



RANCHO MURIETA COMMUNITY SERVICES DISTRICT

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

IMPROVEMENTS COMMITTEE

(Directors Randy Jenco and Martin Pohl)

Special Meeting
September 18, 2024 at 8:00 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. **Closed Session**
 - A. *Closed session regarding appointment of the Director of Operations (Gov. Code, § 54957.)*
3. **Open Session/Report Action from Closed Session**
4. **Improvements Staff Report**
 - A. *Discussion Item* **Murieta Village Water Connection District Service Line vs. Private lines**
 - B. *Discussion Item* **Release of Warranty Bond for Riverview Infrastructure Phase 1A and 1B**
 - C. *Discussion Item* **Broken Raw Water Conveyance Pipe from Granlees to Calero Reservoir**
 - D. *Discussion Item* **Rio Oso Tank Flow Meter Installation Update**
 - E. *Discussion Item* **District Raw Water Report Methodology**
 - F. *Discussion Item* **Bathymetric Survey of Clementia**
 - G. *Discussion Item* **Proposed Enhancement of District's Meter Technology/Leak Detection with Advanced Meter Infrastructure (AMI)**



- H. **Discussion Item** Proposal to Authorize a Comprehensive Distribution System Study
- I. **Discussion Item** Development Update
- J. **Discussion Item** Main Lift North ATS for Generator Replacement
- K. **Discussion Item** North Gate UPS Upgrade to Make it Compatible with the Generator
- L. **Discussion Item** Lift Station 6B Rehab
- M. **Discussion Item** Lost Lake Maintenance Request
- N. **Discussion item** State and Federal Regulatory Compliance
- O. **Discussion item** Repairs to Recycled Water Line on Yellow Bridge

5. **Comments from the Public**

If you wish to speak during Comments from the Public or would like to comment regarding an item appearing on the meeting agenda, please complete a public comment card and submit to the Board Secretary prior to Public Comments. We will hold all comments to the Public Comment section.

6. **Director and Staff Comments/Suggestions**

7. **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 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 September 16, 2024. Posting locations are: 1) District Office; 2) Post Office; 3) Rancho Murieta Association; 4) Murieta Village Association.

MEMORANDUM

Date: September 9, 2024
To: Improvements Committee
From: Travis Bohannon – Interim Director of Operations
Subject: Monthly Improvements Committee Updates

A. Village Water Connection District Service Line vs. Private lines

There has been discussion on who owns the water lines at the village. The discrepancy is where does the CSD responsibility end and the homeowner responsibility began. There was a letter sent by Michael Fritschi to the Village management denoting the district water code that outlines the responsibility of district and homeowner.

B. Release of Warranty Bond for Riverview Infrastructure Phase 1A and 1B

Reynen & Bardis Homes are requesting a letter from the district stating that the one year warranty period for the accepted infrastructure has expired.

C. Repair Broken Raw Water Conveyance Pipe from Granlees to Calero Reservoir

On 8/26/2024, TNT started the repair work on the raw water line. As of 9/5/2024, TNT has removed the section of pipe that is broken and are currently working on fabricating the section of pipe that will be inserted for the repair. Below are pictures of the section of pipe that has been removed. The repair is estimated to be completed and tested by 9/16/2024.



D. Rio Oso Tank Flow Meter Installation

On Tuesday 8/20/2024, the flow meter was installed on the influent pipe for the Rio Oso tank. After minor adjustments, we were able to get a good read of the flow going into the tank. On Thursday, 8/22/2024, the meter was downloaded to ensure that it was working properly. After inspection of data, it was determined that the meter is working in proper order. We are currently collecting influent data for a period of time to determine usage.

E. District Raw Water Report Methodology

As reported before, the current way of reporting the amount of water in the reservoirs to the board as part of the monthly operations report is shown in the table below. It has been asked if the table could be altered to only show Calero and Chesbro reservoir levels. It was directed by the board to be brought back to the Improvements committee for discussion.

Table 1. Current water and wastewater storage

	acre-ft July 2024	acre-ft full	MGal July 2024	MGal Full	%full
Clementia Storage	953.2	907.0	310.5	295.5	105.1%
Chesbro Storage	769.7	1027.0	250.8	372.3	74.9%
Calero Storage	1993.3	2323.6	649.4	756.9	85.8%
Total of all Raw Water Reservoirs	3716.2	4257.6	1210.7	1424.7	87.3%
Wastewater Storage Reservoir available for production	216.8	796.3	70.7	254.6	27.2%

F. Bathymetric Survey for Clementia Reservoir:

Director Butler asked me to inquire about the cost to do a bathymetric survey for Clementia Reservoir. I reached out to Adkins Engineering for a budgetary quote since they did the other to reservoir surveys. Their proposal was for an estimated amount of \$28,400, done on a Time and Material basis. If the board decides to move forward with getting the survey done, I can try to solicit other bids for the survey.

G. Proposed Enhancement of District’s Meter Technology:

General Manager Morris has been researching newer technologies to help with the districts job of doing monthly meter reads and for helping to detect potential water leaks in the system. She will have a report on this.

H. Proposal to Authorize a Comprehensive Distribution System Study:

Attached is a proposal from Domenichelli and Associates to do a comprehensive study to determine additional tank sizing needs for future development in the distribution system.

I. Development Update:

See attached Development Report.

J. Main Lift North ATS for Generator Replacement:

Last month during a brief power outage, the generator at Main Lift North turned on like it was designed to do. The issue was that after the power was restored the ATS switch did not switch back to SMUD power and the generator continued to run. When the on-call operator showed up to check to make sure everything was back to normal, the issue was discovered. After manually turning the generator off, the ATS switch transferred back over to SMUD power. Our district electrician looked at the ATS switch and has determined that all of the components are old and failing and need to be replaced. The district has a contract with Sacramento Metro Fire Department that states that Sac Metro is responsible for ½ of the cost for generator related issues. I am currently attempting to get the head of facilities maintenance for Sac Metro to come on site and discuss this replacement.

K. North Gate UPS Upgrade to Make it Compatible with the Generator:

Recently it was brought to my attention that when the generator at North Gate does its weekly test that all of the computers and monitors go out and it takes a long while for them to come back up. After inspection it was determined that the UPS backup was not sufficient enough to keep the computers and monitors running during the ATS switching from SMUD to generator power and then back to SMUD power. Once this was realized as the problem Andy Lee, IT Manager, purchased the recommended UPS upgrade and the issue has been resolved.

L. 6B Lift Station Rehab

As part of the agreement with K Hovianian Homes for the Retreats development, KHOV is supposed to rehab/upgrade the 6B liftstation. There have been multiple delays in getting this done. There have been delays due to plan specifications and changes that have occurred from both KHOV and the District. The current issue is with the new panel that is being built for the new pumps that are being installed. Our contract electrician (Prodigy Electric) went to do an inspection on the panel before it was to be installed and found several issues with the panel which he has denoted on his report (see report submitted by Prodigy Electric). The current issue is the wire that was used to wire the panel. The drawings that were made by Aqua Sierra Controls (subcontractor for H Kovianian Homes) that were submitted and approved stated that "All control panel wiring is to be MTW stranded only". Aqua Sierra chose to instead use a multi-rated wire for THHN, THWN and MTW that was not approved and is inferior to what was approved in the plans. Jeremy stated that the wire will start to oxidize sooner than the MTW only rated wire and is not acceptable. I have sent an email to Aqua Sierra and KHOV expressing our concern and stating that the wire needs to be replaced with the specific wire that was denoted on the plans. Aqua Sierra is stating that they will not be changing the wire due to the fact that the wire used covers MTW. As of the time of writing this report, we are currently waiting to see what Aqua Sierra is going to do. It was stated that there could potentially be legal action.

M. Basin 5 (Lost Lake) Maintenance Request:

There have been multiple complaints from residents about Basin 5, a drainage basin for the District. There were multiple complaints about the smell and overgrowth in the basin. Solitude Lake management has provided a quote to harvest the overgrowth and chemically treat the duckweed that is in the basin. The district has repaired the aerator pods that are at the bottom of the basin to alleviate the smell, and it has proposed to harvest the overgrowth and remove the duckweed for aesthetic reasons. As stated before, this is a drainage basin and will require continual maintenance to keep it clean. The initial cleaning will require a harvesting machine to get it to where the weeds can be removed and then can potentially be managed by the District, but there is nothing the District can do about the duckweed that will eventually come back. This will require continual chemical maintenance to be done by an outside vendor as the district does not have licensing to apply chemicals. (See quote attached.)

N. State and Federal Regulatory Compliance Issues:

The District is required to do certain regulatory compliance reporting every three and five years on certain things in the District. The District is currently not in compliance with our CalARP/RMP/PSM reporting. These issues have to do with the chlorine system for the water and wastewater facilities. The District has always had these reports completed by an outside consultant. The person that did this reporting in the past had to abruptly retire due to medical reasons and our last reporting of these reports were due during the change of Director of Operation staff and was not completed. I was made aware of this issue during our most recent state inspection of our chlorine system. The District has hired Condor Earth to help us get back into compliance with overdue reporting and I am currently working on the deficiencies that were denoted in the most recent inspection report. Due to not being in compliance with reporting, the District could possibly be subject to fines. It is not known at this time if that will happen or not. It is being brought to the Improvements Committee to keep you informed.

O. Repairs to the Recycled Water Line on the Yellow Bridge

The recycled water line on the yellow bridge sprung a little leak in the rubber part of the expansion coupler. The leak was noticed Friday, 8/30/2024, during a routine daily inspection of the pipe. Once the leak was noticed, staff started to drain the recycled water to the golf course to start to empty the line. The leak was stopped in a couple of hours, but the District did have a minor spill of about 50 gallons of recycled water. The recycled water did not make it into the river. We are still currently draining the pipe to the golf course. Once the pipe is drained we will be having TNT do the repair. The District has purchased the parts to do the repair, we just don't currently have the man power or time to do the repair, so I have asked to have TNT do the repair on time and materials basis.



Rancho Murieta Community Services District

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Visit our website www.rmcsd.com

November 9, 2023

Sent by email to: tlennox@sc-manage.com

Tracy Lennox, General Manager
Murieta Village Association
14751 Poncho Conde Circle
Rancho Murieta, CA 95683

RE: Utility Line Maintenance Authority and Responsibility

Dear Ms. Lennox,

This letter is being provided per our phone discussion on November 6th regarding the authority and responsibility for utility line maintenance. It is my hope that this letter will provide clarification regarding the water distribution system public and private components.

The District Utility Codes establishes District responsibility only for those system elements which the District owns. The District must maintain all District owned water, sewer, and storm drainage infrastructure. The District does not, however, have either the authority, or the responsibility to complete maintenance and repairs on any privately-owned elements of the water distribution system.

In the Murieta Village, and in other areas of the District, Water Mainlines (Water Mains) are typically installed in streets and are at least 4-inches in diameter. Water Service Laterals are smaller in size than Water Mains and branch off of Water Mains and enter and serve private properties. Private Water Service Laterals connect to the District's water supply at the Water Main, where flow is controlled by a valve. Valves are used where a Water Service Lateral serves more than one private residence. Meters are used to capture single residence water usage. This protocol is established in the District Water Code Section 3.02, which states:

District Water Code Section 3.02 states:

"The District shall be responsible for operating, maintaining, and replacing all portions of the distribution system, which are owned by the District. The District shall not be responsible for operating, maintaining or replacing that portion of the distribution system not owned by the District. The installation of a District measuring device upon private property or within a

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General Manager • Mimi Morris



Rancho Murieta Community Services District

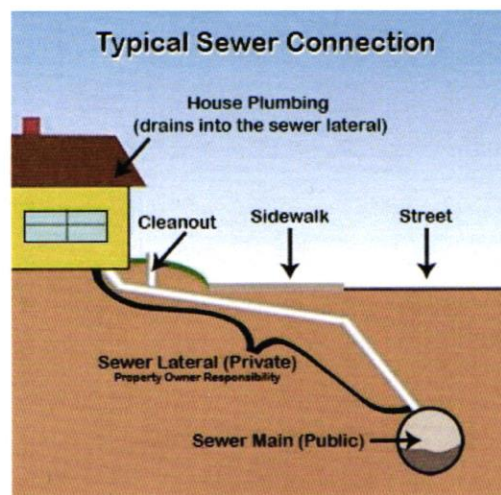
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*portion of the distribution system not owned by the District shall not create an obligation on the part of the District for operation, maintenance or replacement of any works or facilities not owned by the District. District responsibility for maintenance of service extends only to the water meter and the responsibility beyond the water meter is the property owners. **If the water service is connected to a private line, the District's responsibility stops at the valve on the District's main.***

Like water lines, Sewer Main Lines are typically installed in streets and are usually at least 6-inches in diameter. Sewer Service Laterals are typically installed on private property and include a cleanout and are usually only 3-4 inches in diameter. In newer installations a Sewer Service Lateral serves one customer. In older installations, a Sewer Service Lateral may be shared by more than one customer. In both cases, the District responsibility begins at the Sewer Main Line. The point where the Sewer Main meets the Sewer Service Lateral is called a Sewer Service Stub. The portion of the sewer line coming from the residence and before the Sewer Service Stub is not owned by the District. The District has no authority or responsibility for those elements of the Sewer Service System that start before the Sewer Service Stub.

