Permit Application Review

Permit No. 2021-085
Received complete: August 3, 2021

Applicant:	Randy Anhorn, Nine Mile Creek Watershed District, on behalf of NMCWD and the City of Edina
Representative:	Janna Kieffer, Barr Engineering Co.
Project:	Lake Cornelia Water Quality Improvement Filtration Best Management Practice
Location:	Rosland Park, Near the Intersection of West 66th Street and West 64th Street: Edina
Rule(s):	2, 3, 4, 5, 6, 8 and 10
Reviewer(s):	Louise Heffernan and Bob Obermeyer, Barr Engineering Co.

General Background

The project proposes a water quality improvement best management practice (BMP) to improve the surface water quality of Lake Cornelia (North and South) and downstream waterbodies and watercourses, including Lake Edina and Nine Mile Creek. Lake Cornelia (North and South, Public Water #28-01P and #28-02P, respectively) and Lake Edina (Public Water #29P) are listed on the state impaired waters list due to excess nutrients. To help reduce phosphorus concentrations in Lake Cornelia (North and South), the project proposes the construction of an above-ground stormwater treatment filtration system (STFS) for the treatment of surface flows conveyed from Swimming Pool Pond (Pond), Public Water Wetland #679W, to Lake Cornelia (North), and the restoration of areas disturbed with native vegetation. The project is located within the City of Edina-owned Rosland Park near the intersection of West 66th Street and West 64th Street in Edina. This is a cooperative project undertaken by the Nine Mile Creek Watershed District and the City of Edina (City).

The project site is located adjacent to the northern parking lot at Rosland Park, between the parking lot and volleyball court. A portion of stormwater runoff from the site drains to Lake Cornelia (North) – both overland and by storm sewer. The remaining site runoff is conveyed overland to the Pond. The proposed work does not alter the subwatershed drainage patterns to the two waterbodies, nor does it increase impervious area at the site.

Currently, a piped outlet from the Pond conveys water to Lake Cornelia (North) through an existing 18-inch reinforced concrete pipe (RCP). The proposed STFS will connect to the existing 18-inch RCP beneath the parking lot, with a portion of water pumped from the existing 18-inch pipe to the filtration system. Once treated, water exiting the filtration system will be conveyed through a filter vault outlet pipe and discharge to Lake Cornelia (North) by a new pipe system. The proposed STFS will include a backwash filter pipe to assist in maintaining the filtration capacity of the BMP. Water from the backwash process will be recycled back to the Pond through a new filter vault backwash pipe. Modifications to the control structure at the

Pond are not proposed. The normal water elevations at the Pond and Lake Cornelia (North) will be maintained.

The District's Floodplain Management and Alterations Rule 2.0 applies to the project because land-altering activities are proposed below the 100-year frequency flood elevation of Swimming Pool Pond for the installation of the filtration system backwash pipe and replacement of bituminous surface, and Lake Cornelia (North) for the installation of the filtration system outfall and replacement of existing bituminous surface (parking lot and drive).

The District's Wetland Management Rule 3.0 applies to the project because Swimming Pool Pond, Public Water Wetland #679W, is downgradient from the proposed land-disturbing activities. The District is the Local Government Unit (LGU) responsible for administering the Wetland Conservation Act (WCA) in Edina.

The District's Stormwater Management Rule 4.0 and Erosion Control Rule 5.0 apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 4.2.1a and b and 5.2.1a and b, respectively.

The District's Waterbody Crossings and Structures Rule 6.0 applies to the project because of disturbance of the banks of Lake Cornelia (North) for the installation of the filtration system outlet and the disturbance of the banks of Swimming Pool Pond for the installation of a stormwater treatment facility filter backwash outlet, Rule 6.2. The work proposed in the bank of Swimming Pool Pond is above the normal water elevation of the Pond. The Department of Natural Resources has indicated, in e-mail correspondence dated April 9, 2021, that since an OHWL has not been determined for Swimming Pool Pond, the normal water elevation of 862.9 M.S.L. should be used as the jurisdictional elevation.

Because riprap is not proposed to be installed at the new outlet along the banks of Lake Cornelia or at the new filter backwash pipe at Swimming Pool Pond, and the proposed activities do not include shoreline improvements (riprap, bioengineered installation, a retaining wall or other shoreline improvements - Rule 7.2) along the banks of Lake Cornelia or the Pond, the District's Shoreline and Streambank Improvements Rule 7.0 does not apply to the project. Additionally, the proposed removal of accumulated sediment from Lake Cornelia at the outfalls is exempt from review under the Shoreline and Streambank Improvements Rule in accordance with subsection 7.2.3.

The District's Sediment Removal Rule 8.0 applies to the project because the project includes removal of accumulated sediment from the banks of a public waterbody, Lake Cornelia (North).

Because the proposed system will pump and recycle more than 10,000 gallons of water per day or 1 million gallons per year, a state Water Appropriations permit is required for the project. The annual volume is greater than may be permitted under NMCWD Rule 9.0. NMCWD is in the process of obtaining the appropriations permit from the DNR. No water will be permanently removed.

The project site information includes the following:

- Total Site Area: 36.5 acres (Rosland Park area under City ownership)
- Disturbed and Reconstructed Impervious Area: 0.10 acres

- Increase in Impervious Area: 0 acres
- Total Disturbed Area: 0.49 acres (Area within the limits of construction)

Exhibits

1. Permit Application dated June 18, 2021
2. Plans dated June 17, 2021, prepared by Barr Engineering Co.
3. Topographic Survey dated August 11, 2020, prepared by Alliant Engineering
4. Permit Application Narrative dated June 18, 2021, prepared by Barr Engineering Co.
5. MnRAM Assessment dated July 3, 2021, prepared by Barr Engineering Co.
6. E-mail correspondence from the DNR dated November 23, 2020 and April 21, 2021, waiving jurisdiction for work associated with the proposed construction of the filtration system outfall at Lake Cornelia, construction of the filter vault backwash pipe outlet at Swimming Pool Pond, and sediment removal at Lake Cornelia, as these activities will be authorized by under DNR General Permit #1997-6112 if permitted under the NMCWD rules.
7. E-mail correspondence from the DNR dated April 9, 2021, indicating that the DNR has not surveyed the OHWLs for Swimming Pool Pond and Lake Cornelia (North), and that the normal water levels of the waterbodies should be used as the jurisdictional elevations.
8. A variance request for compliance with Rule 3.4.1b criteria provided on August 3, 2021 to address Rules 10.1.1-10.1.4, prepared by the applicant's representative (Janna Kieffer, Barr Engineering Co.)

2.0 Floodplain Management and Drainage Alterations

The project proposes land-altering activities below the 100-year frequency flood elevation of Swimming Pool Pond for the installation of the filtration system backwash pipe and for the installation of the filtration system outfall to Lake Cornelia (North).

Proposed land-disturbing activities below the 100-year high water elevation of Lake Cornelia (North, 864.8 M.S.L.[1]) include the following:

- installation of the new outfall conveying discharge from the STFS to Lake Cornelia (riprap or fill material is not proposed at the outfall)
- removal and replacement of existing bituminous surfaces disturbed within the park parking lot and pedestrian trail at elevations matching existing grades
- removal of sediment at the new outfall below the normal water elevation of Lake Cornelia (North), resulting in the reestablishment of "dead storage" volume (e.g., floodplain storage volume will not increase as a result of excavation activities at the new outfall)

[1] The state Department of Natural Resources has not set an OHWL for either Swimming Pool Pond or Lake Cornelia. The OHWLs used for purposes of determining rule applicability and assessing criteria for this report were determined based on the established normal water surface elevations of both Lake Cornelia (North) and Swimming Pool Pond as directed by the Department of Natural Resources.

- removal of accumulated sediment at the existing 18-inch RCP outfall currently conveying water from Swimming Pool Pond to Lake Cornelia (no permit under the Rule 2.0 is required for the removal of accumulated sediment from a water basin per subsection 2.2.1b)

Proposed land-disturbing activities below the 100-year high water elevation of Swimming Pool Pond (866.3 M.S.L.) includes the installation of the filtration system backwash pipe outlet and the removal and replacement of existing parking lot access drive bituminous surface.

Rule 2 criteria for floodplain and drainage alterations includes the following:

2.3.1: The low floor elevation of all new and reconstructed structures must be constructed in accordance with the NMCWD Stormwater Rule, subsection 4.3.3

No new or reconstructed structures with low-floor elevations are proposed with the project.

2.3.2: Placement of fill below the 100-year flood elevation is prohibited unless fully compensatory flood storage is provided within the floodplain and:

a. at the same elevation +/- 1 foot for fill in the floodplain; or

b. at or below the same elevation for fill in the floodplain of a water basin or constructed stormwater facility.

Because riprap at the two discharge points is not proposed and existing elevations are proposed to be matched, installation of the new outfall conveying discharge from the STFS to Lake Cornelia (North) will not result in fill material placed below the 100-year high water elevation of the lake. Reconstruction of the parking lot and pedestrian trail bituminous surfaces disturbed below the 100-year high water elevation of the lake will be replaced at elevations matching existing grades. The plans show the land-altering activities proposed below the 100-year frequency flood elevation will not result in net fill in or impact within the floodplain of the lake. The area disturbed within the floodplain and above the water surface elevation of the lake will be regraded and seeded with a native seed mixture.

