



OPEN MEETING

REGULAR MEETING OF THE THIRD LAGUNA HILLS MUTUAL MAINTENANCE AND CONSTRUCTION COMMITTEE*

**Thursday, July 7, 2022 at 1:30 p.m.
24351 El Toro Road, Laguna Woods, CA 92637
Board Room and Virtual with Zoom**

Laguna Woods Village owners/residents are welcome to participate in all open committee meetings in-person and virtually. To submit comments or questions virtually for committee meetings, please use one of the following options:

1. Join the committee meeting via Zoom by clicking this link:
<https://us06web.zoom.us/j/81435641900> or by calling 1-669-900-6833, Webinar ID: 81435641900.
2. Via email to meeting@vmsinc.org any time before the meeting is scheduled to begin or during the meeting. Please use the name of the committee in the subject line of the email. Name and unit number must be included.

NOTICE AND AGENDA

This Meeting May Be Recorded

1. Call to Order
2. Acknowledgement of Media
3. Approval of Agenda
4. Approval of Meeting Report from May 2, 2022
5. Chair's Remarks
6. Member Comments – *(Items Not on the Agenda)*
7. Department Head Update

Consent:

All matters listed under the Consent Calendar are considered routine and will be enacted by the committee by one motion. In the event that an item is removed from the Consent Calendar by members of the committee, such item(s) shall be the subject of further discussion and action by the committee.

8. Project Log
9. Solar Production Report

For Discussion and Consideration:

10. RFP for SB326 – Visual Inspections of Exterior Elevated Elements

Items for Future Agendas: *All matters listed under Future Agenda Items are items for a future committee meeting. No action will be taken by the committee on these agenda items at this meeting.*

- Spray Polyurethane Foam (SPF) Roof Systems Update
- Policy to address reimbursements for MI events when residents pay for work due to delay in response from VMS
- Report on the feasibility of additional solar installations

Concluding Business:

11. Committee Member Comments
12. Date of Next Meeting: September 12, 2022
13. Recess – At this time, the meeting will recess for a short break and reconvene to Closed Session to discuss the following matters.

Closed Session Agenda

Approval of the Agenda

Chair's Remarks

Discuss and Consider Contractual Matters

Adjournment

*A quorum of the Third Board or more may also be present at the meeting.

This Page Left Intentionally Blank

This Page Left Intentionally Blank



OPEN MEETING

REGULAR OPEN MEETING OF THE THIRD LAGUNA HILLS MUTUAL MAINTENANCE AND CONSTRUCTION COMMITTEE

**Monday, May 2, 2022 at 1:30 PM
24351 El Toro Road, Laguna Woods, California
Board Room and Virtual with Zoom**

MEMBERS PRESENT: Ralph Engdahl - Chair, James Cook, John Frankel, Robert Mutchnick, Craig Wayne

MEMBERS ABSENT: None

OTHERS PRESENT: **Third:** Cush Bhada, Mark Laws, Ira Lewis
Dave Bienek – Advisor

STAFF PRESENT: Manuel Gomez – Maintenance & Construction Director,
Bart Mejia – Maintenance & Construction Assistant
Director, Ian Barnette – Maintenance & Construction
Assistant Director, Guy West – Projects Division Manager,
Koh Shida - Maintenance Operations Manager, Scot Wolf -
Project Manager, Erik Schneekluth - Project Manager,
Laurie Chavarria – Sr. Management Analyst, Sandra
Spencer – Administrative Assistant

1. Call to Order

Chair Engdahl called the meeting to order at 1:30 p.m.

2. Acknowledgement of Media

Chair Engdahl noted that the meeting was broadcasting on Granicus and being recorded.

3. Approval of Agenda

Director Mutchnick requested the title of Agenda Item 10 be changed to “Recommendation from Parking and Golf Cart Subcommittee for a Pilot Program for Electrical Engineering Services in CDS 317 (verbal update).”

Hearing no objection, the agenda was approved as amended.

4. Approval of Meeting Report from March 7, 2022

Mr. Gomez noted a correction of the address mentioned in Agenda Item 6 of the March 7, 2022 meeting report. The correct address is 2401 Via Mariposa.

Hearing no objections, the meeting report was approved as amended by unanimous consent.

5. Chair's Remarks

Chair Engdahl had no remarks.