District Code Section 3.02 (a)(b) states:

*"The District's responsibility for operation, maintenance, inspection, repair, and replacement extends only from the sewer main to the end of the sewer service stub. **The responsibility for the connection at and beyond the sewer stub is borne by the customer** as depicted in the District Sewer Standard Drawings. The installation of a District device upon private property, or within a portion of the collection system not owned by the District, shall not obligate the District to operate, maintain, or replace devices, works or facilities not otherwise owned by the District."*



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Another component of the District's Water System is Storm Water Lines. These are all considered to be the responsibility of the District. The Storm Water line designation is simple in that all municipal storm lines are owned by the District which is responsible for the operation and maintenance.

I have requested and will send you two maps that illustrate the water and sewer system that services the Murieta Village, including the connection points (valves/meters) and Sewer Service Stubs that indicate the transition between public and private elements of the systems. When I receive the maps, I will send them to you and circle back to see if you would like to meet to discuss this issue further. Thank you for your patience and please let me know if I can be of further assistance in the interim.

Most sincerely,

Michael Fritschi, P.E., Operations Director

c. Mimi Morris, General Manager

Ron Greenfield, Utilities Manager

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General Manager • Mimi Morris



Rancho Murieta CSD

Community Services District

September 10, 2024

Les Hock

RM RIVERVIEW, INC.

350 University Ave, Suite 180

Sacramento California 95825

RE: RIVERVIEW 1a, – RELEASE FROM WARRANTY

Mr. Hock:

The improvement plans for Riverview 1a project have successfully completed the one-year warranty period as of March 15, 2024. Should any further work need to be performed in the public right of way, you will be required to obtain an encroachment permit.

Warranty bonds associated with Riverview Phase 1a, will be released.

Should you have any further questions please contact our office (916-354-3700) www.rmcsd.com

Sincerely,

Mimi Morris, General Manager
[Rancho Murieta Community Services District](http://www.rmcsd.com)
P.O. Box 1050
[Rancho Murieta, CA 95683](http://www.rmcsd.com)



Rancho Murieta CSD

Community Services District

September 10, 2024

Les Hock

RM RIVERVIEW, INC.

350 University Ave, Suite 180

Sacramento California 95825

RE: RIVERVIEW 1b, – RELEASE FROM WARRANTY

Mr. Hock:

The improvement plans for Riverview 1b project have successfully completed the one-year warranty period as of March 15, 2024. Should any further work need to be performed in the public right of way, you will be required to obtain an encroachment permit.

Warranty bonds associated with Riverview Phase 1b, will be released.

Should you have any further questions please contact our office (916-354-3700) www.rmcsd.com.

Sincerely,

Mimi Morris, General Manager
Rancho Murieta Community Services District
P.O. Box 1050
Rancho Murieta, CA 95683



July 24, 2024

Rancho Murieta Community Services District
15160 Jackson Road
Rancho Murieta, CA 95683

RE: Clemmentia Reservoir Bathymetric Survey

Thank you for contacting Adkins Engineering and Surveying for your surveying needs. Adkins has been serving Southern Oregon and Northern California for over 40 years with a wide variety of services including engineering, surveying, planning, testing and inspections.

It is our understanding that the District is wanting to conduct a bathymetric survey on one of your three reservoirs in order to better model a stage storage curve. We have prepared a scope and fee estimate outlined below:

1. Field Survey – Bathymetric Survey of the Clementia Reservoir, topographic survey of ground surface and drainage infrastructure around the reservoir, setting benchmarks for future use by the District.
2. Draft Reservoir Surface and 3D Volume Depiction – Prepare an AutoCAD map of the reservoir and surrounding topography for use by the District. Deliverables will include an AutoCAD file and map prepared on 22”x34” layout.

We propose to complete these items on a Time and Materials basis for an estimated fee of \$28,400.

Thank you for requesting our firm to provide you with our fee proposal and we look forward to working with the District. Please contact me if you have any questions or if you would like to discuss any details of this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kraig M. Blim', is written over a light grey circular stamp.

Kraig M. Blim, PLS (Oregon)



Mr. Travis Bohanan
Director of Operations
Rancho Murieta Community Services District (RMCS D)
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 Domenicelli & 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.



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.



DOMENICHELLI AND ASSOCIATES, INC.
CIVIL ENGINEERING

Project Fees

**Rancho Murieta Community Services District
 RM-045 Tank Sizing Standards**

Fee Estimate
 6/3/2024

Tasks	Labor			Total Hours	Total Fee
	QA/QC	Project Manager 2	Assistant Engineer		
	Joe Domenichelli \$210	Daryl Heigher \$180	 \$138		
Task 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

Please give me a call if you have any questions.

Sincerely,

Joe Domenichelli
 Domenichelli & Associates, Inc.

Authorization to Proceed by,

 Rancho Murieta CSD Date

MEMORANDUM

Date: September 18, 2024
To: Improvements Committee
From: Mimi Morris, General Manager
Subject: AMI and Leak Detection Update

As reported at the August Improvements Committee meeting, staff has been researching Advanced Metering Infrastructure (AMI). AMI technology represents a significant enhancement to both billing and operations due to both the accuracy and efficiency of the data collection methodology.

The compelling, additional benefit to both the District and households is the integration of leak detection in the proposed new meters that would be part of the AMI upgrade. In 2022, the District's treated water loss rate was 12%, or 200 Acre-Feet. We don't have data on homeowners' leaks, but it is likely that their loss rates approximate the District's, given the age of the pipes.

Not all vendors have fully integrated leak detection in one meter. Several have leak detection devices that are installed at or near the meter installation. These separate units then require maintenance and observation and even replacement if they fail.

As I reported last month, one of the vendors offers a unique ultrasonic acoustic leak detection technology that is integrated into their ultrasonic meters. The meters are fully guaranteed for 20 years. These meters accurately track water usage through ultrasonic readings and that same data is used to pinpoint small, mostly undetected and long-standing leaks. These leaks can be the costliest since they are usually continuous and undetected for months or years.

The software also includes the ability to automatically notify homeowners (through texts or emails or phone calls) of what appear to be continuous leaks so they can identify and address their leaks.

The vendor with the integrated leak detection system provided me with a list of water districts from throughout the country and I emailed them regarding their experiences with the product. I received several responses, with all of them indicating that they had seen significant savings because of the leak detection capability. Many of these districts are larger than RMCS D, but some were comparable in size. Savings ranged from \$1.5 million to \$3 million within 1-2 years.

The one-time overall investment in new meters and the data collection infrastructure is roughly \$950,000 for meters, another \$300,000 for their installation, another \$40-\$50K for the data collection infrastructure, (base device, antennae, etc.) and another \$20K for annual software costs. For a total of almost \$1.3 million fixed costs and ongoing costs of \$20K per year.

Staff plans to submit a grant application to the U.S. Bureau of Reclamation under their WaterSmart Water and Energy Efficiency grant program for FY 25. The due date has been extended to mid-November and staff plans to submit an application by November 7th. Funding decisions occur in May of 2025. Staff has spoken to water efficiency experts at the Regional Water Authority which is a big supporter of this technology. RWA will be writing a letter of support for our grant application. The grant program does permit allowable costs incurred now to be considered as either match or reimbursable expenses, but there is no guarantee the grant will be awarded. Staff has a quote from the vendor with the unique, fully-integrated leak detection capability AMI and installation that expires this month. However, Staff has asked about the possibility of extending the time frame of the quote to the point when the federal grant decision will be known. Given limited District resources, staff recommends waiting until the grant award notification is received before proceeding.

The District is less than 100 connections away from 3,000 total connections and the corresponding transition to an Urban Water provider. There are multiple new reporting obligations that will be in play at that time, including annual water loss audits. Planning now for improved leak detection will help us address our current loss rate of 12% (200 acre feet per year) while also improving our overall utility billing accuracy and efficiency.

Staff will continue to evaluate the options and will bring additional information to the board next month.

Summarized Development Report

8/30/2024

Overall 670 FSA Lots: 670 Lots

CANCELLED LOTS -- 120

Lakeview: 99 Original Approved Lots

99 Lots known as s ()

Murieta Gardens II: 21 Original Approved Lots

21 Lots known as Murieta Gardenss (Murieta Gardens II)

CONNECTED LOTS -- 242

Murieta Gardens II: 78 Original Approved Lots

78 Lots known as Murieta Gardenss (Murieta Gardens II)

Murieta Marketplace aka MG I: 50 Original Approved Lots

50 Lots known as Commercials ()

Retreats N&E: 62 Original Approved Lots

62 Lots known as Halfplexs (4100 sf)

Retreats West: 22 Original Approved Lots

22 Lots known as Halfplexs (4100 sf)

Riverview: 30 Original Approved Lots

2 Lots known as Big Estates (12,000-14,500 sq ft.)

11 Lots known as Circles (6500-8500 sf)

10 Lots known as Cottages (<6500 sf)

5 Lots known as Mini-Estates (8500-12K sf)

2 Lots known as Mini-Mansions (14,500-24,500 sq ft.)

PLANNED LOTS -- 308

Residences of Murieta Hills: 198 Original Approved Lots

65 Lots known as Big Estates (12,000-14,500 sq ft.)

5 Lots known as Mansions (>24,500 sf)

99 Lots known as Mini-Estates (8500-12K sf)

29 Lots known as Mini-Mansions (14,500-24,500 sq ft.)

Riverview: 110 Original Approved Lots

4 Lots known as Big Estates (12,000-14,500 sq ft.)

42 Lots known as Circles (6500-8500 sf)

22 Lots known as Cottages (<6500 sf)

4 Lots known as Mansions (>24,500 sf)

31 Lots known as Mini-Estates (8500-12K sf)

7 Lots known as Mini-Mansions (14,500-24,500 sq ft.)



Aqua Sierra Controls, Inc.

California's Leading Instrumentation & Electrical Contractor for Over 40 Years

1650 Industrial Drive, Auburn, CA 95603

Nikki Hernandez, Project Manager

nhernandez@aquasierra.com www.aquasierra.com

Cell (530) 906-5418 Office (530) 488-7295

CA Contractors License A, C-10 474023

CA Small Business Certification #1162

CA DIR #1000003631

IT Services - SCADA – UL508 Panel Shop – Pump Controllers
SCADA Maintenance – Instrument Maintenance & Calibrations

Attention: Prodigy Electric

Phone: 916-997-0798

Subject: Submittal Response

Project: Rancho Murieta Pump Station 6B

Project Number: B22360

October 27, 2023

Mr. Jeramy D. Radmall,

The following is our submittal 3 review response letter. **See ASC responses in red following your comments.**

1). E1.0 The wire color code still does not match as well as has conflicts with the newer tesco version I sent with the newest tesco drawings for the back pan replacement project.

The wire color is fixed according to match TESCO Wire Color Legend template.

