

**MINUTES OF A REGULAR MEETING
OF THE BOARD OF DIRECTORS
HORIZON REGIONAL M.U.D.**

A regular meeting of the Board of Directors of the Horizon Regional M.U.D. was held on Thursday July 21, 2022, at 6:00 p.m. in person 14100 Horizon Blvd, Horizon City, Texas, pursuant to notice given in accordance with the law.

The roll was called of the members of the board, to-wit:

Gordon, Jarvis	-	President
Dean Hulsey	-	Vice President
Florence Thomas	-	Treasurer
Mike Barton	-	Secretary
<i>vacant</i>	-	Assistant Secretary

Director Gordon Jarvis called the meeting to order at 6:00 p.m. A quorum was established. Also attending the meeting were the district's consultant: Account Manager - Charlie McGinnis. TRE & Associates Inc. - Linda Troncoso, Ricardo Felix, Frank Ortiz. Horizon Golf & Conference Center - Luis Delgadillo. The Pledge of Allegiance was said with audience participation.

4. RECEIVE CITIZEN COMMUNICATIONS.

No citizen Communications.

No Action Necessary.

5. CONSENT AGENDA.

A: Consider and Take Action to approve the Payment of Bills and Invoices for Operations and Construction; and to approve the Transfer of Funds.

- B: Consider and Take Action to approve the Financial Statement for the month ending June 30, 2022.
- C: Consider and Take Action to approve the Payment of Bills and Invoices for Operations and Construction for Spray Field; and to approve the Transfer of Funds for Spray Field #1.
- D: Consider and Take Action on Pay Estimate No. 7 for Elevated Storage Tank #5.
- E: Consider and Take Action on Pay Estimate No. 7 for Rancho Desierto Bello Unit 15 Phase II.
- F: Consider and Take Action on Pay Estimate No. 14 for HRMUD water supply Wells #10 and 11.
- G: Consider and Take Action on Pay Estimate No. 2 for Paseo Del Este Unit 8 Phase I Water and Wastewater improvements.
- H: Consider and Take Action on Pay Estimate No. 2 for Paseo Del Este Unit 8 Phase II.
- I: Consider and Take Action on Pay Estimate No. 1 for Painted Desert at Mission Ridge Unit 4 Water and Wastewater Improvements.
- J: Consider and Take Action on Pay Estimate No. 9 for Summer Sky Subdivision Phase II Water and Wastewater Improvements.
- K: Consider and Take Action on Pay Estimate No. 2 for Sludge Digester Rehabilitation.

Motion was made by Director Thomas and seconded by Director Hulsey to approve the Consent Agenda.

All in favor: 4 ayes

Opposed: 0 none

Motion passed to approve.

6. **DISCUSSION ON HORIZON VIEW ESTATES SEWER PROJECT.**

Discussion item only. Ms. Troncoso provided an update stating they are still waiting on the environmental clearance from the Texas Water Development Board. This was expected back in December 2021 and still have not received it. Once this has been received, they will be able to move on to the design phase.

No Action Necessary.

7. **CONSIDER AND TAKE ACTION MANAGEMENT REPORT RELATING TO MANAGEMENT AND OPERATIONAL ACTIVITIES OF THE DISTRICT.**

Mr. McGinnis presented the Management and Operations report and set new calendar. Director Jarvis asked Mr. McGinnis if the replacement of gate valves was an ongoing project and if there was a list of the broken valves and Mr. McGinnis replied that this project was ongoing, and he does have a list and has about 25-30 gate valves that were broken and they have been changed so it is a little less. Most of the broken valves are either 6" or 12" and have been working on the 6" valves about 2 per month. Director Jarvis wants to see if they can up the number of repaired valves per month as it looks like it would take about two years to replace them all.

See attached report.

Director Thomas made a motion to approve the Management Report and was seconded by Director Hulsey.

All in favor: 4 ayes
Opposed: 0 none

Motion passed to approve.

8. **CONSIDER AND TAKE ACTION ON THE ENGINEERING REPORT RELATING TO CONSTRUCTION AND ENGINEERING ACTIVITIES OF THE DISTRICT.**

Ms. Troncoso discussed and presented the current service commitment applications and construction activity, then presented a summary of the Engineer's Report.

See attached report.

Director Hulsey made a motion to approve the Engineering Report relating to construction and engineering activities and was seconded by Director Thomas.

All in favor: 4 ayes

Opposed: 0 none

Motion passed to approve.

9. **CONSIDER AND TAKE ACTION ON MANAGEMENT REPORT RELATING TO MANAGEMENT AND OPERATIONAL ACTIVITIES OF SPRAY FIELD No.1.**

Mr. Delgadillo reported June was the best month they have had stating they made \$144,000.00 in sales compared to last June where they made \$107,000.00. Mr. Delgadillo also reported there is nothing out of the ordinary as far as the expenses other than the cost of gas & oil.

Director Barton made a motion to approve the report relating to management and operational activities of Sprayfield No. 1 and was seconded by Director Thomas.

All in favor: 4 ayes

Opposed: 0 none

Motion passed to approve.

10. **CONSIDER AND TAKE ACTION ON, IF NECESSARY, RELATING TO THE LEASE WITH MOONLIGHT P&Q, LLC.**

No one from Moonlight P&Q present. Director Barton commented that the air conditioner was working much better and the kitchen was doing ok. Mr. Delgadillo added he had spoken to Ms. Bonnie Najera and was told she was trying to hire some new cooks and a new manager to help the current manager as he had been in and out with personal issues. Director Hulsey commented they were closing the kitchen early at 6:30 p.m. and there are still golfers out at that time and would need to still have the beverage cart out until 7:00 p.m. Need to find out if tennis court/volleyball court is included in lease.

No Action Necessary.

11. **CONSIDER AND TAKE ACTION ON SPARE AFTON PUMP FOR RO TRAINS.**

Mr. McGinnis requested item be tabled as he was still waiting to get numbers in.

Item tabled.

12. **CONSIDER AND TAKE ACTION ON REQUEST FROM E3 SOLUTIONS FOR REIMBURSEMENT OF MAINTENANCE.**

Mr. McGinnis left the same letter on agenda that was on from last month's meeting in case the Board needed to discuss anything else. Nothing else to discuss on this matter per Director Jarvis no action necessary.

No Action Necessary.

13. **EXECUTIVE SESSION, AS NECESSARY.**

No items for executive session.

No action necessary.

14. **REPORTS AND DISCUSSION OF OTHER MATTERS THAT MAY COME BEFORE THE BOARD.**

No items to discuss.

There being no further business before the Board, the meeting was upon motion made by Director Hulsey and seconded by Director Thomas all in favor and carried, adjourned at 6:54 p.m.

READ, APPROVED AND ADOPTED THIS 27th DAY OF October 2022.



GORDON JARVIS, PRESIDENT
Board of Directors
Horizon Regional M.U.D.



FLORENCE THOMAS, TREASURER
Board of Directors
Horizon Regional M.U.D.

CM/VS



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WATER & INFRASTRUCTURE SERVICES



**Horizon Regional MUD
General Manager Reports for the month of
June 2022**

Board Meeting Date: 7-21-2022

Reviewed By: Carlos McGinnis

Date: 07-21-2022



Inframark LLC
14100 Horizon Blvd, Horizon
City, TX 79928
United States
www.inframark.com

Current Items Requiring Board Approval

Vendor	Amount	WO#	Budget Amount	Description

Date: 07/21/22

Memorandum for: Board of Director's Horizon Regional MUI

From:

Subject: General Manager's Executive Summary Report

Below is a summary of activities since the last board meeting:

1) Wastewater Treatment Plant

- a) Digester repairs are ongoing
- b) We are waiting for parts to be delivered for Main Bar Screen.
- c) GLO Lift Station is awaiting start.

2) Distribution System – Billing

- a) 10 customer meters were replaced.
- b) Repaired 28 service line leaks and 8 meter leaks
- c) Replaced 1 gate valve on Lago Seco and Veny Webb.

3) Collection System

- a) Lift Stations are all operational
- b)

*NOTE TO REPLACE UP-
HOLD THEM ON*

4) Ponds

- a) Have been holding steady with no overflows this month
- b)

5) Construction

- a) Well 11 has been turned on and are getting bac ts
- b) Elevated Storage construction is moving quickly.

