

Permit Application Review Report Date: 6/4/2025

Board Meeting Date: 6/9/2025 Agenda Item: 13

Applicant/Landowner: Anoka County Parks Attn: Seth Bossert 550 Bunker Lake Blvd. NW Andover, MN 55304

Project Name: Bunker Hills Regional Park Redevelopment

Project PAN: P-24-062

Project Purpose: Reconstruction of various roadways, parking areas, boardwalk, and trails with utility work and stormwater management features.

Project Location: Bunker Hills Regional Park, 550 Bunker Lake Blvd NW, Andover

Site Size: size of parcel – 1,600 acres; size of disturbed area - 27 acres; size of regulated impervious surface - 3.28 acres

Applicable District Rule(s): Rule 2, Rule 3, Rule 4, Rule 6

Recommendation: Approve with 2 Conditions and 4 Stipulations

Description: Anoka County Parks proposes the reconstruction of various roadways, parking areas, boardwalk, and trails with utility work and construction of stormwater management features. The project will disturb 27 acres and create 3.28 acres of regulated impervious surface. The southern portion of the project drains to County Ditch 54, the northeast portion of the project drains to County Ditch 23 and the northwest portion of the project drains to County Ditch 55, the project drains to County Ditch 57. The relevant water resources concerns are stormwater management, erosion and sediment control, and floodplain. These correspond to District Rules 3, 4, and 6. See attached Figure 1: Project Location.

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. Submittal of a performance escrow in the amount of \$15,500.00.

Rule 3.0 – Stormwater Management

2. Provide proof of recording of a fully executed Operations and Maintenance Agreement for the perpetual inspection and maintenance of all proposed stormwater management practices after review and approval by the District.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

- 1. The applicant must apply for coverage under the Minnesota Pollution Control Agency's (MPCA's) Construction Stormwater Permit (Permit No: MNR100001).
- 2. Submittal of as-builts for the stormwater management practices and associated structures listed in Tables 2 and 3, including volume, critical elevations and proof of installation for hydrodynamic separators.
- 3. Completion of a post construction infiltration test on Infiltration Basins 1, 2, 3A, 3B, 3C, 4, 5, and 6 by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
- 4. If dewatering is required, provide DNR dewatering permit prior to construction. If a DNR permit is not required, provide well-field location, rates, discharge location, schedule and quantities prior to construction.

| Exhibits: | |
|------------------|--|
| Each in it. To a | |

| EXILIDITS. | | | |
|------------------------------------------------|--------------------|----------------|---------------|
| Exhibit Type | Exhibit Author | Signature Date | Received Date |
| Geotechnical Evaluation Report | Braun Intertec | 10/17/2024 | 05/14/2025 |
| MIDS | Larson Engineering | undated | 12/23/2024 |
| Construction Plans Boardwalk Replacement | Larson Engineering | 05/01/2025 | 05/14/2025 |
| Construction Plans Phase 1 | Larson Engineering | 03/19/2025 | 05/14/2025 |
| Stormwater Calculations | Larson Engineering | 03/21/2025 | 05/14/2025 |

Findings

Fees and Escrows (Rule 2.7):

The applicant is a government agency and is therefore exempt from an application fee or a review and inspection fee deposit. The applicant will be required to submit a performance escrow in the amount of \$15,500.00. This corresponds to a base escrow of \$2,000.00, plus an additional \$500.00/acre of disturbance (27 acres of land disturbance proposed).

Stormwater Management (Rule 3.0):

Rule 3.0 applies to the proposed project because it is a public linear project where the sum of the new and fully reconstructed impervious surface equals one or more acres.

The Hydrologic Soil Group (HSG) of soils on site are HSG B. The proposed project incorporates soil amendments in accordance with District guidelines.

