

HOWELL TOWNSHIP BOARD MEETING

3525 Byron Road
Howell, MI. 48855
August 08, 2022
6:30 pm

1. Call to Order:
2. Roll Call: Mike Coddington () Jeff Smith ()
 Jean Graham () Harold Melton ()
 Jonathan Hohenstein () Mike Newstead ()
 Matthew Counts ()
3. Pledge of Allegiance:
4. Call to the Board:
5. Approval of the Minutes:
 A. Regular Board Meeting July 11, 2022
6. Correspondence:
7. Call to the Public:
8. Unfinished Business:
9. New Business:
 A. Waste Water Treatment Plant – Greg Tatara
 B. BSNA – Cloud base
 C. Burkhart Ridge Manufactured Housing Community REU Request
 D. End of Year Budget – Brent Kilpela
10. Reports:
 A. Supervisor B. Treasurer C. Clerk D. Zoning
 E. Assessing F. Fire Authority G. MHOG H. Planning Commission
 I. Z B A J. WWTP K. HAPRA L. Property Committee
11. Call to the Public:
12. Disbursements:
 Regular and Check Register
12. Adjournment:

5

**HOWELL TOWNSHIP REGULAR BOARD
PROPOSED MEETING MINUTES**

3525 Byron Road Howell, MI 48855
July 11, 2022, 6:30 P.M.

MEMBERS PRESENT:

Mike Coddington	Supervisor
Jean Graham	Clerk
Jonathan Hohenstein	Treasurer
Matthew Counts	Trustee
Harold Melton	Trustee
Michael Newstead	Trustee
Jeff Smith	Trustee

MEMBERS ABSENT:

ALSO IN ATTENDANCE: Tim Boal, Luke Bowman, Mike Cieslinski, Ben Clark, Colin McDowell, Joe Ostafin, Tom Patterson, and Michael Smith.

Supervisor Coddington called the meeting to order at 6:30 p.m. The roll was called.

All rose for the Pledge of Allegiance.

APPROVAL OF THE AGENDA:

July 11, 2022

MOTION by Counts seconded by Hohenstein, **"TO APPROVE THE JUNE 13, 2022 AGENDA AS PRESENTED."** Discussion followed. Motion carried.

OPEN PUBLIC ENFORCEMENT HEARING-DANGEROUS BUILDINGS:

MOTION by Hohenstein, seconded by Graham, **"TO OPEN THE PUBLIC ENFORCEMENT HEARING ON DANGEROUS BUILDINGS."** Discussion followed. Motion carried. Joe Daus, Howell Township Zoning Administrator gave the Board a summary of the Dangerous Building Matter No. 2022-01. Jeff McKendrick, owner of 1073 Barron Road was present and held a discussion with the Board regarding the complaint and current status. **MOTION** by Hohenstein, seconded by Newstead **"TO ACCEPT RESOLUTION 07.22.511 FINAL RESOLUTION AND ORDER OF THE HOWELL TOWNSHIP BOARD WITH THE CHANGE ON THE FRONT PAGE OF 30 DAYS TO 60 DAYS."** A roll-call vote was taken: Coddington-Y, Smith-Y, Graham-Y, Counts-Y, Melton-Y, Hohenstein-Y, and Newstead-Y. Motion passes 7 to 0. **MOTION** by Counts, seconded by Newstead, **"TO CLOSE THE PUBLIC HEARING."** Discussion followed. Motion Carried.

APPROVAL OF BOARD MEETING MINUTES:

June 13, 2022

A. REGULAR BOARD MEETING MINUTES

MOTION by Hohenstein, seconded by Melton, **"TO APPROVE THE JUNE 13, 2022 REGULAR MEETING MINUTES AS PRESENTED."** Discussion followed. Motion carried.

CORRESPONDENCE:

No additions.

CALL TO THE PUBLIC:

The following individuals spoke regarding gunfire concerns:

Colin McDowell 2045 Brewer Road
Mike Smith 2031 Brewer Road

Joe Ostafin 2079 Brewer Road

Howell Township Board July 11, 2022

UNFINISHED BUSINESS:

- A. HOWELL TOWNSHIP MARR ROAD DISCUSSION
No update at this time.
- B. INTRODUCTION OF A NEW ROAD MILLAGE
No interest in creating a new road millage at this time.

NEW BUSINESS:

- A. 2021-2022 PROPOSED BUDGET AMENDMENT
MOTION by Graham, seconded by Counts, **"TO APPROVE THE ROAD IMPROVEMENT EXPENSE BUDGET."** Discussion followed. Motion carried.
MOTION by Hohenstein, seconded by Melton, **"TO APPROVE WASTE WATER TREATMENT PLANT BIOSOLIDS REMOVAL EXPENSE OF \$28,500.00 TO ACCOUNT FOR SECOND BIOSOLIDS REMOVAL IN SAME YEAR."** Discussion followed. Motion carried.

