules, and federal laws and regulations.

The MPCA issued the General Permit on November 16, 2020, however the permittee received coverage under the General Permit on the coverage issuance date identified above. The General Permit expires at midnight on the expiration date identified above.

Signature: Duane Duncanson *for the* Minnesota Pollution Control Agency

This document has been electronically signed.

Duane Duncanson
Supervisor
Municipal Stormwater Unit
Municipal Division

If you have questions about the General Permit, including specific permit requirements, permit reporting, or permit compliance status, please contact the MPCA at:

Municipal Stormwater Program
Municipal Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194
Telephone: 651-296-6300 or toll free in Minnesota: 800-657-3864

Table of Contents

1.1	**Eligibility**. [Minn. R. 7090]
1.2	To be eligible for authorization to discharge stormwater under the Small Municipal Separate Storm Sewer Systems General Permit (General Permit), the applicant must be an owner and/or operator (owner/operator) of a small Municipal Separate Storm Sewer System (MS4) and meet one or more of the criteria requiring permit issuance as specified in Minn. R. 7090.1010. [Minn. R. 7090.1010]
2.1	**Authorized Stormwater Discharges**. [Minn. R. 7090]
2.2	The General Permit authorizes stormwater discharges from small MS4s as defined in 40 CFR 122.26(b)(16). [Minn. R. 7090]
3.1	**Authorized Non-Stormwater Discharges**. [Minn. R. 7090]
3.2	The following categories of non-stormwater discharges or flows are authorized under the General Permit to enter the permittee's small MS4 only if the permittee does not identify them as significant contributors of pollutants (i.e., illicit discharges), in which case the discharges or flows must be addressed in the permittee's Stormwater Pollution Prevention Program (SWPPP): water line flushing, landscape irrigation, diverted stream flows, rising groundwaters, uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(b)(20)), uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash water, and discharges or flows from firefighting activities. [Minn. R. 7090]
4.1	**Limitations on Authorization**. [Minn. R. 7090]
4.2	The following discharges or activities are not authorized by the General Permit: a. non-stormwater discharges, except those authorized by the permittee in item 3.2; b. discharges of stormwater to the small MS4 from activities requiring a separate NPDES/SDS permit. The General Permit does not replace or satisfy any other permitting requirements; c. the General Permit does not replace or satisfy any environmental review requirements, including those under the Minnesota Environmental Policy Act (Minn. Stat. 116D), or the National Environmental Policy Act (42 U.S.C. 4321 et seq.); d. the General Permit does not replace or satisfy any review requirements for endangered or threatened species, from new or expanded discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species, or adversely modify a designated critical habitat; e. the General Permit does not replace or satisfy any review requirements for historic places or archeological sites, from new or expanded discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites; and f. discharges to prohibited outstanding resource value waters pursuant to Minn. R. 7050.0335, subp. 3. Only the permittee's small MS4 and the portions of the storm sewer system that are under the permittee's operational control are authorized by the General Permit. [Minn. R. 7090]
5.1	**Permit Authorization**. [Minn. R. 7001]
5.2	The applicant must submit a complete application in accordance with Sections 9 through 12 in order to obtain authorization to discharge stormwater from a small MS4 under the General Permit. [Minn. R. 7001]
5.3	The Commissioner reviews the General Permit application for completeness. After review, the Commissioner will do one of the following: a. if an application is determined to be incomplete, the Commissioner will notify the applicant in writing, indicate why the application is incomplete, and request that the applicant resubmit the application; or b. if an application is determined to be complete, the Commissioner will make a preliminary determination as to whether coverage under the General Permit should be issued or denied in accordance with Minn. R. 7001. [Minn. R. 7001]
5.4	The Commissioner provides a public notice with the opportunity for a hearing on the preliminary determination to issue coverage under the General Permit. [Minn. R. 7001]
5.5	Upon receipt of written notification of final approval of the application from the Commissioner, the applicant is authorized to discharge stormwater from the small MS4 under the terms and conditions of the General Permit. [Minn. R. 7001]

6.1	**Transfer of Ownership or Control**. [Minn. R. 7001, Minn. R. 7090.0080]
6.2	Where the ownership or significant operational control of the small MS4 changes after the submittal of an application in accordance with Sections 9 through 12, the new owner/operator must submit a new application in accordance with Sections 9 through 12. [Minn. R. 7090]
7.1	**Issuance of Individual Permits**. [Minn. R. 7001]
7.2	The permit applicant may request an individual permit in accordance with Minn. R. 7001.0210, subp. 6, for authorization to discharge stormwater associated with a small MS4. [Minn. R. 7001.0210, subp. 6]
7.3	The Commissioner may require an individual permit for the permit applicant or permittee covered by a general permit, in accordance with Minn. R. 7001.0210, subp. 6. [Minn. R. 7001.0210, subp. 6]
8.1	**Rights and Responsibilities**. [Minn. R. 7001, Minn. R. 7090]
8.2	The Commissioner may modify the General Permit or issue other permits, in accordance with Minn. R. 7001, to include more stringent effluent limitations or permit requirements that modify or are in addition to the Minimum Control Measures of the General Permit, or both. These modifications may be based on the Commissioner's determination that such modifications are needed to protect water quality. [Minn. R. 7001]
8.3	The Commissioner may designate additional small MS4s for coverage under the General Permit in accordance with Minn. R. 7090. The owner/operator of a small MS4 that is designated for coverage must comply with the permit requirements by the dates specified in the Commissioner's determination. [Minn. R. 7090]
9.1	**Application for Reissuance**. [Minn. R. 7001]
9.2	If an existing permittee desires to continue permit coverage beyond the expiration date, the permittee must submit an application for permit reissuance: Due by 180 days prior to permit expiration. [Minn. R. 7001.0040, subp. 3]
10.1	**New Permittee Applicants**. [Minn. R. 7090]
10.2	To become a new permittee authorized to discharge stormwater under the General Permit, the owner/operator of a small MS4 must submit an application, on a form provided by the Agency, in accordance with the schedule in Appendix B, Table 3, and the following requirements: a. submit Part 1 of the permit application (includes the permit application fee); and b. submit Part 2 of the permit application, also known as the Stormwater Pollution Prevention Program (SWPPP) document, in accordance with Section 12. [Minn. R. 7090]
11.1	**Existing Permittee Applicants**. [Minn. R. 7090]
11.2	All existing permittees seeking to continue discharging stormwater associated with a small MS4 after the issuance date of the General Permit must submit Part 2 of the permit application: Due by 150 days after permit issuance. Existing permittees were required to submit Part 1 of the permit application prior to the expiration date (July 31, 2018) of the Agency's small MS4 general permit No.MNR040000, effective August 1, 2013. [Minn. R. 7090]
12.1	**Stormwater Pollution Prevention Program (SWPPP) Document**. [Minn. R. 7090]
12.2	All applicants must submit a SWPPP Document (i.e., Part 2 of the permit application) when seeking coverage under the General Permit. The SWPPP Document will become an enforceable part of the General Permit upon approval by the Agency. Modifications to the SWPPP Document that are required or allowed by the General Permit (see Section 24) will also become enforceable provisions. The applicant must submit the SWPPP Document on a form provided by the Agency. The applicant's SWPPP Document must include items 12.3 through 12.11, as applicable. [Minn. R. 7090]
12.3	The applicant must provide a description of partnerships with another regulated small MS4(s), into which the applicant has entered in order to satisfy one or more requirements of the General Permit. [Minn. R. 7090]
12.4	The applicant must provide a description of each program the applicant has developed and implemented to satisfy the Minimum Control Measure (MCM) requirements, including: a. the Best Management Practices (BMPs) the applicant has implemented for each MCM at the time of application; b. the status of each required component of the program; and c. name(s) of individual(s) or position titles responsible for implementing and/or coordinating each component of the program.

	If the program has not been developed at the time of application (e.g., new permittee applicants), or revised to meet new requirements of the General Permit (e.g., existing permittee applicants); the applicant must satisfy the permit requirements in accordance with the schedule in Appendix B, Table 2 (existing permittee applicants), or Table 3 (new permittee applicants). [Minn. R. 7090]
12.5	The applicant must indicate whether each storm sewer system map requirement of Section 14 is satisfied at the time of application. For each requirement of Section 14 that is not satisfied at the time of application, the applicant must satisfy the permit requirements in accordance with the schedule in Appendix B, Table 2 (existing permittee applicants), or Table 3 (new permittee applicants). [Minn. R. 7090]
12.6	The applicant must provide a description of existing regulatory mechanism(s) the applicant has developed, implemented, and enforced to satisfy the requirements of Sections 18, 19, and 20. At a minimum, the applicant must provide the following information: a. the type(s) of regulatory mechanism(s) the applicant has in place at the time of application that will be used to satisfy the requirements; b. the status of each required component of the regulatory mechanism(s); and c. if available, a website address to the regulatory mechanism(s). If the regulatory mechanism(s) have not been developed at the time of application (e.g., new permittee applicants), or revised to meet new requirements of the General Permit (e.g., existing permittee applicants); the applicant must satisfy the permit requirements in accordance with the schedule in Appendix B, Table 2 (existing permittee applicants), or Table 3 (new permittee applicants). [Minn. R. 7090]
12.7	The applicant must provide a description of existing enforcement response procedures (ERPs) the applicant has developed and implemented that satisfy the ERP requirements of items 18.14, 19.12, and 20.19. If the applicant has not yet developed ERPs (e.g., new permittee applicants), or existing ERPs must be updated to satisfy new requirements, the applicant must satisfy the permit requirements in accordance with the schedule in Appendix B, Table 2 (existing permittee applicants), or Table 3 (new permittee applicants). [Minn. R. 7090]
12.8	The applicant must submit a compliance schedule for each applicable Waste Load Allocation (WLA) not being met for oxygen demand, nitrate, total suspended solids (TSS), and total phosphorus (TP). The applicant may develop a compliance schedule to include multiple WLAs. The applicant's compliance schedule must include the following information: a. proposed BMPs or progress toward implementation of BMPs to be achieved during the permit term; b. the year each BMP is expected to be implemented; c. a target year the applicable WLA(s) will be achieved; and d. if the applicant has an applicable WLA for TSS or TP, a cumulative estimate of TSS and TP load reductions (in pounds) to be achieved during the permit term and the Agency-approved method used to determine the estimate. Agency-approved methods include "Program for Predicting Polluting Particle Passage thru Pits, Puddles, and Ponds (P8) Urban Catchment Model", "Source Loading and Management Model for Windows (WinSLAMM)", "Minimal Impact Design Standards (MIDS) calculator", "Minnesota Pollution Control Agency (MPCA) simple estimator tool", or any other method that receives Agency-approval. [Minn. R. 7090]
12.9	For each applicable WLA where a reduction in pollutant loading is required for bacteria, chloride, and temperature, the applicant must provide a description of any existing BMPs the applicant has developed and implemented to satisfy the requirements of items 22.3 through 22.7, including: a. the BMPs the applicant has implemented for each required component at the time of application; b. the status of each required component; and c. name(s) of individual(s) or position titles responsible for implementing and/or coordinating each required component. If the required components have not been developed at the time of application (e.g., new permittee applicants), or revised to meet new requirements of the General Permit (e.g., existing permittee applicants); the applicant must satisfy the permit requirements in accordance with the schedule in Appendix B, Table 2 (existing permittee applicants), or Table 3 (new permittee applicants). [Minn. R. 7090]

12.10	If the applicant is claiming to meet an applicable WLA where a reduction in pollutant loading is required for oxygen demand, nitrate, TSS, or TP, the applicant must provide documentation to demonstrate the applicable WLA is being met. At a minimum, the applicant must provide the following information: a. a list of all structural stormwater BMPs implemented to achieve the applicable WLA, including the BMP type (e.g., constructed basin, infiltrator, filter, swale or strip, etc.), location in geographic coordinates, owner, and year implemented; and b. documentation using an Agency-approved method, which demonstrates the estimated reductions of oxygen demand (or its surrogate pollutants), nitrate, TSS, or TP from BMPs meet the MS4 WLA reductions included in the TMDL report, if that information is available (e.g., percent reduction or pounds reduced); or c. documentation using an Agency-approved method, which demonstrates the applicant's existing load meets the WLA. [Minn. R. 7090]
12.11	For the requirements of Section 23, alum or ferric chloride phosphorus treatment systems, if applicable, the applicant must submit the following information: a. location of the system in geographic coordinates; b. name(s) of the individual(s) or position titles responsible for the operation of the system; c. information described in item 23.11, if the system is constructed at the time the applicant submits the application to the Agency; d. indicate if the system complies with the requirements in Section 23; and e. if applicable, for each requirement in Section 23 that the applicant's system does not comply with at the time of application, the applicant must bring the system into compliance in accordance with the schedule in Appendix B, Table 2 (existing permittee applicants), or Table 3 (new permittee applicants). [Minn. R. 7090]
13.1	**Stormwater Pollution Prevention Program (SWPPP)**. [Minn. R. 7090]
13.2	The permittee must develop, implement, and enforce a SWPPP designed to reduce the discharge of pollutants from the small MS4 to the Maximum Extent Practicable (MEP) and to protect water quality. Existing permittees regulated within the urbanized area as defined by the United States Census Bureau, the applicable urbanized area for which the permittee must develop, implement, and enforce a SWPPP can be based on the most recent decennial census of 2010 for the duration of the General Permit. [Minn. R. 7090]
13.3	If the permittee enters into a partnership for purposes of meeting SWPPP requirements, the permittee maintains legal responsibility for compliance with the General Permit. [Minn. R. 7090]
13.4	Existing permittees must revise their SWPPP developed under the Agency's small MS4 general permit No.MNR040000 that was effective August 1, 2013, to meet the requirements of the General Permit in accordance with the schedule in Appendix B, Table 2. New permittees must develop, implement, and enforce their SWPPP in accordance with the schedule in Appendix B, Table 3. The permittee's SWPPP must consist of Sections 14 through 23, as applicable. [Minn. R. 7090]
14.1	**Mapping**. [Minn. R. 7090]
14.2	New permittees must develop, and existing permittees must update, as necessary, a storm sewer system map that depicts the following: a. the permittee's entire MS4 as a goal, but at a minimum, all pipes 12 inches or greater in diameter, including stormwater flow direction in those pipes; b. outfalls, including a unique identification (ID) number assigned by the permittee, and an associated geographic coordinates; c. structural stormwater BMPs that are part of the permittee's MS4; and d. all receiving waters. [Minn. R. 7090]
15.1	**Minimum Control Measures (MCMs)**. [Minn. R. 7090.1040]
15.2	The permittee must incorporate the following six MCMs into the SWPPP. [Minn. R. 7090.1040]
16.1	**MCM 1: Public Education and Outreach**. [Minn. R. 7090]
16.2	New permittees must develop and implement, and existing permittees must revise their current program, as necessary, and continue to implement, a public education program to distribute educational materials or equivalent outreach that informs the public of the impact stormwater discharges have on waterbodies and that includes actions citizens, businesses, and

	other local organizations can take to reduce the discharge of pollutants to stormwater. The permittee may use existing materials if they are appropriate for the message the permittee chooses to deliver, or the permittee may develop its own educational materials. The permittee may partner with other MS4 permittees, community groups, watershed management organizations, or other groups to implement its education and outreach program. The permittee must incorporate Section 16 requirements into their program. [Minn. R. 7090]
16.3	During the permit term, the permittee must distribute educational materials or equivalent outreach focused on at least two (2) specifically selected stormwater-related issues of high priority to the permittee (e.g., specific TMDL reduction targets, changing local business practices, promoting adoption of residential BMPs, lake improvements through lake associations, household chemicals, yard waste, etc.). The topics must be different from those described in items 16.4 through 16.6. [Minn. R. 7090]
16.4	At least once each calendar year, the permittee must distribute educational materials or equivalent outreach focused on illicit discharge recognition and reporting illicit discharges to the permittee. [Minn. R. 7090]
16.5	For cities and townships, at least once each calendar year, the permittee must distribute educational materials or equivalent outreach to residents, businesses, commercial facilities, and institutions, focused on the following: a. impacts of deicing salt use on receiving waters; b. methods to reduce deicing salt use; and c. proper storage of salt or other deicing materials. [Minn. R. 7090]
16.6	For cities and townships, at least once each calendar year, the permittee must distribute educational materials or equivalent outreach focused on pet waste. The educational materials or equivalent outreach must include information on the following: a. impacts of pet waste on receiving waters; b. proper management of pet waste; and c. any existing permittee regulatory mechanism(s) for pet waste. [Minn. R. 7090]
16.7	The permittee must develop and implement an education and outreach plan that consists of the following: a. target audience(s) (e.g., residents, businesses, commercial facilities, institutions, and local organizations; consideration should be given to low-income residents, people of color, and non-native English speaking residents. A resource to help identify these areas is available on the Agency's environmental justice website); b. name or position title of responsible person(s) for overall plan implementation; c. specific activities and schedules to reach each target audience; and d. a description of any coordination with and/or use of stormwater education and outreach programs implemented by other entities, if applicable. [Minn. R. 7090]
16.8	The permittee must document the following information: a. a description of all specific stormwater-related issues identified by the permittee in item 16.3; b. all information required under the permittee's education and outreach plan in item 16.7; c. activities held, including dates, to reach each target audience; d. quantities and descriptions of educational materials distributed, including dates distributed; and e. estimated audience (e.g., number of participants, viewers, readers, listeners, etc.) for each completed education and outreach activity. [Minn. R. 7090]
16.9	The permittee must conduct an annual assessment of the public education program to evaluate program compliance, the status of achieving the measurable requirements in Section 16, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., education and outreach efforts, implementation of written plans, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]
17.1	**MCM 2: Public Participation/Involvement**. [Minn. R. 7090]
17.2	New permittees must develop and implement, and existing permittees must revise their current program, as necessary, and continue to implement, a Public Participation/Involvement program to solicit public input on the SWPPP and involve the public in activities that improve or protect water quality. The permittee must incorporate Section 17 requirements into

	their program. [Minn. R. 7090]
17.3	Each calendar year, the permittee must provide a minimum of one (1) opportunity for the public to provide input on the adequacy of the SWPPP. The permittee may conduct a public meeting(s) to satisfy this requirement, provided appropriate local public notice requirements are followed and the public is given the opportunity to review and comment on the SWPPP. [Minn. R. 7090]
17.4	The permittee must provide access to the SWPPP Document, annual reports, and other documentation that supports or describes the SWPPP (e.g., regulatory mechanism(s), etc.) for public review, upon request. All public data requests are subject to the Minnesota Government Data Practices Act, Minn. Stat. 13. [Minn. Stat. 13]
17.5	The permittee must consider oral and written input regarding the SWPPP submitted by the public to the permittee. [Minn. R. 7090]
17.6	Each calendar year, the permittee must provide a minimum of one (1) public involvement activity that includes a pollution prevention or water quality theme (e.g., rain barrel distribution event, rain garden workshop, cleanup event, storm drain stenciling, volunteer water quality monitoring, adopt a storm drain program, household hazardous waste collection day, etc.). [Minn. R. 7090]
17.7	The permittee must document the following information: a. all relevant written input submitted by persons regarding the SWPPP; b. all responses from the permittee to written input received regarding the SWPPP, including any modifications made to the SWPPP as a result of the written input received; c. date(s), location(s), and estimated number of participants at events held for purposes of compliance with item 17.3; d. notices provided to the public of any events scheduled to meet item 17.3, including any electronic correspondence (e.g., website, e-mail distribution lists, notices, etc.); and e. date(s), location(s), description of activities, and estimated number of participants at events held for the purpose of compliance with item 17.6. [Minn. R. 7090]
17.8	The permittee must conduct an annual assessment of the Public Participation/Involvement program to evaluate program compliance, the status of achieving the measurable requirements in Section 17, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., public input and involvement opportunities, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]
18.1	**MCM 3: Illicit Discharge Detection and Elimination (IDDE)**. [Minn. R. 7090]
18.2	New permittees must develop, implement, and enforce, and existing permittees must revise their current program as necessary, and continue to implement and enforce, a program to detect and eliminate illicit discharges into the MS4. The permittee must incorporate Section 18 requirements into their program. [Minn. R. 7090]
18.3	The permittee must maintain a map of the permittee's MS4, as required in Section 14. [Minn. R. 7090]
18.4	To the extent allowable under state or local law, the permittee must develop, implement, and enforce a regulatory mechanism(s) that prohibits non-stormwater discharges into the permittee's MS4, except those non-stormwater discharges authorized in item 3.2. A regulatory mechanism(s) for the purposes of the General Permit may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanism, that will be enforced by the permittee. The regulatory mechanism(s) must also include items 18.5 and 18.6, as applicable. [Minn. R. 7090]
18.5	For cities, townships, and counties, the permittee's regulatory mechanism(s) must require owners or custodians of pets to remove and properly dispose of feces on permittee owned land areas. [Minn. R. 7090]
18.6	For cities and townships, the permittee's regulatory mechanism(s) must require proper salt storage at commercial, institutional, and non-NPDES permitted industrial facilities. At a minimum, the regulatory mechanism(s) must require the following: a. designated salt storage areas must be covered or indoors; b. designated salt storage areas must be located on an impervious surface; and c. implementation of practices to reduce exposure when transferring material in designated salt storage areas

	(e.g., sweeping, diversions, and/or containment). [Minn. R. 7090]
18.7	The permittee must incorporate illicit discharge detection into all inspection and maintenance activities conducted in items 21.9, 21.10, and 21.11. Where feasible, the permittee must conduct illicit discharge inspections during dry-weather conditions (e.g., periods of 72 or more hours of no precipitation). [Minn. R. 7090]
18.8	At least once each calendar year, the permittee must train all field staff in illicit discharge recognition (including conditions which could cause illicit discharges), and reporting illicit discharges for further investigation. Field staff includes, but is not limited to, police, fire department, public works, and parks staff. Training for this specific requirement may include, but is not limited to, videos, in-person presentations, webinars, training documents, and/or emails. [Minn. R. 7090]
18.9	The permittee must ensure that individuals receive training commensurate with their responsibilities as they relate to the permittee's IDDE program. Individuals includes, but is not limited to, individuals responsible for investigating, locating, eliminating illicit discharges, and/or enforcement. The permittee must ensure that previously trained individuals attend a refresher-training every three (3) calendar years following the initial training. [Minn. R. 7090]
18.10	The permittee must maintain a written or mapped inventory of priority areas the permittee identifies as having a higher likelihood for illicit discharges. At a minimum, the permittee must evaluate the following for potential inclusion in the inventory: a. land uses associated with business/industrial activities; b. areas where illicit discharges have been identified in the past; and c. areas with storage of significant materials that could result in an illicit discharge. [Minn. R. 7090]
18.11	To the extent allowable under state or local law, the permittee must conduct additional illicit discharge inspections in areas identified in item 18.10. [Minn. R. 7090]
18.12	The permittee must implement written procedures for investigating, locating, and eliminating the source of illicit discharges. At a minimum, the written procedures must include: a. a timeframe in which the permittee will investigate a reported illicit discharge; b. use of visual inspections to detect and track the source of an illicit discharge; c. tools available to the permittee to investigate and locate an illicit discharge (e.g., mobile cameras, collecting and analyzing water samples, smoke testing, dye testing, etc.); d. cleanup methods available to the permittee to remove an illicit discharge or spill; and e. name or position title of responsible person(s) for investigating, locating, and eliminating an illicit discharge. [Minn. R. 7090]
18.13	The permittee must implement written procedures for responding to spills, including emergency response procedures to prevent spills from entering the MS4. The written procedures must also include the immediate notification of the Minnesota Department of Public Safety Duty Officer at 800-422-0798 (toll free) or 651-649-5451 (Metro area), if the source of the illicit discharge is a spill or leak as defined in Minn. Stat. 115.061. [Minn. R. 7090]
18.14	The permittee must maintain written enforcement response procedures (ERPs) to compel compliance with the permittee's regulatory mechanism(s) in Section 18. At a minimum, the written ERPs must include: a. a description of enforcement tools available to the permittee and guidelines for the use of each tool; b. timeframes to complete corrective actions; and c. name or position title of responsible person(s) for conducting enforcement. [Minn. R. 7090]
18.15	The permittee must document the following information: a. date(s) and location(s) of IDDE inspections conducted in accordance with items 18.7 and 18.11; b. reports of alleged illicit discharges received, including date(s) of the report(s), and any follow-up action(s) taken by the permittee; c. date(s) of discovery of all illicit discharges; d. identification of outfalls, or other areas, where illicit discharges have been discovered; e. sources (including a description and the responsible party) of illicit discharges (if known); and f. action(s) taken by the permittee, including date(s), to address discovered illicit discharges. [Minn. R. 7090]
18.16	For each training in item 18.8 and 18.9, the permittee must document:

	a. general subject matter covered; b. names and departments of individuals in attendance; and c. date of each event. [Minn. R. 7090]
18.17	The permittee must document any enforcement conducted pursuant to the ERPs in item 18.14, including verbal warnings. At a minimum, the permittee must document the following: a. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); b. date(s) and location(s) of the observed violation(s); c. description of the violation(s); d. corrective action(s) (including completion schedule) issued by the permittee; e. referrals to other regulatory organizations (if any); and f. date(s) violation(s) resolved. [Minn. R. 7090]
18.18	The permittee must conduct an annual assessment of the IDDE program to evaluate program compliance, the status of achieving the measurable requirements in Section 18, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., trainings, inventory, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]
19.1	**MCM 4: Construction Site Stormwater Runoff Control**. [Minn. R. 7090]
19.2	New permittees must develop, implement, and enforce, and existing permittees must revise their current program, as necessary, and continue to implement and enforce, a Construction Site Stormwater Runoff Control program. The program must address construction activity with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, within the permittee's jurisdiction and that discharge to the permittee's MS4. The permittee must incorporate Section 19 requirements into their program. [Minn. R. 7090]
19.3	To the extent allowable under state or local law, the permittee must develop, implement, and enforce a regulatory mechanism(s) that establishes requirements for erosion, sediment, and waste controls that is at least as stringent as the Agency's most current Construction Stormwater General Permit (MNR100001), herein referred to as the CSW Permit. A regulatory mechanism(s) for the purposes of the General Permit may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanism, that will be enforced by the permittee. [Minn. R. 7090]
19.4	When the CSW Permit is reissued, the permittee must revise their regulatory mechanism(s), if necessary, within 12 months of the issuance date of that permit, to be at least as stringent as the requirements for erosion, sediment, and waste controls described in the CSW Permit. [Minn. R. 7090]
19.5	The permittee's regulatory mechanism(s) must require that owners and operators of construction activity develop site plans that must be submitted to the permittee for review and confirmation that regulatory mechanism(s) requirements have been met, prior to the start of construction activity. The regulatory mechanism(s) must require the owners and operators of construction activity to keep site plans up-to-date with regard to stormwater runoff controls. The regulatory mechanism(s) must require that site plans incorporate the following erosion, sediment, and waste controls that are at least as stringent as described in the CSW Permit: a. erosion prevention practices; b. sediment control practices; c. dewatering and basin draining; d. inspection and maintenance; e. pollution prevention management measures; f. temporary sediment basins; and g. termination conditions. [Minn. R. 7090]
19.6	The permittee must implement written procedures for site plan reviews conducted by the permittee prior to the start of all construction activity, to ensure compliance with requirements of the regulatory mechanism(s). At a minimum, the procedures must include:

	a. written notification to owners and operators proposing construction activity, including projects less than one acre that are part of a larger common plan of development or sale, of the need to apply for and obtain coverage under the CSW Permit; and b. use of a written checklist, consistent with the requirements of the regulatory mechanism(s), to document the adequacy of each site plan required in item 19.5. [Minn. R. 7090]
19.7	The permittee must implement an inspection program that includes written procedures for conducting site inspections, to determine compliance with the permittee's regulatory mechanism(s). The inspection program must also meet the requirements in items 19.8 and 19.9. [Minn. R. 7090]
19.8	The permittee must maintain written procedures for identifying high-priority and low-priority sites for inspection. At a minimum, the written procedures must include: a. a detailed explanation describing how sites will be categorized as either high-priority or low-priority; b. a frequency at which the permittee will conduct inspections for high-priority sites; c. a frequency at which the permittee will conduct inspections for low-priority sites; and d. the name(s) of individual(s) or position title(s) responsible for conducting site inspections. [Minn. R. 7090]
19.9	The permittee must implement a written checklist to document each site inspection when determining compliance with the permittee's regulatory mechanism(s). At a minimum, the checklist must include the permittee's inspection findings on the following areas, as applicable to each site: a. stabilization of exposed soils (including stockpiles); b. stabilization of ditch and swale bottoms; c. sediment control BMPs on all down gradient perimeters of the project and up gradient of buffer zones; d. storm drain inlet protection; e. energy dissipation at pipe outlets; f. vehicle tracking BMPs; g. preservation of a 50 foot natural buffer or redundant sediment controls where stormwater flows to a surface water within 50 feet of disturbed soils; h. owner/operator of construction activity self-inspection records; i. containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds, and other construction materials); and j. BMPs maintained and functional. [Minn. R. 7090]
19.10	The permittee must implement written procedures for receipt and consideration of reports of noncompliance or other stormwater related information on construction activity submitted by the public to the permittee. [Minn. R. 7090]
19.11	The permittee must ensure that individuals receive training commensurate with their responsibilities as they relate to the permittee's Construction Site Stormwater Runoff Control program. Individuals includes, but is not limited to, individuals responsible for conducting site plan reviews, site inspections, and/or enforcement. The permittee must ensure that previously trained individuals attend a refresher-training every three (3) calendar years following the initial training. [Minn. R. 7090]
19.12	The permittee must maintain written enforcement response procedures (ERPs) to compel compliance with the permittee's regulatory mechanism(s) in item 19.3. At a minimum, the written ERPs must include: a. a description of enforcement tools available to the permittee and guidelines for the use of each tool; and b. name or position title of responsible person(s) for conducting enforcement. [Minn. R. 7090]
19.13	For each site plan review conducted by the permittee, the permittee must document the following: a. project name; b. location; c. total acreage to be disturbed; d. owner and operator of the proposed construction activity; e. proof of notification to obtain coverage under the CSW Permit, as required in item 19.6, or proof of coverage under the CSW Permit; and f. any stormwater related comments and supporting completed checklist, as required in item 19.6, used by the permittee to

	determine project approval or denial. [Minn. R. 7090]
19.14	For each training in item 19.11, the permittee must document: a. general subject matter covered; b. names and departments of individuals in attendance; and c. date of each event. [Minn. R. 7090]
19.15	The permittee must document any enforcement conducted pursuant to the ERPs in item 19.12, including verbal warnings. At a minimum, the permittee must document the following: a. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); b. date(s) and location(s) of the observed violation(s); c. description of the violation(s); d. corrective action(s) (including completion schedule) issued by the permittee; e. referrals to other regulatory organizations (if any); and f. date(s) violation(s) resolved. [Minn. R. 7090]
19.16	The permittee must conduct an annual assessment of the Construction Site Stormwater Runoff Control program to evaluate program compliance, the status of achieving the measurable requirements in Section 19, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., inventory, trainings, site plan reviews, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]
20.1	**MCM 5: Post-Construction Stormwater Management**. [Minn. R. 7090]
20.2	New permittees must develop, implement, and enforce, and existing permittees must revise their current program, as necessary, and continue to implement and enforce, a Post-Construction Stormwater Management program that prevents or reduces water pollution after construction activity is completed. The program must address construction activity with land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, within the permittee's jurisdiction and that discharge to the permittee's MS4. The permittee must incorporate Section 20 requirements into their program. [Minn. R. 7090]
20.3	To the extent allowable under state or local law, the permittee must develop, implement, and enforce a regulatory mechanism(s) that incorporates items 20.4 through 20.15. A regulatory mechanism(s) for the purposes of the General Permit may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanism, that will be enforced by the permittee. [Minn. R. 7090]
20.4	The permittee's regulatory mechanism(s) must require owners of construction activity to submit site plans with post-construction stormwater management BMPs designed with accepted engineering practices to the permittee for review and confirmation that regulatory mechanism(s) requirements have been met, prior to start of construction activity. [Minn. R. 7090]
20.5	The permittee's regulatory mechanism(s) must require owners of construction activity to treat the water quality volume on any project where the sum of the new impervious surface and the fully reconstructed impervious surface equals one or more acres. [Minn. R. 7090]
20.6	For construction activity (excluding linear projects), the water quality volume must be calculated as one (1) inch times the sum of the new and the fully reconstructed impervious surface. [Minn. R. 7090]
20.7	For linear projects, the water quality volume must be calculated as the larger of one (1) inch times the new impervious surface or one-half (0.5) inch times the sum of the new and the fully reconstructed impervious surface. Where the entire water quality volume cannot be treated within the existing right-of-way, a reasonable attempt to obtain additional right-of-way, easement, or other permission to treat the stormwater during the project planning process must be made. Volume reduction practices must be considered first, as described in item 20.8. Volume reduction practices are not required if the practices cannot be provided cost effectively. If additional right-of-way, easements, or other permission cannot be obtained, owners of construction activity must maximize the treatment of the water quality volume prior to discharge from the MS4. [Minn. R. 7090]
20.8	Volume reduction practices (e.g., infiltration or other) to retain the water quality volume on-site must be considered first when designing the permanent stormwater treatment system. The General Permit does not consider wet sedimentation

	basins and filtration systems to be volume reduction practices. If the General Permit prohibits infiltration as described in item 20.9, other volume reduction practices, a wet sedimentation basin, or filtration basin may be considered. [Minn. R. 7090]
20.9	Infiltration systems must be prohibited when the system would be constructed in areas: a. that receive discharges from vehicle fueling and maintenance areas, regardless of the amount of new and fully reconstructed impervious surface; b. where high levels of contaminants in soil or groundwater may be mobilized by the infiltrating stormwater. To make this determination, the owners and/or operators of construction activity must complete the Agency's site screening assessment checklist, which is available in the Minnesota Stormwater Manual, or conduct their own assessment. The assessment must be retained with the site plans; c. where soil infiltration rates are more than 8.3 inches per hour unless soils are amended to slow the infiltration rate below 8.3 inches per hour; d. with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock; e. of predominately Hydrologic Soil Group D (clay) soils; f. in an Emergency Response Area (ERA) within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13, classified as high or very high vulnerability as defined by the Minnesota Department of Health; g. in an ERA within a DWSMA classified as moderate vulnerability unless the permittee performs or approves a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater; h. outside of an ERA within a DWSMA classified as high or very high vulnerability unless the permittee performs or approves a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater; i. within 1,000 feet up-gradient or 100 feet down gradient of active karst features; or j. that receive stormwater runoff from these types of entities regulated under NPDES for industrial stormwater: automobile salvage yards; scrap recycling and waste recycling facilities; hazardous waste treatment, storage, or disposal facilities; or air transportation facilities that conduct deicing activities. See "higher level of engineering review" in the Minnesota Stormwater Manual for more information. [Minn. R. 7090]
20.10	For non-linear projects, where the water quality volume cannot cost effectively be treated on the site of the original construction activity, the permittee must identify, or may require owners of the construction activity to identify, locations where off-site treatment projects can be completed. If the entire water quality volume is not addressed on the site of the original construction activity, the remaining water quality volume must be addressed through off-site treatment and, at a minimum, ensure the requirements of items 20.11 through 20.14 are met. [Minn. R. 7090]
20.11	The permittee must ensure off-site treatment project areas are selected in the following order of preference: a. locations that yield benefits to the same receiving water that receives runoff from the original construction activity; b. locations within the same Department of Natural Resource (DNR) catchment area as the original construction activity; c. locations in the next adjacent DNR catchment area up-stream; or d. locations anywhere within the permittee's jurisdiction. [Minn. R. 7090]
20.12	Off-site treatment projects must involve the creation of new structural stormwater BMPs or the retrofit of existing structural stormwater BMPs, or the use of a properly designed regional structural stormwater BMP. Routine maintenance of structural stormwater BMPs already required by the General Permit cannot be used to meet this requirement. [Minn. R. 7090]
20.13	Off-site treatment projects must be completed no later than 24 months after the start of the original construction activity. If the permittee determines more time is needed to complete the treatment project, the permittee must provide the reason(s) and schedule(s) for completing the project in the annual report. [Minn. R. 7090]
20.14	If the permittee receives payment from the owner of a construction activity for off-site treatment, the permittee must apply any such payment received to a public stormwater project, and all projects must comply with the requirements in items 20.11 through 20.13. [Minn. R. 7090]
20.15	The permittee's regulatory mechanism(s) must include the establishment of legal mechanism(s) between the permittee and

	owners of structural stormwater BMPs not owned or operated by the permittee, that have been constructed to meet the requirements in Section 20. The legal mechanism(s) must include provisions that, at a minimum: a. allow the permittee to conduct inspections of structural stormwater BMPs not owned or operated by the permittee, perform necessary maintenance, and assess costs for those structural stormwater BMPs when the permittee determines the owner of that structural stormwater BMP has not ensured proper function; b. are designed to preserve the permittee's right to ensure maintenance responsibility, for structural stormwater BMPs not owned or operated by the permittee, when those responsibilities are legally transferred to another party; and c. are designed to protect/preserve structural stormwater BMPs. If structural stormwater BMPs change, causing decreased effectiveness, new, repaired, or improved structural stormwater BMPs must be implemented to provide equivalent treatment to the original BMP. [Minn. R. 7090]
20.16	The permittee must maintain a written or mapped inventory of structural stormwater BMPs not owned or operated by the permittee that meet all of the following criteria: a. the structural stormwater BMP includes an executed legal mechanism(s) between the permittee and owners responsible for the long-term maintenance, as required in item 20.15; and b. the structural stormwater BMP was implemented on or after August 1, 2013. [Minn. R. 7090]
20.17	The permittee must implement written procedures for site plan reviews conducted by the permittee prior to the start of construction activity, to ensure compliance with requirements of the permittee's regulatory mechanism(s). [Minn. R. 7090]
20.18	The permittee must ensure that individuals receive training commensurate with their responsibilities as they relate to the permittee's Post-Construction Stormwater Management program. Individuals includes, but is not limited to, individuals responsible for conducting site plan reviews and/or enforcement. The permittee must ensure that previously trained individuals attend a refresher-training every three (3) calendar years following the initial training. [Minn. R. 7090]
20.19	The permittee must maintain written enforcement response procedures (ERPs) to compel compliance with the permittee's regulatory mechanism(s) required in Section 20. At a minimum, the written ERPs must include: a. a description of enforcement tools available to the permittee and guidelines for the use of each tool; and b. name or position title of responsible person(s) for conducting enforcement. [Minn. R. 7090]
20.20	For each site plan review conducted by the permittee, the permittee must document the following: a. supporting documentation used to determine compliance with Section 20 of the General Permit, including any calculations for the permanent stormwater treatment system; b. the water quality volume that will be treated through volume reduction practices (e.g., infiltration or other) compared to the total water quality volume required to be treated; c. documentation associated with off-site treatment projects authorized by the permittee, including rationale to support the location of permanent stormwater treatment projects in accordance with items 20.10 and 20.11; d. payments received and used in accordance with item 20.14; and e. all legal mechanisms drafted in accordance with item 20.15, including date(s) of the agreement(s) and name(s) of all responsible parties involved. [Minn. R. 7090]
20.21	For each training in item 20.18, the permittee must document: a. general subject matter covered; b. names and departments of individuals in attendance; and c. date of each event. [Minn. R. 7090]
20.22	The permittee must document any enforcement conducted pursuant to the ERPs in item 20.19, including verbal warnings. At a minimum, the permittee must document the following: a. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); b. date(s) and location(s) of the observed violation(s); c. description of the violation(s); d. corrective action(s) (including completion schedule) issued by the permittee; e. referrals to other regulatory organizations (if any); and

	f. date(s) violation(s) resolved. [Minn. R. 7090]
20.23	The permittee must conduct an annual assessment of the Post-Construction Stormwater Management program to evaluate program compliance, the status of achieving the measurable requirements in Section 20, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., inventory, trainings, site plan reviews, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]
21.1	**MCM 6: Pollution Prevention/Good Housekeeping For Municipal Operations**. [Minn. R. 7090]
21.2	New permittees must develop and implement, and existing permittees must revise their current program, as necessary, and continue to implement, an operations and maintenance program that prevents or reduces the discharge of pollutants to the MS4 from permittee owned/operated facilities and operations. The permittee must incorporate Section 21 requirements into their program. [Minn. R. 7090]
21.3	The permittee must maintain a written or mapped inventory of permittee owned/operated facilities that contribute pollutants to stormwater discharges. The permittee must implement BMPs that prevent or reduce pollutants in stormwater discharges from all inventoried facilities. Facilities to be inventoried may include, but is not limited to: a. composting; b. equipment storage and maintenance; c. hazardous waste disposal; d. hazardous waste handling and transfer; e. landfills; f. solid waste handling and transfer; g. parks; h. pesticide storage; i. public parking lots; j. public golf courses; k. public swimming pools; l. public works yards; m. recycling; n. salt storage; o. snow storage; p. vehicle storage and maintenance (e.g., fueling and washing) yards; and q. materials storage yards. [Minn. R. 7090]
21.4	The permittee must implement BMPs that prevent or reduce pollutants in stormwater discharges from the following municipal operations that may contribute pollutants to stormwater discharges, where applicable: a. waste disposal and storage, including dumpsters; b. management of temporary and permanent stockpiles of materials such as street sweepings, snow, sand and sediment removal piles (e.g., effective sediment controls at the base of stockpiles on the down gradient perimeter); c. vehicle fueling, washing, and maintenance; d. routine street and parking lot sweeping; e. emergency response; f. cleaning of maintenance equipment, building exteriors, dumpsters, and the disposal of associated waste and wastewater; g. use, storage, and disposal of significant materials; h. landscaping, park, and lawn maintenance; i. road maintenance, including pothole repair, road shoulder maintenance, pavement marking, sealing, and repaving; j. right-of-way maintenance, including mowing; and k. application of herbicides, pesticides, and fertilizers. [Minn. R. 7090]
21.5	The permittee must implement the following BMPs at permittee owned/operated salt storage areas: a. cover or store salt indoors; b. store salt on an impervious surface; and

