

ENVIRONMENTAL & NATURAL RESOURCES COMMISSION STAFF REPORT
Meeting Date April 21, 2025

REPORT TO: Environmental and Natural Resources Commission
REPORT FROM: Shann Finwall, AICP, Sustainability Coordinator
PRESENTER: Shann Finwall, AICP, Sustainability Coordinator
AGENDA ITEM: Saint Paul Police Training Facility, 2621 Linwood Avenue East - Wetland Buffer Variance

Action Requested: Motion Discussion Public Hearing
Form of Action: Resolution Ordinance Contract/Agreement Proclamation

Policy Issue:

The City of Saint Paul Police Department proposes to update the existing training facility at 2621 Linwood Avenue East. Ramsey County owns the property, and the City of Saint Paul has leased it since the mid-1960s. The proposed plans replace the classroom training facility and include accessibility and safety upgrades. To move forward with the proposal, the applicant requests approval of a conditional use permit, design plans, and a wetland buffer variance.

Recommended Action:

Motion to approve a wetland buffer variance resolution and wetland buffer mitigation strategies for a new training facility to be constructed at 2621 Linwood Avenue East.

Fiscal Impact:

Is There a Fiscal Impact? No Yes, the true or estimated cost is \$ 0.00
Financing source(s): Adopted Budget Budget Modification New Revenue Source
 Use of Reserves Other: n/a

Strategic Plan Relevance:

Community Inclusiveness Financial & Asset Mgmt Environmental Stewardship
 Integrated Communication Operational Effectiveness Targeted Redevelopment

The City deemed the project application complete on March 27, 2025. The initial 60-day review deadline for a decision is May 26, 2025. As stated in Minnesota State Statute 15.99, the City can take an additional 60 days, if necessary, to complete the review. The Environmental and Natural Resources Commission reviews wetland buffer variances to rectify impacts by reviewing and making recommendations for possible repair, rehabilitation, or restoration of the wetland buffer.

Background:

Project Overview

The City of Saint Paul Police Department proposes to update the existing training facility at 2621 Linwood Avenue East. Ramsey County owns the property, and the City of Saint Paul has leased it since the mid-1960s. The proposed plans replace the classroom training facility with accessibility and safety upgrades, including a classroom, two armories, men's and women's locker rooms, a kitchenette/break room, and ADA-compliant restrooms. The existing facility utilizes well and septic infrastructure, both of which will be replaced due to the age of the existing systems.

Additional details on the proposed training facility updates are found on the attached project background report. The report includes information on the City's land use requirements including conditional use and design review permits as outlined in the April 15 Planning Commission report. The Environmental and Natural Resources Commission will review the wetland buffer variance and mitigation strategies proposed for the wetland buffer impacts as outlined below.

Wetlands

Wetland Ordinance

There are two Manage A wetlands affecting the development, one adjacent the property on the vacant lot to the west and one on the east side of the property. The City's wetland ordinance requires a 75-foot minimum and 100-foot average wetland buffer around a Manage A wetland. Any deviation from the wetland buffer requires a wetland buffer variance. Before the City Council acts on a wetland buffer variance the Environmental and Natural Resources Commission makes a recommendation on the variance and mitigation plans. A wetland buffer mitigation plan is required to include one or more of the following strategies:

1. Reducing or avoiding the impact by limiting the degree or amount of the action, such as by using appropriate technology.
2. Rectifying the impact by repairing, rehabilitating, or restoring the buffer.
3. Reducing or eliminating the impact over time by prevention and maintenance operations during the life of the actions.
4. Compensating for the impact by replacing, enhancing, or providing substitute buffer land at a two-to-one ratio.
5. Monitoring the impact and taking appropriate corrective measures.
6. Where the City requires restoration or replacement of a buffer, the owner or contractor shall replant the buffer with native vegetation. A restoration plan must be approved by the City before planting.
7. Any additional conditions required by the applicable watershed district and/or the soil and water conservation district shall apply.
8. A wetland or buffer mitigation surety, such as a cash deposit or letter of credit, of 150 percent of estimated cost for mitigation. The surety will be required based on the size of the

project as deemed necessary by the administrator. Funds will be held by the city until successful completion of restoration as determined by the city after a final inspection. Wetland or buffer mitigation surety does not include other sureties required pursuant to any other provision of city ordinance or City directive.

Wetland Buffer Impacts

The site was originally developed and graded prior to the City's wetland ordinance and wetland buffer requirements. The existing drive lane, tactical training buildings, storage building, and gravel pad extend into the 100-foot wetland buffers and are considered pre-existing nonconforming structures and encroachments. Any expansion of those uses require compliance with the current wetland buffer requirements.

The expanded training facility will have grading to within approximately 53 feet of the eastern Manage A wetland for the extension of a utility line, parking stall, and grading to within 59 feet of the westerly Manage A wetland for building earthwork. Other portions of the new development will be located within the 75-foot minimum buffer. With the wetland buffer impacts, the development requires a 41-foot wetland buffer variance, wetland buffer averaging, and wetland buffer mitigation as required by the wetland ordinance.

To approve a variance, the City Council shall apply the findings for variance approval as required in Minnesota Statutes. Those findings require that the applicant show practical difficulties in complying with the official controls. The applicant's variance justification narrative attached outlines practical difficulties in developing the site including the pre-existing nonconforming conditions, the narrow area for development due to the location of two wetlands, and the need for a new septic system which requires setbacks to the well and the natural undisturbed soils requiring encroachments into the wetland buffer.

Wetland Buffer Mitigation

To mitigate the wetland buffer impacts the applicants are proposing to remove buckthorn and add native seeding in key areas along both wetlands, for a total of 17,700 square feet of mitigation. The attached environmental review includes wetland buffer recommendations requiring that the applicant submit the following additional information for staff review prior to receiving a grading permit:

1. Landscape Plan: Detailed plan for buckthorn removal and native seeding. Plan to show seed mix species and seeding installation methods.
2. Wetland Buffer Signs: Identify the location of wetland buffer signs to be installed every 100 feet at a minimum along the approved wetland buffers. The signs identify that no building, mowing, or grading should take place within the buffer.
3. Wetland Buffer Mitigation and Maintenance Agreement: Sign a wetland buffer mitigation and maintenance agreement with the City requiring that the applicant establish and maintain the required mitigation within the buffer for a three-year period. The City of Maplewood will draft the maintenance agreement once the wetland buffer mitigation plan is complete.

4. Submit a cash escrow or letter of credit to cover 150 percent of the wetland buffer mitigation. The City will retain the escrow for up to three years as outlined in the maintenance agreement to ensure the wetland buffer mitigation is established and maintained.

Staff offers an additional wetland buffer mitigation strategy for consideration including the establishment of a 10-foot-wide or wider area of native plants on the east side of the existing Class 5 parking area adjacent the wetland. Currently that area is graded to the edge of the wetland. Adding native plants in this area will help filter runoff from the Class 5 parking area to the wetland.

Commission and City Council Review

Community Design Review Board

April 15, 2025: The Community Design Review Board recommended approval of the building design plans with no changes.

Planning Commission

April 15, 2025: The Planning Commission held a public hearing and then recommended approval of the conditional use permit and wetland buffer variance.

Environmental and Natural Resources Commission

April 21, 2025: The Environmental and Natural Resources Commission will review the wetland buffer variance and wetland buffer encroachment mitigation strategies and make a recommendation to the City Council.

City Council

May 12, 2025: The City Council is scheduled to review the conditional use permit, design plans, and wetland buffer variance requests.

Attachments:

1. Conditional Use Permit and Design Review Narrative
2. Wetland Buffer Variance Narrative
3. Wetland Buffer Variance Justification
4. Ramsey County Letter of Support Dated April 15, 2025
5. Project Background
6. Overview Map
7. Future Land Use Map
8. Zoning Map
9. Wetland Overlay Map
10. Site and Elevation Plans
11. Wetland Delineation Report
12. Engineering Review Dated April 2, 2025
13. Environmental Review Dated April 2, 2025
14. Wetland Buffer Variance Resolution

Community Development Design Review Narrative

Conditional Use Permit Statement of Intent

The proposed project at 2621 Linwood Ave, owned by Ramsey County and leased by the City of St. Paul, has been operating as the St. Paul police firearms training facility for approximately 50 years. The proposed project is a replacement of the classroom training facility. The existing building is planned to be demolished due to lack of insulation, severe plumbing issues, deterioration of the exterior structural walls and critter infestation in the attic. The proposed building is a simple replacement to house the same staff and functions as the existing facility, with accessibility and safety upgrades.

Due to the use of the site not changing, no change in adjacent property values would be expected. With a similar number of staff and trainees, traffic to and from the site should remain similar to historical trips.

The existing facility utilizes well and septic infrastructure, both of which will be replaced due to the age of the existing systems. The natural site grading does not allow for access to city water and sewer at this time. The site includes a designated wetland area on site, and one wetland area to the west. Both wetlands require a 100' buffer for which this project will require a variance. See separate application for variance. Site storm drainage will continue to flow to the wetlands with no connection or change to city sewer services.

The natural grade does provide for visual and acoustical screening of the training ranges. The grade and tree coverage is to be maintained, with a small percentage of trees replaced to allow for the new septic field and grading immediately adjacent to the new building.

As the building is a replacement, public service needs will not change for streets, police, fire, school or parks services.

The proposed new facility will include a classroom, two armories, men's and women's locker rooms, a kitchenette/break room, and ADA-compliant restrooms. Planned materials include Insulated Concrete Masonry Unit (ICMU) walls with decorative veneer finishes on all exterior walls. This choice will ensure the building remains well-insulated while providing a comfortable and resilient environment for occupants while being near the shooting range. Additionally, the bullet-resistant windows on the north side of the facility will create a secure viewing area overlooking the shooting range and tactical simulation space. To maximize natural light, we have incorporated a double shed roof with windows over the classroom, enhancing sunlight access in an area that would otherwise be dimly lit.

Overall, we believe that this building will offer the St. Paul Police Department a much-needed modernized space that fosters the education and development of our community's service members.



Subject

Date: March 19, 2025
To: Elizabeth Hammond
Shann Finwall
From: Deb Brandwick
RE: 2621 Linwood, Wetland Setback Variance Request

Elizabeth and Shann,

The project in question is the St. Paul Police Training Facility at 2621 Linwood Avenue. The existing site includes a classroom building that is proposed to be demo'd, a storage building proposed to remain, two shooting range areas to remain, and an area developed with partial structures for tactical training. The site has been utilized as a firing range since approximately 1975 (see included lease agreement). The failure of the existing septic system, disrepair and non-accessibility of the classroom building, and undrinkable well water have created the need for this proposed project.

The site appears to have been graded in the 1975 era to provide a relatively flat area for the firing ranges, support buildings and parking. The surrounding bowl was kept intact, if not enhanced, to provide visual and sound protection for the firing ranges. While the bulk of existing development is between the two setbacks, the driveline, tactical training buildings, storage building and gravel pad extend into the buffer setbacks. Both wetlands are listed as Manage A type, requiring a 100' buffer/setback area to all improvements. With the two setbacks and the grading of the bowl, the developable portion of the site is extremely limited.

Our proposed project will locate a new building between the two buffer setbacks. 11 of the required parking stalls are between the buffers, with three stalls between the 75' and 100' buffer lines. The area of the encroaching parking stalls is on an existing paved area, with the project including improvement of the pavement to provide a slight regrading to allow for proper drainage of the area.

An area to the NE of the construction extents crosses the 75' buffer line to allow for connection of the electrical utility. The area of disruption will be limited to that needed for electrical line only. This area is within an existing improved hard surface (class V).

The new/replacement septic field is located to the SE of the construction limits, crossing the 100' and 75' buffer lines. A memo from the septic designer is attached describing the limited options for location of the septic field. The pipe between the septic tanks and the field will run between the 100' and 75' buffer lines.

