



RANCHO MURIETA COMMUNITY SERVICES DISTRICT

15160 Jackson Road, Rancho Murieta, CA 95683

Office - 916-354-3700 * Fax - 916-354-2082

IMPROVEMENTS COMMITTEE

(Directors Morrison Graf and Les Clark)

Regular Meeting

October 2, 2018 at 8:30 a.m.

All persons present at District meetings will place their cellular devices in silent and/or vibrate mode (no ringing of any kind). During meetings, these devices will be used only for emergency purposes and, if used, the party called/calling will exit the meeting room for conversation. Other electronic and internet enabled devices are to be used in the "silent" mode. Under no circumstances will recording devices or problems associated with them be permitted to interrupt or delay District meetings.

AGENDA

1. **Call to Order**
2. **Comments from the Public**
3. **Monthly Updates**
 - ✚ Development
 - ✚ Emergency Well Project
 - ✚ Cantova Pump replacement
 - ✚ Water Plant Culvert
4. **Declare Vehicle 215 Surplus**
5. **Main Lift South Storm Pump and Motor Repairs**
6. **Cantova Sewer Pump Station Installation**
7. **Cantova Sewer Pump Station Bypass**
8. **Discuss Whether or Not to Proceed with Laguna Joaquin Measurement System**
9. **Discuss Impact of Having or Not Having the Augmentation Well**
10. **Additional Costs for Crane Rental**
11. **Directors & Staff Comments/Suggestions *[no action]***
12. **Adjournment**

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 72 hours prior to a regular 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.

Note: This agenda is posted pursuant to the provisions of the Government Code commencing at Section 54950. The date of this posting is September 28, 2018. Posting locations are: 1) District Office; 2) Post Office; 3) Rancho Murieta Association; 4) Murieta Village Association.

MEMORANDUM

Date: September 28, 2018
To: Improvements Committee
From: Paul Siebensohn, Director of Field Operations
Subject: Monthly Updates

PROJECTS

Development

The Retreats East and North

The developer's engineer has reached out to us noting that they want to start this project. Their intent is to install some initial water infrastructure and build three (3) model homes. This project is in review with Coastland Engineering.

The Retreats West

The three (3) homes being built are still in the process of being completed before tying in water and sewer connections with oversight from District staff.

The Murieta Gardens - Murieta Marketplace

This project is still on hold.

The Murieta Gardens – Highway 16 Off-Site Improvements

The Highway 16 road widening and development of an entrance in to the Murieta Gardens development is nearing completion. We have raised our previous concern with the CIA ditch pipe installation that it has never been pressure tested and appears to still leak or there is a groundwater issue that needs to be dealt with. The District has concern that there will be a long-term liability and issues with the future lots below where the CIA pipe is installed that will come back on the District if its not properly dealt with now.

The Murieta Gardens II – Subdivision

The contractor is continuing to install infrastructure with oversight from Coastland Engineering.

Rancho Murieta North – Development Project

The District is in receipt of the water and sewer studies submitted for this project. Review of the studies remains in standby as we are still waiting on requested funding to review of these documents. No Drainage study has been submitted yet.

FAA Business Park

This project is submitting architectural plans into the County Building Department shortly in hopes of beginning this project soon.

Equestrian Center Food Service Building

The contractor for this site has begun laying out infrastructure for the future building including water and sewer lines. I have reached out to the project twice recently to request a Facilities Extension Agreement be provided

to the District and note what the estimated water and sewer demand impacts will be. No response to date has been received. In the meantime, staff has provided some oversight on the water and sewer lines being installed.

District Projects

Emergency Well Project

The appraisal from Integra Realty Resources has been completed and is under review. Negotiations for the well site is still needed should the project move forward.

Cantova pump replacements

Bids for the bypass and installation are being brought forward for Board for approval.

Water Plant Culvert

The pre-cast culvert has been set in the drainage channel by the water plant. Staff is in the process of backfilling the box per the manufacturer's standards. Once that is complete, staff will work on getting entrance and exit headwalls built per District Standards and a rough roadway over it and around to the raw water filtration station. Photos of the installation are shown below.



MEMORANDUM

Date: October 10, 2018
To: Board of Directors
From: Paul Siebensohn, Director of Field Operations
Subject: Consider Adoption of Resolution R2018-09, Surplus District Equipment

RECOMMENDED ACTION

Adopt Resolution R2018-09 declaring the 2003 F-150, vehicle number 215, as District surplus equipment.

BACKGROUND

The District purchased this F-150 truck in 2003 which currently has approximately 134,148 miles and countless run hours on it. The truck was originally purchased from the Sewer Budget and reserved for a five (5) year replacement under that budget. Costs to maintain this vehicle are running too high to keep as a valuable asset. District assigned asset tag is #573-1.

RESOLUTION # R2018-09

**A RESOLUTION OF THE BOARD OF DIRECTORS OF
THE RANCHO MURIETA COMMUNITY SERVICES DISTRICT
AUTHORIZING SALE OF DISTRICT SURPLUS EQUIPMENT**

WHEREAS, in the past, the Rancho Murieta Community Services District has purchased equipment to be used in the provision of water, sewer, drainage, solid waste, and security services to the community of Rancho Murieta; and

WHEREAS, the equipment listed below has become obsolete and its useful life has been consumed:

<u>No.</u>	<u>Description</u>
1	2003 F-150 (vehicle #215)

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Rancho Murieta Community Services District declares this equipment surplus to the needs of the District and no longer necessary for the District's uses. The Board authorizes the General Manager to sell the equipment for fair value with procedures, terms and conditions that he finds appropriate or, if the General Manager determines that any equipment has no substantial value, to dispose of the equipment.