	c. implement practices to reduce exposure when transferring material from salt storage areas (e.g., sweeping, diversions, and/or containment). [Minn. R. 7090]
21.6	The permittee must implement a written snow and ice management policy for individuals that perform winter maintenance activities for the permittee. The policy must establish practices and procedures for snow and ice control operations (e.g., plowing or other snow removal practices, sand use, and application of deicing compounds). [Minn. R. 7090]
21.7	Each calendar year, the permittee must ensure all individuals that perform winter maintenance activities for the permittee receive training that includes: a. the importance of protecting water quality; b. BMPs to minimize the use of deicers (e.g., proper calibration of equipment and benefits of pretreatment, pre-wetting, and anti-icing); and c. tools and resources to assist in winter maintenance (e.g., deicing application rate guidelines, calibration charts, Smart Salting Assessment Tool). The permittee may use training materials from the Agency's Smart Salting training or other organizations to meet this requirement. [Minn. R. 7090]
21.8	The permittee must maintain written procedures for the purpose of determining the TSS and TP treatment effectiveness of all permittee owned/operated ponds constructed and used for the collection and treatment of stormwater. [Minn. R. 7090]
21.9	The permittee must inspect structural stormwater BMPs (excluding stormwater ponds, which are under a separate schedule below) each calendar year to determine structural integrity, proper function, and maintenance needs unless the permittee determines either of the following conditions apply: a. complaints received or patterns of maintenance indicate a greater frequency is necessary; or b. maintenance or sediment removal is not required after completion of the first two calendar year inspections; in which case the permittee may reduce the frequency of inspections to once every two (2) calendar years. [Minn. R. 7090]
21.10	Prior to the expiration date of the General Permit, the permittee must conduct at least one inspection of all ponds and outfalls (excluding underground outfalls) in order to determine structural integrity, proper function, and maintenance needs. [Minn. R. 7090]
21.11	Based on inspection findings, the permittee must determine if repair, replacement, or maintenance measures are necessary in order to ensure the structural integrity and proper function of structural stormwater BMPs and outfalls. The permittee must complete necessary maintenance as soon as possible. If the permittee determines necessary maintenance cannot be completed within one year of discovery, the permittee must document a schedule(s) for completing the maintenance. [Minn. R. 7090]
21.12	The permittee must implement a stormwater management training program commensurate with individual's responsibilities as they relate to the permittee's SWPPP, including reporting and assessment activities. The permittee may use training materials from the United States Environmental Protection Agency (USEPA), state and regional agencies, or other organizations as appropriate to meet this requirement. The training program must: a. address the importance of protecting water quality; b. cover the requirements of the permit relevant to the responsibilities of the individual not already addressed in items 18.8, 18.9, 19.11, 20.18, and 21.7; and c. include a schedule that establishes initial training for individuals, including new and/or seasonal employees, and recurring training intervals to address changes in procedures, practices, techniques, or requirements. [Minn. R. 7090]
21.13	The permittee must document the following information associated with the operations and maintenance program: a. date(s) and description of findings, including whether or not an illicit discharge is detected, for all inspections conducted in accordance with items 21.9 and 21.10; b. any adjustments to inspection frequency as authorized in item 21.9; c. date(s) and a description of maintenance conducted as a result of inspection findings, including whether or not an illicit discharge is detected; d. schedule(s) for maintenance of structural stormwater BMPs and outfalls as required in item 21.11; and e. stormwater management training events, including general subject matter covered, names and departments of

	individuals in attendance, and date of each event. [Minn. R. 7090]
21.14	The permittee must document pond sediment excavation and removal activities, including: a. a unique ID number and geographic coordinates of each stormwater pond from which sediment is removed; b. the volume (e.g., cubic yards) of sediment removed from each stormwater pond; c. results from any testing of sediment from each removal activity; and d. location(s) of final disposal of sediment from each stormwater pond. [Minn. R. 7090]
21.15	The permittee must conduct an annual assessment of the operations and maintenance program to evaluate program compliance, the status of achieving the measurable requirements in Section 21, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., inventory, trainings, inspections, maintenance activities, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]
22.1	**Discharges to Impaired Waters with a USEPA-Approved TMDL that Includes an Applicable WLA**. [Minn. R. 7090]
22.2	If the permittee has an applicable WLA not being met for oxygen demand, nitrate, TSS, or TP, the permittee must provide a summary of the permittee's progress toward achieving those applicable WLAs with the annual report. The summary must include the following information: a. a list of all BMPs applied towards achieving applicable WLAs for oxygen demand, nitrate, TSS, and TP; b. the implementation status of BMPs included in the compliance schedule at the time of final application submittal; and c. an updated estimate of cumulative TSS and TP load reductions. [Minn. R. 7090]
22.3	If the permittee has an applicable WLA where a reduction in pollutant loading is required for bacteria, the permittee must maintain a written or mapped inventory of potential areas and sources of bacteria (e.g., dense populations of waterfowl or other bird, dog parks). [Minn. R. 7090]
22.4	If the permittee has an applicable WLA where a reduction in pollutant loading is required for bacteria, the permittee must maintain a written plan to prioritize reduction activities to address the areas and sources identified in the inventory in item 22.3. The written plan must include BMPs the permittee will implement over the permit term, which may include, but is not limited to: a. water quality monitoring to determine areas of high bacteria loading; b. installation of pet waste pick-up bags in parks and open spaces; c. elimination of over-spray irrigation that may occur at permittee owned areas; d. removal of organic matter via street sweeping; e. implementation of infiltration structural stormwater BMPs; or f. management of areas that attract dense populations of waterfowl (e.g., riparian plantings). [Minn. R. 7090]
22.5	If the permittee has an applicable WLA where a reduction in pollutant loading is required for chloride, the permittee must document the amount of deicer applied each winter maintenance season to all permittee owned/operated surfaces. [Minn. R. 7090]
22.6	If the permittee has an applicable WLA where a reduction in pollutant loading is required for chloride, each calendar year the permittee must conduct an assessment of the permittee's winter maintenance operations to reduce the amount of deicing salt applied to permittee owned/operated surfaces and determine current and future opportunities to improve BMPs. The permittee may use the Agency's Smart Salting Assessment Tool or other available resources and methods to complete this assessment. The permittee must document the assessment. The assessment may include, but is not limited to: a. operational changes such as pre-wetting, pre-treating the salt stockpile, increasing plowing prior to deicing, monitoring of road surface temperature, etc.; b. implementation of new or modified equipment providing pre-wetting, or other capability for minimizing salt use; c. regular calibration of equipment; d. optimizing mechanical removal to reduce use of deicers; or e. designation of no salt and/or low salt zones. [Minn. R. 7090]
22.7	If the permittee has an applicable WLA where a reduction in pollutant loading is required for temperature (i.e., City of

	Duluth, City of Hermantown, City of Rice Lake, City of Stillwater, MnDOT Outstate, St. Louis County, University of Minnesota - Duluth, and Lake Superior College), the permittee must maintain a written plan that identifies specific activities the permittee will implement to reduce thermal loading during the permit term. The written plan may include, but is not limited to: a. implementation of infiltration BMPs such as bioinfiltration practices; b. disconnection and/or reduction of impervious surfaces; c. retrofitting existing structural stormwater BMPs; or d. improvement of riparian vegetation. [Minn. R. 7090]
23.1	**Alum or Ferric Chloride Phosphorus Treatment Systems**. [Minn. R. 7090]
23.2	If the permittee uses an alum or ferric chloride phosphorus treatment system, the permittee must comply with Section 23 requirements. [Minn. R. 7090]
23.3	The permittee's alum or ferric chloride phosphorus treatment system must comply with the following: a. the permittee must use the treatment system for the treatment of phosphorus in stormwater. Non-stormwater discharges must not be treated by this system; b. the treatment system must be contained within the conveyances and structural stormwater BMPs of the MS4. The utilized conveyances and structural stormwater BMPs must not include any receiving waters; c. phosphorus treatment systems utilizing chemicals other than alum or ferric chloride must receive written approval from the Agency; and d. in-lake phosphorus treatment activities are not authorized under the General Permit. [Minn. R. 7090]
23.4	The permittee's alum or ferric chloride phosphorus treatment system must meet the following design parameters: a. the treatment system must be constructed in a manner that diverts the stormwater flow to be treated from the main conveyance system; b. a high flow bypass must be part of the inlet design; and c. a flocculant storage/settling area must be incorporated into the design, and adequate maintenance access must be provided (minimum of 8 feet wide) for the removal of accumulated sediment. [Minn. R. 7090]
23.5	A designated person must perform visual monitoring of the treatment system for proper performance at least once every seven (7) days, and within 24 hours after a rainfall event greater than 2.5 inches in 24 hours. Following visual monitoring which occurs within 24 hours after a rainfall event, the next visual monitoring must be conducted within seven (7) days after that rainfall event. [Minn. R. 7090]
23.6	Three (3) benchmark monitoring stations must be established. Table 1 in Appendix A must be used for the parameters, units of measure, and frequency of measurement for each station. [Minn. R. 7090]
23.7	Samples must be collected as grab samples or flow-weighted 24-hour composite samples. [Minn. R. 7090]
23.8	Each sample, excluding pH samples, must be analyzed by a laboratory certified by the Minnesota Department of Health and/or the Agency, and: a. sample preservation and test procedures for the analysis of pollutants must conform to 40 CFR Part 136 and Minn. R. 7041.3200; b. detection limits for dissolved phosphorus, dissolved aluminum, and dissolved iron must be a minimum of 6 micrograms per liter, 10 micrograms per liter, and 20 micrograms per liter, respectively; and c. pH must be measured within 15 minutes of sample collection using calibrated and maintained equipment. [Minn. R. 7090]
23.9	In the following situations, the permittee must perform corrective action(s) and immediately notify the Minnesota Department of Public Safety Duty Officer at 800-422-0798 (toll free) or 651-649-5451 (Metro area): a. the pH of the discharged water is not within the range of 6.0 and 9.0; b. any indications of toxicity or measurements exceeding water quality standards which could endanger human health, public drinking water supplies, or the environment; or c. a spill or discharge or alteration resulting in water pollution as defined in Minn. Stat. 115.01, subd. 13, of alum or ferric chloride.

	If item b is applicable, the permittee must also report the non-compliance to the Commissioner as required in item 26.11. [Minn. R. 7001.0150, subp. 3(K), Minn. R. 7090]
23.10	If the permittee discovers indications of toxicity or measurements exceeding water quality standards that the permittee determines does not endanger human health, public drinking water supplies, or the environment, the permittee must report the non-compliance to the Commissioner as required in item 26.12. [Minn. R. 7001.0150, subp. 3(L), Minn. R. 7090]

23.11	The permittee must submit the following information with the annual report. The annual report must include a month-by-month summary of:
	
	a. date(s) of operation;
	b. chemical(s) used for treatment;
	c. gallons of water treated;
	d. gallons of alum or ferric chloride treatment used;
	e. calculated pounds of phosphorus removed; and
	f. any performance issues and the corrective action(s), including the date(s) when corrective action(s) were taken. [Minn. R. 7090]

23.12	A record of the design parameters in items 23.13 through 23.15 must be kept on-site. [Minn. R. 7090]
23.13	Site-specific jar testing conducted using typical and representative water samples in accordance with the most current approved version of ASTM D2035. [Minn. R. 7090]
23.14	Baseline concentrations of the following parameters in the influent and receiving waters: a. aluminum or iron; and b. phosphorus. [Minn. R. 7090]
23.15	The following system parameters and how each was determined: a. flocculant settling velocity; b. minimum required retention time; c. rate of diversion of stormwater into the system; d. the flow rate from the discharge of the outlet structure; and e. range of expected dosing rates. [Minn. R. 7090]
23.16	The following site-specific procedures must be developed and a copy kept on-site: a. procedures for the installation, operation and maintenance of all pumps, generators, control systems, and other equipment; b. specific parameters for determining when the solids must be removed from the system and how the solids will be handled and disposed of; and c. procedures for cleaning up and/or containing a spill of each chemical stored on-site. [Minn. R. 7090]
24.1	**Stormwater Pollution Prevention Program (SWPPP) Modification**. [Minn. R. 7090]
24.2	The Commissioner may require the permittee to modify the SWPPP as needed, in accordance with the procedures of Minn. R. 7001, and may consider the following factors: a. discharges from the MS4 are impacting the quality of receiving waters; b. more stringent requirements are necessary to comply with state or federal regulations; and c. additional conditions are deemed necessary to comply with the goals and applicable requirements of the Clean Water Act and protect water quality. [Minn. R. 7090]
24.3	Modifications that the permittee chooses to make to the SWPPP other than modifications authorized in item 24.4, must be approved by the Commissioner in accordance with the procedures of Minn. R. 7001. All requests must be in writing, setting forth schedules for compliance. The request must discuss alternative program modifications, assure compliance with requirements of the permit, and meet other applicable laws. [Minn. R. 7090]
24.4	The permittee may modify the SWPPP without prior approval of the Commissioner provided the Commissioner is notified of the modification in the annual report for the year the modification is made and the modification falls under one of the

	following categories: a. a BMP is added, and none subtracted, from the SWPPP; or b. a less effective BMP is replaced with a more effective BMP. The alternate BMP must address the same, or similar, concerns as the ineffective or failed BMP. [Minn. R. 7090]
25.1	**Annual Assessment, Annual Reporting, and Recordkeeping**. [Minn. R. 7090]
25.2	The permittee must conduct an annual assessment to evaluate compliance with the terms and conditions of the General Permit, including the effectiveness of the components of the SWPPP and the status of achieving the measurable requirements in the General Permit. Measurable requirements are activities that must be documented or tracked (e.g., education and outreach efforts, implementation of written plans, inventories, trainings, site plan reviews, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the SWPPP as a result of the annual assessment. [Minn. R. 7090]
25.3	The permittee must submit an annual report: Due annually, by the 30th of June. The annual report must cover the portion of the previous calendar year during which the permittee was authorized to discharge stormwater under the General Permit. The annual report shall be submitted to the Agency, in a manner determined by the Agency, that includes but is not limited to: a. the status of compliance with permit terms and conditions, including an assessment of the appropriateness of BMPs identified by the permittee and progress towards achieving the measurable requirements of each of the MCMs. The assessment must be based on results of information collected and analyzed, including monitoring (if any), inspection findings, and public input received during the reporting period; b. the stormwater activities the permittee plans to undertake during the next reporting cycle; c. a change in any identified BMPs for any of the MCMs; d. the summary required in item 22.2 to demonstrate progress toward achieving applicable WLAs; e. information required to be recorded or documented in Sections 13 through 24; and f. a statement that the permittee is relying on a partnership(s) with another regulated small MS4(s) to satisfy one or more permit requirements (if applicable), and what agreements the permittee has entered into in support of this effort. [Minn. R. 7090]
25.4	The permittee must make records, including components of the SWPPP, available to the public at reasonable times during regular business hours (see 40 CFR 122.7 for confidentiality provision). [Minn. R. 7090]
25.5	The permittee must retain copies of the permit application, all documentation necessary to comply with SWPPP requirements, all data and information used by the permittee to complete the application process, and any information developed as a requirement of the General Permit or as requested by the Commissioner, for a period of at least three (3) years beyond the date of permit expiration. This period is automatically extended during the course of an unresolved enforcement action regarding the small MS4 or as requested by the Commissioner. [Minn. R. 7001.0080, Minn. R. 7090]
25.6	The permittee must, when requested by the Commissioner, submit within a reasonable time the information and reports that are relevant to the control of pollution regarding the construction, modification, or operation of the facility covered by the General Permit or regarding the conduct of the activity covered by the General Permit. [Minn. R. 7001.0150, subp. 3(H), Minn. R. 7090]
25.7	The permittee must use an electronic submittal process, as provided by the Agency, to submit information required by the General Permit. If electronic submittal is not available, the permittee must use the following mailing address: Supervisor, Municipal Stormwater Unit Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, Minnesota 55155-4194. [Minn. R. 7090]
26.1	**General Conditions**. [Minn. R. 7090]
26.2	The Agency's issuance of a permit does not release the permittee from any liability, penalty, or duty imposed by Minnesota or federal statutes or rules or local ordinances, except the obligation to obtain the General Permit. [Minn. R. 7001.0150, subp. 3(A)]
26.3	The Agency's issuance of a permit does not prevent the future adoption by the Agency of pollution control rules, standards,

	or orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or orders against the permittee. [Minn. R. 7001.0150, subp. 3(B)]
26.4	The General Permit does not convey a property right or an exclusive privilege. [Minn. R. 7001.0150, subp. 3(C)]
26.5	The Agency's issuance of a permit does not obligate the Agency to enforce local laws, rules or plans beyond that authorized by Minnesota statutes. [Minn. R. 7001.0150, subp. 3(D)]
26.6	The permittee must perform the actions or conduct the activity authorized by the permit in accordance with the plans and specifications approved by the Agency and in compliance with the conditions of the permit. [Minn. R. 7001.0150, subp. 3(E)]
26.7	The permittee must at all times properly operate and maintain the facilities and systems of treatment and control and the appurtenances related to them which are installed or used by the permittee to achieve compliance with the conditions of the General Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The permittee must install and maintain appropriate backup or auxiliary facilities if they are necessary to achieve compliance with the conditions of the General Permit and, for all permits other than hazardous waste facility permits, if these backup or auxiliary facilities are technically and economically feasible. [Minn. R. 7001.0150, subp. 3(F)]
26.8	The permittee may not knowingly make a false or misleading statement, representation, or certification in a record, report, plan, or other document required to be submitted to the Agency or to the Commissioner by the General Permit. The permittee must immediately upon discovery report to the Commissioner an error or omission in these records, reports, plans, or other documents. [Minn. R. 7001.0150, subp. 3(G), Minn. R. 7001.1090, subp. 1(G), Minn. R. 7001.1090, subp. 1(H), Minn. Stat. 609.671]
26.9	When authorized by Minn. Stat. 115.04, 115B.17, subd. 4, and 116.091, and upon presentation of proper credentials, the Agency, or an authorized employee or agent of the Agency, must be allowed by the permittee to enter at reasonable times upon the property of the permittee to examine and copy books, papers, records, or memoranda pertaining to the activity covered by the General Permit; and to conduct surveys and investigations, including sampling or monitoring, pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the General Permit. [Minn. R. 7001.0150, subp. 3(I)]
26.10	If the permittee discovers, through any means, including notification by the Agency, that noncompliance with a condition of the General Permit has occurred, the permittee must take all reasonable steps to minimize the adverse impacts on human health, public drinking water supplies, or the environment resulting from the noncompliance. [Minn. R. 7001.0150, subp. 3(J)]
26.11	If the permittee discovers that noncompliance with a condition of the General Permit has occurred which could endanger human health, public drinking water supplies, or the environment, the permittee must, within 24 hours of the discovery of the noncompliance, orally notify the Commissioner. Within five days of the discovery of the noncompliance, the permittee must submit to the Commissioner a written description of the noncompliance; the cause of the noncompliance; the exact dates of the period of the noncompliance; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [Minn. R. 7001.0150, subp. 3(K)]
26.12	The permittee must report noncompliance with the General Permit not reported under item 26.11 as a part of the next report which the permittee is required to submit under the General Permit. If no reports are required within 30 days of the discovery of the noncompliance, the permittee must submit the information listed in item 26.11 within 30 days of the discovery of the noncompliance. [Minn. R. 7001.0150, subp. 3(L), Minn. R. 7090]
26.13	The permittee must give advance notice to the Commissioner as soon as possible of planned physical alterations or additions to the permitted facility (MS4) or activity that may result in noncompliance with a Minnesota or federal pollution control statute or rule or a condition of the General Permit. [Minn. R. 7001.0150, subp. 3(M)]
26.14	The General Permit is not transferable to any person without the express written approval of the Agency after compliance with the requirements of Minn. R. 7001.0190. A person to whom the permit has been transferred must comply with the conditions of the General Permit. [Minn. R. 7001.0150, subp. 3(N)]
26.15	The General Permit authorizes the permittee to perform the activities described in the permit under the conditions of the General Permit. In issuing the permit, the state and Agency assume no responsibility for damage to persons, property, or the environment caused by the activities of the permittee in the conduct of its actions, including those activities authorized, directed, or undertaken under the permit. To the extent the state and Agency may be liable for the activities of its

	employees, that liability is explicitly limited to that provided in the Tort Claims Act, Minn. Stat. 3.736. [Minn. R. 7001.0150, subp. 3(O)]
26.16	The General Permit incorporates by reference the applicable portions of 40 CFR 122.41 and 122.42(c) and (d), and Minn. R. 7001.1090, which are enforceable parts of the General Permit. [Minn. R. 7090]
26.17	The provisions of the General Permit are severable, and if any provision of the General Permit, or the application of any provision of the General Permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of the General Permit shall not be affected thereby. [Minn. R. 7090]
27.1	**Definitions**. [Minn. R. 7090]
27.2	"Active karst" means a terrain having distinctive landforms and hydrology created primarily from the dissolution of soluble rocks within 50 feet of the land surface. [Minn. R. 7090]
27.3	"Agency" means the Minnesota Pollution Control Agency or MPCA. [Minn. Stat. 116.36, subd. 2]
27.4	"Alum or Ferric Chloride Phosphorus Treatment System" means the diversion of flowing stormwater from a MS4, removal of phosphorus through the use a continuous feed of alum or ferric chloride additive, flocculation, and the return of the treated stormwater back into a MS4 or receiving water. [Minn. R. 7090]
27.5	"Applicable WLA" means a Waste Load Allocation assigned to the permittee and approved by the USEPA prior to the issuance date of the General Permit. [Minn. R. 7090]
27.6	"Best Management Practices" or "BMPs" means practices to prevent or reduce the pollution of the waters of the state, including schedules of activities, prohibitions of practices, and other management practices, and also includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge, or waste disposal or drainage from raw material storage. [Minn. R. 7001.1020, subp. 5]
27.7	"Commissioner" means the Commissioner of the Minnesota Pollution Control Agency or the Commissioner's designee. [Minn. Stat. 116.36, subd. 3]
27.8	"Common Plan of Development or Sale" means a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur. [Minn. R. 7090]
27.9	"Construction Activity" means activities including clearing, grading, and excavating, that result in land disturbance of equal to or greater than one acre, including the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. This includes a disturbance to the land that results in a change in the topography, existing soil cover, both vegetative and nonvegetative, or the existing soil topography that may result in accelerated stormwater runoff that may lead to soil erosion and movement of sediment. Construction activity does not include a disturbance to the land of less than five acres for the purpose of routine maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Routine maintenance does not include activities such as repairs, replacement and other types of non-routine maintenance. Pavement rehabilitation that does not disturb the underlying soils (e.g., mill and overlay projects) is not construction activity. [Minn. R. 7090]
27.10	"DNR Catchment Area" means the Hydrologic Unit 08 areas delineated and digitized by the Minnesota DNR. The catchment areas are available for download at the Minnesota DNR Geospatial Commons website. DNR catchment areas may be locally corrected, in which case the local corrections may be used. [Minn. R. 7090]
27.11	"Existing Permittee" means an owner/operator of a small MS4 that has been authorized to discharge stormwater under a previously issued general permit for small MS4s in the state of Minnesota. [Minn. R. 7090]
27.12	"Fully reconstructed" means areas where impervious surfaces have been removed down to the underlying soils. Activities such as structure renovation, mill and overlay projects, and other pavement rehabilitation projects that do not expose the underlying soils beneath the structure, pavement, or activity are not considered fully reconstructed. Maintenance activities such as catch basin repair/replacement, utility repair/replacement, pipe repair/replacement, lighting, and pedestrian ramp improvements are not considered fully reconstructed. [Minn. R. 7090]
27.13	"General permit" means a permit issued under Minn. R. 7001.0210 to a category of permittees whose operations, emissions, activities, discharges, or facilities are the same or substantially similar. [Minn. R. 7001.0010, subp. 4]
27.14	"Geographic Coordinates" means the point location of a stormwater feature expressed by X, Y coordinates of a standard Cartesian coordinate system (i.e. latitude/longitude) that can be readily converted to Universal Transverse Mercator (UTM),

	Zone 15N in the NAD83 datum. For polygon features, the geographic coordinates will typically define the approximate center of a stormwater feature. [Minn. R. 7090]
27.15	"High Flow Bypass" means a function of an inlet device that allows a certain flow of water through, but diverts any higher flows away. High flow bypasses are generally used for BMPs that can only treat a designed amount of flow and that would be negatively affected by higher flows. [Minn. R. 7090]
27.16	"Illicit Discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from firefighting activities. [40 CFR 122.26(b)(2)]
27.17	"Impaired Water" means waters identified as impaired by the Agency, and approved by the USEPA, pursuant to section 303(d) of the Clean Water Act (33 U.S.C. 303(d)). [Minn. R. 7090]
27.18	"Linear project" means construction of new or fully reconstructed roads, trails, sidewalks, or rail lines that are not part of a common plan of development or sale. For example, roads being constructed concurrently with a new residential development are not considered linear projects because they are part of a common plan of development or sale. [Minn. R. 7090]
27.19	"Maximum Extent Practicable" or "MEP" means the statutory standard (33 U.S.C. 1342(p)(3)(B)(iii)) that establishes the level of pollutant reductions that an owner or operator of regulated MS4s must achieve. The USEPA has intentionally not provided a precise definition of MEP to allow maximum flexibility in MS4 permitting. The pollutant reductions that represent MEP may be different for each small MS4, given the unique local hydrologic and geologic concerns that may exist and the differing possible pollutant control strategies. Therefore, each permittee will determine appropriate BMPs to satisfy each of the six Minimum Control Measures (MCMs) through an evaluative process. The USEPA envisions application of the MEP standard as an iterative process. [Minn. R. 7090]
27.20	"Municipal separate storm sewer system" or "MS4" means a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains: a. owned or operated by a state, city, town, county, district, association, or other public body, created by or pursuant to state law, having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district, or drainage district or similar entity, or an Indian tribe or an authorized Indian tribe organization, or a designated and approved management Agency under section 208 of the federal Clean Water Act, United States Code, title 33, section 1288, that discharges into waters of the state; b. designed or used for collecting or conveying stormwater; c. that is not a combined sewer; and d. that is not part of a publicly owned treatment works as defined in 40 CFR 122.2. Municipal separate storm sewer systems do not include separate storm sewers in very discrete areas, such as individual buildings. [Minn. R. 7090.0080, subp. 8]
27.21	"New Permittee" means an owner/operator of a small MS4 that has not been authorized to discharge stormwater under a previously issued General Stormwater Permit for small MS4s in the state of Minnesota and that applies for, and obtains coverage under the General Permit. [Minn. R. 7090]
27.22	"Non-Stormwater Discharge" means any discharge not composed entirely of stormwater. [Minn. R. 7090]
27.23	"Operator" means the person with primary operational control and legal responsibility for the MS4. [Minn. R. 7090.0080, subp. 10]
27.24	"Outfall" means the point source where a MS4 discharges to a receiving water, or the stormwater discharge permanently leaves the permittee's MS4. It does not include diffuse runoff or conveyances that connect segments of the same stream or water systems (e.g., when a conveyance temporarily leaves an MS4 at a road crossing). [Minn. R. 7090]
27.25	"Owner" means the person that owns the MS4. [Minn. R. 7090.0080, subp. 11]
27.26	"Permittee" means a person or persons, that signs the permit application submitted to the Agency and is responsible for compliance with the terms and conditions of the General Permit. [Minn. R. 7090]
27.27	"Person" means the state or any Agency or institution thereof, any municipality, governmental subdivision, public or private corporation, individual, partnership, or other entity, including, but not limited to, association, commission or any interstate body, and includes any officer or governing or managing body of any municipality, governmental subdivision, or public or private corporation, or other entity. [Minn. Stat. 115.01, subd. 10]

27.28	"Pipe" means a closed manmade conveyance device used to transport stormwater from location to location. The definition of pipe does not include foundation drain pipes, irrigation pipes, land drain tile pipes, culverts, and road sub-grade drain pipes. [Minn. R. 7090]
27.29	"Receiving Water" means any lake, river, stream or wetland that receives stormwater discharges from an MS4. [Minn. R. 7090]
27.30	"Reduce" means reduce to the Maximum Extent Practicable (MEP) unless otherwise defined in the context in which it is used. [Minn. R. 7090]
27.31	"Seasonally Saturated Soil" means the highest seasonal elevation in the soil in a reduced chemical state because of soil voids filled with water causing anaerobic conditions. Seasonally saturated soil is evidenced by the presence of redoximorphic features or other information determined by scientifically established methods or empirical field measurements. [Minn. R. 7090]
27.32	"Section" includes all item numbers of the same whole number. For example, "Section 5" of the General Permit refers to items 5.1 through 5.5. [Minn. R. 7090]
27.33	"Significant Materials" includes, but is not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA); fertilizers, pesticides, and waste products such as ashes, slag, and sludge that have the potential to be released with stormwater discharges. When determining whether a material is significant, the physical and chemical characteristics of the material should be considered (e.g. the material's solubility, transportability, and toxicity characteristics) to determine the material's pollution potential. [40 CFR 122.26(b)(12)]
27.34	"Small Municipal Separate Storm Sewer System" or "small MS4", means all separate storm sewers that are: a. Owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management Agency under section 208 of the CWA that discharges to waters of the United States. b. Not defined as "large" or "medium" Municipal Separate Storm Sewer Systems pursuant to 40 CFR 122.26 paragraphs (b)(4) and (b)(7) or designated under paragraph (a)(1)(v). c. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. [Minn. R. 7090]
27.35	"Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage. [Minn. R. 7090.0080, subp. 12]
27.36	"Stormwater flow direction" means the direction of predominant flow within a pipe. Flow direction can be discerned if pipe elevations can be displayed on the storm sewer system map. [Minn. R. 7090]
27.37	"Stormwater Pollution Prevention Program" or "SWPPP" means a comprehensive program developed by the permittee to manage and reduce the discharge of pollutants in stormwater to and from the small MS4. [Minn. R. 7090]
27.38	"Structural Stormwater BMP" means a stationary and permanent BMP that is designed, constructed, and operated to prevent or reduce the discharge of pollutants in stormwater. [Minn. R. 7090]
27.39	"Total Maximum Daily Load" or "TMDL" means the sum of the individual Waste Load Allocations for point sources and load allocations for nonpoint sources and natural background, as more fully defined in 40 CFR 130.2, paragraph (i). A TMDL sets and allocates the maximum amount of a pollutant that may be introduced into a water of the state and still assure attainment and maintenance of water quality standards. [Minn. R. 7052.0010, subp. 42]
27.40	"Waste Load Allocation" or "WLA" means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution, as more fully defined in Code of Federal Regulations, title 40, section 130.2, paragraph (h). In the absence of a TMDL approved by USEPA under 40 CFR 130.7, or an assessment and remediation plan developed and approved according to Minn. R. 7052.0200, subp. 1.C, a WLA is the allocation for an individual point source that ensures that the level of water quality to be achieved by the point source is derived from and complies with all applicable water quality standards and criteria. [Minn. R. 7052.0010, subp. 45]

27.41	"Water pollution" means (a) the discharge of any pollutant into any waters of the state or the contamination of any waters of the state so as to create a nuisance or render such waters unclean, or noxious, or impure so as to be actually or potentially harmful or detrimental or injurious to public health, safety or welfare, to domestic, agricultural, commercial, industrial, recreational or other legitimate uses, or to livestock, animals, birds, fish or other aquatic life; or (b) the alteration made or induced by human activity of the chemical, physical, biological, or radiological integrity of waters of the state. [Minn. Stat. 115.01, subd. 13]
27.42	"Water Quality Standards" means those provisions contained in Minn. R. 7050 and 7052. [Minn. R. 7090]
27.43	"Water Quality Volume" means either: a. for construction activity (excluding linear projects), one (1) inch of runoff from the sum of the new and fully reconstructed impervious surfaces created by the project (calculated as an instantaneous volume); or b. for linear projects, the greater of one (1) inch of runoff from the new impervious surface or one-half (0.5) inch of runoff from the sum of the new and fully reconstructed impervious surfaces created by the project (calculated as an instantaneous volume). [Minn. R. 7090]
27.44	"Waters of the State" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof. [Minn. Stat. 115.01, subd. 22]
27.45	"Wetlands" means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes: a. a predominance of hydric soils; b. inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and c. under normal circumstances support a prevalence of such vegetation. [Minn. R. 7050.0186, subp. 1a.B]

Appendix A. Alum or Ferric Chloride Phosphorus Treatment Systems

Table 1:
Monitoring parameters during operation

Station	Alum parameters	Ferric parameters	Units	Frequency
Upstream-background	Total Phosphorus	Total Phosphorus	mg/L	1 x week
	Dissolved Phosphorus	Dissolved Phosphorus	mg/L	1 x week
	Total Aluminum	Total Iron	mg/L	1 x month
	Dissolved Aluminum	Dissolved Iron	mg/L	1 x week
	pH	pH	SU	1 x week
	Flow	Flow	Mgd	Daily
Alum or Ferric Chloride Feed	Alum	Ferric	Gallons	Daily total dosed in gallons
Discharge from treatment	Total Phosphorus	Total Phosphorus	mg/L	1 x week
	Dissolved Phosphorus	Dissolved Phosphorus	mg/L	1 x week
	Total Aluminum	Total Iron	mg/L	1 x month
	Dissolved Aluminum	Dissolved Iron	mg/L	1 x week
	pH	pH	SU	1 x week
	Flow	Flow	Mgd	Daily

Appendix B. Schedules

Table 2:
Existing Permittees - Schedule of permit requirements

Permit requirement	*Schedule*
Section 12. Stormwater Pollution Prevention Program (SWPPP) Document • *Submit the SWPPP Document completed in accordance with Section 12.*	• Within 150 days after General Permit issuance date.
Section 13. Stormwater Pollution Prevention Program (SWPPP) • *Complete revisions to incorporate the new requirements of Sections 14 - 23 into current SWPPP.*	• Within 12 months of the date General Permit coverage is extended, unless other timelines have been specifically established in the General Permit and identified below.
Section 19. Construction Site Stormwater Runoff Control • *Complete revisions to Construction Site Stormwater Runoff Control program, including revisions to regulatory mechanism(s), if necessary.* • *When the CSW Permit is reissued, revise regulatory mechanism(s), if necessary, to be at least as stringent as the requirements for erosion, sediment, and waste controls described in the CSW Permit.*	• Within 12 months of the date General Permit coverage is extended. • Within 12 months of the issuance date of the CSW Permit (expected issuance date of the CSW Permit is August 1, 2023).
Section 21. Pollution Prevention/Good Housekeeping for Municipal Operations • *Conduct structural stormwater best management practice (BMP) inspections.* • *Conduct pond and outfall inspections.*	• Each calendar year. • Prior to the expiration date of the General Permit.
Section 22. Discharges to Impaired Waters with a USEPA-Approved TMDL that includes an Applicable WLA • *Submit all information required in item 22.2.* • *Meet requirements for applicable WLAs for bacteria, chloride, and temperature in Section 22.*	• With each annual report. • Within 12 months of the date General Permit coverage is extended.
Section 25. Annual Assessment, Annual Reporting, and Recordkeeping • *Conduct assessment of the SWPPP.* • *On a form provided by the Agency, submit an annual report.*	• Prior to completion of each annual report. • By June 30th of each calendar year.

Table 3:
New Permittees - Schedule of permit requirements

Permit requirement	*Schedule*
Section 10. New Permittee Applicants • *Submit Part 1, and Part 2 of the permit application as required by Section 12.*	• Within 18 months of written notification from the Commissioner that the MS4 meets the criteria in Minn. R. 7090.1010, subp. 1.A. or B. and General Permit coverage is required.
Section 13. Stormwater Pollution Prevention Program (SWPPP) • *Complete all requirements of Sections 14 - 23.*	• Within 36 months of the date General Permit coverage is extended, unless other timelines have been specifically established in the General Permit and identified below; or • Within timelines established by the Commissioner in item 8.3.
Section 14. Mapping • *Develop a storm sewer system map.*	• Within 24 months of the date General Permit coverage is extended.
Section 18. Illicit Discharge Detection and Elimination • *Develop, implement, and enforce an Illicit Discharge Detection and Elimination Program.*	• Within 12 months of the date General Permit coverage is extended.
Section 19. Construction Site Stormwater Runoff Control • *Develop, implement, and enforce a Construction Site Stormwater Runoff Control Program.* • *When the CSW Permit is reissued, revise regulatory mechanism(s), if necessary, to be at least as stringent as the requirements for erosion, sediment, and waste controls described in the CSW Permit.*	• Within 12 months of the date General Permit coverage is extended. • Within 12 months of the issuance date of the CSW Permit (expected issuance date of the CSW Permit is August 1, 2023).
Section 20. Post-Construction Stormwater Management • *Develop, implement, and enforce a Post-Construction Stormwater Management program.*	• Within 24 months of the date General Permit coverage is extended.
Section 21. Pollution Prevention/Good Housekeeping for Municipal Operations • *Conduct structural stormwater BMP inspections.* • *Conduct pond and outfall inspections.*	• Each calendar year. • Prior to the expiration date of the General Permit.
Section 22. Discharges to Impaired Waters with a USEPA-Approved TMDL that includes an Applicable WLA • *Submit all information required in item 22.2.* • *Meet requirements for applicable WLAs for bacteria, chloride, and temperature in Section 22.*	• With each annual report. • Within 12 months of the date General Permit coverage is extended.
Section 23. Alum or Ferric Chloride Phosphorus Treatment Systems (if applicable) • *Meet requirements for treatment systems in Section 23.*	• Within 12 months of the date General Permit coverage is extended.
Section 25. Annual SWPPP Assessment, Annual Reporting, and Recordkeeping • *Conduct assessment of the SWPPP.* • *On a form provided by the Agency, submit an annual report.*	• Prior to completion of each annual report. • By June 30th of each calendar year.

MINNESOTA
ENVIRONMENTAL QUALITY BOARD

Minnesota Environmental Quality Board
520 Lafayette Road North
Saint Paul, MN 55155

VIA E-MAIL (cover letter & petition)

March 10, 2023

Chris Lee
City of Duluth Planning & Development Division
411 West First Street
Room 160
Duluth, MN 55802
clee@duluthmn.gov

RE: Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Corporation Project

Dear Mr. Lee,

The Environmental Quality Board (EQB) received a petition on March 8, 2023 requesting that an Environmental Assessment Worksheet (EAW) be prepared for the project described in the petition, and has determined that the City of Duluth is the appropriate governmental unit to decide the need for an EAW.

All requirements for Minnesota's Environmental Review Program, including when review is required and when review is exempt can be found in Minnesota Rules, chapter 4410. Please note, a project may not be started, and a final governmental decision may not be made to grant a permit, approve a project, or begin a project, until a decision has been made for this petition. Project construction includes any activities which directly affect the environment, including preparation of land.

The procedures to be followed in making the decision on the enclosed petition (EAW need decision) are found in part 4410.1100. Key points in the procedures include:

1. As the designated RGU, you are required to decide the need for preparation of an EAW, considering the evidence presented by the petitioners or otherwise known to you about the nature and location of the project. In making your decision, you should consider the evidence submitted and take into account the factors listed in part 4410.1700, subpart 7. Note that these procedures require that a record of decision, including specific findings of fact, be maintained.

2. You have 15 working days from the date of the receipt of this petition to decide on the need for an EAW. (See part 4410.1100.)
   - For RGU decisions made by a board, council, or other body which meets on a periodic basis, the time period may be extended by the RGU for an additional 15 days.
   - For RGU decisions not made by a board, council, or other body, the RGU may request an extension from the EQB of up to an additional 15 days.

3. You must provide written notification of your decision to the proposer, the petitioners' representative, and the EQB, within 5 working days.
    - To notify the EQB of your decision on the need for an EAW, complete the EQB *Monitor* submission form found on the EQB website. The EQB requests that you upload a copy of your record of decision using the same electronic submission form, including instances where environmental review is mandatory, voluntary, or exempt.

4. If for any reason you are unable to act on the petition at this time (e.g., no application has yet been filed or the application has been withdrawn or denied), the petition will remain in effect for a period of one year and must be acted upon prior to any final decision concerning the project identified in the petition. It is recommended that you notify in writing both the petitioners' representative and the EQB if you are unable to act on the petition at the time it is received.

Notice of the petition and its assignment to your unit of government will be published in the *EQB Monitor* on March 14, 2023.

If you have any questions or need any assistance, please do not hesitate to contact us at env.review@state.mn.us or 651-757-2873.

Sincerely,

Jesse Krzenski

Jesse Krzenski
Environmental Review Program
Environmental Quality Board

cc: Becca Mulenburg, Petitioner's Representative
Denise Wilson, Director of EQB's Environmental Review Program

CITIZENS' PETITION FOR AN EAW

Duluth, Minnesota

Photo mprnews.org, 2012 flood, Duluth, MN

"It is especially critical to preserve all remaining wetlands and forested areas at the headwaters and along the streams to help buffer water quality."

– Minnesota Pollution Control Agency referencing Miller Creek's watershed in Duluth, MN. Duluth News-Tribune, March 19, 2018.

