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MEMORANDUM

TO: East Range Water Board

FROM: Miles Jensen (Lic AZ, CO, IA, IL, IN, MD, MI, MN, ND, NE, NM, OH, SD, VA, WI)

DATE: September 19, 2021

RE: SEH Comments to
Scenic Acres Homeowner's Association's
Questions and Points for the September 15, 2021 Board Meeting
East Range Water Project
SEH No. 159723 14.00

This memorandum offers my comments to the East Range Water Board in reference to the Scenic Acres Homeowner's Association's Questions and Points for the September 15, 2021 Board Meeting

Item No. 1:

Discussion noted. I do not have knowledge on the basis, or actual content, of the January 23, 2018. The well improvements apparently made to the Scenic Acres system will be of no use to the proposed East Range Water Project (ERWP).

Item No. 2:

No. SEH has not included any hydrants to the existing Scenic Acres water system. Hydrants have been included on the proposed ERWP water line connecting Pineville and Scenic Acres.

Item No. 3:

SEH can include installation of a hydrant at the end of the existing pipelines in the two (2) Scenic Acres cul-de-sacs. Location of the ends of these pipelines will need to be verified by representatives from Scenic Acres or the Town of White.

Item No. 4:

This is not my area of expertise and something that Fryberger probably should address. As far as the existing Scenic Acres pump house goes, we are not thinking that it will provide any beneficial use in the proposed ERWP.

Item No. 5:

No comment offered.

Item No. 6:

Schedule:

Currently, the project design is between 30% and 60% complete. SEH is planning to hit the 60% completion mark on 9/23/2021 for presentation at the 9/28/2021 technical committee meeting.

Project Cost:

I am not aware of any change in project costs have changed from our 30% level estimate made on 8-6-2021 (presented to the Tech Committee on 8-10-2021 and the ERWB on 8-18-2021).

Engineers | Architects | Planners | Scientists

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Completion of Final Bidding Documents:

SEH is planning to complete the project documents by the end of November 2021.

Item No. 7:

Cost of water main through Pineville is currently estimated at \$0.8M.

Cost of water main extending from Pineville to Scenic Acres is currently estimated at \$1.1M.

Item No. 8:

Water modeling was completed in 2015 for water extraction by Giant's Ridge, the City of Biwabik, City of Aurora, Town of White and City of Hoyt Lakes. The modeling work involved two (2) separate software programs with lake level impacts predicted to range from a drop of 5 feet to a drop of 35 feet. These results have been shared with the MN DNR on several occasions since the 2015 completion of the analysis.

Item No. 9:

Zebra Mussels: It is possible that zebra mussels may someday find their way into Lake Mine. In anticipation of such an occurrence, SEH will be designing the intake screen to be made of a copper alloy that zebra mussels do not like and retards attachment of the mussel larvae (veligers) to the screen. Additionally, SEH is designing the intake pump station to include a chemical room space that can house chlorine or permanganate – common water treatment chemicals – that can be feedthrough a small pipe installed in the intake pipe all the way to the intake screen to retard attachment of the veligers to the inside of the intake pipe, caisson or raw water pumps and piping. As far as future costs go should zebra mussels require chemical treatment the cost will not be that great as the chemicals can serve as pretreatment chemicals that will be fed at the plant anyway.

Item No. 10:

Scenic Acres' water quality comparison: No, SEH has not tested the quality of the water in the Scenic Acres system.

Item No. 11:

Additional sources of funding and best guess of final funding amount: This is not my area of expertise. I believe that we are looking at opportunities through the IRRRB, Corps of Engineers, State of Minnesota Drinking Water Revolving Loan grant funds, State of Minnesota bonding bill funds. Not sure if there are others. Obviously, it is hard to know the value of funding that the project will ultimately receive.

Item No. 12:

As the project cost estimates and funding clues get updated, the project financing model can be updated. The final financing model cannot be completed until the project is actually bid and there are real numbers to incorporate into the financing model.

Item No. 13:

No comment offered. This is an ERWB decision.

Item No. 14:

No comment offered. This is a ERWB decision.

Item No. 15:

SEH is happy to participate in any informational meetings.

Item No. 16:

This is a Town of White decision.

Memorandum

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Page 3

Item No. 17:

The biggest roadblock might be funding. I am not sure of what others there might be. Connection of the ERWP to Scenic Acres appears feasible to occur in the Fall of 2023.