The area west of the proposed new building requires some regrading to allow for building access, accessible parking and to maintain access to the existing storage building. The amount of grading has been minimized by utilizing the building wall as a partial retaining wall, but the grading does extend across the 75' buffer line, but the majority of the area to be regraded is already improved hard surface area.

Variance Request:

We request the proposed project be approved to encroach into the wetland buffer as shown on the attached site plans. The dimensions of encroachment vary and are dimensioned on the site plan, and summarized here:

Encroachment of grading at west edge of building earthwork:	12' to 16'
Encroachment of septic field:	13'
Encroachment of electrical utility:	21.5'
Encroachment of regrading at existing driveway:	11.5' to 29.5'

Variance Reasoning:

A.1 Reasonableness: The City of St. Paul intends to continue the use of property as a police training and firing range, as it has since 1975. The existing classroom building is in disrepair and not accessible, the septic system has failed requiring the use of porta-potties on site, and the well water is currently not drinkable. Thus, to maintain the existing use of the property, a new building and new utilities are required. The building, well and septic tanks will be outside of the buffer areas, but due to the tightness of the site, some grading to maintain access to existing features and create an accessible new building will encroach on the buffers. Please see attached memo for details relating to the location of the proposed septic field.

The number of trainees utilizing the site is not proposed to change from counts prior to the septic system failure.

A.2. Uniqueness: The property is largely covered by the main wetland and a steep sloping bowl at the perimeter. This leaves little flat developable land without encroaching into the sloped grades of the buffer areas. The workable area between the buffers is fully utilized by the building(s), parking, shooting ranges and tactical training area. The sloped areas are important to maintain on this site to buffer the neighboring lots from the visuals and sounds of the firing range. Thus, the proposed project is utilizing the lower bowl to the extent possible. Due to previous construction, a large class V pad exists just west of the main wetland. The project proposes improving a portion of that pad for better site drainage.

The lack of City sewer and water creates the need for the septic field and well. Due to regulations around each of those independent of the wetland regulations, locating outside of the buffer would require displacing required parking, or regrading a steeper sloped portion of the site and removal of an additional number of trees.

A.3 Essential Character: Due to the nature of the site grading, 308 inventoried trees, and the proposed new structure at the bottom of the bowl, the development will not be visible to adjacent properties, or from Linwood Avenue.

- B. A portion of the buffer encroachment is in locations where hardscape improvements have previously been made. Thus, the current proposed improvements do not diminish the intent of the buffer ordinance. The unimproved buffer areas where encroachment is proposed have been minimized by utilizing the building as retaining wall, minimizing extents of construction to actual utility locations and needs. By minimizing tree removing, providing the required tree replacements, removing buckthorn from sections of the buffer, and application of native seeding to improve the buffer areas, the project is intending to meet the requirements to protect and maintain wetland areas, while maintaining the existing historical use of the site.

Attachment: Wetland Buffer Variance_Septic
Variance Site Plan

Variance Justification of the New SSTS at the St. Paul Gun Range

Author:

Jesse Kloepfner – Advanced Designer
Kloepfner Services & Design, LLC

Here is a summary of the justification of the placement of the SSTS. The system will infringe on the wetland buffer of 100 feet.

Reasonable – The new SSTS system for the St Paul Gun Range will require three new precast tanks and a soil treatment area large enough for the estimated daily flow of the staff and guests. The location of the precast tanks will not infringe or encroach into the 100-foot buffer from the two delineated wetlands for the St Paul Gun Range site. However, the newly designed soil treatment area (mound) will be within 100 feet of the wetland along the Eastern of edge of the site. The location of the new mound was identified based on the need to identify natural, undisturbed soil, as well as an area large enough for the mound. Please note, the system cannot be placed in the same location as the original noncompliant trenches. So, a new area must be identified where the soil has not been cut, filled, or disturbed. Due to the buffers for the two wetlands, the amount of disturbed soil for the driveway, constructed berms around the building and range, necessary setback from the well, and the need for natural soil, the area on the top of the hill along Linwood Avenue is the best place for a soil treatment area.

Uniqueness - The placement of the new mound is located along the hillside with a slope that is less than 12% and does not require a lot of trees to be removed. The construction of a mound on slope >12% becomes a challenge to maintain the constructability and overall size. The longer and wider mound will require greater amounts of soil to build and need to remove additional trees. Due to the cut and disturbed soil throughout the site, this location provides the only viable long-term solution. Though it looks as though the system could easily be moved to the West to meet the 100-foot buffer requirement, the topography does not allow the mound to be built according to standards set by the definitions for mound construction by MPCA rules in Chapter 7080. The mound must be placed along the same contour and cannot be cut or graded to establish the upslope contour.

Essential character – The value of the location of the new mound serves as a great place to build a 4.5-foot-tall mound that will be 52.9' wide by 83.4' long. Though the mound will be visible from Linwood Ave, once the grass is established, it will be part of the natural hill landscape and provides an additional barrier from the activities of the Gun Range and neighbors.



To: Danette Parr, Community Development Director
From: Ling Becker, County Manager
Date: April 15, 2025
Re: City of Saint Paul Police Department Outdoor Range
Cc: Mike Sable, City Administrator

We understand that the City of Maplewood is considering a conditional use permit, design review, and a wetland buffer variance for 2621 Linwood Avenue East at tonight's Community Design Review Board and Planning Commission meetings.

Ramsey County remains committed to being a responsible and collaborative neighbor. We are open to measures that reduce impacts to adjacent properties and welcome continued dialogue to ensure clear, consistent communication among all concerned parties. It is a priority for the County that those in proximity to the Saint Paul Police Department's outdoor range facility maintain mutual understanding and constructive relationships as we move forward.

If you have further questions, please contact our Director Property Management Jean Krueger at jean.krueger@co.ramsey.mn.us.

Cc:
Commissioner Kelly Miller, District 7
Kari Collins, Deputy County Manager of Economic Growth and Community Investment

Project Background
Saint Paul Police Training Facility
2621 Linwood Avenue
Elizabeth Hammond, Planner
Excerpts from the April 15, 2025, Planning Commission Report

Project Background

Overview

The City of Saint Paul Police Department proposes to update the existing training facility at 2621 Linwood Avenue East. Ramsey County owns the property, and the City of Saint Paul has leased it since the mid-1960s. The proposed plans replace the classroom training facility with accessibility and safety upgrades, including a classroom, two armories, men's and women's locker rooms, a kitchenette/break room, and ADA-compliant restrooms. The existing facility utilizes well and septic infrastructure, both of which will be replaced due to the age of the existing systems.

Conditional Use Permit

Maplewood city code requires a conditional use permit (CUP) for the public building and its use on the property. When the Saint Paul Police Department began leasing the site from Ramsey County, a CUP was never obtained. The site's use is not changing, and the number of individuals from the Saint Paul Police Department who intend to utilize it is not anticipated to increase largely. To proceed, the proposed project requires the property to obtain a CUP to comply with the city code.

Site Plan

The 3,196-square-foot training facility is proposed in the southwest section of the site, adjacent to the existing building (which will be demolished). The site is accessed from the existing entrance point off Linwood Avenue. A small parking area is provided on the north and east sides of the proposed building.

Septic and Well

There is currently no sewer and water available at the site. The existing facility utilizes well and septic infrastructure, which will be replaced as part of this project. There is residential development proposed on the northeast corner of the county site (old Ponds of Century Golf Course). That development would require the extension of sewer and water in the area. However, the applicant has indicated the timing of that sewer and water extension does not align with their priority to complete this project as soon as possible.

Setbacks

The building and parking areas are set back 201 feet from the property line to the south along Linwood Avenue and 84 feet to the property line to the west. The building and parking areas are screened from the adjacent public streets and residential properties. City code requires the building to be 30 feet from a street right-of-way and 50 feet from a residential lot line, and

parking areas to be 15 feet from a street right-of-way and up to 20 feet adjacent to residential property. All setbacks are achieved.

Building Elevations

The one-story building varies in height between 12.6 feet and 19.2 feet as the grade changes. The proposed materials are insulated CMU blocks in a black and gray tone and asphalt shingles in a charcoal color. The building is not visible from the adjacent public streets or residential properties.

Signage

Any signage on the property is subject to review by the city and requires a sign permit, separate from this design review.

Landscaping and Screening

The proposed landscape plan shows 18 trees would be removed along with some buckthorn on the property. The plan proposes 18 trees to be planted. All other tree coverage on the site remains to provide visual and acoustic screening of the building and exterior training areas.

Parking

City code does not identify a parking requirement for this proposed use; however, the code allows the community development director to review the parking requirements for a use similar to determining the space requirements. The applicant proposes 14 parking stalls, including one accessible stall. As a comparison, the City Code requires one parking stall for every 200 square feet of floor area for commercial, office, or recreational building use. Based on this type of use, the site would be required to have 16 parking stalls. The site will continue to be utilized privately by the City of Saint Paul Police Department for training. The site is not meant for regular public use, so staff believes the number of stalls is adequate.

Lighting

The applicant submitted a lighting plan illustrating the location and lighting types, which includes wall-mounted lighting on site. Also, a plan showing the light spread and foot-candle levels was provided, showing the levels at the [property lines meet code requirements.

Wetlands

The site has two manage A wetlands on either side of the proposed training facility building, which requires a 100-foot buffer. The project will encroach within the 100-foot buffer, requiring a wetland buffer variance.

Department Comments

Fire – Jerry Novak, Fire Marshal

A sprinkler system will be required for the proposed building.

Building – Randy Johnson, Building Official

The proposed building will need to be constructed to meet the minimum requirements of the Minnesota State Building Code.

Environmental – Shann Finwall, Sustainability Coordinator
Please see the environmental review dated April 2, 2025.

Engineering – Jon Jarosch, Assistant City Engineer
Please see the engineering review dated April 2, 2025.

Public Comments

Staff sent a public hearing notice and application details to the properties within 500 feet of the subject property. No public comments were received prior to the public hearing.