PASSED AND ADOPTED this 17th day of October 2018 by the following roll call vote:

- Ayes:**
- Noes:**
- Absent:**
- Abstain:**

Mark Pecotich, President of the Board
Rancho Murieta Community Services District

[SEAL]

Attest:

Suzanne Lindenfeld, District Secretary

MEMORANDUM

Date: September 21, 2018
To: Improvements Committee
From: Paul Siebensohn, Director of Field Operations
Subject: Consider Approval of Main Lift South Stormwater Pump Repairs

RECOMMENDED ACTION

Approve the proposal from Delta Pump Company for repairs to Main Lift South stormwater pump 4 & 5 in an amount not to exceed \$77,334 plus a 15% contingency, for a total of \$88,934. Funding to come from Drainage Reserves.

BACKGROUND

The Main Lift South storm water pumps pump water that is collected from the interior side of the South community levee and to the Cosumnes River for flood protection. During the course of the heavy storms experienced this past year, four (4) of the five (5) pumps sustained some damage that would not allow them to rotate. Two (2) pumps have already been serviced and reinstalled. Two (2) more need to be serviced in order to operate. Photos of the site and pumps examples are below.

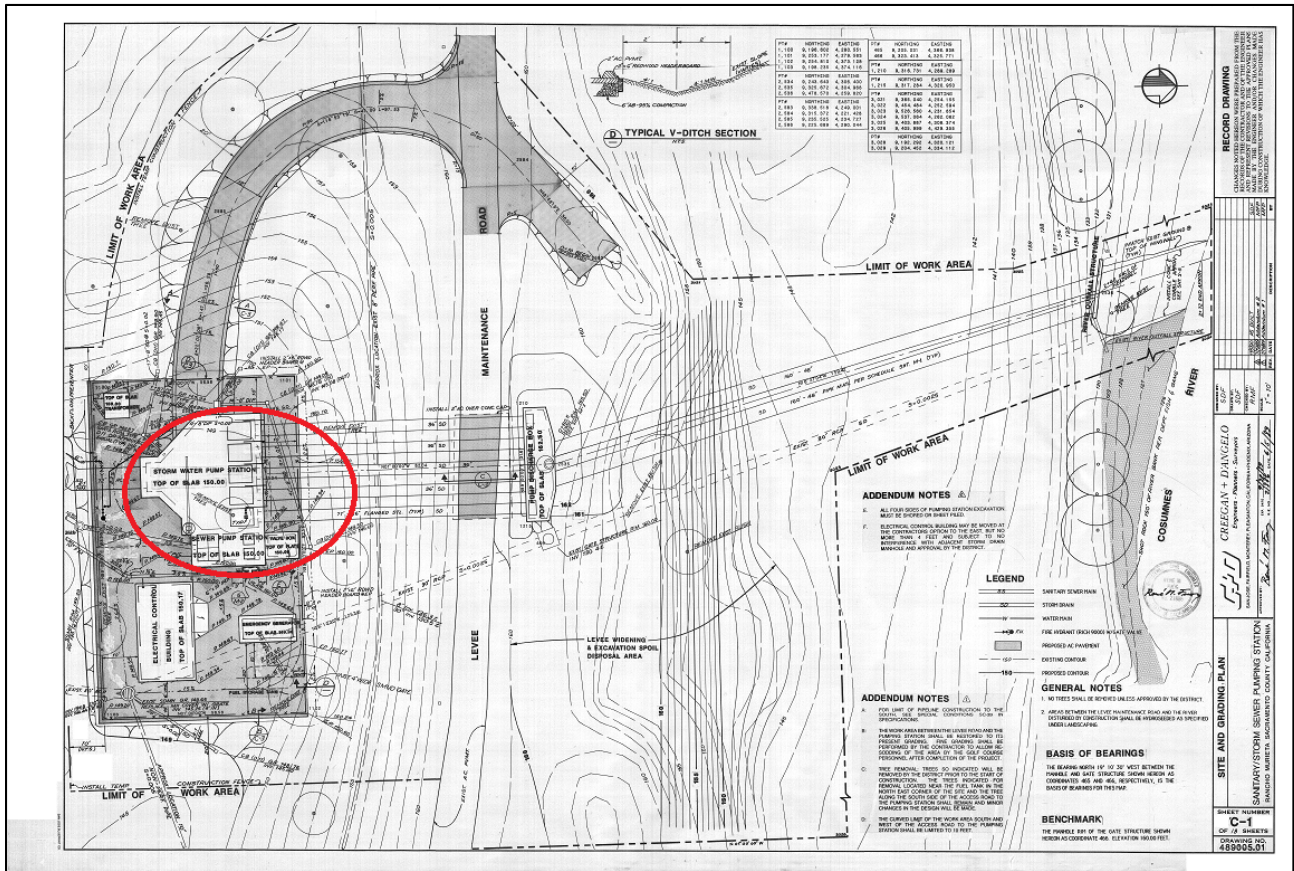


MLS Stormwater Motors, pumps are located beneath the motors.

BIDS

Bid packets were distributed and posted on September 5, 2018 with a bid date closing of September 21, 2018. The bid packet requested the repair of two (2) of our stormwater pumps and motors at the District's Main Lift South (MLS) stormwater pumping station. Four (4) bids were received and are summarized in the table below.