2). E2.0 Does not show the $\frac{3}{4}$ " control conduit going to the generator which will need to be intercepted for panel placement.

Drawing E2.0, and E9.0 fixed. The existing conduit is named C603.

3). E3.0 Single line diagram should show all the proper wire sizes for every transition. Use nec conductor sizing table for proper sizes using 60 deg Celsius. That way we are clear on all the wires that are being replaced and what sizes they will be.

if it is not show in the drawings we will need to inspect before being put into service to verify proper sizing.

We added the wire sizes on single line diagram.

4). E5.0 Relays should be Idec rr3b ul 120ac, timers should be rte-p1af20. As the district has many sites with these already installed keeps the parts necessary to keep on hand to a minimum.

Drawing E5.0 and BOM changed. The relays replaced with the IDEC RR3B-ULAC120V. About the time relays, we will use the existing materials. See drawing E5.0, note 3 about time relays.

5). E6.0 On the vfds R1 is default as the fault relay, and R2 should be used for the pump running relay. That way it falls in line with our other vfd sites. Also, we would like to move the setting file for the vfds for our records.

Drawing fixed. A VFD settings table will be provided by email after the field installation.

6). E7.0 Looks like most of it was corrected. Also noticed that you still have black control wire in this. Refer to the tesco wire color chart. Most all 120 circuits are to be red with the exception of externally powered which is to be yellow.

Drawing fixed.

7). E9.0 i) Note that the generator also has a 3/4" control pipe that both generator pipes need to be intercepted for the panels being put together.

This pipe will need to be intercepted for the panel to be installed. It may not need to be changed but it should be noted.

Drawing E2.0, and E9.0 fixed. The existing conduit is named C603.

ii) on page E2.0 shows C 600 shows from control panel to ug pull box then to wet well. Correct as it is a control circuit with a 4-20ma loop which is prone to vfd noise. On page e9.0 it shows c600 going from vfd panel to wet well (incorrect).

Drawing fixed.

E10.0 i) Interconnections Drawing does not show the underground pull-box which can also denote the placement of the eyes.

Drawing fixed.

ii) In the pull box there are to be no wire terminations, Manufacturer cables are to go continuously from the wet well to their termination point into the panel.

The pumps have a 50ft cable. This cable is going to the VFD. There is no termination in the pull box.

iii) EYS fill. Do not fill the eyes fittings. The district electrician will complete this the day of start-up.

This is a field procedure.

iv) C600 is showing that it goes from vfd panel to wet well. On page E2.0 it shows that c600 goes from wet well to the pull box then to the control section of the panel which is correct. Please change Page E10.0

Drawing fixed.

Respectfully,

Nikki Hernandez
Project Manager

RANCHO MURIETA PUMP STATION 6B PUMP(S) UPGRADE PROJECT AUGUST 2023

DRAWING INDEX

<u>SHEET</u>	<u>DWG NO</u>	<u>DRAWING TITLE</u>
1	E0.0	TITLE SHEET, DRAWING INDEX
2	E1.0	SYMBOLS AND ABBREVIATIONS
3	E2.0	SITE PLAN
4	E3.0	SINGLE LINE DIAGRAM
5	E4.0	MECHANICAL LAYOUT
6	E5.0	VFD SECTION INNER DOOR AND BACKPANEL ELEVATION
7	E6.0	240VAC POWER DISTRIBUTION, 120VAC AUXILIARY POWER WIRING SCHEMATIC
8	E7.0	PUMP 1 & PUMP 2 CONTROL POWER WIRING SCHEMATIC
9	E8.0	UL LISTING - AS LISTED
10	E9.0	CONDUIT & WIRE SCHEDULE
11	E10.0	INTERCONNECTIONS

General Notes

07.20.23 TBA



Project Name and Address
RANCHO MURIETA
PUMP STATION 6B
7291 BRIDGE HOUSE LN,
RANCHO MURIETA, 95683, CA

TITLE SHEET, DRAWING INDEX

ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 1
Checked By T. PINION	E0.0
Scale NONE	

SYMBOLS LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	PANELBOARD		TELEPHONE OUTLET, WALL
	CONTROL PANEL		JUNCTION BOX
	SWITCHBOARD		GROUND
	AMMETER 250 DEGREE SCALE		ALARM HORN
	VOLT METER 250 DEGREE SCALE		THERMOSTAT
	WATT HOUR METER AND SOCKET		MOTOR STARTER CONTACTOR COIL
	PHASE FAILURE RELAY		MANUAL MOTOR STARTER
	ELAPSED TIME METER		DISCONNECT SWITCH - NON FUSED
	CONTROL POWER TRANSFORMER		DISCONNECT SWITCH - FUSED
	SELECTOR SWITCH		DISCONNECT SWITCH
	TIME DELAY RELAY		DISCONNECT SWITCH WITH START PB LOS & AUX CONTACT
	LATCHING RELAY		FUSE, AMPERE SIZE SHOWN
	RELAY		PANEL WIRING
	INTERPOSING RELAY		FIELD WIRING
	LIMIT SWITCH		DENOTES WIRE FOR GROUND FAULT CIRCUIT INTERRUPTER OR GROUND
	INTRINSICALLY SAFE RELAY		CIRCUIT RUN DIRECT TO DESTINATION
	TERMINAL BLOCK POINT		SEAL-OFF FITTING
	PUSHBUTTON		WIRES CONNECTED
	1P CIRCUIT BREAKER		WIRES NOT CONNECTED
	RECEPTACLE		CONDUIT CROSSING NOT CONNECTED
	HEATER		1 LEVEL 1 POLE TERMINAL
	ELECTRICAL PHASE		2 LEVEL TERMINAL-UPPER TIER
			2 LEVEL TERMINAL-LOWER TIER
			ALARM BEACON
			FUSE

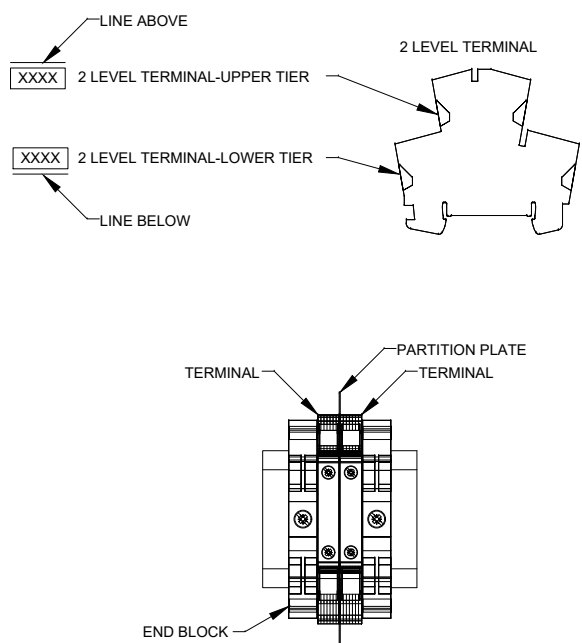
SYMBOL	DESCRIPTION
	PULL BOX
	HORN
	CONTACT NORMALLY OPEN
	CONTACT NORMALLY CLOSED
	OVERLOAD DEVICE CONTACT
	OVERLOAD DEVICE ELEMENT
	DISCONNECT SWITCH
	PILOT LIGHT, COLOR AS INDICATED
	ANTENNA MAST
	GROUND ROD
	SMOKE DETECTOR
	FIRE ALARM PULLSTATION
	NAMEPLATE
	ANALYZER ELEMENT
	FLOW ELEMENT
	FLOW INDICATOR TRANSMITTER
	FLOW SWITCH
	LEVEL ELEMENT
	LEVEL INDICATOR TRANSMITTER
	LEVEL SWITCH HIGH
	LEVEL SWITCH LOW
	LEVEL TRANSMITTER
	OXYGEN ELEMENT
	PRESSURE INDICATOR
	PRESSURE SWITCH HIGH
	PRESSURE INDICATOR TRANSMITTER
	PHOTOELECTRIC SENSOR
	SOLENOID VALVE
	LIMIT/INTRUSION SWITCH

A	AMPERES
AFD	ADJUSTABLE FREQUENCY DRIVE
AIC	AMPS INTERRUPTING CAPACITY
AI	ANALOG INPUT DRIVE
AO	ANALOG OUTPUT
BC	BARE COPPER
BP	BOOSTER PUMP
C	CONDUIT
CB	CIRCUIT BREAKER
CH	CHANNEL
CNTL	CONTROL
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR,R	CONTROL RELAY
CT	CURRENT TRANSFORMER
CU	COPPER
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
(E)	EXISTING
EMT	ELECTRICAL METALLIC TUBING
EYS	CONDUIT SEAL FITTING
ETM	ELAPSED TIME METER
F	FUSE, FILTER
(F)	FUTURE
FSP	FILTER SOLENOID PANEL
FVNR	FULL VOLTAGE NON REVERSING
FVR	FULL VOLTAGE REVERSING
GND	GROUND
G	GREEN
GFI	GROUND FAULT CIRCUIT INTERRUPTER

ABBREVIATIONS

HLP	HAZARDOUS LOCATION PANEL
IMC	INTERMEDIATE METAL CONDUIT
IR	INTERPOSING RELAY
IS	INTRINSICALLY SAFE
ISR	INTRINSICALLY SAFE RELAY
INST	INSTANTANEOUS
JB	JUNCTION BOX
KVA	KILOVOLT AMPERES
KW	KILOWATT
LA	LIGHTNING ARRESTER
LCP	LOCAL CONTROL PANEL
LFMC	LIQUID TIGHT FLEX METAL CONDUIT
LOS	LOCK OFF STOP PUSH BUTTON
mA	MILLIAMPERES
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFG	MANUFACTURER
MOT	MOTOR OVERTEMPERATURE SENSOR
MSB	MAIN SWITCHBOARD
NTS	NOT TO SCALE
N	NEUTRAL
N/A	NOT APPLICABLE
(N)	NEW
NP	NAMEPLATE
OIT	OPERATOR INTERFACE
OL	OVERLOAD
PB	PUSHBUTTON
PFR	POWER FAIL RELAY
PLC	PROGRAMMABLE CONTROLLER
PNL	PANEL

PM	POWER MONITOR
POC	POINT OF CONNECTION
POT	POTENIOMETER
PTT	PUSH TO TEST
PWR	POWER
(R)	EXISTING TO BE REMOVED
R&R	REMOVE & REPLACE
RMC	RIGID METAL CONDUIT
RSC/PVC	RIGID STEEL PVC COATED
SP	SOLENOID PANEL
SOV	SOLENOID OPERATED VALVE
SWBD	SWITCHBOARD
SZ	SIZE
TB	TERMINAL BARRIER
TDR	TIME DELAY RELAY
TC	THERMALCOUPLE
TM	THERMAL MAGNETIC
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TWSP	TWISTED SHIELDED PAIR
TWP	TWISTED PAIR
TYP	TYPICAL
UPS	UNINTERRUPTIBLE POWER SUPPLY
UON	UNLESS OTHERWISE NOTED
V	VOLTS, VOLTAGE
WP	WEATHERPROOF
WW	WET WELL
XFMR	TRANSFORMER
XP	EXPLOSION PROOF



DESCRIPTION	PHASE/CODE LETTER	NON-FIELD WIRE COLOR	WIRE SIZE
480V, 3φ	A	BROWN	PER DRAWING
	B	ORANGE	
	C	YELLOW	
	N	WHITE	
240V/208, 3φ	A	BLACK	
	B	RED, ORG IF HI LEG	
	C	BLUE	
	N	WHITE	
240V / 120V, 1φ	L1	BLACK	
	L2	RED	
	N	WHITE	
+24VDC	+24VDC	BLUE	
-24VDC	-24VDC	BLUE/WHITE STRIP	
+12VDC	+12VDC	PINK/WHITE STRIPE	
-12VDC	-12VDC	BLACK/WHITE STRIPE	
AC CONTROL	N/A	RED	
DC CONTROL	N/A	BLUE	
GROUND	GND	GREEN	
SHIELDED PAIR	+	RED	
	-	BLACK	
INTRINSICALLY SAFE	N/A	LIGHT BLU	

NOTE: ALL CONTROL PANEL WIRING TO BE MTW STRANDED ONLY. WIRE COLOR CHART IN ACCORDANCE WITH UL 508A 66.5.2, 66.9.1, & EXCEPTION #2 OF 66.9.1.