Reference Information

Site Description

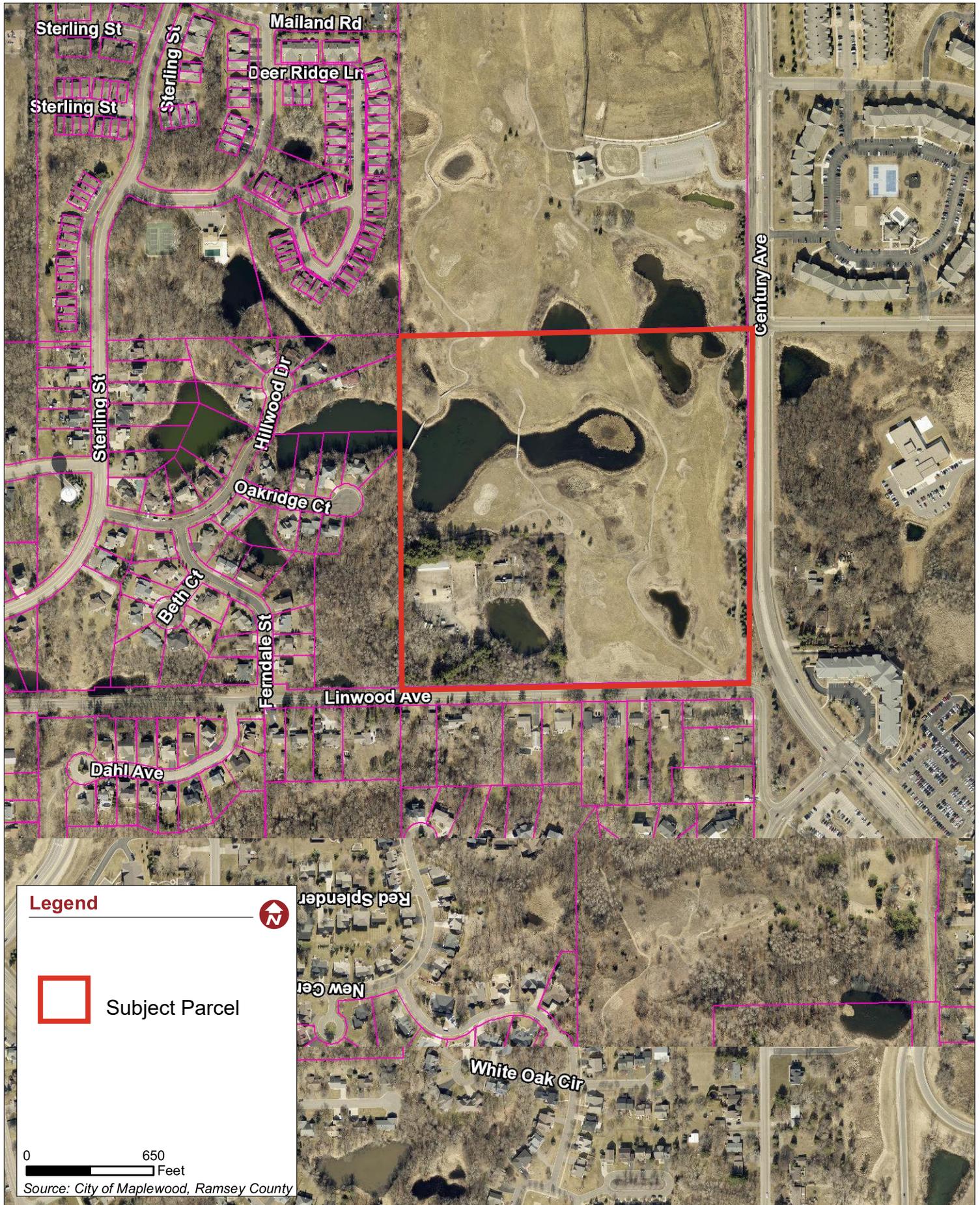
Site Size: 37.06 Acres

Surrounding Land Uses

North: Residential Park Land
South: Residential Dwellings
East: Residential Dwellings in the City of Woodbury
West: Residential Dwellings

Planning

Existing Land Use: Park
Existing Zoning: Farm Residential



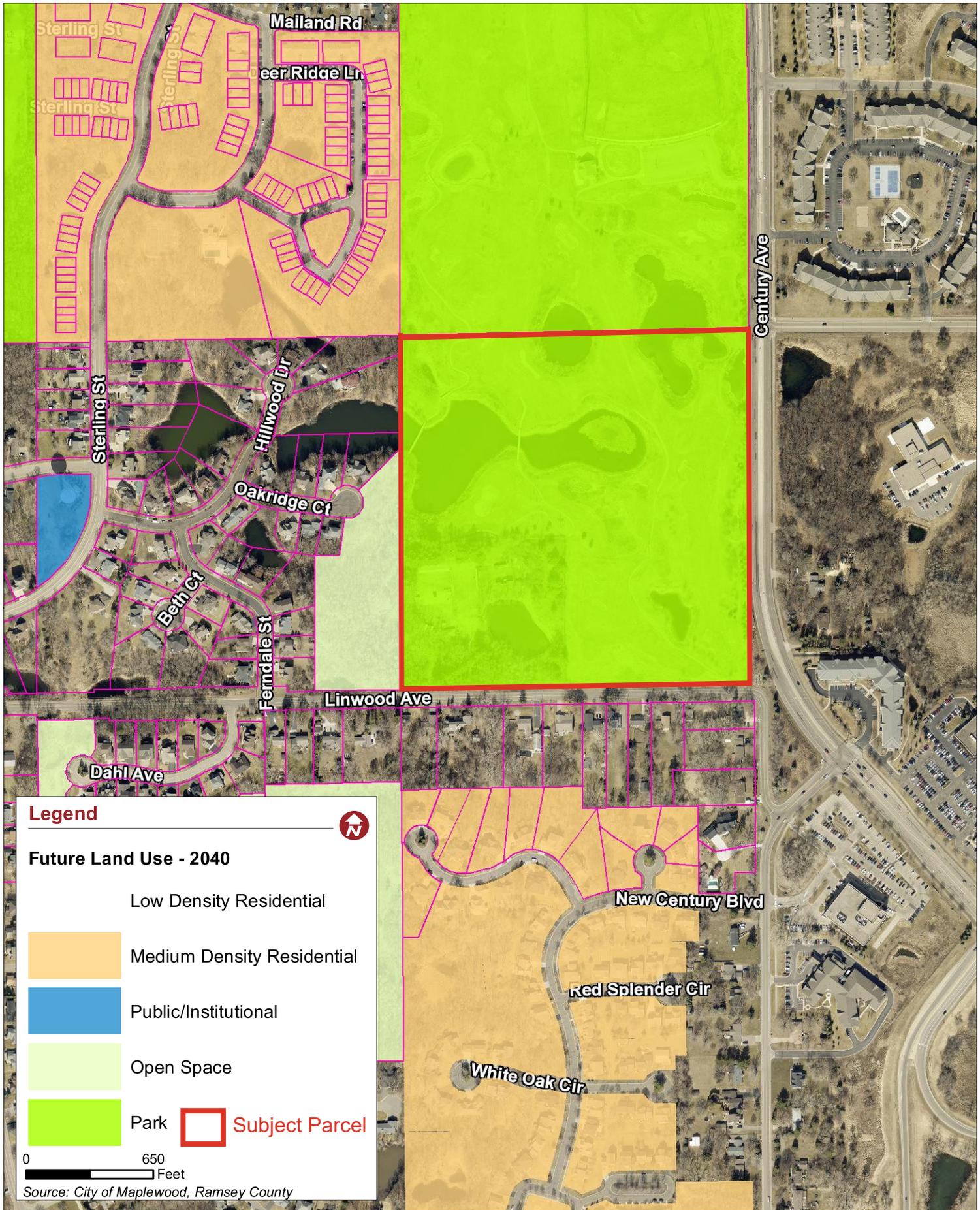
Legend



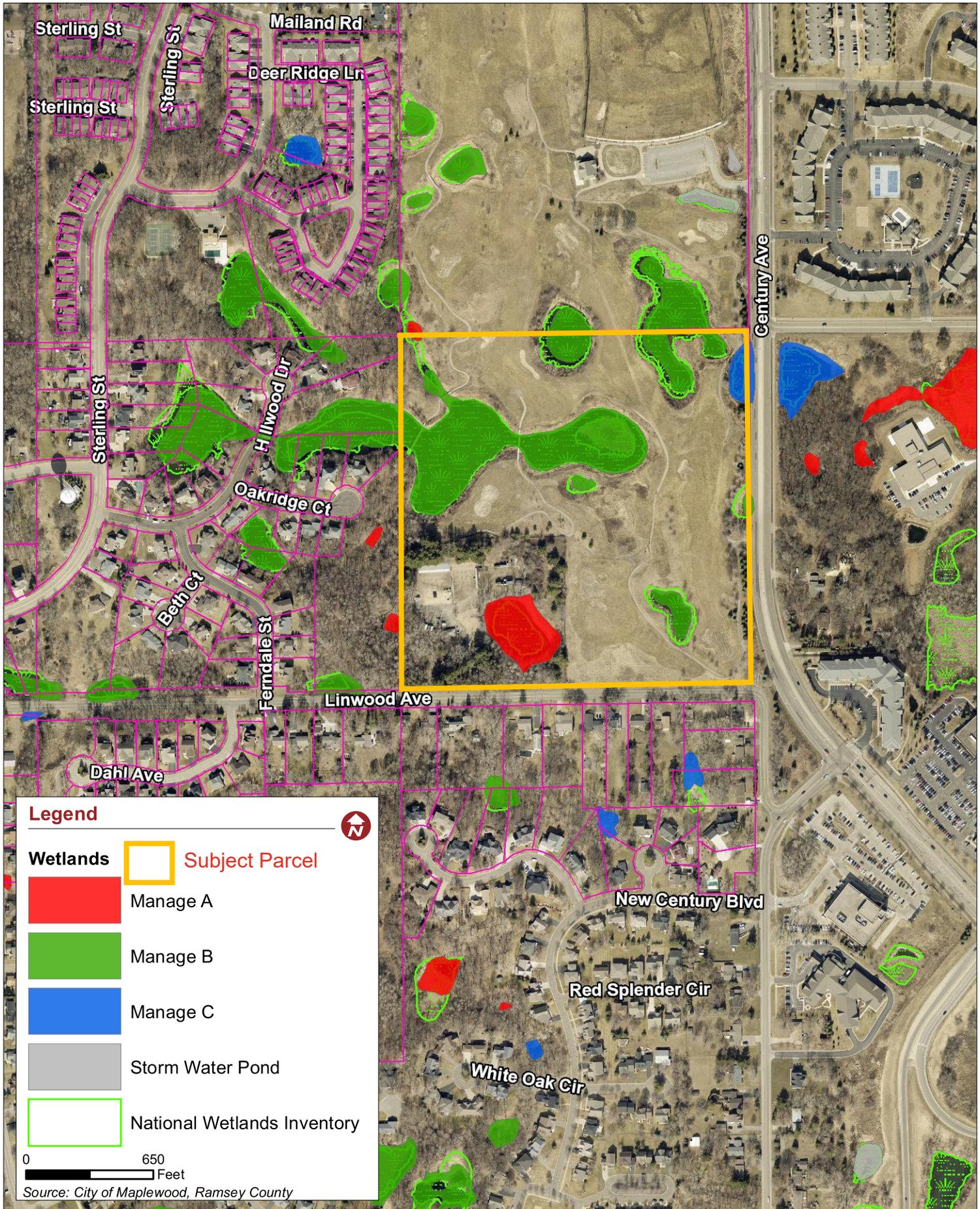
Subject Parcel

0 650
Feet

Source: City of Maplewood, Ramsey County





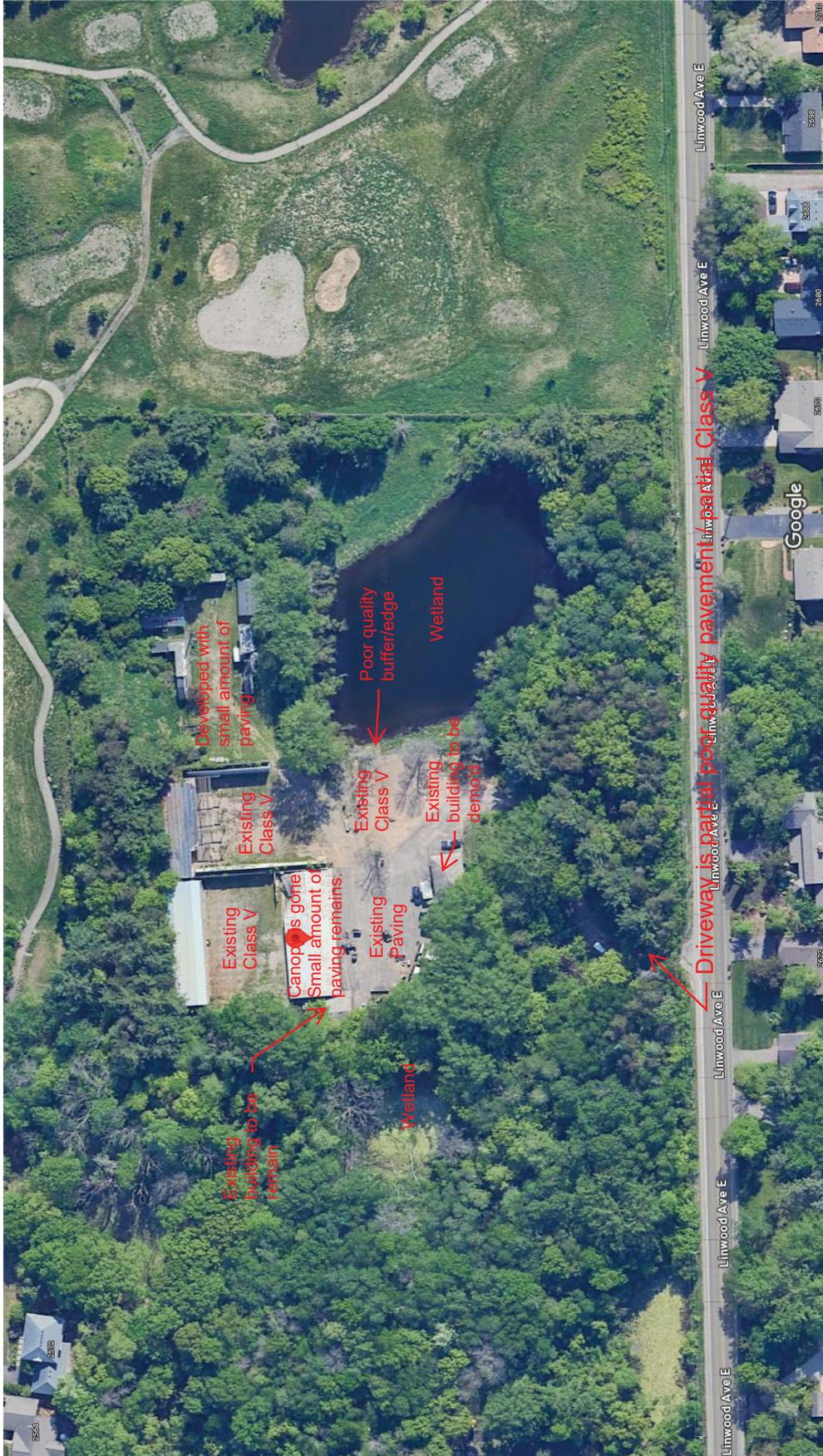


Legend

-  Subject Parcel
-  Manage A
-  Manage B
-  Manage C
-  Storm Water Pond
-  National Wetlands Inventory

