

ICR SANITARY DISTRICT
PO Box 1963 Prescott, AZ 86302

Kimley-Horn
Engineering Report Hearing

June 9, 2022

Date: Thursday, June 9, 2022

Approved July 12, 2022

Time: 2:00 p.m.

Place: Granite Peak Unitarian Universalist Congregation, 882 Sunset Ave., Prescott, AZ.

1. CALL TO ORDER *Mr. Summers called the Engineering Report Hearing to order at approximately 2:00 p.m.*

2. ROLL CALL *Present were: Mr. Bob Summers, Board Chairman; Mr. Jerry DeSantis, Board Member; Mr. Jeff McLeod, Board Member; Mr. Bob Busch, District Manager (via teleconference); Mr. Bill . Whittington, Legal Counsel; Mr. Bill DeHaan, Legal Counsel; Isabel Yribe, Clerk (via teleconference).*

The following residents were in attendance: Mr. Mark Arnold, Mr. Jimmy and Mrs. Stoner, Ms. Eileen McGowan, Ms. Jan Robinson and Mr. Bob Hilb

3. SUMMARY *Mr. Summers read the following:*

Why did your ICR Sanitary District Board call for this public hearing on an Engineering Report? The short answer is because Arizona Statutes require it. The more detailed answer has several components

- 1. The ICRSD is bound by the Restated and Amended Development Agreement with Whispering Canyon and Talking Rock Developers to provide wastewater treatment facilities, the developers are bound to pay a lot sales fee for every lot they sell. The lot sales fees are placed in a restricted capital account used for treatment plant expansion.*
- 2. Unfortunately, the last plant expansion and inflation have left the restricted capital account far short of current plant capacity expansion estimates.*
- 3. The current treatment plant capacity of 90,000 gallons per day will be exceeded within the next 3 to 5 years.*
- 4. Equipment lead time, time to obtain permits, and construction time may exceed 18 months.*
- 5. The Board believes the lowest cost method of obtaining funds to cover the cost of a plant capacity expansion is through the Water Infrastructure Finance Authority of Arizona (WIFA) who offers low interest loans to water and wastewater treatment companies.*
- 6. To obtain a loan from WIFA, the Sanitary District must have an engineering study performed on capacity needs and expansion, hold a public hearing on the Engineering study, and use the study to draft a ballot proposal to place the authorization for the*

ICRSD Board to acquire a loan before the District voters in the November general election.

Why should current residents vote to approve the District acquiring a loan?

A loan will be paid back over time, spreading the cost of the plant expansion over 20 to 30 years. Instead of only current users paying for the plant capacity expansion, new users will help repay the loan, new lot sales fees will also help to repay the loan. Further, by the District abiding by the Amended and Restated Development Agreement, the District can avoid costly litigation over capacity assurance forms. The firm of Kimley-Horn was hired by the ICRSD Board to evaluate the options for plant capacity expansion. First, they developed a historical record of the ICR Sanitary Districts treatment plant. The initial plant was a Sequencing Batch Reactor plant with a capacity of 46,000 gallons per day producing Class B effluent. This plant was replaced with an extended aeration activated sludge system, the Santec plant, with a capacity of 62,500 gallons per day producing class B+ effluent. Class B+ effluent is permitted to be used for several types of irrigation, including Golf Courses. An expansion to the Santec plant was completed in 2020 increasing the capacity to 90,000 gallons per day, the current plant capacity. Kimley-Horn also studied the ICR district records over a recent two year period to determine the historical average daily household discharge and found it to be 89 gallons per day. Next, a study done by a subgroup of the plant capacity expansion committee, incorporating input from Yavapai County Development Services and the Developers, was used to determine full build out of the Sanitary District to be 1706 homes. Because the Developers have the option to change unbuilt subdivision densities and to provide a safety factor, the Board advised Kimley-Horn to use 1900 as the full build out number for this report. The historical household discharge of 89 GPD times the 1900 homes full build out number yielded the average dry weather flow of 169,100 gallons per day to establish the Sanitary Plant full build out daily capacity used in this report. Once a daily full build out capacity was established, Kimley-Horn moved to studying the options available to reach this plant capacity. Several sewage treatment options were evaluated starting with the Conventional Activated Sludge Process (CAS), there are many variations of Conventional Activated Sludge process. Kimley-Horn's report specifically addressed Conventional Activated Sludge – Tapered Diffused Aeration, Modified Ludzack-Ettinger (MLE) process, Bardenpho 4 and 5 stage process and Oxidation ditch systems. Kimley-Horn also included Sequencing Batch Reactor (SBR) and Membrane Bioreactor (MBR) systems in their study. Kimley-Horn recommended two options, expansion of the existing Santec System, which is a variation of a Conventional Activated Sludge system or a new SBR wastewater treatment plant. In both options, Kimley-Horn recommended the addition of a new sludge management system. The Membrane Bioreactor was not considered for this project because MBR systems are very expensive to install, generally used where space is limited, and a high quality effluent is required. The Board found the cost estimates for the two options omitted the cost for the inflow screening that was included in the initial Santec plant design, but never installed and the cost of engineering the systems. Once the cost estimates are amended the +30% numbers, rough cost estimate plus a 30% contingency, will be approximately \$3,400,000 for the expansion of the existing Santec system and approximately \$5,700,000 for a new Sequencing Batch Reactor system. The Board is using the plus 30% number because the ballot proposition must include a

not to exceed limit and in this early stage of cost analysis, even though the estimates come from the potential suppliers, required permit additions and inflation must be covered by the “not to exceed” amount.

4. CALL TO THE PUBLIC *Mr. Hilb stated that it was his recollection that Santec Engineering owed the District a capacity analysis. There was a brief discussion regarding the plant’s capacity as Mr. Hilb estimated it and what the ADEQ and Santec Engineering saw capacity as. A lengthy discussion ensued as Mr. Hilb expressed his concerns regarding the Board using “worst case” figures when figuring out the capacity the proposed plant would need. Factors such as residents being home during Covid 19, residents gone for vacation, agricultural land, primary and secondary homes, future developments and their duty to pay for future expansions were all discussed today. The Board clarified that building to a higher capacity for only 30% more now versus having to start additional expansion in the future would save the District a substantial amount of money..*

5. ADJOURNMENT

Therefore, the Kimley-Horn Engineering Report Hearing was adjourned at approximately 2:40 p.m.