15160 Jackson Road, Rancho Murieta, CA 95683 Office - 916-354-3700 \* Fax - 916-354-2082

## **IMPROVEMENTS COMMITTEE**

(Directors Randy Jenco and Martin Pohll)

Regular Meeting May 3, 2022 at 8:00 a.m.

This meeting will be held via ZOOM video conference only. You can join the conference by (1) logging on to https://us02web.zoom.us/j/87856274356, entering Meeting ID no. 878 5627 4356 and using the audio on your computer, or (2) dialing into 1-669-900-9128 and entering the meeting code 878 5627 4356. Those wishing to join with audio only can simply call the telephone number above and enter the code. Participants wishing to join the call anonymously have the option of dialing \*67 from their phone. Please refer to your telephone service provider for specific instructions. PLEASE NOTE – MOBILE DEVICE USERS MAY NEED TO INSTALL AN APP PRIOR TO USE AND MAC AND PC DESKTOP AND LAPTOP USES WILL REQUIRE YOU TO RUN A ZOOM INSTALLER APPLICATION – PLEASE FOLLOW DIRECTIONS AS PROVIDED BY ZOOM. IT IS RECOMMENDED YOU ATTEMPT TO LOGIN AT LEAST 5 MINUTES BEFORE THE START OF THE MEETING.

## **AGENDA**

- 1. Call to Order
- Consider Finding That as a Result of the COVID-19 Emergency: (i) Meeting in Person Would Present Imminent Risks to the Health or Safety of Attendees; and (ii) the Meeting is Authorized to be Held by Teleconference Pursuant to Gov. Code, § 54953, subd. (e)(1)(C).
- 3. Comments from the Public
- 4. Monthly Update
- 5. Discuss Adkins Bathometric Study
- 6. Discuss Capital Improvement Projects (CIP) for FY2022-23
- 7. Discuss Water Conveyance Options Basis of Design Report
- 8. Director and Staff Comments/Suggestions
- 9. Adjournment

<sup>&</sup>quot;In accordance with California Government Code Section 54957.5, any writing or document that is a public record, relates to an open session agenda item and is distributed less than 24 hours prior to a special meeting, will be made available for public inspection in the District offices during normal business hours. If, however, the document is not distributed until the regular meeting to which it relates, then the document or writing will be made available to the public at the location of the meeting."



In compliance with the Americans with Disabilities Act if you are an individual with a disability and you need a disability-related modification or accommodation to participate in this meeting or need assistance to participate in this teleconference meeting, please contact the District Office at 916-354-3700 or awilder@rmcsd.com. Requests must be made as soon as possible.

Note: This agenda is posted pursuant to the provisions of the Government Code commencing at Section 54950. The date of this posting is April 28, 2022. Posting locations are: 1) District Office; 2) Post Office; 3) Rancho Murieta Association; 4) Murieta Village Association.

#### **MEMORANDUM**

Date: April 25, 2022

To: Improvements Committee

From: Michael Fritschi, P.E. - Director of Operations

Subject: Monthly Utilities Department Updates

#### **SB 170 PROJECTS**

<u>Water Treatment Facility Sodium Hypochlorite Conversion</u> – HDR has been given the notice to proceed on design.

<u>Recycled Water Disinfection Project</u> – RFP will be released in May for design services for the Recycled Water Disinfection Upgrade at the wastewater treatment facility.

<u>Granlees Safety Improvements</u> - HDR has been given the notice to proceed on the preliminary design analysis which will review the safety improvements and operational rehabilitation and to outline any environmental permitting that would be required for the project.

#### **LAGUNA JOAQUIN**

Staff have discussed the preparation of a basis of design report (BODR) with Domenichelli and Associates to analyze the feasibility of a new conveyance system from Calero or Chesbro Reservoir to Laguna Joaquin. The analysis would evaluate the best path with respect to minimizing water loss and means to transport the water, including bypass of the existing CIA ditch. This item is being reviewed separately in the meeting today.