-LIMIT SWITCHES-			
	CLOSE ON REACHING LIMIT		
	CLOSE ON LEAVING LIMIT		
-TIMED CONTACTS-			
SYMBOL	NORMAL	OPEN TO CLOSED	CLOSED TO OPEN
	OPEN	DELAYED	INSTANTANEOUS
	CLOSED	INSTANTANEOUS	DELAYED
	OPEN	INSTANTANEOUS	DELAYED
	CLOSED	DELAYED	INSTANTANEOUS
-SENSING SWITCHES-			
RISING	FALLING	SENSED VARIABLE	
		FLOW	
		LEVEL	
		PRESSURE	
		TEMPERATURE	

General Notes

07.20.23	TBA
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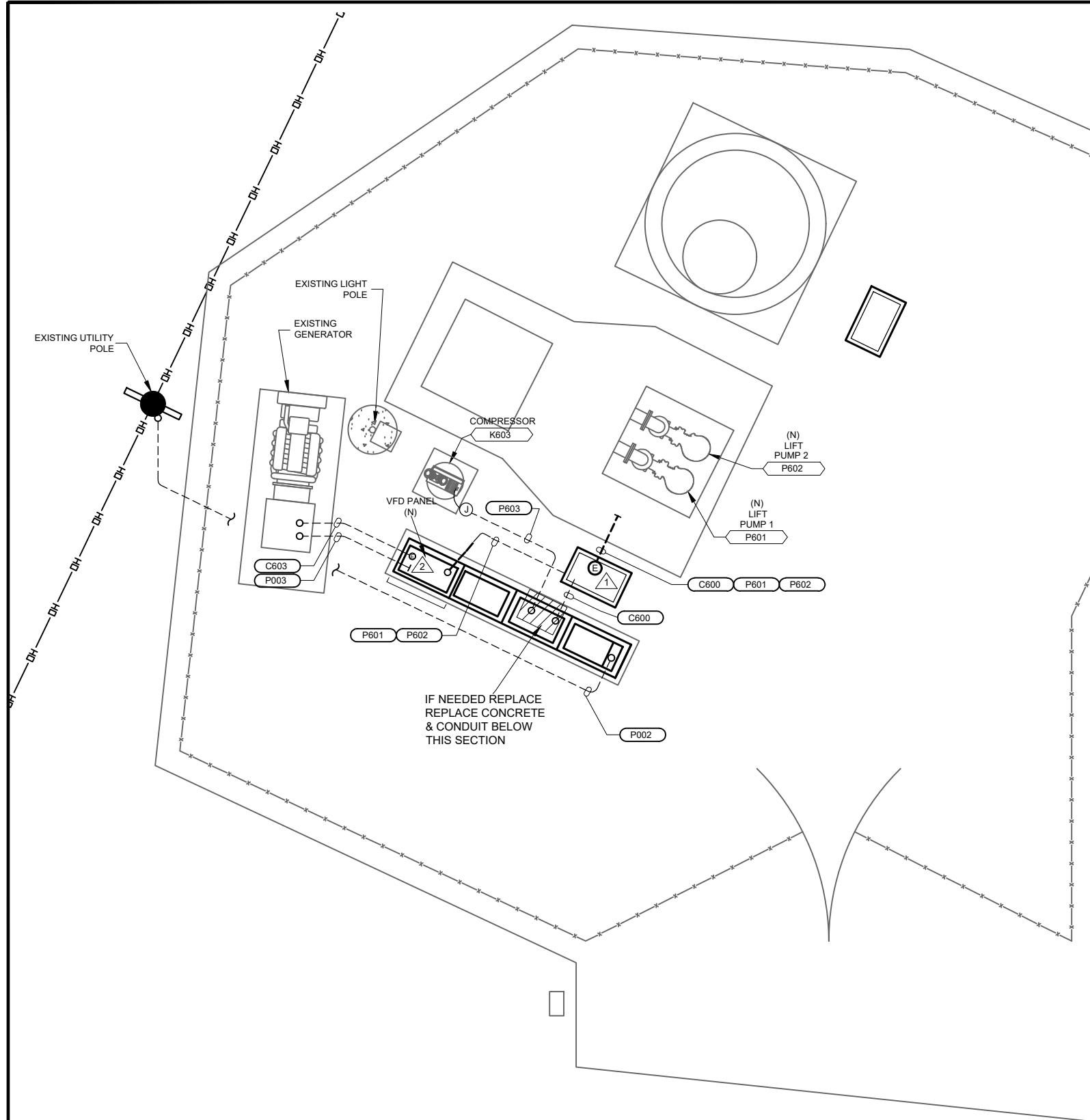
As Aqua Sierra
Controls, Inc.

Sales & Service (800) 649-4287

Project Name and Address
**RANCHO MURIETA
 PUMP STATION 6B
 7291 BRIDGE HOUSE LN,
 RANCHO MURIETA, 95683, CA**

SYMBOLS AND ABBREVIATIONS

ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 2
Checked By T. PINION	E1.0
Scale NONE	



DRAWING REFERENCED NOTES:

- ① ONLY SELECT CONDUITS SHOWN. CONTROL AND LOW VOLTAGE CONDUITS NOT SHOWN.

ELECTRICAL PLAN NOTES:

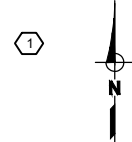
- SEE ELECTRICAL SYMBOLS AND ABBREVIATIONS DRAWING FOR SYMBOL DEFINITION
- ALL WORK SHALL CONFORM TO LOCAL CODES AND NATIONAL ELECTRIC CODE.
- SITEPLAN ACCURATE FOR ELECTRICAL WORK ONLY COORDINATE WITH OTHER DISCIPLINES
- CONFIRM HOOKUP REQUIREMENTS FOR ELECTRICAL AND MECHANICAL EQUIPMENT PRIOR TO INSTALLING UNDERGROUND CONDUIT AND STUB-UPS. MISSING CONDUITS, INCORRECT SIZING, OR OTHER ISSUES MUST BE BROUGHT TO THE ATTENTION OF ENGINEER PRIOR TO BACKFILL.
- CONDUIT ROUTING IS SHOWN GENERALLY DIAGRAMMATIC AND DOES NOT INDICATE TRENCH WIDTH OR TRENCH LAYOUT FOR CONDUITS OUTSIDE BUILDINGS. IF CONTRACTOR WANTS TO RUN CONDUITS IN ROUTES OTHER THAN THOSE SHOWN FOR ANY REASON, THEN HE SHALL SUBMIT THE PLAN FOR APPROVAL PRIOR TO INSTALLATION SPECIFY REASON FOR CHANGE
- INSTALL NON-UTILITY CONDUITS PER DRAWING DETAILS AND SPECIFICATIONS SECTION 16110
- CONDUITS SIZE, TYPE AND FILL DEFINED BY TAG NAME IN CONDUIT NOTES ON CONDUIT & WIRE SCHEDULE DWG E9.0
- INSTALL UNDERGROUND NON-DUCTBANK CONDUITS PER ELECTRICAL DETAIL LVC
- CONDUIT TRANSITIONS SHALL BE PER EXPOSED CONDUIT TRANSITION DETAIL EC
- EXPOSED CONDUIT TYPE AND FITTINGS TO BE USED ABOVE TRANSITION SHALL BE PER AREA CLASSIFICATION DEFINED IN CONDUIT SPECIFICATIONS AND EQUIPMENT SPECIFIC DETAIL
- REPAIR SURFACE TO PREVIOUS CONDITION FOR ALL UNDERGROUND CONDUIT ROUTES GROUT, CAULK, AND PAINT ANY PENETRATIONS INTO STRUCTURES FOR WATERTIGHT SEAL
- USE SS EXPANSION WEDGE ANCHORS OR EPOXY ANCHORS AS NECESSARY FOR EQUIPMENT MOUNTING

OTHER NOTES:

- ① ALL THE PIPES FROM THE WET WELL TO THE PULL BOX THEY HAVE TO HAVE EYS ON THEM TO SEAL THE WET WELL. THE PIPES SHOULD HAVE OCOL NIPPLE FOR RIGIDITY.
- ② CONDUITS SHOULD HAVE PVC SCH 40 90DEG. ELBOW TRANSITION FROM UNDERGROUND WITH A RISER CUT AT 1.5" ABOVE PAD AND PVC BELL END INSTALLED ON THEM

LIFT STATION 6B POWER PLAN

APPROXIMATE SCALE: 3/8" = 1'



General Notes

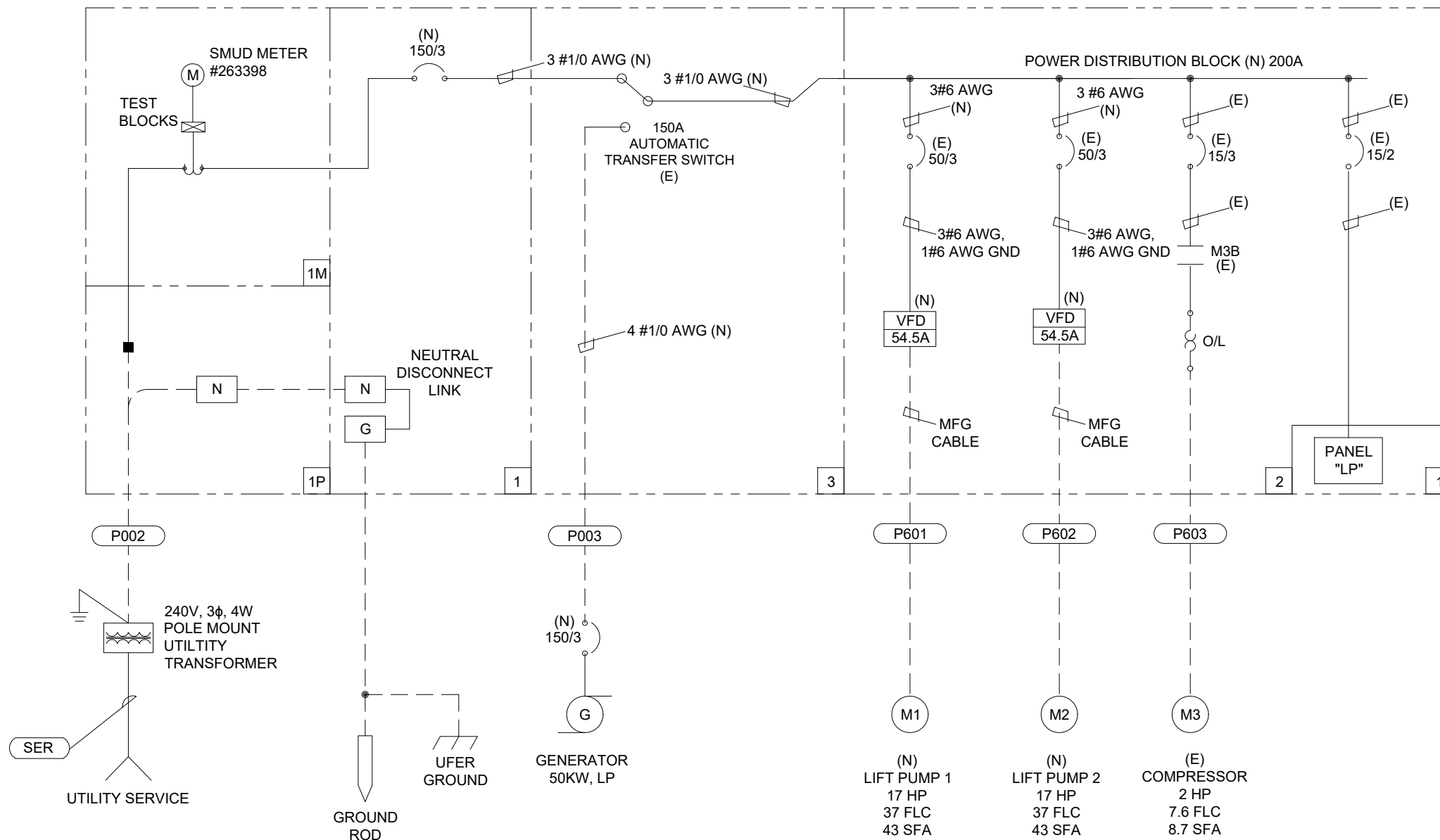
07.20.23 TBA



Project Name and Address
RANCHO MURIETA
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7291 BRIDGE HOUSE LN,
RANCHO MURIETA, 95683, CA