6. Member Comments – (*Items Not on the Agenda*)

- A member commented on the existing laundry facilities for three-story buildings and requested a meeting with staff to discuss potential future options for individual units.
- A member commented that he could not locate the March 2022 meeting report on the website; regarding the water pressure in building 3024; and regarding the termite inspection schedule.
- A member commented that he noted several street light poles were down in the Third area.

Mr. Gomez responded to all member comments. Staff was directed to bring back a report on the feasibility of individual washer/dryer units.

7. Department Head Update

Mr. Gomez updated the committee on SB326 relating to balcony inspections. Proposals are due this week and results will be provided to the committee at the next meeting.

M&C received and approved a request for the addition of a pedestrian walkway light at 3131 Via Serena at a cost of approximately \$2,000. Funding was provided by the board adopted \$25,000 exterior lighting budget for 2022 for lighting upgrades throughout the community.

Consent:

All matters listed under the Consent Calendar are considered routine and will be enacted by the committee by one motion. In the event that an item is removed from the Consent Calendar by members of the committee, such item(s) shall be the subject of further discussion and action by the committee.

Hearing no objections, the Consent Calendar was approved by unanimous consent.

8. Project Log

9. Solar Production Report

For Discussion and Consideration:

10. Recommendation from Parking and Golf Cart Subcommittee for a Pilot Program for Electrical Engineering Services in CDS 317 (verbal update)

Mr. Mejia provided an update and answered questions from the committee. Discussion ensued regarding the approval by the subcommittee of the RFP; the origin of the request to upgrade the system to 200-amps to charge up to 10 EVs at any one time utilizing an energy management system; the addition of a 240-volt system to accommodate charging of electric automobiles; and the possibility that other areas of the mutual would request similar upgrades.

Mr. Mejia suggested further discussion of this item in the closed session of this meeting.

11. Lighting Levels on Via Del Faro at Ave. Sosiega (verbal update)

Mr. Gomez provided background on the original light pole and options for a replacement light pole. Mr. Mejia presented results from recent light measurements at this and similarly configured streets. After further discussion, the committee determined no light replacement is necessary.

12. Roofing Material Comparison (presentation)

Mr. Gomez provided background of the roofing material options offered by the consultant in 2008 and based on those recommendations, the PVC Cool Roof option was selected. A PowerPoint presentation showed before and after photos of roofs with PVC and detailed the life-cycle cost comparison.

Committee Advisor, Dave Bienek, shared his 30-year background in the roofing business and suggested spay foam as an alternative roofing material. Mr. Bienek provided samples and articles to support his recommendation of Spray Polyurethane Foam (SPF).

Staff was directed to further research current roofing material options, including SPF, to present at a future committee meeting.

Items for Future Agendas:

- Policy to address reimbursements for MI events when residents pay for work due to delay in response from VMS
- Cost estimate for motion sensor lights to replace photocell controllers in common areas for three-story buildings
- Report on the feasibility of additional solar installations
- Presentation on allowing washer/dryer units in GV 3-story buildings
- Follow up on roofing material options

Concluding Business:

13. Committee Member Comments

- Chair Engdahl and Director Wayne commented that it was a good meeting.
- Directors Frankel and Mutchnick thanked Dave Bienek for his input on the roofing topic and expressed interest in his participation as an advisor on the committee.
- Director Cook suggested that the cost estimate for motion sensors lights be added to the 2023 budget.
- Advisor Bienek thanked the committee for allowing his participation.

14. Date of Next Meeting: July 7, 2022

15. Recess - At this time, the meeting recessed for a short break and reconvened to Closed Session to discuss contractual matters.

The meeting was recessed at 2:38 p.m.

Summary of Previous Closed Session Meeting

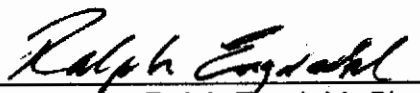
During the March 7, 2022, Regular Closed Meeting, the committee:

Approved the Agenda

Discussed and Considered Contractual Matters

16. Adjournment

The meeting was adjourned at 3:34 p.m.