### **SEWER**

#### Lift 6a (between De La Cruz Dr. and Bass Lake)

Lift station 6a is currently down to one operational pump (out of 2). Staff are going to replace the capacitor pack for the non-operational pump to see if that can bring the pump back to operation. The District may need to procure a replacement pump if the replaced capacitor does not fix the problem. The replacement pump is quoted at \$12,200. Having two pumps in a sewer lift station is considered the minimal level of redundancy and is standard practice.

#### **Recycled Water Tertiary Facility**

The Tertiary facility is envisioned to be up and running to provide recycled water the first week of May. The lag in production startup is due to the tertiary pumps needing to be rebuilt and reinstalled. Staff has done everything in their power to facilitate the pump rebuild in a timely basis. The County club has been notified of the later startup of the recycled water production for this upcoming irrigation season.

## **WATER**

## Raw Water Pumping

Currently staff are operating (2) 125 hp intake pumps sending water directly to Calero Reservoir. Chesbro Reservoir is close to full. The Clementia reservoir level is has reached the bottom of the stop logs.

<u>Rio Oso Pump Replacement Update</u> – The expansion couplings have been ordered and are scheduled to arrive in late June. The District is in the process of receiving a quote to replace the older gate valves while the pumps are being replaced. Staff are planning to evaluate whether a third properly sized pump would provide for additional redundancy and efficiency next fiscal year.

## **The Water Treatment Facility**

Water Treatment Facility #1 is operating at about 800 gpm (1.1 mgd) and plant 2 is currently off due to lower demand.

### **Water Conservation**

The state drought regulation meeting was attended through zoom and it was learned that the emergency state stage 2 drought requirements only apply to urban suppliers. However, all users will be subject to some type of ban on non-functional turf. The ban would be for non-functional use of potable water for turf for commercial, industrial, and institutional use, with the following exclusions:

- Residential excluded from ban
- Sport use excluded from ban
- Recreational excluded from ban

The state will have more progress on the definitions and regs in May.

## **Calero Stage Storage Curve**

Adkins Engineering will be onsite in May to perform a bathymetric survey of Reservoir Calero.

#### SITE DEVELOPMENT UPDATE & STORMWATER

### **Development**

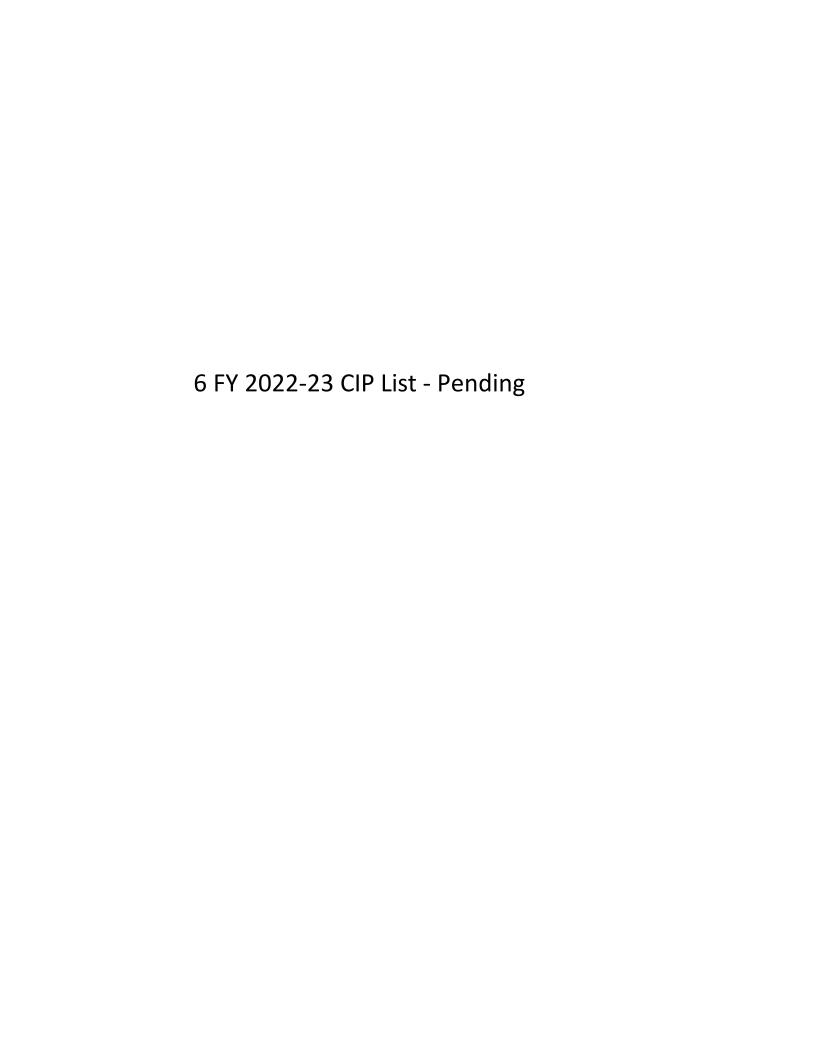
Riverview: Phase 2 and sanitary sewer masterplan update was submitted to the District for review