Because riprap is not proposed and existing elevations are proposed to be matched (no contour changes proposed), installation of the filter backwash pipe outlet will not result in fill material placed below the 100-year high water elevation of Swimming Pool Pond. Reconstruction of the parking lot access drive bituminous surface below the 100-year high water elevation of Swimming Pool Pond will be replaced at elevations matching existing grades. The plans show the land-altering activities proposed below the 100-year frequency flood elevation will not result in net fill or net impacts within the floodplain of the Pond. The area disturbed within the floodplain and above the water surface elevation of the lake will be regraded and seeded with a native seed mixture.

No net flood storage loss is proposed as part of this project at Swimming Pool Pond and Lake Cornelia (North).

2.3.3. The District will issue a permit to alter surface flows only if it finds that the alteration is not reasonably likely to have a significant adverse impact on any upstream or downstream landowner and is not reasonably likely to have a significant adverse effect on flood risk, basin or channel stability, groundwater hydrology, stream base-flow, water quality or aquatic or riparian habitat.

Because the project is does not propose to 1) increase impervious area from existing conditions, 2) modify or alter subwatershed drainage areas, or 3) modify the outlet control structure at Swimming Pool Pond, the 100-year high water elevation of Swimming Pool Pond will be maintained at flood elevation of 866.3 M.S.L.

Because the project is not proposing to 1) increase impervious area within the project site, 2) modify or alter subwatershed drainage areas, or 3) modify or change the Lake Cornelia (North or South) outlet, the 100-year high water elevation of Lake Cornelia (North) will be maintained at flood elevation 864.8 M.S.L.

The downstream creek baseflow conditions will not be increased as a result of the project since the project is a recycling system and will not increase existing flows, baseflow or flood flows. The project will therefore not have a significant adverse impact on upstream or downstream landowners, Lake Edina or the creek compared to pre-project conditions.

The purpose of the project is to improve the water quality of Lake Cornelia and downstream waterbodies including the creek. The improved water quality should also result in an improvement in aquatic habitat, including non-pollutant tolerant invertebrates. The project scope does not include activities or components that would result in a change in groundwater conditions within the area. The proposed work will reduce phosphorus levels in Lake Cornelia and downstream waterbodies, thereby improving water quality. The water quality benefits will enhance potential recreation, aesthetic nature uses, and wildlife habitat adjacent to the waterbodies.

As discussed in the paragraphs for Rule 6.3.1 (Waterbody Crossings and Structures) section of this report, the new pipe outfall and outlet at Lake Cornelia and at Swimming Pool Pond will not result in an increase in the flow rate between the two waterbodies, result in changes to the normal water levels, result in a net increase or hydraulic capacity changes within the subwatershed drainage systems, or have a change in groundwater hydrology, stream base-flow or aquatic or riparian habitat, since the system recycles the surface flow between the two waterbodies. Water conveyance through the project's drainage system and downstream systems will not be increased.

2.3.4 No structure may be placed, constructed, or reconstructed and no surface may be paved within 50 feet of the centerline of any water course, except that this provision does not apply to:

a. Bridges, culverts, and other structures and associated impervious surface regulated under Rule 6.0;

b. Trails 10 feet wide or less, designed primarily for nonmotorized use.

No structure is proposed to be placed, constructed, or reconstructed as part of the project and no water course is located within the project area.

3.0 Wetlands Management

The District's Wetland Management Rule 3.0 applies to the project because Swimming Pool Pond, Public Water Wetland #679W, is downgradient from the project's land-disturbing activities and requires a permit under District Rules 4.0, 6.0 and 8.0 (Rule 3.4). No disturbance within the wetland is proposed, as the filter backwash pipe outlet is located above the normal water elevation (862.9 M.S.L.) of Swimming Pool Pond, the jurisdictional boundary of the Pond

as indicated by the DNR. The NMCWD engineer conducted an onsite review of the wetland, and while a WCA boundary and type determination was not completed, the engineer concurred in the state's determination of the wetland boundary.

Land-disturbing activities upgradient of Swimming Pool Pond are associated with the construction of the filtration BMP backwash pipe adjacent to the wetland. Rule 3.4 requires buffer on the edge of the wetland that is downgradient from the land-disturbing activities.

A MnRAM assessment dated July 3, 2021 was completed for the project. Based on the comparison of the function and values presented in Appendix 3b of the District's Rules, Swimming Pool Pond is classified as medium value, requiring a 40-foot average, 20-foot minimum buffer width, Rule 3.4.1b. Approximately eight (8) feet of pervious surface exists between the land-disturbing activities tributary to the wetland and the edge of the wetland. The land-disturbing activities upgradient of the wetland include replacement of bituminous surface along the access drive for the installation of the filtration system backwash pipe hydraulically connected to the wetland.

In pre-project and post-project conditions, a portion of the Rosland Park access drive is within the required 40-foot average, 20-foot minimum buffer. A variance request for compliance with Rule 3.4.1b criteria has been provided to address Rules 10.1.1-10.1.4. The request for variance pertains to the 20-foot minimum and 40-foot average buffer required from the boundary of Public Water Wetland #679W. The removal and replacement of a section of the existing parking lot access drive, approximately 20 feet in width and 27 feet in length, for the installation of the filter vault backwash pipe is proposed. The pipe installation is within both the 20-foot minimum and 40-foot average buffer.

The pervious surface currently vegetated between the disturbed and reconstructed bituminous surface and the wetland (approximately 200 square feet) will be managed in a naturalized condition, planted, and restored with a wetland seed mixture for maintaining the buffer. The plan requires revegetating disturbed areas within the proposed buffer with native vegetation, thus conforming with Rule 3.4.6.

In accordance with Rule 3.4.5, buffer markers at the edges of the buffer area are required. In accordance with the requirements of subsection 3.4.7 for the maintenance of the wetland buffer, the cooperative agreement between the District and the City provides a maintenance plan.

4.0 Stormwater Management

The District's Stormwater Management Rule 4.0 is triggered because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 4.2.1a and b.

The project includes removal and replacement of 0.10 acres of bituminous trail and parking area. An increase in site impervious surface is not proposed. The applicant has requested that the project be considered a water quality improvement project. For land-disturbing activities undertaken solely for the purposes of water-resources improvements, the stormwater requirements of Rule 4.3.1 or 4.3.2 do not apply. The engineer concurs that the stormwater management requirements do not apply.

5.0 Erosion and Sediment Control

The District's requirements for erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 5.2.1a and b, respectively.

The erosion control plan prepared by Barr Engineering Co. includes installation of perimeter control (silt fence or sediment control logs), a stabilized rock construction entrance, storm drain inlet protection, and floatation silt curtain at Lake Cornelia. Sod and native seed mixtures will be implemented for final stabilization measures.

The contractor for the project will need to designate a contact who will remain liable to the District for performance under the District's Erosion and Sediment Control Rule 5.0 from the time the permitted activities commence until vegetative cover is established, in accordance with subsection 5.4.1e.

6.0 Waterbody Crossings and Structures

The District's Waterbody Crossings and Structures Rule 6.0 applies to the project because of both the installation and location of the filtration system outfall in the bank of Lake Cornelia (North) and the stormwater treatment facility filter backwash outlet in the bank of Swimming Pool Pond, Rule 6.2.

Rule 6.3.1 states construction, improvement, repair, or removal of a waterbody crossing in contact with the bed or bank of a waterbody:

a) *Must retain adequate hydraulic capacity and assure no net increase in the flood stage of the pertinent waterbody:*

The proposed STFS will connect to the existing 18-inch RCP (that conveys flow between Swimming Pool Pond and Lake Cornelia (North) beneath the parking lot and pump a portion of the flow to the filtration system. The project proposes to recycle this water and not increase the flow rate between the two waterbodies or result in changes to the normal water levels of either water body. No hydraulic capacity changes within the existing subwatershed drainage systems are proposed.

Because impervious areas are not proposed to be increased within the project area, subwatershed drainage areas are not to be altered, an increase in additional stormwater runoff volume will not be generated (net zero added impervious surface), and modifications to the outlet control structure at Swimming Pool Pond are not proposed, the 100-year high water elevation of Swimming Pool Pond will be maintained at the pre-project elevation.

Because the project is not proposing an increase in impervious area, subwatershed drainage areas will not be altered, and no changes to the Lake Cornelia outlet are proposed, the 100-year high water elevation of Lake Cornelia (North) will be maintained at the pre-project elevation.

b) *Must retain adequate navigational capacity pursuant to any requirements of the waterbody's classification by the District:*

Lake Cornelia (South) is used by residents on the lake for canoeing and paddle boarding. Lake Cornelia (North) has not historically been used for navigational

purposes. There is no identified public canoe access or boat launch at Lake Cornelia (North or South). Because no changes in the conditions within the Lake and the Lakes' watershed as described above are proposed, the project will not have an impact on the current use and navigational capacity of Lake Cornelia.