Ralph Engdahl, Chair

Ralph Engdahl, Chair
Manuel Gomez, Staff Officer
Telephone: (949) 268-2380

This Page Left Intentionally Blank

This Page Left Intentionally Blank

Third Mutual Project Log (June 2022) Prepared 6-30-22						
#	Dept	Name	Description	Status	Estimated Completion/On-going Programs	Budget
1	920 Projects	Dry Rot Program	This program is funded to implement a systematic approach to eradicating wood rot throughout Third Mutual.	Buildings 3241, 3242, 3244 and 3499- Work is complete. Buildings 4009, 4010 and 4011: Construction bids were received on May 10. Work is scheduled to be completed by the end of November. Building 4011: Construction is in progress and is scheduled to be completed on July 7, 2022. Building 4009: Construction is scheduled to begin on June 30 and is scheduled to be completed on August 17, 2022. Building 4010: Construction is scheduled to begin on August 4 and is scheduled to be completed on September 21.	Annual Program - November 2022	Budget: \$275,000 Exp: \$169,118 Balance: \$105,882
2	920 Projects	Building Structures	This ongoing program is funded by reserve funds to repair or replace building structural components that are not performing as designed. As building structural issues are reported and inspection requests are received, staff schedules an engineer to field inspect and, if required, provide a recommendation for repairs. In addition, roofing repairs are performed after Prior to Paint crews replace fascia due to dry rot. As part of this budget, staff will proactively inspect buildings for drainage issues and provide repairs as needed.	Building 3129: Foundation repairs. Structural Repair Documents are under review. Building 4006: Dry Rot repairs are scheduled to begin on September 15, 2022 and are scheduled to be completed on November 2, 2022. 2355- 3B Balcony Deck and Handrail Repairs: "Like for Like" repairs. Work is scheduled for July 7- August 3, 2022. B4004 Stairwell repair. Structural repair documents have been received and are under review by staff. Repairs are scheduled to be completed by mid-August.	December 2022	Budget: \$500,000 Exp: \$88,079 Balance: \$411,921
3	920 Projects	Foundations Program	This ongoing program is funded by reserve funds to replace foundations showing signs of distress or impending failure. These repairs or replacements are performed on an as- needed basis. Staff performs field observations when a foundation inspection request is received. If needed, a structural engineer is then scheduled to inspect the foundation and provide a recommendation.	5321-B Garage Wall Curb Repair: work is scheduled for July 11, 2022 - July 22, 2022.	December 2022	Budget: \$25,000 Exp: \$15,506 Balance: \$9,494
4	904 Maint Svc	Electrical Systems	This ongoing program is funded to repair or replace electrical equipment failures as needed.	None Scheduled	Annual Program - December 2022	Budget \$30,000 Exp: \$0 Balance: \$30,000

#	Dept	Name	Description	Status	Estimated Completion/On-going Programs	Budget
5	910 Bldg. Maint	Gutters - Replacement and Repair	This ongoing program is funded by reserve funds to replace deteriorated rain gutters and repair existing gutters as needed. Buildings on the exterior paint program will be selected based on drainage issues and will be scheduled for installation of seamless gutter systems by an outside vendor in conjunction with the paint program.	None Scheduled	Annual Program - December 2022	Budget: \$50,000 Exp: \$0 Balance: \$50,000
6	910 Bldg. Maint	Exterior Paint Program	This 15-year full cycle program is funded by reserve funds to paint all exterior components of each building including the body (stucco/siding); fascia boards; beams; overhangs; doors; closed soffits; structural and ornamental metal surfaces. Decks are top coated and damaged building address signs are replaced. Lead abatement activities are also performed in conjunction with this program.	CDS 215, 206, 217, 201, 202, and 221 are scheduled for 2022. CDS 215 has been completed and work has started in CDS 206 and 217.	Annual Program - December 2022	Budget: \$1,238,831 Exp: \$374,682 Balance: \$767,053
7	910 Bldg. Maint	Prior to Paint Program (PTP)	This 15-year full cycle program is funded by reserve funds to repair dry rot and decking surfaces prior to painting.	Work is underway in CDS 206 and 217 which consists of 29 buildings, 14 carports and 6 free standing laundries. Estimated completion date is mid July. CDS to be completed in 2022 are: 201, 202, and 221.	Annual Program - December 2022	Budget: \$1,166,430 Exp: \$389,938 Balance: \$776,492
8	910 Bldg. Maint	Balcony & Breezeway Resurfacing	This mid-cycle program is funded by reserve funds to waterproof and topcoat seal balcony and breezeway deck surfaces every 7.5 years to protect the deck substructure against future dry rot and improve the aesthetics of the deck surface. Prior to applying topcoat, crews conduct an inspection of the deck structure to locate any dry rot or potential safety hazards.	2022 top coat/breezeway resurfacing began in June on Buildings 3415, 3414, 3413, 3368, 3369 and 3370. Other buildings in this cycle are: 3354, 3355, 3356, 3357, 3358, 3359, 3360, 3361, 3362, 3363, 3371, 3416 and 3417.	June - December 2022	Budget: \$110,039 Exp: \$37,388 Balance: \$72,651
9	920 Projects	Asphalt Paving Program	This annual program is funded by reserve funds to preserve the integrity of CDS street paving. Annual inspections are conducted and repaving is scheduled as needed.	Overlay paving work is scheduled at CDS 219, 330-A, 332, 344 (partial area), 357, 362, and 3371. Full depth paving work is scheduled at CDS 3185. All paving work is scheduled to be completed during the month of July.	Annual Program - July 2022	Budget: \$387,903 Exp: \$0 Balance: \$387,903