A large-scale, hotel development in wetlands, 150-200 feet away from Miller Creek aims to violate environmental rules and regulations.

Project Description

Marriott Hotel is a proposed commercial development on six acres located at the northeast corner of the intersection of Sundby Road and W. Page St. in Duluth, MN. The subject site consists of mature forest with wetlands on the northeast and southwest portions of the property. Miller Creek, an impaired trout stream, is approximately 150-200 feet to the west adjacent to Sundby Road. The developer owns a total of 33 acres along Miller Creek situated amongst wetlands.

- Developer's Proposal [EXHIBIT 1]
- Location of Development [EXHIBIT 2]

> ***"In the end, it's going to take action by city residents to affect any real change."***[1] *-Brian Frederickson, MPCA Project Manager, Duluth's impaired streams restoration*

Protections under the Clean Water Act and "Water of the United States"

[EXHIBIT 3]. Summarizing arguments, under the regulations of the Clean Water Act as per the newly revised definition of "Waters of the United States", effective March 20, 2023, interstate waterways, their tributaries, and adjacent wetlands designated as WOTUS receive CWA protection. Miller Creek, as a tributary of an (a)(1) interstate waterway, the St. Louis River, and its adjacent wetlands are to be afforded all protections provided by the Clean Water Act. Proceeding with the development, Miller Creek and its adjacent wetlands will be negatively impacted, a violation of the main objective of the Clean Water Act which is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

Protections under Minnesota's Wetland Conservation Act (WCA)

Per the Minnesota Legislature's Wetland Conservation Act, the purpose is to maintain and protect Minnesota's wetlands and the benefits they provide, and to reach the legislature's goal of no-net-loss of wetlands. This act is administered statewide by the Board of Water and Soil Resources (BWSR), and enforced by the Minnesota Department of Natural Resources (DNR).[2]

How will the waters and wetlands in this area be negatively impacted?

1. **An increase to the impervious surface area adjacent to Miller Creek and its wetlands.**
   Impervious surfaces prohibit the infiltration of water from the land into the underlying soil. The location of this hotel will exponentially increase impervious area next to Miller creek and its wetlands. It is the most critical indicator for analyzing

[1] Meyers, John. *Duluth streams hard-hit by development*. Duluth News-Tribune, March 19, 2018.

[2] The Minnesota Wetland Conservation Act Manual, A comprehensive implementation guide to Minnesota's wetland law. Minnesota Board of Water & Soil Resources. [online]. Available from: https://www.leg.mn.gov/docs/2007/other/070605.pdf Accessed 27 Feb 2023.

impacts of urbanization on the water environment.[3] Miller Creek's watershed contains a high degree (49%) of disturbed and developed land cover.[4] [EXHIBIT 4]

Stream quality starts to degrade if more than 10% of the watershed is impervious. Around 2003, 22% of Miller Creek's watershed was listed as impervious.[5] [EXHIBIT 5]. Development in this area has only increased in the last 20 years with the construction of Costco, Kohl's, Menards, Sam's Club, and Target's recent expansion, to name a few.

Why is a high impervious rate so detrimental to Miller Creek and its adjacent wetlands?

A. Reduces base flow. When infiltration into the ground is prevented by impervious surfaces such as buildings and parking lots, the groundwater recharge and base flow will be reduced. Because all of that water has to go somewhere, it stays above ground and leads to flooding and storm flow.

In 2012, Duluth experienced its worst flooding in recorded history. Chief meteorologist of Minnesota Public Radio, Paul Huttner said, "Over 10 inches of rain triggered the worst flood in the history of Duluth left more than 100 million in damages to infrastructure as it washed out streets, sidewalks and swallowed cars in massive sinkholes. Many have asked me if events like the Duluth Flood can happen again. The answer is not if…but when."[6]

Duluth, MN, 2012 flood. *mprnews.org*

"One of the reasons this mega flood happened in Duluth is the unique 'flood geography' of the North Shore. Think of quickly dumping a bucket of water down a steep driveway."

– Paul Huttner,
Chief Meteorologist,
Minnesota Public Radio

[3] Chithra, S.V., et. al. May 2015. Impacts of Impervious Surfaces on the Environment. [online]. Available from: https://www.ijesi.org/papers/Vol(4)5/E045027031.pdf [Accessed 27 Feb, 2023].

[4] MPCA. October 2020. *Duluth Urban Area Streams Total Maximum Daily Load.* [online]. Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-11e.pdf [Accessed 27 Feb, 2023].

[5] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022. Also *Impervious Surfaces Hinder Infiltration and Increase Runoff.* [online). Available from: https://www.lakesuperiorstreams.org/understanding/impact_impervious.html [Accessed 27 Feb 2023].

[6] Huttner, Paul. June 2013. *Anatomy of the 2012 Duluth flood.* [online]. Available from: https://www.mprnews.org/story/2013/06/19/anatomy-of-the-2012-duluth-flood [Accessed 28 Feb 2023].

It matters where and how close to waterways impervious surfaces are built.

"Increases in impervious surfaces increases the runoff volumes and also shortens the time of water delivery to the stream, sending large pulses of water and related urban pollutants into the stream (e.g., sediments, chloride). Impervious surface has been used as an indicator of stream water quality; the more imperviousness, the greater the likelihood for degraded water quality. Development of lands can reduce temporary water storage by grading the land surface, typically resulting in less pervious surfaces, more impervious surfaces, more turf grass and fewer trees. Incremental degradation of remaining natural resources, such as wetlands and natural areas adjacent to the development is common."[7] *– Tom Estabrooks, MPCA, Project Mgr., Watershed Division, Duluth, MN*

In 2009, MXD Development Strategists was hired by the City of Duluth to conduct a comprehensive Market Analysis and Positioning Strategy for the Miller Hill – Central Entrance Corridor. Specifically, to this 30+ acre site along Sundby Rd, the survey stated, "Commercial land uses do not offer an appropriate nor compatible land use buffer for a project that proposes to encroach upon a sensitive wetlands area. There is a need to ensure that any new development does not unnecessarily encroach on sensitive land areas. It is incumbent and responsible to protect and contribute to more livable and sustainable communities. Duluth is as much a steward of the environment as it is a center for commerce and these fundamentals must be maintained in balance."[8] [Exhibit 5.1]

B. Pollutants are added to the drainage basin and its receiving streams, lakes, and ponds.

Stretches of streams are impaired and need attention. Pollutants already find their way into Miller Creek. Over 30 years, to do all the suggested work could cost the community between $100 and $130 million to save its trout streams.[9]

> ***"…efforts have been underway for years to slow and filter parking lot runoff near Miller Creek."***[10]

Which pollutants are of primary concern?

i. **Road Salt** – "Chloride is a permanent pollutant that'll stick around forever in water, according to the Minnesota Pollution Control Agency, or MPCA. Chloride is actually toxic to our freshwater fish and insects living in our lakes our wetlands our streams. The time to address this is now and to get ahead of this so we can keep our fresh waters fresh and not salty."[11]

---

[7] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022.

[8] Mission Development LLC Rezoning Application Memorandum, 2/12/2009.

[9] Meyers, John. *Duluth's Wild Trout Streams Hanging on, But Need Help*. Duluth News-Tribune, June 28, 2020.

[10] Meyers, John. *Duluth streams hard-hit by development*. Duluth News-Tribune, March 19, 2018.

[11] Vang, Gia. February 2022. *The state of Minnesota's salt dilemma*. [online]. Available from: https://www.kare11.com/article/news/local/kare11-sunrise/minnesota-road-salt-impact/89-b7faf673-a406-4e28-a831-b6f1c51dac62 [Accessed 27 Feb 2023].

This large-scale development will exponentially add to the sodium chloride applications in the area (Sundby Rd, W. Page St.) and the hotel's 112 parking stalls.

"There's plenty of scientific evidence to suggest that freshwater ecosystems are being contaminated by salt from the use of things like road salt beyond the concentration which is safe for freshwater organisms and for human consumption. There are consequences for wildlife, too," said Dr. Bill Hintz, Assistant Professor of Environmental Sciences, University of Toledo. Elevated salinity levels in freshwater ecosystems cause a reduction in the abundance and growth of freshwater organisms and a reduction in their reproduction outputs.[12]

Sodium chloride will runoff into both the wetlands and Miller Creek. When snow and ice melt on roads, the salt washes into the soil, lakes and streams, in some cases contaminating drinking water reservoirs and wells. It has killed or endangered wildlife in freshwater ecosystems, with high chloride levels toxic to fish, bugs and amphibians, according to the Environmental Protection Agency.[13]

ii. **Pathogens** - any organism or agent that can produce disease. The majority of commonly occurring waterborne pathogens in the United States are linked to fecal sources on land. Less ground infiltration near Miller Creek and its wetlands will result in an increased opportunity for pathogens to reach Miller Creek, the St. Louis River, and Lake Superior. There is the potential for increased water quality impairment and the risk of human exposure.[14] Currently, **Miller Creek has four water quality impairments,** two of which have approved studies (total maximum daily loads (TDMLs)). *E. coli* bacteria is one of them, approved by the EPA in 2020.[15] [EXHIBIT 4, pg. 21] Also, in an article by John Myers of the Duluth News-Tribune, "Miller Creek has *E. coli*, too, but also faces compounded problems from too much chloride, or road salt, too warm of water and a lack of invertebrates that make up the base of the food chain for trout."[16]

[12] Gross, Jenny. January 2022. *Road salt works. But it's also bad for the environment.* [online]. Available from: https://www.nytimes.com/2022/01/07/climate/road-salt-water-supply.html [Accessed 27 Feb 2023].

[13] Environmental Protection Agency. Updated February 8, 2023. *Winter is coming! And with it, tons of salt on our roads*. [online]. Available from: https://www.epa.gov/snep/winter-coming-and-it-tons-salt-our-roads [Accessed 28 Feb 2023].

[14] Environmental Protection Agency. Updated April 14, 2022. *Water Quality Topics: Pathogens*. [online]. Available from: https://www.epa.gov/wqclr/water-quality-topics-pathogens [Accessed 27 Feb 2023].

[15] MPCA. October 2020. *Duluth Urban Area Streams Total Maximum Daily Load.* [online]. Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-11e.pdf [Accessed 27 Feb, 2023].

[16] Meyers, John. *Duluth streams hard-hit by development*. Duluth News-Tribune, March 19, 2018.

iii. **Sediment Pollution** - Sediment moves from one place to another through the process of erosion. Similar to green spaces, sediment absorbs microorganisms except it's on the move! Using *E. coli* as an example, pathogens can be transported downstream in sediment. They can survive for up to several months in a sediment reservoir, presenting the risk of re-suspension in the waterway.[17]

Entering pollutants into wetlands and Miller Creek is a violation of the Clean Water Act's objective to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

2. The Importance of Wetland and Shoreland Buffers to Remove Pollutants

[Exhibit 6] When it comes to large developments, the larger the buffer, the better the effectiveness of removing sediments, nutrients, bacteria, and other pollutants from surface water runoff. However, the developer's proposal does not have the required restoration of the natural buffer to the extent feasible, per 50-18.1 D (Duluth's UDC code). In addition, since a linear measurement of 300 feet crosses the impervious surface of Sundby Road, even *less* vegetative buffer lies within that distance. In other words, there are no plans to remove Sundby Road to increase vegetative buffer. To retain wetland-dependent wildlife in important wildlife areas, buffers need to retain plant structure hundreds of feet beyond the wetland.[18] Again, this is not in the developer's proposal.

Per City of Duluth rules, no greater than 30% impervious areas within 300 feet of Miller Creek are allowed.[19] Furthermore, per Duluth's zoning regulations, land located within 300' from a river or stream is subject to shoreland regulations. Note that [Exhibit 6.1] illustrates Miller Creek's shoreland area as cutting the proposed development area of 6 acres in half. See also [Exhibit 6.2], the Shoreland Overlay Map showing the 300' required buffer around Miller Creek.

> ***"The proposed development may be too large for the site, given the existing environmental constraints (wetlands). The proposal doesn't provide an adequate naturally vegetated buffer between the project and the adjacent wetlands, based on the figures in the Staff Report."***[20]

---

[17] Environmental Protection Agency. Updated April 14, 2022. *Water Quality Topics: Pathogens*. [online]. Available from: https://www.epa.gov/wqclr/water-quality-topics-pathogens [Accessed 27 Feb 2023].

[18] https://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Wetland_Buffers_Use_and_Effectiveness.pdf [Accessed 27 Feb 2023].

[19] Environmental Troubleshooters, Inc., Wetland Delineation Report, Sundby Road, Duluth, MN. September 2008.

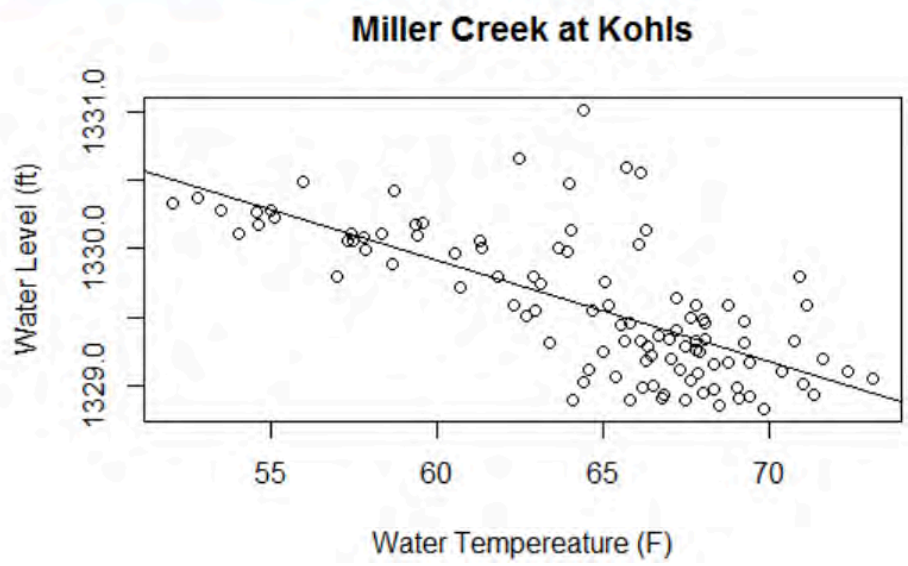
[20] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022.

3. An increase to the stream temperature of Miller Creek

Another water quality impairment of Miller Creek, in addition to *E. coli,* is excessive stream temperature.[21] How will the development impact stream temperature?

[Exhibit 7] Consider the impacts to the area around Kohl's Department Store in Duluth, of which there is ample data indicating a warming Miller Creek. Since this development would be adjacent to Kohl's, warming temperatures will be compounded. The strongest correlations occur during low flow periods, resulting in higher stream temperatures. Wetlands nearest the entrance may become drier, resulting in lower creek flow which correlates to increased temperatures.[22]

Figure 6: Water temperatures versus water levels at Kohl's 2016 (Labuz 2017).



The developer will be removing well over 100 trees and wetland vegetation from undeveloped, mostly forested land, which will contribute to the urban heat island (UHI) that already exists in this heavily-developed commercial area. For example, low levels of riparian shading from upstream of Kohl's to Miller Hill Mall led to much of the current temperature impairments of Miller Creek.[23] The increase in atmospheric heat transfer due to reduced shading, especially from the impacted wetland upstream of Kohl's down to Miller Hill Mall, already has caused maximum daily stream temperatures to increase

[21] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022. Also, MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023].

[22] MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023]. Estabrooks, Tom. Email to the author. 3 Nov. 2022.

[23] Herb, William R. et al. *Stream Temperature Modeling of Miller Creek, Duluth, Minnesota.* University of Minnesota, St. Anthony Falls Laboratory. October 2009, pgs. 5, 6. [online]. Available from: https://conservancy.umn.edu/bitstream/handle/11299/117637/pr535.pdf?sequence=1&isAllowed=y [Accessed 28 Feb 2023].

by up to one degree Celsius.[24] Adding this large hotel would influence the UHI and the health of Miller Creek because when warm water from the UHI ends up flowing into the stream, it will stress the native species that have adapted to life in a cooler aquatic environment.[25] A warming planet due to climate change will only exacerbate the issue.

Currently, extensive wetlands in the upper portion of the watershed are believed to supply much of the hydrologic storage for the watershed.[26] [Exhibit 7.1] "There is a possibility that the development could alter the site hydrology by cutting-off surface and subsurface drainage to the wetlands located between the development and Sundby Road. The stormwater discharge directed to some of the wetlands may replace some of that drainage, but volumes, timing, and duration of the stormwater discharges may alter wetland vegetation and type."[27]

In a study conducted by the Minnesota Pollution Control Agency on Miller Creek, "Elevated stream temperatures are believed to also be negatively affecting the fish and aquatic insect communities."[28] Miller Creek is a naturally-reproducing, brook trout stream. The study goes on to say, "Improvement efforts should be focused on the lower flow conditions, and especially within the stream segment from Haines Road and U.S. Highway 53 to below Miller Hill Mall, to have the greatest temperature mitigation impact."

Restoration began in 2022 to address the aquatic life impairment of Miller Creek behind Kohl's. The primary purpose of the project was to restore the hydrologic and ecologic functions with the goal of reducing stream temperatures and improving aquatic habitat. [Exhibits 8, 9][29]

---

[24] Herb, William R. et al. *Stream Temperature Modeling of Miller Creek, Duluth, Minnesota.* University of Minnesota, St. Anthony Falls Laboratory. October 2009, pg. 60. [online]. Available from: https://conservancy.umn.edu/bitstream/handle/11299/117637/pr535.pdf?sequence=1&isAllowed=y [Accessed 28 Feb 2023].

[25] National Geographic. *Urban Heat Island.* Available from: https://education.nationalgeographic.org/resource/urban-heat-island/ [Accessed 28 Feb 2023].

[26] Herb, William R. et al. *Stream Temperature Modeling of Miller Creek, Duluth, Minnesota.* University of Minnesota, St. Anthony Falls Laboratory. October 2009, pg. 4. [online]. Available from: https://conservancy.umn.edu/bitstream/handle/11299/117637/pr535.pdf?sequence=1&isAllowed=y [Accessed 28 Feb 2023].

[27] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022.

[28] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022. Email to the author. 3 Nov. 2022. Also MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023].

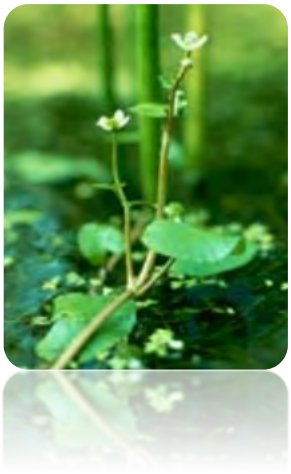
[29] South St. Louis Soil and Water Conservation District, Miller Creek Channel and Floodplain Restoration Project. [online]. Available from: https://www.southstlouisswcd.org/wp-content/uploads/2022/03/Miller-Creek-Channel-and-Floodplain-Restoration-Project-EAW.pdf [Accessed 28 Feb 2023].

"Wetlands provide an important role in Miller Creek through supplying the baseflow to the stream. The rapid recession in the storm hydrographs points to channel storage and surface storage in wetlands rather than in aquifers as the source of water during low flow periods."[30]

"The wetlands in the upper reaches of Miller Creek therefore need to be protected because they play a key role in the hydrology during low flow periods (Erickson et al. 2010)."[31]

4. Unacceptable Query Timeline for the MN Natural Heritage Information System (NHIS)

The Natural Heritage Information System provides information on Minnesota's rare plants, animals, native plant communities and other rare features. Its purpose is to foster better understanding and conservation of these features. Due to the expediency of the development project, ample time has not been allowed to determine the presence of any rare species or other significant natural features in this area.



[Exhibit 10]. In 1994, floating marsh-marigold (*Caltha natans*), a state-listed endangered plant, was documented by NHIS in a shrub swamp and wet meadow along Miller Creek nearby Kohl's in the same general area as the proposed development (within a 1-mile radius).

The best time to search for floating marsh-marigold is from May into September, when flowers or leaves are present.[32] The hotel application was filed early September, 2022. Two appeals against the proposal were heard in December, 2022. Project planning should take into account that botanical surveys need to be conducted during the appropriate time of the year. Since construction is scheduled to begin in the Spring of 2023, an acceptable timeline for an NHIS review is out of reach.

An EAW would address whether the proposed project has the potential to adversely affect the above rare species or any others in the area, and, if so, any avoidance, minimization, or other mitigation measures that will be implemented.

---

[30] MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* Pg. 17. [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023].

[31] MPCA. October 2017. *Miller Creek Water Temperature Total Maximum Daily Load.* Pg. 17. [online). Available from: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb 2023].

[32] South St. Louis Soil and Water Conservation District, Miller Creek Channel and Floodplain Restoration Project. [online]. Available from: https://www.southstlouisswcd.org/wp-content/uploads/2022/03/Miller-Creek-Channel-and-Floodplain-Restoration-Project-EAW.pdf [Accessed 28 Feb 2023].

Conclusion

The purpose of an EAW is to provide information about a project that may have the potential for significant environmental effects. If an EAW was required to *improve* the conditions of Miller Creek near Kohl's approximately 200 feet away from the development site [Exhibit 12], why wouldn't an EAW be required to study the *detrimental impacts* of a large-scale hotel on Miller Creek and its wetlands?[33]

The construction of this hotel would negatively impact the health of Miller Creek and its adjacent wetlands, a violation of "Waters of the United States" under the Clean Water Act (CWA) and the Minnesota Wetland Conservation Act (WCA).

Increases to impervious areas adjacent to wetlands and Miller Creek will add pollutants to the water, increase the temperature of Miller Creek and decrease the quality of Duluth's water. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Minnesota's WCA is designed to achieve no-net-loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands.

Violations exceeding the maximum allowable impervious area in proximity to Miller Creek, in addition to the City directly impacting wetlands for a sidewalk extension, are more indicators this development's location is not being adequately regulated.

On behalf of the Duluth Heights neighborhood and petitioners, the aforementioned arguments provide ample criteria to warrant the implementation of an EAW prior to construction of the hotel at Sundby Rd. and W. Page St., in Duluth, Minnesota.

"… once a green space is developed, that conversion is permanent and constitutes a loss to the watershed, regardless of the mitigating measures put in place through zoning and permitting. So, while efforts to restore the stream are ongoing, so are the impacts."[34]

[Exhibit 13] Source materials for inclusion.

Petitioners' Representative,

Becca Mulenburg
1649 W Page St., Duluth, MN 55811 • email: beccamulenburg@yahoo.com • 218-380-7349 (c)

[33] Miller Creek Channel and Floodplain Restoration Project EAW. [online]. Available from: https://www.southstlouisswcd.org/wp-content/uploads/2022/03/Miller-Creek-Channel-and-Floodplain-Restoration-Project-EAW.pdf [Accessed 2 March 2023.]

[34] Estabrooks, Tom. MPCA, Project Mgr., Watershed Division., Duluth, MN. Email to the author. 3 Nov. 2022.

THE CITY OF DULUTH MINNESOTA

Planning & Development Division
Planning & Economic Development Department

Room 160
411 West First Street
Duluth, Minnesota 55802

218-730-5580
planning@duluthmn.gov

File Number	PL 22-143	**Contact**	Chris Lee, clee@duluthmn.gov	
Type	MU-C Planning Review	**Planning Commission Date**		September 13, 2022
Deadline for Action	**Application Date**	September 7, 2022	**60 Days**	September 19, 2022
	Date Extension Letter Mailed	September 7, 2022	**120 Days**	November 18, 2022
Location of Subject	Sundby Road and W Page Street			
Applicant	Kinseth Hotel Corporation	**Contact**	Aaron Mailey	
Agent	Northland Consulting Engineers	**Contact**	David Bolf	
Legal Description	Parcel ID Number 010-2710-04594			
Site Visit Date	September 1, 2022	**Sign Notice Date**		August 30, 2022
Neighbor Letter Date	August 31, 2022	**Number of Letters Sent**		15

Proposal

The applicant is proposing to construct a 4-story hotel with 112 parking stalls.

Staff Recommendation

Staff is recommending that planning commission approve the planning review.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	MU-C	Undeveloped	Central Business Secondary
North	MU-C	Undeveloped	Central Business Secondary
South	MU-C	Undeveloped	Central Business Secondary
East	MU-C	Undeveloped	Low Density Residential
West	RR-1	Commercial - Retail	Open Space

Summary of Code Requirements

50-15.3.E MU-C District – Planning review by the Planning Commission is required for most development and redevelopment. Development Standards:

1. The location, size and number of curb cuts shall be designed to minimize traffic congestion or hazard in the area. Any traffic control improvements required as a result of the proposal such as traffic signals, turning lanes, medians, signage and other types of improvements necessary to accommodate traffic flow to and from the proposed project shall be paid for by the property owner. Any additional right-of-way or easements needed shall be provided by the property owner at no cost to the city;
2. Any necessary public easements over the subject property shall be dedicated, and any necessary improvements within such easements or other easements adjacent to the subject property shall be made.

50-18.1 Shoreland, Flood Plains, Wetlands, Stormwater.
50-23 Connectivity and Circulation – Focuses on pedestrian and bicycle accommodations.
50-24 Parking and Loading – Addresses required parking spaces, loading docks, and snow storage.
50-25 Landscaping and Tree Preservation – Landscaping requirements and tree preservation
50-26 Screening, Walls, and Fences – Screening of equipment, loading areas, etc., plus fences & retaining walls.
50-29 Sustainability Standards – Sustainability point system for new development.
50-30 Design Standards – Building standards for multi-family, commercial, institutional, and industrial buildings.
50-31 Exterior Lighting – Directs the minimum and maximum illumination values and lighting fixtures for a site.

50-37.11 Planning Review – Planning Commission shall approve the Planning Review or approve it with modifications, if it is determined that the application complies with all applicable provisions of this Chapter.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):

Governing Principles
Governing Principle #4 – Support economic growth sectors, including tourism.

Future Land Use
Central Business Secondary: An area adjacent to and supporting the central business primary area or a stand -alone area providing a similar mix of destination land uses but at a lower intensity than the primary CB area. Includes mixed regional and neighborhood retail, employment centers, public spaces, medium density residential, and public parking facilities.

Review and Discussion Items

Staff finds:

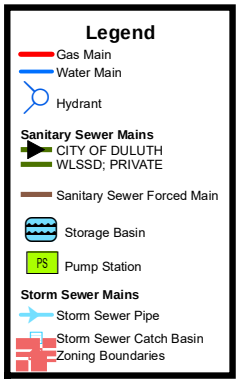
1) The applicant is proposing to construct a 4 story, 51' tall hotel. The applicant will be required to verify the maximum height of the structure at the time of building permit application.
2) 50-15.3 (MU-C District) –Not Applicable: The applicant is not proposing any public easements.
3) 50-18.1.B (Wetlands) – Wetland delineation performed June 2022 show that wetlands are present on site, but will not be impacted.
4) 50-18.1.E (Stormwater Management) –Storm water will be routed to two basins that will discharge to adjacent wetlands.
5) 50-23 (Connectivity) – Not applicable as Sundby Road does not have sidewalks nor is it shown on any bikeways, trail, or pedestrian plan.
6) 50-24 (Parking) – The plan shows 112 parking stalls which is the maximum (2 spaces per 3 guest rooms): 53 in the front, 58 in the rear and side.
7) 50-25 (Landscaping) – The landscape plan shows 21 trees, exceeding the required 19 for parking lot coverage. The required frontage landscaping is met with 33 trees and 149 shrubs. The applicant will must provide details of interior parking lot landscaping that meets the UDC requirements in 50-25.4.B
8) 50-26 (Screening) – The applicant proposes UDC compliant trash enclosure in the north corner of the parking lot. Any ground mounted or roof mounted mechanicals are required to be screened.
9) 50-27 (Signs) – None shown, but can be obtained via a separate permit.
10) 50-29 (Sustainability) – This development will be required to obtain a minimum of 4 sustainability points.
11) 50-30 (Design Standards) – The proposed plans meet requirements.
12) 50-31 (Exterior Lighting) – The applicant has submitted a photometric plan that indicates UDC compliant lighting.
13) No comments have been received from City or other agencies or the general public.
14) Per UDC 50-37.1.N, an approved Planning Review will expire if the project or activity authorized is not begun within one year, which may be extended for one additional year at the discretion of the Land Use Supervisor

Staff Recommendation

Based on the above findings, Staff recommends that Planning Commission the Planning Review with the following conditions:

1.) Applicant shall construct and maintain the project as identified in the attached exhibits.
2.) Applicant shall verify that the height meets the maximum allowed in the MU-C zone district.
3.) Applicant shall show on the landscaping plans that interior parking lot landscaping requirement is meet prior to staff approval of the building permit.
4.) Applicant shall submit details of any mechanical screening prior to approval of the building permit.
5.) Applicant shall submit plans that indicate a minimum of 4 sustainability points are achieved.
6.) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission approval; however, no such administrative approval shall constitute a variance from the provisions of Chapter 50.

PL22-143
CUP, Plan Review
Sundby Road



271004570
224000690
1602
OSAGE AVE
224000610
325700050
271004575
224000710
MU-C
(Mixed Use
Commercial)
325700012
1516
OSAGE AVE
224000600
271004594
325700060
Sundby Road
Osage Ave
224000730
RR-1 (Rural
Residential 1)
271004597
325700010
2115 MILLER
TRUNK HWY
1504
OSAGE AVE
2", MDPE
224000740
271004592
271004590
271004593
224000750
325700011
325700062
1745 W
PAGE ST
Maple Grove Road
2", MDPE
3", MDPE
W Page St
3", MDPE
271004640
1832 MAPLE
GROVE RD
271004654
271004653
0 65 130 260 390 Feet

Aerial photography flown 2019

Prepared by: City of Duluth Planning & Economic Development, October 5, 2021, Source: City of Duluth

OSAGE STREET

RIGHT OF WAY TO BE DEDICATED TO CITY OF DULUTH

33'

33'

66'

SITE

SEDIMENT REMOVAL STRUCTURE

DRAINAGE CONTROL STRUCTURE

SEDIMENT REMOVAL STRUCTURE

1352.0

1350.0

1353.0

1349.0

1350.5

1348.5

1350.0

1352.0

FLOW

NEW BUILDING
FFE=1351.00

TRASH ENCLOSURE
SEE ARCH

POND ELEV=1345.00

WEST PAGE STREET

MAPLE GROVE ROAD

SUNDBY ROAD

1+00

2+00

3+00

4+00

5+00

6+00

7+00

8+00

66' ROW

EXTEND URBAN SECTION OF SUNDBY ROAD

VAULT
EL=1343.66
INFO

TOPOGRAPHIC SURVEY PROVIDED BY
ALTA LAND SURVEYING COMPANY, 2018

0' 30' 60'

Northland
Consulting Engineers L.L.P.
Structural, Civil and Forensic Engineering Services
www.nce-engineers.com
Voice: (218)727-5995
Fax: (218)727-7779

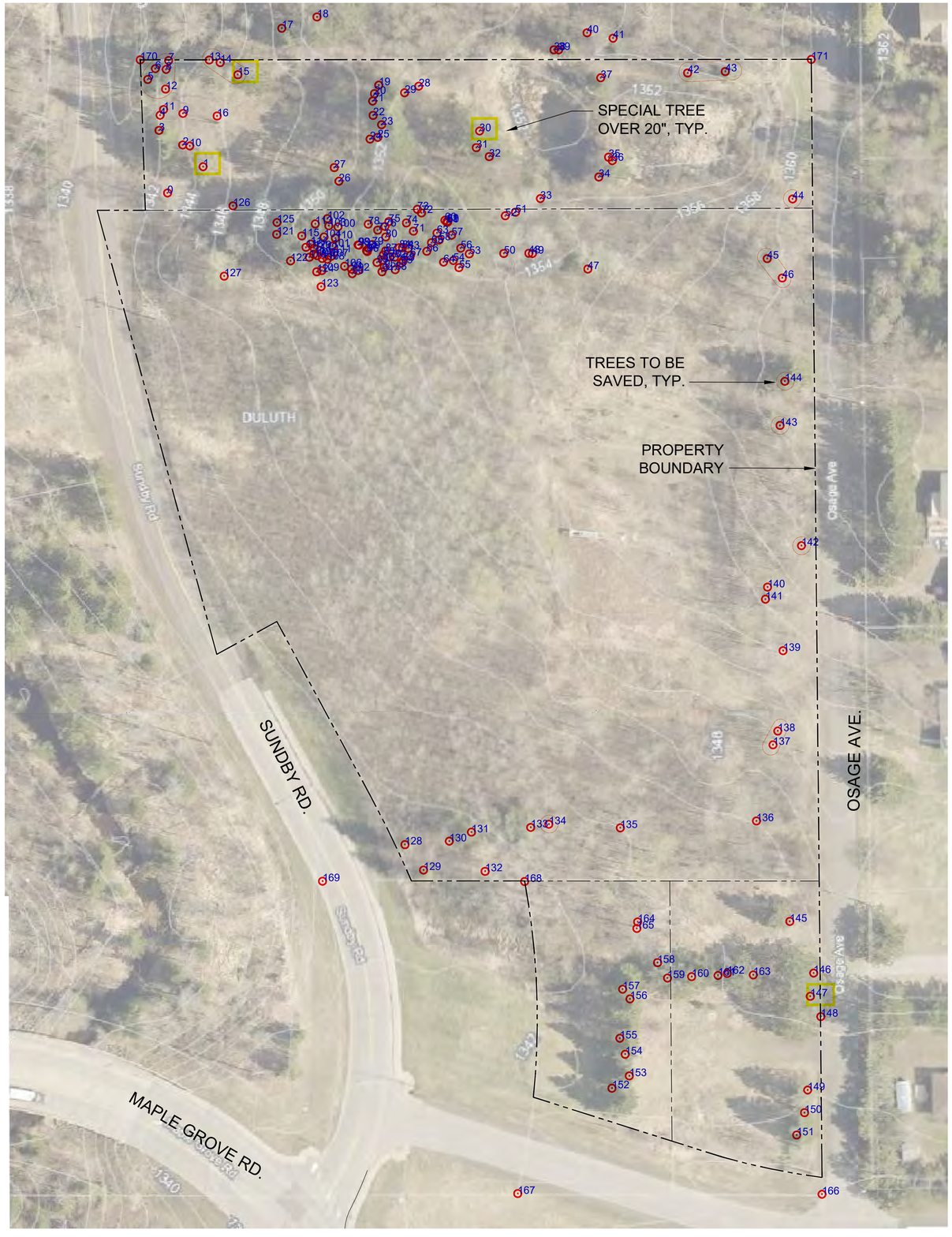
KINSETH HOTEL CORPORATION
SITE DEVELOPMENT
SE 1/4 OF NE 1/4 SEC 18 T50N R14W

revision

Proj: 21-660
Date: 08/04/22
Drawn: JDO
Checked: DGB

SD SITE PLAN
Sheet Title

Sheet Number
1 OF 1



Pt ID	Species	Diameter	Comment	UDC Classification
0	White Birch	10.75	Removed	Tree of Interest
1	White Spruce	22.00	Removed	Special Tree
2	Balsam Fir	14.25	Removed	Tree of Interest
3	Balsam Fir	10.50	Removed	Tree of Interest
4	White Spruce	17.50	Removed	Special Tree
5	Balsam Fir	13.75	SAVED	Tree of Interest
6	White Spruce	13.50	SAVED	Special Tree
7	White Spruce	10.00	SAVED	Special Tree
8	White Spruce	12.50	SAVED	Special Tree
9	Silver Maple	16.25	Removed	Tree of Interest
10	Silver Maple	29.50	Removed	Tree of Interest
11	Silver Maple	11.25	Removed	Tree of Interest
12	Silver Maple	13.00	SAVED	Tree of Interest
13	White Spruce	15.25	SAVED	Special Tree
14	White Spruce	12.25	SAVED	Special Tree
15	Red Pine	23.25	SAVED	Special Tree
16	White Birch	14.00	Removed	Tree of Interest
17	Balsam Fir	13.50	*Off Property*	Tree of Interest
18	Red Pine	17.50	*Off Property*	Special Tree
19	White Spruce	16.25	Removed	Special Tree
20	White Spruce	12.75	Removed	Special Tree
21	White Spruce	12.50	Removed	Special Tree
22	White Spruce	15.75	Removed	Special Tree
23	Red Pine	15.75	Removed	Special Tree
24	Red Pine	15.50	Removed	Special Tree
25	Red Pine	18.25	Removed	Special Tree
26	Red Pine	19.00	Removed	Special Tree
27	Red Pine	17.50	Removed	Special Tree
28	Sugar Maple	15.25	Removed	Special Tree
29	Red Oak	7.00	Removed	Tree of Interest
30	Red Pine	22.50	Removed	Special Tree
31	Red Pine	19.75	Removed	Special Tree
32	Jack Pine	18.50	Removed	Tree of Interest
33	White Spruce	7.75	Removed	Tree of Interest
34	Red Pine	12.75	Wetland Tree	Special Tree
35	Tamarack	7.00	Wetland Tree	Tree of Interest
36	Jack Pine	8.50	Wetland Tree	Tree of Interest
37	White Spruce	8.50	Wetland Tree	Special Tree
38	White Spruce	13.00	*Off Property*	Special Tree
39	White Spruce	9.75	*Off Property*	Special Tree
40	White Birch	12.00	*Off Property*	Tree of Interest
41	White Spruce	12.75	*Off Property*	Special Tree
42	White Spruce	7.75	SAVED	Tree of Interest
43	White Spruce	7.50	SAVED	Tree of Interest
44	Tamarack	9.25	SAVED	Tree of Interest
45	White Birch	10.50	SAVED	Tree of Interest
46	Green Ash	11.25	SAVED	Tree of Interest
47	Quaking Aspen	16.00	Removed	Tree of Interest
48	Paper Birch	11.25	Removed	Tree of Interest
49	Quaking Aspen	17.00	Removed	Tree of Interest
50	Quaking Aspen	13.50	Removed	Tree of Interest
51	Quaking Aspen	10.25	Removed	Tree of Interest
52	Quaking Aspen	11.50	Removed	Tree of Interest
53	Red Pine	14.50	Removed	Special Tree
54	Red Pine	12.50	Removed	Special Tree
55	Red Pine	10.50	Removed	Special Tree
56	Red Pine	14.00	Removed	Special Tree
57	Red Pine	10.50	Removed	Special Tree
58	Red Pine	10.00	Removed	Special Tree
59	Red Pine	11.50	Removed	Special Tree
60	Red Pine	13.75	Removed	Special Tree
61	Red Pine	11.75	Removed	Special Tree
62	Red Pine	10.50	Removed	Special Tree
63	Red Pine	8.25	Removed	Special Tree
64	Red Pine	14.00	Removed	Special Tree
65	Red Pine	11.75	Removed	Special Tree
66	Red Pine	6.50	Removed	Tree of Interest
67	Red Pine	10.25	Removed	Special Tree
68	Red Pine	15.00	Removed	Special Tree
69	Red Pine	13.75	Removed	Special Tree
70	Red Pine	10.00	Removed	Special Tree
71	Red Pine	12.00	Removed	Special Tree
72	Red Pine	13.00	Removed	Special Tree
73	Red Pine	12.75	Removed	Special Tree
74	Red Pine	9.25	Removed	Special Tree
75	White Birch	13.00	Removed	Tree of Interest
76	Red Pine	12.25	Removed	Special Tree
77	Red Pine	10.50	Removed	Special Tree
78	Red Pine	13.25	Removed	Special Tree
79	Red Pine	9.50	Removed	Special Tree
80	Red Pine	7.25	Removed	Tree of Interest
81	Red Pine	7.75	Removed	Tree of Interest
82	Red Pine	8.00	Removed	Special Tree
83	Red Pine	8.00	Removed	Special Tree
84	Red Pine	8.75	Removed	Special Tree
85	Red Pine	9.25	Removed	Special Tree