Swimming Pool Pond is not used for navigational purposes.

c) *Must not be reasonably likely to significantly adversely affect water quality, change the existing flowline/gradient, or cause increased scour, erosion, or sedimentation:*

The project is a water quality improvement project to reduce phosphorus levels in Lake Cornelia and downstream waterbodies, thereby improving water quality. The project will create water quality benefits while enhancing recreation, aesthetic nature uses, and wildlife habitat adjacent to the waterbodies.

The treated water discharge from the proposed filtration BMP will result in an improvement in the water quality within Lake Cornelia. The backwash flow to the Pond will recycle water back to Swimming Pool Pond. Because the existing piped outlet from the Swimming Pool Pond to Lake Cornelia (North) is submerged and flow velocities are dissipated by the submerged condition, the outflow discharge is not reasonably likely to significantly adversely impact the potential for erosion or scour. This condition will be maintained under proposed conditions.

Because implementation of the plans will provide a reduction in pollutant loading and discharges rates, the proposed work is not likely to cause adverse impacts to water quality and the project conforms to Rule 6.3.1c.

d) *Must provide post-project wildlife passage along each bank and riparian area*

The project will not permanently change conditions in a manner that will deter wildlife (such as waterfowl, amphibians, reptiles) from using the area adjacent to the lakes and/or at the outlet discharge points along Lake Cornelia, if currently used. Construction activities may temporarily displace wildlife until the area is restored to pre-project conditions.

e) *Must represent the "minimal impact" solution to a specific need with respect to all other reasonable alternatives:*

Several project options were investigated, and input was received from various stakeholders including the City and DNR. Alternatives evaluated include pumping water for treatment below the NWL of the Pond (approximately 3 to 6 inches). Pumping below the NWL of the Pond would result in upstream impacts to water levels at Lake Otto, which is hydraulically connected through equalizer culverts beneath Trunk Highway 62. Another alternative considered recirculation of water from Swimming Pool Pond (i.e., pumping, filtering, and discharging back to the Pond). While this alternative minimized impacts to water levels in the Pond and Lake Otto, the approach of recirculating water from Swimming Pool resulted in less overall pollutant removal benefit.

The proposed design was chosen based on tree impacts, maintenance accessibility, impacts to existing wetland, pollutant removal benefit, and constructability.

Rule 6.3.2 states, projects involving directional boring or horizontal drilling must provide for minimum clearance of 3 feet below the bed of a waterbody and a minimum setback of 50 feet from any stream bank for pilot, entrance and exit holes. No directional boring or horizontal drilling below a waterbody is proposed, and no directional boring or horizontal drilling underneath or near a stream bank is proposed.

Rule 6.3.3 states, removal of structures or other waterway obstructions:

a) *Shall maintain the original cross-section and bed conditions to the greatest extent practicable:*

   No removal of structures or other water obstructions is proposed.

b) *Shall achieve complete removal of the structure, including any footings or pilings that impede navigation:*

   No removal of structures or other water obstructions is proposed.

c) *Shall not involve the removal of a water level control device:*

   No removal of structures or other water obstructions is proposed.

Rule 6.3.4 requires *that the plans must state no activity affecting the bed of a protected water may be conducted between April 1 and June 30 on public waterbodies to minimize the impacts on fish spawning and migration:*

> The project plan specifications state that work associated with the pipe outfall and sediment removal must be completed by November 15, 2021, complying with the Rule 6.3.4 criteria.

Rule 6.3.5 states, a separate permit under District Rule 7.0 is not required for shoreline or streambank stabilization associated with a waterbody crossing or structure, but such stabilization must comply with the criteria 7.3.3c to e. No riprap is proposed to be installed at the new outfall along the banks of Lake Cornelia or the new filter backwash pipe outlet at Swimming Pool Pond.

In accordance with the requirements of subsection 6.5 for the maintenance of the waterbody structures, the cooperative agreement between the District and the City provides a maintenance plan.

8.0 Sediment Removal

The District's Sediment Removal Rule 8.0 applies to the project because the project includes removal of accumulated sediment from the banks of Lake Cornelia (North, Public Water #28-01P).

The project proposes the removal of a total of approximately 110 cubic yards of accumulated sediment within and directly adjacent to the banks of Lake Cornelia at the outfalls.

Rule 8.3 Criteria states, removal of accumulated sediment at stormwater outfalls may be permitted upon submittal of an application meeting the following criteria:

> *8.3.1 Removal of sediment must not alter the original alignment, slope or cross-section of the beds, banks, or shores of any public water.*

The supporting materials demonstrate, and the NMCWD Engineer concurs, that approximately 110 cubic yards of sediment will be removed within and directly adjacent to the banks of Lake Cornelia.

The project proposes removal of sediment at both the existing outfall and proposed outfall along the bed or bank of Lake Cornelia (North), as shown on Sheet C-04 of the plans. Accumulated material to be removed is located below the NWL, representing the “dead storage” volume of the lake, and will not result in alteration of the alignment, slope or cross-section of the bed or bank.

No sediment removal from the banks of Swimming Pool Pond is proposed. The plans indicate maintenance will be performed at the existing outlet, and that underwater debris will be moved away from the existing trash rack down to the existing invert elevation and out 20 linear feet into Swimming Pool Pond adjacent to the existing piped outlet structure of the Pond. Because sediment is to only be moved away and redistributed from the existing trash rack, no material will be excavated or sediment removed from the bank or bottom of the Pond.

8.3.2 Any excavated materials storage or disposal sites must be identified and shown to be:

a) *Not below the OHW of a public water, public water wetland or wetland subject to the Wetland Conservation Act*

b) *Not in the floodplain; or*

c) *Not subject to erosion or likely to cause redeposition of the sediment to an adjacent water body, storm water facility or storm sewer.*

Excavated material will not be stored or disposed onsite. The plans note that excavated materials will be directly placed within trucks and hauled away. The removed sediment will not be stockpiled, and/or disposed on-site, therefore will not be subject to erosion or likely to cause re-deposition of the sediment to an adjacent waterbody, stormwater facility or storm sewer.

8.3.3 Degradation or erosion of the banks or bed of the subject water body by entry of equipment must be avoided.

The areas disturbed above the OHWL of Lake Cornelia (North) will be restored with erosion control measures and stabilized with native seeding.

The erosion control plan prepared by Barr Engineering Co. includes installation of floating silt fence for in-water erosion control. Equipment used to excavate soil will be placed above the banks of the two water waterbodies.

8.3.4 Where determined necessary by the District to protect water quality, a flotation silt curtain shall be placed around the sediment removal site and maintained for the duration of the project.

Floatation silt curtain will be provided at the existing outfall to Lake Cornelia.

8.3.5 No activity affecting the bed of a protected water maybe conducted between March 15 and June 15 on watercourses, or between April 1 and June 30 on all other public water bodies, to minimize impacts of fish spawning and migration.

The project schedule proposes work associated with the pipe outfall and sediment removal is to be completed by November 15, 2021, complying with the Rule 8.3.5 criteria.

10.0 Variances and Exceptions

The applicant has request a variance from subsection 3.4.1b, , which requires a 20-foot minimum and 40-foot average buffer from the boundary of wetland #679W. The removal and replacement of a section of the existing parking lot access drive, approximately 20 feet in width and 27 feet in length, for the installation of the filter vault backwash pipe, is proposed. The pipe installation is within both the required 20-foot minimum and 40-foot average buffer.

The Nine Mile Creek Watershed District assesses variance requests under the criteria in Rule 10.

10.1.1 That because of the unique conditions inherent to the subject property, which do not apply generally to other land or structures in the District, undue hardship on the applicant, not mere inconvenience, will result from strict application of the rule.

That the area subject to the buffer requirement is impervious is not unique; other possible locations for water-quality improvement projects may also be impervious, and some of course would not. But uniquely here, the impervious area to be disturbed is also within the buffer area of the pond, which is uniquely situated to supply 'input' water to be treated and discharged to Lake Cornelia, and the pond is classified by the state as a wetland, triggering the wetland buffer requirement. The facility to be constructed needs to be in this location to realize the benefits to Lake Cornelia and downstream water resources.

10.1.2 That the hardship was not created by the landowner, the landowner's agent or representative, or a contractor, and is unique to the property. Economic hardship alone may not serve as grounds for issuing a variance if reasonable use of the property exists under the terms of the District rules.

Because the removal and replacement of a section of the parking lot is required only because it is an integral part of the NMCWD water-quality improvement project, the hardship is effectively incurred through the city's agreeing to allow NMCWD to construct the project on its park property. In this sense, the hardship is created by the landowner, but only because the city has agreed to cooperate with NMCWD to allow construction of the project. (The project includes no additional or separate elements of, say, park improvement; the proposed land-disturbing activities are entirely for the resource-improvement project.) The hardship is unique to the property because of the specific location and orientation of the facility to be constructed by NMCWD.

