

**AGENDA FOR A MEETING OF THE
ENGINEERING/EQUIPMENT COMMITTEE
OF THE VALLECITOS WATER DISTRICT
WEDNESDAY, MARCH 23, 2022 AT 3:00 P.M.
VIA TELECONFERENCE**

CALL TO ORDER - DIRECTOR HERNANDEZ

NOTICE TO THE PUBLIC

Pursuant to Section 54953 of the California Government Code, in the interest of public health and safety during the proclaimed State of Emergency and due to the fact that State or local officials have imposed or recommended measures to promote social distancing, the Board of Directors of the Vallecitos Water District will be meeting by teleconferencing. During this period of time, Vallecitos Water District will not be making any physical location available for members of the public to observe the meeting or offer in-person public comment.

Means By Which Members of the Public May Access the Teleconferenced Meeting –

Members of the public may access the teleconferenced meeting via computer, smart device, or by dialing in (audio only). If you would like to join the meeting via computer or smart device, go to the District's website: <https://www.vwd.org/departments/board-of-directors/meetings-minutes> and click on the "Watch Live" icon. If you would like to listen to the meeting live on your phone, dial (888) 788-0099 (Toll Free) or (877) 853-5247 (Toll Free). When prompted, enter the meeting ID and Passcode displayed on the District's website.

PUBLIC COMMENT

Means By Which Members of the Public May Offer Public Comment During the Teleconferenced Meeting – Members of the public are **not** required to submit public comments in advance of the meeting and will be given an opportunity to address the Board of Directors and offer comments in real time. Written public comments or questions may be submitted at least 90 minutes before the Meeting to the following email address: PublicComment@vwd.org.

Members of the public attending the meeting via the Zoom videoconferencing platform can express their desire to offer public comment or provide input on an agenda item at the appropriate time by utilizing the "Raise Hand" function. Persons who have dialed into the meeting and would like to make a comment can enter *9 on their phone and will be identified by their phone number when it is their turn to speak. Additional instructions for online participation will be posted on the District's website: www.vwd.org/meetings.

ITEM(S) FOR DISCUSSION

1. ADOPTION OF RESOLUTION CERTIFYING A MITIGATED NEGATIVE DECLARATION FOR THE EMERGENCY BYPASS REHABILITATION PROJECT (pp. 3-5)

2. MEADOWLARK WATER RECLAMATION FACILITY PROJECTS UPDATE (pp. 6-7)
3. MEADOWLARK WATER RECLAMATION FACILITY CHLORINE CONTACT TANK EXPANSION PROJECT DESIGN ENGINEERING PROFESSIONAL SERVICES AGREEMENT AWARD (pp. 8-10)
4. CONSTRUCTION CONTRACT AWARD FOR SEWER LINING AND REHABILITATION 2021(pp. 11-13)
5. BARHAM DRIVE ILLEGAL SEWER CONNECTIONS
6. SUPPLY CHAIN DISCUSSION (pp. 14)

OTHER BUSINESS

If you have any disability which would require accommodation in order to enable you to participate in this meeting, please call the Executive Assistant at 760.744.0460 ext. 261 at least 48 hours prior to the meeting.

AFFIDAVIT OF POSTING

I, Ann Johnson, Executive Assistant of the Vallecitos Water District, hereby certify that I caused the posting of this Agenda in the outside display case at the District office, 201 Vallecitos de Oro, San Marcos, California by 5:00 p.m., Thursday, March 17, 2022.

Ann Johnson

DATE: MARCH 23, 2022
TO: ENGINEERING & EQUIPMENT COMMITTEE
SUBJECT: ADOPTION OF RESOLUTION CERTIFYING A MITIGATED NEGATIVE DECLARATION FOR THE EMERGENCY BYPASS REHABILITATION PROJECT

BACKGROUND:

The District maintains an existing 16-inch diameter reinforced plastic mortar (RPM or “Techite”) sewer pipeline serving as an emergency bypass/relief sewer intercepting inbound flows to Meadowlark Water Reclamation Facility (MRF) and redirects the flows to the Land Outfall Pipeline. This line serves an important role for District collections to divert flows away from MRF in the event of scheduled or emergency operations at the plant. The pipeline was originally installed in 1969. The project’s upstream connection is near the intersection of Rancho Santa Fe Road and Brighton Glen Road in the City of San Marcos right-of-way and travels through an existing sewer easement to the downstream connection in Melrose Drive in the City of Carlsbad. The easement runs behind houses along the Rancho Montana and Rancho Carrillo communities and is located adjacent to an environmentally sensitive corridor.