Pt ID	Species	Diameter	Removed	UDC Classification
86	Red Pine	10.75	Removed	Special Tree
87	Red Pine	10.25	Removed	Special Tree
88	Red Pine	14.25	Removed	Special Tree
89	Red Pine	8.25	Removed	Special Tree
90	Red Pine	15.00	Removed	Special Tree
91	Red Pine	6.75	Removed	Special Tree
92	Red Pine	14.00	Removed	Special Tree
93	Red Pine	8.00	Removed	Special Tree
94	Red Pine	6.50	Removed	Tree of Interest
95	Red Pine	9.50	Removed	Special Tree
96	Red Pine	8.00	Removed	Special Tree
97	Red Pine	10.50	Removed	Special Tree
98	Red Pine	10.50	Removed	Special Tree
99	Red Pine	8.75	Removed	Special Tree
100	Red Pine	8.25	Removed	Special Tree
101	Red Pine	10.50	Removed	Special Tree
102	Red Pine	11.00	Removed	Special Tree
103	Red Pine	11.50	Removed	Special Tree
104	Red Pine	10.00	Removed	Special Tree
105	Red Pine	8.75	Removed	Special Tree
106	Red Pine	7.50	Removed	Tree of Interest
107	Red Pine	8.50	Removed	Special Tree
108	Red Pine	10.50	Removed	Special Tree
109	Red Pine	6.25	Removed	Tree of Interest
110	Red Pine	14.20	Removed	Special Tree
111	Red Pine	7.50	Removed	Tree of Interest
112	Red Pine	10.00	Removed	Special Tree
113	Red Pine	14.00	Removed	Special Tree
114	Red Pine	11.75	Removed	Special Tree
115	Red Pine	14.50	Removed	Special Tree
116	Red Pine	9.75	Removed	Special Tree
117	Red Pine	8.50	Removed	Special Tree
118	Red Pine	6.50	Removed	Tree of Interest
119	Red Pine	8.75	Removed	Special Tree
120	Red Pine	6.00	Removed	Tree of Interest
121	Red Pine	14.00	Removed	Special Tree
122	Red Pine	16.00	Removed	Special Tree
123	Red Pine	16.00	Removed	Special Tree
124	Red Pine	14.75	Removed	Special Tree
125	Balsam Fir	10.50	Removed	Tree of Interest
126	White Spruce	9.25	Removed	Special Tree
127	Quaking Aspen	14.75	Removed	Tree of Interest
128	White Spruce	12.50	Wetland Tree	Special Tree
129	White Spruce	9.50	Wetland Tree	Special Tree
130	White Spruce	8.25	Wetland Tree	Special Tree
131	White Spruce	11.50	Wetland Tree	Special Tree
132	Quaking Aspen	10.25	Wetland Tree	Tree of Interest
133	Quaking Aspen	10.25	Wetland Tree	Tree of Interest
134	Quaking Aspen	11.00	SAVED	Tree of Interest
135	Quaking Aspen	11.50	Wetland Tree	Tree of Interest
136	Quaking Aspen	12.25	Wetland Tree	Tree of Interest
137	Quaking Aspen	11.25	SAVED	Tree of Interest
138	Quaking Aspen	10.75	SAVED	Tree of Interest
139	Quaking Aspen	10.00	Removed	Tree of Interest
140	Quaking Aspen	10.75	Removed	Tree of Interest
141	Quaking Aspen	11.00	Removed	Tree of Interest
142	Quaking Aspen	11.75	SAVED	Tree of Interest
143	White Spruce	9.50	SAVED	Special Tree
144	White Spruce	17.75	SAVED	Special Tree
145	White Spruce	16.25	Out of Development Area	Special Tree
146	Red Pine	18.50	Out of Development Area	Special Tree
147	Red Pine	20.00	Out of Development Area	Special Tree
148	Red Pine	19.50	Out of Development Area	Special Tree
149	White Spruce	19.50	Out of Development Area	Special Tree
150	White Spruce	15.25	Out of Development Area	Special Tree
151	Balsam Fir	12.50	Out of Development Area	Tree of Interest
152	White Spruce	17.50	Out of Development Area	Special Tree
153	White Spruce	18.00	Out of Development Area	Special Tree
154	White Spruce	16.00	Out of Development Area	Special Tree
155	White Spruce	14.25	Out of Development Area	Special Tree
156	White Spruce	19.50	Out of Development Area	Special Tree
157	White Spruce	16.75	Out of Development Area	Special Tree
158	Red Pine	13.25	Out of Development Area	Special Tree
159	Red Pine	17.75	Out of Development Area	Special Tree
160	White Spruce	10.50	Out of Development Area	Special Tree
161	White Spruce	9.50	Out of Development Area	Special Tree
162	White Spruce	10.50	Out of Development Area	Special Tree
163	Red Pine	17.00	Out of Development Area	Special Tree
164	Balsam Poplar	11.50	Out of Development Area	Tree of Interest
165	Balsam Poplar	14.50	Out of Development Area	Tree of Interest
166		0.00	*Property Corner*	
167		0.00	*Property Corner*	
168		0.00	*Property Corner*	
169		0.00	*Property Corner*	
170		0.00	*Property Corner*	
171		0.00	*Property Corner*	

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

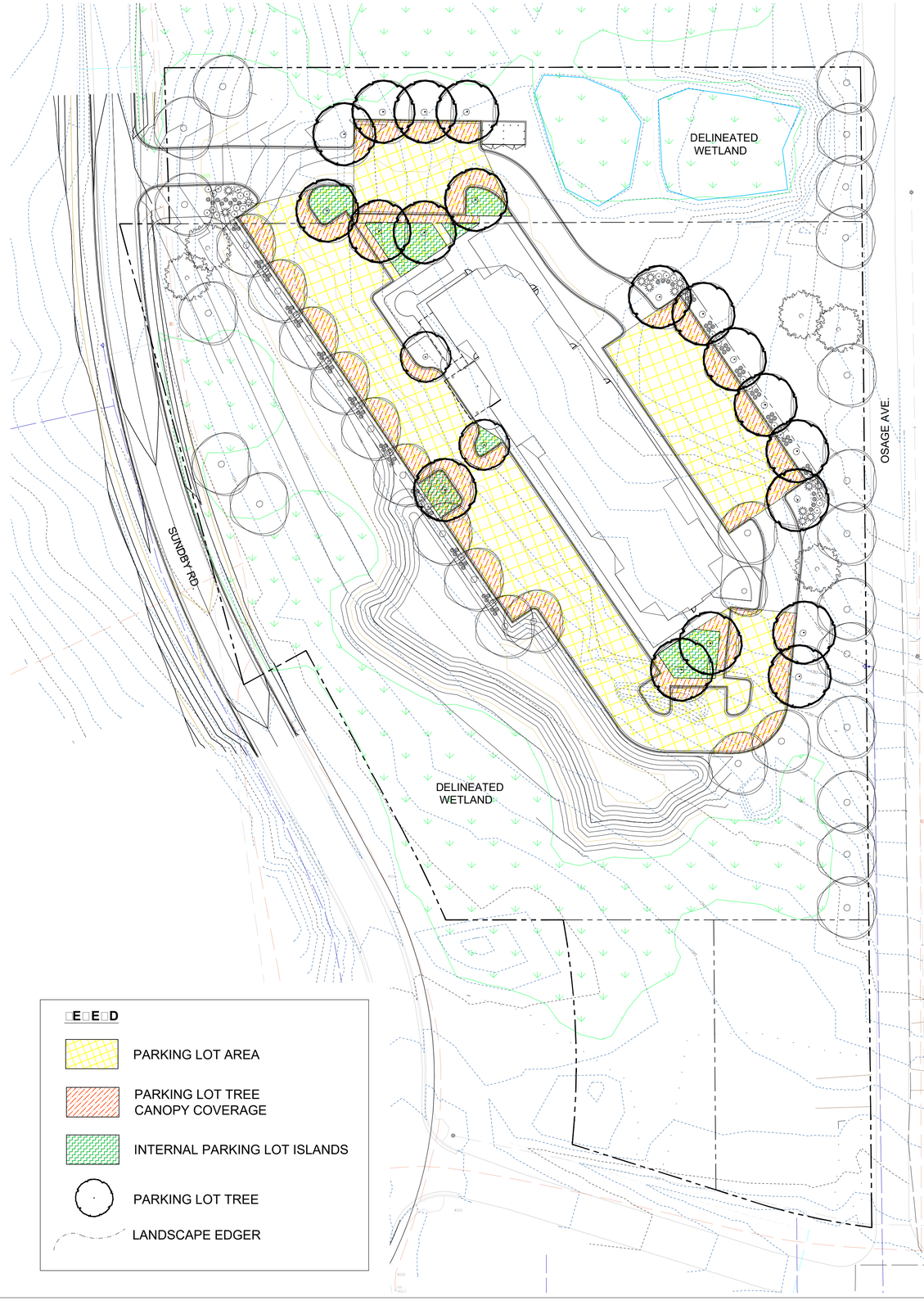
0 40' 80'
ONE INCH

Sheet Key

Sheet Title
TREE INVENTORY

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS
Project Number 22100
Sheet Number L-1.0

Aug 05, 2022 - 10:29am
P:\22100 - Sundby Road\Tree\Sht\SD1 - 22100 - Sundby Rd Tree.dwg



UDC CALCULATIONS

PARKING LOT SIZE:	**45,545 SF (112 SPACES)**
INTERIOR LANDSCAPING:	45,545 SF PARKING AREA INTERNAL ISLANDS REQUIRED: 6,832 SF PROVIDED: 3,705 SF (8.1%) 1 TREE/300 SF INTERNAL LANDSCAPE AREA REQUIRED: 19 TREES PROVIDED: 21 TREES MINIMUM 30% TREE CANOPY REQUIRED REQUIRED: 13,664 SF PROVIDED: 14,014 SF
STREET FRONTAGE #1 LINEAR STREET FOOTAGE:	**SUNDBY RD.** 600 LF
TREES:	1 TREE/35 FT. LINEAR FRONTAGE REQUIRED: 17 TREES PROVIDED: 17 TREES
SHRUBS:	3 LARGE SHRUBS/25 FT. LINEAR FRONTAGE REQUIRED: 72 LARGE SHRUBS/GRASSES PROVIDED: 82 LARGE SHRUBS/GRASSES
STREET FRONTAGE #2 LINEAR STREET FOOTAGE:	**OSAGE AVE.** 550 LF
TREES:	1 TREE/35 FT. LINEAR FRONTAGE REQUIRED: 16 TREES PROVIDED: 16 TREES
SHRUBS:	3 LARGE SHRUBS/25 FT. LINEAR FRONTAGE REQUIRED: 66 LARGE SHRUBS/GRASSES PROVIDED: 67 LARGE SHRUBS/GRASSES
	ALL PLANT SELECTIONS WILL MEET UDC REQUIREMENTS
	ALL SHRUB PLANTING BEDS TO INCLUDE 3-4" SHREDDED HARDWOOD MULCH WITH LANDSCAPE FABRIC ALL DISTURBED AREAS NOT PLANTED WITH SHRUBS/ TREES ARE TO BE SODDED OR PLANTED WITH NATIVE GRASSES; SEE PLANS FOR DETAIL.

LANDSCAPE KEY

	Common Name	Scientific Name	Size	Type	Quantity	Height	Width
TREES							
AM	Apollo Maple	Acer saccharum 'Barrett Cole'	2.5"	B&B		25'	10-15'
BL	Boulevard Linden	Tilia americana 'Boulevard'	2.5"	B&B		50-60'	25-30'
FFM	Fall Fiesta Maple	Acer saccharum 'Bailsta'	2.5"	B&B		50-75'	50'
JE	Jefferson Elm	Ulmus americana 'Jefferson'	2.5"	B&B		70'	50'
MSO	Majestic Skies Oak	Quercus ellipsoidalis 'Bailskies'	2.5"	B&B		60'	45'
NFM	Northern Flare Maple	Acer saccharum 'Sisseton'	2.5"	B&B		40-50'	30-40'
NP	Norway Pine	Pinus resinosa	6'	B&B		50-80'	30-40'
PE	Princeton Elm	Ulmus americana 'Princeton'	2.5"	B&B		60'	40'
SL	Sentry Linden	Tilia americana 'McKSentry'	2.5"	B&B		40-45'	25-30'
SWO	Swamp White Oak	Quercus bicolor	2.5"	B&B		50-60'	40-50'
WS	White Spruce	Picea glauca	6'	B&B		40-60'	15-20'
SHRUBS							
APS	Acrocona Pusch Spruce	Picea abies 'Acrocona Pusch'	#3	Container		2-3'	3-4'
BBH	Butterfly Bush Honeysuckle	Diervilla sessilifolia 'Butterfly'	#2	Container		3-5'	3-4'
DPB	Double Play Big Bang Spirea	Spiraea japonica 'Tracy'	#2	Container		2-3'	2-3'
LGJ	Lime Glow Juniper	Juniperus horizontalis 'Lime Glow'	#3	Container		18"	3-5'
ORNAMENTAL GRASSES							
ORG	Overdam Feather Reed Grass	Calamagrostis x acutiflora 'Overdam'	#1	Container		24-36"	18"
SSG	Shenandoah Red Switch Grass	Panicum virgatum 'Shenandoah'	#1	Container		36"	24"
TPD	Tara Prairie Dropseed	Sporobolus heterolepis 'Tara'	#1	Container		18-24"	12"

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, Suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

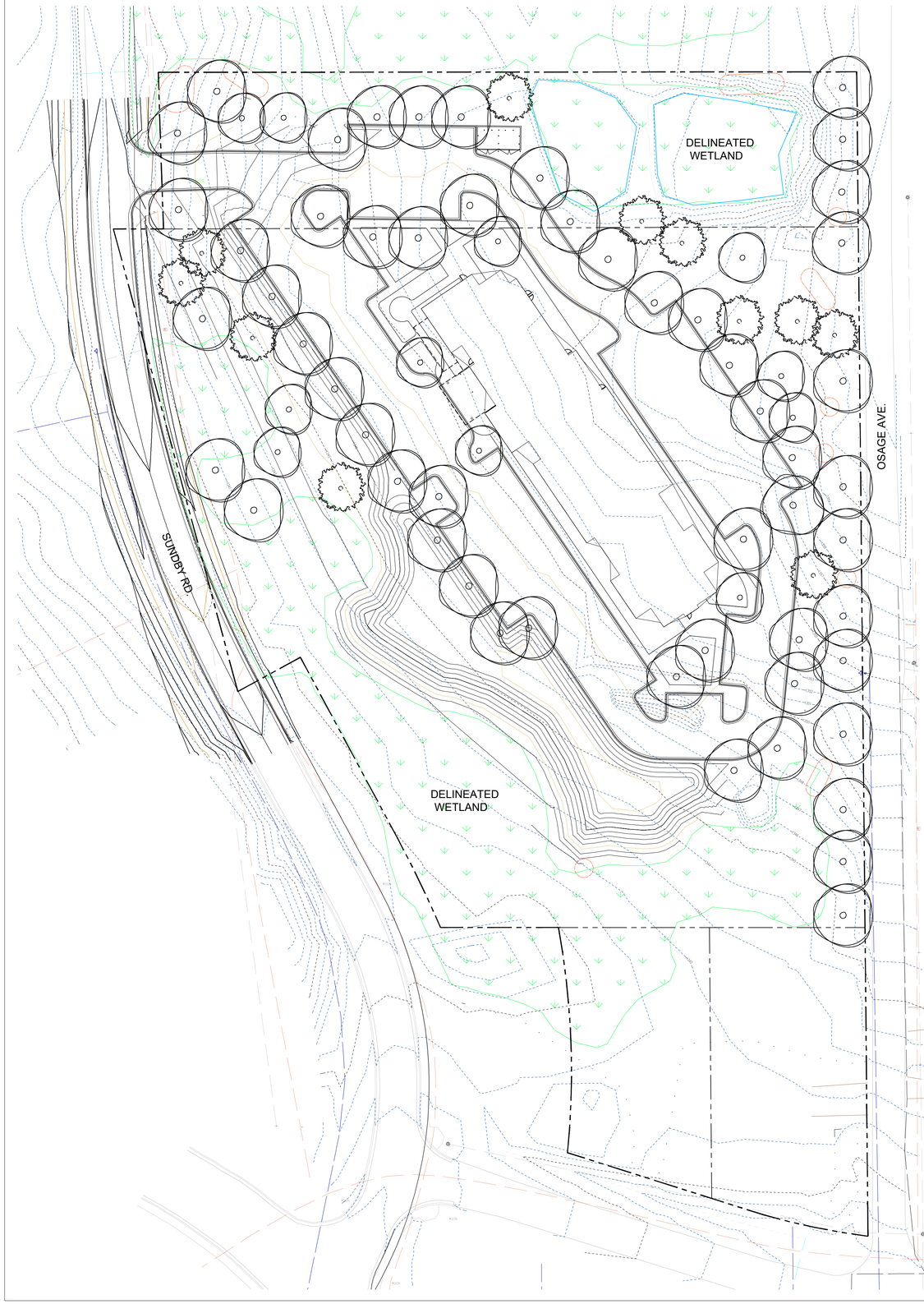
0 40' 80'
ONE INCH

Sheet Key

Sheet Title
UDC LANDSCAPE PLAN

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS
Project Number 22100
Sheet Number L-1.1

Aug 03, 2022 - 10:52am
P:\22100 - Sundby Road Hotel\Sheets\BS - 22100 - Sundby Rd Hotel.dwg



TREE PRESERVATION AND REPLACEMENT PLAN

TREE PRESERVATION CREDITS (50-25.6)			
DBH of Preserved Tree	**Quantity**	**# of Trees Credited**	**Total**
Over 12 in.	8	3	24
8 in. to 11.9 in.	9	2	18
5 in. to 7.9 in.	2	1	2
TOTAL TREE CREDITS		**44**	

TREES TO BE REMOVED

SPECIAL TREES

ID NO.	Species	DBH	UDC Designation
1	White Spruce	22.00	Special Tree
4	White Spruce	17.50	Special Tree
19	White Spruce	16.25	Special Tree
20	White Spruce	12.75	Special Tree
21	White Spruce	12.50	Special Tree
22	White Spruce	15.75	Special Tree
23	Red Pine	15.75	Special Tree
24	Red Pine	15.50	Special Tree
25	Red Pine	18.25	Special Tree
26	Red Pine	19.00	Special Tree
27	Red Pine	17.50	Special Tree
28	Sugar Maple	15.25	Special Tree
30	Red Pine	22.50	Special Tree
31	Red Pine	19.75	Special Tree
53	Red Pine	14.50	Special Tree
54	Red Pine	12.50	Special Tree
55	Red Pine	10.50	Special Tree
56	Red Pine	14.00	Special Tree
57	Red Pine	10.50	Special Tree
58	Red Pine	10.00	Special Tree
59	Red Pine	11.50	Special Tree
60	Red Pine	13.75	Special Tree
61	Red Pine	11.75	Special Tree
62	Red Pine	10.50	Special Tree
63	Red Pine	8.25	Special Tree
64	Red Pine	14.00	Special Tree
65	Red Pine	11.75	Special Tree
67	Red Pine	10.25	Special Tree
68	Red Pine	15.00	Special Tree
69	Red Pine	13.75	Special Tree
70	Red Pine	10.00	Special Tree
71	Red Pine	12.00	Special Tree
72	Red Pine	13.00	Special Tree
73	Red Pine	12.75	Special Tree
74	Red Pine	9.25	Special Tree
76	Red Pine	12.25	Special Tree
77	Red Pine	10.50	Special Tree
78	Red Pine	13.25	Special Tree
79	Red Pine	9.50	Special Tree
82	Red Pine	8.00	Special Tree
83	Red Pine	8.00	Special Tree
84	Red Pine	8.75	Special Tree
85	Red Pine	9.25	Special Tree
86	Red Pine	10.75	Special Tree
87	Red Pine	10.25	Special Tree
88	Red Pine	14.25	Special Tree
89	Red Pine	8.25	Special Tree
90	Red Pine	15.00	Special Tree
91	Red Pine	6.75	Special Tree
92	Red Pine	14.00	Special Tree
93	Red Pine	8.00	Special Tree
95	Red Pine	9.50	Special Tree
96	Red Pine	8.00	Special Tree
97	Red Pine	10.50	Special Tree
98	Red Pine	10.50	Special Tree
99	Red Pine	8.75	Special Tree
100	Red Pine	8.25	Special Tree
101	Red Pine	10.50	Special Tree
102	Red Pine	11.00	Special Tree
103	Red Pine	11.50	Special Tree
104	Red Pine	10.00	Special Tree
105	Red Pine	8.75	Special Tree
107	Red Pine	8.50	Special Tree
108	Red Pine	10.50	Special Tree
110	Red Pine	14.20	Special Tree
112	Red Pine	10.00	Special Tree
113	Red Pine	14.00	Special Tree
114	Red Pine	11.75	Special Tree
115	Red Pine	14.50	Special Tree
116	Red Pine	9.75	Special Tree
117	Red Pine	8.50	Special Tree
119	Red Pine	8.75	Special Tree
121	Red Pine	14.00	Special Tree
122	Red Pine	16.00	Special Tree
123	Red Pine	16.00	Special Tree
124	Red Pine	14.75	Special Tree
126	White Spruce	9.25	Special Tree
	Total DBH Removed	**944.2**	

TREES TO BE REMOVED

TREES OF INTEREST

ID NO.	Species	DBH	UDC Designation
0	White Birch	10.75	Tree of Interest
2	Balsam Fir	14.25	Tree of Interest
3	Balsam Fir	10.50	Tree of Interest
9	Silver Maple	16.25	Tree of Interest
10	Silver Maple	29.50	Tree of Interest
11	Silver Maple	11.25	Tree of Interest
16	White Birch	14.00	Tree of Interest
29	Red Oak	7.00	Tree of Interest
32	Jack Pine	18.50	Tree of Interest
33	White Spruce	7.75	Tree of Interest
47	Quaking Aspen	16.00	Tree of Interest
48	Paper Birch	11.25	Tree of Interest
49	Quaking Aspen	17.00	Tree of Interest
50	Quaking Aspen	13.50	Tree of Interest
51	Quaking Aspen	10.25	Tree of Interest
52	Quaking Aspen	11.50	Tree of Interest
66	Red Pine	6.50	Tree of Interest
75	White Birch	13.00	Tree of Interest
80	Red Pine	7.25	Tree of Interest
81	Red Pine	7.75	Tree of Interest
94	Red Pine	6.50	Tree of Interest
106	Red Pine	7.50	Tree of Interest
109	Red Pine	6.25	Tree of Interest
111	Red Pine	7.50	Tree of Interest
118	Red Pine	6.50	Tree of Interest
120	Red Pine	6.00	Tree of Interest
125	Balsam Fir	10.50	Tree of Interest
127	Quaking Aspen	14.75	Tree of Interest
139	Quaking Aspen	10.00	Tree of Interest
140	Quaking Aspen	10.75	Tree of Interest
141	Quaking Aspen	11.00	Tree of Interest
Removed		**351.0**	

DBH REPLACEMENT REQUIREMENTS (50-25.9)

Tree Type	# to be Removed	DBH to be Removed	% DBH to be Replaced	Replacement Requirement (in.)
Trees of Interest	31	351.0	20%	70.2
Special Trees	77	944.2	40%	377.7
TOTAL	*108*	*1295.2*	n/a	**447.9**

TREE REPLACEMENT CALCULATIONS: Trees to be Planted

IF REPLACING WITH:	Trees of Interest (1 in/ 1 in required)
Number of Trees	180
Caliper of Trees	2.5
TOTAL INCHES REPLACED	**450**
TOTAL INCHES REQUIRED	*447.9*

IF REPLACING WITH:	Special Trees (1 in/ 1.5 in required)
Number of Trees	120
Caliper of Trees	2.5
TOTAL INCHES REPLACED	**450**
TOTAL INCHES REQUIRED	*447.9*

TREE REPLACEMENT w/ TREE PRESERVATION CREDITS:

TOTAL TREE CREDITS=	**44**
SPECIAL TREES REQ'D=	120
TREES OF INTEREST REQ'D=	180

Per **UDC Section 50-25.6,** trees to be preserved will count towards the total number needed for replacement, up to 50%. With those factored in, the following are the final replacement numbers for both Special Trees and Trees of Interest:

SPECIAL TREES REQUIRED=	**76**
TREES OF INTEREST REQUIRED=	**136**

TREE REPLACEMENT NOTE:

REPLACEMENT TREE QUANTITY CAN BE REDUCED BY CONTRIBUTING CASH IN LIEU TO THE CITY TREE FUND. TREE QUANTITIES SHOWN ARE USING SPECIAL TREE SPECIES (USING OTHER SPECIES WOULD REQUIRE ADDITIONAL TREE PLANTINGS; SEE CHART 50-25.6).

SAS
LANDSCAPE ARCHITECTURE
+ ASSOCIATES
WWW.SASLANDARCH.COM
219 West First Street, suite 350
Duluth, MN 55802
(p) 218.391.1335
mail@saslandarch.com

Issue Record/Revision

Purpose	Date

KINSETH HOTEL CORPORATION

SUNDBY RD.
DULUTH, MINNESOTA

0 40' 80'
ONE INCH

Sheet Key

Sheet Title
TREE REPLACEMENT PLAN

Date: 8/5/2022
Drawn By: AMA
Checked By: LWS

Project Number 22100

Sheet Number L-1.2

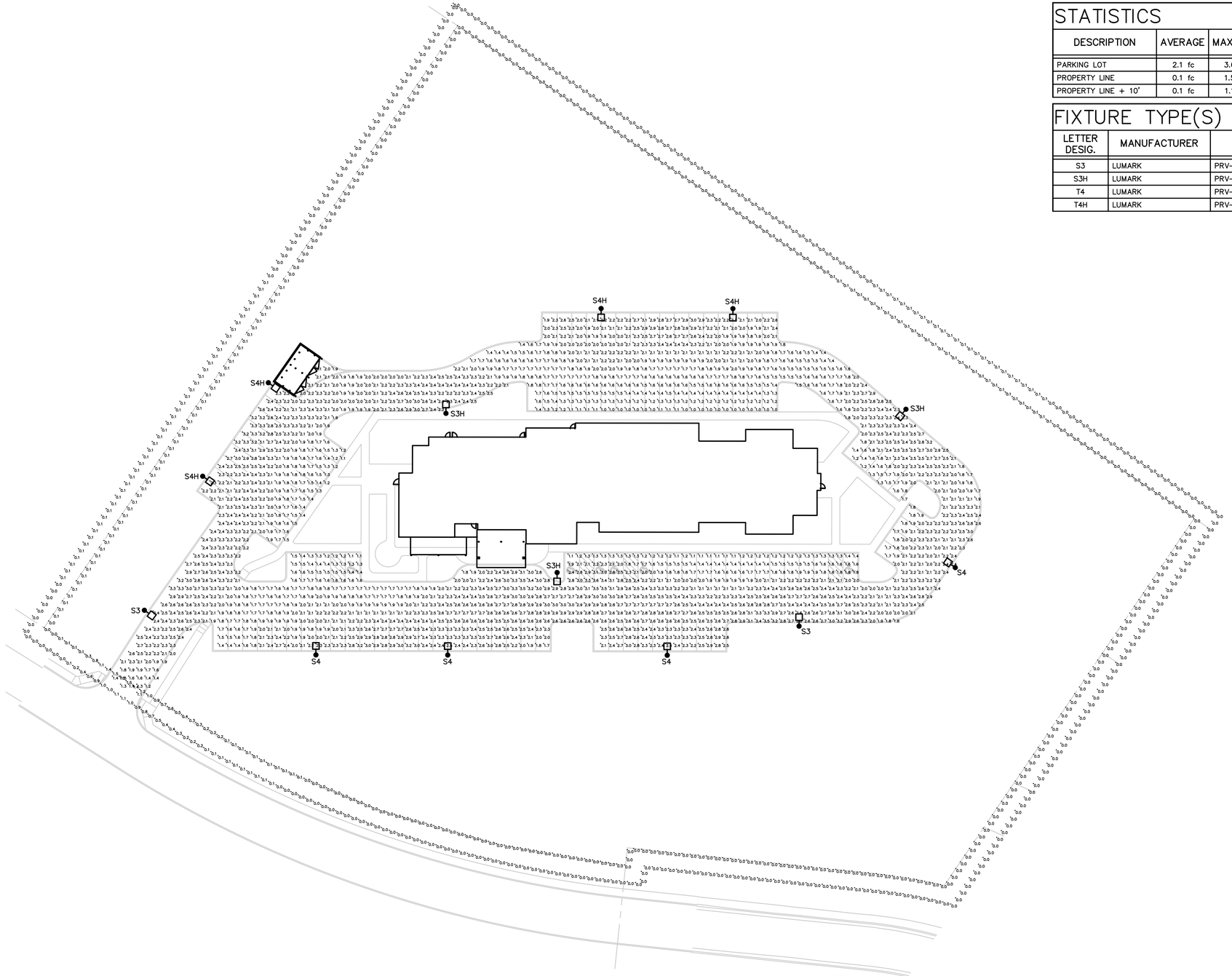
Aug 05, 2022 - 10:53am
P:\22100 - Sundby Road Hotel Site\RS - 22100 - Sundby Rd Hotel.dwg

STATISTICS

DESCRIPTION	AVERAGE	MAXIMUM	MINIMUM	MAX/MIN	AVG/MIN
PARKING LOT	2.1 fc	3.6 fc	1.0 fc	3.6:1	2.1:1
PROPERTY LINE	0.1 fc	1.5 fc	0.0 fc	N/A	N/A
PROPERTY LINE + 10'	0.1 fc	1.1 fc	0.0 fc	N/A	N/A

FIXTURE TYPE(S)

LETTER DESIG.	MANUFACTURER	CATALOG NUMBER	LAMPS NO.	LAMPS TYPE	LUMENS	MOUNTING HEIGHT
S3	LUMARK	PRV-C40-D-UNV-T3-SA-BZ	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
S3H	LUMARK	PRV-C40-D-UNV-T3-SA-BZ-HSS	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
T4	LUMARK	PRV-C40-D-UNV-T4-SA-BZ	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE
T4H	LUMARK	PRV-C40-D-UNV-T4-SA-BZ-HSS	–	LED W/ UNITS	17,100	25'-0" POLE ON 3' BASE



A SITE PHOTOMETRICS

1/32" = 1'-0"

NORTH

Project		Catalog #		Type	
Prepared by		Notes		Date	

Lumark

Prevail LED

Area / Site Luminaire

Product Features

LumaWatt Technology

Interactive Menu

Product Certifications

Quick Facts

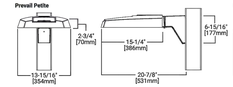
- Lumen packages range from 4,800 - 52,300 lumens (35W - 350W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 160 lumens per watt
- Energy and maintenance savings up to 85% versus HID solutions
- Standard universal quick mount arm with universal drill pattern

Connected Systems

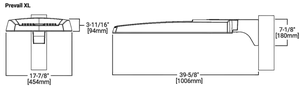
- WaveLinx

Dimensional Details

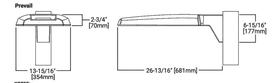
Prevail Petite



Prevail XL



Prevail



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

COOPER Lighting Solutions

PS500001EN page 1
February 14, 2022 11:56 AM

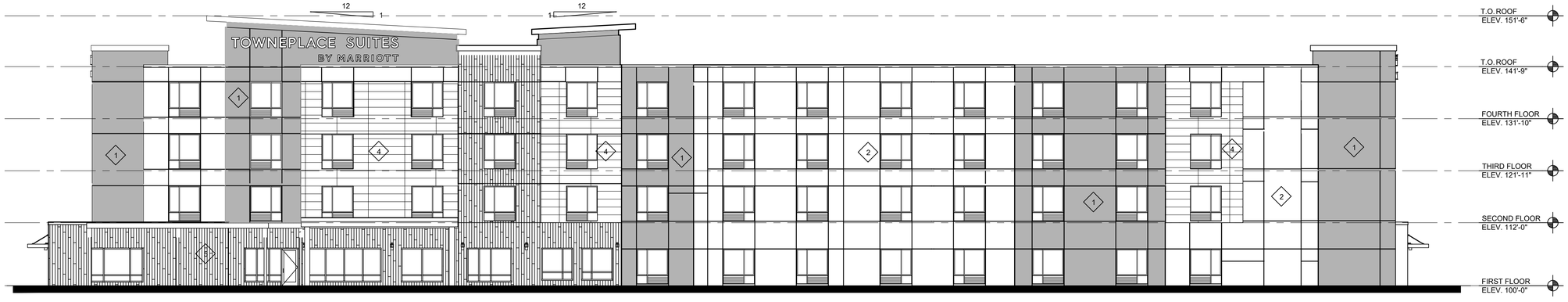
LK Architecture

August 9, 2022

TOWNEPLACE SUITES® BY MARRIOTT

Duluth, MN

SE1



B SOUTHWEST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'

A NORTHWEST ELEVATION

3/32" = 1'-0"

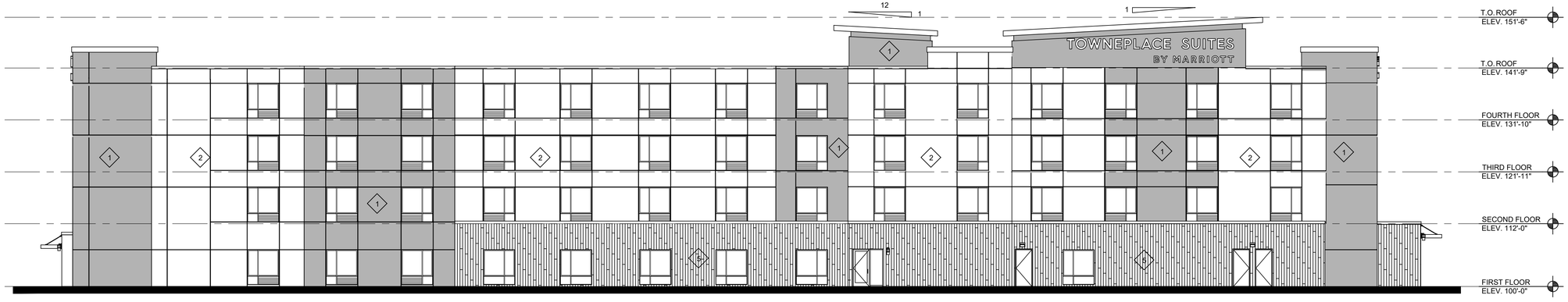
0' 5' 10' 20'

1 EIFS, COLOR : BENJAMIN MOORE "MANOR BLUE" No. 1627 (CLR13414)

2 EIFS, COLOR : BENJAMIN MOORE "NOVEMBER RAIN" No. 2142-60 (CLR13415)

4 EIFS, COLOR : MATCH CONTROL COLOR SW 6006 " BLACK BEAN"

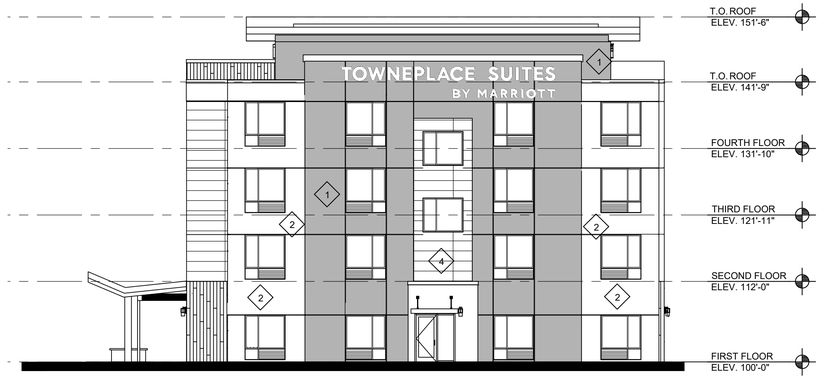
5 EIFS, COLOR : MATCH CONTROL COLOR SW 7045 "INTELLECTUAL GREY"



B NORTHEAST ELEVATION

3/32" = 1'-0"

0' 5' 10' 20'



A SOUTHEAST ELEVATION

3/32" = 1'-0"

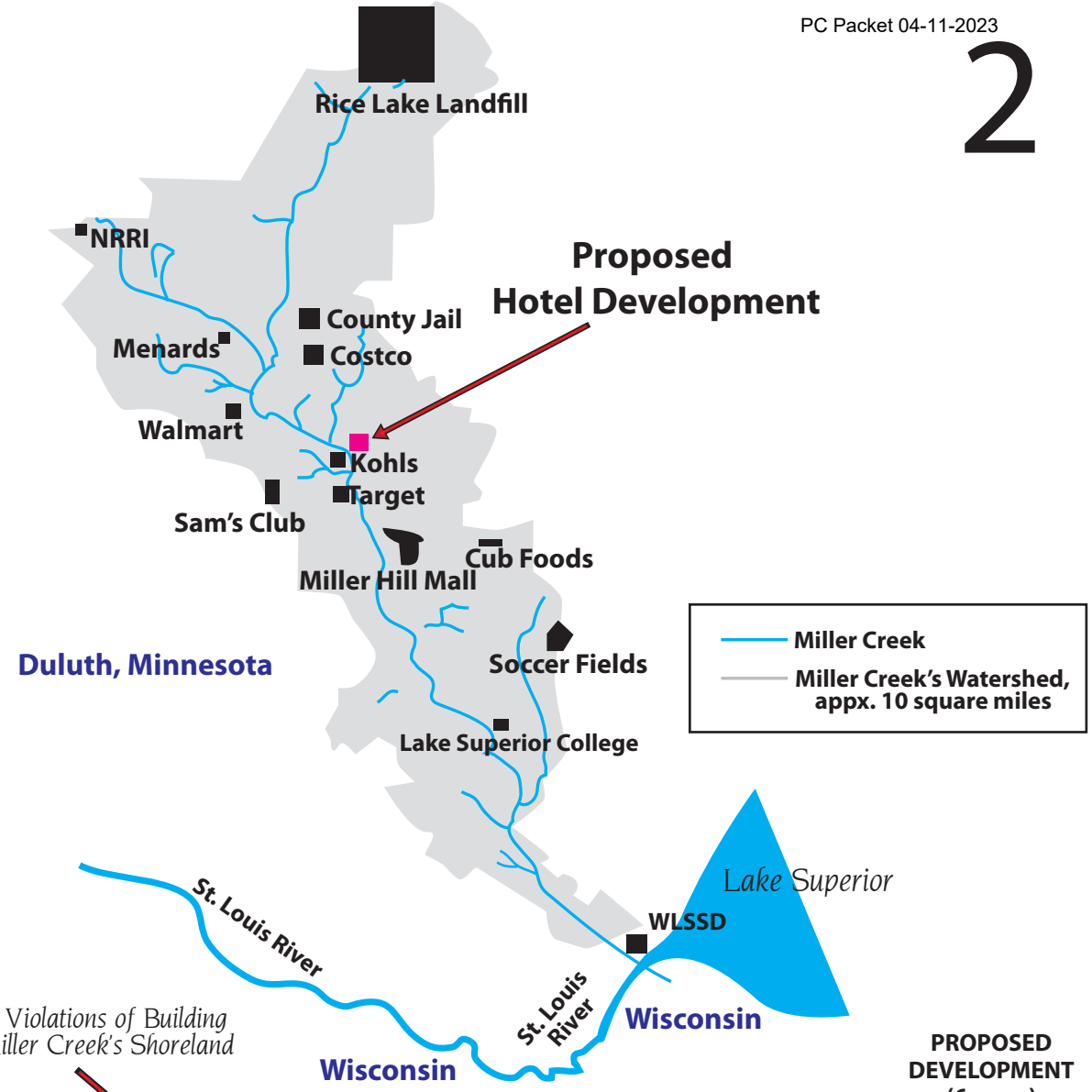
0' 5' 10' 20'

1 EIFS, COLOR : BENJAMIN MOORE
"MANOR BLUE" No. 1627 (CLR13414)

2 EIFS, COLOR : BENJAMIN MOORE
"NOVEMBER RAIN" No. 2142-60 (CLR13415)

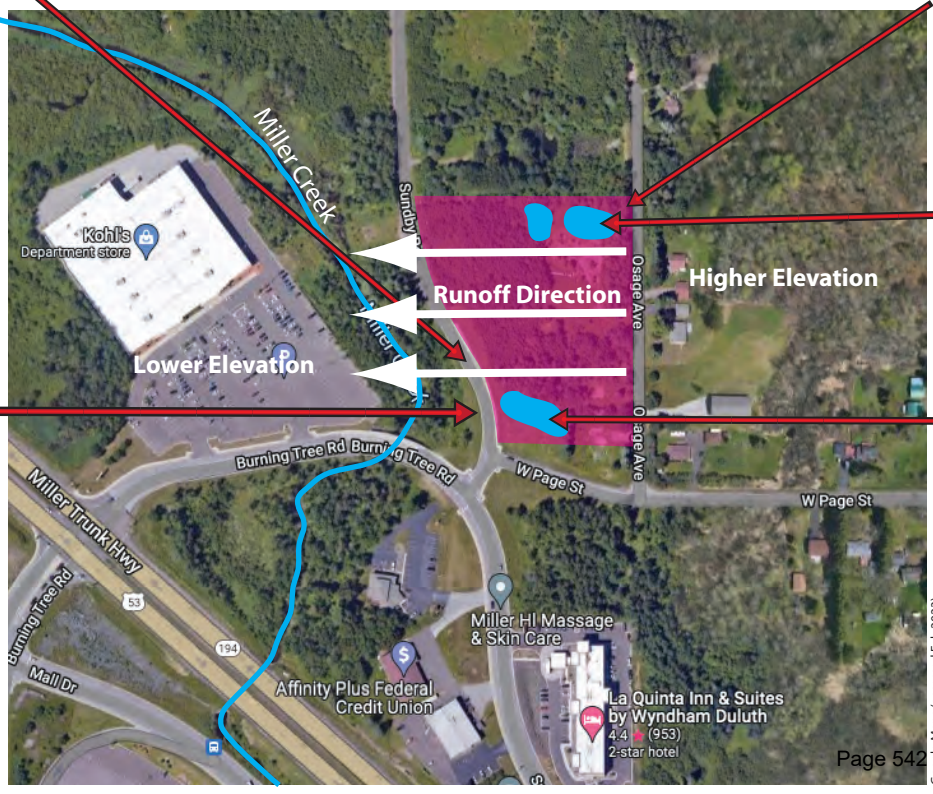
4 EIFS, COLOR : MATCH CONTROL
COLOR SW 6006 " BLACK BEAN"

5 EIFS, COLOR : MATCH CONTROL
COLOR SW 7045 "INTELLECTUAL GREY"



Possible Violations of Building within Miller Creek's Shoreland

Direct wetland impacts to extend sidewalk per City of Duluth. (Exhibit 11)



3

Supporting documents:

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

33 CFR Part 328

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 120

[EPA-HQ-OW-2021-0602; FRL–6027.4-01-OW]

RIN 2040-AG19

Revised Definition of "Waters of the United States"

AGENCY: Department of the Army, Corps of Engineers, Department of Defense; and Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) and the Department of the Army ("the agencies") have finalized a rule defining the scope of waters protected under the Clean Water Act. In developing this rule, the agencies considered the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, relevant Supreme Court case law, and the agencies' experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining "waters of the United States." This final rule advances the objective of the Clean Water Act and ensures critical protections for the nation's vital water resources, which support public health, environmental protection, agricultural activity, and economic growth across the United States.[1]

[1] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pgs. 1-2.