Bidder	Bid	Alternative Bid
Delta Pump	\$77,334	\$288,787
Harold & Meilenz Inc.	\$115,050 no freight	No bid
Commercial Pump & Mechanical Inc.	\$93,634	\$296,368
Durham Pump	\$306,900	\$306,900



Site Plan from As-Built drawing



Corrosion of Vortex Plate of pump 2



Corrosion of pipe column



Corrosion of pipe column

MEMORANDUM

Date: September 26, 2018
To: Board of Directors
From: Improvements Committee Staff
Subject: Cantova Sewer Pump Station Installation

RECOMMENDED ACTION

Approve the proposal from Kirby Pump & Mechanical Inc. for pump and rail installment in an amount of \$29,430 plus a 15% contingency for a total not to exceed of \$33,845. Funding to come from Sewer Capital Replacement Reserves.

BACKGROUND

The Board approved the purchase of new pumps for the Cantova Sewer Pumping Station this past July. This proposal is for professional services to install the pumps and the related appurtenances at prevailing wage. Bids were solicited with four (4) contractors responding but with only two (2) providing bids. The other two (2) contractors responded they were too busy.

Bids attached.



KIRBY'S PUMP AND MECHANICAL, INC.

■ PUMP REPAIR
■ INSTALLATION
3233 FITZGERALD ROAD
RANCHO CORDOVA, CA 95742
TELEPHONE (916) 635-2735
FAX (916) 635-6090
CONTRACTOR LIC. #538234

September 25, 2018

Rancho Murieta CSD
P.O. Box 1050
Rancho Murieta, CA 95683

re: Cantova Lift Station Modifications

Gentlemen:

We are updating our quotation per the following:

Perform demolition work as shown; layout and install base elbows furnished by others; furnish and install ductile iron discharge pipe, check valve, and plug valves; furnish and install wetwell lid with access hatch; furnish and install stainless steel guide rails, install sewage pumps furnished by others; install control floats furnished by others; perform electrical work as required to make the lift station operational; connect discharge piping to force main; test station for correct operation.

Price for the work - \$ 29,430.00

Furnished and/or accomplished by others:

- 1) Supply of submersible pumps and control floats
- 2) Installation and operation of sewage bypass system by others
- 3) Maintenance of wetwell in dry condition by others
- 4) Wetwell repairs and/or coatings by others
- 5) Removal of bypass at end of job by others

Clarifications:

- 1) Contractor will pay prevailing wages

Sincerely

J Paul Hannum
Kirby's Pump Mechanical, Inc.



3800 Happy Lane
Sacramento, CA 95827
Tel: (916) 395-8400
Fax: (916) 395-8429
tntindustrial.com

August 14, 2018

ref no. 18078

Paul Siebensohn
RMCSO
15160 Jackson Rd.
Rancho Murieta, CA 95683

RE: Proposal for Cantova Lift Station Rehabilitation

TNT Industrial Contractors shall furnish and install all labor and equipment to complete the system as per the following design criteria for the above referenced project:

- Cantova Lift Station Rehabilitation Project per Scope Provided.

Total Price - \$49,929.00

Inclusions:

- 1) Drawings covered: as discussed during walk through
- 2) Specifications covered: as discussed during walk through.
- 3) The above proposal is subject to review in (30) days.
- 4) The above proposal includes all applicable taxes.
- 5) Payment Terms: Per contract

Exclusions:

- 1) Bypass system and monitoring.
- 2) Pumps and floats
- 3) Ground water infiltration
- 4) Coating of wet well
- 5) Painting of pipe
- 6) Bonds, fees, engineering or permits.
- 7) Dewatering
- 8) Any other item not specifically covered.

Should you have additional questions please contact the undersigned.

Thank you,
Josh Twist
Project Manager
TNT Industrial Contractors Inc.



California Contractor's Lic. # 622974
Nevada Contractor's Lic. # 0072754

A - General Engineering Contractor
B - General Building Contractor

MINORITY BUSINESS ENTERPRISE/SMALL BUSINESS ENTERPRISE

MEMORANDUM

Date: September 26, 2018
To: Board of Directors
From: Improvements Committee Staff
Subject: Consider Approval of Cantova Pump Station Bypass

RECOMMENDED ACTION

Approve the proposal from HercRentals for Cantova pump station bypass, in an amount not to exceed \$7,140. Funding to come from Sewer Capital Replacement Reserves, CIP 18-02-2.

BACKGROUND

The Board approved a bypass of the Cantova Sewer Pumping Station this past July. The proposal did not cover installation and removal of the system. Despite numerous requests to the contractor that had provided the bid for the bypass I had not received costs for delivery and installation of the system, so I had estimated that a \$10,000 amount would have covered it in total. After approval at the Board meeting I had finally got a hold of the contractor and they provided estimates of cost that exceeded the Board's approval amount.

I met with my staff to discuss what could be done to lower the cost of the bypass and then put together a revised scope of work for the bypass. I sent that scope of work out to several local companies, including the originally approved one, that could bid on the sewer lift station bypass on September 5, 2018 with a closing date of September 21, 2018 to provide a bid. It was also posted on our website. Only United Rentals and HercRentals came out to review the site. Only HercRentals provided a bid. Their bid is attached along with the scope of work we posted.

Although the goal is to only have the bypass needed for one week, I am seeking an approval amount for two (2) weeks' worth of rental in case something goes wrong during the installation process.