#	Dept	Name	Description	Status	Estimated Completion/On-going Programs	Budget
10	920 Projects	Seal Coat Program	This ongoing program is funded by reserve funds to extend the life of the asphalt paving by sealing asphalt cracks and applying a bituminous slurry seal to the asphalt surface preventing water intrusion and protecting the asphalt from deterioration.	Seal coat maintenance work is scheduled at CDS 323, 324, 372, 405, 406, 407, 408, 2396, 2401, 3190, 3232, 3241, 3243, 3274, 3275, 3363, 3395, 3500, 5326, 5329, 5333, 5336, 5342, 5345 and 5370. Street sections Luz del Sol, Rayo del Sol, Via Dicha, and Via La Meas will also receive seal coat maintenance. All seal coat work is scheduled to be completed in August.	Annual Program - August 2022	Budget: \$46,057 Exp: \$0 Balance: \$46,057
11	920 Projects	Roof Replacement - BUR to PVC Cool Roofing	This ongoing program is funded by reserve funds to replace roofs at the end of their serviceable life with a PVC Cool Roof system. Built-up roofs are inspected 15 years after installation.	Buildings 2129, 2132, 2324, 3011, 3110, 3113, 3123, 3165, 3367, 3384, 3390, 3396, 3478, 4006, 4022, 5331, 5358, 5368, 5373, 5388, 5390, 5400, 5460, 5461, 5468, 5476, 5489, 5507, 5528, and 5540 began on April 25 and will be completed by October. As of June 24, 2022, 7 of 32 buildings have been completed. Invoicing is pending.	April - October 2022	Budget: \$1,099,749 Exp: \$14,166 Balance: \$1,085,583
12	920 Projects	Emergency Roof Repair Program	This ongoing program is funded as a contingency to preserve and prolong the serviceable life of roofs by performing emergent repairs as needed. As emergency roof leak requests are received, staff schedules the roofing contractor to investigate roof related issues. If required, the roofing contractor will perform the necessary repairs.	None Scheduled	Annual Program - December 2022	Budget: \$123,000 Exp: \$86,850 Balance: \$36,150
13	904 Maint Svc	Epoxy Wasteline Remediation	This ongoing program is funded by reserve funds to install seamless epoxy liners within existing interior and exterior waste pipes to mitigate future root intrusion as well as to resolve and prevent future back-up problems related to compromised pipes.	Total number of buildings in Third Mutual: 1407 Number of buildings left to complete: 1095 Building 2395 is scheduled to begin soon.	Annual Program - December 2022	Budget: \$700,000 Exp: \$179,044 Balance: \$520,956
14	920 Projects	Shepherd's Crook	This ongoing program is funded by reserve funds to remove and replace barbed wire with Shepherd's Crook on all perimeter block on a phased approach.	To date, a total of 6,702 LF out of 33,525 LF of Shepherd's Crook has been installed. The contractor is currently fabricating the fencing material.	Annual Program - December 2022	Budget: \$35,000 Exp: \$0 Balance: \$35,000
15	904 Maint Svc	Water Lines - Copper Pipe Remediation	This ongoing program is funded by reserve funds to install epoxy liners in copper water lines in all buildings which experience a high frequency of copper pipe leaks.	None Scheduled	Annual Program - December 2022	Budget: \$500,000 Exp: \$0 Balance: \$500,000