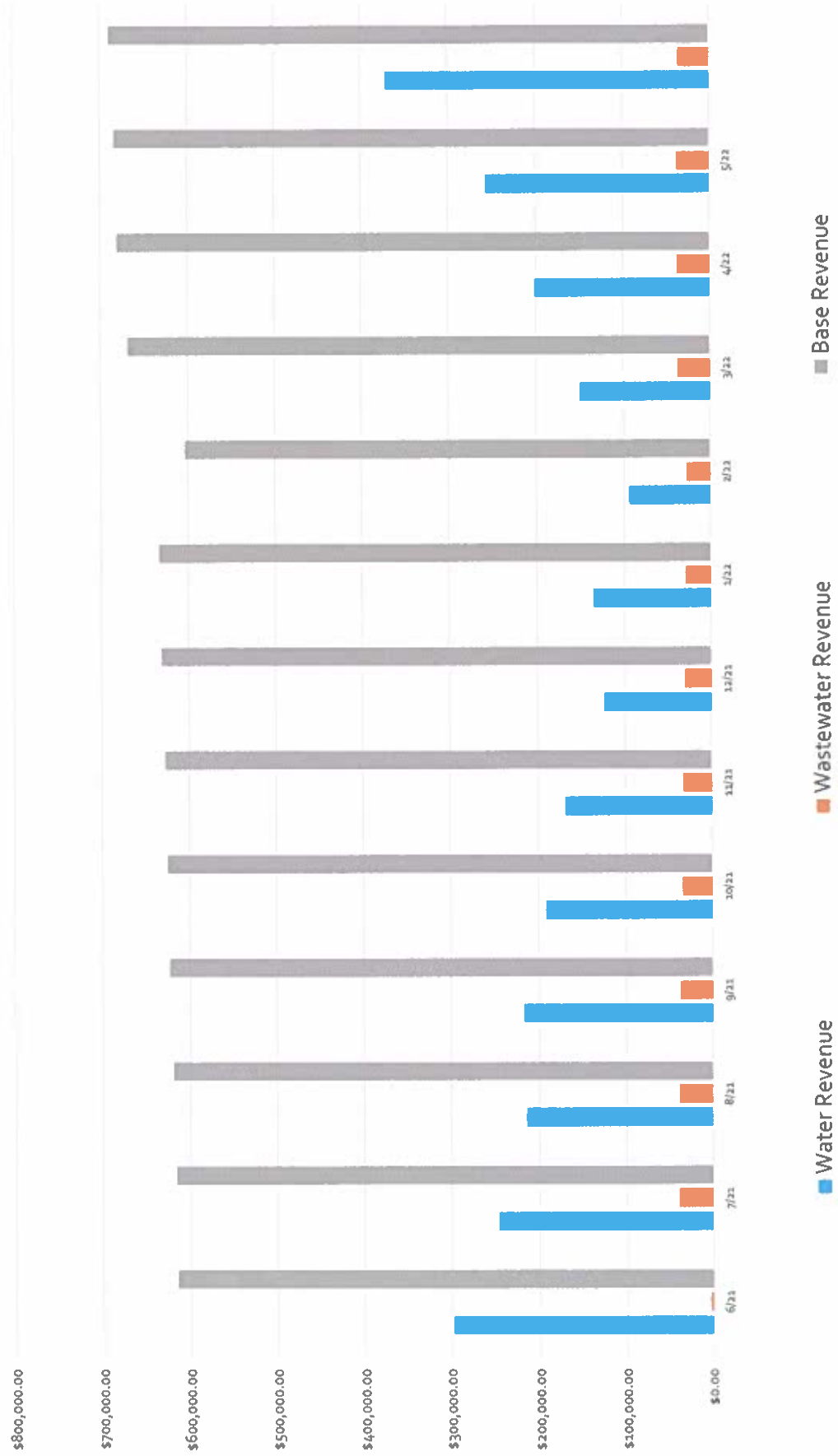
6) Customer Care

- a) Assisted 12 Customers with payment plans.
- b) 176 Disconnections were done.

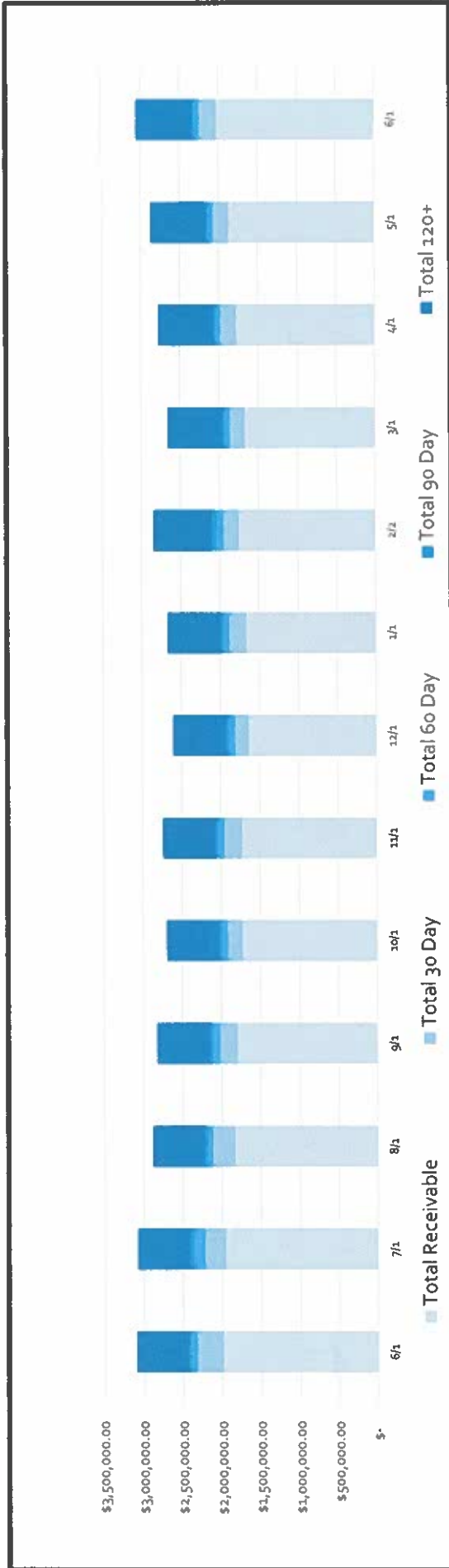
Billing Summary

Description	Connections	
	Jun-21	Jun-22
Residential	11,688	12,532
Commercial	247	249
Irrigation	54	55
School	20	23
Municipal	16	16
Church	12	12
Bulk Meter	28	34
Total Number of Accounts Billed	12,065	12,921
	Consumption	
Residential	118,708,700	103,681,300
Commercial	5,835,100	7,920,800
Irrigation	5,478,800	11,849,000
School	910,000	1,422,500
Municipal	633,200	2,323,300
Church	654,000	729,000
Bulk Meter	1,113,000	4,604,000
Total Gallons Consumed	133,332,800	132,529,900
	Average Consumption	
Residential	5,556	8,273
Commercial	15,474	31,810
Irrigation	23,596	215,436
School	13,395	61,848
Municipal	11,900	145,206
Church	11,267	60,750.00
Bulk Meter	51,359	135,412
Avg Water Use for Accounts Billed	11,051	10,257
Total Billed	\$ 954,648	\$ 1,099,115
Total Aged Receivables	\$ 969,675	\$ 921,505
Total Receivables	\$ 1,987,359	\$ 2,020,620

12 Billing Month History Revenue by Category



12 Month Accounts Receivable and Collections Report



Date	Total Receivable	Total 30 Day	Total 60 Day	Total 90 Day	Total 120+
Jun-21	\$ 1,987,359.25	\$ 333,419.13	\$ 84,947.49	\$ 25,810.47	\$ 667,246.17
Jul-21	\$ 1,954,940.89	\$ 261,632.63	\$ 147,880.14	\$ 45,113.02	\$ 668,494.70
Aug-21	\$ 1,830,971.29	\$ 284,363.90	\$ 67,383.97	\$ 35,218.35	\$ 665,609.02
Sep-21	\$ 1,799,321.15	\$ 219,560.23	\$ 91,062.29	\$ 32,337.27	\$ 678,542.81
Oct-21	\$ 1,728,773.18	\$ 186,754.08	\$ 69,973.17	\$ 36,193.65	\$ 674,288.07
Nov-21	\$ 1,728,750.15	\$ 229,165.27	\$ 79,548.39	\$ 23,961.91	\$ 680,155.56
Dec-21	\$ 1,639,534.72	\$ 176,096.12	\$ 74,866.58	\$ 31,338.13	\$ 685,024.65
Jan-22	\$ 1,664,708.09	\$ 216,551.92	\$ 76,349.65	\$ 22,987.38	\$ 693,648.16
Feb-22	\$ 1,752,885.13	\$ 196,848.69	\$ 93,274.07	\$ 55,643.82	\$ 749,947.91
Mar-22	\$ 1,672,316.30	\$ 194,092.81	\$ 62,230.37	\$ 23,933.95	\$ 706,848.97
Apr-22	\$ 1,776,220.26	\$ 205,391.56	\$ 64,233.14	\$ 16,959.35	\$ 716,364.40
May-22	\$ 1,874,079.57	\$ 197,287.37	\$ 64,578.63	\$ 16,799.24	\$ 721,239.50
Jun-22	\$ 2,020,620.46	\$ 226,445.16	\$ 67,429.82	\$ 16,754.16	\$ 720,798.42

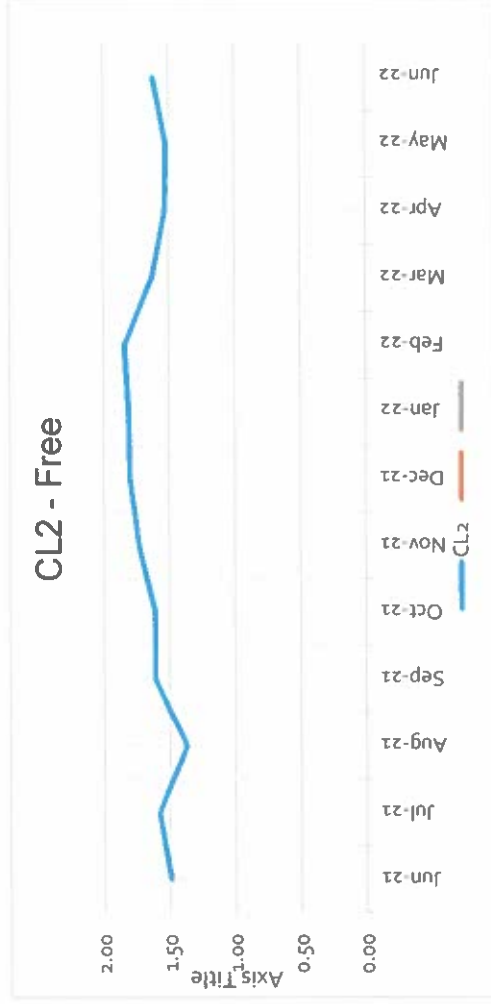
Board Consideration to Write Off \$26.29
 Board Consideration Collections \$1,331.86

Delinquent Letter Mailed N/A
 Delinquent Tags Hung 176
 Disconnects for Non Payment