St. Louis River as a "paragraph (a)(1) waters", a federally protected interstate water

In this rule, consistent with the general framework of the 1986 regulations, the agencies interpret the term "waters of the United States" to include:

• traditional navigable waters, the territorial seas, and interstate waters ("paragraph (a)(1) waters");[2]

The agencies interpret interstate waters under this rule to mean "all rivers, lakes, and other waters that flow across, or form a part of, State boundaries" based on precursor water protection statutes and practice.[3]

The St. Louis River borders Minnesota and Wisconsin, and is a "paragraph (a)(1) water", specifically an interstate water.

Miller Creek as a tributary to the St. Louis River

"Waters of the United States" include

• tributaries to traditional navigable waters, the territorial seas, interstate waters, or paragraph (a)(2) impoundments when the tributaries meet either the relatively permanent standard or the significant nexus standard ("jurisdictional tributaries");[4]

Wetlands adjacent to Miller Creek

"Waters of the United States" include

• wetlands adjacent to paragraph (a)(1) waters, wetlands adjacent to and

[2] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 8.
[3] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 248.
[4] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 8.

with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments, wetlands adjacent to tributaries that meet the relatively permanent standard, and wetlands adjacent to paragraph (a)(2) impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard ("jurisdictional adjacent wetlands"); [5]

Comments

Impacted wetlands by the large, proposed, hotel development are approximately 500 feet away from Miller Creek, a tributary of the St. Louis River, a federally protected (a)(1) "Waters of the United States." Miller Creek is jurisdictional as a tributary to the St. Louis River.

"The Court concluded that "the Corps' ecological judgment about the relationship between waters and their adjacent wetlands provides an adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act."[6]

Wetlands provide several purposes such as drainage, filtering, purifying, slowing surface runoff, preventing flooding and erosion, and providing food chain production and healthy stream biota, all contingent to the health of Miller Creek, an impaired trout stream currently subjected to high sediment runoff, salt from winter roads and parking lot clearing, and E. coli bacteria contamination from people and animals. Since this large hotel development is proposed to be 4-stories with at least 112 parking stalls *upstream* from Miller Creek (≤500 feet away), its construction will significantly affect Miller Creek and its wetlands. Building in this location would be contrary to the central framework and protections afforded by the Clean Water Act.

[5] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pgs. 8-9.
[6] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 90.

('[T]he Corps has concluded that wetlands adjacent to lakes, rivers, streams, and other bodies of water may function as integral parts of the aquatic environment even when the moisture creating the wetlands does not find its source in the adjacent bodies of water. . . . [W]e therefore conclude that a definition of 'waters of the United States' encompassing all wetlands adjacent to other bodies of water over which the Corps has jurisdiction is a permissible interpretation of the Act.').[7]

Reasonably Close – Defined

Wetlands can be jurisdictional if they are reasonably close to the proximity of a jurisdictional water. While this rule does not explicitly identify regional factors that influence what is "reasonably close" for purposes of adjacency, the agencies recognize there may be site-specific factors (*e.g.*, topography) that influence what is "reasonably close." This rule does not establish specific distance limitations for adjacency, which helps ensure that site-specific and regional factors can be considered when a wetland is being evaluated…[8]

In addition, the longstanding regulation properly defines the term "adjacent" for purposes of the Clean Water Act because it is based on the concept of both reasonable proximity and scientific connections.[9]

[7] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pgs. 418-419.
[8] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 322.
[9] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 419.

Comments

Wetlands directly impacted by the hotel development are to be considered reasonably close to Miller Creek since those wetlands are ≤500 ft. from Miller Creek, closer when the distance to Miller Creek's shore land is considered.

Final Conclusion and Summary

Miller Creek in Duluth, Minnesota, is a tributary of the St. Louis River, a paragraph (a)(1) interstate water that is Federally protected under the definition "Waters of the United States" in conjunction with the Clean Water Act. Miller Creek's wetlands are positioned to be negatively impacted by the large hotel slated to be built in-between wetlands and close to Miller Creek, contrary to the protections afforded by the recently revised WOTUS rules under the Clean Water Act.

Hotel construction set to begin in the Spring of 2023 at Sundby Road and Page Street in Duluth, Minnesota, on plats 010-2710-04594 and 010-2710-04575 (PL22-143), would ostensibly violate the Clean Water Act. This environmentally-sensitive area includes wetlands and an impaired trout stream, Miller Creek, a tributary to the federally protected interstate water, the St. Louis River. It is crucial to examine their protections under the jurisdiction of all applicable environmental and regulatory statutes including the Clean Water Act.

Authority

"The authority for this action is the Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.*, including sections 301, 304, 311, 401, 402, 404, and 501."[10]

[10] EPA, 40 CFR Part 120, Revised Definition of "Waters of the United States", pg. 15.

Duluth Urban Area Streams Total Maximum Daily Load

Restoring and protecting urban streams in Duluth and surrounding areas.

MINNESOTA POLLUTION CONTROL AGENCY

wq-iw10-11e **October 2020**

Table 6. Land cover/land use (source: University of Minnesota 2013)

Percent rounded to nearest whole number.

Water Body Name (AUID)	Watershed Areas	Percent of Watershed (%)													
		Natural Land Covers								Developed/Disturbed Land Covers					
		Deciduous Forest	Conifer Forest	Mixed Forest	Managed/Natural Grass	Forested and Shrub Wetlands	Emergent Wetlands	Lakes, Ponds, and Rivers	*Total Natural Land Cover*	Hay and Pasture	0 – 25% Impervious	26 – 50% Impervious	51 – 75% Impervious	76 – 100% Impervious	*Developed/Disturbed Land Cover*
Amity Creek (04010102-511)	10,568	55	17	0	2	8	1	1	*84*	3	7	5	1	0	*16*
Chester Creek (04010102-545)	4,315	37	15	0	1	14	3	0	*70*	2	13	9	4	2	*30*
E Br Amity Creek (04010102-540)	5,237	59	15	0	2	9	2	1	*88*	2	5	4	1	0	*12*
Keene Creek (04010201-627)	4,029	39	14	0	2	13	2	1	*71*	2	7	8	7	5	*29*
Kingsbury Creek (04010201-626)	6,012	35	11	1	2	20	1	1	*71*	2	3	6	9	9	*29*
Lester River (04010102-549)	34,240	48	20	0	2	15	2	2	*89*	3	4	3	1	0	*11*
Merritt Creek (04010201-987)	1,412	42	11	0	4	7	0	0	*64*	1	13	8	6	8	*36*
Miller Creek (04010201-512)	6,212	19	14	0	2	13	2	1	*51*	4	15	11	9	10	*49*
Sargent Creek (04010201-848)	1,964	73	3	6	3	4	0	0	*89*	1	1	3	3	3	*11*
Stewart Creek (04010201-884)	1,108	74	2	2	0	9	1	0	*88*	0	3	5	3	1	*12*
Tischer Creek (04010102-544)	4,767	28	23	0	1	8	2	1	*63*	2	18	12	4	1	*37*

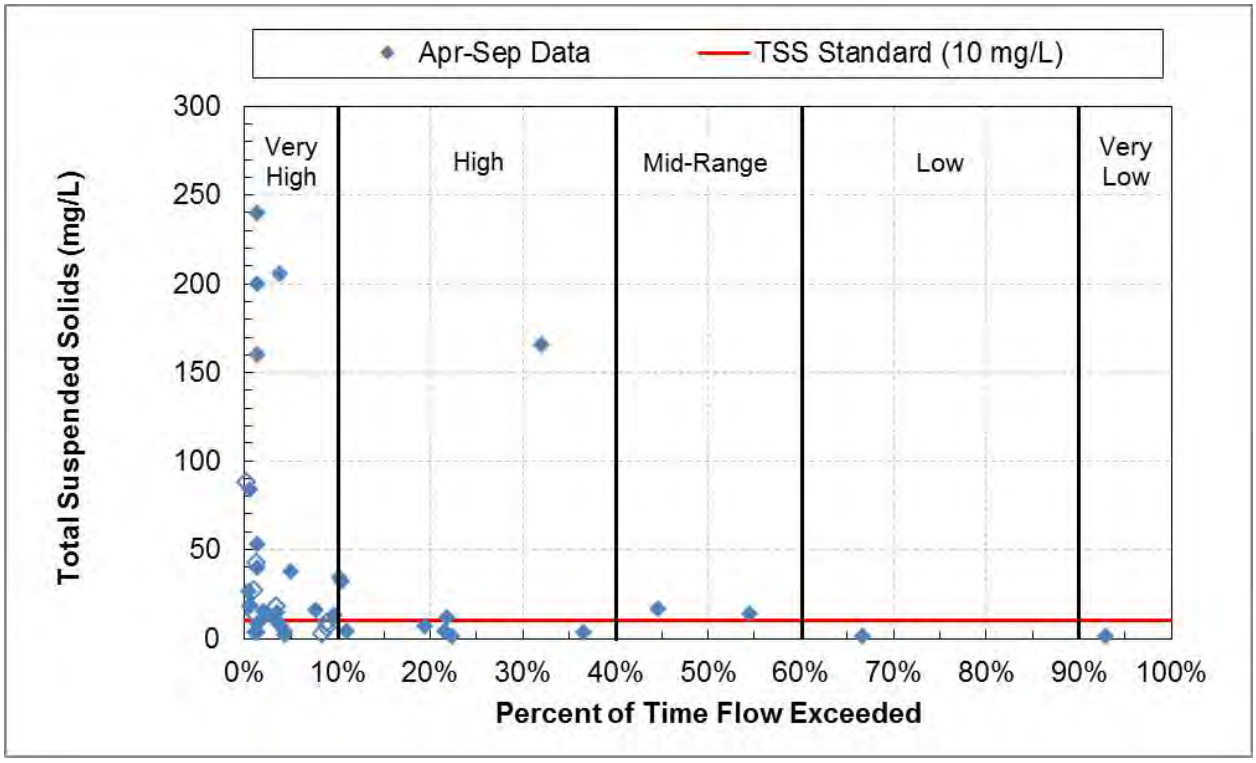


Figure 8. TSS water quality duration plot, Kingsbury Creek.
(AUID 04010201-626), 2008–2010, 2012, 2014. Hollow points indicate samples during months when the standard does not apply.

3.3.3 Miller Creek (04010201-512) *E. coli*

There are five monitoring stations on Miller Creek (Figure 5). The *E. coli* concentration exceeded the individual sample standard in one or more samples in four of the five monitored years (Table 11). Exceedances of the monthly geometric mean standard were observed in June through September, and concentrations on average were highest in July (Table 12). The individual sample standard was exceeded during mid-range to very high flows, with higher concentrations occurring under high and very high flows (Figure 9).

Table 11. Annual Summary of *E. coli* data for Miller Creek.
(AUID 04010201-512, sites S001-169, S003-070, S003-071, S004-973 and S008-484, Apr–Oct)

Year	Sample Count	Geometric Mean (org/100 mL)	Minimum (org/100 mL)	Maximum (org/100 mL)	Number of Individual Sample Standard Exceedances (>1,260 org/100 mL)	Percent of Individual Sample Standard Exceedances (%)
2008	22	116	21	1,046	0	0
2009	32	237	46	1,733	3	9
2010	11	186	68	2,400	1	9
2015	20	829	67	2,400	10	50
2016	12	723	56	≥2,420[a]	6	50

a. 2,420 org/100mL is the method's maximum recordable value

Table 12. Monthly Summary of *E. coli* data for Miller Creek.

(AUID 04010201-512, sites S001-169, S003-070, S003-071, S004-973 and S008-484; 2008–2010, 2015–2016). Values in red indicate months in which the monthly geometric mean standard of 126 org/100 mL was exceeded or the individual sample standard of 1,260 org/100 mL was exceeded in greater than 10% of the samples.

Month	Sample Count	Geometric Mean (org/100 mL)	Minimum (org/100 mL)	Maximum (org/100 mL)	Number of Individual Sample Standard Exceedances (>1,260 org/100 mL)	Percent of Individual Sample Standard Exceedances (%)
March	2	53	13	220	NA	NA
April	2[a]	176	67	460	0	0
May	3[a]	304	96	1,400	1	33
June	23	196	26	≥2,420[b]	5	22
July	28	418	46	≥2,420[b]	6	21
August	29	275	21	≥2,420[b]	4	14
September	10	305	27	2,400	4	40
October	2[a]	535	260	1,100	0	0

a. Not enough samples to assess compliance with the monthly geometric mean standard

b. 2,420 org/100mL is the method's maximum recordable value

NA: not applicable because the *E. coli* standard does not apply during this month

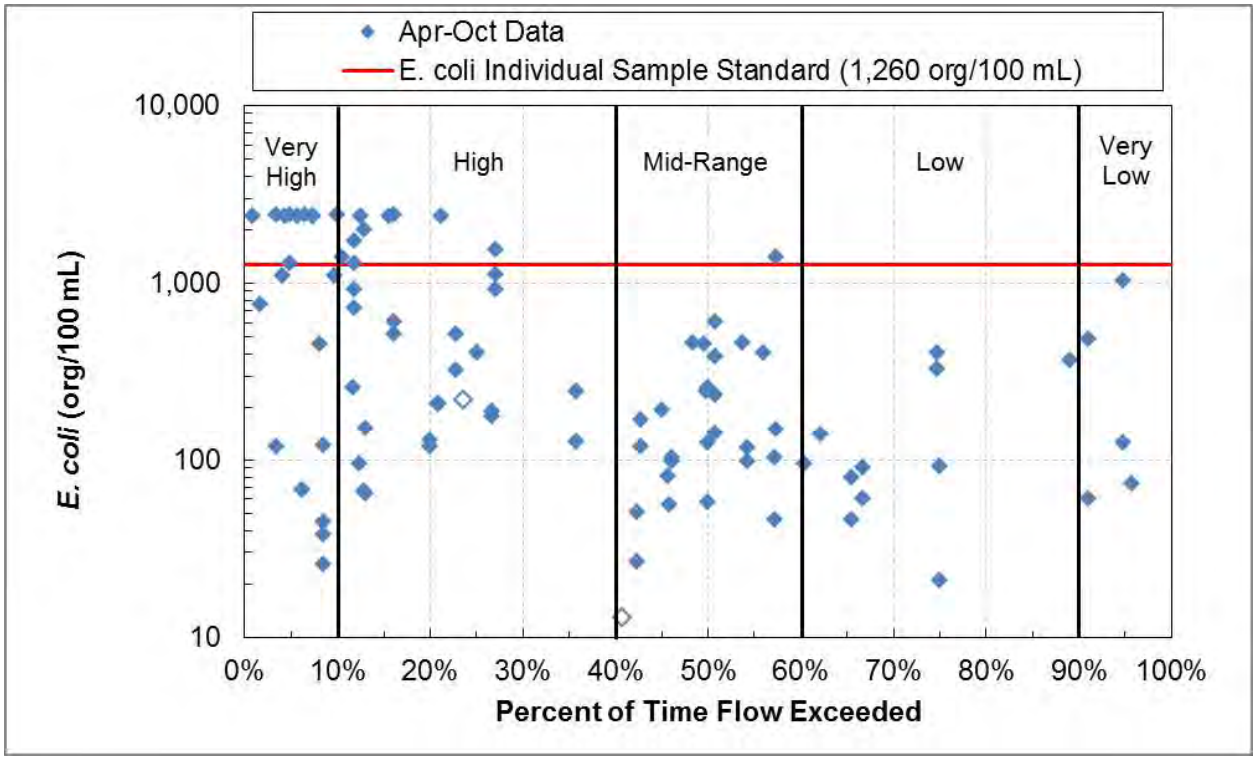


Figure 9. *E. coli* water quality duration plot, Miller Creek.

(AUID 04010201-512), 2008–2010, 2015–2016. Hollow points indicate samples during months when the standard does not apply.

E. coli concentrations at the most downstream site, S008-484, were generally higher than at the other sites; however, these data are from a different time period (2015 through 2016) and therefore cannot be compared directly.

E. coli results on Miller Creek were also evaluated with daily precipitation records from the Duluth International Airport. Results for four sites sampled in 2008 through 2010 are presented in Figure 60, and results for site S004-484 for 2015 and 2016 are presented in Figure 61. Similar to other water bodies in the Duluth area, elevated *E. coli* concentrations were detected at all five sites on days with or immediately following a precipitation event.

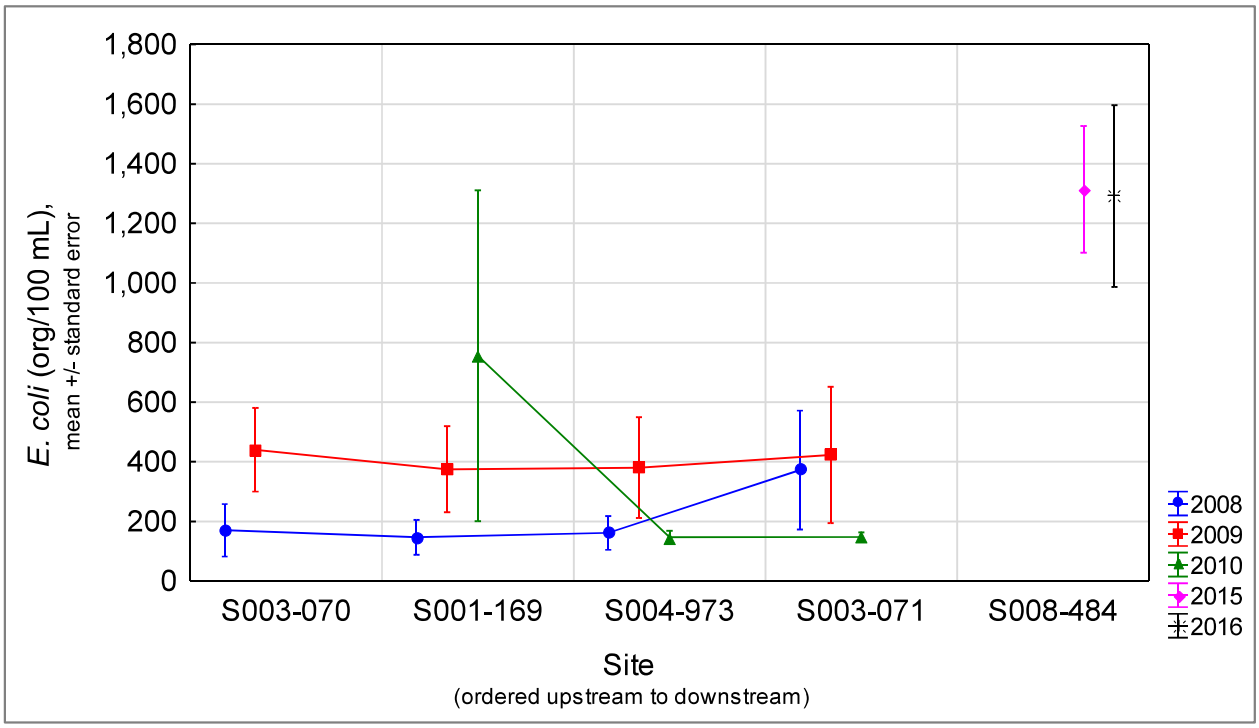


Figure 59. Summary of *E. coli* results at five sites on Miller Creek.
Only data collected between April 1 and October 30 in the specified years are presented in this figure. See Figure 53 for monitoring site names.

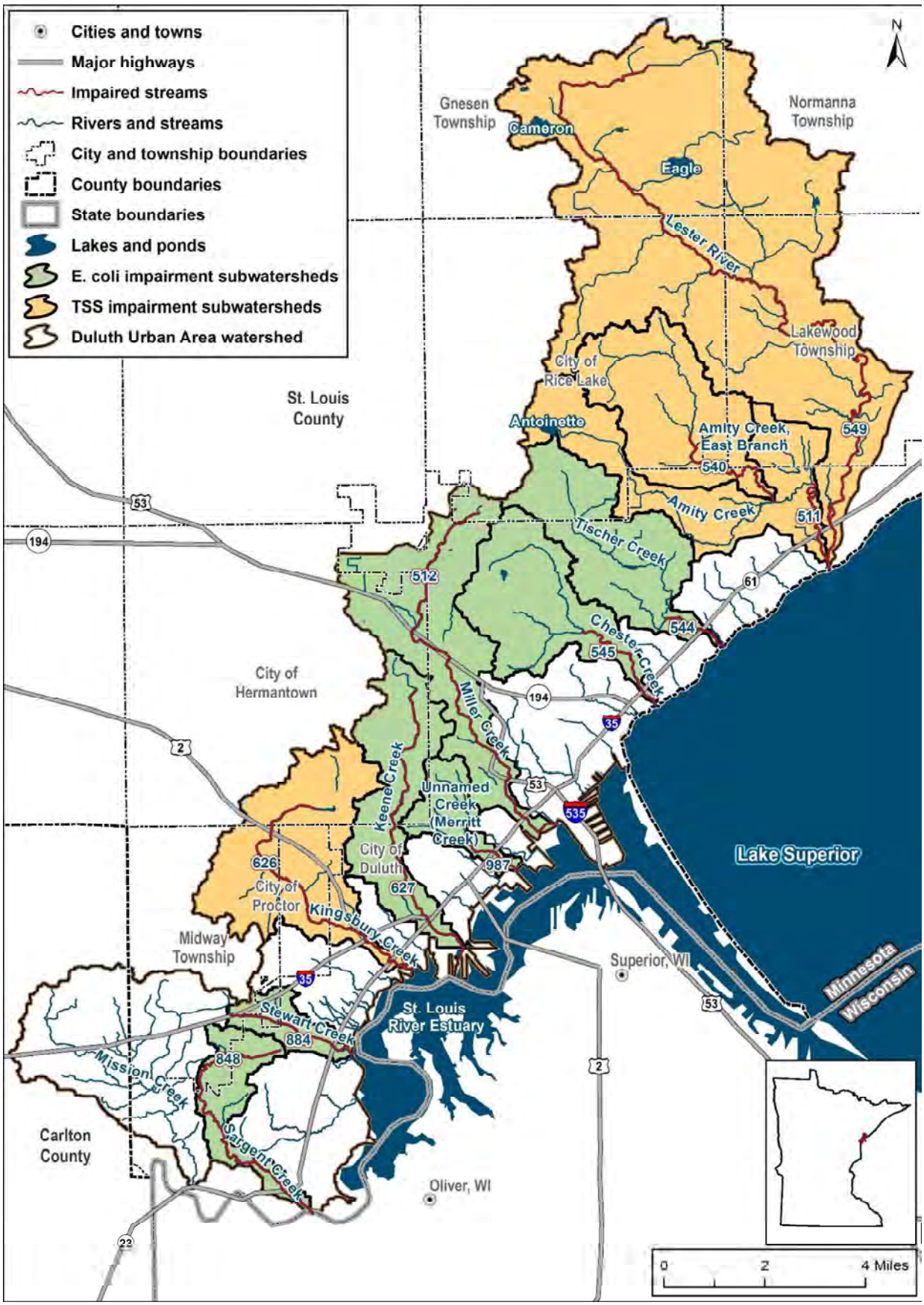


Figure 64. Impaired segments receiving TMDLs.

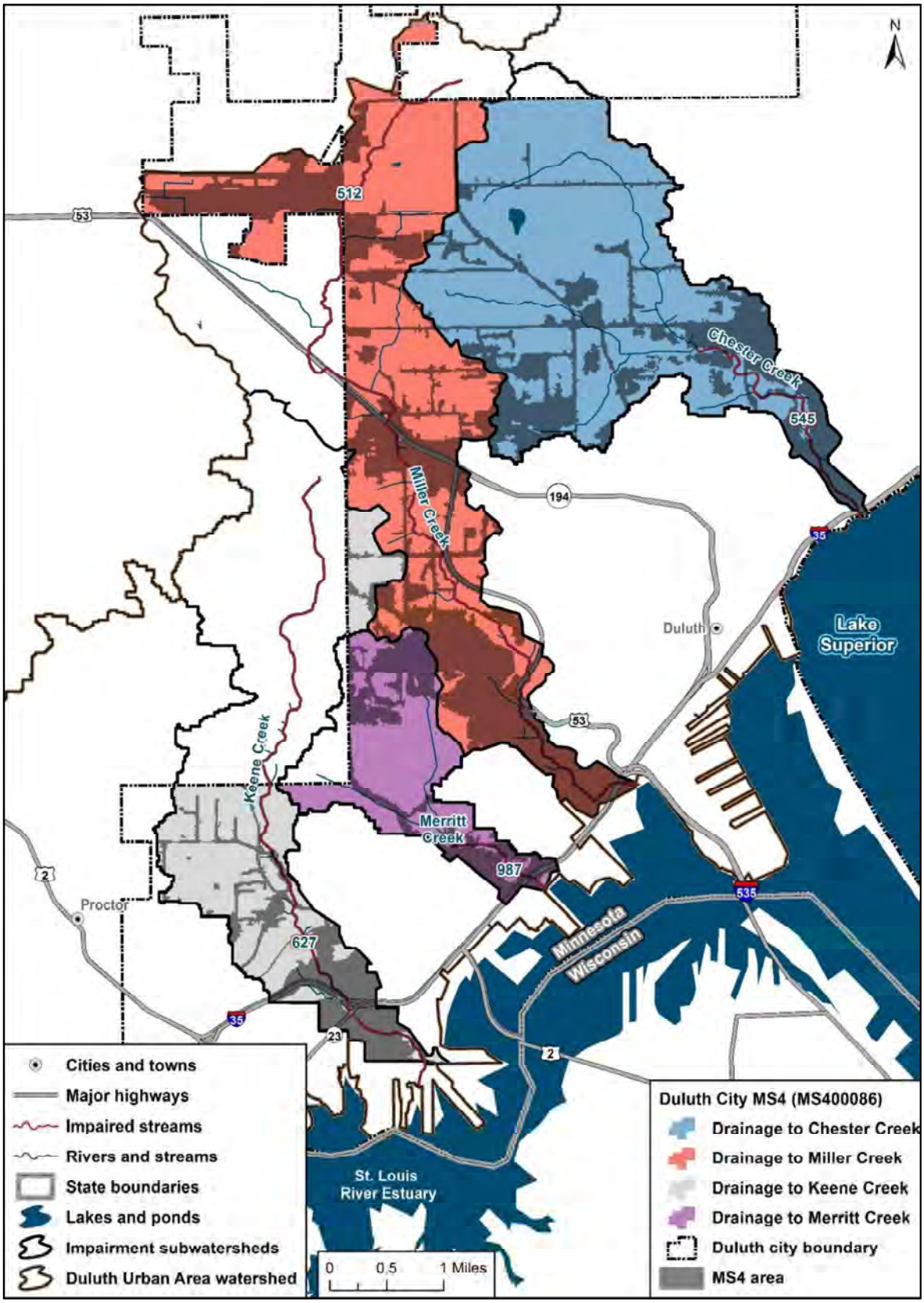
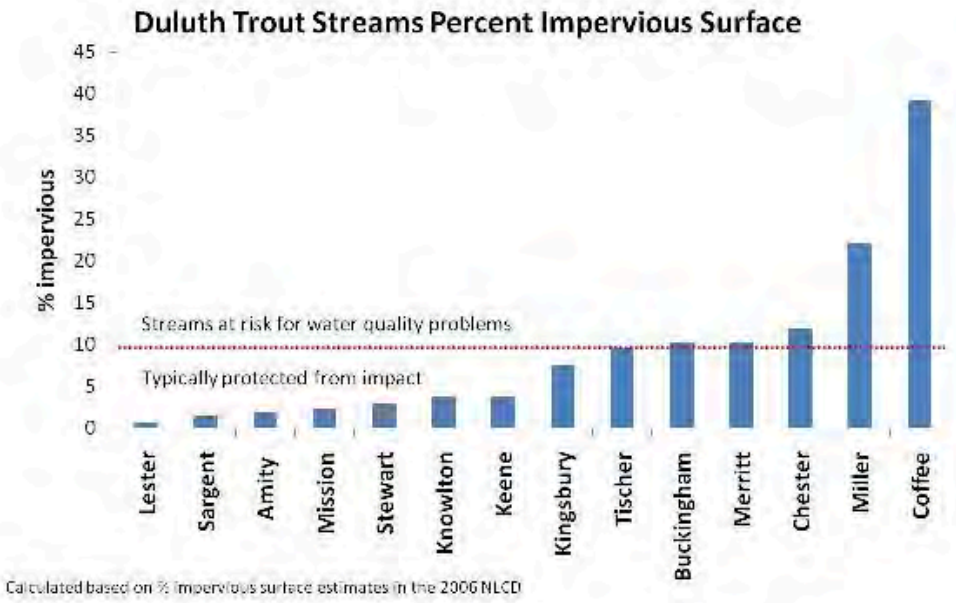


Figure 88. Duluth MS4 (middle).

The MS4 area does not include MS4 areas designated to MnDOT, St. Louis County, University of Minnesota, or Lake Superior College.



The red line follows a convention used by the National NEMO program (nemo.uconn.edu), and is associated with studies showing that when impervious surface values are greater than 10%, streams are likely to have water quality problems.

Source: lakesuperiorstreams.org/understanding/impact_impervious.html Accessed Feb 2023.

1. ***Political / Economic Evaluation;***
2. ***Demand and Growth-Based Evaluation;***
3. ***Citywide Positioning & Social Evaluation;***
4. ***Development Trends Evaluation; and***
5. ***Environmental Evaluation.***

1. Political / Economic Evaluation:

Duluth is the center of the Northland region for commerce, at the center of which is the Miller Hill – Central Entrance Corridor. In terms of retail sales tax, the Miller Hill – Central Entrance Corridor is the most significant retail sales tax revenue generator for the City of Duluth. In recent years however, the role of Hermantown has increased significantly to a point whereby Hermantown has now become a major player in attracting commercial developments, notably Wal-Mart, Sam's Club, Menards and Gander Mountain. As a result, this has contributed to likely sales outflow from Duluth to Hermantown. It is therefore incumbent upon the City of Duluth to ensure that retail development recognize the parasitic and opportunistic evolution that is occurring, while at the same time ensure the need to maintain balanced and pragmatic growth within its own city limits. The rezoning application is valid in its assertion that "*potential*" short term tax benefits and sales could occur. Additionally, Hermantown does have active commercial development opportunities available, such as at Hermantown Center, which do pose a competitive threat for Duluth. However, the current economic slowdown must now also be considered as demand for commercial development slows and retailers hold off on expansion plans suggesting that now is an ideal time to prioritize developments.

Hermantown is following in Duluth's footsteps with haphazard, uncohesive commercial developments. The City of Duluth should now take the lead in establishing and promoting more compact urban/suburban developments that prioritize areas already zoned for commercial land uses. Retail Sales Taxes are a critical component of revenues for the City, however by allowing development to occur away from the existing critical mass of retail could have the negative impact of reducing foot traffic in the core shopping area around the Miller Hill Mall, while also encouraging Hermantown to further densify their retail concentration along Haines Road resulting in additional retail sales tax revenues for Hermantown. Consumers are not concerned with the boundary between Duluth and Hermantown, but they will shop and patronize those areas that are more compact, have the stores they are looking for and offer more services in close proximity of one another.

On the basis of the project's proximity and access to Haines Road, new commercial development in the proposed location could have the unintended effect of placing significant development pressure on the adjacent wetlands and could act as a further catalyst for Hermantown to develop and infill along Haines Road in the short term, as opposed to being catalytic for Duluth's existing retail. This development pattern could result in further retail sales outflow from Duluth to Hermantown. Alternatively, if development is more focused and concentrated around the Miller Hill Mall then the result would be to create demand in an area that is already zoned commercial which would benefit existing Duluth retailers and residents.

With respect to historical rezoning applications and approvals (as documented in the Mission Development LLC Rezoning Application), many of the rezoning approvals profiled were in commercially compatible areas and did not have environmental concerns or wetland encroachment issues. From a future land use allocation perspective, historical rezoning applications do not take into account the need to incorporate a new planning direction and focus for development that is more consistent with current development trends for prioritization, intensification and densification of properties.

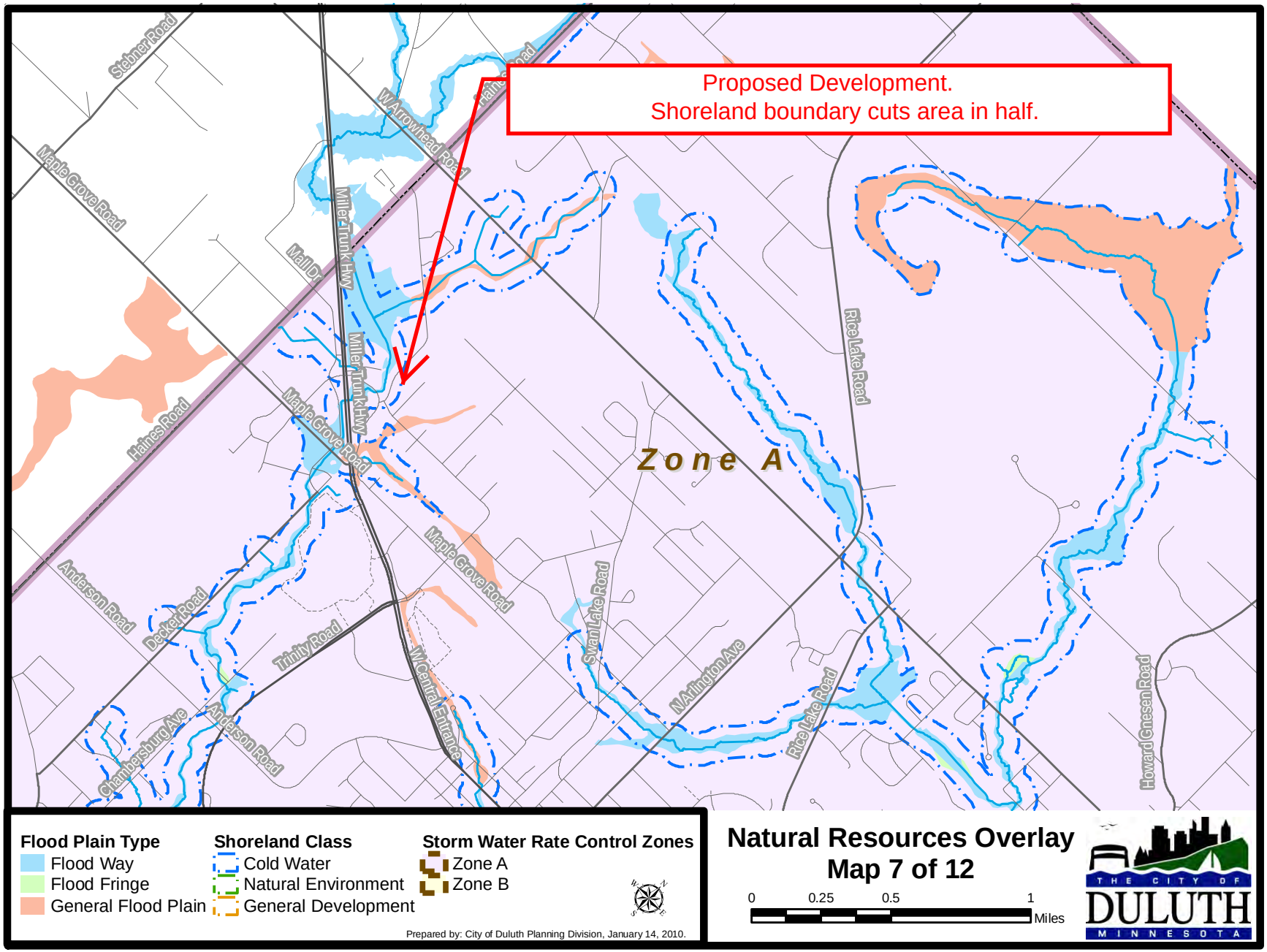
Diagram of Proposed Hotel and Adjacent Wetlands

Locations Approximate
Drawn in Revit 2023
Crawford-Nichols
3/2023

Source:
PL22-143 Project Application
UDC Landscape Plan
Sheet L-1.1
8/5/2022

Scale: 1" = 100'

6.1



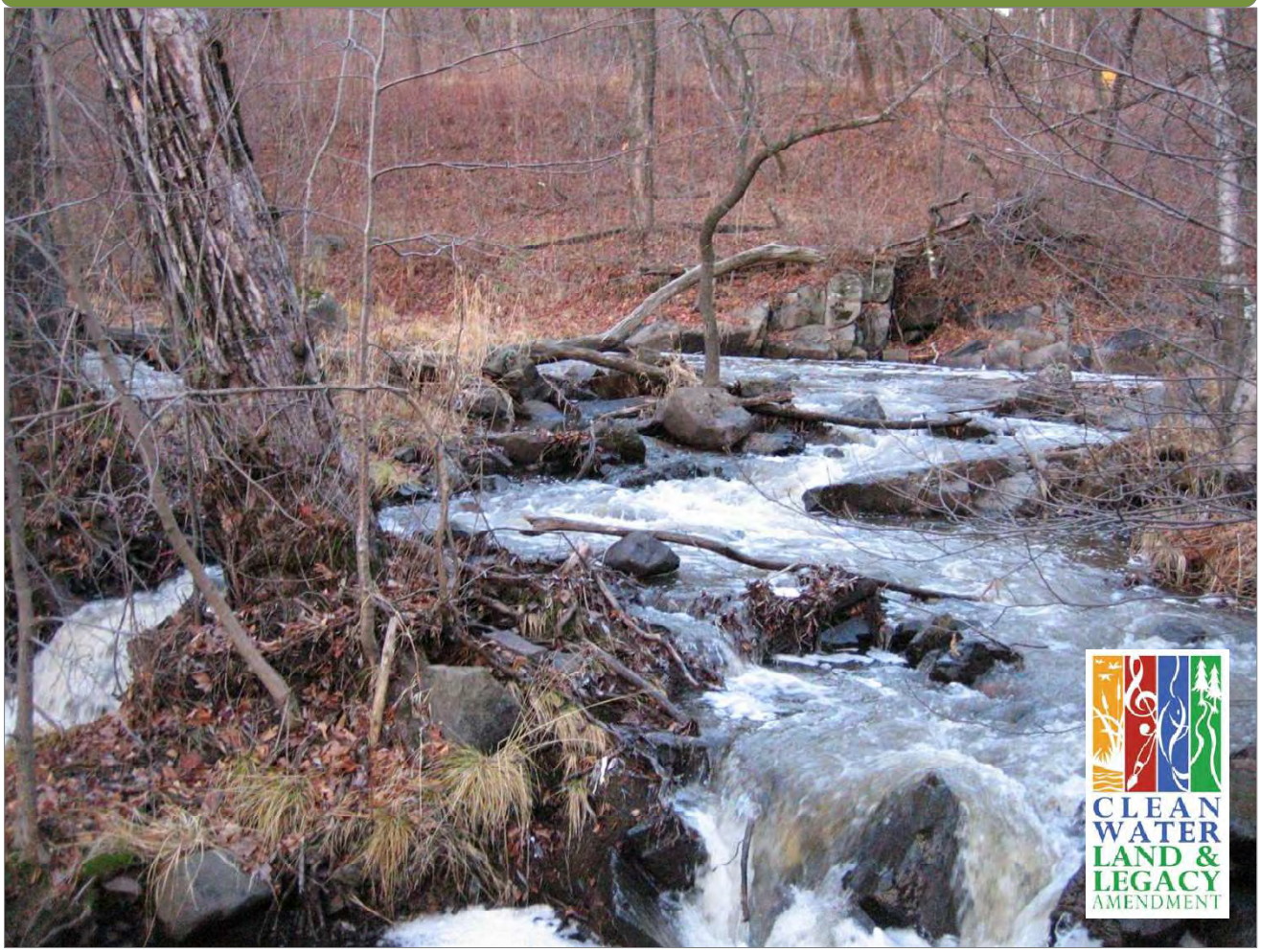
Source: City of Duluth. Email to the author. Feb. 23, 2023.

November 7, 2022

2008 Wetland Delineation Report
300-foot Buffer Requirements Surrounding Miller Creek.

Miller Creek Water Temperature Total Maximum Daily Load

A report to address impairment of aquatic life due to elevated stream temperature.



MINNESOTA POLLUTION CONTROL AGENCY

October 2017

wq-iw10-07e

Source: https://www.pca.state.mn.us/sites/default/files/wq-iw10-07e.pdf [Accessed 27 Feb, 2023].

Executive Summary

This report addresses the impairment of aquatic life in Miller Creek due to elevated water temperature. Miller Creek is a small, urban trout stream flowing through the cities of Duluth and Hermantown in northeastern Minnesota. The watershed includes parks, trails and residential neighborhoods, but also crisscrosses the regions retail, commercial and transportation corridors. The importance of the stream, along with other streams and natural resources of this area, is continually reinforced by the many efforts and activities undertaken by citizens, businesses, schools, and community and government organizations to protect and restore stream water quality and ecology.

Water temperature data demonstrate that problems occur in summer months, mostly from high air temperatures during periods of lower stream flows, or less frequently from runoff from summer rains that occur after high air temperatures. Elevated stream temperatures are believed to also be negatively affecting the fish and aquatic insect communities.

The Clean Water Act (CWA) requires a process to analyze and correct water problems. This is called a Total Maximum Daily Load (TMDL) study. The TMDL establishes the maximum amount of a pollutant a water body can receive on a daily basis and still meet water quality standards. The TMDL is divided into wasteload allocations (WLA) for point or permitted sources, and load allocations (LA) for nonpoint sources, which includes natural background, and a margin of safety (MOS). The heat load (pollutant) and load reductions in this TMDL are in gigajoules (GJ), a measure of energy, per day (GJ/day). An energy-based allocation was used in order to express temperature as a load-based TMDL.