The Failsafe Outfall Sewer (Failsafe Outfall) pipeline is a 12-inch ductile iron pipe installed in 1980 connecting MRF to the Encina Wastewater Authority’s (EWA) Ocean Outfall. The Failsafe Outfall follows a parallel alignment to the Emergency Bypass Pipeline within the scope of this project. The Failsafe Outfall allows MRF to discharge up to 3 MGD of secondary effluent directly into the ocean, bypassing the tertiary or recycled water treatment process at MRF and the treatment process further downstream at EWA. Bypassing the tertiary treatment process typically occurs when recycled water demand is low or MRF’s systems are experiencing an outage. MRF also has the operational flexibility to send recycled water through the Failsafe Outfall during scheduled maintenance or water quality disruptions.

The 16-inch Emergency Bypass Sewer Pipeline and the parallel 12-inch Failsafe Outfall have experienced failures resulting in sewer spills, requiring emergency action to make repairs. Due to the sensitive locations of the work and regulatory action from previous spills, the Board of Directors authorized a professional services agreement (PSA) for engineering design and environmental services on March 17, 2021, to rehabilitate the District’s Emergency Bypass Sewer Pipeline and the Failsafe Outfall. The project is in final design and an evaluation of potential environmental impacts was needed per the California Environmental Quality Act (CEQA).

DISCUSSION:

Staff executed a PSA with Recon Environmental, Inc. (Recon) in the amount of \$48,391 to prepare an Initial Study and Mitigated Negative Declaration (MND) for the project corridor between Melrose Drive and Carrillo Way in the City of Carlsbad. Recon compiled

their environmental studies and completed an Initial Study to evaluate the effects of the proposed changes on the environment. Based on the reports contained in the Initial Study, staff determined the proposed project excavations may impact the environment. The project scope was adapted to add specific trenchless technology pipeline rehabilitation measures to mitigate the potential impacts. Staff recommended, per CEQA Section 15070, that a MND be prepared.

CEQA Section 15073 requires the Notice of Preparation, Initial Study, and draft MND be sent to public agencies and interested parties concerned with the project. These parties have 30 days to review and respond with comments.

On October 6, 2021, the Board authorized circulation of the Emergency Bypass Rehabilitation Project Notice of Preparation, Initial Study, and draft MND. Staff commenced the 30-day public review on October 13, 2021. Fifteen (15) copies of these documents were delivered to the State Clearinghouse for distribution to interested public agencies. Staff also created a map and listing of all properties within 500 feet of the project alignment. A copy of the Notice of Preparation for a MND was submitted to each of the identified property owners. Those parties interested could contact the District to receive additional information and voice concerns. The draft MND was also posted on the District's website throughout the entirety of the public review period.

The 30-day public review period ended on November 15, 2021. The District received a total of zero (0) comment letters.

Staff has prepared a resolution certifying an enhanced MND for the Emergency Bypass Rehab Project as complete and adequate and which includes more effective mitigation monitoring measures. If the Board adopts this resolution, which includes written findings that the measures are more effective in avoiding potential significant effects, staff will file a Notice of Determination with the San Diego County Clerk and a Certificate of Fee Exemption with the California Department of Fish and Wildlife. Filing of the Notice of Determination commences the thirty (30) day statute of limitations for legal challenges for any party that has commented on the draft MND. Upon adoption of the resolution, staff will complete the final design and release the project for bid in by the summer of 2022.