10.1.3 That the activity for which the variance is sought will not materially adversely affect water resources, flood levels, drainage, or general welfare in the District; and

The proposed project is entirely for water quality improvement and will improve water quality in the downstream waterbodies. The proposed disturbance to the existing roadway facilitates and is necessary for construction of the treatment facility, which ultimately will result in improvement of the water resources substantially outweighing the benefit that would be achieved through the implementation of the 540 square feet of buffer area for which a variance is sought. Further, there are no elements of the work in the park that are *not* part of the water-quality improvement project. As such, requiring the city to further modify operations in the park to accommodate additional buffer area arguably would represent overreach on the part of NMCWD.

10.1.4 That there is no feasible and prudent alternative to the proposed activity requiring a variance

Options for installing the backwash pipe and directing the outflow to other locations within the park were discussed with city staff. The option selected requires removing and replacing a portion of the existing driveway.

11.0 Fees

Because the property owner is a public entity, no fees are charged.

Rules 2.0, 3.0, 4.0, 5.0, 6.0 and 8.0 $0

12.0 Financial Assurances

Because the property owner is a public entity, the District's financial assurance requirements do not apply.

Sureties for the project are: $0

Findings

1. The proposed work will take place within publicly owned property, Rosland Park, as a cooperative project undertaken by the Nine Mile Creek Watershed District and the City.
2. The proposed water quality improvement project will address concerns related to the observed high level concentrations of phosphorus in Lake Cornelia and downstream Lake Edina. The project will create water quality benefits while enhancing recreation, aesthetic nature uses, and wildlife habitat.
3. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
4. For the purposes of compliance with Minnesota State Work in Waters Rules (Minn. R. Ch. 6115), the DNR has waived jurisdiction over the work in the banks of the public water basin and public water wetland, and the applicant may proceed with the associated work under General Permit #1997-6112, so long as the applicant complies with the conditions of the general permit. Authorization by NMCWD of the construction of the filtration system outfall to Lake Cornelia (North), construction of the filter vault backwash pipe outlet to Swimming Pool Pond, and removal of accumulated sediment within Lake Cornelia (North) under NMCWD's Waterbody Crossings and Structures Rule 6.0 and Sediment Removal Rule 8.0 represents state authorization of the work under the general permit, so long as the work proceeds in compliance with the conditions of the general permit.
5. Because the proposed system will withdraw (pump) more than 10,000 gallons of water per day or 1 million gallons per year, a DNR Water Appropriation Permit is required for the project. The applicant is in the process of securing such permit.
6. The applicant has requested a variance from subsection 3.4.1b of the District Rules.
7. In accordance with the requirements of subsection 3.4.7 and 6.5 for the maintenance of the wetland buffer and waterbody structures, respectively, the cooperative agreement between the District and the City provides a maintenance plan.

Recommendation

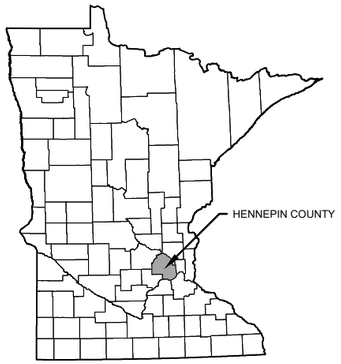
Approval, contingent upon:

1. General Conditions
2. The applicant providing a name and contact information from the contractor responsible for the erosion and sediment control at the site. NMCWD must be notified if the responsible individual changes during the permit term.

   By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. In accordance with Rule 3.4.5, buffer markers are required at the limits of the wetland buffer on the site.

ROSLAND PARK BMP
NINE MILE CREEK WATERSHED DISTRICT
EDINA, MN



MINNESOTA COUNTY MAP



PROJECT LOCATION MAP

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G-03 ... TRAFFIC CONTROL PLAN

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S-02 ... STRUCTURAL PLANS
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E-03 ... ELECTRICAL SCHEMATICS
E-04 ... ELECTRICAL SCHEMATICS

B-01 ... SOIL BORINGS

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EMAIL: RANHORN@NINEMILECREEK.ORG

GOPHER STATE ONE CALL

GOPHER STATE ONE CALL:
CALL BEFORE YOU DIG.
1-800-252-1166

DRAWING NO. PREFIX KEY:

G - GENERAL
C - CIVIL
L - LANDSCAPE
S - STRUCTURAL
P - PROCESS
E - ELECTRICAL
B - GEOTECHNICAL (BORING LOGS)

PROJECT COORDINATE SYSTEM:

HORIZONTAL: HENNEPIN COUNTY COORDINATES, US FT
VERTICAL: NGVD29

ISSUED FOR BID

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PRINTED NAME Kurt Leuthold
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DATE 06/17/2021 LICENSE # 22225

		RELEASED TO/FOR
CLIENT	06/17/21	0
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		3
		4
		5
		6

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Approved	KAL

NINE MILE CREEK WATERSHED DISTRICT
EDEN PRAIRIE, MN

ROSLAND PARK BMP
EDINA, MN

PROJECT LOCATION AND SHEET INDEX

BARR PROJECT No. 23/27-1725.02
CLIENT PROJECT No.
DWG. No. G-01
REV. No. 0

CADD USER: Katie J. Turpin-Nagel FILE: M:\DESIGN\23271725.02\23271725.02_G-01_TITLE SHEET.DWG PLOT SCALE: 1:2 PLOT DATE: 6/18/2021 5:59 AM

Limits of land-disturbing activities upgradient of wetland

Jurisdictional Boundary (Edge of Wetland)

Avg. Buffer Distance (40 ft)

Min. Buffer Distance (20 ft)

Park Access Roadway

TREE DRIP LINE (TYP)

BACKWASH SUPPLY, SEE 4 C-09

AERATION MANHOLE, SEE 1 C-13

THICKER FENCE LINE DENOTES 8' LF HIGH FENCE

FILTER VAULT BACKWASH PIPE, SEE 2 C-08

MATCH EXISTING BITUMINOUS GRADES, SEE 3 C-15

FILTER VAULT OVERFLOW PIPE

STORM WATER FORCE MAIN, SEE 3 C-08

FILTER VAULT, SEE 1 S-01

GRAVITY INFLOW FROM AERATION MH

6" GATE VALVE

PRESSURIZED BACKWASH FROM PUMP

STMH-05

SWIMMING POOL POND NWL = 862.9

FLOW METER STRUCTURE, SEE 1 P-03

CONTROL PANEL AND SURROUNDING CONCRETE PAD, SEE 1 E-01

ELECTRICAL TRANSFORMER, SEE 1 E-01

PUMP STATION, SEE 1 P-03

FILTER VAULT TROUGHS, SEE 1 P-01

FILTER DRAIN - CELL 2, 3, 4, SEE 2 P-01

BH-1

BH-2

BH-3

BH-4

CB-01

CB-02

CB-03

CB-04

MATCH EXISTING CONTOURS ON EAST SLOPE FOR FUTURE GRADE

TAPER 3 LF OF CURB

FILTER VAULT OUTLET PIPE, SEE 1 C-10

B618 CURB AND GUTTER, SEE 2 C-15

FILTER VAULT OUTLET PIPING, SEE 1 C-07 1 P-01

LIMESTONE RETAINING WALL (TYP), SEE 1 L-02

GRADE TO MAKE WATER FLOW AROUND AND AWAY FROM STRUCTURES

MATCH EXISTING BITUMINOUS GRADES, SEE 3 C-15

MATCH EXISTING PARKING LOT STRIPING

CONSTRUCTION LIMITS

EXISTING POND OUTLET STRUCTURE
RIM EL. 863.70
SW INV. 857.83
INLET INV. 860.72

STORM SEWER PIPE TO PUMP STATION, SEE 3 C-08

PROTECT EXISTING CURB AND GUTTER

CONNECT TO EXISTING 18" STORM SEWER, SEE 1 C-12

1 - PLAN: PROPOSED FILTER VAULT PLAN

0 10 20
SCALE IN FEET

EXISTING CONDITIONS LEGEND

- 860 — 10-FT CONTOUR
- 858 — 2-FT CONTOUR
- PROPERTY LINE
- NORMAL WATER LEVEL
- STORM SEWER
- OVERHEAD UTILITY
- UNDERGROUND ELECTRIC
- FENCELINE
- CURB
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN
- FLARED END SECTION
- SIGN
- LIGHT POLE
- DECIDUOUS TREE
- CONIFEROUS TREE
- BITUMINOUS
- CONCRETE
- SAND

CONSTRUCTION LEGEND

- CONSTRUCTION LIMITS
- X — CONSTRUCTION FENCE
- 870 — 10-FT CONTOUR
- 868 — 2-FT CONTOUR
- BITUMINOUS, SEE 3 C-15
- CONCRETE
- RETAINING WALL
- STORM SEWER
- PIPE VALVE
- STORM SEWER MANHOLE
- FLARED END SECTION
- SOIL BORING MARKER

NOTES:

1. CONFIRM LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. NOTIFY OWNER OF ANY DISCREPANCIES.
2. UTILITY RELOCATION TO BE COORDINATED BY CONTRACTOR PRIOR TO CONSTRUCTION.
3. PROTECT EXISTING UTILITIES DURING DEMOLITION AND CONSTRUCTION.
4. FOR EROSION CONTROL NOTES AND DETAILS, SEE SHEETS C-01 AND C-02.
5. FOR PLANTING PLAN, SEE L-01.
6. FOR GEOTECHNICAL SOIL BORING LOGS, SEE SHEET B-01.

