Nebraska Department of Administrative Services State Building Division

Guidance Document

The American Plan Act of 2021 (ARPA)

Cemetery Sediment Control & Stormwater



ADVISORY STATEMENT

This guidance document is advisory in nature but is binding on an agency until amended by such agency. A guidance document does not include internal procedural documents that only affect the internal operations of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules and regulations made in accordance with the Administrative Procedure Act. If you believe that this guidance document imposes additional requirements or penalties on regulated parties, you may request a review of the document.

Nebraska Revised Statute §84-901.03. (2)



Project Summary

Working Title: State-Owned Cemetery Sediment Control and Stormwater

Site: Wyuka Cemetery

3600 O Street, Lincoln Nebraska 68510

Funding: \$1,800,000.00 – American Rescue Plan Act (ARPA)

History: For over 140 years, Wyuka Cemetery has played an integral part in the lives of

Nebraskans. During that time, its grounds have been host to family gatherings of all kinds. Visitors continue to tell their stories of their visits to Wyuka – be it for birthday celebrations, family reunions, or because they-re celebrating the lives of their loved

ones who have passed away.

Wyuka Cemetery, a nationally recognized historic cemetery, has been a vital living piece of Lincoln's history since its founding. With its rolling hills, shady trees, sparkling pond and spectacular plantings, Wyuka Cemetery is considered one of the most magnificent examples of landscape architecture and design in Nebraska. In addition, it is literally a museum without walls. It features statuary art and monumental architecture, historical tributes to Lincoln families, civil war veterans, and ordinary citizens.

Today, Wyuka is known to be the largest all-faith cemetery serving the Lincoln community. When a loved one passes on, a service of dignity and simplicity in a setting of great natural beauty is a wonderful way to say good-by, and many see Wyuka as a peaceful and comforting place to visit. Throughout the cemetery are spacious sections to suit any preference, such as traditional ground burial, mausoleum, or personalized cremation choices. Wyuka provides a beautiful and peaceful setting for families and their chosen form of permanent and perpetual memorialization and offers a wide range of choices for one's final place of rest, through the years, over 52,000 individuals have selected Wyuka to be their cemetery of choice for burial.



Project

Overview:

The existing pond lacks depth, due to on-going deposition of heavy sediments from the urban watershed upstream. A range of design options were explored on how to address the sediment load. These varied from a "No Action/Do Nothing" option to three design options on how to route heavy sediment around the pond.

The preferred option recommended by the design team includes season use of a bypass pipe to route heavy sediment around the pond. The bypass would be used seasonally, at times of high sediment transport. As part of this option, the existing pond would be dredged, a hard pond edge installed to benefit water quality, and a forebay constructed to catch heavy sediment that makes it into the pond. Additional water quality recommendations have been taking into consideration.

Goals: Design & Install a Stormwater Bypass Pipe with Flow Controls

Protect & Enhance Pond Water Quality & Stormwater Runoff

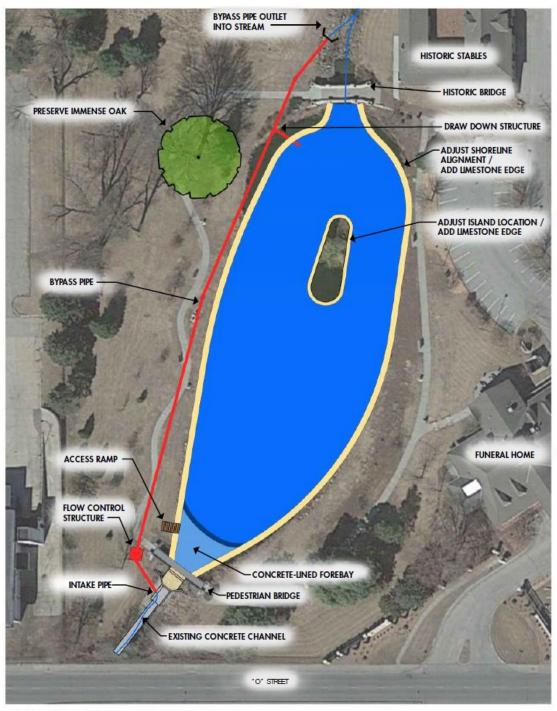
Control Sediment Collection and Distribution Stabilization of Stream and Pond Edges

Improve Wildlife Habitat

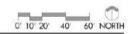
Exhibits: The following is proposed schematic design documents that were developed by JEO and

Big Muddy Workshop in the study phase.





