

MEMORANDUM

Date: July 19, 2021
To: Board of Directors
From: Tom Hennig, General Manager
Subject: Requests from Residences East & West to Confirm Development Requirements

RECOMMENDED ACTION

Approve the request from Bob Kiel and John Sullivan to consider their proposed plans for recycled water, water delivery, sewer system and drainage design in relation to the existing approved plans for the Residences East and West subdivisions. Each of the subdivisions was approved by the County for 99 single family home sites for a total of 198 new homes.

BACKGROUND

At the CSD Board Meeting on June 16th, Developer Bob Keil requested a lower deposit amount to obtain concurrence on their improvement plans for the Residences East and West. This deposit and developer agreement would allow them to design the development in a manner that meets the plans currently on file with the District with certain alterations. The request was approved by the General Manager and a reduced deposit was collected along with a signed developer agreement. This first step opened the opportunity to work with the CSD engineer, Domenichelli and Associates, (DA) on proposed plans. To allow the Developer to meet their planned Spring 2022 construction deadline, we have worked with DA and the Developer to bring these four specific items to this Board meeting.

The District has reviewed the four items below and has provided responses based on current information available. These responses are not intended to be a complete list of conditions or requirements to complete the improvement plan processes, as these processes are an ongoing effort of review, findings, and negotiations. It is our hope this helps to provide a starting point and a basis to begin the improvement plans.

Recycled Water – The most recent Conditions of Approval from Sacramento County for this development do not mandate the use of recycled water for the Residences East and West. The delivery of recycled water from District is estimated to cost more than \$4,000,000 (2017 dollars). As part of the many historical documents associated with the planned long-term use of recycled water the Board of Directors is granted the authority to consider whether to require specific developments or lands to comply with the plans. Furthermore, the District may consider the economic feasibility of the costs associated with meeting wastewater disposal alternative.

Before the Board considers waving the requirement for this development to provide recycled water delivery, we are recommending that the Developer be allowed to proceed without

including this option in their engineering study. As part of this agreement the developer will be required to fund a new recycled water study to validate the assumptions made in bringing this matter forward for consideration by the Board. If it is determined that the development of a recycled water delivery system is economically justified, the developer will be required to re-engineer their plans to include recycled water delivery to each household.

Sewer – According to the 2004 Rancho Murieta North Infrastructure Master Plan and the Sewer System Management Plan of 2019, it has been suggested to increase the existing sewer pipes sizes along the West side of Laguna Joaquin from 8 inches to 10 and 12 inches to accommodate additional flows from Residences East and West. Upsizing along this section of the existing sewer will eliminate current capacity issue and would be upgraded as a project expense under the supervision of the District. These upgrades would be completed over 1-3 years as volumes come online from the 198 homes. Construction will be ongoing through 2025, if improvements are in the ground in 2022.

The District concurs that the alignment described above would be a preferred solution. This plan will provide improvements to the existing system without adding the requirement for maintaining the infrastructure related to an additional lift station and piping. The Developer shall provide a sewer study specific to Residences East and West that will establish pipe capacities and sizes required as a supporting document to new designs. The sewer study models should include all elements of the system to insure there are no adverse impacts to other connecting infrastructure. An alignment showing adequate cover and utility separation for the new system must be established with the sewer study. Adequate geotechnical data relative to soils conditions and potential pipe infiltration shall be presented for this alignment near Laguna Joaquin. If phasing of improvement is proposed, the developer will provide phased layouts and descriptions in the sewer study. This study should also provide data on impacts to the adjacent residences and community.

Water - According to the developer, the results of the Water Model demonstrated that the existing Hydro-pneumatic pump system has the capacity to accommodate the demand of the Residences East and West with adequate system pressures (including fire suppression). The Developer would like the District to confirm these findings and confirm the connection points for the new development.

The “hydro-pneumatic pump system” is intended to serve Residences East & West; however, the District has identified upgrades required for the pump station that must be considered. To accommodate all new development proposed in the upper pressure zone, additional storage may be necessary. Updated modeling of the entire system with new development demands should be provided to the District for review. If additional storage or upgrades to the pump station and/or storage are needed for development to occur, contribution to the facilities will be a condition of the subject projects.

In addition to the potential storage needs identified above, a water study for the Residences East and West shall be submitted to show that maximum day plus fire flow can be delivered

throughout the district based on current fire flow requirements for the associated building types and sizes. The connection points should be like those shown in the Masterplan. Actual locations should be confirmed by the developer's engineer. Once locations are identified, the developer's engineer shall submit those locations and approximate maximum day plus fire flow demands for the entire development to the District for review.

Drainage - The Residences East and West engineering report determined that the existing conveyance system can accommodate 100 year storm event. The developer is proposing to build an on-site detention basin designed to reduce post development peak flows to pre-development peak conditions or less.

The proper sizing of detention facilities to mitigate for increased runoff potential downstream will meet an important goal of the drainage system. In addition, stormwater quality goals must be addressed per State and County guidelines. A drainage study with appropriate modeling shall be submitted to show how these features will meet current standards.

SUMMARY

District staff, with guidance from Domenichelli and Associates, are recommending the Board consider approving the four requests by the Developers of the Residences East and West. If approved, it is recommended they be required to meet additional recycled water delivery to the homes if it is determined to be necessary, after a review of the various recycled water requirements for the full buildout of Rancho Murieta. Staff also recommends the District allow the proposed engineering plans for Water, Sewer, and Drainage to be completed for approval.