REPORTS:

- A. SUPERVISOR:
Supervisor Coddington held a discussion regarding recent fireworks complaints the Township had received.
- B. TREASURER:
Treasurer Hohenstein gave an update on the following items:
 - MiSignal
 - Burkhart Ridge and REU(s)
- C. CLERK:
 - ELECTION LAPTOPS
MOTION by Counts, seconded by Newstead, **"TO APPROVE PRESENTED REQUEST FOR 3 RENEWED LAPTOPS PLUS LABOR."** Discussion followed. Motion carried.
- D. ZONING:
(See Zoning Administrator Daus's prepared written report.)
- E. ASSESSING:
(See Assessor Kilpela's prepared written report.)
- F. FIRE AUTHORITY:
Supervisor Coddington gave an update on the recent Howell Area Fire Authority meeting.

- G. MHOG:
(Trustee Counts gave an update on the recent MHOG meeting.)
- H. PLANNING COMMISSION:
No meeting in June.
- I. ZONING BOARD OF APPEALS (ZBA):
Trustee Melton gave an update on the last ZBA Meeting.
- J. WWTP:
Treasurer Hohenstein gave an update from the June 15, 2022 and June 30, 2022 Meetings.

Howell Township Board July 11, 2022

MOTION by Counts, seconded by Smith, **“TO APPROVE COMMITTEE REQUEST FOR AN AFTER-
THE FACT APPROVAL FOR EMERGENCY FUNDS SPENT AS PRESENTED.”** Discussion followed.
Motion carried.

K. HAPRA
(Trustee Melton gave an update on the June 14, 2022 HAPRA meeting.)

L. Property Committee
Treasurer Hohenstein gave an update from the July 7, 2022 Property Committee Meeting. Treasurer Hohenstein noted that the Oak Grove Road property will be going back on the market.

CALL TO THE PUBLIC:

Luke Bowman asked the Board for a status update on the Marr Road issues.

DISBURSEMENTS: REGULAR AND CHECK REGISTER:

MOTION by Hohenstein, seconded by Melton, **“TO APPROVE THE REGULAR DISBURSEMENTS AS PRESENTED, ALSO ANY CUSTOMARY AND NORMAL PAYMENTS FOR THE MONTH.”** Discussion followed. Motion carried.

ADJOURNMENT:

MOTION by Counts, seconded by Newstead, **“TO ADJOURN.”** Motion carried. The meeting adjourned (8:15 pm).

As Presented: _____ X _____

As Amended: _____

As Corrected: _____

Dated: _____ August 8, 2022 _____

Howell Township Clerk
Jean Graham

Mike Coddington
Howell Township Supervisor

Teresa Murrish, Recording Secretary

PROPOSED

9A

Howell Township
Wastewater Treatment Plant Meeting
Meeting: July 20, 2022 10am

Attending: Greg Tatara, James Aulette, Jonathan Hohenstein

Please see the attached report for full details.

Section 1.1 is a summary of the operations and the items that were discovered once MHOG crew was able to get into the plant and start working. Photos are of:

1. The north clarifier after they got it cleaned out and removed the rodents. The representative for the clarifiers will be stopping out to perform an in depth review of the north clarifier.
2. The sand filter influent channel was filled with sand. James is unsure of what event that could have taken place that would have caused sand to end up in the influent channel. Also discovered that the air compressor for the sand filters was so full of water that the pumps had to run at full speed at all times to operate. Both motors on the compressor are no longer operational. A new compressor is needed. For the time being MHOG brought a compressor from the GO plant.
3. Along with most areas of the plant the clarifier scum pit was in desperate need of cleaning.
4. The junction chamber was much worse than anticipated. You will notice the cement looks very rough. After getting it drained and cleaned out Greg and Jim noticed that we have lost about 4 inches of concrete in certain areas. While that sounds bad, it could have been catastrophic to the plant because this is a two tiered structure. The untreated sewage comes into the top of the chamber where ferric chloride gets added before making its way to the clarifiers. Once the water has been through the clarifier it enters the bottom chamber before making its way to the sand filters. If the concrete had failed between these two chambers there would have been no way to separate the sewage.
5. The sand filter tent had to be cleaned out because there were all sorts of plants growing in it and junk was stored in there. The crew got some gravel to put around the outside and inside to help keep pests out of the structure. The water spraying everywhere in the next photo is from the air compressor that was filled with water, not allowing it to blow in the sand to help wash it.

Section 1.3 is still waiting on lab data from Inframark. Ideally, all of the gray boxes in section 1.4 would be filled in with data.