#	Dept	Name	Description	Status	Estimated Completion/On-going Programs	Budget
16	920 Projects	Elevator Replacement Program	This ongoing program is funded by reserve funds to replace mechanical equipment and interior renovations as needed.	None Scheduled	Annual Program - December 2022	Budget: \$105,000 Exp: \$0 Balance: \$105,000
17	910 Bldg. Maint	Pest Control for Termites	This annual program is funded by operating funds to eradicate dry wood termites from inaccessible areas by tenting buildings for fumigation and includes hotel accommodations during whole structure fumigation. The program also includes funding for local termite treatments and the removal of bees/wasps as needed.	The fumigation program will commence in July and conclude in November.	July to November 2022	Budget: \$174,633 Exp: \$13,759 Balance: \$160,874
				COMPLETED		
	910 Bldg. Maint	Garden Villa (GV) Lobby Renovations	This ongoing program is funded by reserve funds to replace the acoustic ceiling, wallpaper and carpet in GV lobbies.	The lobby at building 5515 was completed in June.	Annual Program - December 2022	Budget: \$12,000 Exp: \$0 Balance: \$12,000

This Page Left Intentionally Blank

This Page Left Intentionally Blank

Third Mutual Solar Production Report

2022 Production													
Third Mutual Project	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Total
2353 Via Mariposa	6,271	8,173	11,371	12,534	13,240								51,589
2381 Via Mariposa	2,278	4,028	10,280	9,590	11,910								38,086
2393 Via Mariposa West	4,949	6,633	9,573	10,936	11,650								43,741
2394 Via Mariposa West	6,819	8,884	12,408	13,703	14,480								56,294
2397 Via Mariposa West	5,716	7,562	10,613	11,735	12,370								47,996
2399 Via Mariposa West	5,037	6,673	9,332	10,348	11,010								42,400
2400 Via Mariposa West	5,672	7,722	10,925	12,174	12,940								49,433
3242 San Amadeo	4,784	6,324	9,028	10,355	11,180								41,671
3243 San Amadeo	4,716	6,091	8,630	9,203	9,405								38,045
3420 Calle Azul	3,502	4,605	6,397	7,172	7,608								29,284
5372 Punta Alta	4,525	6,003	8,367	9,333	9,824								38,052
5510 Paseo Del Lago West	3,361	4,467	6,087	7,172	7,659								28,746
Total Production of kWh =	57,630	77,165	113,011	124,255	133,276	0	0	0	0	0	0	0	505,337

2021 Production													
Third Mutual Project	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Total
2353 Via Mariposa	6,440	7,700	10,750	11,550	12,880	13,770	13,870	12,020	10,130	8,790	6,690	4,814	119,404
2381 Via Mariposa	4,560	5,330	9,090	10,740	11,950	13,370	12,560	11,020	9,290	5,510	4,010	2,250	99,680
2393 Via Mariposa West	4,130	5,230	7,640	8,390	9,520	10,580	9,820	8,480	8,550	7,290	5,350	3,761	88,741
2394 Via Mariposa West	6,050	7,150	11,110	12,700	14,090	15,800	14,910	13,050	10,960	9,590	7,300	5,227	127,937
2397 Via Mariposa West	6,050	7,220	1,080	10,720	11,980	13,460	12,700	11,070	9,340	8,200	6,290	4,463	102,573
2399 Via Mariposa West	5,310	6,410	8,870	9,590	10,710	12,070	11,510	10,030	8,420	7,270	5,560	3,922	99,672
2400 Via Mariposa West	6,110	7,360	10,390	11,230	12,540	14,130	13,260	11,540	9,700	8,370	6,300	4,509	115,439
3242 San Amadeo	4,510	5,650	8,570	9,670	10,930	12,450	11,840	10,140	8,400	6,860	5,210	3,697	97,927
3243 San Amadeo	5,000	5,800	9,267	8,651	9,125	10,202	10,538	9,025	7,476	6,105	4,637	2,576	88,402
3420 Calle Azul	3,616	4,339	6,164	6,565	7,201	7,819	7,479	6,525	3,051	4,830	3,807	2,687	64,083
5372 Punta Alta	4,750	5,688	8,116	8,395	8,837	10,242	9,860	8,624	7,357	6,384	4,884	3,472	86,609
5510 Paseo Del Lago West	3,447	4,188	6,094	6,595	7,307	8,018	7,564	6,667	5,589	4,566	3,652	2,541	66,228
Total Production of kWh =	59,973	72,065	97,141	114,796	127,070	141,911	135,911	118,191	98,263	83,765	63,690	43,919	1,156,695

(3243 - Jul-Nov 2021): Modem Failure - all solar panes and inverters are operational. Estimated values based on the production from 3242 and the number of solar panels at 3243.