**Retreats:** KHOV was issued a Notice of Violation by the District for failing to prevent sediment from leaving the site and have been fined \$500. KHOV is updating their SWPPP to comply with the District requirements.

Taco Bell: no update

Circle K/Shell: no update

**Residences North** – The District has received tentative Zoning and tentative Subdivision maps for the North.



#### **MEMORANDUM**

Date: April 28, 2022

To: Board of Directors

From: Michael Fritschi, P.E. - Director of Operations

Subject: Water Conveyance Options basis of design report (BODR)

#### RECOMMENDED ACTION

It is recommended that the improvements committee approve bringing the contract with Domenichelli & Associates for the Water Conveyance Options basis of design report (BODR) in the amount of \$27,970 to the next regularly scheduled Board meeting.

#### **BACKGROUND**

Staff have discussed the preparation of a basis of design report (BODR) with Domenichelli and Associates to analyze the feasibility of a new conveyance system from Calero or Chesbro Reservoir to Laguna Joaquin. The analysis would evaluate the best path with respect to minimizing water loss and means to transport the water, including bypass of the existing CIA ditch.

This BODR would provide valuable planning information in the analysis of alternatives to utilizing the CIA ditch system and could provide the basis for beginning design efforts should the District decide to move forward with the alternate conveyance project.

#### FINANCIAL IMPACT

The FY 2021-22 has funds appropriated for this project. No additional appropriation is needed at this time.



# DOMENICHELLI AND ASSOCIATES, INC. CIVIL ENGINEERING

April 20, 2022

Tom Hennig General Manager Rancho Murieta CSD PO Box 1050 Rancho Murieta, CA 95683

Subject: Proposal for Raw Water Conveyance BODR- Clementia or Chesbro to Laguna Joaquin

Dear Tom,

Attached is our scope and fee for preparation and submittal of a Basis of Design Report (BODR) for conveying raw water from either Clementia or Chesbro Reservoir to the Laguna Joaquin. We understand that the District would like to abandon the existing Snyder and Stonehouse Ditch, and provide a new conveyance system from one of the storage reservoirs to Laguna Joaquin, that follows a more direct and efficient (in terms of access and reduced water loss) route.

We will base our analyses and project layout on existing LiDAR mapping of the project limits, District GIS maps and desired flow information provided by the District.

Please contact me if you have any questions regarding this proposal.

Sincerely.

Joseph Domenichelli, PE

President, Domenichelli & Associates



## DOMENICHELLI AND ASSOCIATES, INC. CIVIL ENGINEERING

Rancho Murieta CSD Water Conveyance Options Raw Water from Clementia or Chesbro to Laguna Joaquin Basis of Design Report (BODR) Proposal 4-20-22

## **Scope of Services**

## Task 1 – Base Mapping and Gather Pertinent Information

*Task 1A. Base Map of Study Area* - D&A will download LiDAR generated topo files for Rancho Murieta and overlay the contours onto satellite map images for use in base mapping.

*Task 1B. Review District Information-* D&A will review District GIS information for extracting existing utilities and also consult with the District regarding desired flow to convey to Laguna Joaquin.