ISSUED FOR BID

CADD USER: Alec D. Bateman FILE: M:\DESIGN\23271725.02\23271725.02_C-05_FILTER VAULT PLAN.DWG PLOT SCALE: 1:2 PLOT DATE: 6/17/2021 5:08 PM

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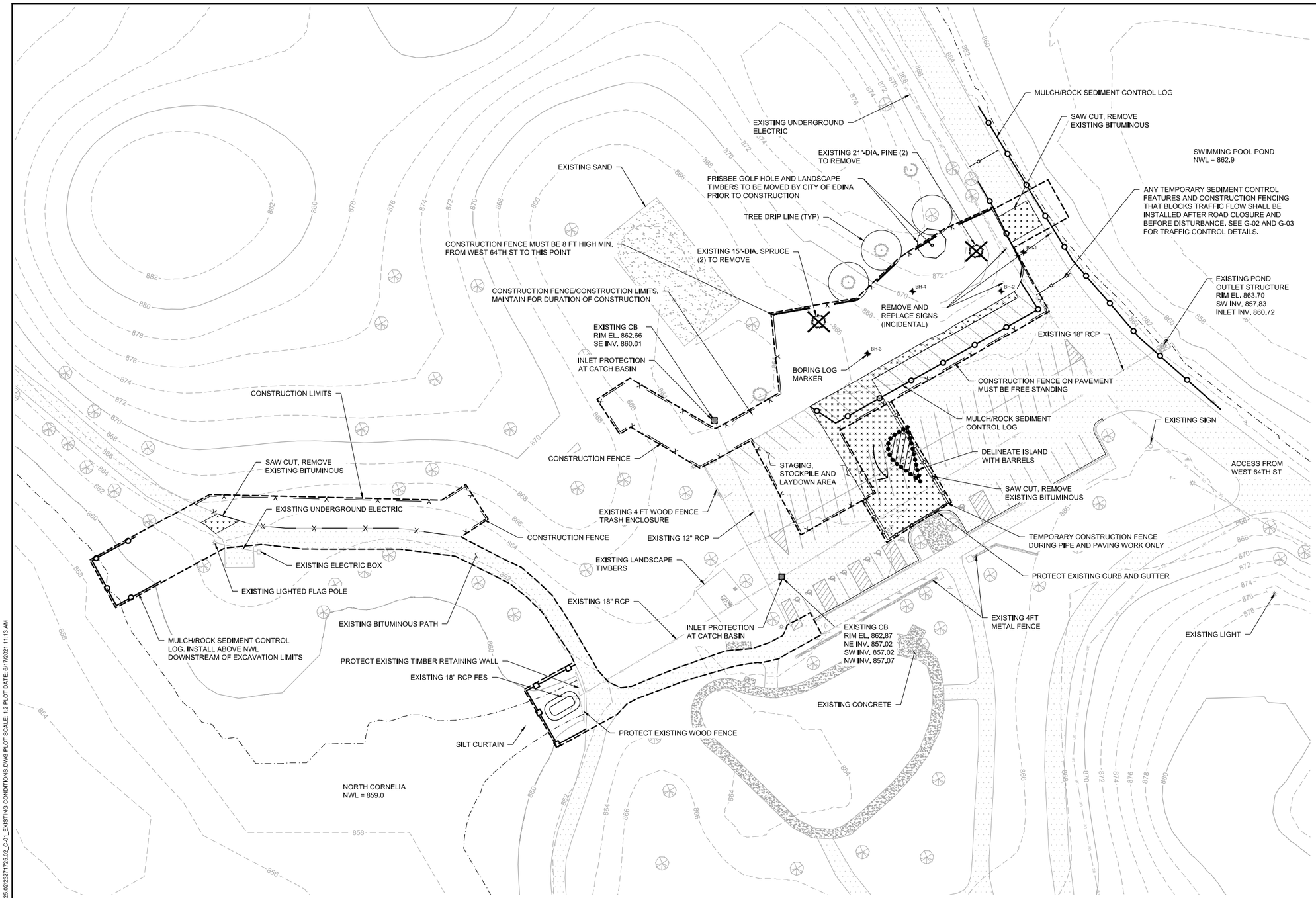
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Designed	BARR
Approved	KAL

NINE MILE CREEK WATERSHED DISTRICT
EDEN PRAIRIE, MN

ROSLAND PARK BMP
EDINA, MN

PROPOSED FILTER VAULT
LAYOUT AND GRADING

BARR PROJECT No. 23/27-1725.02
CLIENT PROJECT No.
DWG. No. C-05
REV. No. 0



EXISTING CONDITIONS LEGEND

- 860 — 10-FT CONTOUR
- 858 — 2-FT CONTOUR
- PROPERTY LINE
- NORMAL WATER LEVEL
- STORM SEWER
- OE — OVERHEAD UTILITY
- UE — UNDERGROUND ELECTRIC
- X — FENCELINE
- CURB
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN
- FLARED END SECTION
- SIGN
- LIGHT POLE
- DECIDUOUS TREE
- CONIFEROUS TREE
- TREE - TO REMOVE
- BITUMINOUS
- BITUMINOUS TO REMOVE
- CONCRETE
- SAND

EROSION CONTROL LEGEND

- CONSTRUCTION LIMITS
- X — CONSTRUCTION FENCE
- TEMPORARY CONSTRUCTION FENCE
- MULCH/ROCK SEDIMENT CONTROL LOG (5, C-02)
- SILT CURTAIN (1, C-02)
- INLET PROTECTION (1, C-03)

NOTES:

1. THE FIELD WORK FOR THIS SURVEY WAS COMPLETED BY ALLIANT ENGINEERING ON AUGUST 11, 2020. ADDITIONAL SURVEY WAS COMPLETED ON AUGUST 13, 2020 TO CAPTURE ADDITIONAL TREE LOCATIONS. THE ORIENTATION OF THIS BEARING SYSTEM IS ASSUMED.
2. THE LOCATIONS OF UNDERGROUND UTILITIES ARE DEPICTED BASED ON INFORMATION FROM GOPHER STATE ONE CALL SYSTEM FOR A "BOUNDARY SURFACE LOCATE", TICKET NUMBER 202173539. THE INFORMATION WAS PROVIDED BY A COMBINATION OF AVAILABLE MAPS, PROPOSED PLANS OR CITY RECORDS AND FIELD LOCATIONS WHICH MAY NOT BE EXACT. CONFIRM LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. NOTIFY OWNER OF ANY DISCREPANCIES.
3. UTILITY RELOCATION TO BE COORDINATED BY CONTRACTOR PRIOR TO CONSTRUCTION.
4. PROTECT ALL EXISTING UTILITIES DURING DEMOLITION AND CONSTRUCTION.
5. ANY TOPSOIL STRIPPED FOR REUSE ONSITE SHALL BE STOCKPILED WITHIN THE CONSTRUCTION LIMITS.
6. PROTECT EXISTING PAVEMENT AND LANDSCAPE OUTSIDE OF CONSTRUCTION LIMITS.
7. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BEFORE COMMENCING LAND DISTURBING ACTIVITIES AND SHALL NOT BE REMOVED UNTIL PERMANENT COVER HAS BEEN ESTABLISHED.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER OPERATION, MAINTENANCE, AND REGULAR INSPECTION OF ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL THE SITE IS FULLY RESTORED.
9. SOIL STOCKPILES SHALL BE STABILIZED WITH ONE OF THE FOLLOWING MATERIALS: MULCH (SUCH AS STRAW MULCH, SLASH MULCH, WOOD CHIP, OR OTHER APPROPRIATE MULCH); IF SLOPES GREATER THAN 3H:1V, COVER MATERIAL WITH TARPS OR PLASTIC SHEETING.
10. IF SEDIMENT IS TRACKED ONTO THE PAVED PARKING LOT/DRIVE LANE, STREET SWEEPING SHALL BE EMPLOYED. SEDIMENT SHALL BE REMOVED BY SWEEPING WITHIN 24 HOURS.
11. FOR EROSION CONTROL NOTES AND DETAILS, SEE C-02 AND C-03.

ISSUED FOR BID

1 / – PLAN: EXISTING CONDITIONS, REMOVALS, EROSION AND SEDIMENT CONTROL

0 30 60
SCALE IN FEET

PROJECT COORDINATE SYSTEM:

HORIZONTAL: HENNEPIN COUNTY COORDINATES, US FT
VERTICAL: NGVD 29

BENCH MARK NOTES:

BENCH MARK 1: MnDOT MONUMENT "X TOWN A". IN EDINA, IN A BRIDGE WALKWAY IN THE NORTH END OF THE FOOTING AT THE SOUTH LANDING OF PEDESTRIAN BRIDGE NUMBER 27520 OVER TRUNK HIGHWAY 62, 0.65 MILE EAST ALONG TRUNK HIGHWAY 62 FROM THE JUNCTION OF TRUNK HIGHWAY 62 AND TRUNK HIGHWAY 100. THE MARK IS UNDER THE STAIRWAY RAILING HAVING AN ELEVATION OF 872.54 FEET NGVD29.