SITEPLAN

ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 3
Checked By T. PINION	E2.0
Scale NONE	



SINGLE LINE DIAGRAM

General Notes

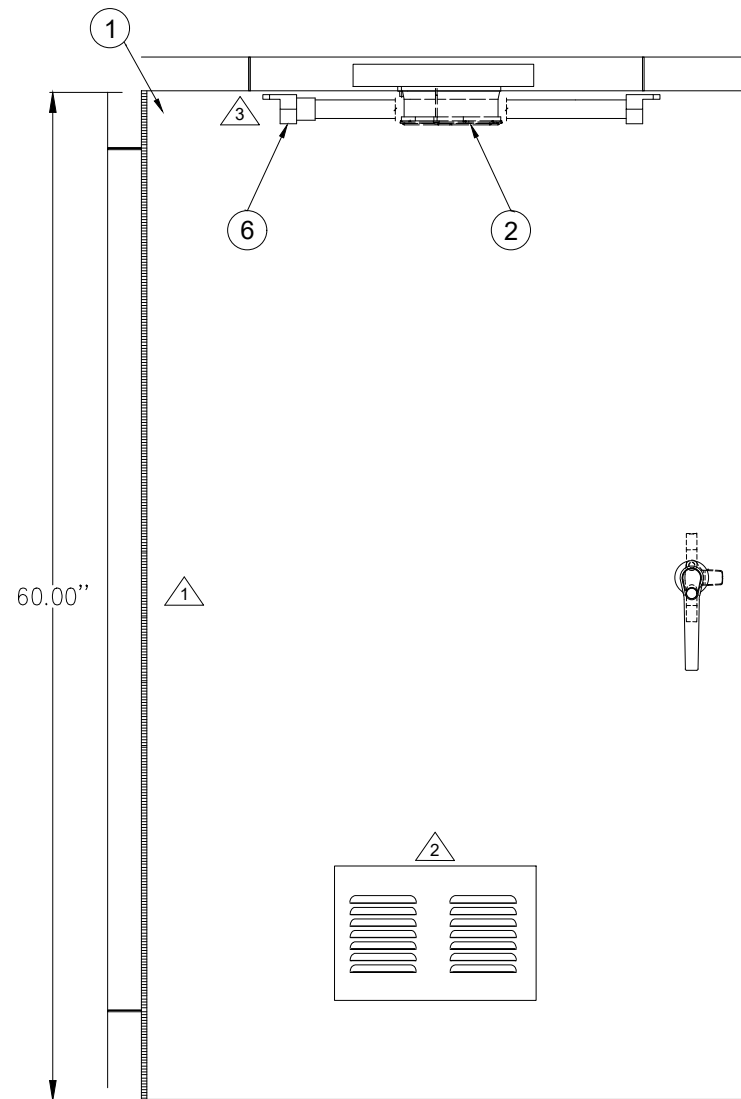
07.20.23	TBA



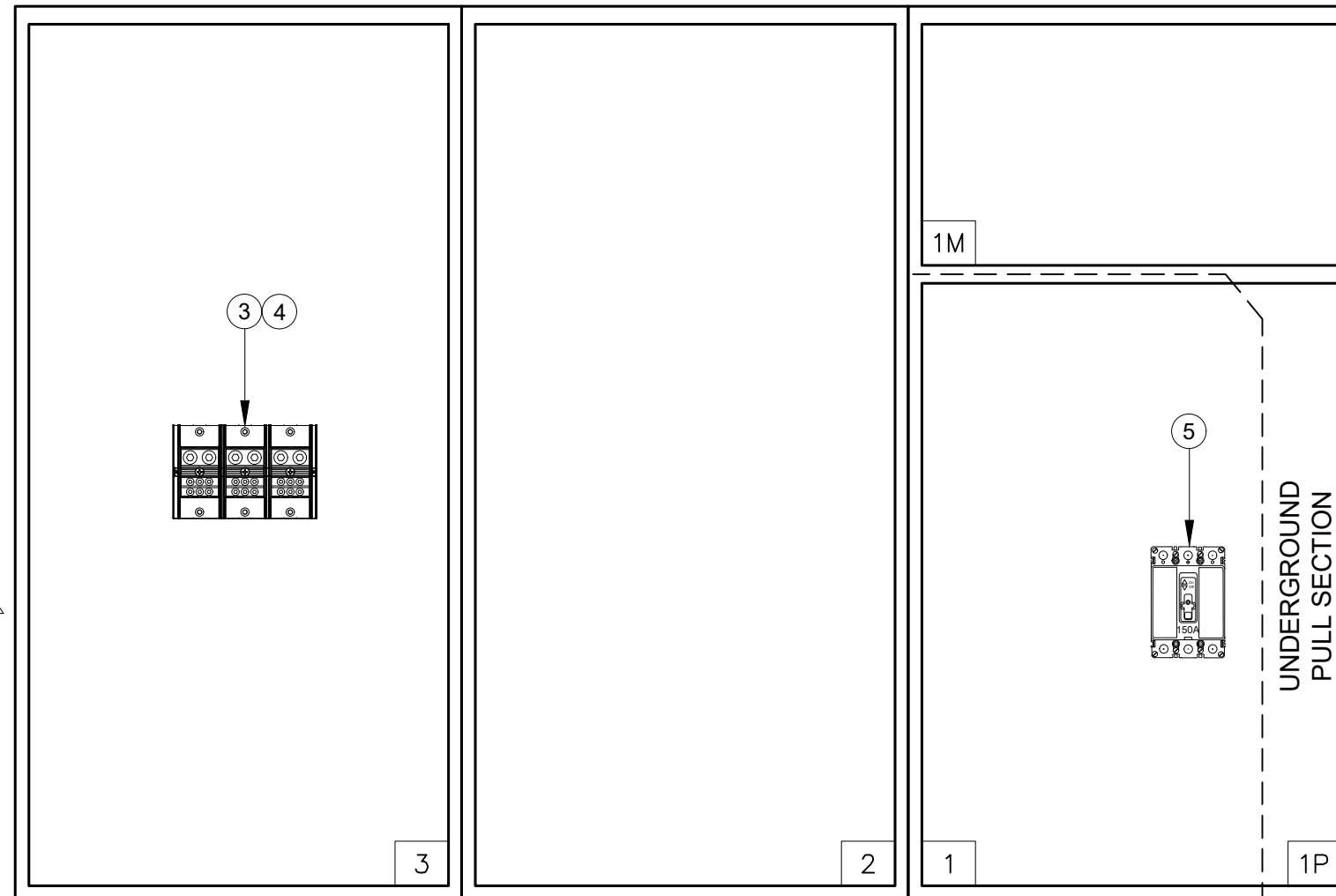
Project Name and Address
RANCHO MURIETA
PUMP STATION 6B
7291 BRIDGE HOUSE LN,
RANCHO MURIETA, 95683, CA

SINGLE LINE DIAGRAM

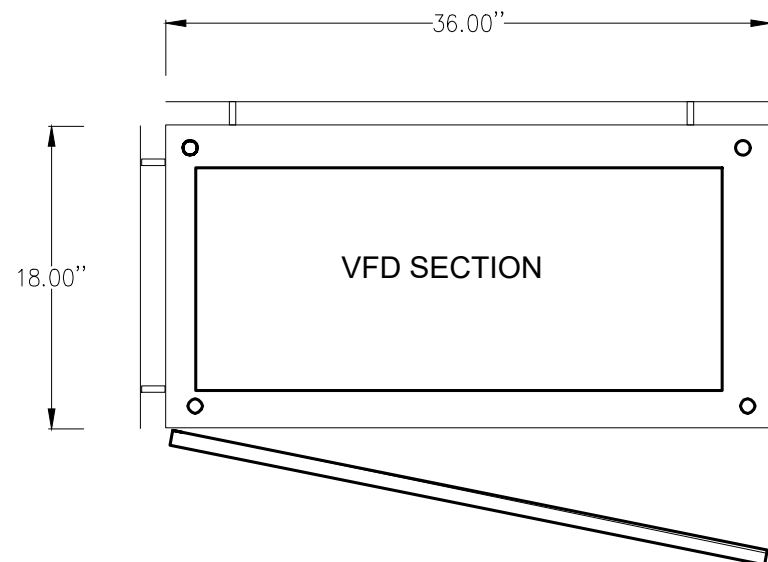
ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 4
Checked By T. PINION	E3.0
Scale NONE	



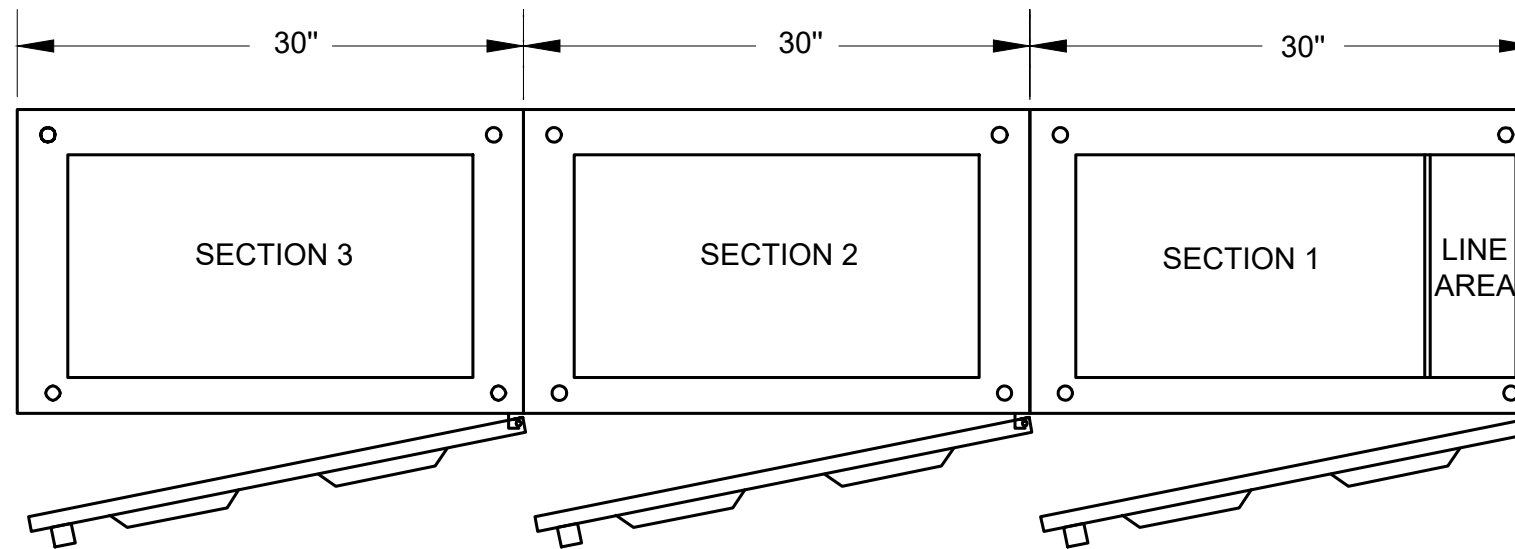
VFD FRONT DOOR VIEW



EXISTING SECTIONS 1-3
NEW COMPONENTS SHOW ONLY



VFD SECTION



EXISTING SECTIONS 1-3

△ ENCLOSURES WILL BE COVERED IN ANSI 61 GREY POWDER COAT
 △ ALL SCREWS AND WASHERS WILL BE STAINLESS STEEL

△ LED ENCLOSURE LIGHT WILL BE PLACED INFRONT OF DEAD FRONT DOOR

△ TWO 4" RACEWAY FOR CONDUCTORS REQUIRED. THE UPPER FOR HIGH VOLTAGE CONDUCTORS. THE LOWER FOR OTHER CONDUCTORS

General Notes

1. GAYLORD 60"x36"x18" , NEMA 3R ENCLOSURE
2. SCE SCE-CF6, COOLING FAN
3. ALLEN BRADLEY 1492-PD3287, DISTRIBUTION BLOCK
4. ALLEN BRADLEY 1492-PBC3, PDB COVER
5. EATON FDB3150L, 150A, 3P CIRCUIT BREAKER
6. STEGO 022000-30, 23.4" LED ENCLOSURE LIGHT