RANCHO MURIETA CSD - CANTOVA SEWER PUMP STATION BYPASS NEEDS

Bid information: Provide quote for 1 week and per day rates thereafter for all equipment and appurtenances, delivery & return, setup & takedown assistance needed for sewer lift station bypass. Quote needs to be good for a minimum of 90 days.

General information: Total average site demand for pumping is approximately 125 gpm for the Cantova lift station with most flow coming from the Murieta Village manhole – Manhole A, as shown in following graphics. Manhole A is approximately 15.2' deep and located inside a wall on a resident's property. Manhole B is approximately 14' deep and located in a street. District will provide a trench under the wall at site A for bypass hose to run through to connect up to the lift station. Cantova lift station pumps that are in service are 5 hp electric solids handling pumps. Discharge head approximately 45'. Goal is for high level float to be installed in each manhole and tied into existing Cantova panel for "High wet well" level alarm to callout, to be done by District. Vendor is to supply, deliver, assist in setup and take-down, and return bypass equipment and K-rails. Water available at Cantova lift station site. District can assist offloading of equipment and placement of K-rail.

Site A

- 1) Install two (2) sets of two (2) control floats, one start one stop.
- 2) Install third float for "high" alarm. *To be done by District.*
- 3) Bypass pump: two (2) 4" submersible cutter pumps, electrically driven, solid handling, that can provide 100 gpm capacity. One pump is redundant to other with floats staggered to start/stop. Suction head approximately 16 ft. Discharge head approximately 50 ft.
 - c. Tie discharges in to existing 6" discharge flanges at Cantova pump station

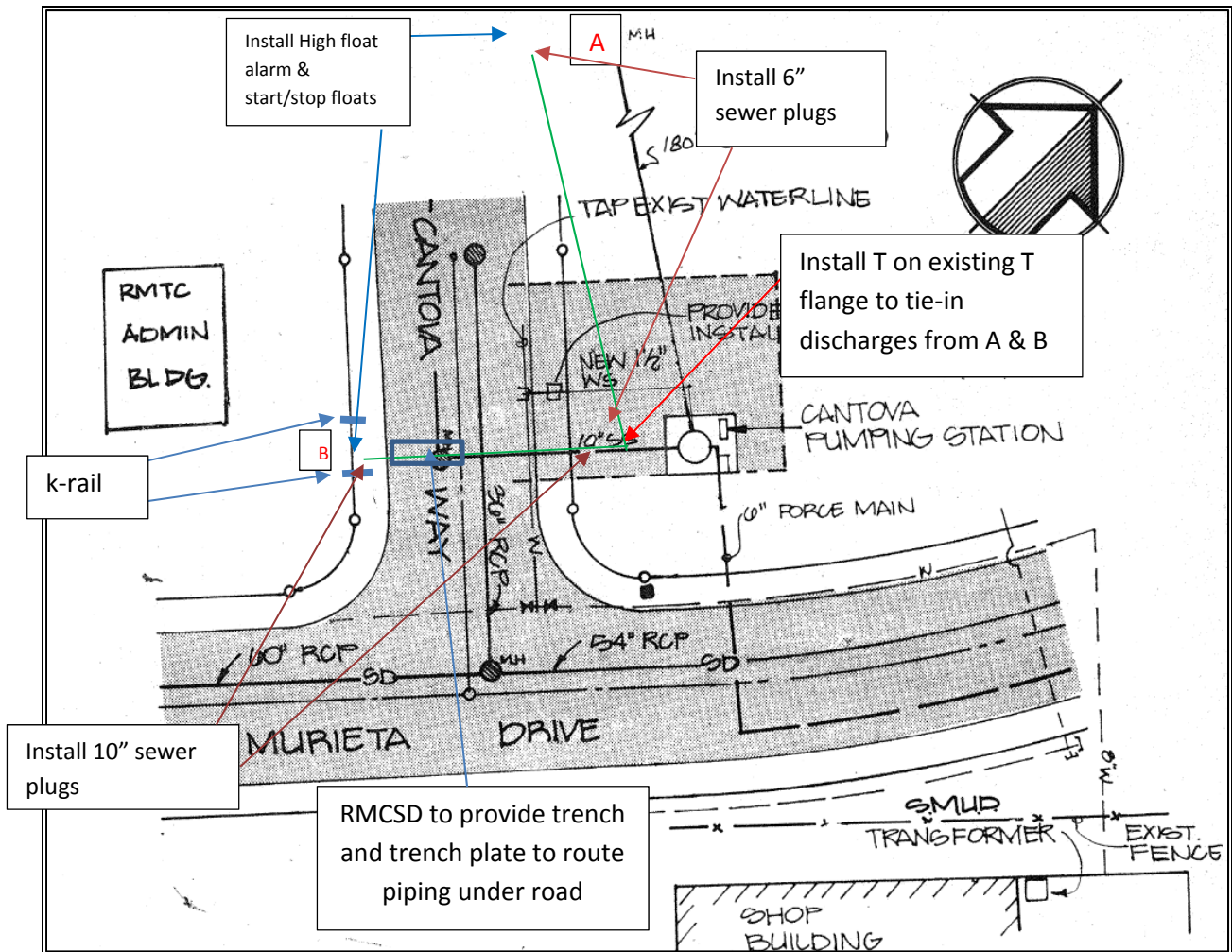
Site B

- A. Sewage manhole at this location is 14.0' deep.
- B. Bypass pump: one 4" submersible cutter pump, electrically driven, solid handling, that can provide 100 gpm capacity. Suction head approximately 14 ft. Discharge head approximately 40 ft.
- C. Install three (3) K-rails around manhole bypass pump.
- D. Route and tie-in non-collapsible pipe to discharge at Cantova pump station 6" discharge flange. District to provide a 1'x1' trench across roadway to route pipe & wires through.
- E. Install two (2) 10" inflatable sewer plugs, one upstream and one downstream at Cantova.