0 650
Feet

Source: City of Maplewood, Ramsey County



CLIENT:



NOTES:
 COMMUNITY DESIGN REVIEW
Not for Construction

PROJECT NAME:
ST PAUL POLICE TRAINING FACILITY
 2821 Linwood Ave E, Maplewood, MN 55119

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 PROFESSIONAL LANDSCAPE ARCHITECT OF THE STATE OF MINNESOTA.

SIGNATURE: **DEBRA BRANDWICK**
 ARCHT. LICENSE # _____ DATE: **03/18/2025**

SHEET NAME:
LANDSCAPE PLAN

NO.	DATE	DESCRIPTION

23,280
 PROJECT NUMBER
 DATE: **03/18/2025**
 N.E. GRANNEY
 CHECKED BY
 SHEET NO.



Not for Construction

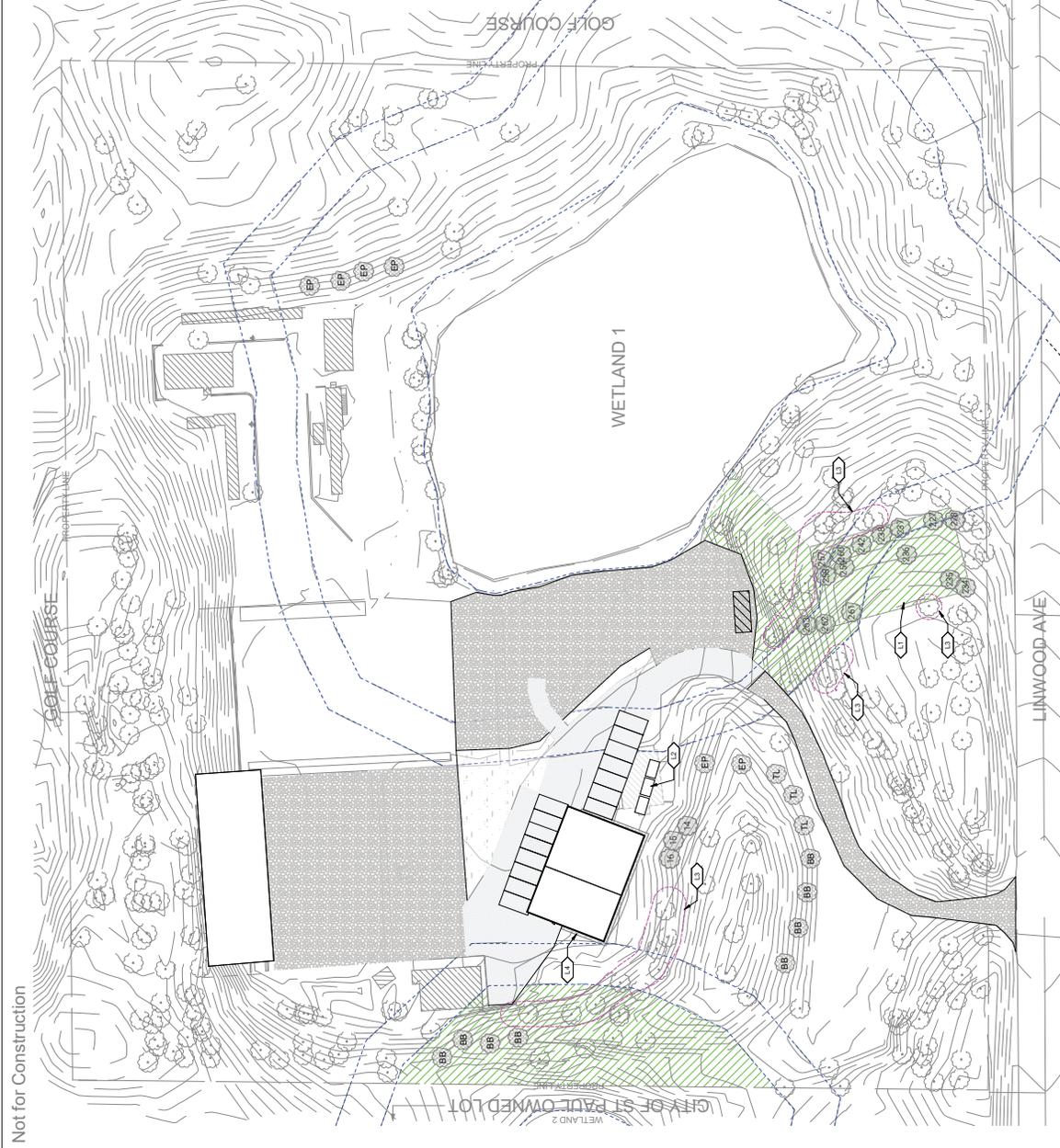
KEY VALUE	KEYNOTE TEXT
L1	BOUND
L2	SEPTIC TANKS
L3	PROTECT TREE / DRIFTLINE
L4	ROCK MULCH

LEGEND	
	EXISTING TREE
	TREE TO BE REMOVED
	NEW TREE
	AREA OF BUCKTHORN REMOVAL AND NATIVE SEEDING

PLANTING SCHEDULE			
KEY	COMMON NAME	SCIENTIFIC NAME	SIZE / QTY.
EP	EASTERN WHITE PINE	PINUS STROBUS	2" DIA / 6
TL	TAMARACK	LARIX LARICINA	2" DIA / 4
BB	BLUE BEACH	CARPINUS CAROLINIANA	2" DIA / 8

NOTES

- TOTAL EXISTING TREES: 308
- TOTAL TREES TO BE REMOVED: 18
- 18/308 = 5.84% > 20%
- REPLACE TREES 1:1 WITH 2" MINIMUM DIAMETER REMOVAL OF BUCKTHORN:
- 1. STEMS LESS THAN 3/8" DIA. PULL BY HAND
- 2. CUT LARGER STEMS AS CLOSE TO THE GROUND AS POSSIBLE
- 3. REMOVE ALL BERRIES FROM SITE
- 4. PROVIDE SHADY WOODLAND NATIVE SEED MIX TO AREA OF REMOVAL



1 LANDSCAPE PLAN 1" = 50'

Not for Construction

Not for Construction
 PLOTTED: 19/02/25 11:03:08 AM PROJECT NAME: ST PAUL POLICE TRAINING FACILITY



**PINNACLE
ENGINEERING**

November 14, 2024 (Revised January 7, 2025)

Wetland Determination and Delineation Report

**2621 Linwood Avenue East,
Maplewood, MN 55119**

Prepared For

**Sunde Land Surveying
9001 E Bloomington Fwy., Suite 118,
Bloomington, MN 55420**

Pinnacle Project Number: FSM20247315

WETLAND DETERMINATION AND DELINEATION

FOR:

2621 Linwood Avenue East,
Maplewood, MN 55119

PREPARED FOR:

Sunde Land Surveying
9001 E Bloomington Fwy., Suite 118,
Bloomington, MN 55420

PREPARED BY:

PINNACLE ENGINEERING, INC.
11541 95th AVENUE NORTH
MAPLE GROVE, MINNESOTA 55369

PINNACLE PROJECT NUMBER: FSM20247315

November 14, 2024(Revised January 7, 2025)

Prepared By:



Brett Molloy
Staff Scientist
MWPCP # 5454

Reviewed By:



Eric Simonson
Senior Project Engineer

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FIGURE 4: National Wetland Inventory Map

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APPENDICES

APPENDIX A: Midwest Supplement Data Forms

APPENDIX B: Wetland Boundary Application

APPENDIX C: Wetland Photographs

APPENDIX D: Historical Aerial Photographs

1.0 INTRODUCTION

1.1 Introduction

Sunde Land Surveying retained Pinnacle Engineering, Inc. (Pinnacle) to conduct a Level 2 On-Site Wetland Delineation of a 7.86-acre portion of a 37.40-acre property located at 2621 Linwood Ave. E., Maplewood, Ramsey County, Minnesota (Site). The Site is within the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 12, Township 28N, Range 22W (Lat: 44.9204611°, Long: -92.9885639°). The Site consists of buildings, dirt parking lot, shooting ranges, woods, and a wetland.

The purpose of the wetland delineation was to determine the presence of wetland areas on and near the Site for a potential development project. The Level 2 Wetland Delineation was conducted in substantial conformance with the 1987 U.S. Army Corps of Engineers (ACOE) Wetland Delineation Manual, updated February 25, 1997, and utilizes the Midwest Regional Supplement. The local governmental unit (LGU) is the Ramsey-Washington Metro Watershed District (RWMWD). This report documents the methods and findings of the delineation. The report was revised to include an off-site wetland area at the request of the LGU.

1.2 Scope

Pinnacle conducted a Level 2 Onsite Wetland Determination and Delineation in accordance with the criteria established in the 1987 ACOE Wetland Delineation Manual, updated in 1997, utilizing the Midwest Regional Supplement. The work included the following items:

- Review of Natural Resource Conservation Service (NRCS) County Soil Surveys, USGS topographic maps, National Wetland Inventory (NWI) Maps, Public Water Inventory (PWI) maps, and aerial photographs.
- Completion of a site reconnaissance to determine if and where wetlands exist.
- Delineation of the identified wetlands within the area of interest boundaries.
- Preparation and submittal of this report summarizing the findings of our work.

2.0 BACKGROUND INFORMATION

2.1 Site Location and Use

The Site consists of a 7.86-acre portion of a 37.40-acre property located at 2621 Linwood Ave. E., Maplewood, Ramsey County, Minnesota. The Site is within the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 12, Township 28N, Range 22W (Lat: 44.9204611°, Long: -92.9885639°). The property identification number (PID) is 122822440002. Figure 1 shows the property location and the Site boundary. Figure 2 depicts the Site in its current configuration. The Site consists of buildings, dirt parking lot, shooting ranges, woods, and a wetland.

2.2 Surveys and Maps

Pinnacle conducted a review of the NRCS Ramsey County Soil Survey, topographic maps, NWI, and PWI maps for the vicinity of the Site. The following sections summarize the information available at the time of this review.

2.2.1 Topographic Maps

Based on the topographic map (Figure 2), the elevation of the Site ranges from approximately 1062 feet above mean sea level (AMSL) in the northwest portion of the Site to a wetland with an approximate elevation of 1036 feet AMSL in the southeast portion of the Site. The Site generally slopes toward the wetland in the lower area. Surficial drainage appears to be to the east/southeast toward the wetland.