Water Quality Monitoring

Current Annual CL2 Avg 1.63

Requirements	Min	.02
Date	CL2	
Jun-21	1.49	
Jul-21	1.58	
Aug-21	1.37	
Sep-21	1.61	
Oct-21	1.61	
Nov-21	1.73	
Dec-21	1.80	
Jan-22	1.81	
Feb-22	1.84	
Mar-22	1.63	
Apr-22	1.53	
May-22	1.52	
Jun-22	1.62	





Pictures of Construction of new Elevated Storage

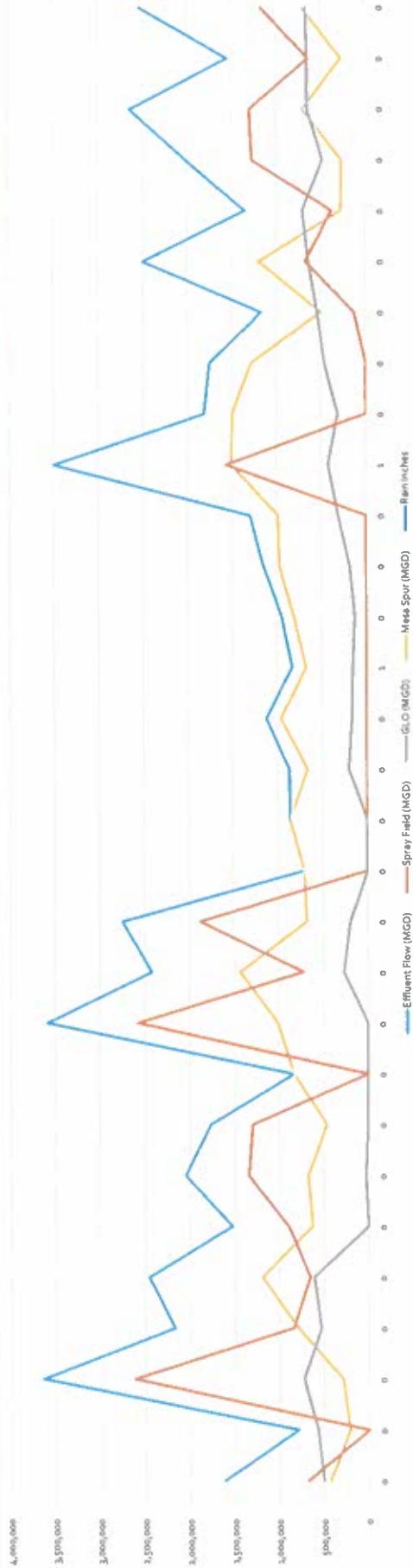
Month	Month	Connection Total	Pumped Water	Sold (1000)	Flushing/District	Gal.s Loss (-)	Water loss %
June 21	6/24/2021	11994	227,874	99,048	55,200	21,815	12.5%
July 21	7/22/2021	12065	150,880	133,333	10,000	35,315	9.7%
August 21	8/26/2021	12122	152,172	118,239	20,000	13,933	12.5%
September 21	9/23/2021	12233	163,518	105,556	40,000	17,962	15.5%
October 21	10/28/2021	12291	139,733	101,250	25,000	13,483	9.0%
November 21	11/30/2021	12424	130,773	85,051	30,000	15,722	11.0%
December 21	12/31/2021	12488	121,828	74,820	30,000	17,008	9.6%
January 22	1/31/2022	12510	120,320	76,674	33,000	10,646	12.0%
February 22	2/28/2022	12611	110,934	72,951	29,000	8,893	13.0%
March 22	3/31/2022	12696	137,251	82,886	38,000	16,361	8.8%
April 22	4/30/2022	12809	146,607	100,892	34,050	11,665	11.0%
May 22	5/30/2022	12844	170,803	117,013	40,500	13,290	7.8%
June 22	6/30/2022	12921	173,030	132,529	30,500	10,001	6.0%



Wastewater Production and Quality



Wastewater Flows for the Month of June 2022



Wastewater Treatment Permit Summary - Month of June 2022

	DISCHARGE	Eff.	ACTUAL	COMPLIANT	PERCENT
Avg. Treated Flow	MGD	3	2.054	Yes	68.5%
Avg. Sprayfield Flow	MGD	3	1.027	Yes	34.3%
Avg. GLO Flow	MGD	3	0.341	Yes	11.4%
Avg. Mesa Spur Flow	MGD	3	0.686	Yes	22.9%
Avg. Other Flow			0.000	N/A	
Avg. cBOD	mg/L	10	14.63	No	
Avg. TSS	mg/L	15	33.2	Yes	
Avg. Ammonia Nitrogen NH3	mg/L	3	7.68	No	
Avg DO	mg/L	7.77	7.33	Yes	
E. coli Bacteria	CFU	126	12.6	Yes	
MIN. PH	STD UNITS	6.0	7.10	Yes	
MAX. PH	STD UNITS	9.0	7.87	Yes	

only applies if discharge

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July 21, 2022

Leak Report for June, 2022

Address	Date	Street	Meter	Repaired	Comments
1123 Colina Bella	6/3/2022	X		X	Replaced with copper
14821 Dquincy	6/3/2022	X		X	Replaced with copper
310 Hosston	6/3/2022	X		X	Replaced with copper
1428 Cotonel	6/7/2022	X		X	Replaced with copper
14048 Highweed	6/7/2022	X		X	Replaced with copper
13472 Sunset Hills	6/10/2022		X	X	Replaced with copper
14208 Desert Sky	6/10/2022		X	X	Replaced with copper
13542 Inspiration	6/15/2022		X	X	Replaced with copper
15000 Ashford	6/15/2022		X	X	Replaced with copper
16001 Harrison	6/15/2022	X		X	Replaced with copper
14569 Puerto del Carmen	6/20/2022	X		X	Replaced with copper
617 Paseo Del Mar	6/20/2022	X		X	Replaced with copper
14497 Encantado	6/20/2022		X	X	Replaced with copper
719 Palmer	6/20/2022	X		X	Relaced with copper
605 Orchid	6/20/2022	X		X	Replaced with copper
663 de Bartolo	6/20/2022	X		X	Replaced with copper
14048 Warren Belin	6/21/2022	X		X	Replaced with copper
829 Agua de Rio	6/21/2022	X		X	Replaced with copper
13446 Sunset Hills	6/21/2022	X		X	Replaced with copper

Date: July ,12 2022

Re: Operations Report for June , 2022

Lift Stations

<u>Barrel Cactus Lift Station</u>	Fully operational.
<u>Benton Lift Station</u>	Fully operational.
<u>Biglon Lift Station</u>	Fully operational
<u>Duanesburg Lift Station</u>	One pump running diesel pump as back up.
<u>Ellsworth Lift Station</u>	Fully operational.
<u>El Paso Hills Lift Station</u>	Fully operational.
<u>El Paso Hills Relay Station</u>	Fully operational.
<u>El Paso Hills Lift Station #2</u>	Fully operational.
<u>Horizon Lift Station</u>	Fully operational.
<u>Kenazo Lift Station</u>	Fully operational.
<u>Notre Dame List Station</u>	Fully operational.
<u>Manor 9 Lift Station</u>	Fully operational.
<u>Section 32 Lift Station</u>	Fully operational
<u>Veny Webb Lift Station</u>	Fully operational
<u>Woodale Lift Station</u>	Fully operational.
<u>Kenazo Lift Station #2</u>	Fully Operational
<u>Summer Sky Lift station</u>	Fully Operational
<u>Hazlewood Lift Starion</u>	Fully Operational
<u>Desert Point Lift Station</u>	Fully Operational
<u>Holly spirit Lift station</u>	Fully operational

Tanks

<u>GST 1</u>	Online as reserve storage for the distribution system.
<u>GST 2</u>	Online as primary pumping station and water supply for the distribution system.
<u>GST 3</u>	Online with the distribution system.
<u>GST 4</u>	Online with the distribution system.
<u>GST 5</u>	Online with the distribution system.
<u>RWT #1</u>	Online and feeding the RO plant.
<u>EST 1</u>	Online with the distribution system.
<u>EST 2</u>	Online with the distribution system.
<u>EST 3</u>	Online with the distribution system.
<u>EST 4</u>	Online with the distribution system.

Wastewater Treatment Plant

- 6 blowers are up and running.
Hauled 20 loads of sludge.

Water Wells

Well 1 operational

Well 2 operational

Well 3 operational

Well 4 Not working (running spare pump)

Well 5 not working Waiting on Pump

— 700 W

Well 6 operational

Well 7 operational

Well 8 operational

Pump Station 2

No change in status.

Pump Station 3

Operational.

Pump Station 4

Operational.

Pump Station 1

Operational.

RO Plant

All RO Trains are up and running. Concentrators are up.

General

Replaced Gate valve on Veny Webb and Lago de Oro *Seco*

Aldo Navarrete, Operations Manager.