Need

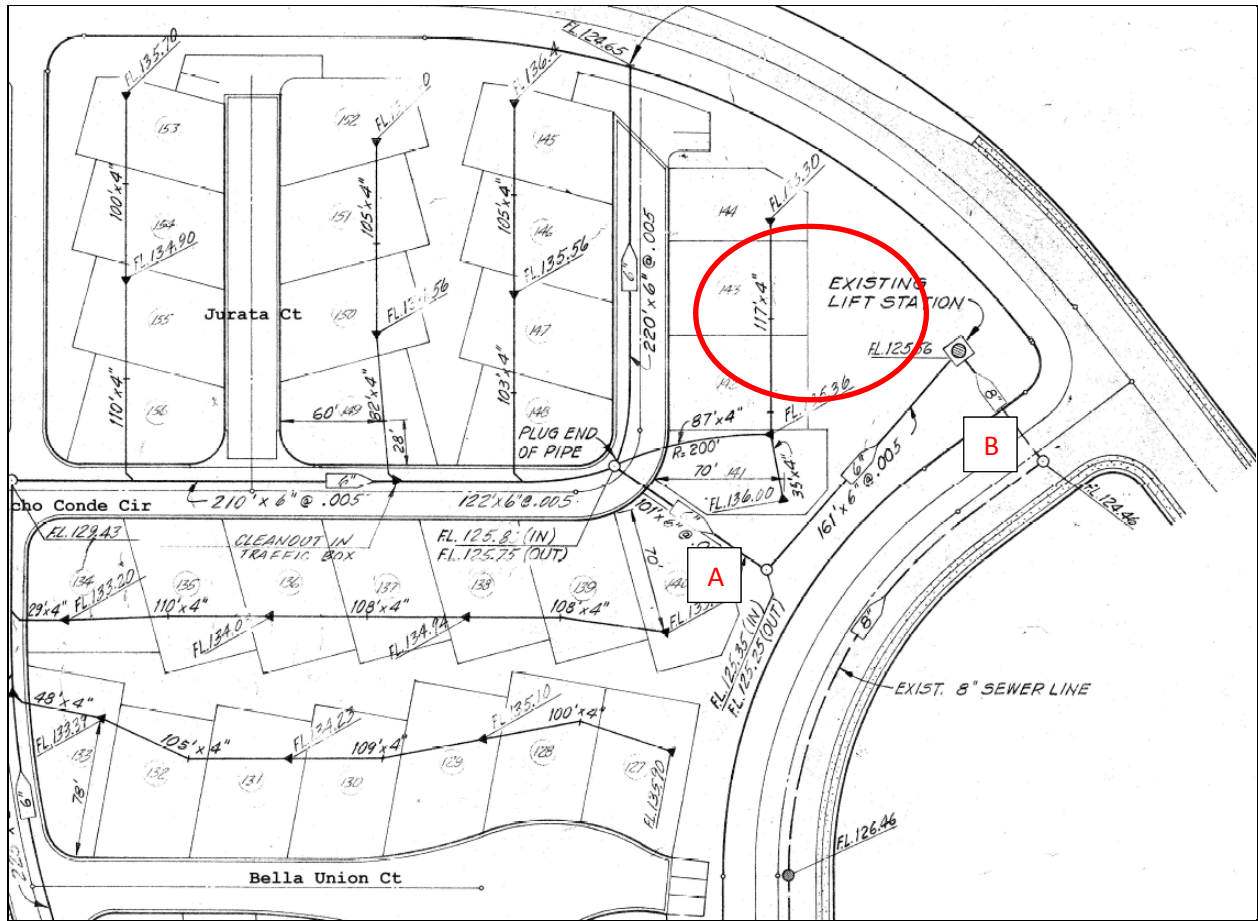
- 1) Bypass Pumps. 4" electrically driven submersible cutter sewage pumps capable of continuous operation and passing sewage solids.
 - * electrical connected into existing MCC panel at Cantova lift station. Start-stops floats and high alarm to be tied in as well. District's contracted electrician to assist.
- 2) Four (4) inflatable sewer plugs in total with air lines with gauges to fill pneumatic plugs. Two 6" and two 10".
- 3) Piping: Non-collapsible piping as needed for connections. Piping installations need to avoid area above Cantova wet well to allow work to occur there.
- 4) 3 sets of start / stop floats to be supplied by vendor. High level floats. (Supplied by District)

- 5) Water filled K-rail, three (3) around manhole B. Flashing lights for K-rail at night. Water is available from hose bib at Cantova sewer lift station.
- 6) Delivery, setup, removal, return.