2.2.2 Soil Survey

The NRCS Web Soil Survey map, which is included as Figure 3, was reviewed for information pertaining to the Site soils. The Soil Survey indicated the Site soil units consist of:

- 342C - Kingsley sandy loam, 6 to 12 percent slopes
- 342E - Kingsley sandy loam, 18 to 30 percent slopes
- 504B - Duluth silt loam, 1 to 6 percent slopes
- 504D - Duluth silt loam, 12 to 25 percent slopes
- W - Water

Of the identified soil types, none are considered hydric soil.

2.2.3 Wetland Inventory Maps

The United States Fish and Wildlife Service (USFWS) NWI map for the Site area (Figure 4) depicted one wetland type within the Site. The description is as follows:

- One area consists of a palustrine, unconsolidated bottom, permanently flooded, excavated (PUBHx).

NWI maps generally show the approximate location of wetlands as of the time of publication.

2.2.4 Public Waters Inventory

The Minnesota Department of Natural Resources PWI produces a map of the protected wetlands and waters of the State. The PWI map, which is included as Figure 5, Did not identify any PWI basins or watercourses within Site Boundary.

3.0 WETLAND DETERMINATION

3.1 Methodology

The wetland determination was made utilizing the techniques of the Routine Level 2 Onsite Method, as described in the 1987 ACOE Wetland Delineation Manual, updated February 25, 1997, and utilizing the Midwest Regional Supplement. Determination of hydric soils, site hydrology, and hydrophytic vegetation were made according to the procedures and guidelines described in the manual. Sampling locations were selected to be representative of wetland/upland transition areas.

Brett Molloy of Pinnacle assessed the wetlands within the project area on November 7, 2024. The assessment included probing the soils to observe the color and moisture, as well as other available hydric soil indicators, such as mottling, gleying, and oxidized root channels. The characteristics noted for each sampling location are documented in the data forms, which are included in Appendix A. Potential wetland boundaries were collected using a handheld GPS unit and were flagged for survey by others. Wetland areas are depicted on Figure 2.

The 2024 seasonal antecedent rainfall amounts were less than normal amounts of rainfall for this area. Precipitation in the amount of 2.08 inches occurred the fourteen days prior to the wetland delineation field event. Due to a wetter than normal summer and a dry fall hydrology was anticipated to be present during the field visit.

3.2 Aerial Photo Evaluation

The LGU requested an aerial evaluation of a visible wetland to the west of the Site. The LGU determined the evaluation was needed to determine potential buffers or setbacks that may extend from the off-site wetland into the Site. Pinnacle acquired aerial photographs from Google Earth Pro (GEP) from the years 2006, 2012, 2016, 2019, 2020, 2022, and 2023. The aerial photographs were reviewed to evaluate if wetland indicators were present. The review also included evaluation of soils data for presence of hydric soils, NWI map, aerial imagery, and other wetland mapping resources to identify potential wetland areas for further evaluation.

Based on the review of aerial photographs, the site appears to have remained the same since 2006, consisting of a police shooting range used for training, a stormwater pond representing Wetland 1, and a shallow marsh corresponding to Wetland 2. Aerial photos from 2006 to 2023 are found in Appendix D. Vegetation types were inferred from the NWI classification and the wetland signatures observed in the aerial images.

Table 3.3.1 below summarizes the findings of the Air Photo Evaluation and the field investigation. The table describes the identified wetlands, their location, size, type, and wetland criteria determining factors. Data forms were completed for the wetlands identified in the hydrological assessment and in the NWI map (Figure 4). Data forms completed during the field investigation can be found in Appendix A, and photographs of the wetlands can be found in Appendix C. The delineated wetlands areas are depicted in Figure 2.

3.3 Wetland Descriptions

Table 3.3.1. - Wetland Areas Table
2621 Linwood Ave. E.,
Maplewood, MN 55119

Wetland ID	Delineated Wetland Type	Wetland Size* ac/sf		NWI Wetland Type	Dominant Wetland Vegetation	Hydric Soil Indicator	Hydrology
1	PUBH	1.15	50.094	PUBHx	Reed Canary Grass, Lake Sedge	Depleted Matrix (F3)	Surface Water (A1)
2	PUBH	0.12	5,227				Surface Water (A1)

Pinnacle identified two wetland area within the Site boundary through aerial photography review and the on-site investigation. The NWI description of the wetland classification and type is found below.

Wetland Type PUBHx

The NWI Cowardin wetland classification system identifies the PUBHx label for a wetland that consists of a palustrine basin, nontidal wetlands dominated by persistent emergent vegetation, consisting of plants that grow principally on or below the surface of the water for most of the growing season, with an unconsolidated bottom that is permanently flooded. This habitat classification includes areas less than 20 acres of active wave-formed or bedrock shoreline with water in the deepest part of the basin less than 8.2 ft. Water covers the substrate throughout the year. Special modifier (x) is used to identify wetlands basins or channels that were excavated by humans. The NWI map for the Site area did indicate one PUBHx wetland contained within and beyond the Site boundary which corresponds to wetland 1.

Wetland Type PUBH

The NWI Cowardin wetland classification system identifies the PUBH label for a wetland that consists of a palustrine basin, nontidal wetlands dominated by persistent emergent vegetation, consisting of plants that grow principally on or below the surface of the water for most of the growing season, with an unconsolidated bottom that is permanently flooded. This habitat classification includes areas less than 20 acres of active wave-formed or bedrock shoreline with water in the deepest part of the basin less than 8.2 ft. Water covers the substrate throughout the year.

4.0 DISCUSSION

Pinnacle performed a Wetland Determination and Delineation of a 7.86-acre portion of a 37.40-acre property with located at 2621 Linwood Ave. E., Maplewood, Ramsey County, Minnesota. The Site is within the SW ¼ of the SE ¼ of Section 12, Township 28N, Range 22W (Lat: 44.9204611°, Long: -92.9885639°). The PID is 122822440002. The level 2 delineation was conducted in substantial conformance with the 1987 ACOE Wetland Delineation Manual, updated February 25, 1997, and utilized the Midwest Regional Supplement.

The elevation of the Site ranges from approximately 1062 feet AMSL in the northwest portion of the Site to a wetland with an approximate elevation of 1036 feet AMSL in the east central portion of the Site. The Site generally slopes toward the wetland in the lower area. Surficial drainage appears to be to the east/southeast toward the wetland.

The 2024 seasonal antecedent rainfall amounts were less than normal amounts of rainfall for this area. Precipitation in the amount of 2.08 inches occurred the fourteen days prior to the wetland delineation field event. Due to a wetter than normal summer and a dry fall hydrology was anticipated to be present during the field visit.

Wetland 1, located in the east central portion of the property, is primarily an open water basin with a fresh meadow fringe. According to the Cowardin classification system, it falls under the category of palustrine, unconsolidated bottom, permanently flooded, and excavated. Under the Circular 39 system, Wetland 1 is considered a Type 2 and 5 wetland. Wetland 1 is dominated by hydrophytes comprised primarily of reed canary grass (*Phalaris arundinacea*) and lake bank sedge (*Carex lacustris*).

The delineation of the wetland boundary was determined by following the vegetation change, and the distinct topographic change from the basin to the upland area and the presence of hydric/nonhydric soils.

Wetland 2, located west of the property line, is primarily an open water basin with a fresh meadow fringe. According to the Cowardin classification system, it falls under the category of palustrine, unconsolidated bottom, permanently flooded. Under the Circular 39 system, Wetland 2 is considered a Type 2 and 5 wetland. Wetland 1 is dominated by hydrophytes comprised primarily of reed canary grass (*Phalaris arundinacea*). The delineation of the wetland boundary was determined by a level one off site delineation with some GPS points and following the vegetation change, and the topographic change from the contour lines upon request for the LGU.

5.0 CONCLUSION

Pinnacle performed a Wetland Determination and Delineation of a 7.86-acre portion of a 37.40-acre property located at 2621 Linwood Ave. E., Maplewood, Ramsey County, Minnesota (PID 122822440002). The Site consists of buildings, dirt parking lot, shooting ranges, woods and a wetland. The level 2 wetland delineation was conducted in substantial conformance with the 1987 U.S. ACOE Wetland Delineation Manual, updated February 25, 1997, and utilized the Midwest Regional Supplement.

During the field assessment, it was determined that one area within the Site met all three of the mandatory criteria of a wetland, and the wetland boundaries were recorded utilizing a handheld GPS device and were flagged for survey by others. The delineation will be reviewed by the LGU of the RWMWD, which administers Minnesota's Wetland Conservation Act and the ACOE which administers the Clean Water Act.

6.0 STANDARD OF CARE

Environmental services performed by Pinnacle for the project have been conducted in a manner consistent with the degree of care and technical skill appropriately exercised by environmental professionals currently practicing in this area under similar budget and time constraints. Recommendations or opinions contained in this report represent our professional judgment and are generally based upon available information and currently accepted practices for environmental professionals. Other than this, no other warranty is implied nor is it expressed.

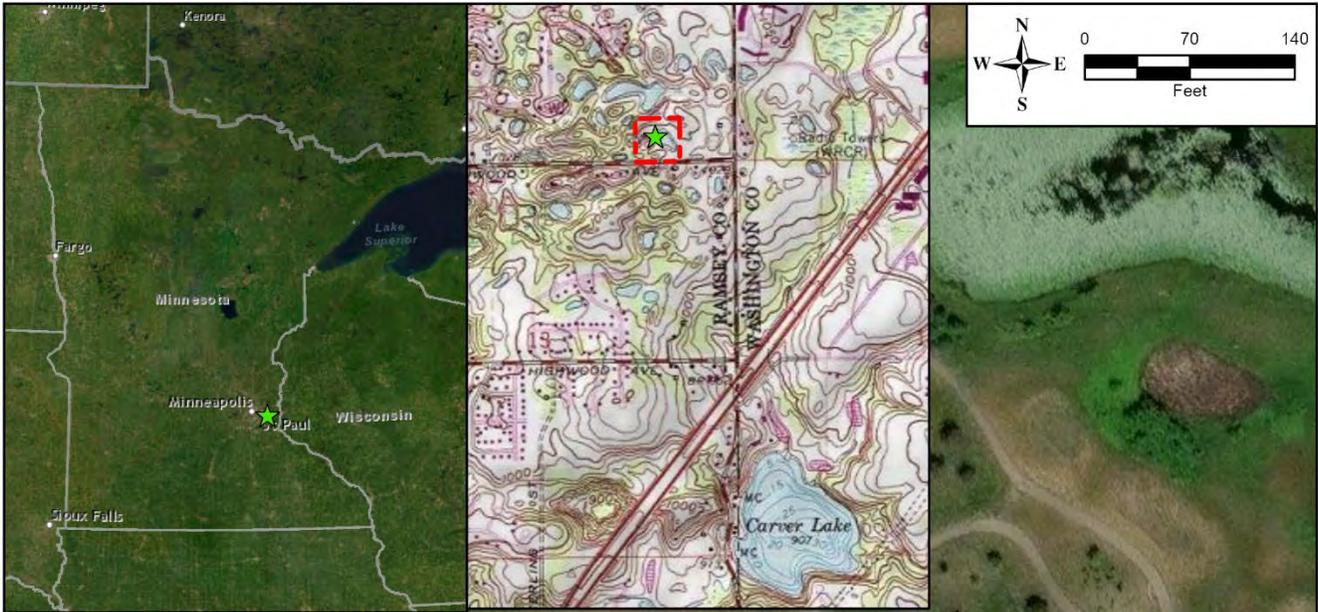
7.0 REFERENCES

- Eggers, Steve D. and Reed, Donald M., Wetland Plants and Plant Communities of Minnesota and Wisconsin, 1997, U. S. Army Corps of Engineers, St. Paul District.
- Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Regional Supplement, August 2010, Washington, D. C.
- Lyon, John Grimson, Practical Handbook for Wetland Identification and Delineation, 1993, Lewis Publishers, Boca Raton, Florida.
- Minnesota Board of Water and Soil Resources <https://bwsr.state.mn.us/sites/default/files/2018-12/WETLANDS_Delin_Guidance_for_Offsite_Hydrology_and_Wetland_Determinations.pdf> (November 8, 2024).
- Minnesota Geospatial Commons (<https://gisdata.mn.gov/dataset/water-mn-public-waters>), NWI data (<https://gisdata.mn.gov/dataset/water-nat-wetlands-inv-2009-2014>), generated by Brett Molloy using <<https://gisdata.mn.gov/>>, (November 8, 2024)
- U.S Fish and Wildlife Service National Wetlands Inventory
<http://www.fws.gov/wetlands/data/WebMapServices.html> > (November 8, 2024)
- U. S. Army Corps of Engineers, U. S. Army Corps of Engineers Wetland Delineation Manual, 1987, updated on February 25, 1997, Washington, D. C.
- Ramsey County GIS. < [https://www. https://www.ramseycounty.us/residents/property/maps-surveys/interactive-map-gis](https://www.https://www.ramseycounty.us/residents/property/maps-surveys/interactive-map-gis)> (November 8, 2024)