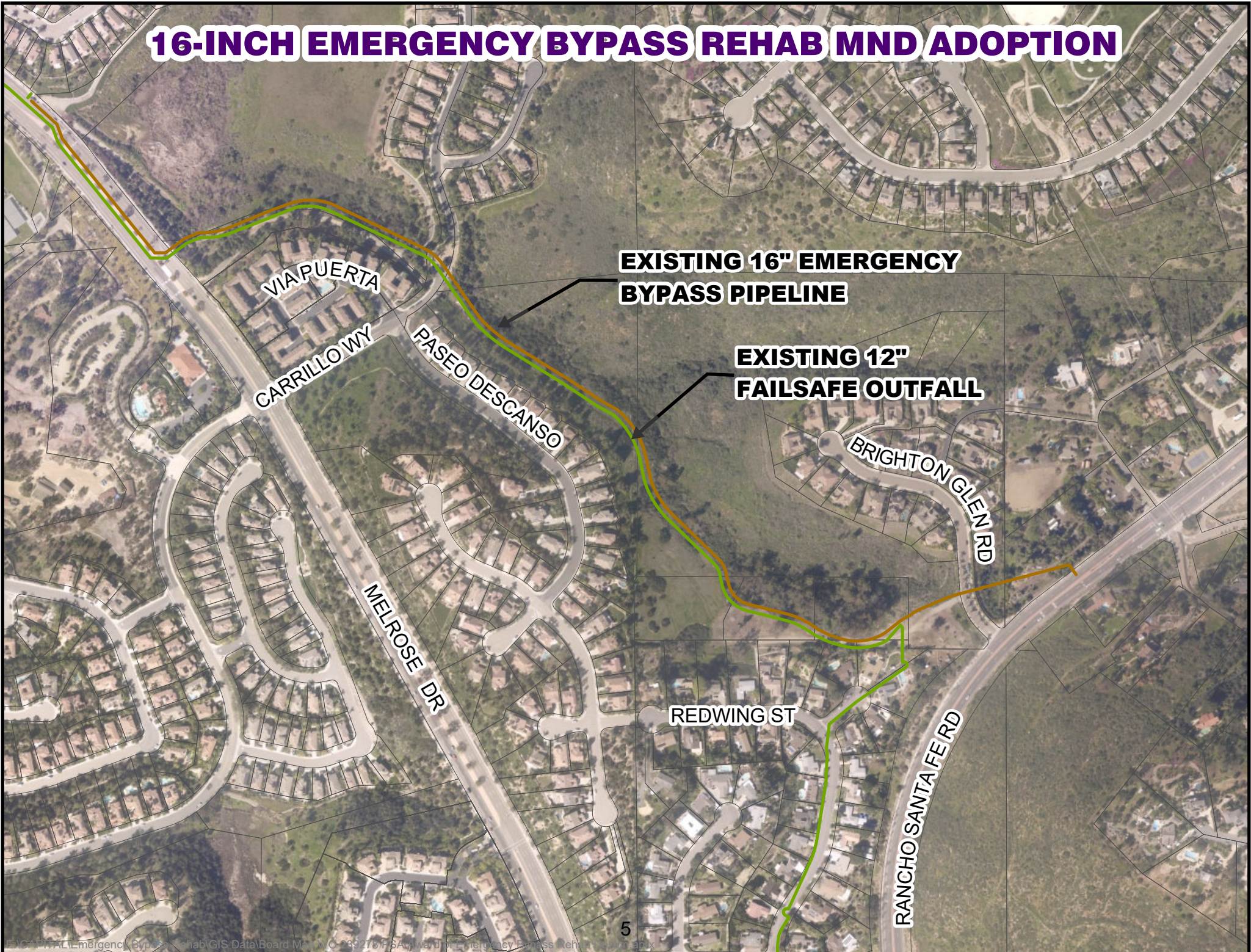
FISCAL IMPACT:

Funding for this project is provided through the District's Sewer Replacement Fund 210. The project was approved in the District's Fiscal Year 2021-2022 Budget with a total project amount of \$3,210,000.