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TOTAL WATER PRODUCTION BY DAY

For June 2022

DAY	Total Pumpage From All Wells	Daily Total To Tanks	Chlorine Used	System Residuals		GST#2A Residual
				by Site Number	Site #	
1	6,722,708	5,755,800	250	1.82	2	2.19
2	6,394,751	5,685,600	250	1.63	3	2.28
3	6,939,115	5,710,500	250	1.22	4	1.99
4	7,331,163	6,451,100	250	1.67	5	2.29
5	5,624,390	4,878,900	250	1.87	6	1.98
6	8,230,313	7,142,300	250	1.83	7	1.93
7	5,662,813	4,840,400	250	1.91	8	2.22
8	7,713,868	6,897,900	250	1.96	9	1.99
9	7,859,533	6,585,000	250	2.11	10	1.97
10	6,355,291	5,079,100	250	1.96	11	1.89
11	5,986,943	3,457,500	250	1.98	12	2.07
12	6,876,974	6,136,400	250	1.59	13	1.65
13	7,345,632	6,646,600	250	1.43	14	1.92
14	8,340,940	7,177,100	250	1.91	15	2.17
15	9,042,814	8,129,900	250	1.68	16	2.33
16	6,993,345	5,750,400	250	1.55	17	2.40
17	7,998,119	6,791,400	250	1.51	18	2.02
18	7,194,430	6,088,400	250	0.76	19	1.31
19	7,211,795	5,938,100	250	1.12	20	1.77
20	7,784,536	6,236,800	250	1.89	21	2.22
21	5,037,618	3,965,900	250	1.22	22	2.11
22	6,057,702	4,957,200	250	1.51	23	2.22
23	6,945,648	5,830,500	250	1.66	24	2.09
24	6,335,313	5,151,900	250	1.30	25	2.02
25	5,240,310	4,453,600	250	1.88	26	2.09
26	5,833,975	5,033,400	250	1.44	27	1.98
27	7,355,554	6,334,800	250	1.47	28	1.86
28	6,378,719	5,540,200	250	1.46	29	2.03
29	6,598,462	5,303,900	250	1.66	30	2.11
30	6,262,040	5,079,500	250	1.64	31	2.01
TOTAL						
	205,654,814	173,030,100	7500			
	AVG. DAILY USE		5,767,700		1.62	
	MAX. DAILY USE		8,129,900		2.11	
	MIN DAILY USE		3,457,500		0.76	

HRMUD

Water - Jun 2022

Day	Wells	Permeate	Reject	Potable	Cl2
1	6,722,708	3,792,857	966,890	5,755,800	1.82
2	6,394,751	2,619,748	709,112	5,685,600	1.63
3	6,939,115	4,361,482	1,228,597	5,710,500	1.22
4	7,331,163	3,210,323	880,091	6,451,100	1.67
5	5,624,390	2,704,309	745,512	4,878,900	1.87
6	8,230,313	4,047,544	1,087,979	7,142,300	1.83
7	5,662,813	2,920,837	822,425	4,840,400	1.91
8	7,713,868	3,160,911	816,018	6,897,900	1.96
9	7,859,533	4,677,192	1,274,557	6,585,000	2.11
10	6,355,291	4,683,621	1,276,213	5,079,100	1.96
11	5,986,943	5,728,375	2,529,406	3,457,500	1.98
12	6,876,974	4,149,229	740,538	6,136,400	1.59
13	7,345,632	3,884,217	699,064	6,646,600	1.43
14	8,340,940	4,688,310	1,163,869	7,177,100	1.91
15	9,042,814	3,583,213	912,964	8,129,900	1.68
16	6,993,345	4,411,710	1,242,918	5,750,400	1.55
17	7,998,119	4,299,585	1,206,706	6,791,400	1.51
18	7,194,430	4,018,932	1,105,983	6,088,400	0.76
19	7,211,795	4,490,333	1,273,683	5,938,100	1.12
20	7,784,536	5,264,789	1,547,758	6,236,800	1.89
21	5,037,618	3,375,291	1,071,721	3,965,900	1.22
22	6,057,702	3,463,668	1,100,522	4,957,200	1.51
23	6,945,648	3,383,071	1,115,168	5,830,500	1.66
24	6,335,313	4,375,144	1,183,375	5,151,900	1.30
25	5,240,310	3,127,460	786,758	4,453,600	1.88
26	5,833,975	3,163,262	800,568	5,033,400	1.44
27	7,355,554	3,728,911	1,020,800	6,334,800	1.47
28	6,378,719	2,545,325	838,485	5,540,200	1.46
29	6,598,462	3,850,496	1,294,523	5,303,900	1.66
30	6,262,040	3,572,983	1,182,498	5,079,500	1.64

Max	9,042,814	5,728,375	2,529,406	8,129,900	2.11
Min	5,037,618	2,545,325	699,064	3,457,500	0.76
Average	6,855,160	3,842,771	1,087,490	5,767,670	1.62

RO Reject
For June 2022

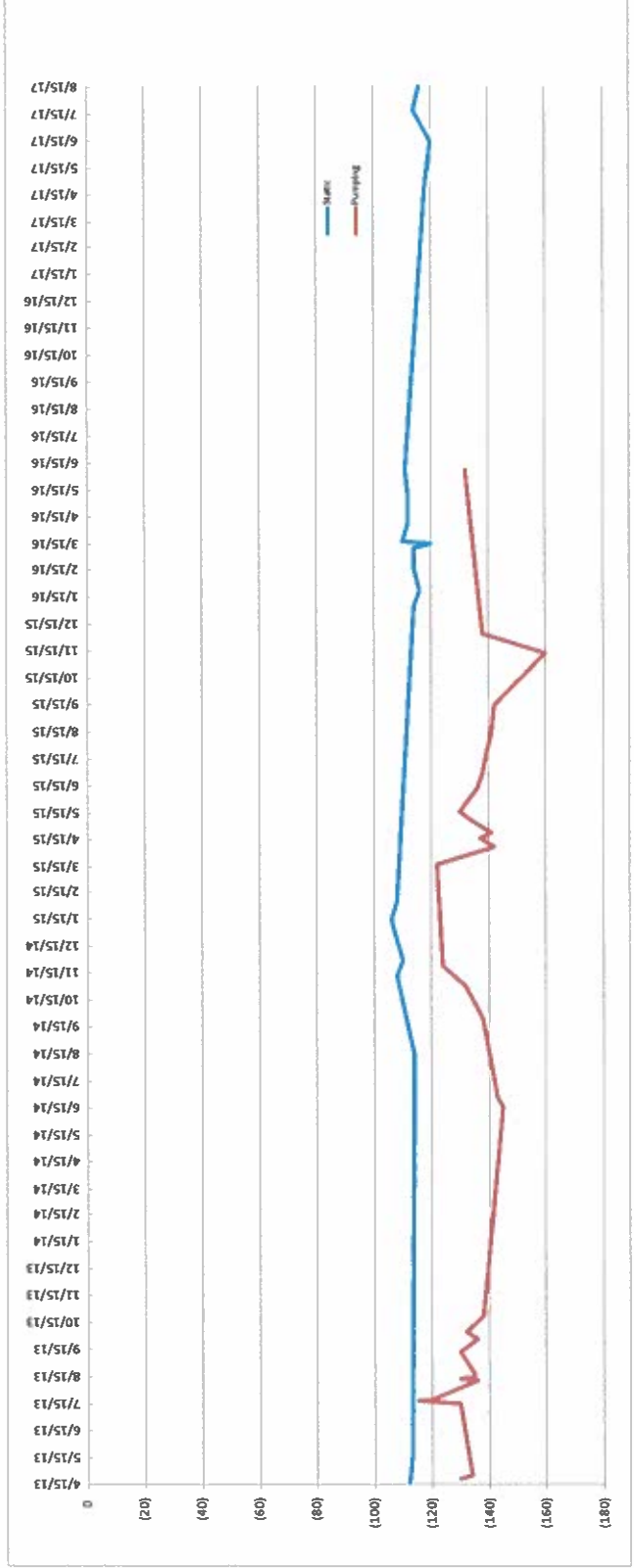
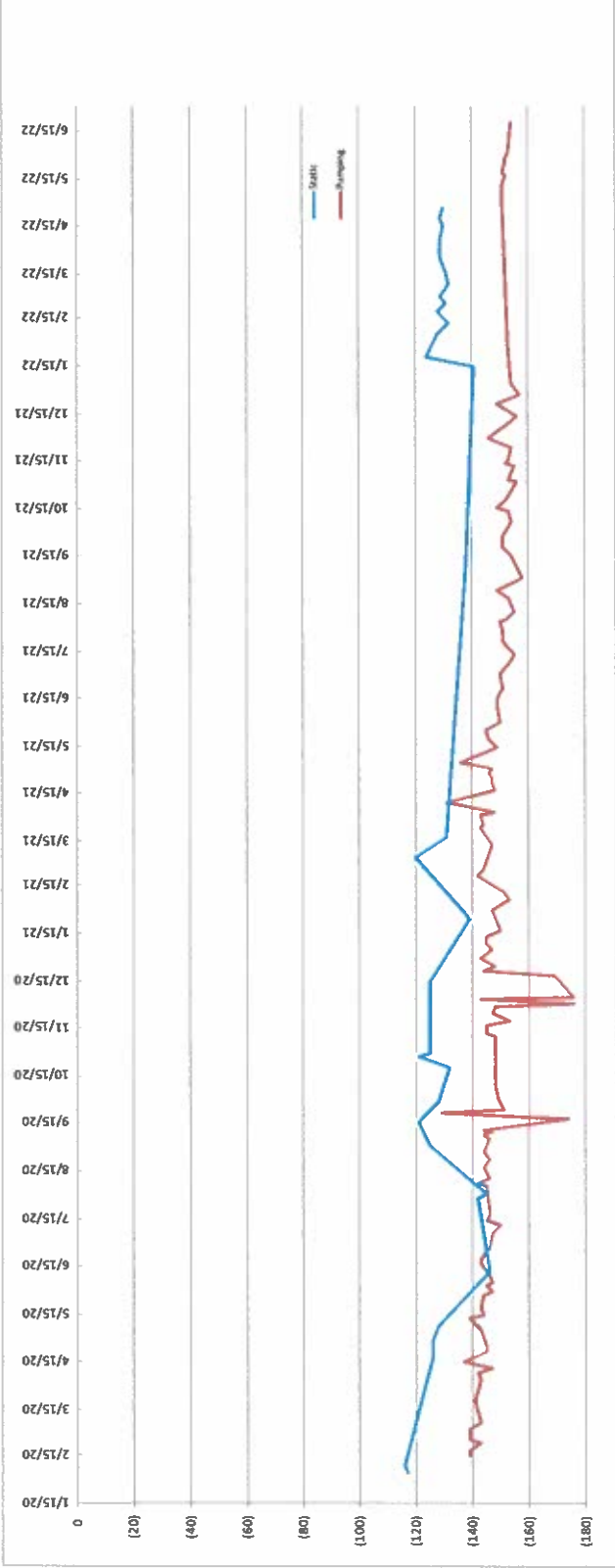
RO Concentrator
For June 2022