Traffic Signage needed: (supplied and installed by District)









ProSolutions
PUMP & POWER
Formerly DW Pumps

Sept 19, 2018

Paul Siebensohn
RMCS D
psiebensohn@ranchomurrietacsd.com
916-354-3700

Re: Cantova Liftstation

Item 1, Quantity 4:

4" Tsurumi 100C42.2, 3HP submersible cutter pump

Item 2, Quantity 4:

3hp, 240V, 3 Phase automatic float control panel- Dual float high & low operation

Item 3, Quantity 6:

4" X 20' heavy duty rubber flex/rigid pressure rated hose (1 off each pump into manifold & two extra if needed for connection at wetwell)

Item 4, Quantity 280:

280LF of 4" sewage bypass rated discharge pipe

Item 5, Quantity 3:

4" X 4" X 4" manifold with (2) sewage style check valves
(1 at each manhole and 1 to flange to your piping at liftstation- 6" FLANGE AT LS)

Item 5, Quantity 300:

300 LF of 8/4 SOOW temporary power cable
(This will be used to run power to each set of panels placed closer to manholes)

Item 6, Quantity 2:

Single floats with extended wire to connect to RMCS D auto dialer

Item 7, Quantity 2:

6" sewer plugs

Item 8, Quantity 2:

10" sewer plugs

Item 9, Quantity 3:

Water filled K-RAIL

Item 10, Quantity 3:

Flashing beacon sandwich boards

SYSTEM RENTAL PRICE: \$2,400/week \$7,200/month UNLIMITED HOURS

SYSTEM INSTALLATION PRICE: \$1,800.00

DELIVERY: \$270.00 and return \$270.00

Subject to availability
Taxes not included

Thanks,
-Pat LaZansky
916-626-0973

**\$4,740 total for one week including delivery, install, and return.
Daily rate is \$800 after 1 week. If 3 days additional are used it rounds up to weekly rate.**



ProSolutions



MEMORANDUM

Date: September 25, 2018
To: Improvements Committee
From: Paul Siebensohn, Director of Field Operations
Subject: Discuss Laguna Joaquin Measurement Station Installation

RECOMMENDED ACTION

No recommendation. Discussion and direction from Committee.

BACKGROUND

At the August 15, 2018 District Board Meeting, the Board of Directors approved a proposal from Telstar, Inc. for Laguna Joaquin level monitoring station installation. This was in response to the system possibly being required as per a California Senate Bill 88 requiring water rights holders to measure diversions up to an hourly timeframe. The Board asked that I confirm that it is required before moving forward with the project.

After reaching out the State Water Board, they conveyed that only daily readings are required at this site. The data shall be recorded in a format retrievable and viewable using Microsoft Excel, Microsoft Access, or other software program authorized by the Deputy Director.

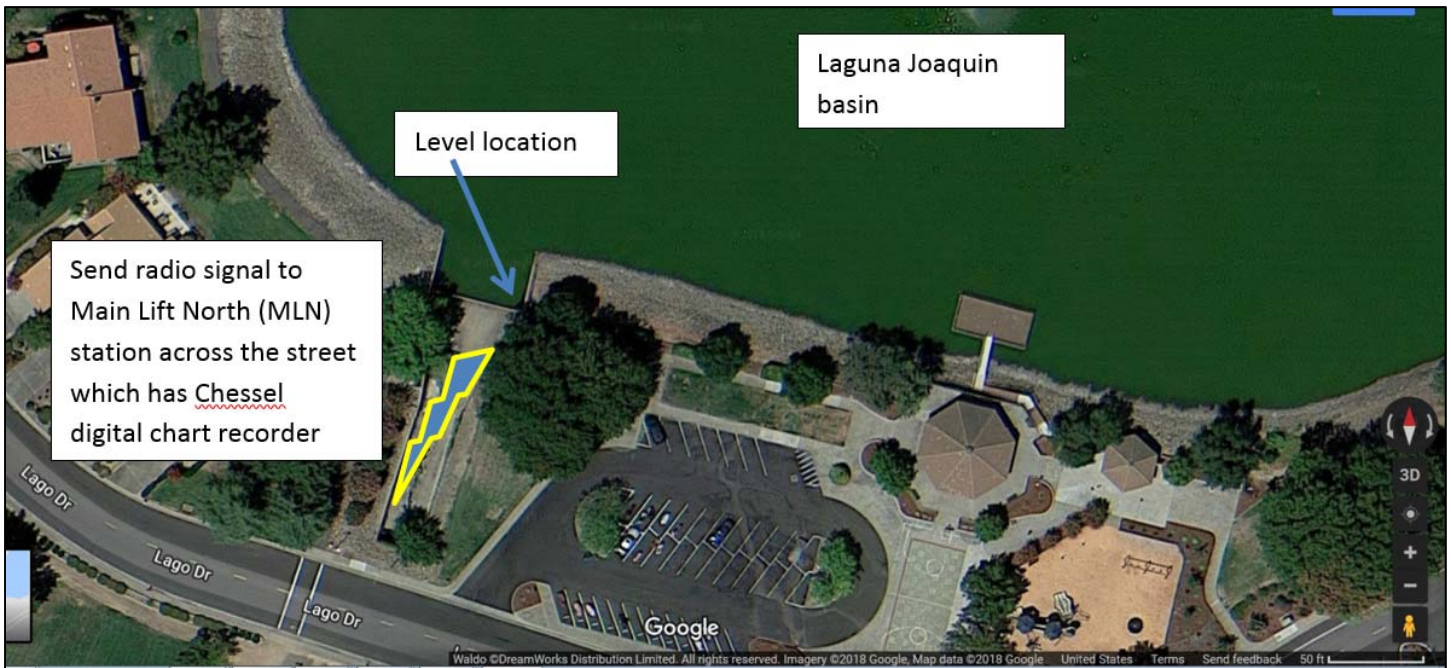
Staff may conduct this daily recording manually. Staff's time to conduct this daily work is estimated at 20 minutes per day to go to the site, read the staff gauge that is currently there, and then go back and enter the data into a computer spreadsheet. This is approximately 121 hours per year or 15.2 eight-hour work days per year.