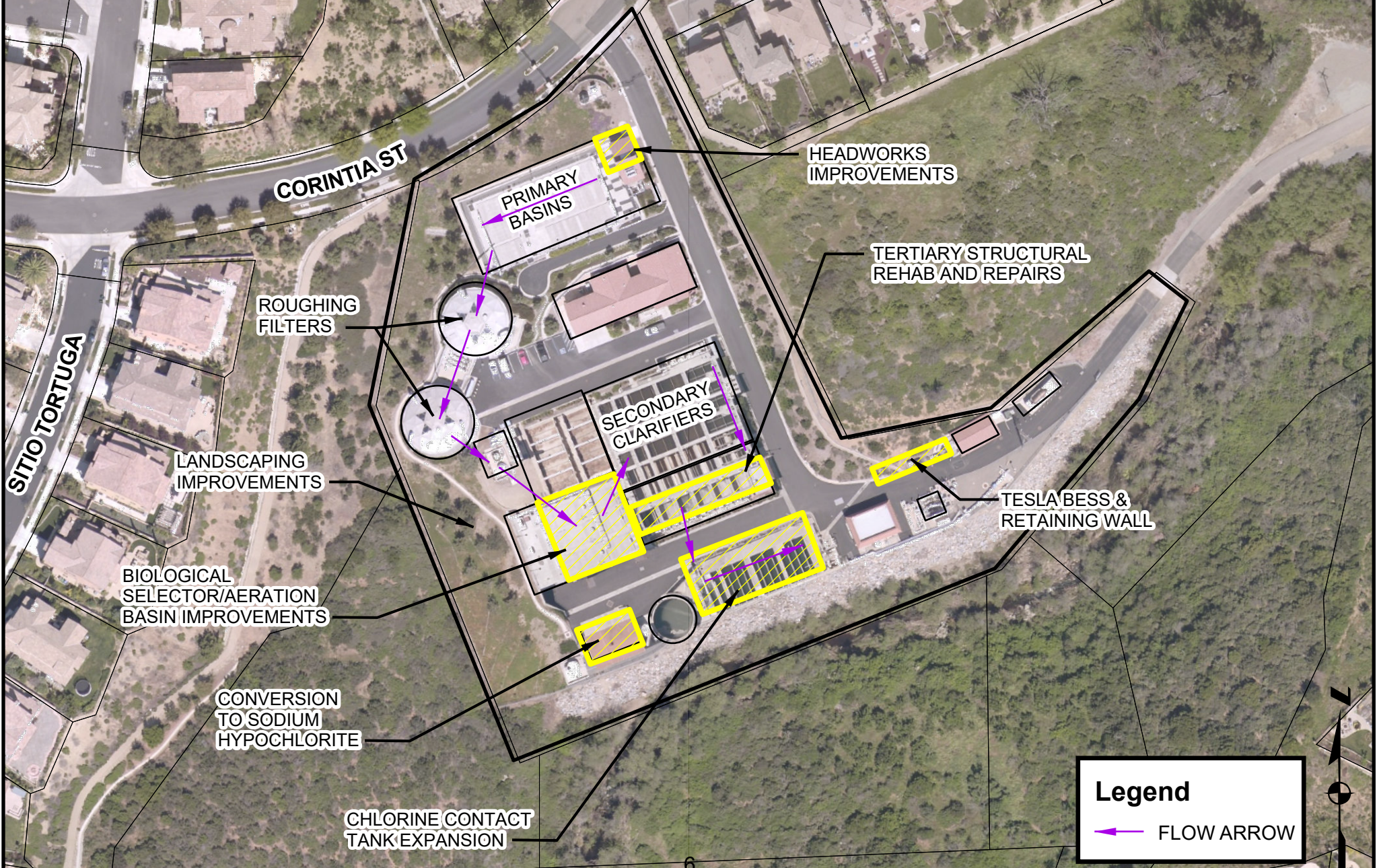
RECOMMENDATION:

Adopt the resolution certifying the MND for the Emergency Bypass Rehabilitation Project. This resolution also directs staff to file a Notice of Determination with the San Diego County Clerk and a Certificate of Fee Exemption with the California Department of Fish and Wildlife.