Date	RO-A		RO-B		RO-C		RO-D		Total Reject	Feed Brine to Concentrators	Permiate to GST 2	Total Reject to Evap Ponds
	Reject	RO-A	Reject	RO-B	Reject	RO-C	Reject	RO-D				
1	490,533	473,890	2,635	511,130	1,478,200				1,478,200	511,310	966,890	
2	338,655	327,162	289	353,624	1,019,700				1,019,700	310,588	709,112	
3	559,734	534,581	60,277	584,841	1,739,400				1,739,400	510,803	1,228,597	
4	418,942	410,302	296	439,007	1,268,500				1,268,500	388,409	880,091	
5	354,775	342,191	14,813	369,752	1,081,500				1,081,500	335,988	745,512	
6	526,165	507,265	0	550,814	1,584,200				1,584,200	496,221	1,087,979	
7	374,624	367,012	739	393,413	1,135,800				1,135,800	313,375	822,425	
8	403,643	390,995	1,361	423,955	1,220,000				1,220,000	403,982	816,018	
9	458,781	452,401	444,139	455,033	1,810,400				1,810,400	535,843	1,274,557	
10	452,870	446,868	458,516	447,555	1,805,800				1,805,800	529,587	1,276,213	
11	548,523	547,079	561,141	1,545,901	3,202,600				3,202,600	673,194	2,529,406	
12	405,588	392,435	403,243	0	1,201,300				1,201,300	460,762	740,538	
13	350,534	359,955	405,551	0	1,116,000				1,116,000	416,936	699,064	
14	459,633	445,958	457,089	227,724	1,590,400				1,590,400	426,531	1,163,869	
15	355,168	344,480	351,715	339,666	1,391,000				1,391,000	478,036	912,964	
16	431,127	418,868	444,456	405,188	1,699,600				1,699,600	456,682	1,242,918	
17	427,283	414,127	429,859	394,802	1,666,100				1,666,100	459,394	1,206,706	
18	391,887	380,621	399,635	384,959	1,557,100				1,557,100	451,117	1,105,983	
19	437,870	425,000	446,944	430,946	1,740,800				1,740,800	467,117	1,273,683	
20	549,626	533,740	561,547	389,796	2,034,700				2,034,700	486,942	1,547,758	
21	405,590	393,561	421,547	0	1,220,700				1,220,700	148,979	1,071,721	
22	426,373	414,539	441,875	3,236	1,286,000				1,286,000	185,478	1,100,522	
23	406,880	430,152	421,696	0	1,258,700				1,258,700	143,532	1,115,168	
24	538,619	585,358	549,645	0	1,673,600				1,673,600	490,225	1,183,375	
25	388,446	432,707	395,188	0	1,216,300				1,216,300	429,542	786,758	
26	394,428	439,110	404,069	0	1,237,600				1,237,600	437,032	800,568	
27	511,773	472,007	557,508	0	1,541,300				1,541,300	520,500	1,020,800	
28	359,803	315,516	375,900	3,405	1,054,600				1,054,600	216,115	838,485	
29	450,917	507,735	475,673	62,213	1,496,500				1,496,500	201,977	1,294,523	
30	428,241	504,228	462,896	55,659	1,451,000				1,451,000	268,502	1,182,498	
TOTAL										44,779,400	32,624,701	

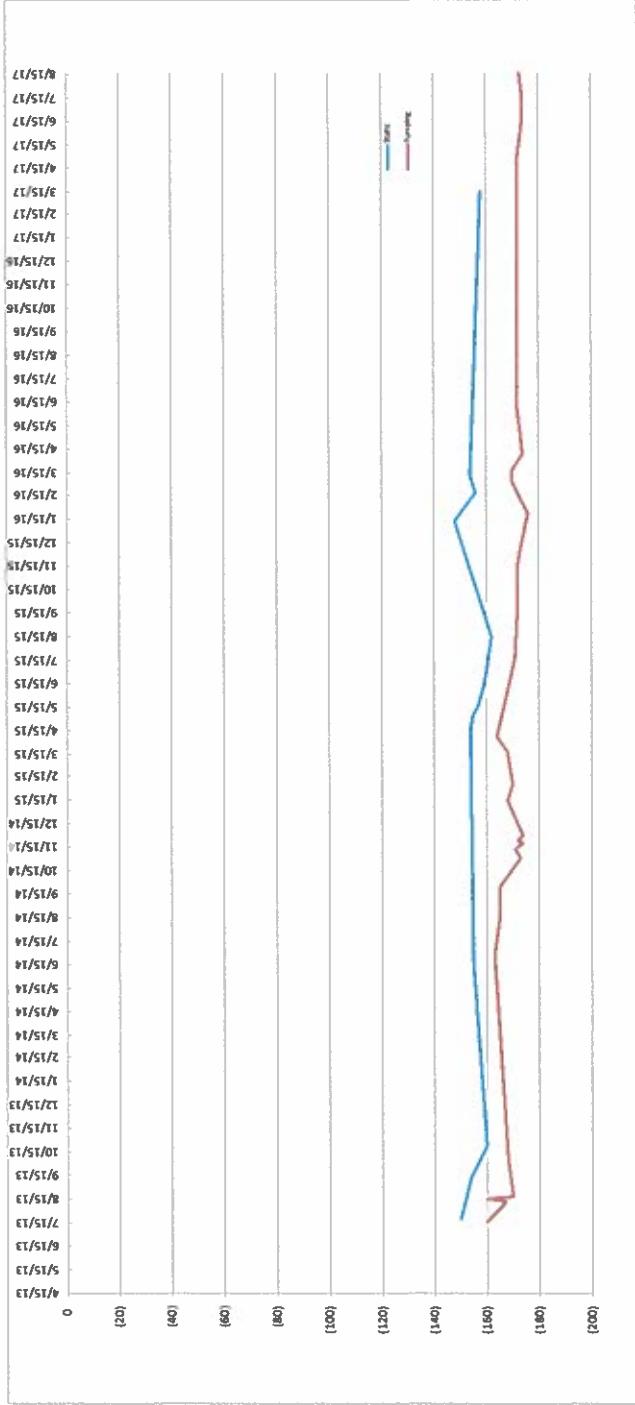
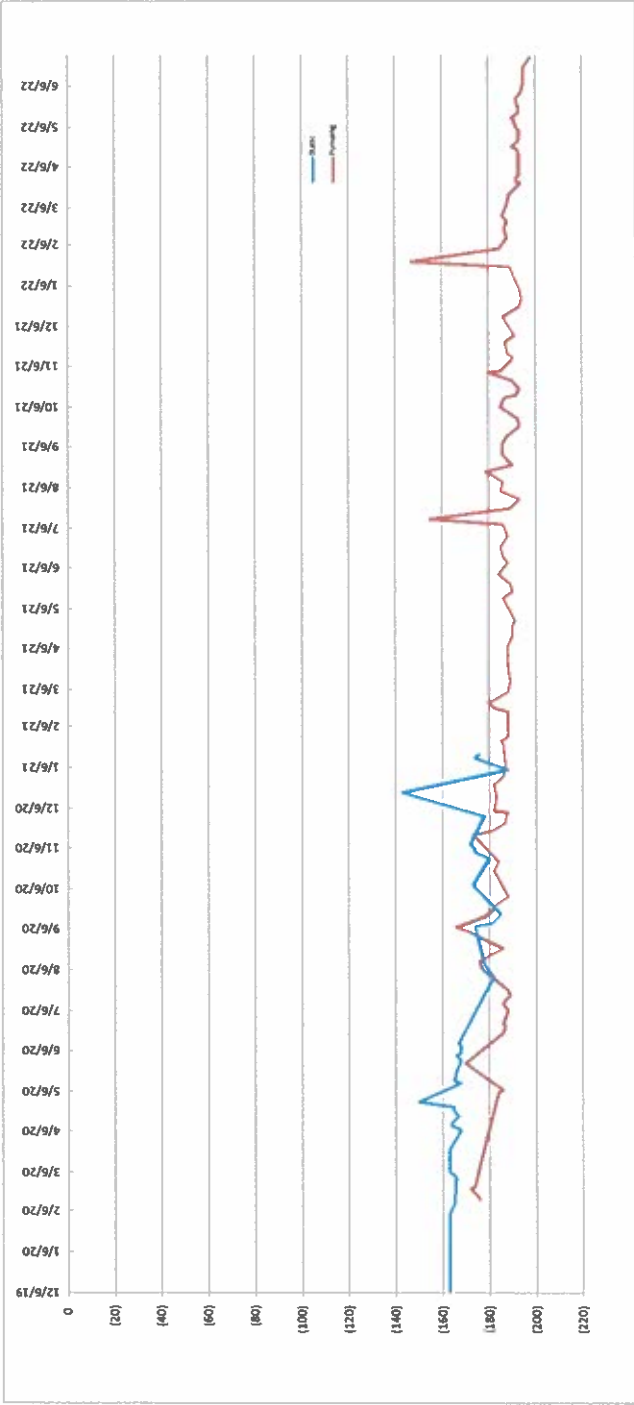
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Date	
1	2,203
2	2,301
3	2,203
4	2,399
5	2,228
6	2,130
7	2,203
8	2,399
9	2,344
10	2,277
11	2,257
12	2,155
13	2,326
14	2,301
15	2,332
16	2,185
17	2,307
18	2,338
19	2,313
20	2,240
21	2,240
22	2,338
23	2,258
24	2,161
25	2,161
26	2,234
27	2,136
28	2,283
29	2,307
30	2,258