This study used a variety of methods including a temperature model, a heat export model and a stormwater model. The models evaluated overall heat inputs to the stream, contributions of heat from all sources, and determined the heat limits to achieve a healthy stream. The heat analysis:

- determined actual and allowable heat inputs as a function of flow conditions;
- estimated the contributions from atmospheric heating and stormwater to the overall heat budget; and
- determined the contributions of each Municipal Stormwater Permit.

The TMDL and associated WLAs and LAs were further divided into five flow regimes: high, moist, mid, dry and low. Most heat violations occurred under “dry” flow conditions. Improvement efforts should be focused on the lower flow conditions, and especially within the stream segment from Haines Road and U.S. Highway 53 to below Miller Hill Mall, to have the greatest temperature mitigation impact. Moderate reductions of heat input from stormwater (40%) are required, under dry flow conditions. A summary of the heat loading, WLAs and LAs can be found in Table 6 in Section 4.1.7.

1. Project Overview

1.1 Purpose

The CWA Section 303(d) requires states to publish, every two years, a list of surface waters that do not meet water quality standards and do not support their designated uses. These waters are classified as impaired. Once a water body is placed on the impaired waters list, a TMDL must be developed for it. The TMDL provides a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and allocates pollutant loads to the various sources of the pollutant.

This study serves to address the federal CWA requirement to establish a TMDL for the temperature impairment in Miller Creek. In addition, the report will serve as a resource to be used by water quality agencies, individual citizens, watershed planners, and local and state government officials to identify the key causes and implement solutions for these impairments.

Miller Creek was placed on Minnesota's 2002 Impaired Waters List for not meeting the assigned beneficial uses for aquatic life, based upon elevated water temperatures for Class 2A waters. Minnesota's chronic standard for temperature in Class 2A waters is "no material increase". For this TMDL, a numeric target for water temperature was set at 19 degrees Celsius (°C), which is equivalent to 66 degrees Fahrenheit (°F). This study focuses on temperature (heat) as a primary factor that is affecting the coldwater biotic communities. The TMDL study was completed through analysis of existing and newly collected data and field measurements, watershed modeling, calculation of loading capacity, and through developing implementation strategies to meet TMDL goals.

- **Analysis of Stream Temperature Data from Miller Creek, Duluth, Minnesota**, University of Minnesota, SAFL, Project Report 529, October 2009.
- **Stream Temperature Modeling of Miller Creek, Duluth, Minnesota**, University of Minnesota, SAFL, Project Report No. 535, October 2009.
- **Streamflow Modeling of Miller Creek, Duluth, Minnesota**, University of Minnesota, SAFL, Project Report No. 536, January 2010.
- **Miller Creek Macroinvertebrate, Habitat, and Temperature Report**, Natural Resources Research Institute (NRRI), University of Minnesota Duluth, NRRI Technical Report Number NRRI/TR2010/11, June 2010.
- **Characterization of Stream Temperature and Heat Loading for Miller Creek, Duluth, Minnesota**, University of Minnesota, SAFL, Project Report No. 552, August 2011.

Key findings, conclusions and recommendations from these studies include:

- Only 5% to 10% of all temperature exceedances appear to be associated with surface runoff due to rainfall, and even fewer were caused exclusively by runoff (Herb and Stephan 2009b).
- The temperature of Miller Creek is driven by atmospheric heat transfer during dry weather periods, by surface runoff during wet weather with substantial runoff, and by both mechanisms during small rainfall events (Herb et al. 2011).
- Temperature changes are most apparent in the stream from reaches with low shading, but persist for several kilometers downstream into reaches of higher shading (Herb et al. 2011).
- The temperature of Miller Creek was found to be relatively sensitive to air temperature, e.g., a 1 degree C increase in air temperature led to a 0.6 C increase in stream temperature. This sensitivity is likely due to low groundwater inputs, which tend to buffer diurnal and seasonal changes in air temperature (Herb et al. 2011).
- Wetlands provide an important role in Miller Creek through supplying the baseflow to the stream. The rapid recession in the storm hydrographs points to channel storage and surface storage in wetlands rather than in aquifers as the source of water during low flow periods. The wetlands in the upper reaches of Miller Creek therefore need to be protected because they play a key role in the hydrology during low flow periods (Erickson et al. 2010).

Please note that the supporting reports include calculations and discussions for splitting Miller Creek into two sections and developing two separate temperature TMDLs. For the purposes of submitting this Water Temperature TMDL to EPA for approval, a single TMDL was completed for the entire stream reach (headwaters to mouth). The detailed work in these reports has been and will continue to be very useful in planning and targeting implementation activities. The reports can be access through links in Appendix B or through the Miller Creek TMDL web page:
https://www.pca.state.mn.us/water/tmdl/miller-creek-water-temperature-tmdl-project

Temperature is a measure of the concentration of thermal energy (heat) in a substance such as water. Heat can enter a stream from atmospheric heat transfer and heat conduction, through the sediment, and by inputs of surface water or groundwater (Herb 2011). Figure 7 depicts the major heat flux processes in streams. The temperature impairment indicates that the stream is receiving excess heat

energy for particular climate, flow conditions, and for the prescribed designated uses (for Miller Creek, as a coldwater fishery). Recent data from 2016 demonstrated a strong correlation between stream temperatures and water levels, with the strongest correlations during low flow periods and higher stream temperatures (Labuz 2017) (Figure 6).

Figure 6: Water temperatures versus water levels at Kohl's 2016 (Labuz 2017).

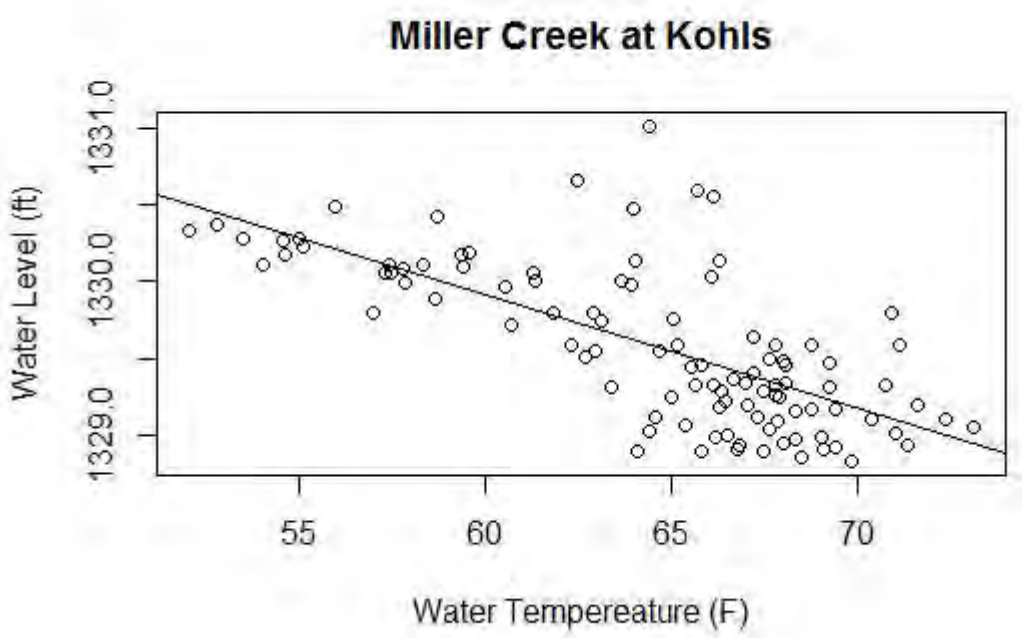
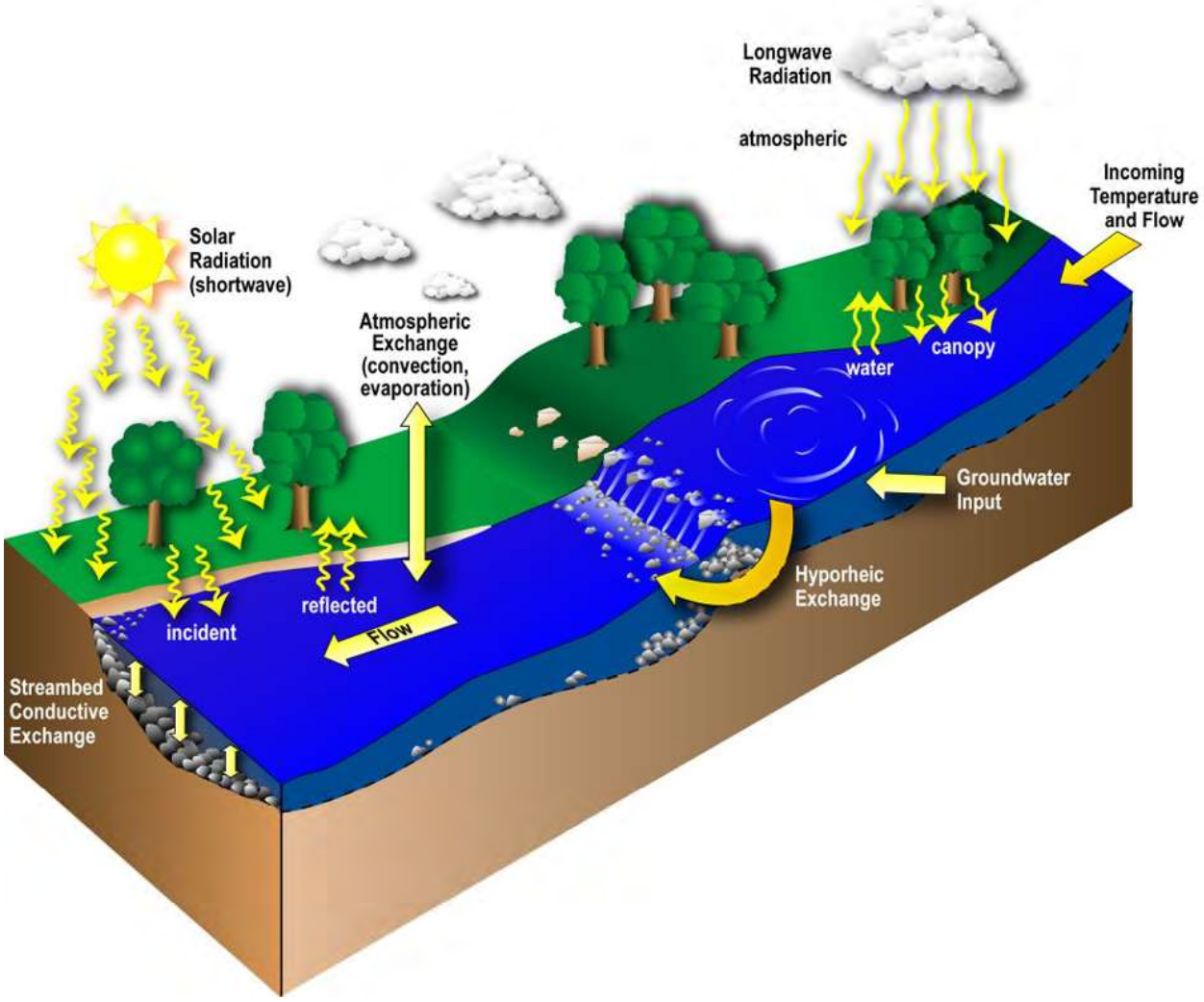


Figure 7: Major heat fluxes in streams (EPA 2010 Release, CADDIS)



Herb and Stefan (2009b) found stream temperature in Miller Creek to be highly correlated to air temperatures at daily to annual time scales (Figure 8). This relationship was found to become stronger as stream flows become lower, less than 5 cubic feet per second (cfs), and suggests low groundwater inputs into the stream (Herb et al. 2009). Water temperature exceedances above 20 °C (68 °F) are caused mainly from strong heat transfer from the atmosphere to the stream. This is especially true for the middle reaches with low channel shading, such as the channelized section above Kohl's Department Store in Duluth (Herb 2011).

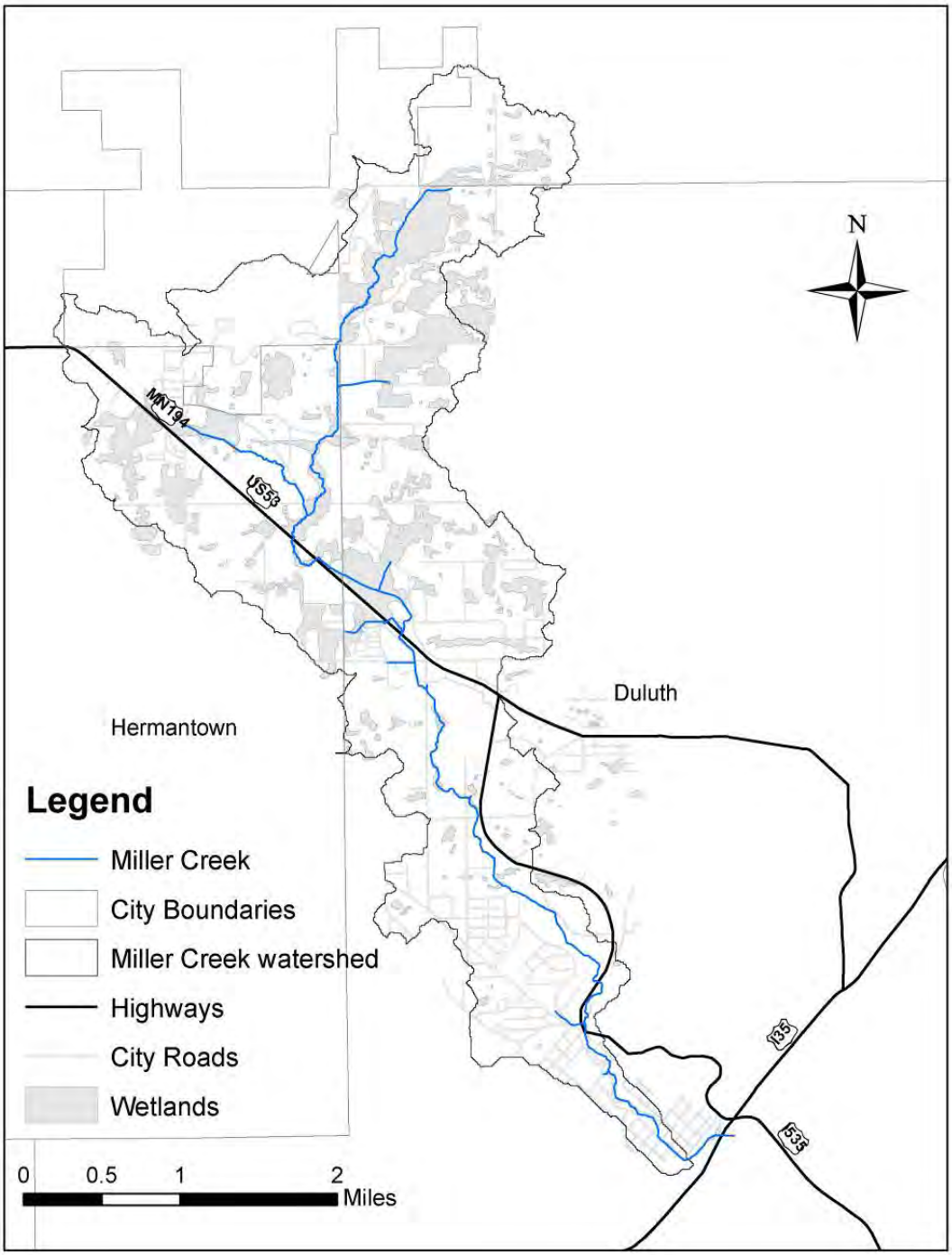
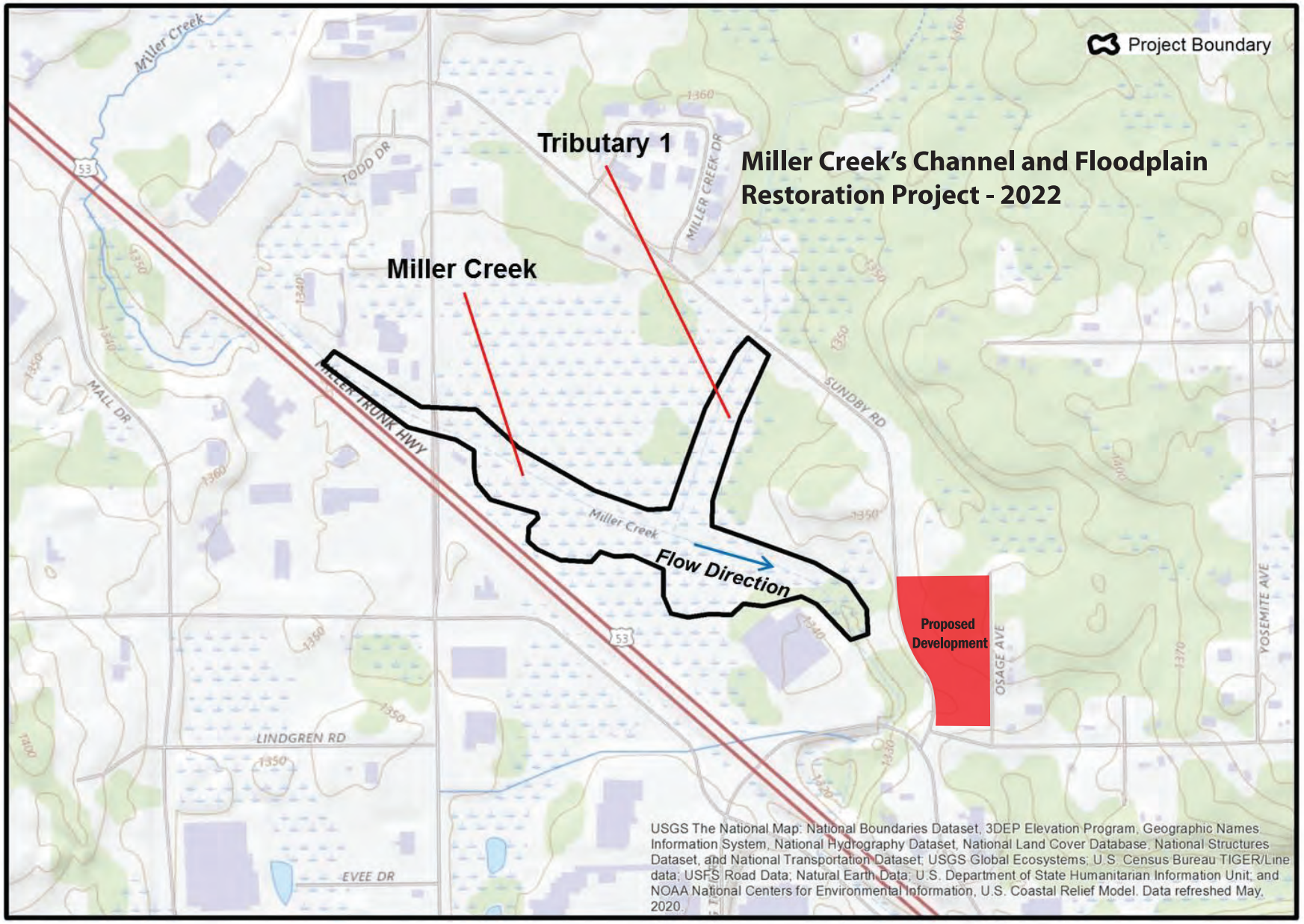


Figure 1.1. Map of the Miller Creek watershed, including wetland delineations.

Source: https://conservancy.umn.edu/bitstream/handle/11299/117637/pr535.pdf?sequence=1&isAllowed=y

8



Project Boundary Map

Source: https://www.southstlouisswcd.org/wp-content/uploads/2022/03/Miller-Creek-Channel-and-Floodplain-Restoration-Project-EAW.pdf [Accessed 28 Feb 2023].

6. Project Description:

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

This project will restore a straightened section of Miller Creek and Miller Creek Tributary 1 to a more stable, meandering channel. Miller Creek is a designated trout stream impaired for lack of coldwater assemblage due to temperature. The project will re-establish natural stream processes, re-connect the creek to its floodplain, and create quality habitat.

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, 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.

Introduction

Miller Creek begins in wetlands within the City of Hermantown, runs through a heavily commercial part of the City of Duluth, cascades down the hillside in Duluth and eventually drains into the St. Louis River estuary near 22nd Ave. West. In 2003 it was placed on Minnesota's Impaired Waters (303d) list for Lack of Coldwater Assemblage due to temperature. The temperature and other water quality monitoring work that was completed in 2009 for the Total Maximum Daily Load Study showed that the most heat input exceedances occurred with the project area.

Restoring this section of Miller Creek has been a high-priority water quality project among local natural resources professionals for many years. Funding to complete the project was finally granted to the South St. Louis SWCD by the MN Department of Natural Resources in 2019. It is presumed that this section was straightened to accommodate agriculture in the 1930s (see Attachment 3). At that time, conventional engineering advocated getting water off the land as quickly as possible, which led to ditching and straightening projects such as what was done to this stretch of Miller Creek and Tributary 1. Today, we know that this approach initiates channel evolution and incision, negatively impacting water quality, aquatic habitat, and flood retention.

This project is designed to improve the ecologic/hydrologic function of the stream channel and adjacent floodplain by creating a sinuous channel that is hydrologically connected to its floodplain and has diverse in-stream habitat for trout and other cold-water species. The project will replace 4,000 feet of low-quality, ditched stream habitat with 7,100 feet of high quality, functioning stream habitat.

The restoration methodology for this project is Natural Channel Design (Applied River Morphology, Rosgen, 1996). Using these methods, the design for the new channel and floodplain emulates the forms and processes that exist in a nearby stable river, called a "reference reach", which shares similar boundary conditions (slope, floodplain width, channel substrate, drainage area, etc.) with the disturbed project site. The cross-section, pattern, and profile dimensions of the reference channel are scaled to the impacted reach based on the riffle bankfull cross-sectional dimensions of the impacted reach. The design methodology is laid out in detail in Chapter 11 of the Natural Resources Conservation Service (NRCS) Stream Restoration and Design National Handbook. South St. Louis SWCD uses this approach on all stream restoration projects. Two reference reaches were used for the Miller Creek portion of this project: the Lester River upstream of Arnold Rd north of Duluth and the Sucker River downstream of Fox Farm Rd northeast of Duluth. East Amity Creek downstream of W. Tischer Rd is the reference reach for the Tributary 1 portion of the project.

Natural channel design uses natural materials, such as root wads, brush and boulders placed in specific arrangements and elevations in the stream channel and along the stream banks to provide aquatic habitat and stabilize the channel until floodplain vegetation can establish itself and provide long-term stabilization. Six different types of natural structures and sub-structures including toewood, toe-brush, gravel riffles, and habitat logs are being used in this project. See design plan set (Attachment 10) for more detail.

Construction methods that will cause physical manipulation of the environment

Mobilization/Construction of temporary access trails and staging areas off of Sundby Rd, with secondary access areas off of Haines Rd and Hwy 53, will be necessary to construct the project. No permanent infrastructure will be constructed.

A bulldozer and an excavator with a hydraulic thumb will be used to install the in-stream structures and to dig and shape the new channel, floodplain and stream banks. Articulated dump trucks and trailers will be used to transport materials, equipment and other items needed to construct the project and to decommission the access trails once the stream channel is restored. The riparian areas will be planted with native vegetation and will be stabilized with erosion control mats and blankets to allow vegetation to become established. Plantings will include transplanted mats of sod from the project site, as well as native flower and grass seed, shrubs and trees. See Attachment 10 for detailed information on the planting plan.

The stream will be temporarily diverted around the active construction areas using an engineer-approved stream diversion plan. Any stockpiles will have erosion and perimeter control and other best management practices implemented according to the Storm Water Pollution Prevention Plan to ensure that sediment does not enter the stream during construction. A balance of fill and cut will occur so that excess material will not be hauled on or off site.

Timing and duration of construction activities:

The proposed project is scheduled to take place over four months with the following approximate timeline:

July 1 – September 15, 2022:
- Construction of the re-meandered channel, including grading and excavating.
- Placement of all in-stream structures and habitat features
- Placement and stabilization of vegetated sod mats
- Stabilization of all near-stream areas with erosion control blanket.

September 1 – October 31, 2022:
- Planting of all disturbed areas with native forbs and grasses, shrubs and trees.
- Installation of erosion control matting to protect the newly seeded area.
- Restoration of any access trails and/or staging areas.

Exact dates will be determined by stream flow/condition, weather and contractor availability.

c. Project magnitude:

Total Project Acreage	11.2
Linear project length	4,000' existing stream length, 7,100' restored stream length
Number and type of residential units	0
Commercial building area (in square feet)	0
Industrial building area (in square feet)	0
Institutional building area (in square feet)	0
Other uses – specify (in square feet)	Access Trails – 2,100 sq. ft.
Structure height(s)	N/A

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 project is being carried out by the South St. Louis SWCD, which is the Local Government Unit. This project is needed because the conditions within this ditched, over-wide reach of Miller Creek contribute significantly to the aquatic life impairment of Miller Creek. The primary purpose of this project is to restore the hydrologic and ecologic function of this reach, with the goals of reducing stream temperatures and improving aquatic habitat. This project will address the five components of stream health (MN DNR Watershed Health Assessment Framework) as follows:

1. Connectivity:
Restore lateral connectivity of the stream to its floodplain, longitudinal connectivity by removing thermal stress and low water barriers, and vertical connectivity of the stream to the groundwater table by raising the stream channel.

2. Water Quality:
Improve stream temperature by increasing groundwater input, narrowing the steam channel to the correct dimension, and re-establishing native vegetation to provide shading. Reduce sediment input by restoring the correct pattern and profile to the channel which will reduce shear stress to the stream banks and bed.

3. Hydrology:
Improve base flow conditions by raising the groundwater table. Potentially create oxbow ponds to further mitigate floods and capture flood flows to improve storage capacity of the floodplain. The Miller Creek Watershed is moderately developed including many impervious surfaces such as airports, roads and parking lots. Impervious surfaces have led to increased flashiness and the restoration project would re-connect the river to its floodplain reducing the impacts of high flow events.

4. Geomorphology:
Restore channel stability by addressing dimension, pattern and profile of the channel. The design will be based on the form of a stable reference reach.

5. Biology:
Improve habitat diversity with geomorphic stability and improved cover. Deep pools providing thermal refuge will be created and gravel riffles and glides will be constructed to provide spawning habitat for native brook trout. Native vegetation and a restored channel will improve invertebrate populations. The coldwater fish community will also benefit from the decrease in overall water temperatures and a decrease in sediment input. Wildlife will benefit from a reforested riparian zone.

6. Other:
The property is owned by the City of Duluth and improved aesthetic appearance of stream would improve the recreational and educational potential of the area.

The beneficiaries for the project are the trout and other cold-water aquatic species living in the creek; species that live in this area of high biodiversity significance; local anglers who will be able to utilize this unique urban resource; and the citizens of Duluth, as healthy creeks and watersheds are a goal for the City and its residents (City of Duluth Comprehensive Plan, 2016).

e. Are future stages of this development including development on any other property planned or likely to happen?
☐ Yes X No
If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

f. Is this project a subsequent stage of an earlier project? ☐ Yes X No
If yes, briefly describe the past development, timeline and any past environmental review.

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

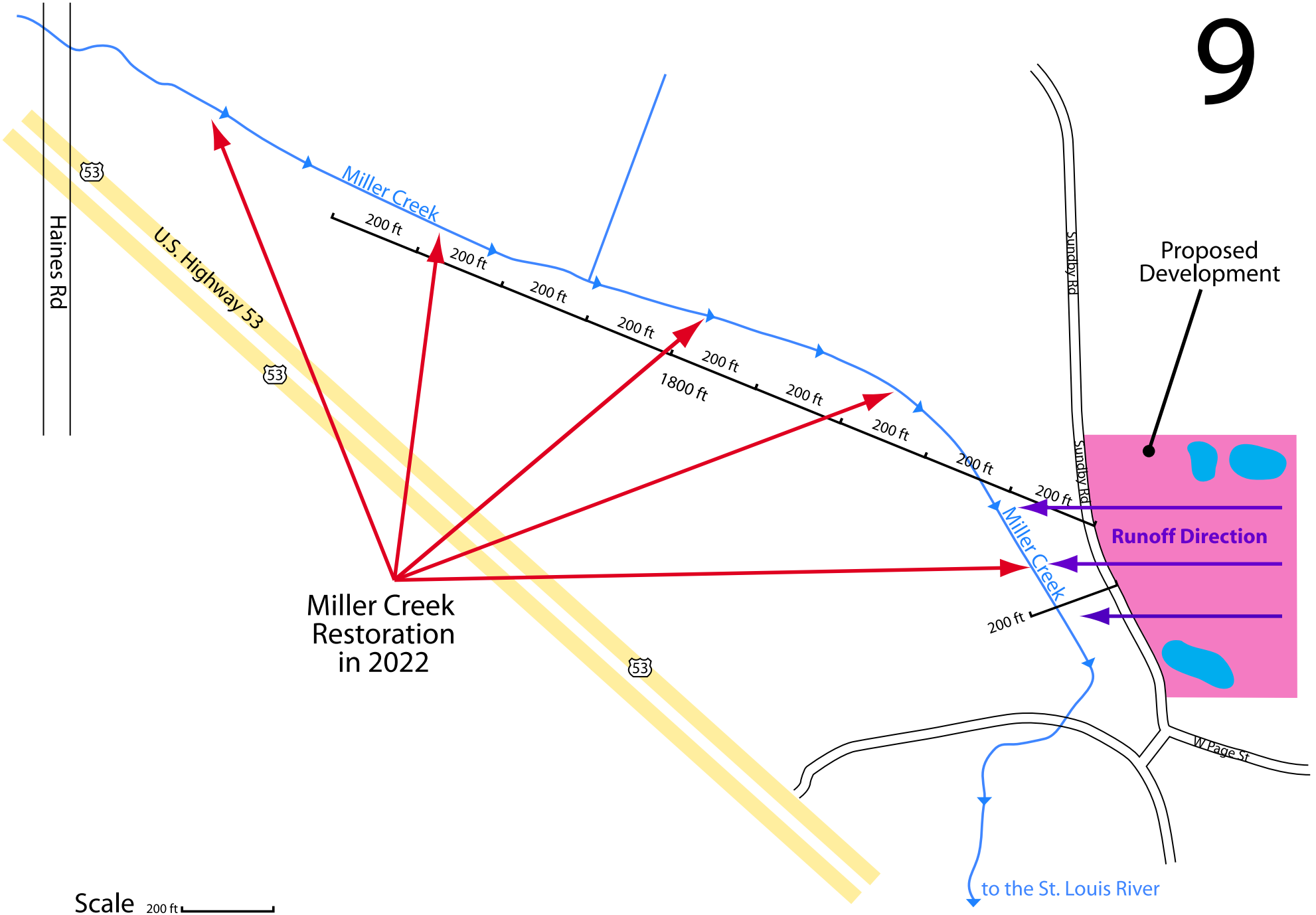
	Before	After		Before	After
Wetlands	9.8	8.9	Lawn/landscaping	0	0
Deep water/streams	1.4	2.3	Impervious surface	0	0
Wooded/forest	0	0	Stormwater Pond	0	0
Brush/Grassland	0	0	Other	0	0
Cropland	0	0			
			TOTAL	**11.2**	**11.2**

8. 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.*

Approvals Required

Unit of government	Type of application	Status
MN DNR – Ecological Services	Public Waters Permit	Incomplete

9


Haines Rd
U.S. Highway 53
53
Miller Creek
200 ft
200 ft
200 ft
200 ft
1800 ft
200 ft
200 ft
200 ft
200 ft
Sundby Rd
Sundby Rd
Proposed Development
Runoff Direction
Miller Creek
200 ft
Miller Creek Restoration in 2022
W Page St
to the St. Louis River
Scale 200 ft
Source: Google Maps

Minnesota Department of Natural Resources
Division of Ecological and Water Resources, Box 25
500 Lafayette Road
St. Paul, Minnesota 55155-4025
Phone: (651) 259-5109 E-mail: lisa.joyal@state.mn.us

July 25, 2012 **Correspondence # ERDB 20120321**

Ms. Kate Kubiak
South St. Louis SWCD
215 N 1st Avenue E, Room 301
Duluth, MN 55802

RE: Natural Heritage Review of the proposed Miller Creek Restoration (Outlot B),
T50N R14W Section 18, St. Louis County

Dear Ms. Kubiak,

As requested, the Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, rare features have been documented within the search area (for details, see the enclosed database reports). Please note that the following **rare features *may* be adversely affected** by the proposed project:

- In 1994, floating marsh-marigold (*Caltha natans*), a state-listed endangered plant, was documented within the project boundary in a shrub swamp and wet meadow along Miller Creek. Floating marsh-marigold is an aquatic species that occurs in shallow slow-moving water in streams, creeks, ditches, swamps, pools, beaver ponds, and sheltered lake margins. There are only a few records of floating marsh-marigold in Minnesota, all within St. Louis County. While the restoration of the creek alignment will be beneficial in the long term, the proposed project does have the potential to result in the taking of a protected plant.

  Minnesota's endangered species law (*Minnesota Statutes*, section 84.0895) and associated rules (*Minnesota Rules*, part 6212.1800 to 6212.2300 and 6134) prohibit the taking of threatened or endangered species without a permit. Given the protected status of this species and the potential for it to still occur within the project boundary, a qualified surveyor (see attached list) will need to conduct a survey for this species prior to any construction activities. The purpose of the survey would be to delineate the current extent of the population in order to inform the takings permit process, and to provide information for the Environmental Assessment Worksheet in order to adequately assess the environmental effects of the proposed project. P**lease contact me before any survey work is initiated**, as the DNR would like the opportunity to provide feedback on surveyor qualifications and survey protocol in order to prevent any potential project delays. Project planning should take into account that the botanical survey needs to be conducted during the appropriate time of the year, which may be limited (the best time to search for floating marsh-marigold is from May into September, when flowers or leaves are present). Please visit the DNR Rare Species Guide at http://www.dnr.state.mn.us/rsg/index.html for more information on the biology, phenology, habitat use, and conservation measures of this rare plant.

- The Environmental Assessment Worksheet should address whether the proposed project has the potential to adversely affect the above rare species and, if so, any avoidance, minimization, or other mitigation measures that will be implemented.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

The enclosed results include an Index Report and a Detailed Report of records in the Rare Features Database, the main database of the NHIS. To control the release of specific location information, which might result in the destruction of a rare feature, both reports are copyrighted.

The Index Report provides rare feature locations only to the nearest section, and may be reprinted, unaltered, in an environmental review document (e.g., EAW or EIS), municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the index report for any other purpose, please contact me to request written permission. **The Detailed Report is for your personal use only as it may include specific location information that is considered nonpublic data under *Minnesota Statutes*, section 84.0872, subd. 2. If you wish to reprint or publish the Detailed Report for any purpose, please contact me to request written permission.**

For environmental review purposes, the Natural Heritage letter and database reports are valid for one year; they are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or if an updated review is needed.

Please note that locations of the gray wolf (*Canis lupus*), state-listed as special concern, and the Canada lynx (*Lynx canadensis*), federally-listed as threatened, are not currently tracked in the NHIS. As such, the Natural Heritage Review does not address these species.

Furthermore, the Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. Additional rare features for which we have no data may be present in the project area, or there may be other natural resource concerns associated with the proposed project. For these concerns, please contact your DNR Regional Environmental Assessment Ecologist (contact information available at http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html). Please be aware that additional site assessments or review may be required.

Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources. An invoice will be mailed to you under separate cover.

Sincerely,

Lisa Joyal

Lisa Joyal
Endangered Species Review Coordinator

enc. Rare Features Database: Index Report
Rare Features Database: Detailed Report
Rare Features Database Reports: An Explanation of Fields
DNR List of Surveyors

cc: Rian Reed
Bruce Carlson
Patricia Fowler
Rich Baker

Steven Robertson <srobertson@duluthmn.gov>
To: Becca Mulenburg
Cc: Chris Fleege, Adam Fulton

Tue, Feb 21 at 8:46 AM

Good morning. I talked to my colleague Kyle in Planning on Friday who is more involved than I am with wetlands. The hotel itself will have no direct wetland impacts...the project proposer was placing the hotel on the property to avoid any direct wetland impacts. There will be minor wetland impacts by the city when there is work to extend the sidewalk adjacent to the road, but these are expected to be about 2,500 square feet.

Thank you, and I hope you have a good day.

July 2013 version

ENVIRONMENTAL ASSESSMENT WORKSHEET

This Environmental Assessment Worksheet (EAW) form and EAW Guidelines are available at the Environmental Quality Board's website at: http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm. The EAW form provides information about a project that may have the potential for significant environmental effects. The EAW Guidelines provide additional detail and resources for completing the EAW form.

Cumulative potential effects can either be addressed under each applicable EAW Item, or can be addresses collectively under EAW Item 19.

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:** Miller Creek Channel and Floodplain Restoration Project

2. **Proposer:** South St. Louis Soil & Water Conservation District
Contact person: Tim Beaster
Title: Conservation Specialist
Address: 4215 Enterprise Circle
City, State, ZIP: Duluth, MN 55811
Phone: 218-723-4867
Fax:
Email: tim.beaster@southstlouisswcd.org

3. **RGU:** South St. Louis Soil & Water Conservation District
Contact person: Tim Beaster
Title: Conservation Specialist
Address: 4215 Enterprise Circle
City, State, ZIP: Duluth, MN 55811
Phone: 218-723-4867
Fax:
Email: tim.beaster@southstlouisswcd.org

4. **Reason for EAW Preparation:** (check one)

Required:
☐ EIS Scoping
X Mandatory EAW

Discretionary:
☐ Citizen petition
☐ RGU discretion
☐ Proposer initiated

If EAW or EIS is mandatory give EQB rule category subpart number(s) and name(s):
The proposed project will re-align some sections of Miller Creek and an unnamed tributary to Miller Creek (hereafter referred to as Tributary 1). Both are designated trout streams. The EAW is mandatory under the following rule category: Minnesota Rule: part 4410.4300, subpart 26. **Stream diversion.** For a diversion, realignment, or channelization of any designated trout stream, or affecting greater than 500 feet of natural watercourse with a total drainage area of ten or more square miles unless exempted by part 4410.4600, subpart 14, item E, or 17, the local government unit shall be the RGU. The South St. Louis Soil & Water Conservation District is the Local Government Unit and will serve as the RGU.

5. **Project Location:**
County: St. Louis
City/Township: Duluth
PLS Location (¼, ¼, Section, Township, Range): Located in part of the West Half of Section 18, Township 50 North, Range 14 West of the Fourth Principle Meridian, Platted as Outlot B of the Miller Creek Division. Certificate No. 285237.
Watershed (81 major watershed scale): St. Louis River
GPS Coordinates: 46.81403, -92.16993 (center of reach)
Tax Parcel Numbers: 010-3257-00050

International Journal of Engineering Science Invention
ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726
www.ijesi.org ||Volume 4 Issue 5 || May 2015 || PP.27-31

Impacts of Impervious Surfaces on the Environment

Chithra S.V. [1,*], Dr. M.V. Harindranathan Nair[2], Amarnath A[3], Anjana N.S.[4]
[1,2,3,4]*School of Environmental Studies, Cochin University of Science and Technology, Kochi, Kerala, India.*

Abstract: *Anthropogenic surfaces that prevent the infiltration of water into the underlying soil such as buildings and paved surfaces (asphalt, concrete), roads, parking lots are called impervious surfaces. Increasing urbanization and pressure of population stimulates the growth of impervious surfaces in the cities. Tremendous increase in impervious surfaces has far reaching effects on the landscape and environment of the region. Impacts of impervious surfaces on climate and hydrology are reviewed here. This review suggests that increasing impervious surfaces strongly alters the hydrology by reducing infiltration and increasing surface run-off. It increases the Land Surface Temperature (LST) by creating Urban Heat Islands (UHI).*

Keywords: *Impervious surfaces, pollution, water quality, Land Surface Temperature, Urban Heat Islands.*

I. INTRODUCTION

Impervious surfaces are defined as the surfaces that prohibit the infiltration of water from the land surface into the underlying soil. Imperviousness is the most critical indicator for analyzing impacts of urbanization on the water environment.[1,2] With the advent of urban sprawl, impervious surfaces have also become a key issue in growth management and watershed planning due to their impact on habitat health.[2] Impervious surface increases the frequency and intensity of downstream runoff and decreases water quality. Increasing urbanization has resulted in increased amounts of impervious surfaces - roads, parking lots, roof tops, and so on - and a decrease in the amount of forested lands, wetlands, and other forms of open space that absorb and clean storm water in the natural system.[3,4] This change in the impervious-pervious surface balance has caused significant changes to both the quality and quantity of the storm water runoff, leading to degraded stream and watershed systems.[5,6,7,8] Stream quality starts to degrade, if more than 10 percent of the watershed is impervious.[1]

A good number of researchers attempted to find the watersheds' response to land use/ land cover changes over time.[9,10] Many authors[11,12,13] have noted that an increase in impervious surface reduces base flow. This is because impervious surfaces prevent infiltration, thereby reducing groundwater recharge and base flow.[14] Impervious surfaces can be used as an alternate measure for the cumulative impact of urbanization on water resources without having to consider specific factors. The other benefit is that it can be measured by a variety of procedures.[2] Watersheds with large amounts of impervious cover may experience an overall decrease of groundwater recharge and base flow and an increase of storm flow and flood frequency.[8,15] Furthermore, imperviousness is related to the water quality of a drainage basin and it's receiving streams, lakes, and ponds. Increase in impervious cover and runoff directly impact the transport of non-point source pollutants including pathogens, nutrients, toxic contaminants, and sediment.[16] Increases in runoff volume and discharge rates together with non-point source pollution, will predictably alter in-stream and riparian habitats, and the loss of some critical aquatic habits.[17] In addition, the areal extent and spatial occurrence of impervious surfaces may significantly influence urban climate by altering sensible and latent heat fluxes within the urban areas.[18] As impervious cover increases within a watershed/administrative unit, vegetation cover would decrease.

