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MEMORANDUM

TO: Ash River Sanitary Sewer District Board

FROM: Colin Marcusen, P.E. (Lic. MN, ND, SD, IA)
Project Manager

DATE: August 12, 2020

RE: Engineering Updates
SEH No. STLES 146794 14.00

The purpose of this memo is to provide you with updates related to the Ash River Sanitary Sewer District (ARSSD) Collection and Treatment Systems project for decision making at the next regular District meeting.

FACILITY PLAN UPDATE

We do not yet have approval of the Facility Plan from MPCA. The following will lead to Facility Plan approval after an amendment is submitted:

1. Service Area Decisions:
 - a. Total project area has an estimated project cost of \$16,987,500.

Alternative	Capital Cost
Mechanical Pretreatment with Biomicrobics System and Subsurface Dispersal	\$5,108,000
Low Pressure Collection System	\$9,717,000
Additional Collection System Costs for Serving Properties on the South Side of the River	\$2,162,500
Total Project Costs	\$16,987,500

- i. We have received Preliminary Effluent Limits from the MPCA that do not allow for treated effluent discharge to surface waters in this area (Outstanding Resource Value Waters). Therefore, a subsurface discharge will be required. Costs listed above are conservative and assume much of the excavation will require removal of bedrock.
 - ii. Low Pressure Collection System Costs assume bedrock is present in many areas. Additional soil borings are required to refine cost estimates.
 - b. Options for Serving South Side of River Properties
 - i. One River crossing and low pressure system - \$2.16M
 - ii. Two River crossings and low pressure system - \$2.60M
 - iii. Low pressure system and small community treatment system - \$2.24M
 - iv. Individual systems – hybrid model. Owner pays a one time fee for construction or improvements to their individual system. They then pay a monthly fee for the District to maintain and make future improvements. Costs for this alternative have not been calculated.
 - v. No service - \$0.
2. PPL Scoring

- a. While not pertinent to obtaining approval of the Facility Plan, the project will be scored against other projects in the state. In order to be considered in the “fundable” range, we’ll need to exhibit non-compliance in individual septic systems.

PROJECT NEXT STEPS

1. Archaeological Review
 - a. Sue with Duluth Archaeological Center will be contacting property owners to gain permission to access their properties and if she chooses, to explore further by use of hand tools (shovel). MnSHPO required that this review be completed prior to Facility Plan approval.
2. Easements
 - a. Would like to establish blanket easements for review and construction so that we do not have to modify easements if the tank location needs to move slightly at the time of installation.
 - b. Need a decision from the District on Title Commitments from a Title company for each parcel or Owners and Encumbrances reports
 - i. O & E is most common and has been used on other similar projects.
 - ii. O & E only looks at the last deed of record to identify land owner
 - c. If homeowner refuses consent to an easement will the District elect to utilize eminent domain to acquire the easements?
 - d. If there are mortgages on the properties, we will need consent from the lender because easements are a violation of the mortgage terms. Usually easy to obtain from local lenders but not as easy for national banks.
3. Soil Borings
 - a. To get an idea of the amount of available sand or depth to bedrock, soil boring should be conducted at each place where a grinder installation is planned. This will help refine costs and help us better plan for construction.
4. Project Commitment
 - a. Will the District require connection for every property in the District?
 - b. To get an idea of those property owners who would like to connect to a community system, we will send correspondence to include a “Commitment Card”. By signing the document, the property owner agrees to connect to the future system. This will help the District to get an idea of how many connections there will be. The costs of construction and O & M are split among the users. More owners means less cost per user and less funding needed.
 - i. Connection of every property would result in 230.8 EDUs at the current calculation
5. Review of EDU assignments – future meeting

SCHEDULE

The project is currently in report phase. The draft Facility Plan was submitted to the Minnesota Pollution Control Agency (MPCA) in March 2020. An Amendment to further refine the scope of work and to include the archaeological review, will be submitted after the review is complete.

Preliminary Project Schedule	
Archaeological review complete and submittal of Facility Plan Amendment	September 2020
Public Hearing to discuss Findings of Facility Plan	September 2020
MPCA Facility Plan Review	Sept-Dec, 2020
MPCA Facility Plan Approval	December 2020
Submit Intended Use Plan (funding) Request to MPCA	Deadline June 2021
Design of Recommended Improvements	January – May 2021

Submit 90% Design to MPCA for approval	May 2021
Secure Construction Funding	Prior to Bidding
MPCA approval and Advertisement for Bids (pending securing funding)	As early as August 2021
Project Bid Date	As early as September 2021
Earliest Potential Construction Start	October 2021

FUNDING

Minnesota Clean Water Legacy Grant funds have been obtained for a portion of this project. The grant is in the amount of \$450,000, but includes a match of \$90,000 from St. Louis County's Environmental Trust Fund, for a total of \$540,000. These funds will be mostly expended by engineering and geotechnical services. The JPB and SEH's lobbyists have secured another \$450,000 in grant funding for Ash River. SEH will complete the budget and schedule in the next few weeks and submit to MPCA for review to finalize. This funding will allow completing of easements, soil borings, and design with likely some left over for construction. Additional funding will be needed to complete the construction of the project. The goal in obtaining funding is to set sewer rates at or below \$100 per month per EDU.

clm/mrb

c: Jason Chopp, SEH

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