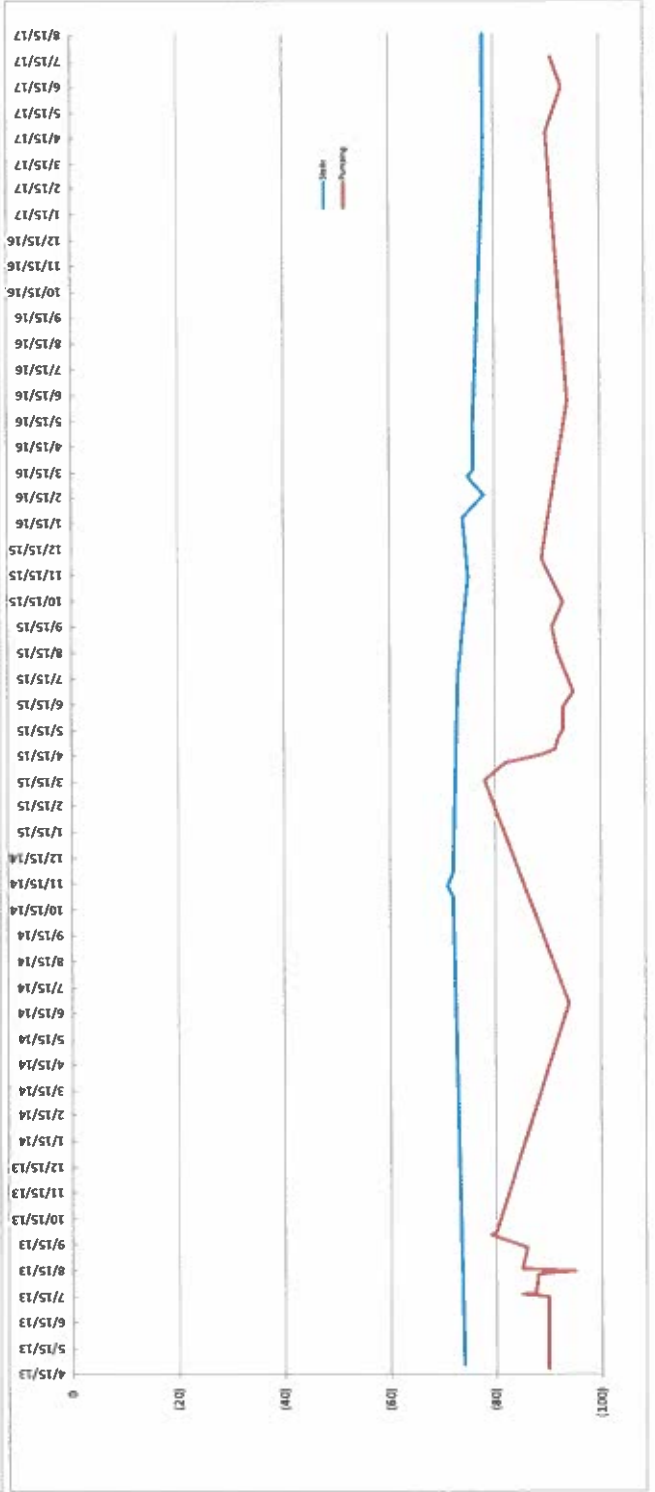
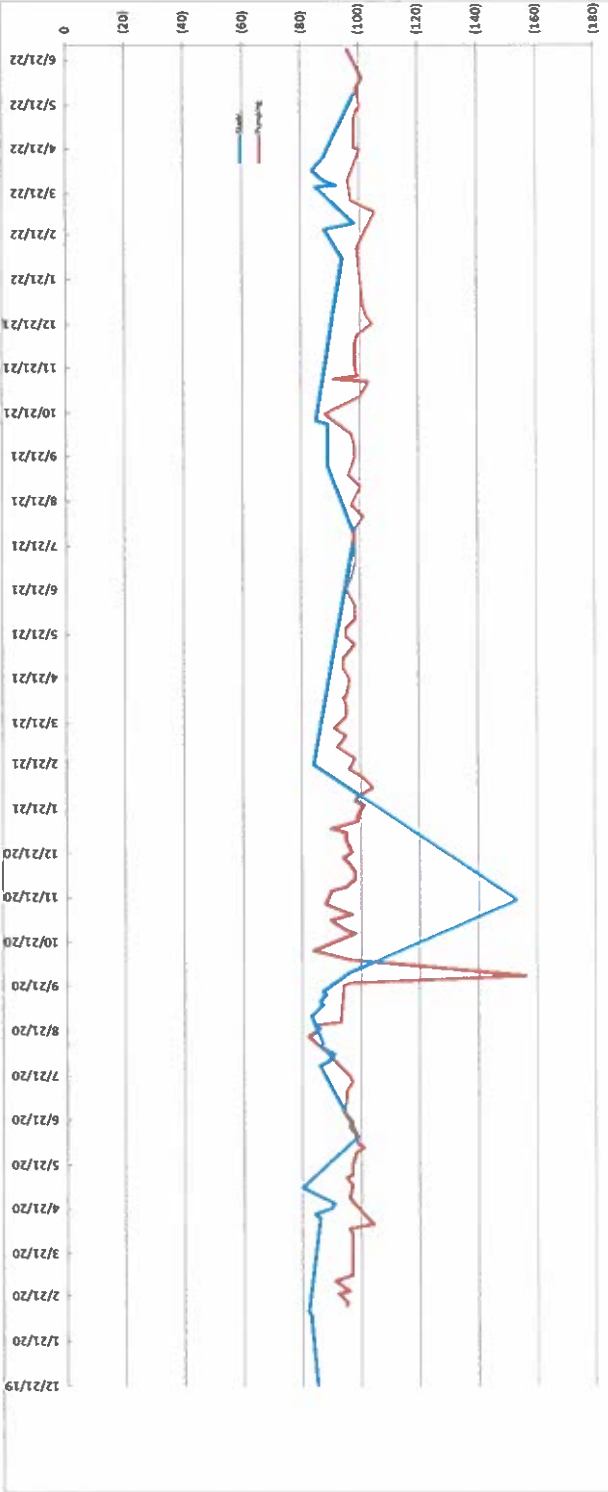
Well 1B



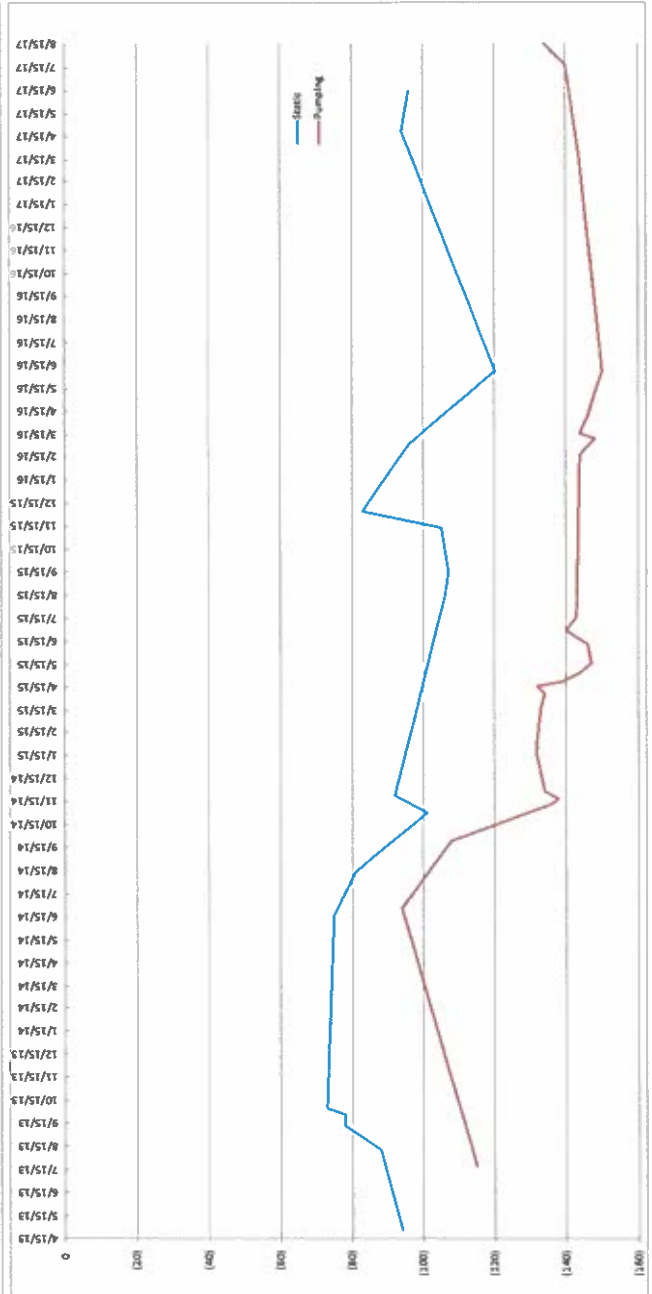
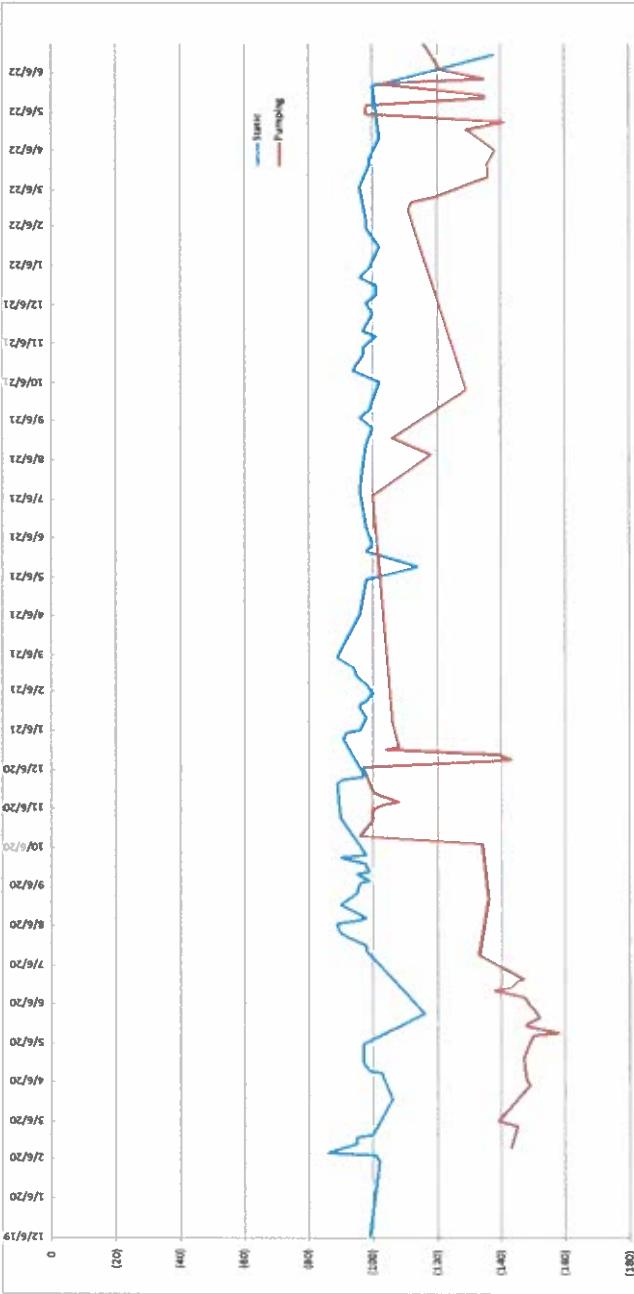
Well 4A