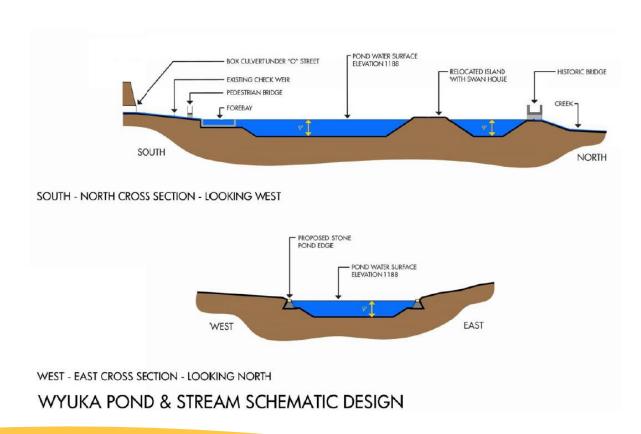
OPTION "D" - BYPASS PIPE WYUKA POND & STREAM SCHEMATIC DESIGN







BYPASS PIPE AND STREAM WEIR WYUKA POND & STREAM SCHEMATIC DESIGN







American Rescue Plan Act (ARPA) Eligibility

The sediment control and stormwater project at Wyuka Cemetery is considered an "Eligible Use" within the Coronavirus State Fiscal Recovery Fund and the Coronavirus Local Fiscal Recovery Fund (SLFRF) established under the American Rescue Plan Act (ARPA) as determined by the Department of the Treasury's final rule. Specifically, it is within the use provision [t] o make necessary investments in water, sewer, or broadband infrastructure.¹

The Department of Treasury expanded eligibility within this category, to include a broad range of lead remediation and stormwater management projects, the latter of which Wyuka Cemetery is regarded. Furthermore, the final rule states, Treasury interprets the word "infrastructure" in this context broadly to mean the underlying framework or system for achieving the given public purpose, whether it be provision of drinking water or management of wastewater or stormwater.²

Testifying before the Nebraska Legislature's Appropriations Committee, Greg Osborn, on behalf of Wyuka Cemetery, summarized the project as follows: "There is a tremendous amount of gravel, sand, yard waste, and trash that comes into the pond at downstream. The report you have answers the issues we currently are dealing with and address is the future success of the stormwater drainage... This will ensure water quality and quantity. This project will greatly benefit the public by creating a better drainage flow for the 255 acres south of Wyuka Cemetery and help reestablish the beauty of Lincoln's first park."

As with other infrastructure projects and capital expenditure projects that are permitted as responses to the public health emergency and its negative economic impacts, costs for planning and design and associated pre-project costs are eligible uses of SLFRF funds.³

JEO and Big Muddy Workshop conducted a "Wyuka Pond & Stream Study and Schematic Design" on behalf of Wyuka Cemetery, issuing the final report on December 27, 2021. The reflecting pond at Wyuka Cemetery is acknowledged to lack depth as a result of heavy sediments deposit from the upstream urban watershed, and the report examines various options of which Wyuka Cemetery may address this stormwater project. The chosen option and allocated ARPA funding will be used to "build a bypass pipe with a flow control structure that can direct seasonal flows either around the pond, or into the pond after passing through a forebay, depending upon the anticipated load of heavy sediment."

The [Clean Water State Revolving Fund] CWSRF includes a broad range of stormwater infrastructure projects, and as such these projects were eligible under the interim final rule and continue to be eligible under the final rule. These projects include gray infrastructure projects, such as traditional pipe, storage, and treatment systems. Projects that manage, reduce, treat, or recapture stormwater

² D. Investments in Water, Sewer, and Broadband Infrastructure 1. WATER AND SEWER INFRASTRUCTURE Interpretation of Necessary Investments and Water and Sewer Infrastructure (Page 270)

DEPARTMENT OF THE TREASURY [31 CFR Part 35 RIN 1505-AC77] Coronavirus State and Local Fiscal Recovery Funds AGENCY: Department of the Treasury ACTION: Final Rule

¹ I. Introduction (Page 5)

³ D. Investments in Water, Sewer, and Broadband Infrastructure 1. WATER AND SEWER INFRASTRUCTURE *Interpretation of Necessary Investments and Water and Sewer Infrastructure* (Page 271)

or subsurface drainage water are also eligible, including real-time control systems for combined sewer overflow management, and sediment control. Culvert infrastructure projects are eligible under the CWSRF if they 1) implement a nonpoint source management plan, 2) implement National Estuary Program Comprehensive Conservation and Management Plan, or 3) implement a stormwater management plan with the goal of providing a water quality benefit.⁴