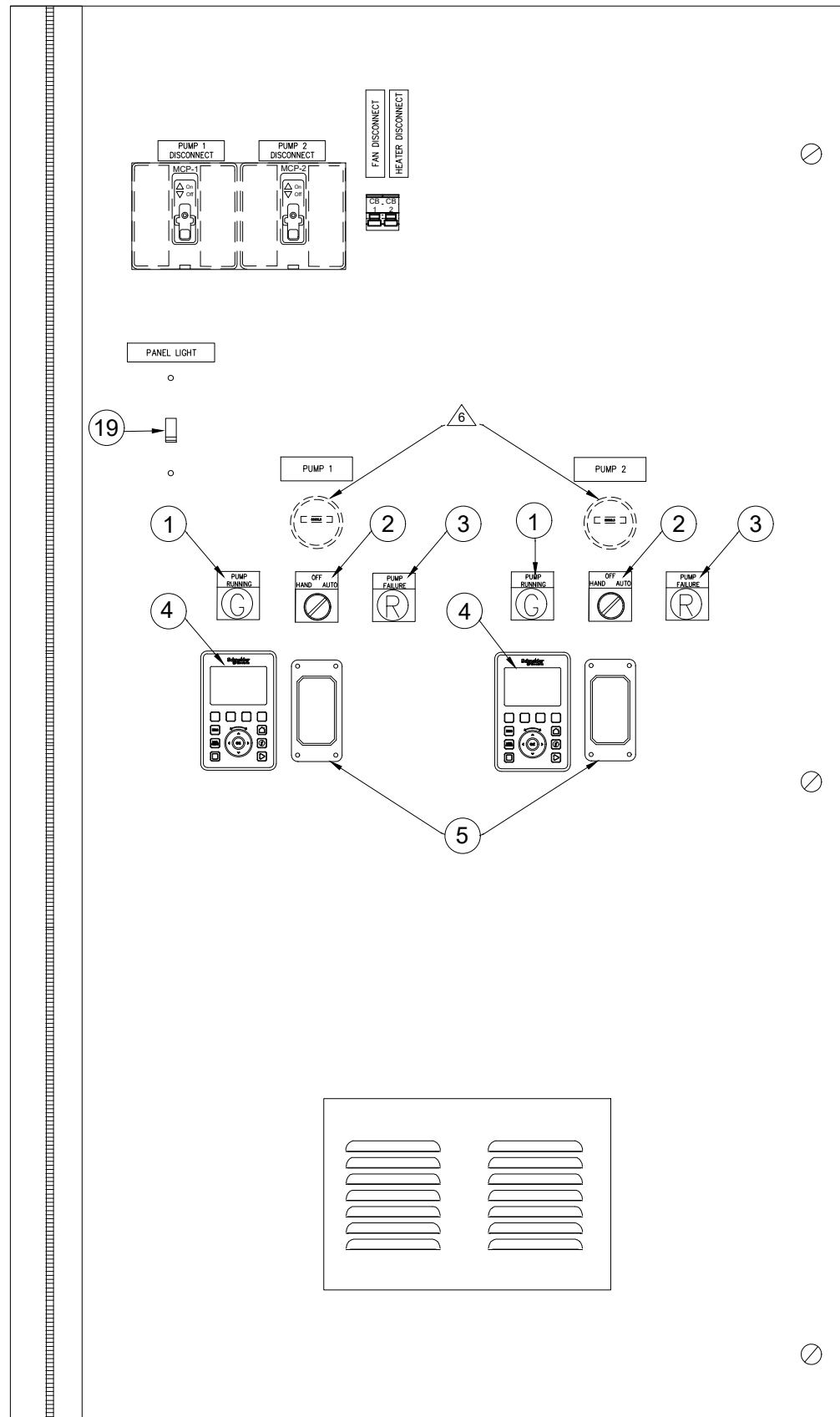
07.20.23	TBA



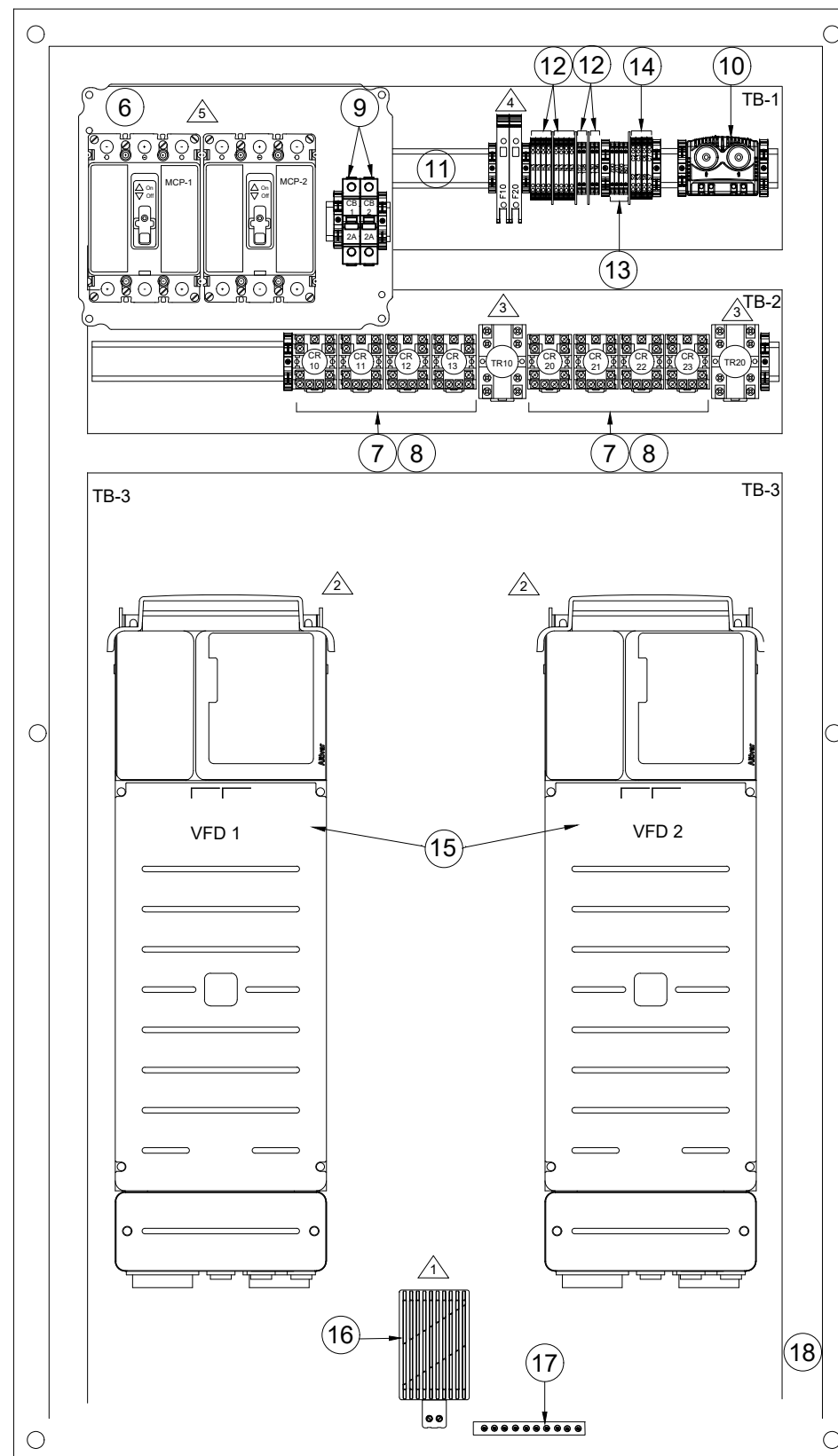
Project Name and Address
RANCHO MURIETA
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7291 BRIDGE HOUSE LN,
RANCHO MURIETA, 95683, CA

MECHANICAL LAYOUT

ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 5
Checked By T. PINION	E4.0
Scale NONE	



INNER DOOR ELEVATION



BACKPANEL ELEVATION

General Notes

1. ALLEN BRADLEY 800T-QTH2G, PILOT LIGHT GREEN (TYP OF 2EA)
2. ALLEN BRADLEY 800T-J2B, SELECTOR SWITCH (TYP OF 2EA)
3. ALLEN BRADLEY 800T-QTH2R, PILOT LIGHT RED (TYP OF 2EA)
4. SQUARE D VV3A1112, DOOR MOUNTING KIT (TYP OF 2EA)
5. FLYGT MINICAS, PMR (TYP OF 2EA)
6. SCE SCE-12P10, CB MOUNTING PLATE
7. IDEC RR3B-ULAC120V, RELAY 120VAC (TYP OF 8EA)
8. IDEC SR3P-05C, RELAY SOCKET (TYP OF 8EA)
9. ALLEN BRADLEY 1492-SPM1C020, CIRCUIT BREAKER 2A (TYP OF 2EA)
10. SCE SCE-TEMD, THERMOSTAT DUAL
11. IBOCO OMEGA 3F, DIN RAIL
12. ALLEN BRADLEY 1492-JD4C, TERMINAL BLOCK
13. ALLEN BRADLEY 1492-J4, TERMINAL BLOCK
14. ALLEN BRADLEY 1492-JD4, TERMINAL BLOCK
15. SQUARE D ATV630D18M3, VFD (TYP OF 2EA)
16. SCE SCE-TSH75, HEATER 75W
17. EATON PK7GTA, GND BAR
18. IBOCO T1-EF01127, WIREWAY 40X80
19. LEVITON R56-01451-02T, 15A SINGLE POLE SWITCH

07.20.23	TBA

As Aqua Sierra
Ac Controls, Inc.
 Sales & Service (800) 649-4287

Project Name and Address
RANCHO MURIETA
PUMP STATION 6B
7291 BRIDGE HOUSE LN,
RANCHO MURIETA, 95683, CA

VFD SECTION
 INNER DOOR & BACKPANEL
 ELEVATION

ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 6
Checked By T. PINION	E5.0
Scale NONE	