Rate Control: Peak stormwater flow rate increases during the 100-year event from the predevelopment condition for the 1-1R, 2-1R, 2-2R, and 5-1R discharge points as shown in Table 1. Areas 1-1R, 2-1R and 2-2R discharge to large open areas on the same property. No adverse impacts are anticipated. The rate increases for the 4-1R 2- and 10- year return frequency are within model tolerance. The project will not impact Drainage Sensitive Use areas. The rate control standard is met.

| Point of | 2-year (cfs) | | 10-year (cfs |) | 100-year (cf | s) |
|-----------|--------------|----------|--------------|----------|--------------|----------|
| Discharge | Existing | Proposed | Existing | Proposed | Existing | Proposed |
| 6-1R | 0.95 | 0.19 | 2.03 | 1.5 | 4.81 | 4.14 |
| 5-1R | 3.23 | 1.49 | 8.23 | 6.32 | 21.89 | 18.48 |
| 4-1R | 0.82 | 0.91 | 1.53 | 1.58 | 8.08 | 7.38 |

| 3-1R | 4.35 | 1.08 | 8.13 | 4.84 | 16.48 | 15.95 | |
|------|------|------|------|------|-------|-------|--|
| 2-2R | 0 | 0 | 0 | 0 | 7.61 | 8.03 | |
| 2-1R | 0.2 | 0 | 0.46 | 0 | 5.43 | 5.64 | |
| 1-2R | 0.31 | 0 | 0.5 | 0 | 0.91 | 0 | |
| 1-1R | 0.36 | 0 | 0.74 | 0.19 | 1.73 | 3.06 | |

Table 1.

<u>Volume Control</u>: The application proposes redevelopment of existing impervious surfaces. The amount of proposed impervious required to be treated is 143,103 ft². See attached **Table 2**. Volume Control. Note that basin 3A and 3B are undersized, but they flow into basin B3 which makes up for that volume.

| SMP ID | Pretreatment Device/Method | Percent TSS Removal |
|-------------------|----------------------------|---------------------|
| Basin 6 - RG6 | Rain Guardian | 80 |
| Basin 5 - RG5 | Rain Guardian | 80 |
| Basin 4 - RG4B | Rain Guardian | 80 |
| Basin 4 - RG4A | Rain Guardian | 80 |
| Basin 3C - RG3C-2 | Rain Guardian | 80 |
| Basin 3C-RG3C | Rain Guardian | 80 |
| Basin 3B - RG3B | Rain Guardian | 80 |
| Basin 3A - RG3A | Rain Guardian | 80 |
| Basin 2 - CB Sump | Catch Basin Sump | 82 |
| Basin 2 - RG 1 | Rain Guardian | 80 |

The following pretreatment has been provided:

Table 3.

Pretreatment is required to be designed such that the device/method provides removal of 80% TSS entering an infiltration or filtration Stormwater Management Practice. The proposed project meets pretreatment requirements as shown in Table 3.

An explanation of drainage area treatment swapping can be found in the Water Quality section below. The volume control standard has been met to the maximum extent practicable.

<u>Water Quality</u>: Project is treating 135,193 square feet of existing impervious as in-kind replacement for the 70,086 square feet of the untreated new/reconstructed impervious. The total Water Quality Volume has been provided in aggregate.

Stormwater treatment on site must remove at least 80% of the average annual post development TSS per discharge location. The following TSS removal has been provided:

| Discharge Point | TSS Removal Provided |
|-----------------|-------------------------------------|
| 6-1R | 94 |
| 5-1R | 89 |
| 4-1R | <80 - MEP |
| 3-1R | 94 |
| 2-2R | <80 - MEP |
| 2-1R | 98 |
| 1-2R | no discharge in proposed conditions |
| 1-1R | <80 - MEP |

Table 4.

The TSS removal standard is met to the maximum extent practicable at each discharge point as shown in Table 4.

<u>Discharges to Wetlands</u>: Stormwater from the proposed project is not being discharged into any wetlands, therefore this section does not apply.

Landlocked Basins: The proposed drainage system does not outlet to a landlocked basin, therefore this section does not apply.

<u>Low Floor Freeboard</u>: The proposed project is not considered new development with buildings and habitable structures; therefore, this section does not apply.

Maintenance:

Access: Sufficient maintenance access has been provided on the plans for all stormwater management practices.

Easements: All required maintenance easements have been provided on the plans.

Maintenance Agreements: The proposed stormwater management practices will not be maintained as part of standard municipal public work activities. Therefore, a maintenance agreement that meets District standards will be required.