BENCH MARK 2: STORM MANHOLE AT THE SOUTHWEST CORNER OF THE PARKING LOT HAVING AN ELEVATION OF 862.87 FEET NGVD29.

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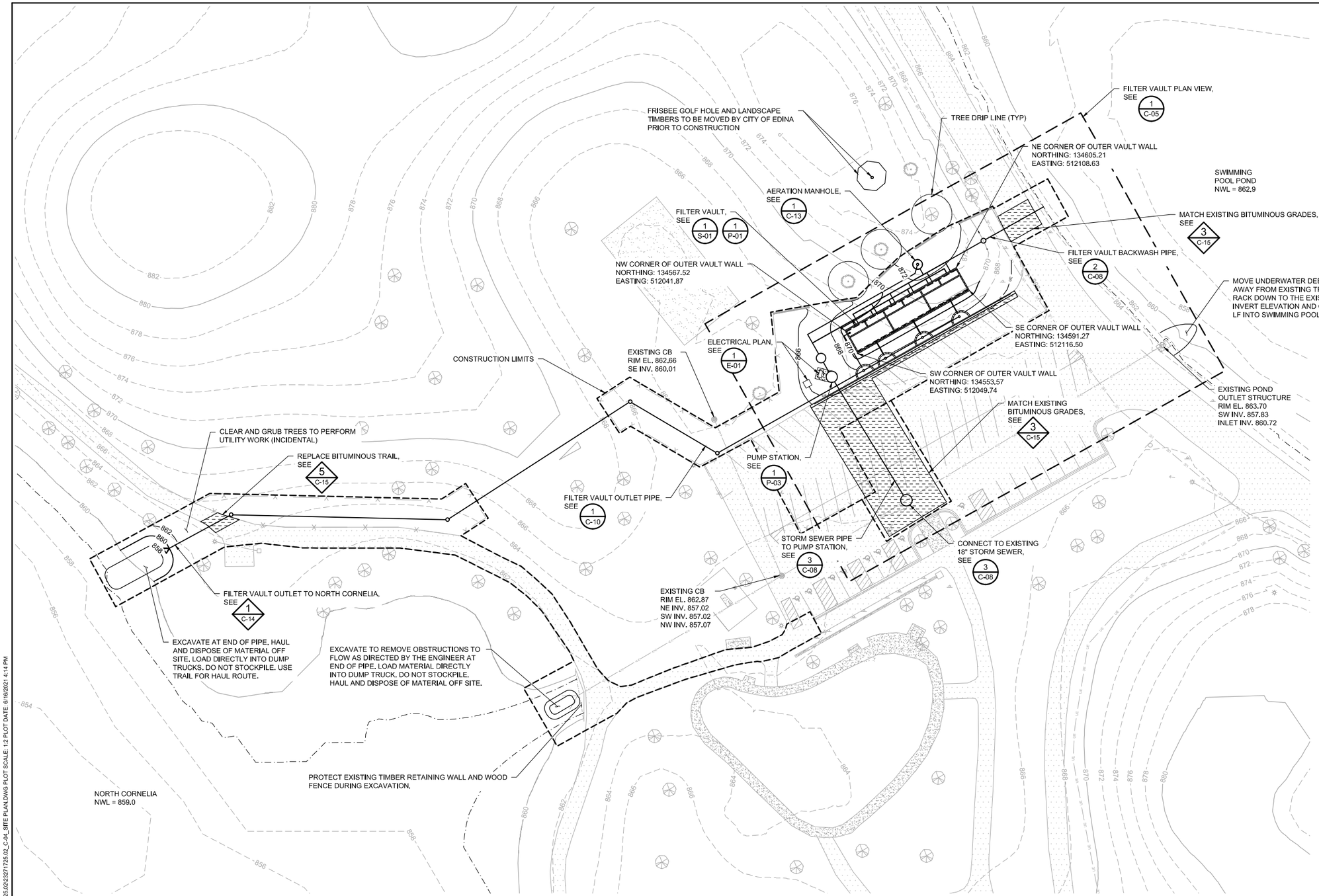
NINE MILE CREEK WATERSHED DISTRICT
EDEN PRAIRIE, MN

ROSLAND PARK BMP
EDINA, MN

EXISTING CONDITIONS, REMOVALS, AND EROSION AND SEDIMENT CONTROL PLAN

BARR PROJECT No. 23/27-1725.02
CLIENT PROJECT No.
DWG. No. C-01
REV. No. 0

CADD USER: Alec D. Bateman FILE: M:\DESIGN\23271725.02\23271725.02_C-01_EXISTING CONDITIONS.DWG PLOT SCALE: 1:2 PLOT DATE: 6/17/2021 11:13 AM



EXISTING CONDITIONS LEGEND

- 10-FT CONTOUR
- 2-FT CONTOUR
- PROPERTY LINE
- NORMAL WATER LEVEL
- STORM SEWER
- OVERHEAD UTILITY
- UNDERGROUND ELECTRIC
- FENCELINE
- CURB
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN
- FLARED END SECTION
- SIGN
- LIGHT POLE
- DECIDUOUS TREE
- CONIFEROUS TREE
- BITUMINOUS
- CONCRETE
- SAND

CONSTRUCTION LEGEND

- CONSTRUCTION LIMITS
- CONSTRUCTION FENCE
- 10-FT CONTOUR
- 2-FT CONTOUR
- BITUMINOUS, SEE 3 C-15
- CONCRETE
- RETAINING WALL
- STORM SEWER
- PIPE VALVE
- STORM SEWER MANHOLE
- FLARED END SECTION
- SOIL BORING MARKER

NOTES:

1. CONTRACTOR TO OBTAIN APPROPRIATE BUILDING, MECHANICAL, AND ELECTRICAL PERMITS FOR ALL PROPOSED WORK.

1 - PLAN: PROPOSED SITE PLAN

0 30 60
SCALE IN FEET

ISSUED FOR BID

CADD USER: Alec D. Bateman FILE: M:\DESIGN\23271725.02\23271725.02_C-04_SITE PLAN.DWG PLOT SCALE: 1:2 PLOT DATE: 6/16/2021 4:14 PM

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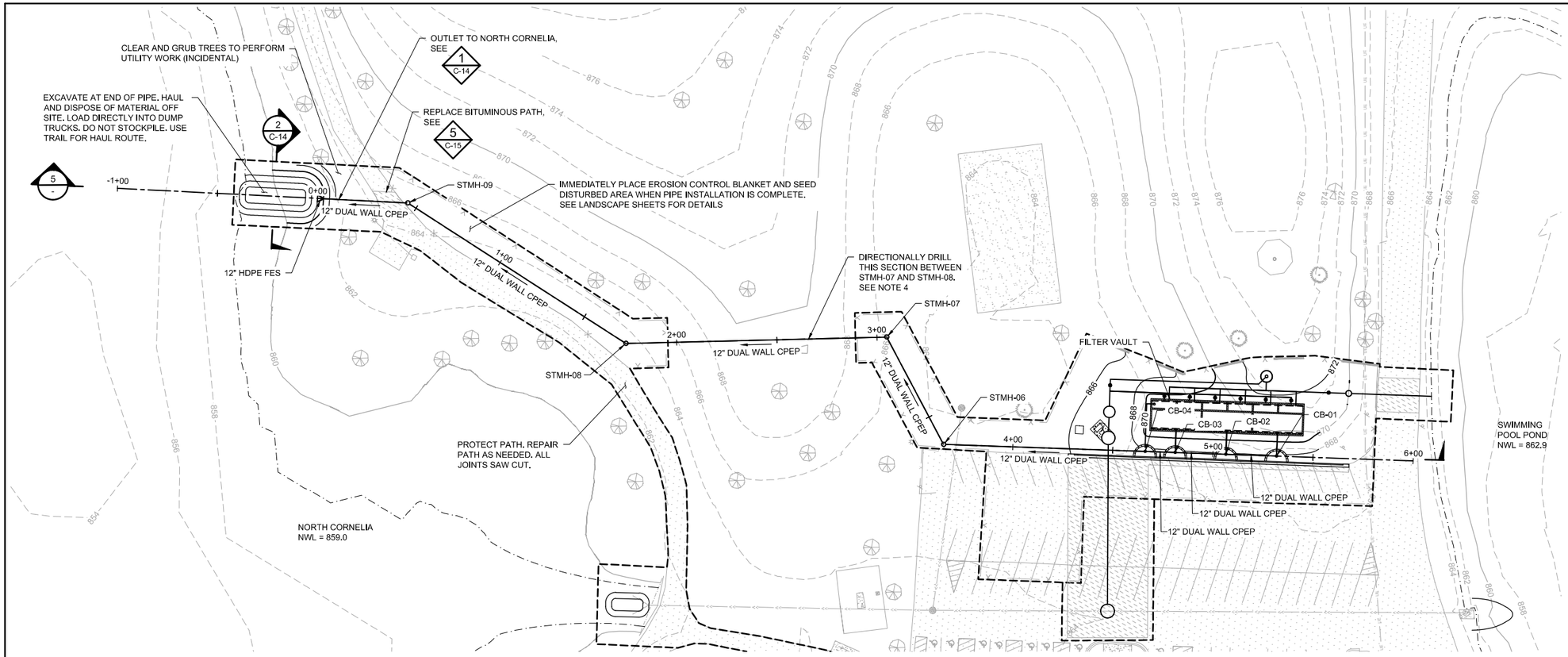
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EDEN PRAIRIE, MN