Well 6



Well 8



WASTEWATER TOTALS FOR MONTH
For June 2022

DAY	TOTAL INFLUENT	EFFLUENT PUMPAGE			TOTAL EFFLUENT
		SPRAY FIELD	GLO	MESA SPUR DRAIN	
1	1,501,000	681,578	504,000	432,600	1,618,178
2	2,526,000	0	576,000	212,800	788,800
3	2,518,000	2,621,759	727,000	290,100	3,638,859
4	1,764,000	845,990	535,000	791,800	2,172,790
5	2,078,000	654,740	612,000	1,193,700	2,460,440
6	2,070,000	898,170	0	627,900	1,526,070
7	2,334,000	1,343,580	32,000	674,700	2,050,280
8	2,082,000	1,298,730	0	464,800	1,763,530
9	2,709,000	0	0	833,600	833,600
10	1,867,000	2,578,758	0	1,009,300	3,588,058
11	2,740,000	721,807	267,000	1,433,300	2,422,107
12	1,818,000	1,875,826	193,000	678,300	2,747,126
13	2,066,000	0	0	709,800	709,800
14	2,575,000	0	0	867,300	867,300
15	2,264,000	0	202,000	666,600	868,600
16	1,776,000	0	164,000	962,200	1,126,200
17	1,849,000	0	156,000	679,000	835,000
18	2,406,000	0	131,000	814,300	945,300
19	2,229,000	0	182,000	971,100	1,153,100
20	2,321,000	0	316,000	988,200	1,304,200
21	2,080,000	1,569,178	421,000	1,510,300	3,500,478
22	1,806,000	0	316,000	1,497,900	1,813,900
23	1,996,000	0	460,000	1,288,200	1,748,200
24	2,484,000	126,367	544,000	498,100	1,168,467
25	1,915,000	671,687	633,000	1,192,400	2,497,087
26	2,346,000	375,955	701,000	272,600	1,349,555
27	1,929,000	1,273,371	476,000	265,900	2,015,271
28	2,295,000	1,296,587	645,000	698,900	2,640,487
29	2,567,000	633,809	646,000	267,000	1,546,809
30	2,015,000	1,163,288	660,000	707,100	2,530,388
	64,926,000	20,631,180	10,099,000	23,499,800	54,229,980

Percent of permitted to Spray Field	133.1%
Percent of permit to GLO	32.6%
Percent of permitted effluent from STP	58.3%
Percent of permitted effluent to Mesa Spur Drain	26.1%
average treated Effluent	60.3%

Horizon Regional MUD Laboratory Results - ~~2022~~ 2022 June

		Influent				Effluent Outfalls 2 & 3											
	Date	BOD mg/l	pH	S.U.	TSS mg/l	DO mg/l	pH	S.U.	TSS mg/l	TSS Lbs/Day	NH ₄ NO ₃ mg/l	NH ₄ NO ₃ Lbs/Day	CBOD mg/L	CBOD Lbs/Day	Free Cl ₂ Re mg/l	E.Coli MPN	Flow MGD
	6/1/2022		6.89			7.1		19.2	536.23		<0.5	<13.964	15.6	435.69	2.8	<1	0.5760
	6/2/2022	444	7.01	330		7.1									1.67	<1	3.3488
	6/3/2022		6.9												1.88	<1	1.3810
	6/4/2022														1.78		1.2667
	6/5/2022														1.89		0.8982
	6/6/2022		7.01			7.1	7.1	10.8	116.98	0.28	3.033	14.8	160.30	1.8	<1	1.3756	
	6/7/2022	320	6.8	366		7.1								1.53	<1	1.2987	
	6/8/2022		6.91			7.2								3.28	1	2.5788	
	6/9/2022	240	7.29	124		7.1	7.87	<5	<107.53	1.01	21.722	20.2	434.44	2.5	<1	0.9888	
	6/10/2022		7.47											2.39		2.0688	
	6/11/2022													1.73		0.0000	
	6/12/2022													2.56	<1	0.0000	
	6/13/2022		7.13			7.1								2.58	<1	0.2020	
	6/14/2022	168	7.13	100		7.1	7.63	<5	<8.42	14.7	24.765	9.8	16.51	3.29	<1	0.1640	
	6/15/2022		7.22			7.1								2.49	<1	0.1310	
	6/16/2022	298	7.63	162		7.1								2.5		0.1820	
	6/17/2022		7.51											2.79		0.3160	
	6/18/2022		7.31											2.6	<1	1.9902	
	6/19/2022													3.29	12.1	0.3160	
	6/20/2022					7.2	7.19	<5	<13.18	<0.5	<1.318	11.1	29.25	2	13.1	0.4600	
	6/21/2022	286	7.24	200		7.1								2.09	1	0.6704	
	6/22/2022		7.17											2.08	<1	1.3047	
	6/23/2022	235	7.4	280		7.1	7.5	<5	<27.95	<0.5	<2.795	7.02	39.25	2.51	<1	1.0767	
	6/24/2022		7.29											2.39		1.7496	
	6/25/2022		7.19											2.07	9.7	1.9416	
	6/26/2022													2.1	3.1	1.2798	
	6/27/2022					7.2	7.1	<5	<53.37	<0.5	<5.337	12.2	130.22	1.89	59.9	1.8233	
	6/28/2022	270	7.19	820		7.1	7.2	<5	<55.59	<0.5	<5.559	5.2	57.81	1.94	<1	1.3331	
	6/29/2022		7.41											1.92			
	6/30/2022	218	7.29	155		7.1								1.53	<1	0.0000	
	Min	168	6.8	100		7.1	7.1	<5	<0.2	<0.500	<0.02	5.20	13.27	3.29	59.9	3.4888	
	Max	444	7.63	820		7.2	7.87	19.2	536.2	14.7	24.76	20.2	435.69	2.30	12.6	1.0293	
	Avg	275.4	7.2143	282		7.13	7.37	13.20	221.9	7.648	17.13	11.79	146.30				

Permit Limits

Daily Avg.					15	375	3	75	10	250							126
7-Day Avg.					25		6		15								
Daily Max					6	40	10		25						1		399
Daily Min					4	9	N/A		N/A						4		



Engineering Solutions

MEMORANDUM

Via E-Mail

TO: Horizon Regional Municipal Utility District
Board of Directors

FROM: Linda Troncoso, P.E.

DATE: July 21, 2022

SUBJECT: July 21, 2022 Board Meeting
Engineer's Report
TRE Job No.: 1277-7388-54

The following is a brief summary of the major activities that TRE & Associates, LLC. (TRE) has been involved in since the District's last regular Board meeting.

Service Commitments Currently Under Review

See attached summary.

Plans Under Review

See attached summary.

Projects Under Construction

See attached summary.

Horizon City Roadway Projects

TRE is continuing to coordinate with the Town of Horizon on future roadway widening and rehabilitation projects. Regular meetings are now being held to discuss upcoming projects including the potential TIRZ and the improvements on both Darrington and Pawling/Oxbow.

TRE and Inframark have met with the Town and TxDOT in monthly since December regarding Darrington and Horizon Blvd reconstruction and are continuing to address specific line replacement and relocation requirements as part of the project scope. Construction is anticipated to be occur June 2023 – May 2025.

County Roadway Projects

Coordination with the County and the Camino Real Regional Mobility Authority is ongoing for upcoming projects.

Elevated Storage Tanks and Water Model Update

The construction has commenced. Pay Estimate Number 6 is on the agenda for approval at this BOD meeting. The bowl construction, bowl coating, and logo application are complete. The tank hoisting and air phase of the steel erection is scheduled to be occur on Friday, July 29, 2022 at 8 am. The waterline construction is complete except for the connections.

Two Water Wells for RO Supply

The pumps have been set in Well Nos. 10 and 11. Well 10 has successfully completed start up and is online with the system. Well 11 has conducted the start-up and the three day flushing and testing are ongoing at this time. Pay Application Number 14 is on the agenda for approval at this meeting.

4.2 MGD RO Plant Expansion and Permit Amendment

TRE is currently working with Desalotech for the sizing, pricing, and proposed operating procedures to integrate the proposed plant with the existing plant. TRE has received the autopsy of membranes at the existing RO plant as well as water samples from the feed water to establish design parameters for the RO plant expansion and is currently evaluating the data and working on the new plant configuration.

RO Concentrate Disposal Management

TRE has received approval from the Railroad Commission and has submitted the formal permit application and support documentation to the TCEQ on June 14, 2022.