Soils and Erosion Control (Rule 4.0)

Rule 4.0 applies to the proposed project because it is a land disturbing activity that requires a permit under another District rule.

The proposed project drains to County Ditches 57, 54 and 23. The soils affected by the project include Sartell which do not have a soil erodibility factor of 0.15 or greater. Disturbed areas are proposed to be stabilized within 7 days, as required. The proposed erosion and sediment control plan includes inlet protection, perimeter control, stabilized construction entrance, and street sweeping. The erosion control plan meets District Requirements. The site does require an NPDES permit. See attached Figure 2 Erosion and Sediment Control Plan.

Wetlands (Rule 5.0)

Wetlands exist on site, but no impacts are proposed. Rule 5.0 does not apply.

Floodplain (Rule 6.0)

Rule 6.0 applies to the proposed project because it includes land disturbing activities within or adjacent to the boundary of the 100-year flood elevation as mapped and modeled by the District.

The regulatory floodplain elevation is 887.4 ft NAVD 88. The application proposes the placement of approximately 35 cubic yards of fill within the floodplain. This a one-time deposition of less than 50 cubic yards, therefore compensatory storage is not required.

Drainage, Bridges, Culverts, and Utility Crossings (Rule 7.0)

The proposed project does not include land disturbing activities which construct, improve, repair, or alter the hydraulic characteristics of a bridge profile control or culvert structure on a creek, public ditch, or major watercourse. The proposed project does not include land disturbing activities which involve a pipeline or utility crossing of a creek, public ditch, or major watercourse.

The proposed project does not include land disturbing activities which construct, improve, repair or alter the hydraulic characteristics of a conveyance system that extends across two or more parcels of record not under common ownership and has a drainage area of 200 acres or greater. Rule 7.0 does not apply.

Buffers (Rule 8.0)

The proposed project does not include a land disturbing activity on land adjacent or directly contributing to a Public Water, Additional Waters, High or Outstanding Ecological Value Waters, a

Public Ditch, or Impaired Waters/waters exceeding state water quality standards. Rule 8.0 does not apply.

Variances (Rule 10.2)

The proposed project is not requesting a variance from the District's rules, regulations, and policies. Rule 10.2 does not apply.

| | V | Volume Control | | | | | |
|----------------------------------------|--------------------------------------|-------------------------------|-----------------------------|--------------|-------------------------|-----------------------------------------|-------------------------------------------------|
| Drainage Area | New/Reconstructed Impervious (sf) | In-Kind Impervious (sf) | Total Impervious (sf) | Proposed SMP | TP Removal Factor | Required Treatment Volume (CF) | Water Quality Volume Provided (ft3) |
| Basin 1 (Area 1A) | 4,095 | 9,151 | 13,246 | Basin 1 | 1 | 1,214 | 3,089 |
| Basin 2 (Area 2A and 2B) | 18,857 | 17,744 | 36,601 | Basin 2 | 1 | 3,355 | 13,047 |
| Basin 3A (Area 3A) | 132 | 29,871 | 30,003 | Basin 3A | 1 | 2,750 | 1,178 |
| Basin 3B (Area 3B) | 164 | 36,374 | 36,538 | Basin 3B | 1 | 3,349 | 1,548 |
| Basin 3C (Area 3C) | 21,931 | 4,421 | 26,352 | Basin 3C | 1 | 2,416 | 6,416 |
| Basin 4 (Area 4B) | 3,042 | 19,016 | 22,058 | Basin 4 | 1 | 2,022 | 7,542 |
| Basin 5 (Area 5A) | 24,616 | 9,800 | 34,416 | Basin 5 | 1 | 3,155 | 3,159 |
| Basin 6 (Area 6A) | 180 | 8,816 | 8,996 | Basin 6 | 1 | 825 | 1,833 |
| Untreated new/reconstructed impervious | 70,086 | 1 | ı | None | 1 | 6,425 | 0 |
| Total | 143,103 | 135,193 | 208,210 | | | 25,510 | 37,812 |
| | | | | | | | |

Table 2: Volume Control.

new/reconstructed impervious. The remaining 70,086 square feet of untreated new/reconstructed impervious is made up with The applicant is required to treat 143,103 ft2 of new/reconstructed impervious. They are treated 73,017 square feet of the in-kind treatment of 136,715 square feet, which exceeds the required amount.