The goal for this site, as outlined in CIP 18-5-2, is to provide continuous level monitoring and capture that data as required for reporting to the State Water Board, Department of Water Resources. Request for quotes to complete this work as visually outlined below.

Zoomed out:



Zoomed in:



A level transducer and RTU will be mounted on the east side of the Laguna Joaquin spillway. It will be powered by a localized solar panel with battery backup system. The information generated will be sent via radio across to the Main Lift North sewer pump station which has an existing digital chart recorder that will be utilized to record the data.

MEMORANDUM

Date: September 27, 2018
To: Improvements Committee
From: Paul Siebensohn, Director of Field Operations
Subject: Discuss Emergency Well

RECOMMENDED ACTION

No action, discussion only.

BACKGROUND

Every action the Board has taken to date the past eight (8) years has led us towards the development of a Well as until recently it was required. The Prop 84 Grant which would cover up to \$500,000 of matching construction costs is set to expire at the end of June of 2019. It needs to move forward now or be shelved again. The information presented below provides information as to why this project exists.

The Emergency Well project used to be called the Augmentation Well project as previous studies showed that the District had a shortfall of water supply needed to support development and the existing community at full buildout under certain drought scenarios.

The last update of the District's Integrated Water Master Plan (IWMP) in 2010 showed the augmentation supply that would be necessary under a medium growth buildout scenario (projected by 2030) along with other parameters presented below. The 2010 IWMP Table 4-5 showed that the supply reservoirs will reach their "dead storage" and be short by an estimated 89 acre-feet (AF) based on the worst-case planning scenario using the Board direction of the medium buildout scenario. An additional contingency was recommended for meeting peak month demands up to 300 AF, and with factoring economies of scale, it was noted that additional contingency may be worthwhile of up to 600 AF. The recommendation was subsequently extended to include emergency supply for domestic "public health and safety" water supply for all residents at build-out. Since 2010, the follow-on efforts by the District focused on creating a groundwater supply source to meet these needs.

Since the 2010 IWMP update the developer of the Rancho North project had lowered their buildout number from 950 to 795 and a Water Supply Assessment (WSA) of the Ranch Murieta North development project was conducted in January 2016. The WSA concluded that the District had enough supply available provided the District lowered its planning number for EDUs from 750 to 600, which is the 20% reduction in line with the 20/2020 reduction goal. Shortly after, the Well was relabeled from an Augmentation Well to an Emergency Well. Subsequently, it was kept as a District Water Capital Improvement Project, Coastland Project No.17-1-08 (CIP 12-10-1) as the District has no other potable water source other than from our reservoirs fed via pumping from the Cosumnes River.

The District moved forward with getting a well after the 2010 IWMP update. Work to this point includes putting together a project for Proposition 84 and getting it approved as a project, hiring consultants to investigate where to put an augmentation well and developing a study *Technical Memorandum – Production Water Well Assessment*, developing a bid packet for drilling and development of a well, producing and posting necessary CEQA documentation for developing a well, bidding it three (3) times

and receiving a bid on the third try, and recently an appraisal of the land on which the well and its easements would be sited. However, the project stalled with getting access from the landowner, who is also the North Project developer, and therefore the bid to drill the well has not been awarded. Although I am not directly involved in the negotiations, my understanding is that the landowner believes the water below the land has value that they want to be compensated for before an agreement is signed. Also the ranch wants to be able to use water from the well, which former General Manager Ed Crouse has already told them cannot occur as the Prop 84 Grant would be invalidated by providing public funds for the benefit of a private entity. After inquiring around as how to determine worth of the groundwater, there is no straight answer to it. Legally a well may be drilled right next to another well and there is no legal right to the groundwater from any one property owner.

PROS AND CONS OF WELL

Pros

- 1) It is a safety net for the District's water supply. An alternative water supply which provides backup to surface water supply in times of water plant, reservoir, distribution system, or other type of water supply emergency.
- 2) It could reduce intensity of a drought and drought stage implementation.
- 3) It could allow the potential for additional homes be built or to meet higher unanticipated demands.
- 4) If the planned amounts for available recycled water end up being lower than anticipated, this gives us another source for water.
- 5) Water is precious in California. If a future drought is worse than what we have planned for, having a well would be vital.

Cons

- 1) It is very expensive to drill and develop and pipe into distribution system. May be even more expensive if water quality from well requires treatment.
- 2) Well site chosen may not have a sustainable aquifer for full demand need of drought.
- 3) Well site may never need to be used if the community does not expand to point of where it is needed.
- 4) District would need to join a Groundwater Sustainability Agency and incur costs and reporting associated with it and regulators.

STUDIES WHICH REFERENCE WELL (post yr. 2000)

[2006 Integrated Water Master Plan](#) – HDR Inc. – Nov. 2006

[2010 Integrated Water Master Plan – Maddaus Water Management Inc.](#) – Oct. 2010

[Water Supply Assessment - Maddaus Water Management Inc.](#) – January 2017

[Water Supply Augmentation Fee & Capital Improvement Fee Study Update](#) – Coastland – Nov. 2017

WELL FAQs

Over 25 years ago, the District identified the need for an augmented water supply during times of extreme drought or emergency and began the planning process for drilling and constructing a

groundwater well in or near the District's service area. Over the years, many studies were completed, and several test wells were drilled to identify potential well sites.