Four basic qualities of imperviousness that make it an important indicator of environmental quality are:

(1) Although the impervious surface does not directly generate pollution, a clear link has been made between impervious surfaces and the hydrologic changes that degrade water quality;
(2) An impervious surface is a characteristic of urbanization;
(3) An impervious surface prevents natural pollutant processing in the soil by preventing percolation; and
(4) Impervious surfaces convey pollutants into the waterways, typically through the direct piping of stormwater[2].

The development of the scientific basis to establish the relationship between land use changes and the amount of impervious surfaces took place in the field of urban hydrology primarily during the 1970s. The majority of current impervious surface analyses rely on the methods of these original studies and subsequent studies that correlated percentage of impervious surfaces to land use largely by using estimates of the proportion of imperviousness within each class. A good number of studies estimate the percentage of Total Impervious Area (TIA) as well as Effective Impervious Area (EIA) by coupling remote sensing and GIS[10, 19].

II. HYDROLOGIC EFFECTS OF IMPERVIOUS SURFACES

The water cycle is the most critical processes in supporting life on this planet, and fresh water is central to all aspects of our lives. Hydrology is the study of the movement, distribution and quality of water on earth and urban hydrology is the interdisciplinary science of water and its interrelationships with man in an urban watershed. In urban areas, due to the intense alteration of natural environmental processes by human activity, the watershed response to precipitation are also significantly altered (e.g. reduced infiltration, decreased travel time, higher runoff, urban flooding etc.). Although urban areas are quiet small relative to un-urbanized land, they significantly alter hydrology, biodiversity, biogeochemistry and climate at local, regional and global scales. Land development causes pervious soft surfaces such as grass lands, water bodies and green vegetation being replaced by hard impervious surfaces. While forests capture much precipitation through interception and infiltration, even more is evapotranspired by the trees.[20] Open land, such as a pasture or cultivated land, allows less infiltration than forest, and is often more prone to runoff. Water enters into the soil through infiltration and the velocity with which water enters the soil is infiltration rate. Land use can have significant impacts on the amount and speed of infiltration in a basin. Impermeable surfaces, such as roofs, parking lots, and roads allow zero infiltration, forcing all water that falls onto them to runoff. The changing proportions of these land use types within a basin can have serious effects on discharge and response to storms, either increasing total yield of water, or decreasing and smoothing the hydrograph.[21] Increased impervious cover generally results in more storm water runoff and less ground water recharge. More runoff, in turn, increases stream flows during storm periods. Stream banks erode, more sediment is carried into the streams from surrounding lands, and aquatic habitats are disrupted and degraded. Less recharge means less ground water discharges to streams during dry periods. High levels of impervious cover are associated with dense development, which sends greater pollutant loads to runoff flow channels.

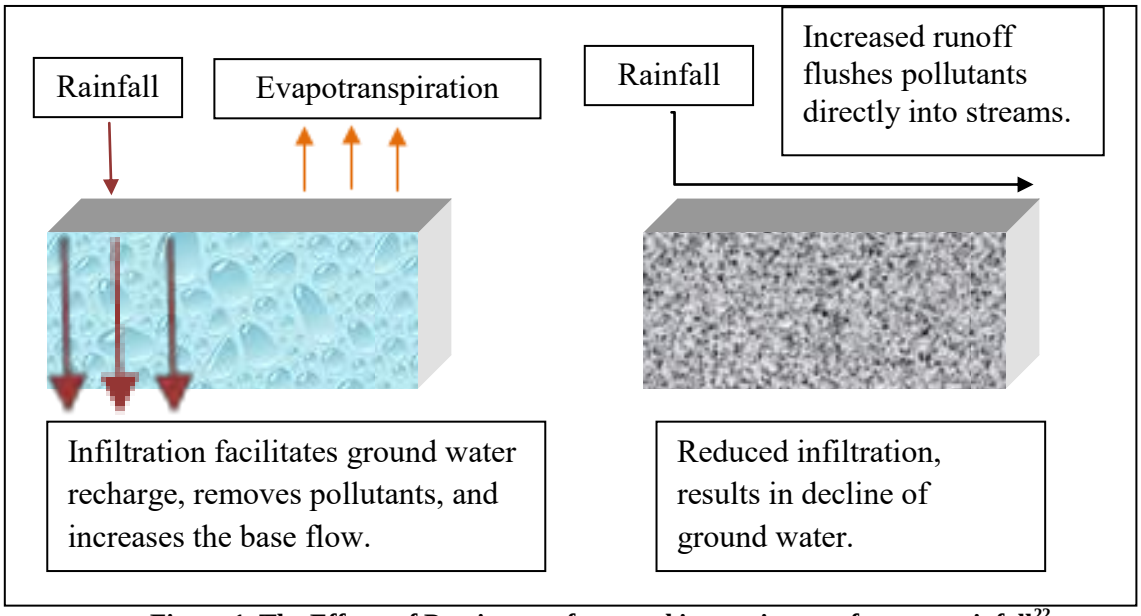


Figure 1. The Effects of Pervious surfaces and impervious surfaces on rainfall[22].

III. IMPERVIOUSNESS AND WATER QUALITY

Impervious surfaces serve as a key indicator for health of aquatic ecosystems.[2] Increased impervious cover is strongly related to increased degradation of aquatic ecosystems. Impervious surfaces collect and accumulate pollutants deposited from the atmosphere, leaked from vehicles or derived from other line and point sources. During storms, accumulated pollutants are quickly washed off and rapidly delivered to aquatic systems. As the area under impervious cover increases, more water reaches the ocean as surface water run-off. Storm water runoff is the rain or snowmelt that runs off streets, rooftops, parking lots, lawns and other land surfaces and eventually runs into our streams. Storm water also picks up pollutants as it flows across land surfaces. Pollutants include sediment, pesticides, asphalt, fertilizers, bacteria and disease-causing organisms from failing septic systems; petroleum products such as oil and grease. Sometimes pollutants (e.g., used oil, paint thinners, etc.) are illegally dumped directly into storm drains and waterways. Urban pollutant loads are linked to watershed imperviousness and it serves as a key predictive variable in most simulations and empirical models used to estimate pollutant loads. The simple method assumes that pollutant loads are a direct function of watershed imperviousness.[23]

Impervious surface affects the hydrology of a watershed, the geomorphology of stream beds, temperature, fish populations, macro invertebrates, microbes, algae, and macrophytes. Nutrients, toxins and sediment disrupt aquatic ecosystems and contribute to degraded water quality. The reduced stream flow and more extreme stream temperatures will stress aquatic ecosystems. The abundance and diversity of fish and macro invertebrate populations is harmed as the concentration of impervious surfaces increase.[24] A few works studied the impacts of urbanization on stream insect communities by taking Impervious Surface Area as an indicator.[25] They noticed a steep decrease in stream insect community structure as impervious surfaces increase above 6% of the total catchment area. Water temperature increased as total percentage of impervious surface increases.[26]

The expansion of urban areas is creating more impervious surfaces, such as roofs, roads, and parking lots, which collect pathogens, heavy metals, sediment, and chemical pollutants and quickly transmit them to streams, rivers, estuaries or sea downstream during rain. This non-point source pollution is one of the major threats to water quality and is linked to chronic and acute illnesses from exposure through drinking water, seafood, and contact recreation. Impervious surfaces also lead to pooling of storm water, thus increasing the potential breeding areas for mosquitoes, the disease vectors for dengue hemorrhagic fever, Chikungunya and other infectious diseases. Traditional strategies to manage storm water and treat drinking water require large infrastructure investments and face difficult technical challenges. Reducing storm water runoff and associated non-point source pollution is a potentially valuable component of an integrated strategy to protect public health at the least cost. Runoff from roofs, roads, and parking lots can contain significant concentrations of copper, zinc, and lead, which can have toxic effects in humans. Bioaccumulation of insecticides at levels considered harmful to organisms, raises concern about carcinogenic effects and disruption of hormonal systems in humans.

When storm water moves more quickly into streams, it also has a greater capacity to carry non-point source pollutants into the streams. Community drinking water supplies are commonly disinfected with chlorine and, if the source is surface water, it is filtered to remove sediment and associated pollutants. Several common disease carrying microorganisms are resistant to treatment with chlorine and filtration, although the effectiveness of the filters varies with their pore size. Suspended sediment in source waters further reduces the effectiveness of chlorine. Nitrogen also poses direct health threats. Exposure to nitrate in drinking water increases the risk of methemoglobinemia, causing shortness of breath and blueness of the skin, especially for infants. Consumption of water with elevated nitrate is also suspected to increase miscarriage risk. Major sources of nitrogen from urban and suburban areas may include fertilizers carried by storm water, vehicle exhaust, and septic systems. Fecal coliform bacteria in surface waters commonly exceed standards for recreation, and exposure to bacteria and parasites from swimming and other forms of recreation in water contaminated with urban runoff has caused numerous cases of illness, including ear and eye discharges, skin rashes, and gastrointestinal problems. Increasing impervious surface without storm water controls leads to increased runoff. Elevated fecal coliform levels also have been detected in suburban streams.

Impervious surfaces both absorb and reflect heat. During the summer months, impervious areas can have local air and ground temperatures that are 10 to 12 degrees warmer than the fields and forests that they replace. In urban areas, trees that could provide shade to offset the effects of solar radiation are usually absent. Other factors such as lack of riparian cover and ponds, were also demonstrated to amplify stream warming, but the primary contributing factor was impervious cover.[26]

IV. IMPERVIOUSNESS AND WEATHER CHANGE

Urban heat islands (UHI) refer to the phenomenon of higher atmospheric and surface temperatures occurring in urban areas than in the surrounding rural areas due to urbanization.[27] The prime driving force behind UHI is impervious surfaces. The UHI occurs due to differences in thermal, and radiative properties of urban surface materials from the ones of natural surfaces, multiple reflection and absorption of sunlight by urban surfaces (due to specific geometry), anthropogenic heat sources and lack of evapotranspiration in urban areas.[28] The Thermal properties of various urban surface types are given in Table 1. The UHI may greatly change the local climate and thus should be captured by climate models on local and regional scales.

Sl.No.	Surface Type	Emissivity	Absorptivity
1	Highly reflective roof	0.85-0.9	0.3-0.4
2	Galvanized roof sheets	0.25-0.28	0.85-0.9
3	Grass	0.97-0.98	0.7-0.75
4	White tile	0.9-0.95	0.1-0.5
5	Tar and Gravel	0.28	0.82-0.97
6	Brick or Stone	0.87	0.6-0.8
7	Asphalt	0.92	0.8-0.95
8	Concrete	0.9	0.65-0.9
9	Dense Canopy trees	0.95-0.99	0.82-0.85
10	Water	0.99	0.95-0.98
11	Black loamy soil	0.66	0.82-0.87

Table 1. The Thermal properties of various urban surface types[29]

Fei Yuan and Marvin E Bauer compared the Normalised Difference Vegetation Index (NDVI) and percent impervious surface as indicators of surface urban heat island effects by investigating the relationships between the Land Surface Temperature (LST), percent impervious surface area and the NDVI.[30] Landsat TM and ETM data were used for the study. They reported a strong linear relationship between LST and percent impervious surface for all seasons, whereas the relationship between LST and NDVI is less strong. Hua Li and Qinhuo Liu (2008) compared the normalized difference built-up index (NDBI) and Normalised Difference Vegetation Index (NDVI) as indicator of Surface Urban Heat Island (SUHI) effects in MODIS imagery by investigating the relationships between the Land Surface Temperature (LST), NDBI, NDVI from four different seasons for Changsha-Zhu zhou- Ziangtan (China) metropolitan area.[31] Scatterplots of NDBI, NDVI and LST for all the images were compared to find the relationships of LST to NDBI and NDVI. Results suggest that NDBI is an accurate indicator of SUHI effects and can be used as a complimentary method to the traditional NDVI. A good number of works reported the prevalence of heat island effect in various cities throughout the world.[29, 32]

Some authors have questioned the accuracy of impervious surface measures with regard to their impact on water quality and quantity.[33] For example, Total Impervious Area (TIA) includes all of the impervious surfaces in a watershed, regardless of what kind of connection exists between the impervious surfaces and the basin's water bodies. Most of the satellite based estimates calculates the TIA only. Effective Impervious Area (EIA) includes only the portion of a watershed that allows water to cross only an impervious pathway to reach the water. Years of scientific inquiry has firmly established impervious surface coverage as a "reliable and integrative indicator of the impact of development on water resources".[2] This combined with the fact that impervious surface is a measurable parameter, makes it an ideal substitute for measuring water quality in an urban environment.

Conclusion:

A good number of studies have commented on the impacts of impervious surfaces on urban hydrology. Impervious surfaces significantly reduce the water quantity and quality in a watershed. It is reported that the impervious surface degrades the watershed quality by greatly reducing the stream flow and increasing the stream temperature. They carry huge pollutant loads downstream, causing due harm to aquatic life. Surface urban heat islands are another phenomenon caused by impervious surfaces. Attempts have been reported from all over the world to quantify the area under impervious surfaces as well as its impacts.

Acknowledgement:

We acknowledge CSIR, for the financial support provided in the form of CSIR-JRF. Also we thank DST-FIST for the financial support provided for the school.

REFERENCES

[1]. Schueler T.R. The importance of impervious surfaces, Watershed Protection Techniques, 1994, 1, 100-111.
[2]. Arnold, C.A. Jr. and Gibbons, C.J, "Impervious Surface Coverage: the Emergence of a Key Urban Environmental Indicator", Journal of the American Planning Association, 1996, 62(2), 243-258.
[3]. Leopold, L.B., Hydrology for urban land planning: a guide book on the hydrologic effects of urban land use, U.S. Geological Survey Circular, 1968, 554.
[4]. Carter, R. W. Magnitude and Frequency of Floods in Suburban Areas. Short Papers in the Geologic and Hydrologic Sciences, 1961, 424-B: B9-B11.
[5]. Morisawa, M., LaFlure, E., 'Hydraulic geometry, stream equilibrium and urbanization. In adjustments of the fluvial systems'. In: Rhodes, DD; Williams, GP, editors. Proceedings of 10th Annual Geomorphology Symposium Series. Binghamton. New York: 1979.
[6]. Arnold, D. G., Boison, P. J. and Patton, P. C. 'Sawmill Brook: An example of rapid geomorphic change related to urbanization', J. Geol., 1982, 90, 155–166.
[7]. Bannerman, R.T., Ownes, D.W., Dobbs, R.B., Hornewer, N.J., 'Sources of pollutants in Wisconsin stormwater', Water Science and Technology, 1993, 28 (35), 241–259.
[8]. Girija, D., Environmental Impact Assessment of Surface Water Drainage System in the Central Area of Cochin using GIS and Remote Sensing, M.Tech. Thesis, CUSAT, 2005.
[9]. Shekhar K.R. and Rao B.V., Evaluation of sediment yield by using Remote Sensing and GIS: a case study from the Phulang Vagu watershed, Nizamaba District (A.P), International Journal of Remote Sensing, 2002, 23(20), 4449-4509.
[10]. Santillan, J.R., Makinano, M.M., and Paringit, E.C. Integrating remote sensing, GIS and Hydrologic models for predicting Land Cover Change Impacts on surface runoff and sediment yield in a critical watershed in Mindanao, Philippines, International archives of the Photogrammetry, Remote Sensing and Spatial Information Services, XXXV111, 8, Kyoto Japan, 2010.
[11]. Harbor, and Jonathan M., A practical method for estimating the impact of land-use change on surface runoff, groundwater recharge and wetland hydrology. American Planning Association. Journal of the American Planning Association, 1994, 60 (1).
[12]. Pappas, E. A., D. R. Smith, C. Huang, W. D. Shuster, and J.V. Bonta. Impervious surface impacts to runoff and sediment discharge under laboratory rainfall simulation Catena, 2008, 72:146-152,.
[13]. Schueler T. R., Mc Neal, L.F., and Cappiella K. Is impervious cover still important? Review of Recent Research, Journal of Hydrologic Engineering, ASCE, 2009, 4, 309-315.
[14]. Klein, R. Urbanization and stream quality impairment. American Water Resources Association, Water Resources Bulletin, 1979, 15(4).
[15]. Brun, S. E., and L. E. Band. Simulating runoff behavior in an urbanizing watershed, Computers, Environment and Urban Systems, 2000, 24 (1):5-22.

[16]. Hurd J.D., and Civco D.L., Temporal characteristics of impervious surfaces for the state of Connecticut, ASPRS Annual conference proceedings, 2004.
[17]. Gillies R., Box J.B., J. Symanzic, and Rodmaker, E.J., Effects of urbanization on the aquatic fauna of the Line Creek watershed, Atlanta- A satellite perspective. Remote sensing of environment, 2003, 86:411-422.
[18]. Yang, L, C. Huang, C. Homer, B. Wylie, and M. Coan., An approach for mapping large-area impervious surfaces: Synergistic use of Landsat 7 ETM+ and high spatial resolution imagery, Canadian Journal of Remote Sensing 2002, 29(2), 230-240.
[19]. Chithra S.V., Amarnath A., Smitha S.V., Harindranathan Nair M.V., Estimation of Effective Impervious Area of Cochin using Satellite Images, Research Journal of Recent Sciences,2013, Vol. 2(ISC-2012), 241-24.
[20]. Hough, J., Management alternatives for increasing dry season base flow in the Miombo woodlands of Southern Africa. Ambio, 1986, 15(6), 341-346.
[21]. Zheng, H., Chen, F., Ouyang, Z., Tu, N., Xu, Weihua, Wang, X., Miao, H., Li, X., Tian, Y., Impacts of reforestation approaches on runoff control in the hilly red soil region of Southern China. Journal of Hydrology, 2008, 356, 174-184.
[22]. Ferguson, B. K., Introduction to Stormwater: Concept, Purpose, Design. New York, NY: John Wiley and Sons, Inc., 1998.
[23]. Schueler, T.R., Controlling urban runoff–a practical manual for planning and designing urban best management practices, Metro. Wash. Counc. Gov., Washington, DC 240, 1987.
[24]. Paul M.J and J.L. Meyer, Streams in the urban landscape. Annual review of Ecology and Systematics. 2001, 32, 333-365.
[25]. Chandler C. M., Huryn, A.D., Cronan, C., Impervious Surface Area As A Predictor of the Effects of Urbanization On Stream Insect Communities In maine, U.S.A., Environmental Monitoring and Assessment, 2002, 89: 95–127.
[26]. Galli, J., Thermal Impacts Associated with Urbanization and Stormwater Management Best Management Practices. Washington, DC. Metropolitan Washington Council of Governments for the Sediment and Stormwater Administration of the Maryland Department of the Environment, 1990.
[27]. Voogt J A, Oke T R, Thermal Remote Sensing of Urban Areas, Rem. Sensing of Environment, 2003, 86, 370-384.
[28]. Oke, T. R., The energetic basis of the urban heat island, Quarterly Journal of Royal Meteorology Society, 1982, 108, 1 – 24.
[29]. Minni S., M. Mili, K. Pradeep, and D E V S Kiran K., "Sustainable Urban Development: Minimising Urban Heat Island Effect and Imperviousness Factor", SANEI Working Paper Series No. 13-03, South Asia Network of Economic Research Institutes, Dhaka, 2013.
[30]. Fei Yuan, Marvin E Bauer. Comparison of impervious surface area and normalized difference vegetation index as indicators of surface heat island effects in Landsat imagery, Rem. Sensing.of Environment, 106, 375-386; 2007.
[31]. H. Li, Q. Liu, Comparison of NDBI and NDVI as indicators of surface urban heat island effects in MODIS imagery, Proc. Of SPIE. 2008, 7285, 728503-3.
[32]. Shabeer, A. M., & Mahesha D., estimation of land surface temperature in urbanized area and microclimate change using spatial technique –a MODIS based approach for Cochin City, Papeles de Geografía, 2011, 53-54, 241-245.
[33]. Brabec, E., Schulte, S., and Richards, P., Impervious Surfaces and Water Quality: A Review of Current Literature and Its Implications for Watershed Planning, Journal of Planning Literature, 2002, 16 (4) 499-514.

Meeting summary & additional information, discussion on hotel proposal at Sundby Road & Osage Street

From: Estabrooks, Tom (MPCA) (tom.estabrooks@state.mn.us)

To: beccamulenburg@yahoo.com

Date: Thursday, November 3, 2022 at 03:37 PM CDT

Hi Becca, Here's a summary of my notes on the things we talked about earlier today. I have also included links to references and to other addi. onal informa. on, as you requested.

Notes on Miller Creek Water Quality & Watershed Conditions
Miller Creek is a designated trout stream with a naturally reproducing brook trout popula on (i.e., brook trout are not stocked by the DNR).

The watershed contains a high degree (49%) of disturbed & developed land cover in watershed (MPCA Duluth Urban Area Streams TMDL, Table 6/PDF 23 h. ps://www.pca.state.mn.us/sites/default/files/wq-iw10-11e.pdf summarizes the land cover in the Duluth Streams watersheds).

Miller Creek watershed contains a high degree of impervious surfaces in the watershed, with an es□mate in ~ 2003 to be at least 22% (Lake Superior Streams web site h. ps://www.lakesuperiorstreams.org/understanding/impact_impervious.html). Note that studies on impervious surfaces have documented nega□ve effects/degrada□on to stream biota, when impervious surfaces reach 10%, but degrada□on can be detected even at approximately 4% impervious surfaces in a watershed.

Miller Creek has four water quality impairments, two of which have approved studies (total maximum daily loads (TMDLs)) from U.S. EPA. Each impairment requires detailed studies to understand the factors (stressors) that are causing and contribu□ng to the water quality impairments and to set needed reduc□on goals to restore the water quality. There are numerous studies and reports completed by MPCA and local partners (e.g., South St. Louis SWCD, UMD-NRRI) available on MPCA's web site that describe strategies and ac□ons that are needed/could be taken to contribute to restoring the stream water quality and can be found here:

h. ps://www.pca.state.mn.us/watershed-informa□on/duluth-urban-area-watershed
https://www.pca.state.mn.us/watershed-informa□on/st-louis-river

The four water quality impairments on Miller Creek are:

- Stream Temperature (approved by EPA in 2018)
- E. coli bacteria (approved by EPA in 2020)
- Macroinvertebrates
- Chloride (source = Minnesota's 2022 Impaired Waters List: https://www.pca.state.mn.us/air-water-land-climate/minnesotas-impaired-waters-list).

Development of urban watersheds, especially coldwater streams like Miller Creek can cause and/or contribute to a mul□tude of factors that nega□vely affect the stream water quality – biology and chemistry (commonly referred to as urban stream syndrome). Some examples include:

- channeliza□on/ditching of the stream channel speeds up the stream flow and contributes to stream channel erosion & degrada□on. It also nega□vely affects recharge of the shallow groundwater and water storage in the streambanks.
- increases in impervious surfaces increases the runoff volumes and also shortens the □me of water delivery to the stream, sending large pulses of water and related urban pollutants into the stream (e.g., sediments, chloride). Impervious surface has been used as an indicator of stream water quality; the more imperviousness, the greater the likelihood for degraded water quality.

- Filling of wetlands has diminished the water storage capacity in the watershed, which contributes to less water available for the stream, especially during extended dry periods.
- Smaller water volumes in the stream can warm more quickly and reduce the favorable condi□ons necessary for brook trout survival.
- Development of lands can reduce temporary water storage by grading the land surface, typically resul□ng in less pervious surfaces, more impervious surfaces, more turf grass and fewer trees.
- Incremental degrada□on of remaining natural resources, such as wetlands and natural areas adjacent to development is common.

Notes on observations discussed

There is a possibility that the development could alter the site hydrology by cutting-off surface and subsurface drainage to the wetlands located between the development and Sundby Road. The stormwater discharge directed to some of the wetlands may replace some of that drainage, but volumes, □ming, and dura□on of the stormwater discharges may alter wetland vegeta□on and type. The wetlands nearest the entrance may affected by the development (e.g., become drier), while the hydrology of the wetlands downgradient of the development may be maintained or could become drier or wetter, depending on precipita□on factors.

The proposed development may be too large for the site, given the exis□ng environmental constraints (wetlands). The proposal doesn't provide an adequate naturally vegetated buffer between the project and the adjacent wetlands, based on the figures in the Staff Report.

At the same □me that there is a large-scale stream restora□on project occurring very near the proposed project to restore degraded stream func□ons and contribute to improving water quality, more green spaces in the watershed will be developed through this project and other projects. So, while efforts to restore the stream are ongoing, so are the impacts.

Ul□mately, there is a maximum level (carrying capacity/sustainability) of the watershed to be able to absorb/withstand the effects from development and s□ll func□on as a healthy stream and watershed. Given the high percentages of past development and disturbed land cover in Miller Creek watershed (especially those undertaken during early development of the watershed), one could easily argue that we are beyond that point. There is no indica□on that development pressures will decrease, and even if it does there exists a high degree of developed and disturbed land surfaces, and degraded water quality in Miller Creek. For the most part, once a green space is developed, that conversion is permanent and cons□tutes a loss to the watershed, regardless of the mi□ga□ng measures put in place through zoning and permitting.

Requested links to resources

You also asked about the Environmental Assessment Worksheet (EAW), Alterna□ve Urban Area Review (AUAR) and the pe□□on process. Addi□onal resources can be found here:

https://www.eqb.state.mn.us/content/environmental-review-guidance-ci□zens
https://www.eqb.state.mn.us/content/eaw-process
https://www.eqb.state.mn.us/sites/default/files/documents/Quick%20Reference-Alterna□ve%20Urban%20Areawide%20Review%20-%20Updated%20Dec2015.pdf
https://www.eqb.state.mn.us/content/ci□zen-pe□□on-prepara□on-process

Lastly, here's a link to the Duluth News Tribune ar□cle on Duluth streams that I men□oned:
https://www.wctrib.com/sports/duluths-urban-trout-streams-hanging-on-but-need-help

Please feel free to contact me if you have addi□onal ques□ons or want clarifica□on on the informa□on and resources I have provided. Thanks! – Tom Estabrooks

Tom Estabrooks | Project Manager | Watershed Division | Minnesota Pollu on Control Agency | 525 South Lake Avenue, Suite 400, Duluth, MN 55802 | Phone: (218) 302-6608 | Email: tom.estabrooks@state.mn.us | Web: www.pca.state.mn.us

Wetland Delineation Report

Sundby Road
Duluth, MN

September 2008

Prepared For:
Marshall Weems
Mission Development
603 20th Street North
Sartell, MN 56377

Prepared By:
Environmental Troubleshooters, Inc.
3825 Grand Avenue
Duluth, Minnesota 55807

ET Project #08-0906

1.0 EXECUTIVE SUMMARY

Environmental Troubleshooters, Inc. (ET) performed a wetland delineation for Mr. Marshall Weems of Mission Development for a parcel of property ("subject site") located east and west of Sundby Road in Duluth, Minnesota. The site location is visually depicted on Figure 1, attached. The property's legal description is the SE ¼ of the NW ¼, Sec. 18, T 50 N, R 14 W, (St. Louis County). Marshall Weems called to request a wetland delineation as part of future site development. The subject site encompasses the east and west sides of Sundby Road. The subject site is an irregularly shaped parcel. The subject site is approximately twenty-eight (28) acres in size. Sundby intersects the subject site on the east and west, Page Street borders the subject property on the east, Kohl's Department store borders the subject site on the southwest, residential property borders the subject site on the north and east, Miller Creek borders the subject site on the southwest, and undeveloped property borders the subject site to the south, west, and east.

The subject property is currently developed with residential homes and also has undeveloped portions. The subject site consists of mature forest with wetland areas on the northwestern, northeastern, and southeastern portions of the property. The approximate property size is twenty-eight (28) acres.

Based on visual observations and data collected along various points, the subject property contains three (3) wetland areas, consisting of three (3) wetland types. The wetlands are classified as a Type 6 (Shrub Swamp), Type 3 (Shallow Marsh), and Type 4 (Deep Marsh). Approximately fifty (50) percent of the property is wetlands. The Type 6 wetland is located on the northwestern, northeastern, and southwestern portions of the subject site, the Type 3 (Shallow Marsh) is located on the east central portion of the subject site, and the Type 4 (Deep Marsh) is located on the east central portion of the subject site adjacent to the Type 3 (Shallow Marsh) wetland. The approximate wetland sizes and locations are visually depicted on Figure 2, attached. Because these wetlands are located in the Miller Creek Floodplain and Shore land boundary, the following City of Duluth rules apply:

- No Building, Roads, Parking within 150 feet of Miller Creek.
- No greater than 30% Impervious Areas within 300 feet of Miller Creek

2.0 INTRODUCTION

The following is a report documenting the wetland delineation completed at the subject site located on Sundby Road in Duluth, Minnesota. The wetland delineation was conducted on behalf of Mr. Marshall Weems of Mission Development as part of future site development. ET performed the wetland delineation on September 5, 16, and 17 of 2008 and determined the wetland/upland boundaries on the subject site. Approximate wetland sizes, wetland/upland boundaries and data point locations are illustrated on Figure 2, attached.

DULUTH'S WILD TROUT STREAMS HANGING ON, BUT *NEED HELP*

PCA has cataloged issues, developed long-term plan to restore trout stream water quality.

By John Myers
jmyers@duluthnews.com

There aren't many cities that can claim 50 streams running through their boundaries, like Duluth can, let alone a dozen or more clear and cool enough to hold native, wild trout.

From Mission Creek on the west to the Lester River on the east, the city is crossed by streams that start high over the hill and tumble down to the St. Louis River or Lake Superior.

Jeff Jasperson of Duluth likes to snorkel in these shallow, cool streams and look behind old logs in the water. He's finding not only small brook trout babies but also some bigger, breeding stock fish, in places that don't necessarily look like the trout streams we see in fly-fishing magazines or movies.

"I don't think many people in Duluth realize how many of these local streams still have wild trout in them,'' said Jasperson, a biologist for the Minnesota Pollution Control Agency in Duluth. "It's not just the bigger rivers. We're finding trout in tiny, cold-water tributaries you could jump across in one step."

When Jasperson isn't snorkeling for fun or monitoring streams as part of his day job, he likes catching trout with his kids. He's even captured some great underwater video of urban trout on his Go-Pro.

"The fact we can walk from our house in Duluth and catch a few trout and cook them up for dinner, the kids think that's so cool. So do I,'' he said.

But most of Duluth's urban trout streams are impaired, in some sort of trouble caused by the trappings of city life: Too much sediment from runoff, salt from winter road clearing and E. coli bacteria contamination from people and animals.

All that concrete and blacktop in town means water runs off, doesn't soak in, and is often too warm and too dirty, or turbid, to meet trout standards. Some Duluth streams are already too warm at times for trout to live. Worse, most are forecast by mid-century — just 30 years from now — to warm to levels that are fatal to trout, thanks to a warming climate.

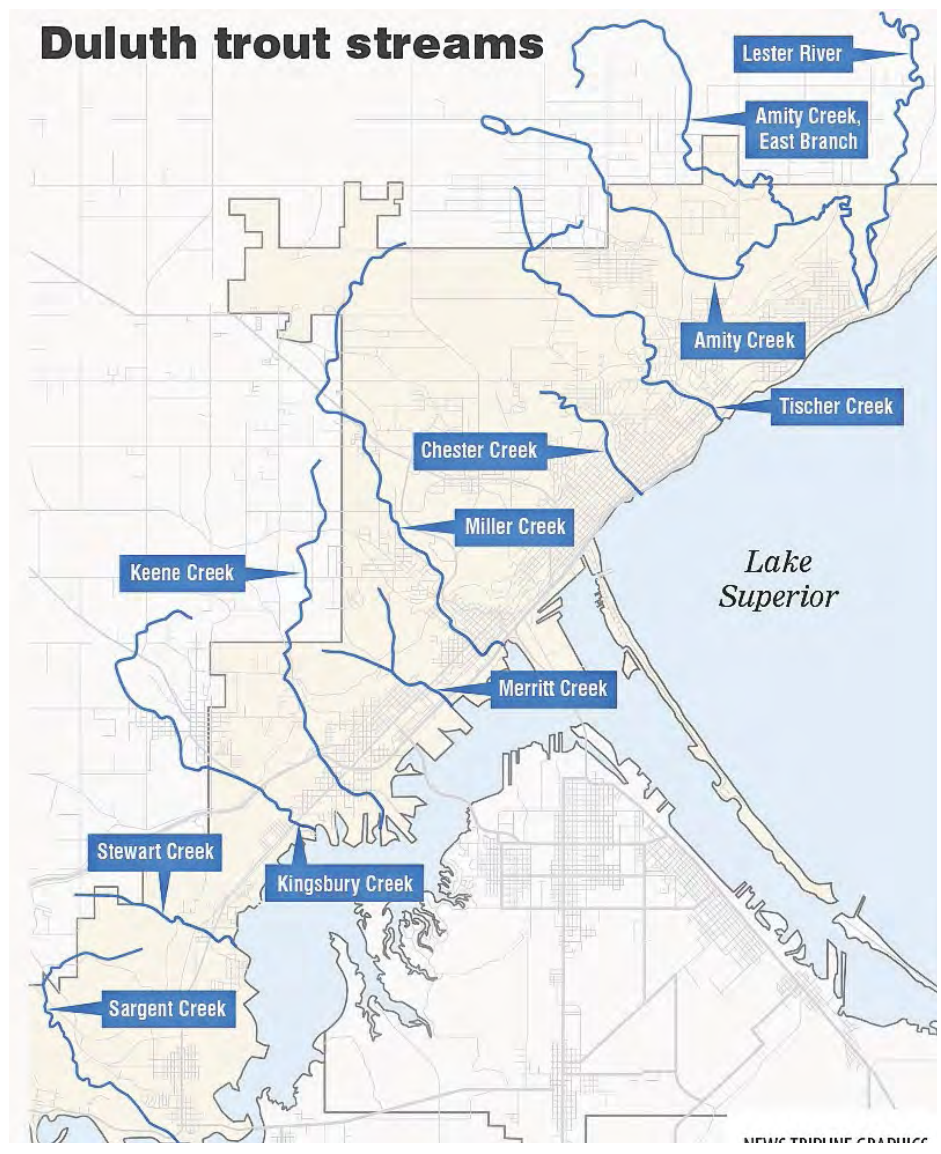
That's why the PCA has developed a report on the status of those streams and released a plan on how to make 11 of them more hospitable to fish. The 11 are the streams with enough long-term data available to show what impairments are an issue.

Jeff Jasperson photo
Jeff Jasperson of Duluth releases a nice brook trout on Amity Creek in Duluth. Jasperson, a biologist with the PCA, says he's surprised by how trout are hanging on in the city despite water quality issues.

Jeff Jasperson photo
Owen Jasperson of Duluth releasing a brook trout on Tischer Creek in Duluth.

The name is a mouthful — the Duluth Urban Streams Total Maximum Daily Load — part of the sometimes-obtuse federal mandate to apply the Clean Water Act to ground-level waterways. The effort establishes the amount of each pollutant, the load, that each stream can accept and still meet water quality standards. The process provides a snapshot of where streams are today and lays out a road map on how to improve water quality over the next 10-30 years. But it's going to take more than a plan to get there. Local governments, watershed districts and especially residents will have to spend time, money and effort.

TROUT: Page D3



Hidden lake produces fish and memories

By Steve Kuchera
skuchera@duluthnews.com

Minnesota is naturally known as the land of lakes, and over the years I've been on many of them. As a fisherman, several are more clearly fixed in my memories.

One of the foremost is a small, undeveloped lake surrounded by forests, beaver ponds and wetlands. The only access is up a small, log-choked stream or down a dirt road that likely hasn't seen a lick of maintenance since neighboring parcels of land covered with grown trees were last logged.

When Dad and I first fished here perhaps 20 years ago, we could, in dry weather, drive a truck or SUV to the lake. Then one wet fall a bear hunter tore out the bottom of the track, leaving ruts that became streams and holes that became pits of clinging mud. Now getting to the lake requires dry weather and an UTV pulling a small boat.

The difficulties getting there ensure that we almost always have the lake to ourselves. And over the years, we have had some great days of fishing. One early fall visit, we each caught the largest northern pike either of us ever boated in Minnesota.

But what really makes the fishing memorable are the panfish, especially in the fall when the aspen and tamarack around the lake are dressed in gold and the air has a nip to it. Then the slabside crappies are biting, sometimes so quickly that Dad and I will double up, each reeling in a fish. Such action adds to our friendly and traditional debate about who is the better fisherman. (Just as me losing a fish can bring forth Dad's

LAKE: Page D3

Steve Kuchera / skuchera@duluthnews.com
A morning mist burns off an undeveloped lake that over the years has produced nice fish and great memories.

Steve Kuchera / skuchera@duluthnews.com
A small northern is netted and soon after returned to the lake. The lake holds far bigger fish.

TROUT

From Page D1

"It's not saying that by 2030 or even 2050 everything is going to be fine. But it's identifying the issues and offering a plan on how to improve,'' said Karen Evens, who is leading the effort for the PCA. "And it gives us a way to measure the progress along the way."

There are no trout police to enforce the effort.

"It's not prescriptive. We can't order the community to do these things,'' Evens noted. "It has to be collaborative."

Fixes included more and better street sweeping by cities to keep polluted sediment from flushing into the streams with each rain; better stormwater storage and management; cleaning sediment traps in storm sewers; protecting small, cold-water tributaries that keep the bigger streams cold and oxygenated enough for trout; limiting or at least better planning for development near streams; and preserving vegetation along the waterways.

E.coli bacteria in streams washes in not just from humans, but also pets and wild animals. On the human side, fixing leaking sewer pipes and replacing failing septic systems are key. Adding more and better restrooms in city parks would help. Reducing pet waste remains a huge issue. There may be areas where nuisance wild animal populations — raccoons, deer, beaver, etc. need to be reduced or where birds like geese and ducks need to be encouraged to stay away.

While many people perceive brook trout to be a hyper-sensitive species that needs pristine waters to survive, Jasperson says Duluth brook trout have adapted over the last century of intense development, with the strongest fish passing on their genes.

"The surviving fish know where the cold water springs and tributaries are; I've seen fish really packed around those. They also know where to go in August, or in a drought year like right now, to hang out when the flows are really low,'' he said.

That's how Miller Creek can flow right through the uber-developed Miller Hill Mall district and still have a viable population of wild brook trout. But fluctuations in the creek's population — from as high as 448 trout per 1,000 feet in 1993 to just 34 in 2005 — show problems remain: Salt, sediment, a lack of cold-water hiding places and runoff from the massive parking lots and ribbons of road in the area.

Comment on the plan:

The PCA is asking for public comments on the TMDL report, which is available on the project's web page at www.pca.state.mn.us/water/total-maximum-daily-load-tmdl-projects or at PCA's Duluth office. You can get more information or send written comments to Karen Evens 218-302-6644, PCA, 525 Lake Avenue South, Suite 400, Duluth, MN 55802, by July 22.

"When people realize that these aren't just drainage ditches running through town. When you show them they are a functioning, living systems with real fish — maybe not functioning as well as they could be — most people are willing to help,'' Jasperson said. "But a lot of people don't know. I've talked to landowners who didn't even know they had a cold-water stream on their land, let alone a population of wild brook trout. Some of them are just floored when I tell them."

Over 30 years, to do all the suggested work in the PCA plan could cost the community between $100 and $130 million to save its trout streams, Evens said. But it's not an all-or-nothing proposition.

"We want to target efforts to where they are going to have the most bang for the buck,'' she said. "That's why we want to incorporate stream (protections) into projects that are already going to happen."

That means UMD plans ahead to improve campus stormwater control efforts as part of its new dormitory construction project. City officials incorporate stream protection efforts as they rebuild city streets and sewers. Slowing and storing warm, dirty water on developed sites is a big step toward cleaner streams. So is protecting wetlands and springs high on Duluth's hill, the sources of each stream, using conservation easements and tougher construction rules.

Deserae Hendrickson, Minnesota Department of Natural Resources Duluth area fisheries supervisor, said reclaiming more natural stream channels also is key for trout, and restoration projects that followed the massive 2012 flood have done wonders. Chester Creek, for example, has seen a transformation from a dammed, channeled stream slowed by a pond to a more natural, free-flowing waterway thanks to a project by the South St. Louis County Soil and Water Conservation District. The effort also has helped the stream stay within its natural floodplain during major flood events.

The flood itself has some surprising benefits. When a man-made debris barrier blew out of Mission Creek in western Duluth during the flood, it opened up the upper stream for fish. Now, steelhead trout from Lake Superior are spawning far upstream for the first time in half a century, Hendrickson said.

"The flood did a lot of damage, certainly. But where it blew out (small culverts and small bridges) it allowed us to get larger passages replaced in those areas. So we saw a lot of re-connectivity there, opening up new areas for trout,'' she said.

In a few western Duluth streams, the DNR found cool water but no wild trout remaining. So they stocked the creeks and now the trout are reproducing on their own.

But problem areas remain. Tischer Creek just below Hartley Nature Area now is a warm water dead zone for trout, Hendrickson noted, in large part because the creek is dammed to create Hartley Pond. Removing the dam would help trout but destroy the pond, a favorite spot for local residents. There are possible solutions, such as separating the creek from the pond so the stream water can flow faster.