FIGURE 1

Site Location Map

WETLAND DETERMINATION AND DELINEATION



File: FSM20247315 Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN



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Figure 1
Site Location

2621 Linwood Ave E,
Maplewood, MN 55119

LEGEND

-  Site Boundary
-  Site

PROJECT NUMBER: FSM20247315

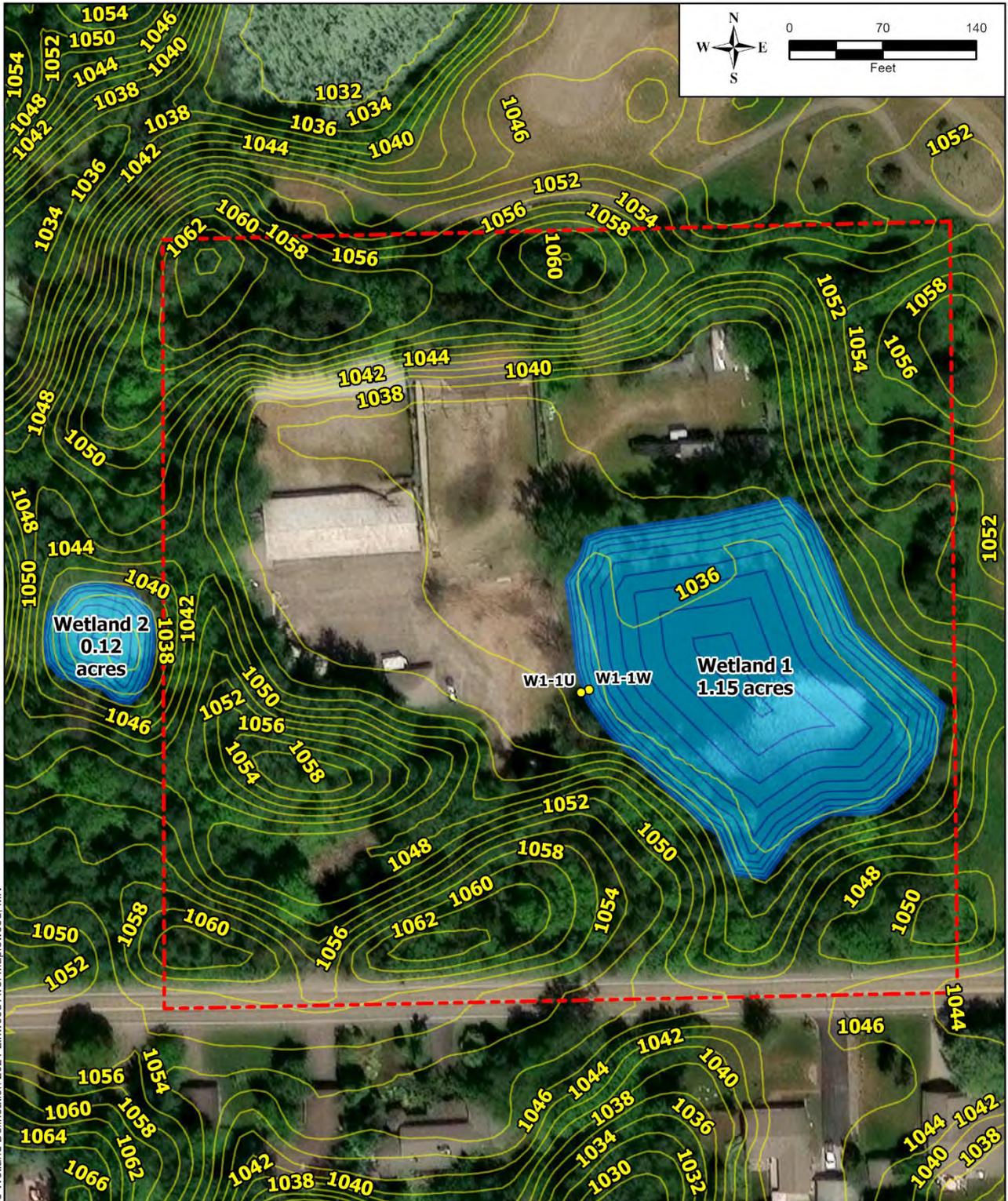
DRAWN: BM
REVIEWED: ST

DATE: 11/07/2024

FIGURE 2

Site Layout

WETLAND DETERMINATION AND DELINEATION



File: FSM20247315 Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN



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Figure 2
Site Layout

2621 Linwood Ave E,
Maplewood, MN 55119

LEGEND

- Site Boundary
- 2ft Contours
- Wetlands
- Sample Point
- Transect

PROJECT NUMBER: FSM20247315

DRAWN: BM
REVIEWED: ST

DATE: 01/06/2025

FIGURE 3
Soil Survey

WETLAND DETERMINATION AND DELINEATION



File: FSM20247315 Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN

342C - Kingsley sandy loam, 6 to 12 percent slopes
 342E - Kingsley sandy loam, 18 to 30 percent slopes
 504B - Duluth silt loam, 1 to 6 percent slopes
 504D - Duluth silt loam, 12 to 25 percent slopes
 W - Water



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Figure 3
 Soils
 2621 Linwood Ave E,
 Maplewood, MN 55119

LEGEND

- Site Boundary
- NRCS Soils

PROJECT NUMBER: FSM20247315

DRAWN: BM
 REVIEWED: ST

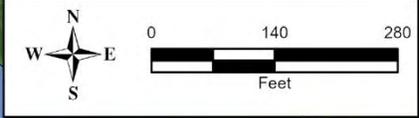
DATE: 11/11/2024

FIGURE 4

National Wetland Inventory

WETLAND DETERMINATION AND DELINEATION

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



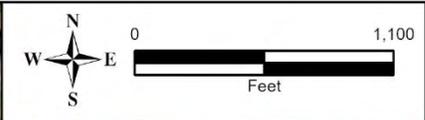
File: FSM20247315 Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN

 <p>PINNACLE ENGINEERING</p>	<p>11541 95th Ave N. Minneapolis, MN 55369 (763) 315-4501 www.pineng.com</p>	<p>Figure 4 NWI Map</p>	<p>LEGEND</p> <p>- - - Site Boundary</p>	
	<p>2621 Linwood Ave E, Maplewood, MN 55119</p>			
<p>PROJECT NUMBER: FSM20247315</p>		<p>DRAWN: BM REVIEWED: ST</p>	<p>DATE: 01/07/2025</p>	

FIGURE 5

Public Waters Inventory

WETLAND DETERMINATION AND DELINEATION



File: FSM20247315_Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN

 PINNACLE ENGINEERING	11541 95th Ave N. Minneapolis, MN 55369 (763) 315-4501 www.pineng.com			
	<table border="0"> <tr> <td>DRAWN: BM</td> <td>DATE: 11/07/2024</td> </tr> <tr> <td>REVIEWED: ST</td> <td></td> </tr> </table>	DRAWN: BM	DATE: 11/07/2024	REVIEWED: ST
DRAWN: BM	DATE: 11/07/2024			
REVIEWED: ST				

Figure 5
PWI Map

2621 Linwood Ave E,
Maplewood, MN 55119

LEGEND

-  Site Boundary
-  Site
-  PWI Basins
-  PWI Watercourses

FIGURE 6

Wetland Communities

WETLAND DETERMINATION AND DELINEATION



File: FSM20247315_Sunde_Wetland_Delineation_2621_Linwood_Ave_Maplewood_MN

 PINNACLE ENGINEERING	11541 95th Ave N. Minneapolis, MN 55369 (763) 315-4501 www.pineng.com	
	DRAWN: BM REVIEWED: ST	DATE: 01/07/2025

Figure 6
Wetland Communities

2621 Linwood Ave E,
Maplewood, MN 55119

LEGEND	
	Site Boundary
	Open Water
	Fresh Meadow

APPENDICES

APPENDIX A

Midwest Regional Supplement Data Forms

SOIL

Sampling Point: W1-1W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR	3/2	100				CL	
8-24	10YR	5/1	100				CL	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.					² Location: PL=Pore Lining, M=Matrix.			
Hydric Soil Indicators:						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Coast Prairie Redox (A16)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> Dark Surface (S7)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Iron-Manganese Masses (F12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Mucky Mineral (F1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Stratified Layers (A5)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> 2 cm Muck (A10)			<input checked="" type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Redox Depressions (F8)					
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)								
Restrictive Layer (if observed):								
Type: _____								
Depth (inches): _____						Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks:								

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>36</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: 2621 Linwood Ave E City/County: Ramsey County Sampling Date: 2024-11-07
 Applicant/Owner: Sunde State: Minnesota Sampling Point: W1-1U
 Investigator(s): Brett Molloy Section, Township, Range: sec 12 T028N R022W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 3-7 Lat: 44.920410 Long: -92.988451 Datum: WGS84
 Soil Map Unit Name: Duluth silt loam, 1 to 6 percent slopes NWI classification: None

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

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

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

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Pinus strobus</u>	<u>50</u>	<u>Y</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25.00</u> (A/B)
2. <u>Fraxinus pennsylvanica</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
3. _____				
4. _____				
5. _____				
<u>70.0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>95</u> x 4 = <u>380</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>115</u> (A) <u>420.00</u> (B) Prevalence Index = B/A = <u>3.65</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u>)				
1. <u>Lonicera tatarica</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	
2. _____				
3. _____				
<u>30.0</u> = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)				
1. <u>Arctium minus</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
<u>15.0</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u>)				
1. _____				
2. _____				
<u>0</u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: W1-1U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)	%	%	Color (moist)	%	Type ¹	Loc ²		
0-32	10YR	4/4	90	10YR	4/6	10	C	M	COSL
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.					² Location: PL=Pore Lining, M=Matrix.				
Hydric Soil Indicators:					Indicators for Problematic Hydric Soils³:				
<input type="checkbox"/> Histosol (A1)					<input type="checkbox"/> Sandy Gleyed Matrix (S4)				
<input type="checkbox"/> Histic Epipedon (A2)					<input type="checkbox"/> Sandy Redox (S5)				
<input type="checkbox"/> Black Histic (A3)					<input type="checkbox"/> Stripped Matrix (S6)				
<input type="checkbox"/> Hydrogen Sulfide (A4)					<input type="checkbox"/> Loamy Mucky Mineral (F1)				
<input type="checkbox"/> Stratified Layers (A5)					<input type="checkbox"/> Loamy Gleyed Matrix (F2)				
<input type="checkbox"/> 2 cm Muck (A10)					<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)					<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Thick Dark Surface (A12)					<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)					<input checked="" type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)					³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.				
Restrictive Layer (if observed):						Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Type: _____									
Depth (inches): _____									
Remarks:									

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	_____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	_____
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	_____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

APPENDIX B

Wetland Boundary Application

Project Name and/or Number:

PART ONE: Applicant Information

If applicant is an entity (company, government entity, partnership, etc.), an authorized contact person must be identified. If the applicant is using an agent (consultant, lawyer, or other third party) and has authorized them to act on their behalf, the agent's contact information must also be provided.