16-INCH EMERGENCY BYPASS REHAB MND ADOPTION



ACTIVE CAPITAL IMPROVEMENT PROJECTS AT MEADOWLARK WATER RECLAMATION FACILITY (MRF) FY 2021-2022



Legend
← FLOW ARROW

	PM	Project	Priority	Ph	2022								2023								2024																
					Q3		Q4		Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4		Q1		Q2										
					Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov
M R F A C T I V E	Lito	Biological Selector/Aeration Basin Improvements	Budget	P D C																																	
	Lito	Tertiary Structural Rehab and Repairs	Budget	P D C																																	
	Ryan/Lucas	Landscaping Improvements & BESS Retaining Wall	OPS	P D C																																	
	Ryan	Chlorine Contact Tank Expansion	Budget	P D C																																	
	Ryan	Conversion to Sodium Hypochlorite	Budget	P D C																																	
	Ryan	Headworks Improvements	Budget	P D C																																	
	Varies	Various MRF O&M CIP Projects	Budget	P D C																																	

LEGEND
PLANNING PHASE
DESIGN PHASE
BID PHASE
CONSTRUCTION PHASE

DATE: MARCH 23, 2022
TO: ENGINEERING & EQUIPMENT COMMITTEE
SUBJECT: MRF CHLORINE CONTACT TANK EXPANSION PROJECT DESIGN
ENGINEERING PROFESSIONAL SERVICES AGREEMENT AWARD

BACKGROUND:

The Meadowlark Water Reclamation Facility (MRF) has two existing chlorine contact tanks (CCTs), set up in series, which is the final process responsible for disinfection of reclaimed water. The CCTs were last improved during the 1980's plant expansion with each tank rated at 2.25 million gallons per day (MGD). During the 2005 plant expansion, the capacity of the CCTs were re-rated to convey a design peak flow of 5.0 MGD by operationally utilizing both tanks as one. Today, the CCT process at MRF is the primary bottleneck which prevents MRF from increasing the peak flow capacity from 5.0 to 6.5 MGD.

As a member of the North San Diego County Water Reuse Coalition, the District secured grant funding totaling approximately \$1,000,000 under Prop 84, awarded by the State Water Resources Control Board. Project reimbursement through recycled water rates will also be acquired from current recycled water customers (City of Carlsbad and Olivenhain Municipal Water District).

The project is an operational priority to the District with successful completion of the CCT expansion providing MRF a 1.5 MGD flow capacity increase. The project is scheduled for planning and design in the Fiscal Year 2021-2022 CIP Budget.

DISCUSSION:

The District submitted a Request For Proposals (RFP) to four (4) local engineering firms on December 1, 2021. The firms were asked to present their experience in designing wastewater disinfection process and structural improvement projects of similar nature. The four (4) firms staff requested proposals from included:

- Kleinfelder
- Kennedy/Jenks (K/J)
- Michael Baker International (MBI)
- LEE & RO (L&R)

Staff received proposals from all four (4) firms on January 14, 2022. District engineering and operations staff reviewed the proposals and evaluated each firm based on their experience on similar projects and overall RFP responsiveness in proposed technical approach, scope of work, labor estimate/fee, and schedule.

Evaluations of proposals were completed on February 14, 2022. Kleinfelder was determined to be the most responsive and qualified consultant and staff followed up to discuss the scope of work and request clarifications, additional geotechnical engineering services, and operational flexibility design elements. Kleinfelder provided a revised scope of work and a not to exceed fee of \$355,385 for design and bid phase professional engineering and environmental services.

FISCAL IMPACT:

The project is identified in the Fiscal Year 2021-2022 Budget with a budget amount of \$4,719,000. The project will be funded through an approximate \$1,000,000 Prop 84 grant with the remainder from Reclaimed Water funds. The total estimated project cost and budget summary are as follows:

Budget	\$ 4,719,000
Design/Bid Engineering & Environmental	\$ 355,385
Project Design Staff Services	\$ 50,000*
Overhead and Materials	\$ 115,000*
Project Construction Staff Services	TBD
Construction Management & Inspection	TBD
Construction Contract	TBD
Total	\$ 520,385