△ 4.75" MINIMUM GAP ABOVE & 2" TO THE SIDE OF DEVICE

△ 4.00" MINIMUM CLEAR SPACE REQUIRED FROM TOP & BOTTOM OF THE DEVICE

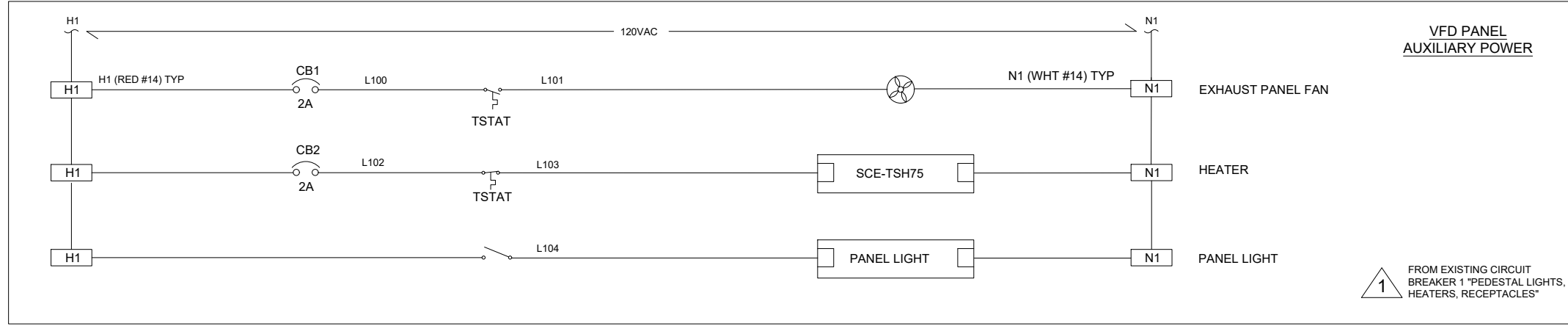
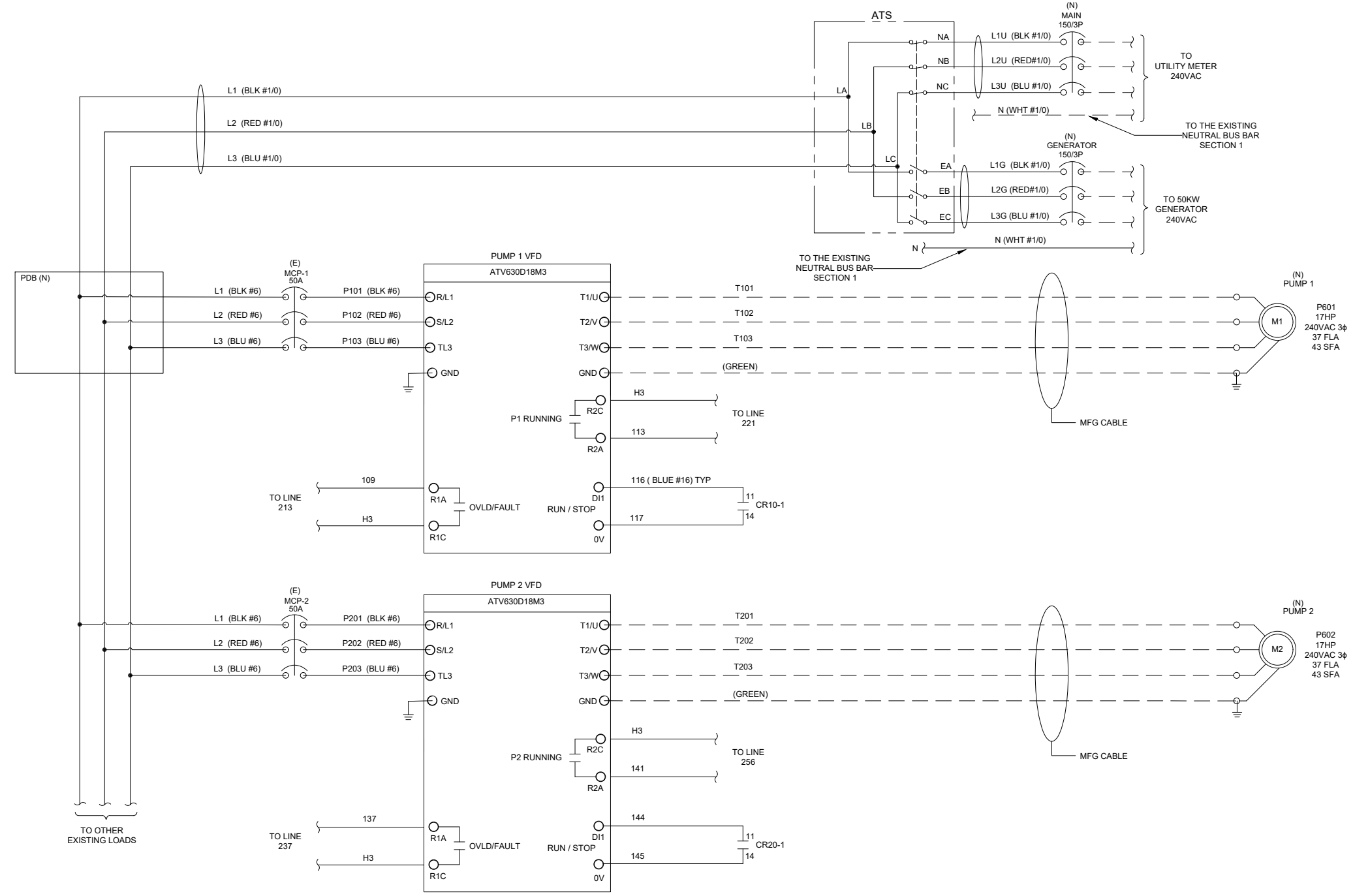
△ MOVE TD-1 & TD-2 FROM PLC SECTION AND RENAME IT

△ MOVE F-1P & F2-P FROM PLC SECTION AND RENAME IT

△ MOVE MCP-1 & MCP-2 FROM PLC AND MOUNT ON STAND OFF

△ MOVE ETM FROM PLC SECTION AND MOUNT ON VFD SECTION

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General Notes

07.20.23 TBA

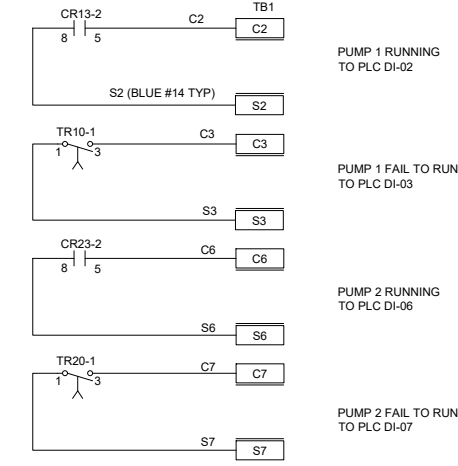
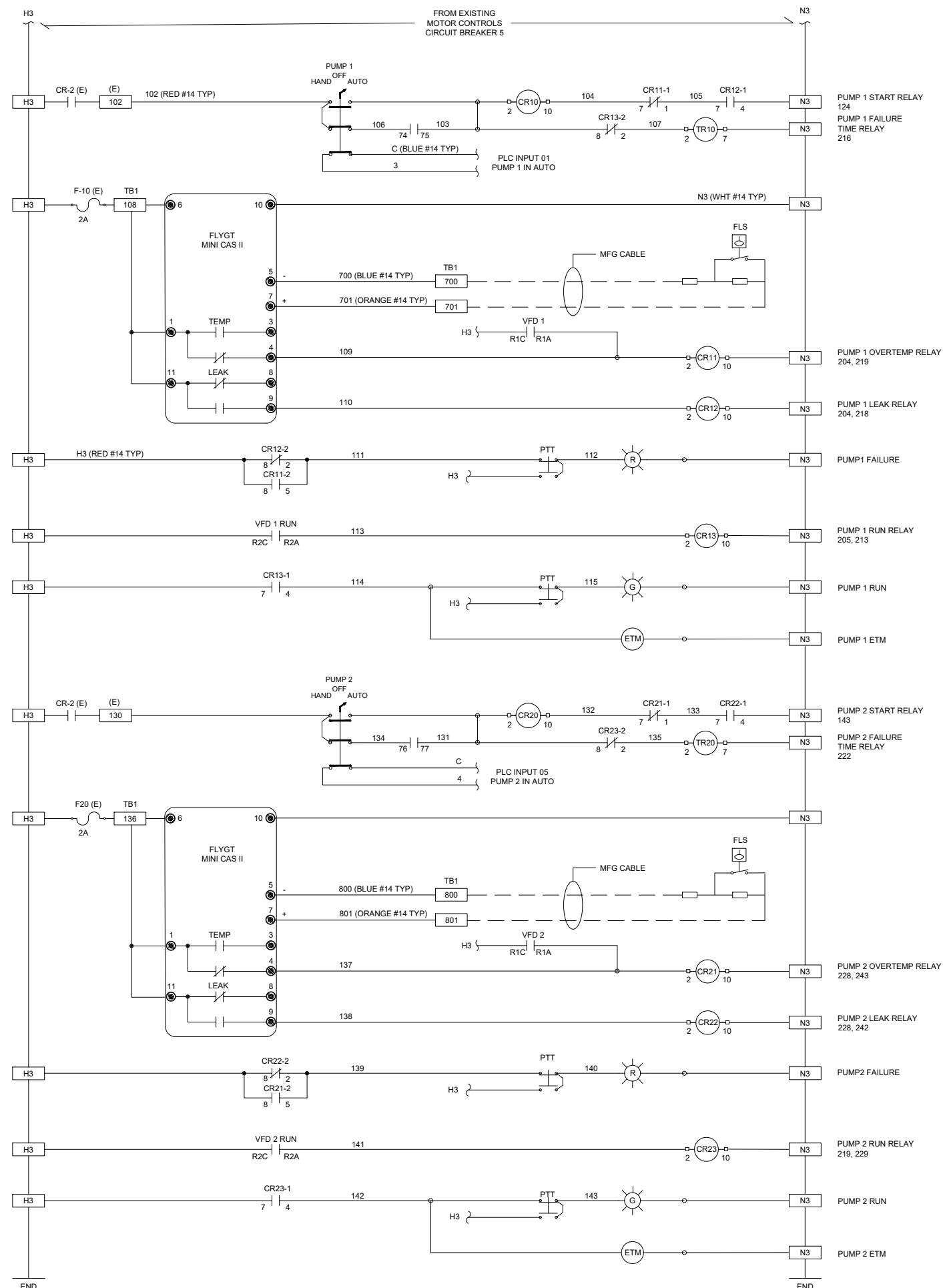


Project Name and Address
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7291 BRIDGE HOUSE LN,
RANCHO MURIETA, 95683, CA

240VAC POWER DISTRIBUTION
 WIRING SCHEMATIC
 120VAC VFD PANEL AUXILIARY POWER

ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 7
Checked By T. PINION	E6.0
Scale NONE	

200
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General Notes

1. REMOVE THE EXISTING MATERIALS F-1P & F-2P FUSE BLOCKS FROM PLC SECTION. INSTALL ON VFD SECTION & RENAME IT.
2. REMOVE THE EXISTING MATERIALS TD-1 & TD-2 TD FROM PLC SECTION. INSTALL ON VFD SECTION & RENAME IT.
3. REMOVE THE EXISTING MATERIALS XFMR-1 & XFMR-2 TRANSFORMERS FROM PLC SECTION.
4. REMOVE THE EXISTING MATERIALS ETM PUMP 1 & ETM PUMP 2 FROM PLC SECTION. INSTALL ON VFD SECTION INNER DOOR.