Wastewater Treatment Plant Expansion Design and Major Permit Amendment

TRE is underway with the design for the WWTP to be expanded at the current treatment plant location. The site layout is being designed at this time to accommodate future expansions.

Wheeler Well No. 5 Rehabilitation

The VFD has been installed and the pump is being set today.

Duanesburg Lift Station Rehabilitation

Contracts have been executed and material submittals have been reviewed and ordered. Pumps are anticipated to arrive in August.

HRMUD Engineering Report
July 21, 2022
Page 3 of 3

Wastewater Treatment Plant Digester Emergency Repair

Digester A is offline at this time and the contractor has begun the repair process. Additional work has been required for the repair due to an extra 1.5 to 2 feet of grout above the piping. Pay Application No. 2 is on the agenda for approval at this meeting.

GLO Lift Station Repair

Contracts have been executed, material submittals have been reviewed and pumps are anticipated to arrive in August.

Tank Inspection

A proposal was approved for the inspection of the District's existing seven (7) ground storage and four (4) elevated storage tanks in conformance with the TCEQ five (5) year inspection requirement. The site visit is being scheduled at this time.

RO Train D and RO Concentrator A Membrane Replacement

The solicitation for the membrane replacement is being advertised beginning Sunday, July 24 for award at the August Board meeting.

Linda Troncoso will be at the July 21st BOD meeting to address any questions or comments you may have regarding these and any other items.

Attachment

cc: Mr. Charlie McGinnis, General Manager; HRMUD
Mr. John M. Jansing, Jr., P.E.; TRE & Associates, LLC
Mr. Adrian H. Rosas, P.E.; TRE & Associates, LLC

TRE & ASSOCIATES, LLC (revised 7/18/22)
COMMITMENT APPLICATIONS

Job #	Job Title	Date Received	Additional Info Request	Commitment Letter Released	Committed LUE's WW	Committed LUE's Wtr	Comments
1277-12271	Rancho Desierto Bello 14	7/1/2022					Under Review
1277-12262	355 Ascencion	7/5/2022					Under Review

TRE & ASSOCIATES, LLC (revised 7/18/2022)
HR - CONSTRUCTION REVIEW

Job #	Job Title	Commitment Letter Released	Plans Received	Plan Comments Sent	Plan Approval	Comments
1277-11838	Horizon City Unit 91 - 22 lots	1/17/2020	12/16/2019	2/14/2020- 1st set 7/24/20 - 2nd set		awaiting revised plans
1277-11850	13300 Horizon Boulevard	2/20/2020	4/30/2020	6/3/2020		awaiting revised plans
1277-12051	Polar Services Center	7/19/2021	10/7/2021			corresponding with engineer
1277-12134	Jack in the Box - 13640 Horizon Blvd	11/10/2021	9/30/2021 1/25/2022 2nd 3/24/2022 3rd 5/16/2022 4th	11/23/2021 1st 2/24/2022 2nd 4/26/2022 3rd	6/7/2022	Approved
1277-12136	TxDOT Horizon Blvd Irrigation	12/22/2021	12/16/2021 1st 6/20/22 2nd	12/23/2021 1st 7/6/2022 2nd		awaiting revised plans
1277-12192	Summer Sky North Unit 1 Phase I	4/6/2022				under review
1277-12193	Summer Sky North Unit 1 Phase II	4/6/2022				under review
1277-12200	12504 Weaver Rd	3/29/2022	5/5/2022	5/12/2022		awaiting plan submittal
1277-12205	Horizon Town Center Unit 4	4/11/2022	4/11/2022	4/19/2022	5/5/2022	Approved
1277-12201	14861 Horizon Blvd	4/11/2022	6/13/2022		6/17/2022	Approved
1277-12224	Dutch Bros., LLC	4/22/2022	4/22/2022 1st 5/25/2022 2nd	5/23/2022 1st 6/13/2022 2nd	6/21/2022	Approved
1277-12225	14400 Golden Eagle	4/21/2022	4/22/2022	5/17/2022		awaiting revised plans
1277-12209	PDEU9 PHI	5/5/2022				under review
1277-12229	Walmart #3136-13900 Horizon Blvd	5/5/2022	5/5/2022 1st 5/31/2022 2nd	5/25/2022 1st 6/1/2022 2nd	6/2/2022	Approved
1277-12236	15071 Horizon Blvd	5/11/2022	5/17/2022	5/31/2022	6/2/2022	Approved
1277-12230	All of Lot 1, Blk 2, Darrington Eastlake Comm. Unit 4	5/19/2022				awaiting plan submittal
1277-12237	Dollar General - 801 S. Darrington	5/19/2022	5/10/2022 6/17/2022	6/7/2022 7/5/2022		awaiting revised plans
1277-12240	Mister Car Wash	5/19/2022	4/29/2022	6/15/2022		awaiting revised plans
1277-12249	201 S. Darrington	6/14/2022	5/6/2022 7/5/2022	6/14/2022		awaiting revised plans

TRE & ASSOCIATES, LLC (revised 7/18/22)
CONSTRUCTION OBSERVATION

Job #	Job Title	Plan Approval	Construction Start Date	Comments
1277-12011	Horizon Mesa Self Storage	10/26/2021		awaiting construction start
1277-11903	Summer Sky Unit 2	9/16/2020	6/28/2021	under construction
1277-11864	West Eastlake Estates Unit Two	3/5/2020	3/21/2021	under construction
1277-12059	HC Unit 91 Blk 791-792	9/9/2021	10/7/2021	under construction
1277-11852	Painted Desert at Mission Ridge Unit 4	10/14/2021	4/26/2022	under construction
1277-12152	905 Linwood	4/5/2022		awaiting construction start
1277-12179	Horizon Retail Center	12/6/2021	2/21/2022	under construction
1277-12180	Rancho Desierto Bello Unit 15 Phase I	6/17/2021	11/22/2021	under construction
1277-12182	Paseo del Este Unit 8 Phse I	6/7/2021	3/29/2022	under construction
1277-12190	Paseo del Este Unit 8 Phse II	5/26/2021	5/1/2022	under construction
1277-12133	HCU 51	8/25/2021		awaiting construction start
1277-12120	DECU4 - 13649 Eastlake-Shopping	3/22/2022	3/28/2022	under construction
1277-12201	14861 Horizon Blvd	6/17/2022		awaiting construction start
1277-12224	Dutch Bros., LLC	6/21/2022		awaiting construction start
1277-12229	Walmart #3136-13900 Horizon Blvd	6/2/2022		awaiting construction start
1277-12134	Jack in the Box - 13640 Horizon Blvd	6/7/2022		awaiting construction start
1277-12236	15071 Horizon Blvd	6/2/2022		awaiting construction start

TRE & ASSOCIATES, LLC (revised 7/18/22)
HR - APPROVED UTILITY SERVICE COMMITMENTS

Job #	Job Title	Commitment Letter Released	Committed LUE's WW	Committed LUE's Wtr	Plan Approval	Comments
1277-11838	Horizon City Unit 91 - 22 lots	1/17/2020	0	22		awaiting revised plans
1277-11850	13300 Horizon Boulevard	2/20/2020	64	64		awaiting revised plans
1277-11864	West Eastlake Estates Unit Two	2/24/2020	118	118	3/5/2020	under construction
1277-11903	Summer Sky Phase 2	5/20/2020	215	215	9/16/2020	under construction
1277-12011	Horizon Mesa Self Storage	2/17/2020	3	3	10/26/2021	approved
1277-12051	Polar Services Center	7/19/2021	5	5		under review
1277-11852	Painted Desert at Mission Ridge Unit 4	7/19/2021	276	276	10/14/2021	approved
1277-12120	Darrington Eastlake Commerical Unit 4	11/10/2021	33	33	3/22/2022	approved
1277-12134	Jack in the Box - 13640 Horizon Blvd	11/10/2021	15	15	6/7/2022	awaiting revised plans
1277-12136	TxDOT Horizon Blvd Irrigation	12/22/2021	0	24		awaiting revised plans
1277-12152	905 Linwood	12/9/2021	1	1	4/5/2022	approved
1277-12059	HC Unit 91 Blk 791-792	6/9/2021	0	11	9/9/2021	approved
1277-12180	Rancho Desierto Bello Unit 15 Phase I	6/17/2021	81	81	7/22/2021	approved
1277-12182	Paseo del Este Unit 8 Phse I	6/17/2021	251	251	6/7/2021	approved
1277-12179	Horizon Retail Center	12/6/2021	5	5	2/9/2022	approved
1277-12190	Paseo del Este Unit 8 Phse II	2/24/2022	173	173	5/26/2021	approved
1277-12200	12504 Weaver Rd	3/29/2022	0	0		awaiting revised plans
1277-12192	Summer Sky North Unit 1 Phase I	4/6/2022	231	231		under review
1277-12193	Summer Sky North Unit 1 Phase II	4/6/2022	247	247		under review
1277-12205	Horizon Town Center Unit 4	4/11/2022	39	39	5/5/2022	approved
1277-12201	14861 Horizon Blvd.	4/11/2022	0	1	6/17/2022	approved
1277-12203	13660 Horizon Blvd.	4/11/2022	5	5		under review
1277-12225	14400 Golden Eagle	4/21/2022	0	15		under review
1277-12224	Dutch Bros., LLC	4/22/2022	0	5	6/21/2022	approved
1277-12209	PDEU9 PHI	5/5/2022	195	195		under review
1277-12229	Walmart #3136-13900 Horizon Blvd	5/5/2022	0	0	6/2/2022	approved
1277-12236	15071 Horizon Blvd	5/11/2022	0	1	6/2/2022	approved
1277-12240	Mister Car Wash	5/19/2022	25	25		under review
1277-12237	801 S. Darrington	5/19/2022	7	7		under review
1277-12249	201 S. Darrington	6/14/2022	0	6		under review

**TOTAL OUTSTANDING
COMMITMENTS**

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