*Estimated Fee

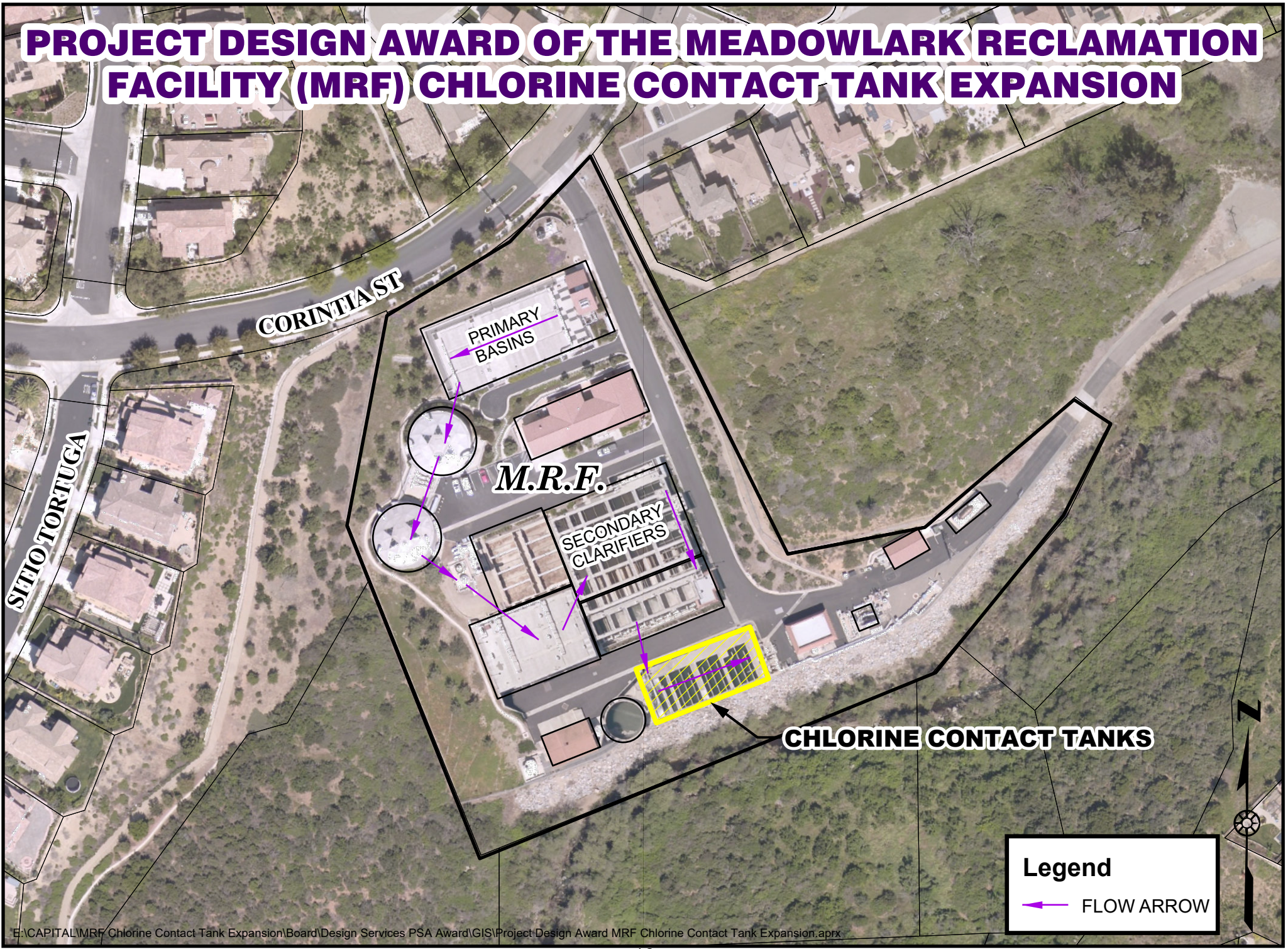
RECOMMENDATION:

Staff recommends the Board of Directors authorize the General Manager to execute a professional services agreement with Kleinfelder in the not to exceed amount of \$355,385 for project design and bid phase engineering and environmental services for the MRF Chlorine Contact Tank Expansion Project.

ATTACHMENT

Aerial exhibit

PROJECT DESIGN AWARD OF THE MEADOWLARK RECLAMATION FACILITY (MRF) CHLORINE CONTACT TANK EXPANSION



DATE: MARCH 23, 2022
TO: ENGINEERING & EQUIPMENT COMMITTEE
SUBJECT: CONSTRUCTION CONTRACT AWARD FOR SEWER LINING AND REHABILITATION 2021

BACKGROUND:

Operational maintenance and structural deficiencies were identified in existing segments of 8", 10" and 12" diameter vitrified clay pipe (VCP) and ductile iron pipe (DIP) sanitary sewer segments throughout 44 different locations in the District. The identified sewer segments need rehabilitation to restore pipeline structural or operational integrity.