ROSLAND PARK BMP
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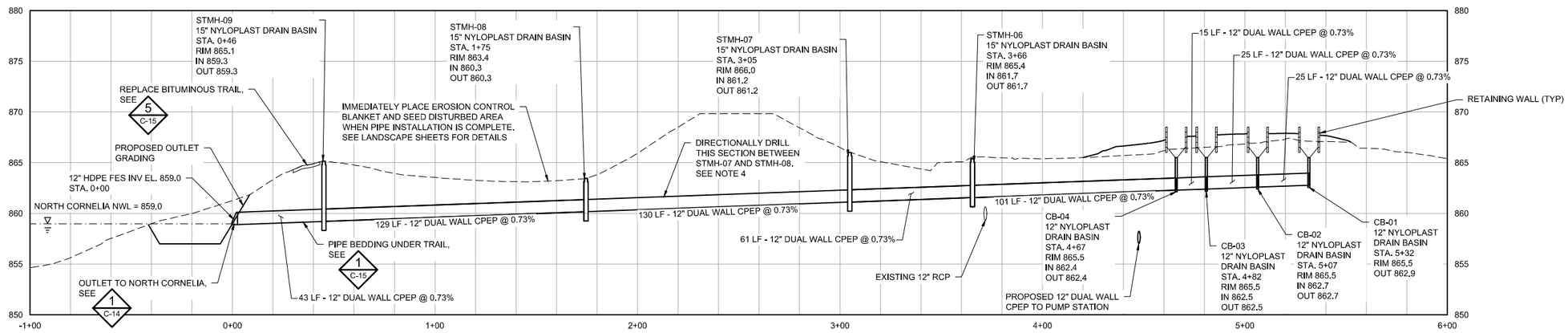
PROPOSED SITE PLAN

BARR PROJECT No. 23/27-1725.02
CLIENT PROJECT No.
DWG. No. C-04
REV. No. 0



1 - PLAN: FILTER VAULT OUTLET TO NORTH CORNELIA

0 30 60 SCALE IN FEET



5 - PROFILE: FILTER VAULT OUTLET TO NORTH CORNELIA

0 30 60 HORIZONTAL SCALE IN FEET

0 6 12 VERTICAL SCALE IN FEET

EXISTING CONDITIONS LEGEND

- 860 — 10-FT CONTOUR
- 858 — 2-FT CONTOUR
- PROPERTY LINE
- NORMAL WATER LEVEL
- STORM SEWER
- OE — OVERHEAD UTILITY
- X — FENCELINE
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- SIGN
- LIGHT POLE
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- BITUMINOUS
- CONCRETE
- SAND

CONSTRUCTION LEGEND

- CONSTRUCTION LIMITS
- X — CONSTRUCTION FENCE
- 870 — 10-FT CONTOUR
- 868 — 2-FT CONTOUR
- BITUMINOUS, SEE 3 C-15
- CONCRETE
- RETAINING WALL
- STORM SEWER
- PIPE VALVE
- STORM SEWER MANHOLE
- FLARED END SECTION
- SOIL BORING MARKER

NOTES:

1. MANHOLES STMH-06 THROUGH STMH-09 SHALL HAVE SOLID COVER ASSEMBLIES.
2. CATCH BASINS CB-01 THROUGH CB-04 SHALL HAVE GRATE ASSEMBLIES.
3. SEE SHEET C-15 FOR NYLOPLAST STRUCTURE DETAIL AND PIPE BEDDING DETAIL.
4. THE SLOPE TOLERANCE FOR THE PIPE SEGMENT DIRECTIONALLY DRILLED SHALL BE 1% MAX AND 0.5% MIN. THE CORRESPONDING INVERT ELEVATION TOLERANCE FOR STMH-07 AND STMH-08 IS ± 0.3 FEET. THE MIN SLOPE FOR ALL PIPE SEGMENTS SHALL BE 0.5%.

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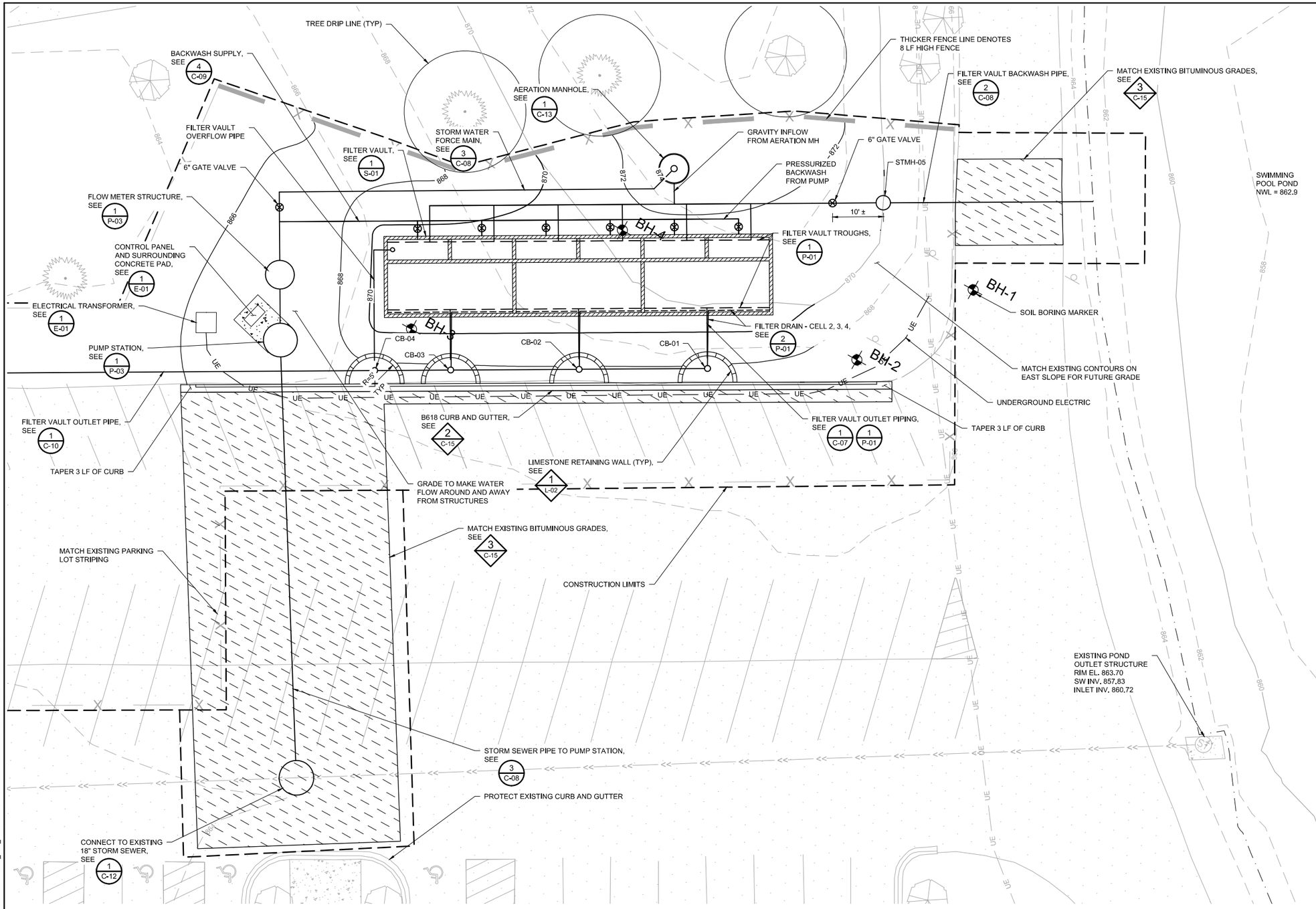
NINE MILE CREEK WATERSHED DISTRICT
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EDINA, MN

FILTER VAULT OUTLET TO NORTH CORNELIA
PLAN AND PROFILE

BARR PROJECT No. 23/27-1725.02
CLIENT PROJECT No.
DWG. No. C-10
REV. No. 0

CADD USER: Alec D. Bateman FILE: M:\DESIGN\23271725.02\23271725.02_C-10_OUTLET TO NC PLAN AND PROFILE.DWG PLOT SCALE: 1:2 PLOT DATE: 6/17/2021 11:57 AM



