CC Regular Session **5. 13.**

Meeting Date: 05/25/2021

By: Bruce Westby, Engineering/Public Works

Information

Title

Adopt Resolution #21-143 Approving Water Treatment Plant Feasibility Study

Purpose/Background:

Purpose:

The purpose of this case is to adopt Resolution #21-143 approving the final Feasibility Study dated March 4, 2021, for the municipal water treatment plant.

Background:

Attached is a copy of the final Feasibility Study dated March 4, 2021 for the proposed municipal water treatment plant as prepared by SEH, Inc. This study documents the City's existing water supply source, quality and quantity, existing water supply infrastructure, proposed water treatment process options and recommendations, water treatment plant site evaluations and recommendations, estimated costs, alternative funding sources, impacts to water rates, and a proposed project schedule.

At the February 8, 2021, City Council work session, Staff presented the following findings and recommendations in the draft Feasibility Study, which at the time was generally considered to be complete.

- The Tunnel City Wonewoc aquifer will be able to continue to produce potable water to meet present and foreseeable future demands.
- The most cost-effective method for removing manganese and iron from the City's drinking water is chemical oxidation followed by sand filtration. These processes require construction of a water treatment plant.
- Based upon an analysis of Ramsey's 2040 water demand, the initial capacity of the water treatment plant should be 10 million gallons per day (MGD), with the ability to expand to 20 MGD.
- Four water treatment plant (WTP) sites were evaluated and the Public Works site is recommended since it requires the least overall construction costs and offers the greatest operational efficiencies. It was noted that in January the City of Ramsey's Planning Commission, Economic Development Authority, and Public Works Committee all voted unanimously to recommend constructing the WTP on the Public Works site.
- Two treatment process alternatives were evaluated including gravity filtration and pressure filtration. Gravity filtration is recommended.

It was also discussed that while the City has continued to supply its municipal water users with safe potable water without interruption by running the three municipal wells with the lowest manganese concentrations (wells #5, #6 and #7) generally non-stop since April of 2019, some of the existing water system infrastructure is showing signs of wear due to the continual operation of moving parts including meters, motors and pumps. For instance, in the fall of 2020, well #7 had to be repaired putting it out of service for almost a month, and early last winter the same repairs were needed to well #6 requiring it to be shut down for a month. Then last winter the water meter at well #6 was replaced, and the meter for well #7 has had ongoing issues. Also, a cooling unit failed recently in the service cabinet for well #6, which can cause the well to overheat and shut down. The constant use of these wells is believed to be a major contributing factor to these required repairs.

Fortunately, none of the repairs noted above were needed during peak water use times in the summer when people water their lawns, fill their swimming pools, wash their cars, etc. If one of the wells would need to be repaired during the summer months the City would need to rely on one or more other wells with higher manganese concentrations for water supply, which would increase manganese concentrations throughout the system. Staff therefore recommends moving forward with implementation of the water treatment plant project as soon as

possible.

Per prior Council authorization, SEH Inc. is preparing final plans and specifications for the trunk watermain improvements required to supply raw water from the six municipal wells in The COR to the proposed Water Treatment Plant site near the new Pubic Works Facility, and to supply treated water from the WTP to the water supply distribution system. This work is proposed to be bid this summer for late summer/early fall construction.

It is important to note that a separate case is on this evening's consent agenda requesting City Council approval of a Request for Proposals (RFP) and authorization to solicit proposals from qualified consultants to prepare final plans and specifications for the WTP based on the findings and recommendations in the attached final Feasibility Study, to administer bids, and to provide construction administration services, pending required future City Council approvals. Therefore, if this case is tabled or is not approved this evening, the consent agenda case requesting approval of the RFP and authorization to solicit proposals for the municipal WTP should also be tabled or not approved at this time since the RFP relies on approval of the final Feasibility Study first.

Hard copies of the final Feasibility Study will be placed in each Council member's in box at City Hall.

Notification:

Notifications are not required for this case.

Observations/Alternatives:

Alternatives:

Alternative #1 – Motion to adopt Resolution #21-143 approving the final Feasibility Study dated March 4, 2021, for the municipal water treatment plant.

Funding Source:

No additional funds are required for approval of this case.

Recommendation:

Staff recommends alternative #1.

Action:

Motion to adopt Resolution #21-143 approving the final Feasibility Study dated March 4, 2021, for the municipal water treatment plant.

Attachments

Resolution 21-143

Final Feasibility Study

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	05/20/2021 02:22 PM
Form Started By: Bruce Westby		Started On: 05/18/2021 09:57 AM
Final Approval Date: 05/20/2021		

Councilmember Musgrove introduced the following resolution and moved for its adoption:

RESOLUTION #21-143

RESOLUTION APPROVING WATER TREATMENT PLANT FEASIBILITY STUDY, IMPROVEMENT PROJECT #19-12

WHEREAS, pursuant to Ramsey City Council Resolution #19-191, adopted August 12, 2019, proposals were solicited for professional services to analyze the municipal water supply system source water, develop a water system model, and prepare a Feasibility Study for a centralized municipal water treatment plant for the purpose of ensuring the municipal water supply system will continue to provide adequate quantities of safe drinking water for municipal water users into the foreseeable future; and

WHEREAS, pursuant to Ramsey City Council Resolution #19-248, adopted October 8, 2019, the City entered into a contract with SEH, Inc. for the requested professional services; and

WHEREAS, City Staff recommends approving the final Feasibility Study prepared by SEH, Inc. for Improvement Project #19-12, including their findings and recommendations relatedto the construction of a municipal water treatment plant.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) The City Council hereby approves the final Feasibility Study prepared by SEH, Inc. for Improvement Project #19-12, including their findings and recommendations related to theconstruction of a municipal water treatment plant.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember Woestehoff, and upon vote being taken thereon, the following voted in favor thereof:

Mayor Kuzma
Councilmember Musgrove
Councilmember Woestehoff
Councilmember Heineman
Councilmember Howell
Councilmember Riley
Councilmember Specht

and the following voted against the same:

None

and the following abstained:

None

and the following were absent:

None

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 25th day of May, 2021.

Mayor

ATTEST:

City Clerk