## Task 2 – BODR Analysis & Report

This conveyance will most likely be a pipeline to convey raw water from either Clementia or Chesbro Reservoirs to Laguna Joaquin through existing streets. A portion may be conveyed in existing drainage ditches leading to Laguna Joaquin, however, water loss through a ditch system would need to be accounted for.

- *Task 2A. Determine Flow Requirements* From information gathered in Task 1B, D&A will determine volume and maximum flow rate required to maintain water quality of Laguna Joaquin and provide local irrigation needs.
- Task 2B. Determine Pipeline Alignment & Size For the pipeline conveyance alternative, DA& will assess alignment options through existing streets and other right of way to convey the require flows. D&A will also review existing ditch topography to assess possibility of ditch usage along with the pipeline alternatives, including capacity of existing culverts. This effort will also include estimated ditch flow losses.
- *Task 2C. Prepare Draft & Final BODR* D&A will write up a draft report to include a summary of the findings from Tasks 1 through 2B, describe the preferred project, compile cost estimates for this project and prepare preliminary figures showing potential project alignments. A workshop review meeting will follow District review to go over comments and questions to be answered for the final BODR.

After the draft report review workshop, D&A will incorporate all comments to complete a final report for submittal to the District.

## Deliverables:

- 1. Draft BODR PDF version and one hard copy of the draft report.
- 2. Final BODR PDF and three hard copies of the final report.



# DOMENICHELLI AND ASSOCIATES, INC. CIVIL ENGINEERING

## **Fee Estimate**

Water Conveyance Options Raw Water from Clementia or Chesbro to Laguna Joaquin Basis of Design Report Proposal

| ns              |  |   |                 |   |  |   |
|-----------------|--|---|-----------------|---|--|---|
|                 | Princ. QA/QC                             | PM  | PE              |   |  |   |
|                 | Joe D                                    | Daryl H   | Matt D          | Expense   | 3  |   |
|                 | \$190                                    | \$165   | \$125           |   |  | Totals  |
|                 |  |   |                 |   |  |   |
|                 |  |   |                 |   |  |   |
|                 |  | 4   | 20              |   | \$   | 3,160   |
|                 | 2  | 8   | 16              |   | \$   | 3,700   |
| Subtotal:       |  |   |                 |   | \$   | 6,860   |
| o Laguna Joaqu  | in                                       |   |                 |   |  |   |
|                 | 4  | 8   | 16              |   | \$   | 4,080   |
|                 | 8  | 16  | 32              |   | \$   | 8,160   |
|                 | 4  | 24  | 32              | \$ 15   | 0 \$   | 8,870   |
| Subtotal:       |  |   |                 |   | \$   | 21,110  |
|                 |  |   |                 |   |  |   |
|                 |  | •   | •               | •   | •  |   |
| Project Totals: | 18                                       | 60  | 116             | \$ 15   | 0 \$   | 27,970  |
|                 |  |   |                 |   |  |   |
|                 | Subtotal:<br>D Laguna Joaqu<br>Subtotal: | Princ. QA/QC Joe D \$190  2 Subtotal: D Laguna Joaquin  4 8 4 Subtotal: | Princ. QA/QC PM | Princ. QA/QC PM PE Joe D Daryl H Matt D \$190 \$165 \$125   4 20 2 8 16  Subtotal:  D Laguna Joaquin  4 8 16 8 16 32 4 24 32  Subtotal: | Princ. QA/QC PM PE Joe D Daryl H Matt D Expenses \$190 \$165 \$125  4 20 2 8 16  Subtotal:  D Laguna Joaquin  4 8 16 8 16 8 16 32 4 24 32 \$ 15  Subtotal: | Princ. QA/QC PM PE Joe D Daryl H Matt D Expenses \$190 \$165 \$125  4 20 \$ 2 8 16 \$ Subtotal: \$ 5 Laguna Joaquin  4 8 16 \$ 8 16 \$ 8 16 32 \$ 4 24 32 \$ 150 \$ Subtotal: \$ Subtotal: \$ 5 Subtotal: \$ 5 Laguna Joaquin \$ 5 Subtotal: \$ 5 |