

DOMENICHELLI AND ASSOCIATES, INC. CIVIL ENGINEERING

Mr. Travis Bohanan Director of Operations Rancho Murieta Community Services District (RMCSD) PO Box 1050 Rancho Murieta, CA 95683 June 3, 2024

Subject: RM-045 Tank Sizing Standards

Dear Travis,

Per our Master Services Agreement dated 3-19-21, between Rancho Murieta Community Services District and Domenichelli & Associates Inc, we are requesting authorization to proceed on the following Task Order.

This letter represents our estimated scope and budget for analyzing District water system data provided by others and formulating a standard to be used to size water storage tanks for future development. This will establish set criteria to indicate when a new development will be required to construct a water storage tank to serve the new community.

The following is the intended scope of this task:

- Gather and review available District flow and use data.
- Coordinate possible testing to establish unknown flow rates.
- Analyze gathered data to formulate Average Day demands as well as Maximum Day and Peak Hour Demand factors.
- Establish tank storage criteria for emergency, fire and operational storage and check these criteria against current available storage.
- Produce a brief TM outlining our findings.

Scope of Services:

Task 1. Gather and review available District flow and use data:

Obtain system maps, development masterplan data, current flow data. D&A will review the pertinent data to compile criteria for analyses.

Task 2. Testing Coordination:

After review of the available data D&A will request additional system testing to determine if missing needed critical data can be obtained. We will also coordinate with District staff to determine the best method to obtain needed data.

Task 3. Data Analysis:

Gathered data will be analyzed to confirm Average Day flow criteria and provide estimates of maximum day and Peak Hour factors.



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We will establish tank sizing criteria from the above analysis and research into other similar local agency standards. D&A will also establish storage capacity criteria, current storage capacity needs and existing available excess or deficiency capacities.

Task 4. Technical Memorandum (TM):

D&A will summarize our findings and recommendations in a Draft TM to be submitted to the District for review. A review workshop will be conducted with the District to gather comments and thoughts regarding the TM. After the review workshop, D&A will provide responses to all comments and questions prior to completion of the final TM.

Deliverables: PDF version of the Draft TM, Review Workshop Agenda and Responses to Comments, PDF version and two hard copies of the Final Technical Memorandum.



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Project Fees

Rancho Murieta Community Services District RM-045 Tank Sizing Standards

Please give me a call if you have any questions.

Fee Estimate

6/3/2024

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Tasks	Labor					Total	
	QA/QC	Project Manager 2	Assistant Engineer	Total		Total	
	Joe Domenichelli	Daryl Heigher		Hours		Fee	
	\$210	\$180	\$138				
Fask 1. Gather and review available District flow and use data							
1.1 Gather and Review Information		16	8	24	\$	3,984	
Subtotal Task 1:	0	16	8	24	\$	3,984	
Task 2. Testing Coordination:							
2.1 Flow Tests Coordination	2	16	24	42	\$	6,612	
Subtotal Task 2:	2	16	24	42	\$	6,612	
Task 3. Data Analysis:							
3.1 Determine Max Day and Peaking Factors	2	40	24	66	\$	10,932	
3.2 Establish Tank Sizing Criteria	4	40	32	76	\$	12,456	
Subtotal Task 3:	6	80	56	142	\$	23,388	
Task 4. Technical Memorandum (TM):							
4.1 Draft TM	2	16	8	26	\$	4,404	
4.2 Workshop with the District	4	4		8	\$	1,560	
4.3 Final TM	2	8	4	14	\$	2,412	
Subtotal Task 4:	8	28	12	48	\$	8,376	
TOTAL	16	140	100	256	\$	42,360	

Sincerely,	Authorization to Proceed b	y,
Je-D		
Joe Domenichelli Domenichelli & Associates, Inc.	Rancho Murieta CSD	Date