Pipe integrity can be lost over time due to a combination of operational and maintenance defects such as debris, grease, encrustation, and root intrusion or structural defects such as cracking, displaced joints, offset joints, voids, and collapsed sewers.

Rehabilitation of these pipeline sections will be accomplished using a Cured-in-Place-Pipe (CIPP). CIPP uses trenchless technology to make fully structural repairs from inside the host pipe, increasing the efficiency and extending the service life of the pipe. The trenchless improvements significantly reduce surface restoration, paving, and traffic control project costs. Installing CIPP Liners is a proven and effective technique in inaccessible areas such as easements and reduces disruptive impacts to communities where pipelines are in the street.

Summary of rehabilitation:

- 44 Sewer Segments
 - 42 Full Lining (manhole to manhole)
 - 2 spot repairs
- Total length CIPP Lining - 8,859 LF (VCP and DIP)
 - 8" – 7,988 LF
 - 10" – 360 LF
 - 12" – 511 LF
- 3 Top Hats (lateral repairs)

DISCUSSION:

District staff received and opened bids from five (5) contractors on March 3, 2022, at 2:00 p.m., with bid results as follows:

<u>Bidder</u>	<u>Amount</u>
Nor-Cal Pipeline Services	\$ 615,360.00
Nu-line Technologies	\$ 632,932.00
Southwest Pipeline & Trenchless Corp.	\$ 634,086.00
Sancon Technologies	\$ 646,869.00
Insituform Technologies, LLC	\$ 652,231.00

Staff and Counsel completed the evaluation of qualifications and determined the following:

Nor-Cal Pipeline Services, the apparent low bidder's bid contained a major irregularity and did not fulfill the District's requirement to provide documentation of 5 years minimum of experience. Nor-Cal Pipeline Services bid was considered non-responsive.

Nu-line Technologies, the second apparent low bidder's bid contained a major irregularity by listing the incorrect subcontractor State of California Contractor's Licensing Board number which is an uncorrectable error beyond 24-hours after bid opening. Nu-line Technologies bid was considered non-responsive.

Southwest Pipeline & Trenchless Corporation (Southwest), the third apparent low bidder's bid contained no irregularities and is considered responsive. Southwest's bid is within 3% of Nor-Cal Pipeline Services bid.

Staff prepared the contract documents including the design plans, specifications and bid package. Staff will perform engineering services during construction, construction management, and inspection.

FISCAL IMPACT:

The combined total estimated cost and budget summary for both projects are as follows:

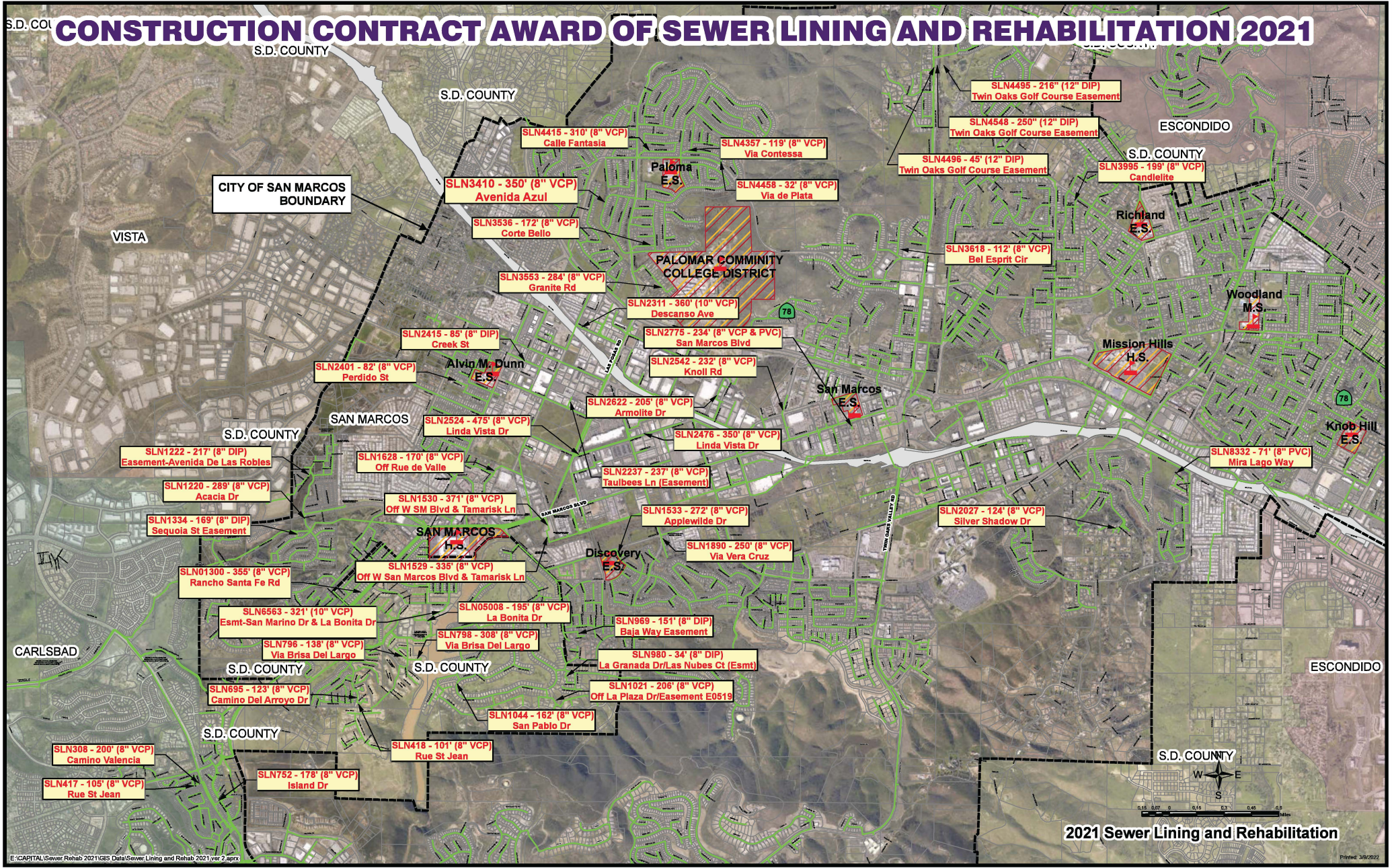
Budget	\$ 870,000
Construction	\$ 634,086
10% Contingency	\$ 63,409
Staff (Construction)*	\$ 20,000
Staff Overhead (Construction)*	\$ 60,000
Staff (Design)	\$ 15,210
Staff Overhead (Design)	\$ 31,047
Total	\$ 823,752
Budget Surplus	\$ 46,248

*Estimated Cost

RECOMMENDATION:

Staff recommends authorizing the General Manager to disqualify the bid received from Nor-Cal Pipeline Services and Nu-line Technologies and execute a construction contract with Southwest in the amount of \$634,086 for the Sewer Lining and Rehabilitation 2021 Project, subject to provisions of the contract.

CONSTRUCTION CONTRACT AWARD OF SEWER LINING AND REHABILITATION 2021



2021 Sewer Lining and Rehabilitation

E:\CAPITAL\Sewer Rehab 2021\GIS Data\Sewer Lining and Rehab 2021\ver 2.aprx

Printed: 3/8/2022

Budget Equipment Not Received Due to Product Shortage

<u>Project No.</u>	<u>Description</u>	<u>Replace</u>	<u>Total Cost</u>
2021100034	Ford F-250 4X 4 Super rCab W/Service Body	R	\$45,000
2022100037	Ford F150 2WD SuperCab XL	R	\$43,000
2022100038	Ford F150 4X4 SuperCab XL	R	\$45,000
2022100039	Kenworth T370 Truck W/Service Body	R	\$230,000
2022100040	Ford F-250 4X4 SuperCab XL	R	\$50,000
2022100041	Vacuum Excavator	R	\$165,000
2022100043	Ford F-550 Cab Chassis 2WD XL	R	<u>\$65,000</u>
TOTAL VECHICLES			<u>\$643,000</u>

All Equipment on Order Except Construction Kenworth T370