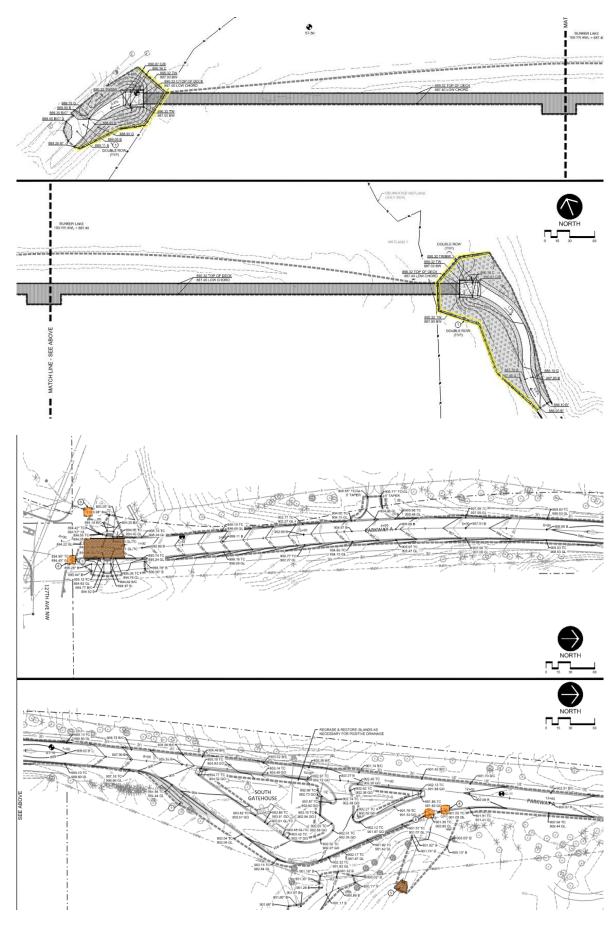
PAN # P-24-062 Project Name: Bunker Hills Regional Park - Phase 1 Redevelopment | 6

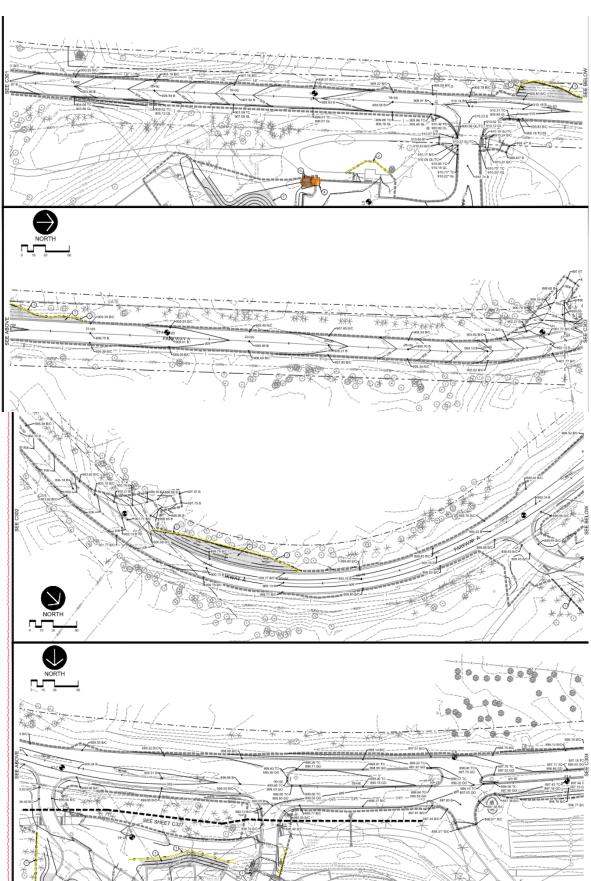
13632 Van Buren St NE | Ham Lake, MN 55304 | 763.755.0975 | www.cooncreekwd.org