1. Why does the District need to drill a groundwater well?

Currently, Rancho Murieta relies on a single source of water; the Cosumnes River, for its potable water supply. The augmentation well(s) are needed to provide a second source of water in emergency situations, such as a failure of the water treatment plant that prevents production of potable water. In addition, the groundwater well(s) may be used to augment the District's water supply during extreme drought events that prohibit the District's ability to pump water from the Cosumnes River.

Originally, the studies indicated that the District could have a shortfall of supply during extreme drought of approximately 1,400 Acre-Feet (AF)/year. In 2010, the District updated its Integrated Water Master Plan (2010 IWMP Update) to reflect new State mandates of a 20% reduction in water use per person per day, estimated development density reductions, and the District's adopted policy requiring all future development to utilize recycled water for outside irrigation. With this new data, the projected supply shortfall in times of extreme drought could be 300 AF/year; however, the 2010 IWMP Update recommends developing augmentation supplies in the range of 600 AF/year to provide a comfortable cushion. With the completion of the Water Supply Assessment for the projected Rancho North Development, the District can supply water during extreme drought for three (3) years without augmentation with groundwater.

2. How long will the District's water supply last during extreme drought without the use of groundwater?

The recently completed Water Supply Assessment (January 2016) projects that the District's stored water supply is sufficient to last three (3) years at projected full build-out during extreme drought conditions under a 50% conservation curtailment.

3. How much will the groundwater well(s) cost? Where will the money come from to drill the augmentation well(s)?

It is estimated that a single groundwater well will cost approximately \$1.2 million to drill and equip. The well(s) will be paid for using developer fees (the Water Supply Augmentation fee) and Prop 84 grant funds. Developers pay a Water Supply Augmentation fee to the District at the time the water permit is issued for the lot being developed. The Water Supply Augmentation fees are designated for projects like the groundwater well(s) and recycled water infrastructure that augment the District's water supply. The District will collect over \$5.0 mm in future Water Supply Augmentation fees from developers for the remaining undeveloped property within the community, which when added to the February 2016 Water Supply Augmentation reserve balance of \$2.2 mm totals over \$7.0 mm in Water Supply Augmentation funds. The District also has approximately \$500,000 in Prop 84 grant funds for the construction of the groundwater well(s).

4. What is the Prop 84 Implementation Grant Project and how does it relate to the District's augmentation well(s)?

In September 2012, the District entered into an agreement with the Regional Water Authority (RWA) as an approved project under the Proposition 84 Implementation Grant application. The application was submitted for approximately \$500,000 of grant support to develop the groundwater well(s). Initially, the District and Omochumne Hartnell Water District (OHWD)

were partners in the project with the District constructing a groundwater well, which has dual purpose of providing augmentation of the District's surface water supply in times of drought and providing for an emergency backup supply to the District's single source of supply (the Cosumnes River), and OHWD constructing a recharge basin, including the pumps and necessary infrastructure for diversion of river water, that would accept excess surface water available under the District's primary water right during wet years that would recharge the groundwater basin. However, the project was split into two projects when OHWD encountered difficulty in securing the lease for the original identified recharge basin. Even though the projects have been separated, the intent is for both projects to be completed.

5. How much groundwater does the District expect to the augmentation well(s) will provide?

Even though the 2016 Water Supply Assessment projects that groundwater is not needed at full build-out during extreme drought with 50% conservation restrictions, the District's goal is to achieve 600 AF/year from the groundwater well(s) as recommended in the 2010 Integrated Water Master Plan Update (2010 IWMP Update). Borehole and surface geophysical responses indicated conducted by Dunn Environmental concluded that each testhole had significant layers with significant water production potential well yields ranging from 150 to 500 gpm. Our goal hope is that a well at TH-B could sustain a consistent yield of 390 gpm or higher.

6. What is the current status of the well drilling project?

Based on the positive results of the Dunn Environmental study and testhole drilling, the District plans to drill one groundwater well at the Testhole B site since that location potentially has the groundwater yield to meet the District's need. The District received a bid for the drilling, not the equipping, of the well but never awarded the bid. The District and the property owners of the testhole locations must negotiate and enter into easement agreements for locating the wells on their property. The terms of these agreements are yet to be determined.

The Prop 84 grant to fund 50% of the construction cost of a well is set to expire at the end of June 2019.

7. Has the District entered into any agreements with the property owners?

The District and the property owners of the testhole locations must negotiate and enter into easement agreements for locating the well on their property. The terms of these agreements are yet to be determined.

MEMORANDUM

Date: September 26, 2018
To: Improvements Committee
From: Paul Siebensohn, Director of Field Operations
Subject: Additional Cost for Crane Rental for Water Plant Box Culvert Offloading and Placement

RECOMMENDED ACTION

Approve an additional \$1,009.30 to American Crane for water plant box culvert off-loading and placement. Funding to come from Water Capital Improvement Reserves, CIP 18-06-04.

BACKGROUND

An additional amount is requirement to fund the rental of the crane for the water plant box culvert placement. In ordering the culvert box it was found that a larger culvert box was immediately available at a highly reduced rate. This larger culvert box was heavier and therefore required a larger crane for the placement of it at a reach of 45'. The cost to cover the larger crane was \$1,009.30.

The culvert box cost originally approved was at a cost of \$11,816, for a 4'x8'x16' box. The culvert box we ended up purchasing was \$4,687.12, \$7,128.88 less than approved, for a 6'x6'x16' box. With the additional cost of the crane rental that ends up with an overall savings of \$6,119.58.