1 - PLAN: PROPOSED FILTER VAULT PLAN

0 10 20
SCALE IN FEET

EXISTING CONDITIONS LEGEND

- 860 — 10-FT CONTOUR
- 858 — 2-FT CONTOUR
- PROPERTY LINE
- NORMAL WATER LEVEL
- STORM SEWER
- OE — OVERHEAD UTILITY
- UE — UNDERGROUND ELECTRIC
- X — FENCELINE
- CURB
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN
- FLARED END SECTION
- SIGN
- LIGHT POLE
- DECIDUOUS TREE
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- BITUMINOUS
- CONCRETE
- SAND

CONSTRUCTION LEGEND

- CONSTRUCTION LIMITS
- X — CONSTRUCTION FENCE
- 870 — 10-FT CONTOUR
- 868 — 2-FT CONTOUR
- BITUMINOUS, SEE 3 C-15
- CONCRETE
- RETAINING WALL
- STORM SEWER
- PIPE VALVE
- STORM SEWER MANHOLE
- FLARED END SECTION
- SOIL BORING MARKER

NOTES:

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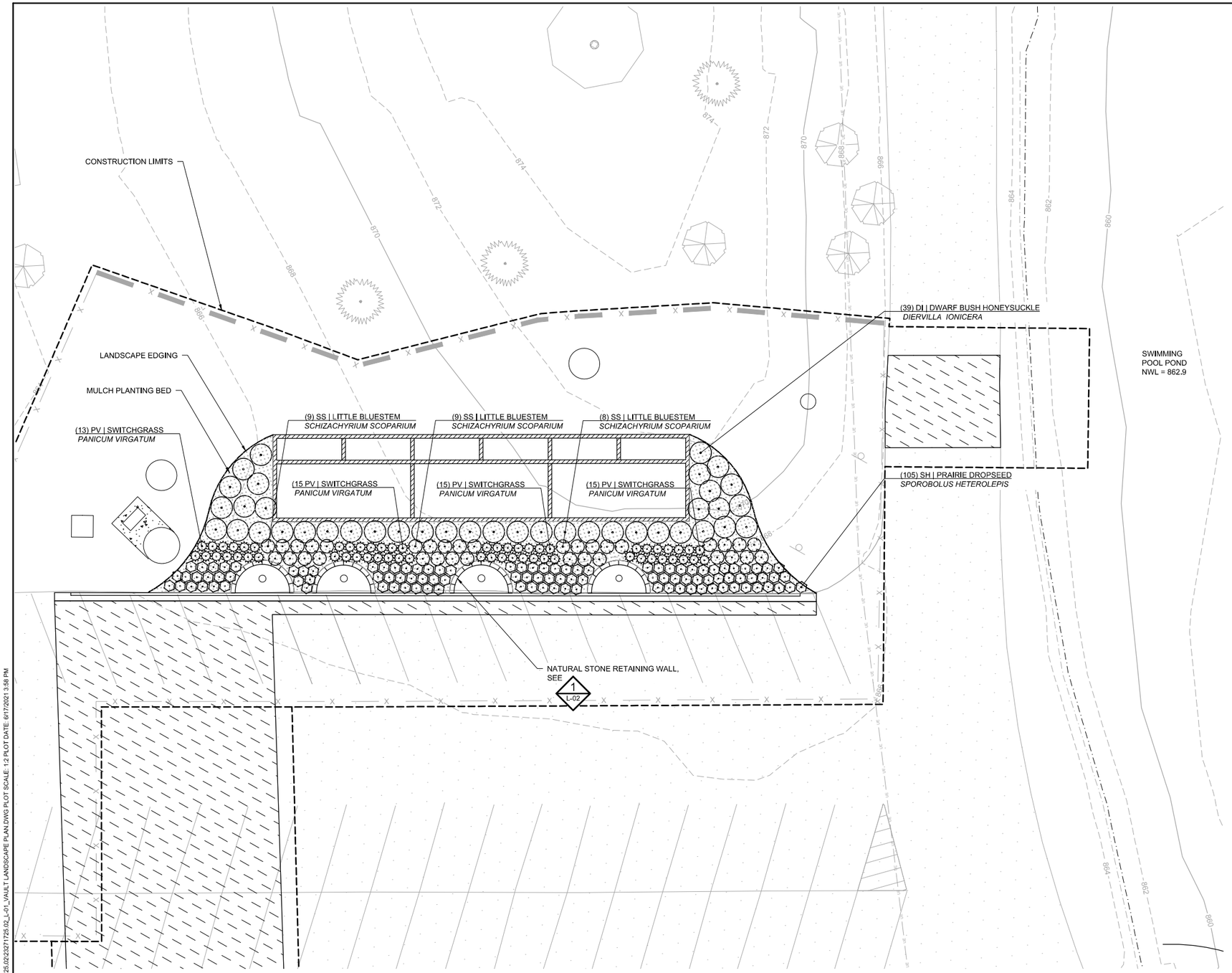
NINE MILE CREEK WATERSHED DISTRICT
EDEN PRAIRIE, MN

ROSLAND PARK BMP
EDINA, MN

PROPOSED FILTER VAULT
LAYOUT AND GRADING

BARR PROJECT No. 23/27-1725.02
CLIENT PROJECT No.
DWG. No. C-05
REV. No. 0

CADD USER: Alec D. Bateman FILE: M:\DESIGN\23271725.02\23271725.02_C-05_FILTER VAULT PLAN.DWG PLOT SCALE: 1:2 PLOT DATE: 6/17/2021 5:08 PM



1 - PLAN: FILTER VAULT LANDSCAPE PLAN

0 10 20
SCALE IN FEET

EXISTING CONDITIONS LEGEND

- 860 — 10-FT CONTOUR
- 858 — 2-FT CONTOUR
- PROPERTY LINE
- NORMAL WATER LEVEL
- STORM SEWER
- OE — OVERHEAD UTILITY
- X — FENCELINE
- CURB
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN
- FLARED END SECTION
- SIGN
- LIGHT POLE
- DECIDUOUS TREE
- CONIFEROUS TREE
- BITUMINOUS
- CONCRETE
- SAND

CONSTRUCTION LEGEND

- CONSTRUCTION LIMITS
- 860 — 10-FT CONTOUR
- 858 — 2-FT CONTOUR
- BITUMINOUS, SEE 3 / C-15
- RETAINING WALL
- STORM SEWER MANHOLE
- FLARED END SECTION

PLANTING LEGEND

- PROPOSED SHRUBS
- MULCH PLANTING BED

PLANT SCHEDULE

SHRUBS	BOTANICAL NAME	COMMON NAME	QTY
	DIERVILLA LONICERA	DWARF BUSH HONEYSUCKLE	39
	PANICUM VIRGATUM	SWITCH GRASS	58
	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	34
	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	105

GENERAL NOTES

1. PROTECT EXISTING CURBS, PAVEMENT, SIDEWALKS, AND OTHER SITE ELEMENTS FROM IMPACT BY SITE PREPARATION AND PLANTING OPERATIONS.
2. AVOID COMPACTING SOIL WITH HEAVY EQUIPMENT, ANY DAMAGE TO SITE TO BE REPAIRED AT CONTRACTOR'S EXPENSE.
3. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. IN THE CASE OF ANY DISCREPANCIES BETWEEN THIS DETAIL, PLANS, OR SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

SEEDING NOTES

1. ANY DISTURBED AREAS OUTSIDE OF THE MAIN, MULCHED PLANTING AREA MUST BE RESTORED WITH SEED AND EROSION CONTROL BLANKET (NATURAL NET, TYPE 3N2S). USE MNDOT SEED MIX 33-261 ALONG POND EDGES TO MATCH EXISTING POND BUFFER WIDTHS, AND MNDOT SEED MIX 25-131 FOR THE REMAINDER OF THE SITE.
2. ANY INVASIVE PLANTS AND WEEDS WITHIN THE SEEDING AREAS SHALL BE SPRAYED WITH HERBICIDE NO LATER THAN 14-DAYS PRIOR TO SEEDING.
3. SEED IN ACCORDANCE WITH THE SPECIFICATIONS. SEEDING IS TO TAKE PLACE IMMEDIATELY FOLLOWING SITE PREPARATION TO PREVENT EROSION AND COMPACTION.

ISSUED FOR BID

NO.	BY	CHK. APP.	DATE	REVISION DESCRIPTION

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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINTED NAME Matt Kumka
SIGNATURE
DATE 06/17/2021 LICENSE # 53974

CLIENT	06/17/21
BID	06/17/21
CONSTRUCTION	

RELEASED TO/FOR

0 1 2 3 4 5 6
DATE RELEASED

BARR
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Scale	AS SHOWN
Date	06/17/2021
Drawn	ADB2
Checked	KJN2
Designed	BARR
Approved	MEK2

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EDEN PRAIRIE, MN

ROSLAND PARK BMP
EDINA, MN

FILTER VAULT LANDSCAPE PLAN

BARR PROJECT No. 23/27-1725.02
CLIENT PROJECT No.
DWG. No. L-01
REV. No. 0

CADD USER: Alec D. Bateman FILE: M:\DESIGN\23271725.02\23271725.02_L-01_VAULT LANDSCAPE PLAN.DWG PLOT SCALE: 1:2 PLOT DATE: 6/17/2021 3:58 PM