Table 2: Volume Management

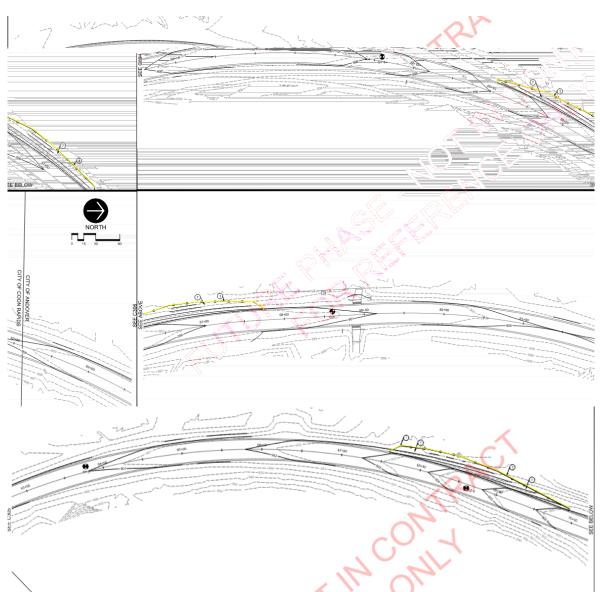


Figure 1: Project Location





PAN # P-24-062 Project Name: Bunker Hills Regional Park - Phase 1 Redevelopment | 9

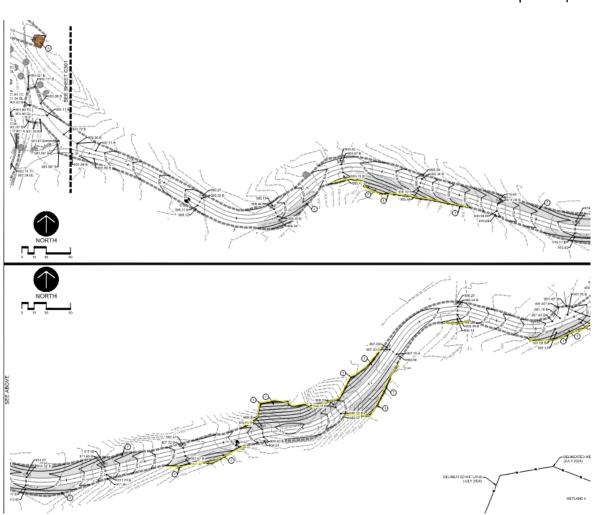




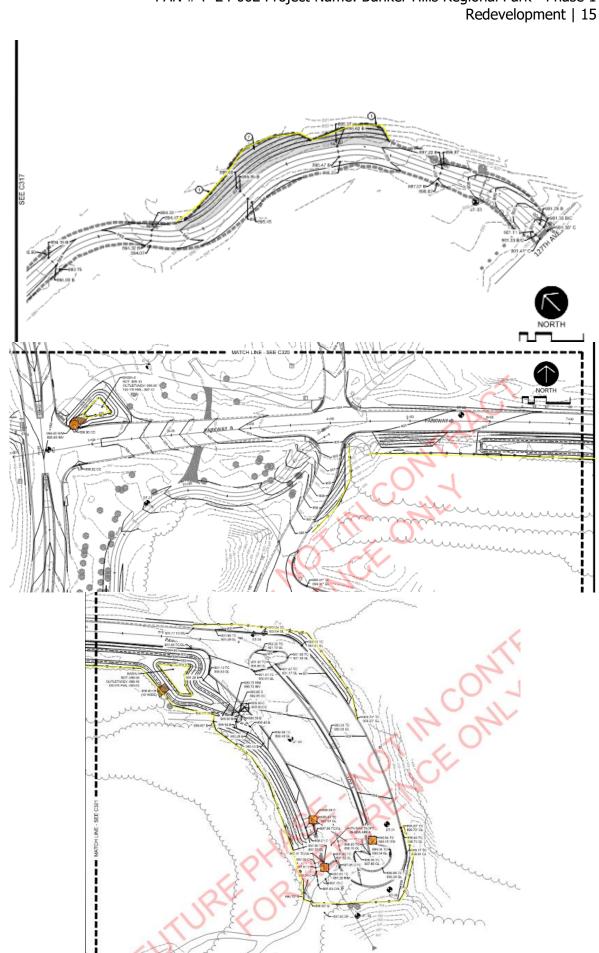
PAN # P-24-062 Project Name: Bunker Hills Regional Park - Phase 1 Redevelopment | 11