07.20.23	TBA

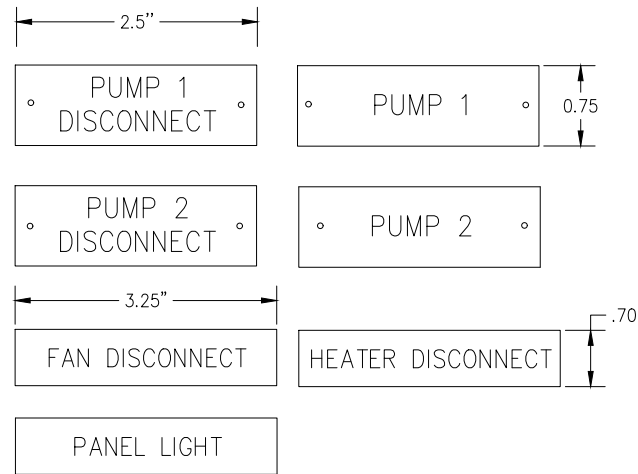
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Project Name and Address
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PUMP STATION 6B
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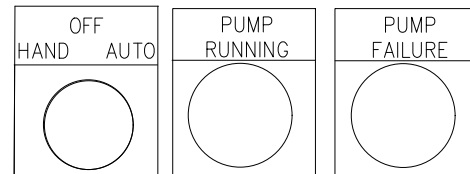
PUMP 1 & PUMP 2
CONTROL POWER WIRING SCHEMATIC

ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 8
Checked By T. PINION	E7.0
Scale NONE	

(ASC FAB)

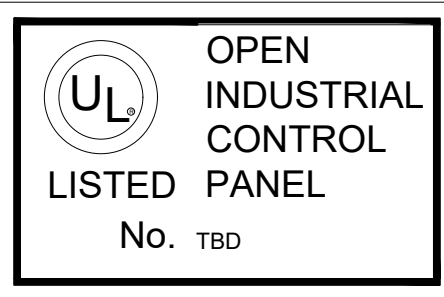


BLACK LEGENT PLATE WITH 15/64 HELVETICA FONT
LAMACOID BLACK ON WHITE LETTERS
SECURED WITH STAINLESS STEEL #4 FASTENERS



3/16" HELVETICA FONT
2.2"x2.2" LAMACOID
BLACK ON WHITE LETTERS

UL508A



AQUA SIERRA CONTROLS INC.
JOB#: B22360
MANUFACTURE DATE:TBD
ENVIRONMENTAL RATING:3R
TEMPERATURE CODE:NA
PANEL RATING UL TYPE:OPEN
SHORT CIRCUIT PROTECTION:18.0KA
LOAD IN AMPS 120VAC: 2.0
LOAD IN AMPS 240VAC: 3φ:74.00
LOAD IN AMPS 480VAC: 3φ:0.00

FIELD WIRING
UL CLASS 1 600 VOLT RATING
USE COPPER CONDUCTOR ONLY
60C (140F)

GROUND WIRING
UL CLASS 1 600 VOLT RATING
CU WIRING ONLY 60C (140° F)
TORQUE WIRE TO 35LB-IN

CAUTION RISK OF ELECTRICAL SHOCK
REMOTE DISCONNECT SWITCH
REQUIRED TO DE-ENERGIZE EQUIPMENT
BEFORE SERVICING

"DANGER"
RISK OF ELECTRICAL SHOCK
HAZARDOUS VOLTAGES
MULTIPLE POWER SOURCES
MAY BE PRESENT

General Notes

07.20.23	TBA



Project Name and Address
RANCHO MURIETA
PUMP STATION 6B
7291 BRIDGE HOUSE LN,
RANCHO MURIETA, 95683, CA

UL LISTING - AS LISTED

ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 9
Checked By T. PINION	E8.0
Scale NONE	



CONDUIT & WIRE SCHEDULE

CONDUIT DETAILS						POWER WIRE			CONTROL WIRE		GROUND	NOTES
NUMBER	FROM	TO	QTY	SIZE	TYPE	QTY	SIZE	QTY	SIZE	SIZE		
P002 (E)	UTILITY SERVICE	CONTROL PANEL	1	4"	C/W	4	#1/0	--	--	--		
P003 (E)	GENERATOR	CONTROL PANEL	1	2"	C/W	4	#1/0			#6		
P601	VFD PANEL	PUMP 1	1	2"	PVC	--		MFG CABLE	--	--	MFG PUMP 1 CABLE	
P602	VFD PANEL	PUMP 2	1	2"	PVC	--		MFG CABLE	--	--	MFG PUMP 2 CABLE	
P603 (E)	PLC CONTROL PANEL	AIR COMPRESSOR	1								EXISTING CONDUIT REMAIN AS IS	
C600	CONTROL PANEL	WET WELL	1	2"	PVC						EXISTING LEVEL FLOATS AND LEVEL SENSOR CABLES	
C603 (E)	GENERATOR	CONTROL PANEL	1	3/4"							EXISTING CONDUIT CONTROL CIRCUITS REMAIN AS IS	

General Notes

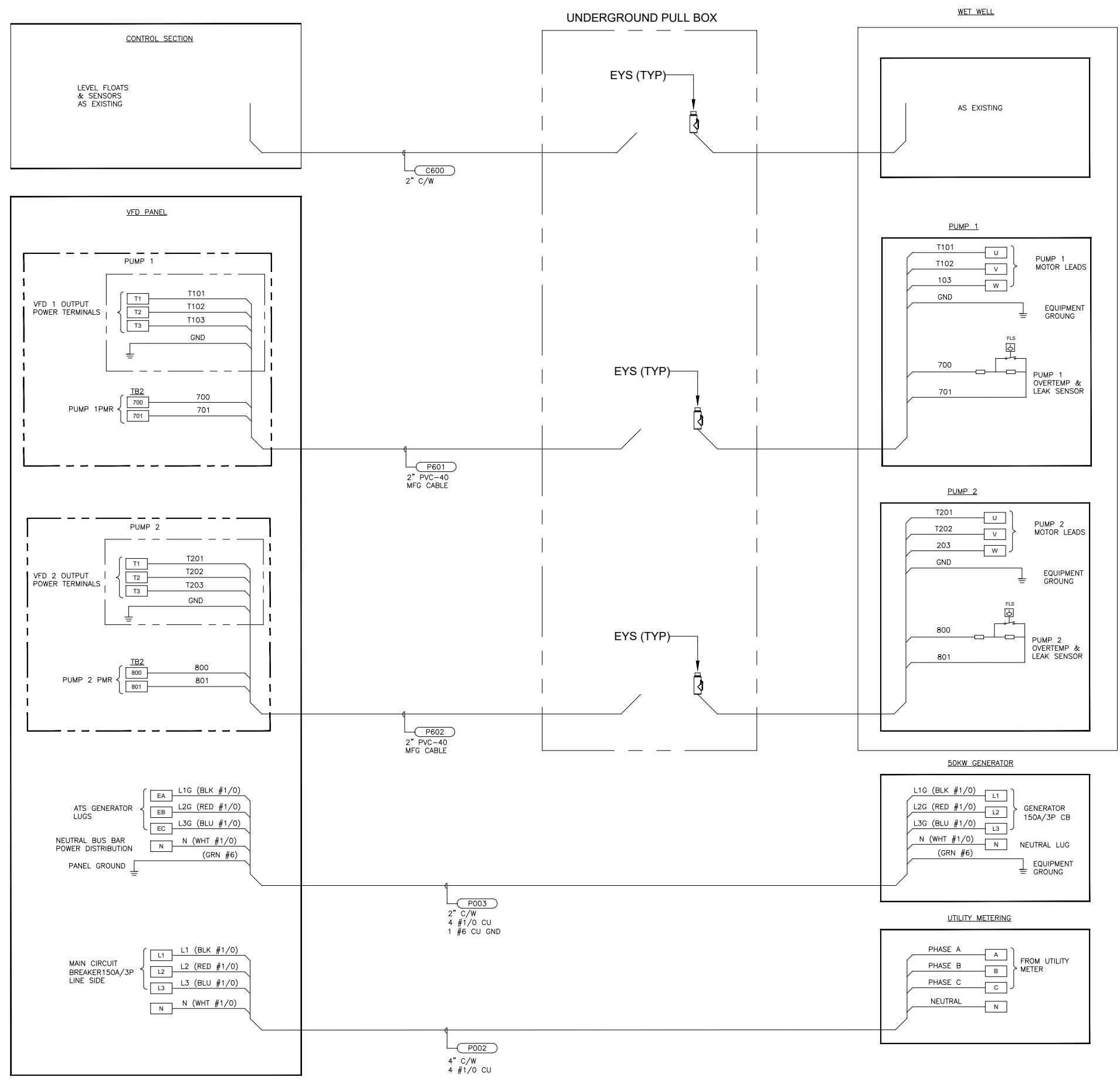
07.20.23 TBA



Project Name and Address
RANCHO MURIETA
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CONDUIT & WIRE SCHEDULE

ASC Project # B22360	Date 07.20.2023
Drawn By N. ROTAS	Sheet 10
Checked By T. PINION	E9.0
Scale NONE	



General Notes

07.20.23	TBA



Project Name and Address
RANCHO MURIETA
PUMP STATION 6B
7291 BRIDGE HOUSE LN,
RANCHO MURIETA, 95683, CA

INTERCONNECTIONS

ASC Project # B22360	Date 07.20.2023
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Checked By T. PINION	E10.0
Scale NONE	

SOLITUDE

LAKE MANAGEMENT

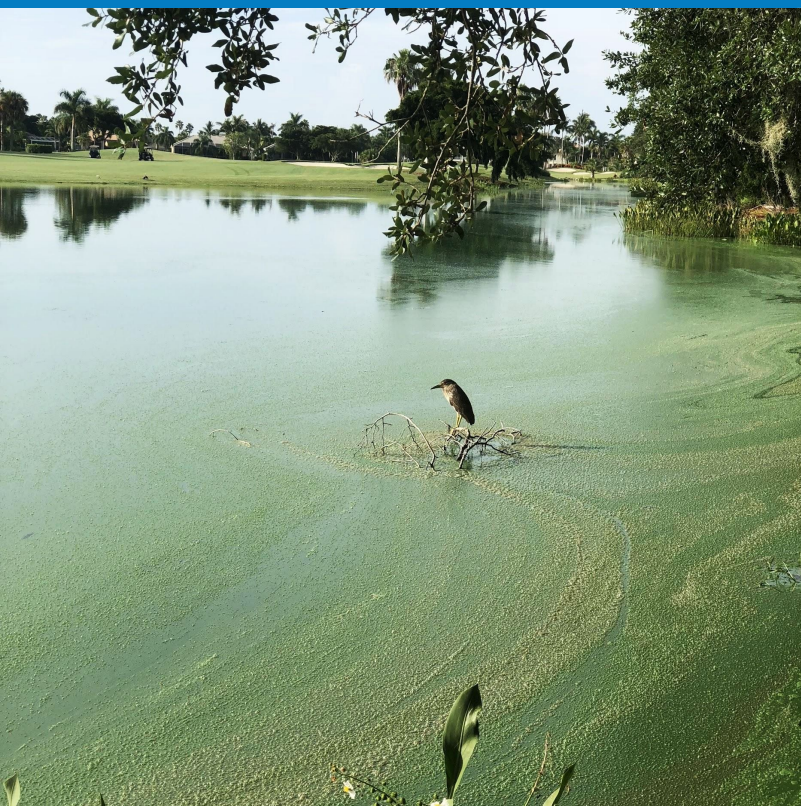
Restoring Balance. Enhancing Beauty.

Proposal for Services Annual Pond Management

PROPOSAL FOR:
Rancho Murieta CSD

PROPOSAL BY:
Sara Malek
Business Development Consultant
SOLitude Lake Management
sara.malek@solitudelake.com
415.686.5933

March, 14 2024





HARVESTING SERVICES

PROJECT SUMMARY: The scope of work described below includes mobilization and demobilization of an aquatic weed harvester with operator for 1 day work, Shore hand with conveyor to dispose material on specific space on site for 1-day work. The company is not responsible for the hauling and disposal of the removed material.

SPECIFICATIONS:

1. The Company will mobilize / demobilize a harvester and operator to the site.
2. The company will provide a Shore Hand Conveyor on site
3. A (1) day of mechanical harvesting services are included which will be scheduled in accordance with the customer.
4. Company is not responsible to hauling and disposal of removed material.

Assumptions:

1. Company will have free and unimpeded access at the work location to store these parts on site.
2. Assignment will be completed on demand, and scheduled in advance with Solitude Lake Management.
3. Does not require any engineering or permits.
4. Should any additional issues be identified during work activity, Company will notify the Customer immediately to discuss modified scope, related additional costs, and confirm project path forward.

Customer Responsibilities:

1. Customer will be responsible for the following:
 - a. Providing information required for the permit application process upon request.
 - b. Providing Certified Abutters List for abutter notification where required.
 - c. Perform any public filings or recordings with any agency or commission associated with the permitting process, if required.
 - d. Compliance with any Order of Conditions or other special requirements or conditions required by the local municipality.
 - e. Compliance and enforcement of temporary water-use restrictions where applicable.

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Breakdown Prices for 1 day (6 hours) work:

SERVICE	Price
<u>Aquatic Harvesting</u> with Operator for 6h/day	\$1,650.00
<u>Shorehand</u> with Conveyor trailer	\$600
<u>Equipment Mobilization</u> One time cost	\$500

Note: The prices shown above are valid for 60 days from the date of this quotation.

*All prices shown are **all inclusive of all product and labor** associated with the services being offered. We do not** bill for additional products.*

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