(3420 - Sept 2021): Low production due to SCE power outage and repairs from 9/16 to 10/1

2020 Production													
Third Mutual Project													
2353 Via Mariposa	3,378	8,145	9,186	10,730	13,940	12,100	14,310	13,210	9,590	7,860	6,700	5,560	114,709
2381 Via Mariposa	5,150	6,493	6,816	8,450	12,980	11,260	13,380	12,350	8,820	6,640	5,480	4,050	101,869
2393 Via Mariposa West	5,067	6,794	8,166	9,830	11,690	7,540	8,940	7,120	4,950	5,560	3,560	3,160	82,377
2394 Via Mariposa West	7,064	8,883	10,050	11,760	15,260	13,210	15,690	14,600	10,570	8,620	7,350	5,350	128,407
2397 Via Mariposa West	6,068	7,604	8,603	10,080	13,080	11,370	13,440	12,490	9,080	7,360	6,250	5,230	110,655
2399 Via Mariposa West	5,356	6,763	7,630	8,970	11,690	10,220	12,020	11,160	8,150	6,560	5,510	4,580	98,609
2400 Via Mariposa West	6,159	7,797	8,910	10,490	13,680	11,940	14,070	12,950	9,350	7,500	5,130	3,450	111,426
3242 San Amadeo	4,642	6,160	7,423	8,700	11,380	9,850	11,700	10,700	7,350	5,790	3,270	1,790	88,755
3243 San Amadeo	4,876	5,804	6,880	7,832	9,912	8,431	10,115	10,296	7,362	6,044	5,128	4,383	87,063
3420 Calle Azul	3,805	4,863	5,637	6,500	8,460	7,327	8,861	8,361	5,890	4,794	4,046	3,212	71,756
5372 Punta Alta	4,782	6,646	8,045	8,284	10,751	5,673	8,414	11,525	8,666	7,034	5,402	4,322	89,544
5510 Paseo Del Lago West	3,508	4,514	5,308	4,646	5,995	6,933	7,551	7,754	5,236	4,509	3,625	2,967	62,546
Total Production of kWh =	59,855	80,466	92,654	106,272	138,818	115,854	138,491	132,516	95,014	78,271	61,451	48,054	1,147,716

(2353 - Jan 2020): This was due to 1 out of 3 inverter's wiring harnesses malfunctioning and needing replacement through the manufacturer. Production data was not recorded but estimated based on 2/3 of the production of an identical setup.

2019 Production													
Third Mutual Project													
2353 Via Mariposa	3,368	5,552	8,329	11,520	11,880	10,870	14,370	13,230	10,120	9,850	5,920	2,720	107,729
2381 Via Mariposa	4,951	5,431	8,366	9,418	9,650	8,761	11,590	10,590	8,100	7,920	4,950	3,940	93,667
2393 Via Mariposa West	4,762	5,917	9,176	10,480	11,170	10,230	13,470	12,000	7,267	8,380	5,070	4,080	102,002
2394 Via Mariposa West	6,393	789	8,618	12,420	13,060	11,910	15,680	14,370	10,910	10,800	6,790	5,580	117,320
2397 Via Mariposa West	5,506	6,497	9,682	10,880	11,210	10,250	13,500	12,440	9,480	9,250	5,840	4,770	109,305
2399 Via Mariposa West	4,889	5,796	1,841	X	4,692	7,812	12,100	11,170	8,540	8,240	5,210	4,220	74,510
2400 Via Mariposa West	3,778	5,036	8,142	9,948	11,760	10,790	14,170	12,930	9,830	9,500	5,940	4,860	106,684
3242 San Amadeo	3,856	3,756	8,158	9,671	10,250	9,200	12,000	10,860	8,180	7,510	4,660	3,670	91,771
3243 San Amadeo	4,509	4,952	7,669	8,607	8,162	7,510	8,447	8,849	7,359	7,161	4,706	3,832	81,763
3420 Calle Azul	3,547	4,197	6,116	7,037	7,019	6,540	7,120	7,838	5,803	5,617	3,799	3,016	67,649
5372 Punta Alta	5,133	6,126	9,022	10,380	10,391	9,551	10,742	10,739	7,271	7,731	5,010	4,184	96,280
5510 Paseo Del Lago West	3,287	3,939	5,822	6,766	6,759	6,167	7,837	7,520	5,404	5,424	3,520	2,786	65,231
Total Production of kWh =	53,979	57,988	90,941	107,127	116,003	109,591	141,026	132,536	98,264	97,383	61,415	47,658	1,113,911

(2394 - Feb 2019): Replaced power supply due to the power to communication comes on once communication enclosure is opened.