Applicant/Landowner Name: Eric Kammerer
Mailing Address: 367 Grove St, St Paul, MN 55101
Phone: 651-417-5813
E-mail Address: Eric.Kammerer@stpaul.gov

Authorized Contact (do not complete if same as above): Pinnacle Engineering, Inc.
Mailing Address: 11541 95th Avenue North, Maple Grove, MN 55369
Phone: 612-432-5590
E-mail Address: bmolloy@pineng.com

Agent Name: Brett Molloy
Mailing Address: 11541 95th Avenue North, Maple Grove, MN 55369
Phone: 612.246.0630
E-mail Address: bmolloy@pineng.com

PART TWO: Site Location Information

County: Ramsey County **City/Township:** Maplewood
Parcel ID and/or Address: 122822440002
Legal Description (Section, Township, Range): Section 12, Township 28N, Range 22W
Lat/Long (decimal degrees): Lat: 44.9204611°, Long: -92.9885639°
Attach a map showing the location of the site in relation to local streets, roads, highways.
Approximate size of site (acres) or if a linear project, length (feet): 7.86-acre

If you know that your proposal will require an individual Permit from the U.S. Army Corps of Engineers, you must provide the names and addresses of all property owners adjacent to the project site. This information may be provided by attaching a list to your application or by using block 25 of the Application for Department of the Army permit which can be obtained at:

http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RegulatoryDocs/engform_4345_2012oct.pdf

PART THREE: General Project/Site Information

If this application is related to a delineation approval, exemption determination, jurisdictional determination, or other correspondence submitted *prior to* this application then describe that here and provide the Corps of Engineers project number.

Describe the project that is being proposed, the project purpose and need, and schedule for implementation and completion. The project description must fully describe the nature and scope of the proposed activity including a description of all project elements that effect aquatic resources (wetland, lake, tributary, etc.) and must also include plans and cross section or profile drawings showing the location, character, and dimensions of all proposed activities and aquatic resource impacts.

Potential development project.

Project Name and/or Number:

PART FOUR: Aquatic Resource Impact¹ Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T) ¹	Size of Impact ²	Overall Size of Aquatic Resource ³	Existing Plant Community Type(s) in Impact Area ⁴	County, Major Watershed #, and Bank Service Area # of Impact Area ⁵

¹If impacts are temporary; enter the duration of the impacts in days next to the "T". For example, a project with a temporary access fill that would be removed after 220 days would be entered "T (220)".

²Impacts less than 0.01 acre should be reported in square feet. Impacts 0.01 acre or greater should be reported as acres and rounded to the nearest 0.01 acre. Tributary impacts must be reported in linear feet of impact and an area of impact by indicating first the linear feet of impact along the flowline of the stream followed by the area impact in parentheses). For example, a project that impacts 50 feet of a stream that is 6 feet wide would be reported as 50 ft (300 square feet).

³This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".

⁴Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.

⁵Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

If any of the above identified impacts have already occurred, identify which impacts they are, and the circumstances associated with each:

PART FIVE: Applicant Signature

Check here if you are requesting a pre-application consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.

By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.

Signature: _____



November 14, 2024

I hereby authorize _____ to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

¹ The term "impact" as used in this joint application form is a generic term used for disclosure purposes to identify activities that may require approval from one or more regulatory agencies. For purposes of this form it is not meant to indicate whether or not those activities may require mitigation/replacement.

Attachment A

Request for Delineation Review, Wetland Type Determination, or Jurisdictional Determination

By submission of the enclosed wetland delineation report, I am requesting that the U.S. Army Corps of Engineers, St. Paul District (Corps) and/or the Wetland Conservation Act Local Government Unit (LGU) provide me with the following (check all that apply):

Wetland Type Confirmation

Delineation Concurrence. Concurrence with a delineation is a written notification from the Corps and a decision from the LGU concurring, not concurring, or commenting on the boundaries of the aquatic resources delineated on the property. Delineation concurrences are generally valid for five years unless site conditions change. Under this request alone, the Corps will not address the jurisdictional status of the aquatic resources on the property, only the boundaries of the resources within the review area (including wetlands, tributaries, lakes, etc.).

Preliminary Jurisdictional Determination. A preliminary jurisdictional determination (PJD) is a non-binding written indication from the Corps that waters, including wetlands, identified on a parcel may be waters of the United States. For purposes of computation of impacts and compensatory mitigation requirements, a permit decision made on the basis of a PJD will treat all waters and wetlands in the review area as if they are jurisdictional waters of the U.S. PJDs are advisory in nature and may not be appealed.

Approved Jurisdictional Determination. An approved jurisdictional determination (AJD) is an official Corps determination that jurisdictional waters of the United States are either present or absent on the property. AJDs can generally be relied upon by the affected party for five years. An AJD may be appealed through the Corps administrative appeal process.

In order for the Corps and LGU to process your request, the wetland delineation must be prepared in accordance with the 1987 Corps of Engineers Wetland Delineation Manual, any approved Regional Supplements to the 1987 Manual, and the *Guidelines for Submitting Wetland Delineations in Minnesota* (2013).

<http://www.mvp.usace.army.mil/Missions/Regulatory/DelineationJDGuidance.aspx>

APPENDIX C

Wetland Photographs



View of Wetland 1 looking North



View of Wetland 1 looking Southeast



View of Wetland 1 looking South



View of Wetland 1 looking West



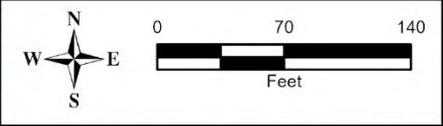
View of Wetland 2 looking West



View of Wetland 2 looking Northwest

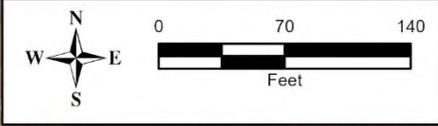
APPENDIX D

Historical Aerial Photos



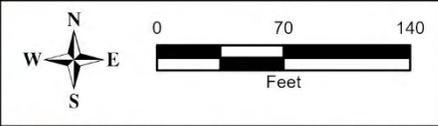
File: FSM20247315 Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN

 PINNACLE ENGINEERING	11541 95th Ave N. Minneapolis, MN 55369 (763) 315-4501 www.pineng.com	Historical Aerial Photos 3/31/2006	LEGEND  Site Boundary  Wetlands
		2621 Linwood Ave E, Maplewood, MN 55119	
PROJECT NUMBER: FSM20247315	DRAWN: BM REVIEWED: ST	DATE: 01/06/2025	



File: FSM20247315 Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN

 PINNACLE ENGINEERING 11541 95th Ave N. Minneapolis, MN 55369 (763) 315-4501 www.pineng.com	Historical Aerial Photos 4/3/2012	LEGEND  Site Boundary  Wetlands
	2621 Linwood Ave E, Maplewood, MN 55119	
PROJECT NUMBER: FSM20247315	DRAWN: BM REVIEWED: ST	DATE: 01/06/2025



File: FSM20247315 Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN



**PINNACLE
ENGINEERING**

11541 95th Ave N.
Minneapolis, MN 55369
(763) 315-4501
www.pineng.com

Historical Aerial Photos
3/11/2016

2621 Linwood Ave E,
Maplewood, MN 55119

LEGEND

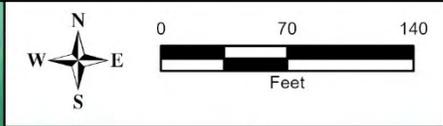
Site Boundary

Wetlands

PROJECT NUMBER: FSM20247315

DRAWN: BM
REVIEWED: ST

DATE: 01/06/2025



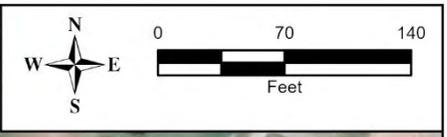
File: FSM20247315 Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN

 PINNACLE ENGINEERING 11541 95th Ave N. Minneapolis, MN 55369 (763) 315-4501 www.pineng.com	Historical Aerial Photos 8/16/2019	LEGEND  Site Boundary  Wetlands
	2621 Linwood Ave E, Maplewood, MN 55119	
PROJECT NUMBER: FSM20247315	DRAWN: BM REVIEWED: ST	DATE: 01/06/2025



File: FSM20247315_Sunde Wetland Delineation 2621 Linwood Ave, Maplewood, MN

 PINNACLE ENGINEERING 11541 95th Ave N. Minneapolis, MN 55369 (763) 315-4501 www.pineng.com	Historical Aerial Photos 4/17/2020	LEGEND  Site Boundary  Wetlands
	2621 Linwood Ave E, Maplewood, MN 55119	
PROJECT NUMBER: FSM20247315	DRAWN: BM REVIEWED: ST	DATE: 01/06/2025

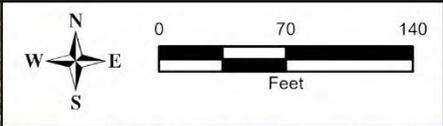


Wetland 2

Wetland 1

File: FSM20247315 Sunde Wetland Delineation, 2621 Linwood Ave., Maplewood, MN

 PINNACLE ENGINEERING	11541 95th Ave N. Minneapolis, MN 55369 (763) 315-4501 www.pineng.com	Historical Aerial Photos 6/26/2022	LEGEND  Site Boundary  Wetlands
		2621 Linwood Ave E, Maplewood, MN 55119	
PROJECT NUMBER: FSM20247315	DRAWN: BM REVIEWED: ST	DATE: 01/06/2025	



File: FSM20247315 Sunde Wetland Delineation 2621 Linwood Ave. Maplewood, MN

 PINNACLE ENGINEERING	11541 95th Ave N. Minneapolis, MN 55369 (763) 315-4501 www.pineng.com	Historical Aerial Photos 5/24/2023	LEGEND  Site Boundary  Wetlands
		2621 Linwood Ave E, Maplewood, MN 55119	
PROJECT NUMBER: FSM20247315	DRAWN: BM REVIEWED: ST	DATE: 01/07/2025	

Engineering Plan Review

PROJECT: Saint Paul Police Firearms Training Facility
2621 Linwood Avenue

PROJECT NO: 25-13

COMMENTS BY: Jon Jarosch, Assistant City Engineer

DATE: 4-2-2025

PLAN SET: Engineering plans dated 3-8-2025

The applicant is proposing to replace the existing classroom training facility at 2621 Linwood Avenue. In addition, the proposal includes replacing portions of the entrance drive and parking lot, the septic system, and the onsite well.

This review does not constitute a final review of the plans, as the applicant will need to submit construction documents for final review prior to issuing permits. The following are engineering review comments on the design and act as conditions prior to issuing permits:

Drainage and Stormwater Management

- 1) The applicant shall verify the total area disturbed by the project along with the total area of new impervious surfacing. Should the project exceed ½ acre of disturbance or add more than 5,000 square feet of new impervious surface, the project shall meet the City's stormwater management standards.
- 2) Concrete curb and gutter is required around parking lots and entrance drives per City Code. The applicant shall include concrete curb and gutter along the parking lot edge and entrance drive.

Water and Sewer Service

- 3) This project proposes the installation of a new well to provide potable water to the new classroom facility, as there is currently no water service available adjacent to this site. A housing development has been proposed at the adjacent Ponds at Battle Creek property. If this project is approved and moves forward, water main will be installed along Linwood Avenue to service the housing development. This water main could be utilized in lieu of installing a new well at the Saint Paul Police Firearms Training Facility. The applicant shall coordinate with the developer of the Ponds at Battle Creek site to determine whether or not connecting to the proposed water main is a viable solution.