In accordance with the final rule on projects that manage stormwater and sediment control, the Wyuka Cemetery stormwater project will address the eligibility criteria and control flow through "...a bypass pipe which would be opened seasonally, to route stormwater containing high loads of heavy sediment around the pond. Early spring stormwater flows containing high amounts of sand from city streets would be directed into the bypass pipe. This sediment carrying water would flow through the bypass pipe and outlet into the stream, below the pond. The bypass pipe would be sized to be able to convey storms up to the 90-percentile size, based upon rainstorm frequency. The 90-percentile size storm in Lincoln is about a one-inch rain event. Based upon preliminary watershed modelling, the diameter of the bypass for this pipe would be 36-inches. At the pipe outlet, the receiving area will be reshaped and armored with rip-rap for energy dissipation and erosion control."

Green infrastructure projects that support stormwater system resiliency could include bioretention basins that provide water storage and filtration benefits, and green streets, where vegetation, soil, and engineered systems are combined to direct and filter rainwater from impervious surfaces.⁵

The Wyuka Pond & Stream Schematic Design & Study Final Report addresses filtration benefits away from impervious surfaces as part of an analysis of the proposed options conducted by Common Sense Water Resources Engineering, Appendix "C" of the report.

In addition to the eligible uses under the CWSRF, Treasury is expanding the eligible uses under the final rule to include stormwater system infrastructure projects regardless of whether there is an expected water quality benefit from the project. All stormwater infrastructure projects undertaken should incorporate updated design features and current best practices.⁶

As Wyuka Cemetery's pond is central to the project and sediment control, the report incorporates considerations of how to "protect or enhance water quality" as summarized in Appendix "D", an advantage overall, but not a requirement as acknowledged in the rule. Additionally, a stream analysis was conducted with recommendations for corrective actions and stabilization. These considerations, as well as design concepts, including a smaller forebay, and ongoing sediment removal take into account best practices for construction and maintenance.

⁴ D. Investments in Water, Sewer, and Broadband Infrastructure 1. WATER AND SEWER INFRASTRUCTURE *Stormwater Infrastructure* (Page 281)

⁵ D. Investments in Water, Sewer, and Broadband Infrastructure 1. WATER AND SEWER INFRASTRUCTURE *Drinking Water State Revolving Fund and Clean Water State Revolving Fund* (Page 272)

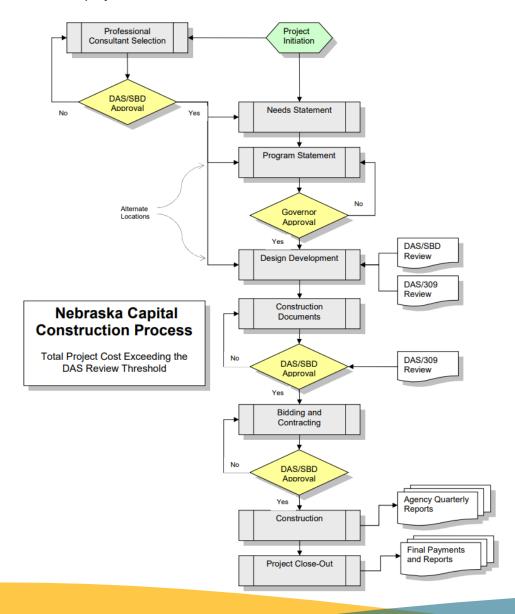
⁶ D. Investments in Water, Sewer, and Broadband Infrastructure 1. WATER AND SEWER INFRASTRUCTURE *Stormwater Infrastructure* (Page 282)

Project Process

Capital Construction

Per the Procedure Manual for Capital Construction Projects, the procedure outline in this manual shall apply to all capital construction projects whose total project cost exceeds \$705,000 (Updated as of March 11, 2022, to \$896,000) which are administered by a State agency, board or commission, regardless of the source of funding.

Therefore, the project will follow the structure outlines below:





Project Management

State Building Division

State Building Division has the primary functions and responsibilities to coordinate statewide facilities planning, construction, and administration. As such, the Division will coordinate the interaction between the State and consultants during the planning and design process, as well as oversee and coordinate the construction of the project.