SEE BELO ્રાથ્ય રિ 3 Ь SEE C309

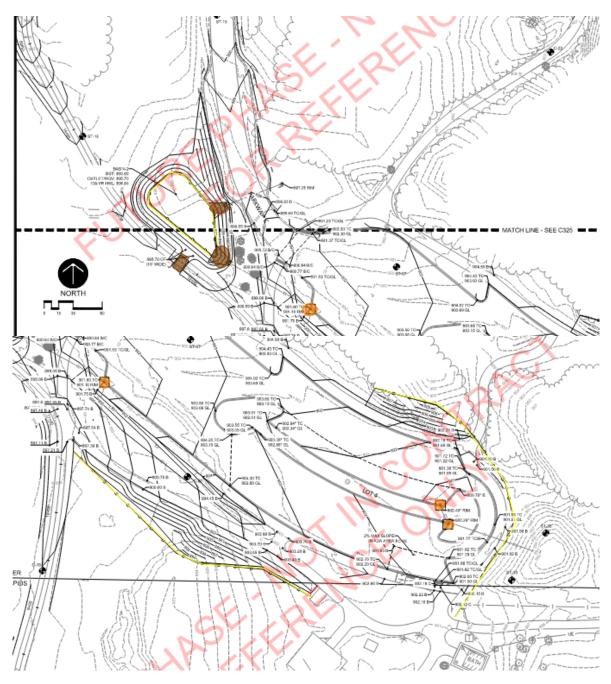
PAN # P-24-062 Project Name: Bunker Hills Regional Park - Phase 1 Redevelopment | 12



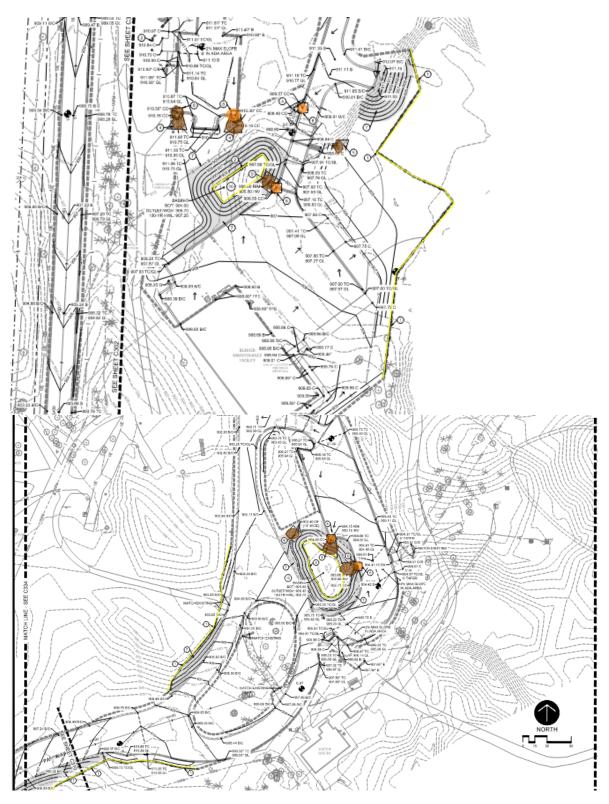
SEE BELOW



PAN # P-24-062 Project Name: Bunker Hills Regional Park - Phase 1







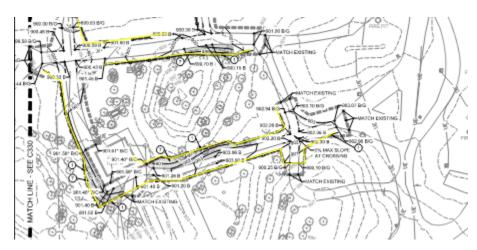


Figure 2: Erosion and Sediment Control Plan