- 4) This project proposes the installation of a new septic system to provide sewer service to the new classroom facility, as there is currently no sewer service available near this site. If the adjacent development at the Ponds at Battle Creek site moves forward, sanitary sewer mainline may be made available adjacent to this site. The applicant shall coordinate with the developer of the Ponds at Battle Creek site to determine whether or not connecting to the proposed sewer mainline is a viable solution.
- 5) A subsurface sewage treatment system (SSTS) permit is required for new septic systems. All requirements of the SSTS Ordinance shall be met for the proposed septic system.

Grading and Erosion Control

- 6) Inlet protection devices shall be installed on all existing and proposed onsite storm sewer until all exposed soils are stabilized.
- 7) Public and private drives and roadways shall be swept as needed to keep the pavement clear of sediment and construction debris.
- 8) All pedestrian facilities shall be ADA compliant.
- 9) A copy of the project SWPPP and NDPEs Permit shall be submitted prior to the issuance of a grading permit.
- 10) All slopes shall be 3H:1V or less steep in slope.
- 11) The total cut/fill volume shall be noted on the grading plan.

Public Works Permits

The following permits are required by the Public Works Department for this project. The applicant should verify the need for other City permits with the Building Department.

- 12) Grading and erosion control permit
- 13) SSTS Permit
- 14) Right-of-way Permit (If work is completed within Linwood Avenue right-of-way.)

- END COMMENTS -

Environmental Review

Project: St. Paul Police Training Facility

Location: 2621 Linwood Avenue

Date of Plans: March 18, 2025

Date of Review: April 2, 2025

Reviewer: Shann Finwall, Sustainability Coordinator
(651) 249-2304, shann.finwall@maplewoodmn.gov

Background: The St. Paul Police Department is proposing to upgrade their training facility at 2621 Linwood Avenue East. The development must comply with the tree and wetland ordinances, and landscape policies.

Trees:

1. Tree Preservation Ordinance:
 - a. Significant Trees: Maplewood's tree preservation ordinance describes a significant tree as a healthy tree as follows - hardwood tree with a minimum of 6 inches in diameter, an evergreen tree with a minimum of 8 inches in diameter, and a softwood tree with a minimum of 12 inches in diameter.
 - b. Specimen Trees: A specimen tree is defined as a healthy tree of any species which is 28 inches in diameter or greater.
 - c. Tree Replacement: If less than 20 percent of the overall caliper inches of significant trees on the site are removed, applicants must replace one 2 diameter inch tree for each significant tree removed. If more than 20 percent are removed, replacement is based on the City's tree replacement calculation which includes the overall caliper inches of significant trees located on the parcel versus the caliper inches of significant trees removed. Additionally, credits are given for all specimen trees that are preserved.
2. Tree Impacts: The tree survey identifies 308 significant trees on the site, however, the overall caliper inches of significant trees are not included. The site demolition plan shows the removal of 18 significant trees, however, the size and species of the trees are not included. Tree replacement cannot be determined without additional information, but it is likely that the tree removal is less than 20 percent of the overall caliper inches of trees on the site. In that case the required tree replacement is 18 – 2 diameter inch trees.
3. Tree Replacement: The landscape plan includes 18 – 2 diameter inch trees.

4. Tree Recommendations:

a. Prior to issuance of a grading permit the following is required:

1) Tree Plan:

- a. Identify which trees will be removed on the tree survey and the size and species on the site demolition plan.
- b. Add the City's tree replacement calculation to the plans. The tree calculation will include the overall caliper inches of significant trees on the site versus the caliper inches of trees removed.

2) Tree Planting Plan: Final tree planting plan to be reviewed and approved by the City's Natural Resources Coordinator.

3) Tree Escrow: Tree escrow in the amount of \$60 per caliper inch of trees to be replaced on the site. The escrow will be released once the trees are planted with a one-year warranty.

Wetlands:

1. Wetland Ordinance:

a. Wetland Classification and Buffer Requirements: There are two Manage A wetlands, one adjacent the property on the vacant lot to the west and one on the east side of the property. The City's wetland ordinance requires a 75-foot minimum and 100-foot average wetland buffer around a Manage A wetland.

b. Wetland Buffer Averaging: The wetland ordinance allows flexibility in instances where, because of the unique physical characteristics of a specific parcel of land, the averaging of buffer width for the entire parcel may be necessary to allow for the reasonable use of the land during a development or construction project. In such cases decreasing the minimum buffer width will be compensated for by increased buffer widths elsewhere in the same parcel to achieve the required average buffer width. Averaging is allowed based on an assessment of the following:

- 1) Undue hardship would arise from not allowing the average buffer, or would otherwise not be in the public interest.
- 2) Size of parcel.
- 3) Configuration of existing roads and utilities.
- 4) Percentage of parcel covered by wetland.
- 5) Configuration of wetlands on the parcel.

- 6) Averaging will not cause degradation of the wetland or stream.
 - 7) Averaging will ensure the protection or enhancement of portions of the buffer which are found to be the most ecologically beneficial to the wetland or stream.
 - 8) A wetland buffer mitigation plan is required for construction of development projects that will require averaging. In reviewing the mitigation plan, the city may require one or more of the following actions:
 - a) Reducing or avoiding the impact by limiting the degree or amount of the action, such as by using appropriate technology.
 - b) Rectifying the impact by repairing, rehabilitating, or restoring the buffer.
 - c) Reducing or eliminating the impact over time by prevention and maintenance operations during the life of the actions.
 - d) Compensating for the impact by replacing, enhancing, or providing substitute buffer land at a two-to-one ratio.
 - e) Monitoring the impact and taking appropriate corrective measures.
 - f) Where the city requires restoration or replacement of a buffer, the owner or contractor shall replant the buffer with native vegetation. A restoration plan must be approved by the city before planting.
 - g) Any additional conditions required by the applicable watershed district and/or the soil and water conservation district shall apply.
 - h) A wetland or buffer mitigation surety, such as a cash deposit or letter of credit, of 150 percent of estimated cost for mitigation. The surety will be required based on the size of the project as deemed necessary by the administrator. Funds will be held by the city until successful completion of restoration as determined by the city after a final inspection. Wetland or buffer mitigation surety does not include other sureties required pursuant to any other provision of city ordinance or city directive.
- c. Wetland Buffer Variance: Any deviation from the wetland buffer or wetland buffer averaging requires a wetland buffer variance. The City may require the applicant to mitigate wetland buffer impacts with the

approval of a variance, including, but not limited to, implementing one or more of the strategies listed in the mitigation strategies above.

2. Wetland Impacts:

- a. Existing Conditions: The site was originally developed and graded in approximately 1975, prior to the City's wetland ordinance and wetland buffer requirements. The drive lane, tactical training buildings, storage building, and gravel pad extend into the 100-foot wetland buffers and are considered pre-existing nonconforming structures and encroachments.
- b. New Development: The new development will have grading to within approximately 53 feet of the eastern Manage A wetland for the extension of a utility line, parking stall, and septic system. Grading will come to within approximately 59 feet of the western Manage A wetland for building earthwork. Other portions of the new development will be located within the 75-foot minimum buffer. The development requires a 41-foot wetland buffer variance, wetland buffer averaging, and wetland buffer mitigation as required by the wetland ordinance.

3. Proposed Wetland Mitigation: To mitigate the wetland buffer impacts the applicants are proposing to remove buckthorn in key areas of the buffer and add native seeding.

4. Wetland Buffer Recommendations:

- a. Prior to issuance of a grading permit the following is required:
 - 1) Landscape Plan: Detailed plan for buckthorn removal and native seeding. Plan to show seed mix species and seeding installation methods. Final landscape plan to be reviewed and approved by the Natural Resources Coordinator.
 - 2) Wetland Buffer Sign Plan: Identify the location of wetland buffer signs to be installed along the approved wetland buffers. The signs should be placed every 100 feet at a minimum. The City of Maplewood supplies wetland buffer signs identifying that no building, mowing, or grading should take place within the buffer. There is a \$35 fee per sign.
 - 3) Wetland Buffer Sign Installation: Install the wetland buffer signs prior to grading if feasible
 - 4) Wetland Buffer Mitigation and Maintenance Agreement: Sign a wetland buffer mitigation and maintenance agreement with the City requiring that the applicant establish and maintain the required mitigation within the buffer for a three-year period. The City of Maplewood will draft the maintenance agreement once the wetland buffer mitigation plan is complete.

- 5) Submit a cash escrow or letter of credit to cover 150 percent of the wetland buffer mitigation. The City will retain the escrow for up to three years as outlined in the maintenance agreement to ensure the wetland buffer mitigation is established and maintained.

Landscape Policies:

Review of the overall landscape plan to ensure nonnative and invasive species are avoided, seed mix is appropriate for use in areas proposed, and plantings are climate resilient.

Prior to issuance of a grading permit the following is required:

- 1) Landscape Plan: Final landscape plan to be reviewed and approved by the City's Natural Resources Coordinator.

WETLAND BUFFER VARIANCE RESOLUTION

BE IT RESOLVED by the City Council of the City of Maplewood, Minnesota, as follows:

Section 1. Background.

1.01 The City of Saint Paul Police Department has requested a wetland buffer variance to build a new training facility on the property at 2621 Linwood Avenue East.

1.02 The property located at 2621 Linwood Avenue East is legally described as:
The west 600 feet of the South 525 feet of the Southeast Quarter of the Southeast Quarter of Section 12, Township 28, Range 22, according to the plat thereof on file and of record in the office of the Register of Deeds in and for Ramsey County, Minnesota.
PIN: 122822440002

1.03 The site was originally developed and graded in approximately 1975, prior to the City's wetland ordinance and wetland buffer requirements. The drive lane, tactical training buildings, storage building, and gravel pad extend into the 100-foot wetland buffers and are considered pre-existing nonconforming structures and encroachments.

1.04 The new development requires a 41-foot wetland buffer variance, wetland buffer averaging, and wetland buffer mitigation as required by the wetland ordinance. The new development will have grading to within approximately 53 feet of the eastern Manage A wetland for the extension of a utility line, parking stall, and septic system. Grading will come to within approximately 59 feet of the western Manage A wetland for building earthwork. Other portions of the new development will be located within the 75-foot minimum buffer.

Section 2. Standards.

2.01 Wetland Buffer Variance Standards. The City Ordinance states that the City Council must base approval of a variance on the following standards for approval.

1. Before the city council acts on a wetland ordinance variance, the Environmental and Natural Resources Commission and the Planning Commission will make a recommendation to the city council. The city shall hold a public hearing for the variance. The city shall notify property owners within 500 feet of the property for which the variance is being requested at least ten days before the hearing.
2. The city may require the applicant to mitigate any wetland, stream, or buffer alteration impacts with the approval of a variance, including, but not limited to, implementing one or more of the strategies listed in subsection 18-221(e)(4) (mitigation).
3. To approve a variance, the city council shall apply the findings for variance approval as required in Minnesota Statutes.

4. The applicant for a variance shall submit, with the variance application and any other required materials, a statement showing how the proposal would meet the findings for variance approval.

Section 3. Findings.

3.01 The proposal meets the specific wetland buffer variance standards.

Section 4. City Review Process

4.01 The City conducted the following review when considering this wetland buffer variance request.

1. On April 15, 2025, the Planning Commission held a public hearing. City staff published a hearing notice in the Pioneer Press and sent notices to the surrounding property owners. The Planning Commission allowed everyone to speak and present written statements at the hearing. The Planning Commission recommended that the City Council approve this resolution.
2. On April 21, 2025, the Environmental and Natural Resources Commission held a public meeting to discuss the proposal. The ENR recommended that the City Council _____ this resolution.
3. On May 12, 2025, the City Council discussed this resolution. They considered reports and recommendations from the planning commission and City staff.

Section 5. City Council

5.01 The City Council hereby _____ the resolution. Approval is based on the findings outlined in section 3 of this resolution. Approval is subject to the following conditions:

1. All construction shall follow the approved plans. The director of community development may approve minor changes.
2. The applicant shall meet the conditions outlined in the design review resolution.