"We have stretches of streams that are impaired and need attention," Hendrickson said. "But we also have a lot of stream runs that, despite what we've done to them over the years, somehow hang on and support trout."

The PCA's Evens agreed.

"These trout, even if you don't fish for them, are part of Duluth's identity, part of the quality of life,'' she said. "Having trout streams in our city is part of why people want to live here."

Jeff Jasperson photo

A brook trout caught on Tischer Creek in Duluth.

Jeff Jasperson photo

Jeff Jasperson likes to snorkel in small Duluth streams to find out where the fish hang out, such as near old logs. Here he found several small brook trout near where a coldwater spring seeps into the stream.

11 Duluth trout streams and their major problems

Keene Creek — E. coli bacteria
Kingsbury Creek — Poor invertebrate population
Miller Creek — Salt; poor invertebrate population; warm water; E.coli
Sargent Creek — E. coli bacteria
Stewart Creek — E. coli bacteria
Merritt Creek — E. coli bacteria
Tischer Creek — E. coli bacteria
Chester Creek — E. coli bacteria
Amity Creek — Sediment turbidity
Amity Creek East Branch — Sediment turbidity
Lester River — Sediment turbidity

LAKE

From Page D1

comment "Stupid kid. I taught you everything I know and you still don't know anything.")

Even when nothing but deer flies and mosquitoes are biting, it is good to be on the lake. Undeveloped and remote, it is home or magnet to wildlife. Beaver and otters have swum by us as we fished. Eagles have soared overhead looking for their own catch. Morning mists have faded to reveal a dozen swans in a corner of the lake. We've watched deer come to the water to drink and been watched by a loon hiding on its nest.

We were last on the lake earlier this month, fishing two evenings. The first night the only fish we caught was a small northern I hooked late in the day.

Steve Kuchera / skuchera@duluthnews.com

A common loon sits on its nest, watching as Dad and I troll by.

The next evening it looked like we were skunked as we trolled back to the landing when Dad hooked a snag. Then the snag started moving in the jerking and diving manner of a northern. I sat back and watched as Dad played a combative pike on a panfish rig. Two, three times he brought the fish close to the boat only for the northern to drive again, rod bending over and line pulling out.

When Dad got the seven-pound northern alongside the boat I netted it, quickly unhooked it, and returned it to the lake.

"You don't need big hooks to catch big fish," Dad said.

Or special times on the water that will long be remembered.

Steve Kuchera / skuchera@duluthnews.com

A deer walks across the lake's outlet.

Steve Kuchera / skuchera@duluthnews.com

A nice-sized sunfish lays on top a five gallon pail.

Duluth streams hard-hit by development

Duluth News Tribune
By John Myers
March 19, 2018 05:53 PM

Duluth's bounty of urban streams have been hard-hit by development, pollution and other human impacts, according to a report released Monday by the Minnesota Pollution Control Agency.

All 11 trout streams tested in Duluth have at least one impairment for water quality, the PCA reported Monday, including Miller Creek, pictured here. Problems include too much sediment, warm water, road salt and E. coli bacteria. News Tribune file photo.

Duluth's bounty of urban streams have been hard-hit by development, pollution and other human impacts, according to a report released Monday by the Minnesota Pollution Control Agency.

All 11 of the designated trout streams that were assessed recently had at least one form of "impairment," the PCA noted.

The city's network of paved roads, parking lots and roofs send water into streams that's often too dirty and too warm for trout to thrive. There's also E. coli bacteria and pollutants such as road salt. Several of the streams don't have the diversity of invertebrates and other creatures that should be seen in a healthy stream.

Keene, Sargent, Merritt, Tischer and Chester creeks all have high levels of E. coli bacteria that could be coming from wildlife, pets, failing septic systems and leaking sewer lines, said Brian Fredrickson, PCA project manager.

Miller Creek has E. coli, too, but also faces compounded problems from too much chloride, or road salt, too warm of water and a lack of invertebrates that make up the base of the food chain for trout. Kingsbury Creek also lacks invertebrates.

Both branches of Amity Creek and the Lester River have too much turbidity, or sediment, in the water.

Still, most of the 11 streams studied continue to hold populations of stocked and naturally reproducing brook trout - even Miller Creek, which winds through the Miller Hill shopping corridor - lending hope that the streams can be saved if they can be buffered from human activity on land.

Duluth has 43 named streams in all - 16 of which are designated trout streams - that drain 141 square miles, from Mission Creek in the far west to Lester River on the east. Most of the streams start in wetlands and boggy headwater areas on top of the hill before dropping some 600 feet, often carrying clay and other sediment down to either the St. Louis River estuary or Lake Superior.

The PCA reports on Duluth streams are part of the statewide effort to assess and report back on what's stressing all of Minnesota's 80 major watersheds. The reports list the type and quantity of pollutants, identify where the pollution comes from and propose ways to return water quality to an acceptable level. A similar report was released last month on some North Shore streams.

The PCA is now asking for public comments on the reports before sending them on to the Environmental Protection Agency for approval. The reports are intended to be the basis to develop projects that solve the water quality impairments, with the PCA calling in help from the Board of Water and Soil Resources, the Soil and Water Conservation District, the city of Duluth and other agencies.

In the end it's going to take action by city residents to affect any real change, Fredrickson said.

The report notes that it is especially critical to preserve all remaining wetlands and forested areas at the headwaters and along the streams to help buffer water quality. Other projects include stream bank and channel stabilization, minimizing grass lawns, minimizing impervious areas such as paved parking lots, planting trees and shrubs and establishing conservation easements.

Several projects already have occurred, such as stream channel restoration along Chester Creek and bluff stabilization along several creeks, and efforts have been underway for years to slow and filter parking lot runoff near Miller Creek.

"There's no way we're going to fix these problems without engaging pretty much everyone who lives in the watershed," Fredrickson told the News Tribune. "The actions of one landowner, good or bad, can have an impact on these streams."

Even then, larger forces also are in play. At least 10 of Duluth's trout streams are projected to have summer water temperatures that are lethal to brook trout by 2050 as the region's climate warms.

The reports can be seen at www.pca.state.mn.us/duluth-urban-area-streams-watershed . Public comments on the reports will be accepted through April 18 at Brian.Fredrickson@state.mn.us

UNIVERSITY OF MINNESOTA
ST. ANTHONY FALLS LABORATORY
Engineering, Environmental and Geophysical Fluid Dynamics

Project Report No. 535

Stream Temperature Modeling of Miller Creek, Duluth, Minnesota

by

William R. Herb, Timothy Erickson and Heinz G. Stefan

Prepared for

Minnesota Pollution Control Agency
St. Paul, Minnesota

October 2009
Minneapolis, Minnesota

Table of Contents

1. Introduction

Miller Creek is a trout stream which originates near Duluth International Airport, flows through the cities of Hermantown and Duluth, MN and discharges into St. Louis Bay of Lake Superior. Despite a highly urbanized watershed, Miller Creek has a naturally reproducing Brook Trout fishery. Prominent hydrologic features of the 9.4 square mile watershed include relatively high levels of impervious surfaces (22%) and extensive wetlands in the upper portion of the watershed (Figure 1.1) that are believed to supply much of the hydrologic storage for the watershed. Miller Creek is temperature impaired and was recently put on the list of impaired waters by the Minnesota Pollution Control Agency (MPCA).

Temperature impairment of a stream implies that the stream is receiving excessive loading of heat energy for particular climate and flow conditions. The main sources of heat energy for a stream include atmospheric heat transfer (solar radiation, long wave radiation, evaporation, convection), surface runoff and local inputs, e.g. of treatment effluent. Previous temperature TMDLs for Pacific Northwest salmon rivers (e.g. USEPA 2000) have treated atmospheric heat transfer as a non-point source of heat and local inputs of treatment effluent as point sources of heat. Atmospheric heat inputs are further classified into natural and anthropogenic sources,

then used to generate daily runoff volumes for each of 41 sub-watersheds of Miller Creek for the period June 1, 2008 to October 10, 2008.

Runoff temperatures were simulated using MINUHET for a commercial and residential development in Miller Creek, and calibrated to observed stormwater discharge temperatures in 2008, as described in Section 2. In Section 4, these runoff temperatures are generalized for the entire watershed, based on the level of impervious land use, and combined with the volumes determined by the SWMM model to give the resulting heat loading due to stormwater for the entire watershed. Runoff volumes and heat loadings from stormwater were calculated for a continuous period (June 15 to September 15, 2008), so that the heat loading from a variety of storms over the period is captured. The simulated runoff volumes and temperatures from each sub-watershed were then used to estimate stormwater heat inputs to Miller Creek from the MS4 permit areas (Section 4.2). These estimated heat loadings did not, in general, take into account possible best management practices (BMPs) of stormwater. The effect of stormwater BMPs such as wet ponds, infiltration practices, and underground vaults on heat loading is examined for a commercial development in Section 5.1. At the time of this report draft, allowable stormwater heat loadings have not been calculated, because the temperature standard to be used for the TMDL has not been finalized.

Finally, conclusions are given in Section 6 for managing stream temperature impairments in Miller Creek. There are several pressing issues to resolve for the Miller Creek temperature impairment. Low levels of riparian shading from upstream of Kohl's to Miller Hill Mall lead to much of the current stream temperature impairments. If shading is improved, then stormwater inputs may give more noticeable impacts of stream temperature. While infiltration practices are the most effective means to reduce stormwater heat loading, rate control practices (wet ponds, underground vaults) slow down the flow water and heat energy, and reduce the magnitude of stream temperature spikes. Increasing summer baseflow in Miller Creek through, e.g., wetland restoration will likely improve trout habitat, but baseflow increases may not, alone, give substantial reductions in stream temperature. Beyond this TMDL study, the high sensitivity of stream temperature to air temperature in Miller Creek makes future climate change effects a major concern.

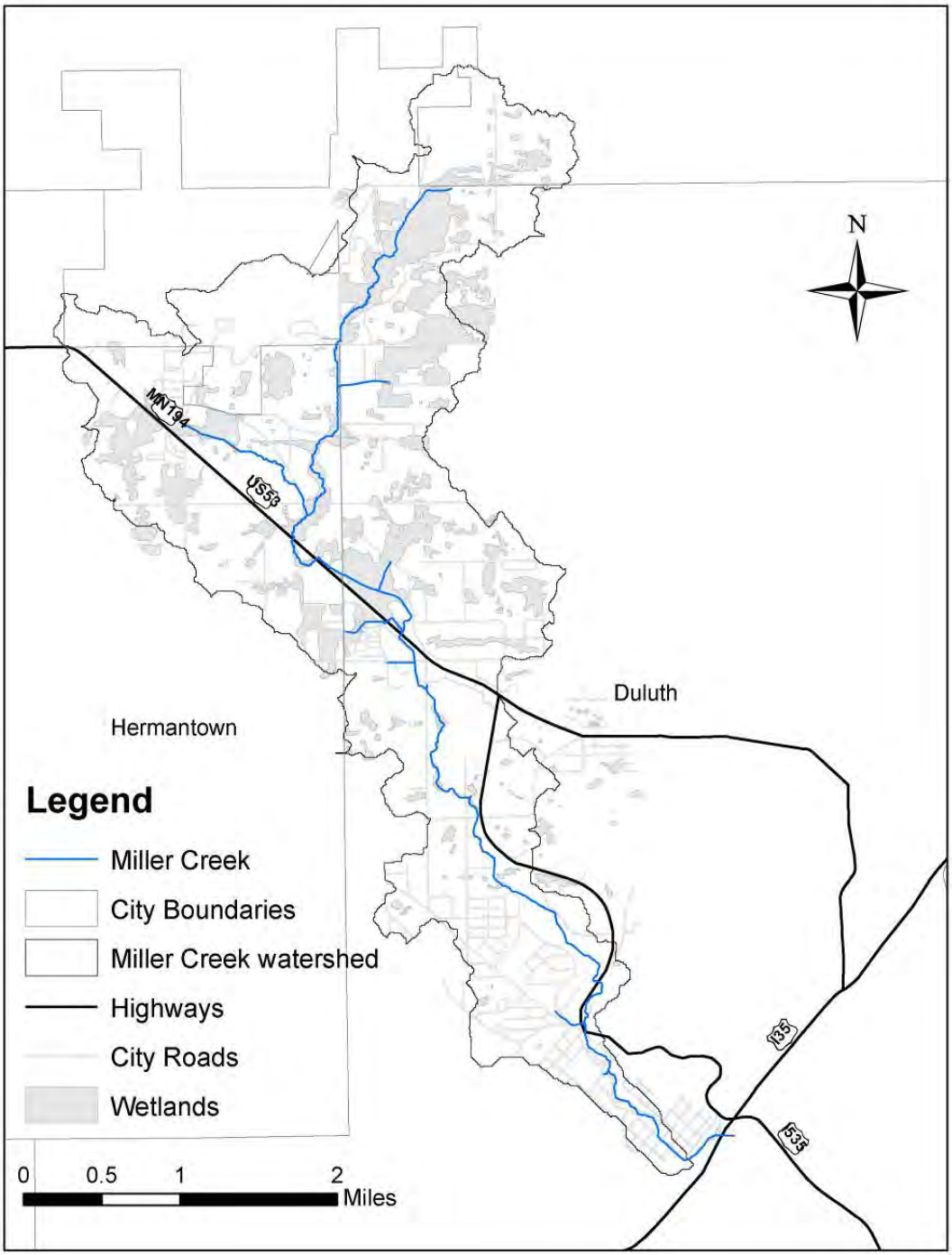


Figure 1.1. Map of the Miller Creek watershed, including wetland delineations.

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

196

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Rebecca Mulenburg	1649 W Page St, Duluth, MN 55811	
2	Terrance Mulenburg	1649 W Page St, Duluth, MN 55811	
3	Patricia Hughes	1014 N 11th Ave E Duluth, MN 55805	
4	Lisa Konicek	3509 N Blackman Ave, Duluth MN 55811	
5	Joseph Konicek	3509 N Blackman Ave, Duluth MN 55811	
6	Jeff Hughes	1014 N 11th Ave E Duluth MN 55805	
7	Lucas Trea	1014 N 11th Ave E Duluth MN 55805	
8	Dan Nees	3230 Maple Grove Rd Hermantown, MN 55811	
9	Annette McDonald	1710 W Page St. Duluth MN 55811	
10	Marilyn Duncan	1512 Yosemite Ave Duluth, MN 55811	

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Julie Sexton	3827 Oxford Echo Woodbury, MN 55125	Julie Sexton
2	Sydney Sexton	3827 Oxford Echo Woodbury, MN 55125	Sydney Sexton
3	Hannah Paulsen	3444 White Oaks Lane Woodbury, MN 55125	Hannah Paulsen
4	Brigid Baumer	1748 Spinaker Drive 55125 Woodbury MN	Brigid E Baumer
5	Katie Musser	1355 Jurdy Rd Eagan, MN 55121	Katie Musser
6	Savira Sisneros	8949 197th St W, Lakeville, MN 55044	Savira Sisneros
7	Claire Rice	7926 9th Street circle North Oakdale, MN 55128	Claire Rice
8	Katie Sexton	3827 Oxford Echo Woodbury, MN 55125	Katie Sexton
9	Ron Sexton	3827 Oxford Echo, Woodbury, MN 55125	Ronald Sexton
10	Ruth Littmann	4014 Trinity Rd - Duluth, MN 55811	Ruth Littmann

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Lisa Cardinal	450-15th Ave-No. So. St Paul Mn 55075	
2	John Bjorklund	450 15th Ave, South St. Paul, MN 55075	
3	Connor Bjorklund	450 15th Ave No So St Paul MN 55075	Connor Bjorklund
4	Jillie Nordstedt	27020 Petesthill Jr. Elko New Market MN 55020	
5	Rick Jones	456 15th Ave N So St Paul 55075	
6	Rachel Casey	2920 E 38th St Mpls 55406	
7	Scott Mebten	3860 - Upper 149th St W Rosemount MN 55068	
8	Steve Elliott	4132 Lowry Av N Mpls MN 55406	
9	Laura Marker	3700 Woodddale Ave. So (unit 15) St Louis Pk, MN 55416	Laura Marker
10	Jennifer Montain	2609 W. 2nd St. Apt 1 Duluth MN 55806	

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Molly Watson	4014 Trinity Road Duluth, MN 55811	Molly Watson
2	Latoya Houston	218 E 5th St. Duluth, MN 55811	Latoya Houston
3	Rachel Durand	4014 Trinity Rd. Duluth, MN 55811	Rachel Durand
4	Sarah Klande	4014 Trinity Rd Duluth, MN 55811	
5	Denise Austin	4962 Anderson Rd. Hermantown, MN 55811	
6	Cody Kalkbrenner	4014 Trinity Rd. Duluth, MN 55811	
7	Harlekruger	317 1/2 e 6th St Duluth MN 55805	
8	Trevon Pille	327 102nd Ave W Duluth MN 55808	
9	Jessica Mullen	3919 Chambersburg Ave Duluth, MN 55811	Jessica Mullen
10	Taylor Shaw	6417 Petre St. Duluth, MN 55807	

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Julie Mattila	1648 W. Page St. Duluth, MN 55811	Julie Mattila
2	Betty Mattila	1650 W. Morgan Duluth, MN 55811	Betty A. Mattila
3	JMattila	824 N 41st Ave W 55807 Duluth MN	JMattila
4	Katie Brooks	227 W. Mulberry St 55811 Duluth, MN	Kat
5	Tyler Mattila	8756 Pine Dr Cloquet 55720 MN	Tyler M
6	Brook Mattila	5041 Stuberud Rd Duluth MN 55803	Brook Mattila
7	Travis Allen	4877 Munger Shaw Rd Saginaw MN 55779	Travis Allen
8	Heidi Engstro	6040 Lavaque Rd Duluth 55803	Heidi Engstro
9	Kelley Talbot	512 4th ave NE Aitkin MN 56431	Kelley Talbot
10	Jean Peak	328 W. Morgan St Dlh, MN 55811	Jean R Peak

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Casandra Mulenburg	3717 11th Ave S, Minneapolis MN 55407	Casandra L Mulenburg
2	Loren Heine	1425 Walnut St, Duluth 55811 MN	
3	Jason Miller	1500 Walnut St Duluth 55811 MN	
4	Mark Glad	912 Rodburt St, Duluth, MN 55811	
5	Steve Ludolph	857 W Morgan St. Duluth MN 55811	
6			
7			
8			
9			
10			

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Jen Kolquist	1954 Middle Ln. Duluth, MN 55811	
2	Ann Ballinger	4190 Stockton Rd Duluth, MN 55803	
3	Dan Mattila-Sova	5306 Glendale St Duluth MN 55804	
4	Roger Swor	5306 Glendale St. Duluth MN 55804	
5	Kevin Mattila	1648 W Page St Duluth MN 55811	
6			
7			
8			
9			
10			

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Robert Mulenburg	5099 Camden Rd Baxter MN 56425	
2	Clio Mulenburg	5099 Camden Road Baxter MN 56425	
3			
4			
5			
6			
7			
8			
9			
10			

Petition for an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St., Duluth, MN, Parcels ID Numbered 010-2710-04594 and 010-2710-04575

We, the undersigned, live in and/or own property in the state of Minnesota and request the preparation of an Environmental Assessment Worksheet for the Kinseth Hotel Development at Sundby Road and W Page St. in Duluth/St. Louis County, Minnesota. By signing below, I support the material evidence submitted in the attached petition and believe that because of the nature or location of the proposed project there may be potential for significant environmental effects including but not limited to:

- An increase to the impervious surfaces in the Miller Creek watershed, destroying undeveloped land and wetlands, corresponds with a decline in water quality temperature (warming), affecting designated trout stream Miller Creek currently under restoration. Miller Creek, with natural reproducing brook trout, lies appx 150 feet away from the proposed development site. Miller Creek watershed already contains a high degree of impervious surfaces in the watershed, with an estimate in ~ 2003 to be at least 22%.
- Additionally, with increased impervious surface area, Miller Creek will flow faster with less infiltration to future, reduced-availability ground water storage. Stream flow rate, especially after rain events, will speed up delivery to the stream and degrade those segments of the trout stream due to deluge and erosion. Studies on impervious surfaces have documented negative effects/degradation to stream biota, when impervious surfaces reach 10%, but degradation can be detected even at approximately 4% impervious surfaces in a watershed.
- As this development lies upwards of the stream, an increase to the Duluth Urban Streams Total Maximum Daily Load of pollutants will increase, contesting the federal mandate to apply the Clean Water Act to ground-level waterways, including but not limited to road and parking lot salt applications, trash, sand, and grit entering the watershed. The replacement of forested acreage with asphalt and concrete will elevate the sodium chloride (road salt) in Miller Creek and the surrounding wetlands. According to aquatic ecologists, once salt gets into the soil or waterway, there are no biological processes that will remove it. Road salt kills aquatic plants and animals, depletes oxygen levels and raises water temperatures. Researchers have linked high chloride levels from road salts to the corroded lead pipes in Flint, Michigan. This pipe corrosion was the primary cause of lead pollution in Flint's drinking water.

Minnesota's Environmental Review Program rules require that a citizen petition contain the [legible] signatures and mailing addresses of at least 100 individuals who reside or own property in the state.

Number	Name (Print Clearly)	Address (Full Street, City, State, and Zip Code)	Signature
1	Mike Littmann	9172 Utica Ave S. Bloomington MN 55437	Mike Littmann
2	Chris Littmann	9172 Utica Ave S. Bloomington MN 55437	Chris Littmann
3			
4			
5			
6			
7			
8			
9			
10			

Online Petition Signatures - www.imagine-dn.org

#	Date & Time	First Name	Last Name	Signature	I hereby give my consent to count my signature towards the EAW petition regarding application PL22-143.	Street Address	City, State	Zip Code
1	2/27/23-13:14:20	jo	haubrich	jo m haubrich	TRUE	1513 w Morgan st	Duluth, MN	55811
2	2/27/23-17:05:43	jill	widness	jill widness	TRUE	2112 ponderosa cir	Duluth, MN	55811
3	2/27/23-17:11:29	Richard	Staffon	Richard Carlyle Staffon	TRUE	1405 Lawrence Rd	Cloquet, MN	55720
4	2/27/23-17:38:28	Jill	Crawford-Nichols	Jill N. Crawford-Nichols	TRUE	1505 W Morgan St	Duluth, MN	55811
5	2/27/23-17:38:52	Lucas	Crawford-Nichols	Lucas M. Crawford-Nichols	TRUE	1505 W Morgan St	Duluth, MN	55811
6	2/27/23-18:47:58	Pamela	Preston	Pamela Preston	TRUE	4953 Parkview Rd	Duluth, MN	55804
7	2/28/23-00:43:38	Julius	Salinas	Julius Salinas	TRUE	95 Stillmeadow Road	Esko, MN	55733
8	2/28/23-00:46:40	Celeste E	Kawulok	Celeste E Kawulok	TRUE	6588 East Hunter Lake Road	Duluth, MN	55803
9	2/28/23-00:46:51	Matt	Paulson	Matt Paulson	TRUE	5569 East grandview rd	Duluth, MN	55810
10	2/28/23-01:00:49	Amy	Westbrook	Amy C. Westbrook	TRUE	4015 Robinson Street	Duluth, MN	55804
11	2/28/23-01:23:42	Carol	Staffon	Carol A Staffon	TRUE	1405 Lawrence Rd.	Cloquet, MN	55720
12	2/28/23-01:29:07	Steven	Schulstrom f	Steven Schulstrom	TRUE	2631 county road 4 Carlton MN	Carlton, MN	55718
13	2/28/23-02:48:43	Linda	Crumpton	Linda Jean Crumpton	TRUE	1701 E 6th St	Duluth, MN	55812-1212
14	2/28/23-02:53:41	Craig	Sterle	Craig R. Sterle	TRUE	2676 County Road 104	Barnum, MN	55707
15	2/28/23-03:16:00	Gene	Kremer	Gene Kremer	TRUE	3938 Cannon Ball Lake Road	Duluth, MN	55803
16	2/28/23-03:44:34	Libby	Bent	Libby Bent	TRUE	2423 E 2nd Street	Duluth, MN	55812
17	2/28/23-04:01:36	Robert	Stodola	Robert Stodola	TRUE	131 N Hawthorne Rd	Duluth, MN	55812
18	2/28/23-04:07:58	Gary	Meier	Gary I Meier	TRUE	2940 Acquire Lane	Duluth, MN	55804
19	2/28/23-04:09:35	Zabelle	Stodola	Zabelle Stodola	TRUE	131 N Hawthorne Road	Duluth, MN	55812
20	2/28/23-04:45:27	Mark	Baker	Mark A. Baker	TRUE	1721 E 3rd St, Apt 207	Duluth, MN	55812
21	2/28/23-12:34:03	Janet	Keough	Janet Keough	TRUE	2787 Northwoods Ln	Duluth, MN	55803
22	2/28/23-12:59:27	Daniel	Rau	Daniel Rau	TRUE	204 E 6TH ST	Duluth, MN	55805
23	2/28/23-14:11:15	Virginia	Snarski	Virginia M. Snarski	TRUE	3325 MEDIN RD	Duluth, MN	55804-2673
24	2/28/23-14:36:26	Paul	O'Brien	Paul A. O'Brien	TRUE	4089 reinke road	Duluth, MN	55811
25	2/28/23-14:52:51	Stephanie	Hemphill	Stephanie J Hemphill	TRUE	3614 Prindle Rd	Duluth, MN	55803
26	2/28/23-15:17:20	Lori	Andresen	Lori Beth Andresen	TRUE	3025 E Superior St	Duluth, MN	55812
27	2/28/23-15:39:13	Donna	Andrews	Donna J Andrews	TRUE	1020 Glen place drive	Duluth, MN	55806
28	2/28/23-16:57:04	Molly	Thompson	Molly Thompson	TRUE	5922 N Tischer Rd	Duluth, MN	55804
29	2/28/23-21:17:26	Rich	Axler	Richard Axler	TRUE	201 FAIRMONT ST	Duluth, MN	55803
30	3/1/23-15:00:54	Tom	Richards	Thomas C. Richards	TRUE	3333 Red Oak Lane	Barnum, MN	55707
31	3/1/23-22:02:58	Rita	Vavrosky	Rita M. Vavrosky	TRUE	2631 COUNTY ROAD 4	Carlton, MN	55718-9101
32	3/2/23-13:41:34	Al	Bugge	Albert Peter Bugge	TRUE	1612 W Page St	Duluth, MN	55811
33	3/2/23-13:59:50	William	Redmond	William Robert Redmond	TRUE	1110 w morgan st duluth mn	Duluth, MN	55811
34	3/2/23-14:29:51	Sarah	Dahle	Sarah K Dahle	TRUE	1715 W Morgan St	Duluth, MN	55811-1834
35	3/2/23-15:02:16	Patricia	Willis	Patricia Corrine Willis	TRUE	1504 Wet Page	Duluth, MN	55811
36	3/3/23-02:51:50	Deb	Bugge	Debra L Bugge	TRUE	1612 W Page St	Duluth, MN	55811
37	3/3/23-14:20:50	Cody	Blossom	Cody Blossom	TRUE	1715 W Morgan ST	Duluth, MN	55811
38	3/4/23-16:07:29	NJ	Deever	Nancy J Deever	TRUE	3868 Getchell Rd.	Duluth, MN	55811
39	3/4/23-17:49:27	Marjorie	Lemke	Marjorie Lynn Lemke	TRUE	2933 Tuxedo Blvd	Mound, MN	55364

Online Petition Signatures - www.imagine-dn.org

#	Date & Time	First Name	Last Name	Signature	I hereby give my consent to count my signature towards the EAW petition regarding application PL22-143.	Street Address	City, State	Zip Code
40	3/5/23-16:55:39	Randall	Hicks	Randall Hicks	TRUE	2601 Northwoods Lane	Duluth, MN	55803
41	3/5/23-17:27:17	Thomas	Szukis	Thomas D. Szukis	TRUE	1722 Swan Lake Road	Duluth, MN	55811
42	3/5/23-17:37:06	Cindy	Peterson-Wlosinski	Cindy Peterson-Wlosinski	TRUE	1121 W Morgan Street	Duluth, MN	55811
43	3/5/23-17:51:04	Barbara	Guenterberg	Barbara Guenterberg	TRUE	2232 WOODLAND AVE.	Duluth, MN	55803
44	3/5/23-18:01:04	JoAnne	Axtell	JoAnne Axtell	TRUE	710 West 2nd St.	Duluth, MN	55806
45	3/5/23-18:21:30	Paul	Collins	Paul Collins	TRUE	4844 Terrace Cir	Duluth, MN	55811
46	3/5/23-18:30:38	Stacey	Solem	Stacey Solem	TRUE	707 N 46th Ave W	Duluth, MN	55807
47	3/5/23-18:54:17	William	Sommernes	William D. Sommernes	TRUE	3800 London Road, #108	Duluth, MN	55804
48	3/5/23-19:30:33	V	Anderson	V Anderson	TRUE	5775 Kehtel Rd	Duluth, MN	55811
49	3/5/23-19:38:31	Melinda	Cummins	Melinda Amy Cummins	TRUE	4023 Cooke Street	Duluth, MN	55804
50	3/5/23-20:28:08	Toni	Mattson	Toni Mattson	TRUE	314 Wildwood Drive	Duluth, MN	55811
51	3/5/23-20:28:52	Erin	Sheets	Erin Dayle Sheets	TRUE	2302 Selkirk St	Duluth, MN	55811
52	3/5/23-21:03:13	Scott	Nelson	Scott R. Nelson	TRUE	2806 Wellington St	Duluth, MN	55806
53	3/5/23-21:47:43	Eric	Rost	Eric Rost	TRUE	829 Maple Grove Rd.	Duluth, MN	55811
54	3/5/23-21:53:17	Rebecca	Pederson	Rebecca Pederson	TRUE	829 Maple Grove Rd.	Duluth, MN	55811
55	3/5/23-22:12:29	Heather	Theisen	Heather Theisen	TRUE	5425 Avondale Street	Duluth, MN	55804
56	3/5/23-22:36:09	Catherine	Farrell	Catherine Grace Farrell	TRUE	3660 E 3rd St	Duluth, MN	55804
57	3/5/23-22:53:33	Darin	Golden	Darin Robert Golden	TRUE	4873 2nd Ave N	Duluth, MN	55803
58	3/5/23-22:55:12	Teresa	Piskoty	Teresa Marie Piskoty	TRUE	4873 2nd Ave N	Duluth, MN	55803
59	3/5/23-23:00:42	Linda	Peplinski	Linda Peplinski	TRUE	4231 Luverne Street	Duluth, MN	55804
60	3/5/23-23:13:24	Kathleen	Hills	Kathleen Hills	TRUE	1052 Greysolon Rd	Duluth, MN	55812
61	3/5/23-23:23:53	Stephen	Wlosinski	Stephen Wlosinski	TRUE	1121West Morgan St.	Duluth, MN	55811
62	3/5/23-23:32:53	Meghan	Zetah	Meghan Zetah	TRUE	6022 Raleigh St	Duluth, MN	55807
63	3/5/23-23:57:49	Genevieve	Stark	Genevieve A. Stark	TRUE	120 E Wabasha St	Duluth, MN	55803
64	3/6/23-00:11:06	Yuliya	Mader	Yuliya I Mader	TRUE	5877 Kehtel Rd	Duluth, MN	55811
65	3/6/23-00:33:01	Jasmine	Phoenix	Jasmine Phoenix	TRUE	2113 W 5th St	Duluth, MN	55806
66	3/6/23-00:52:30	Lacey	Parr	Lacey Parr	TRUE	5101 Dodge st	Duluth, MN	55804
67	3/6/23-00:53:03	Nathan	Parr	Nathan Parr	TRUE	5101 Dodge st	Duluth, MN	55804
68	3/6/23-01:05:06	Jacquelyn	Wiermaa	Jacquelyn Wiermaa	TRUE	43 Amy Lane	Esko, MN	55733
69	3/6/23-01:06:07	Molly	Goldfine	Molly Goldfine	TRUE	3925 South Lake Avenue	Duluth, MN	55802
70	3/6/23-01:13:07	Tim	Kratz	Timothy K. Kratz	TRUE	3660 E 3RD ST	Duluth, MN	55804
71	3/6/23-01:30:10	Kim	Knuth	Kim Knuth	TRUE	5178 Arnold Rd	Duluth, MN	55803
72	3/6/23-01:44:24	Suzanne	Cervin	Suzanne M Cervin	TRUE	5301 IVANHOE ST	Duluth, MN	55804-1141
73	3/6/23-01:45:44	Jason	Beagle	Jason beagle	TRUE	5587 Martin Road	Duluth, MN	55811
74	3/6/23-01:46:36	Ann	Miller	Ann Miller	TRUE	808 W Arrowhead Rd	Duluth, MN	55811
75	3/6/23-02:27:52	Kevin	Jones	Kevin w Jones	TRUE	424whouse st	Duluth, MN	55808
76	3/6/23-02:32:59	Jennifer	Johnson	Jennifer K. Johnson	TRUE	4200 Chambersburg Ave	Duluth, MN	55811
77	3/6/23-02:38:32	Martha	Cole	Martha Ann Cole	TRUE	36 Bell Circle	Duluth, MN	55614
78	3/6/23-03:28:29	Wendy	Olson	Wendy Olson	TRUE	8019 Congdon Blvd	Duluth, MN	55804

Online Petition Signatures - www.imagine-dn.org

#	Date & Time	First Name	Last Name	Signature	I hereby give my consent to count my signature towards the EAW petition regarding application PL22-143.	Street Address	City, State	Zip Code
79	3/6/23-03:38:25	James	Dusheck	James Reid Dusheck	TRUE	3998 Lavaque Rd.	Duluth, MN	55811
80	3/6/23-03:40:17	Emily	Marshall	Emily Marshall	TRUE	3998 Lavaque Rd.	Duluth, MN	55811
81	3/6/23-03:41:28	Sabrina	Dusheck	Sabrina Dusheck	TRUE	3998 Lavaque Rd.	Duluth, MN	55811
82	3/6/23-05:33:25	Scott	Laderman	Scott Laderman	TRUE	4014 McCulloch Street	Duluth, MN	55804
83	3/6/23-05:54:01	Summer	Allen	Summer Allen	TRUE	1408 Maple Grove Rd, #614	Duluth, MN	55811
84	3/6/23-06:58:07	Tess	Dornfeld	Tess Dornfeld	TRUE	159 Elysian Trail 418	Grand Marais, MN	55604-0418
85	3/6/23-08:54:03	Louise	Guggisberg	Louise M Guggisberg	TRUE	2301 W 2nd St	Duluth, MN	55806
86	3/6/23-10:59:32	Jeff	Asfoor	Jeff Asfoor	TRUE	5426 E. Superior St.	Duluth, MN	55804
87	3/6/23-11:02:05	Abeeda	Asfoor	Abeeda Asfoor	TRUE	5426 E. Superior St.	Duluth, MN	55804
88	3/6/23-12:57:21	Susan	Marturano	Susan Miller Marturano	TRUE	231 W Morgan St	Duluth, MN	55811
89	3/6/23-13:04:19	Dudley	Edmondson	Dudley Edmondson	TRUE	4302 Cooke St	Duluth, MN	55804
90	3/6/23-13:04:55	Christine	Ostby	Christine Ostby	TRUE	727 S 64th Ave W	Duluth, MN	55807
91	3/6/23-13:07:21	Jack	Jacobson	Jack A. Jacobson	TRUE	912 Spring Lake Rd	Cloquet, MN	55720
92	3/6/23-13:24:24	Linda	Herron	Linda L Herron	TRUE	2617 E. Fifth St.	Duluth, MN	55812
93	3/6/23-13:41:40	Candy	Lee	Candy Lee	TRUE	1819 W Morgan St.	Duluth, MN	55811
94	3/6/23-13:50:41	Norman	Herron	Norman W Herron	TRUE	2617 E. Fifth St.	Duluth, MN	55812
95	3/6/23-13:51:48	Susan	Turk	Susan Turk	TRUE	301 Maple Grove Road	Duluth, MN	55811
96	3/6/23-13:53:53	Thomas	Turk	Thomas Turk	TRUE	301 Maple Grove Road	Duluth, MN	55811
97	3/6/23-13:57:29	John	McDonald	John McDonald	TRUE	118 Coffee Creek Blvd, Apt 104	Duluth, MN	55812
98	3/6/23-14:02:19	Wade	Lee	Wade Lee	TRUE	1819 w Morgan st.	Duluth, MN	55811
99	3/6/23-14:02:33	Jason	Eder	Jason Eder	TRUE	2921 N 22nd Ave W	Duluth, MN	55811
100	3/6/23-14:05:04	John	Thoennes	John W Thoennes	TRUE	231 E Owatonna St	Duluth, MN	55803
101	3/6/23-14:29:53	Janice	Hille	Janice Hille	TRUE	1002 Grandview Ave.	Duluth, MN	55812
102	3/6/23-14:55:51	Brian	Bergeron	Brian Bergeron	TRUE	5164 Country Lane	Duluth, MN	55811
103	3/6/23-14:57:11	Bradley	Flynn	Bradley Flynn	TRUE	2711 E 7th ST	Duluth, MN	55812
104	3/6/23-15:00:30	Alyssa	Friesen	Alyssa Friesen	TRUE	4013 Gladstone St	Duluth, MN	55804
105	3/6/23-15:16:46	Matthew	Miller	Matthew S Miller	TRUE	1128 7th St	Two Harbors, MN	55616
106	3/6/23-15:25:28	Daniel	Mettner	Daniel L Mettner	TRUE	19 N. 44th Ave. E.	Duluth, MN	55804
107	3/6/23-15:41:05	Jennie	WABROWETZ	Jennifer L. Wabrowetz	TRUE	5506 W ARROWHEAD RD	Duluth, MN	55811
108	3/6/23-16:08:44	Jill	Crafton	Jill Crafton	TRUE	10351 Decatur Ave S	Minneapolis, MN	55438
109	3/6/23-16:26:17	Kyle	Scherz	Kyle Scherz	TRUE	1524 e 7th St	Duluth, MN	55812
110	3/6/23-16:42:53	Sheri	Bergeron	Sheri Boril Bergeron	TRUE	5164 Country Lane	Duluth, MN	55810
111	3/6/23-16:48:09	Mary	Gaidis	Mary Louise Gaidis	TRUE	3820 Minnesota Ave.	Duluth, MN	55802
112	3/6/23-17:51:11	Sandra	Carlson	Sandra Ann Carlson	TRUE	1900 St. Louis Ave., 116	Duluth, MN	55802
113	3/6/23-18:06:53	Grace	Leppink	Grace Leppink	TRUE	2850 County Road 1	Wrenshall, MN	55797
114	3/6/23-18:44:41	Wil	Chapple	Wil Chapple	TRUE	309 Wadena St	Duluth, MN	55803
115	3/6/23-18:55:21	Janice	Erickson	Janice Erickson	TRUE	1824 Edoka St	Welch, MN	55089
116	3/6/23-20:27:27	Susan	Bourgoyne	Susan L Bourgoyne	TRUE	421 E Oxford St	Duluth, MN	55803
117	3/6/23-20:39:00	Mark	Furo	Mark Steven Furo	TRUE	323 W Superior St, STE300	Duluth, MN	55802

Online Petition Signatures - www.imagine-dn.org

#	Date & Time	First Name	Last Name	Signature	I hereby give my consent to count my signature towards the EAW petition regarding application PL22-143.	Street Address	City, State	Zip Code
118	3/6/23-20:42:47	Julie	Heine	Julie ann heine	TRUE	1425 walnut st	Duluth, MN	55811
119	3/6/23-20:58:29	chris	susnik	chris susnik	TRUE	10009 e 7th st	Duluth, MN	55805
120	3/6/23-21:26:12	Deanna	Torfin	Deanna J Torfin	TRUE	202 Proco Court	Duluth, MN	55808
121	3/6/23-21:27:56	John	Prouse	John Otto Prouse	TRUE	202 Proco Court	Duluth, MN	55808
122	3/6/23-21:41:19	Steve	Glowacki	Stephen Paul Glowacki	TRUE	1923 Greysolon Rd	Duluth, MN	55812
123	3/6/23-21:56:19	Christine	Post	Christine Post	TRUE	114 Pleasant View Road	Duluth, MN	55803
124	3/6/23-22:23:46	Eleanor	Brandt	EleanorBrandt	TRUE	4715 Dodge Street	Duluth, MN	55804
125	3/6/23-22:55:07	Kristin	Regas	Kristin Regas	TRUE	1645 W Morgan St	Duluth, MN	55811
126	3/6/23-22:55:47	Steve	Regas	Steve Regas	TRUE	1645 W Morgan St	Duluth, MN	55811
127	3/7/23-01:15:12	Drake	Peterson	Drake D Peterson	TRUE	2723 Minnesota Ave	Duluth, MN	55802
128	3/7/23-01:53:16	Jennifer	Hudyma	Jennifer A Hudyma	TRUE	1410 W PAGE ST	Duluth, MN	55811
129	3/7/23-04:58:33	Joyce	Ellis	Joyce Ellis	TRUE	516 Farrell Rd	Duluth, MN	55811
130	3/7/23-05:01:53	William	Ellis	William Ellis	TRUE	516 Farrell rd	Duluth, MN	55811
131	3/7/23-07:02:08	Troy	Woodcock	Troy Woodcock	TRUE	5207 North Shore Drive	Duluth, MN	55804
132	3/7/23-07:03:37	Mark	Woodcock	Mark Woodcock	TRUE	5207 North Shore Drive	Duluth, MN	55804