(2399 - Apr 2019): This was due to a conduit becoming damaged after heavy rains.

(2353 - Dec 2019): This was due to 1 out of 3 inverter's wiring harnesses malfunctioning and needing replacement through the manufacturer. Production data was not recorded but estimated based on 2/3 of the production of an identical setup.

2018 Production													
Third Mutual Project	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
2353 Via Mariposa	5,860	7,790	10,400	12,370	10,730	14,030	13,573	12,057	9,830	8,750	6,630	3,390	115,410
2381 Via Mariposa	4,730	3,340	6,210	8,130	8,260	10,360	9,905	10,918	9,090	8,040	6,120	4,000	89,103
2393 Via Mariposa West	5,166	6,867	7,876	2,799	10,380	13,260	12,820	11,288	8,970	7,480	5,440	4,440	96,786
2394 Via Mariposa West	5,450	8,840	11,420	13,590	12,130	15,450	14,888	13,236	10,770	9,530	7,260	6,100	128,664
2397 Via Mariposa West	5,590	7,560	9,400	11,660	10,420	13,510	13,295	11,817	9,610	8,350	6,280	5,250	112,742
2399 Via Mariposa West	5,240	6,780	8,680	10,380	9,340	12,030	11,993	10,669	8,680	7,450	5,580	4,640	101,462
2400 Via Mariposa West	5,990	7,730	10,130	12,060	10,870	14,150	13,794	12,137	9,850	8,540	6,380	4,580	116,211
3242 San Amadeo	4,960	6,340	8,600	10,480	9,570	12,220	12,005	10,177	8,290	6,790	5,090	4,160	98,682
3243 San Amadeo	4,192	5,428	7,896	8,896	7,932	9,953	10,144	9,481	8,054	6,514	5,035	4,278	87,803
3420 Calle Azul	2,016	2,705	5,128	7,581	6,910	8,744	8,736	7,770	6,221	5,212	4,008	3,334	68,365
5372 Punta Alta	5,296	7,220	8,918	11,074	10,012	12,649	12,412	11,369	9,215	7,392	5,853	4,621	106,031
5510 Paseo Del Lago West	3,138	4,451	5,679	7,130	6,098	8,283	8,253	7,509	6,151	4,990	3,747	2,965	68,394
Total Production of kWh =	57,628	75,051	100,337	116,150	112,652	144,639	141,818	128,428	104,731	89,038	67,423	51,758	1,189,653

2017 Production													
Third Mutual Project	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
2353 Via Mariposa							7,336	11,749	9,151	8,125	5,756	5,807	47,924
2381 Via Mariposa							X	8,566	5,922	6,211	4,410	5,622	30,731
2393 Via Mariposa West							6,283	8,423	7,967	6,712	4,671	4,157	38,213
2394 Via Mariposa West							1,789	X	2,203	1,029	5,542	5,826	16,389
2397 Via Mariposa West							12,437	11,011	8,431	7,446	5,330	3,627	48,282
2399 Via Mariposa West							6,206	10,194	7,617	6,703	4,770	4,678	40,168
2400 Via Mariposa West							7,282	5,400	8,697	7,668	5,468	5,514	40,029
3242 San Amadeo							11,193	9,736	7,256	6,312	4,341	4,433	43,271
3243 San Amadeo							10,351	9,449	6,901	4,708	3,409	4,397	39,215
3420 Calle Azul							8,381	7,141	5,666	4,971	3,325	3,288	32,772
5372 Punta Alta							2,439	8,332	8,216	7,016	5,004	5,081	36,088
5510 Paseo Del Lago West							7,962	7,090	5,329	4,628	3,110	3,015	31,134
Total Production of kWh =							81,659	97,091	83,356	71,529	55,136	55,445	444,216

(2381 - Jul 2017): Unknown Outage
(2394 - Aug 2017): Unknown Outage

Lifetime Production (kWh)	5,557,528
Total 2022 Repair Costs	\$516
Recent Panel Cleanings	