Section 1.5 are plant repair projects. The Board has already approved the North RAS Pump to be fixed. **Recommend approval of the quote from Lakeside to fix the fine screen not to exceed \$23,000.**

Section 1.6 is our current MDPES permit and the forthcoming MDPES permit with the change to weekly phosphorus testing due to repeated violations. This will be more costly and time consuming.

Section 2.1 is an overview of the pump stations and corrective items performed by the crew. Most of these items were minor fixes with big repercussions and were long overdue.

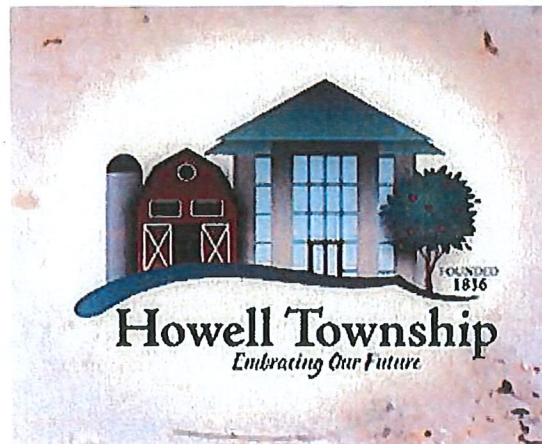
Section 2.3 MHOG has started implementing the manhole inspections as were requested of Inframark years ago.

Section 3.1 is the capital improvement plan summary. Only one of these items has been out for quotes. The following quote is for the Burkhart Ridge pump station. Both of these items are high priority.
Recommend approval of quote from ART plus bypass costs for lining of the influent channel.
Recommend approval of the quotes for the Burkhart Ridge pump station rehabilitation work as presented.

Recommend approval of all quotes in the waste water report as presented.

Respectfully submitted,
Jonathan Hohenstein

Howell Township Monthly Wastewater Operations Report



July 2022

**Howell Township Wastewater System Operations Report
July 2022**

Table of Contents

Section 1 – Plant Operation

Attachment 1.1 – Written Operations Summary & Pictures

Attachment 1.2 - Plant Performance Summary

Attachment 1.3 – EGLE Discharge Monitoring Report

Attachment 1.4 - Process Data

Attachment 1.5 – Repair Project Listing and Cost Summary

Attachment 1.6. 1 - Associated Quotations for Fine Screen and RAS Pump

Attachment 1.6 – New NPDES Permit Comparison of Values

Section 2 – Collection System Operation

2.1 – Written Maintenance Summary & Pictures

2.2 – Weekly Inspection Data

2.3 – Maintenance Initiative Summary (Air Releases, Manhole Inspections, Valve Exercising, Sewer Cleaning)

2.4 – MISS DIG Summary

2.5 – Pump Station Project Listing and Repair Summary

Attachment 2.6.2 – Associated Quotations

Section 3 – Capital Improvements

Attachment 3.1 –Plant Capital Improvements

Attachment 3.2 – Collection System Capital Improvements

Section 1
Plant Operation

Howell Township Operations

Summary

June 27th was the first day we started recording data and running labs. Attached you will find all of the information for those dates. As for the rest of the information, Inframark sent me some of the lab data on July 19th. I am still missing all data that was sent to Brighton Analytical. I have been in communication with Brent Bodnar from EGLE since day 1 and he is well aware of what is going on. Brent met me at the plant on June 29th so he could see the mess Inframark left behind.

We seem to have the plant process under control now. We did walk into some violations for the month of June but we are hopeful we will not have any violations for the month of July. July's Operation Report will have much more detail.

Howell Township WWTP Summary

ITEM

EQ Tank

No Problems at this Time

Influent Sampler

Repaired Ground Around Shed

Still Need to Insulate and Repair Shed

Headworks

Repaired Leaking Water Valve

Purchased Oil Drum (6 month lead time)

Removed Bird Nests and Fecal Matter

Received 2 yard Dumpster from Republic

Quote from DuBois Cooper for fine Screen

Quote from ART to Line Influent Channel

FeCl₂ Chemical Room

Cleaned UP Spill

Replaced Ferric Pump

Biolac Basin

Adjusted Mixed Liquor

Need to Fix Broken Cables and Adjust the Sway of Diffuser

Junction Chamber

Cleaned Out Junction Chamber

Ferric Line Broke and Eating Away Concrete Floor

Fixed Ferric Line

RAS Building and Clarifier

Repair RAS Pump (\$7190)

Cleaned North Clarifier and had Sales Rep Onsite

Cleaned Sludge Line

Sand Filters

Removed Old Parts and Vegetation
Cleaned out Sand Filter Influent Channel
Put another Filter Online
Compressor Broke 7/18/22

Post Aeration

Appears Ok

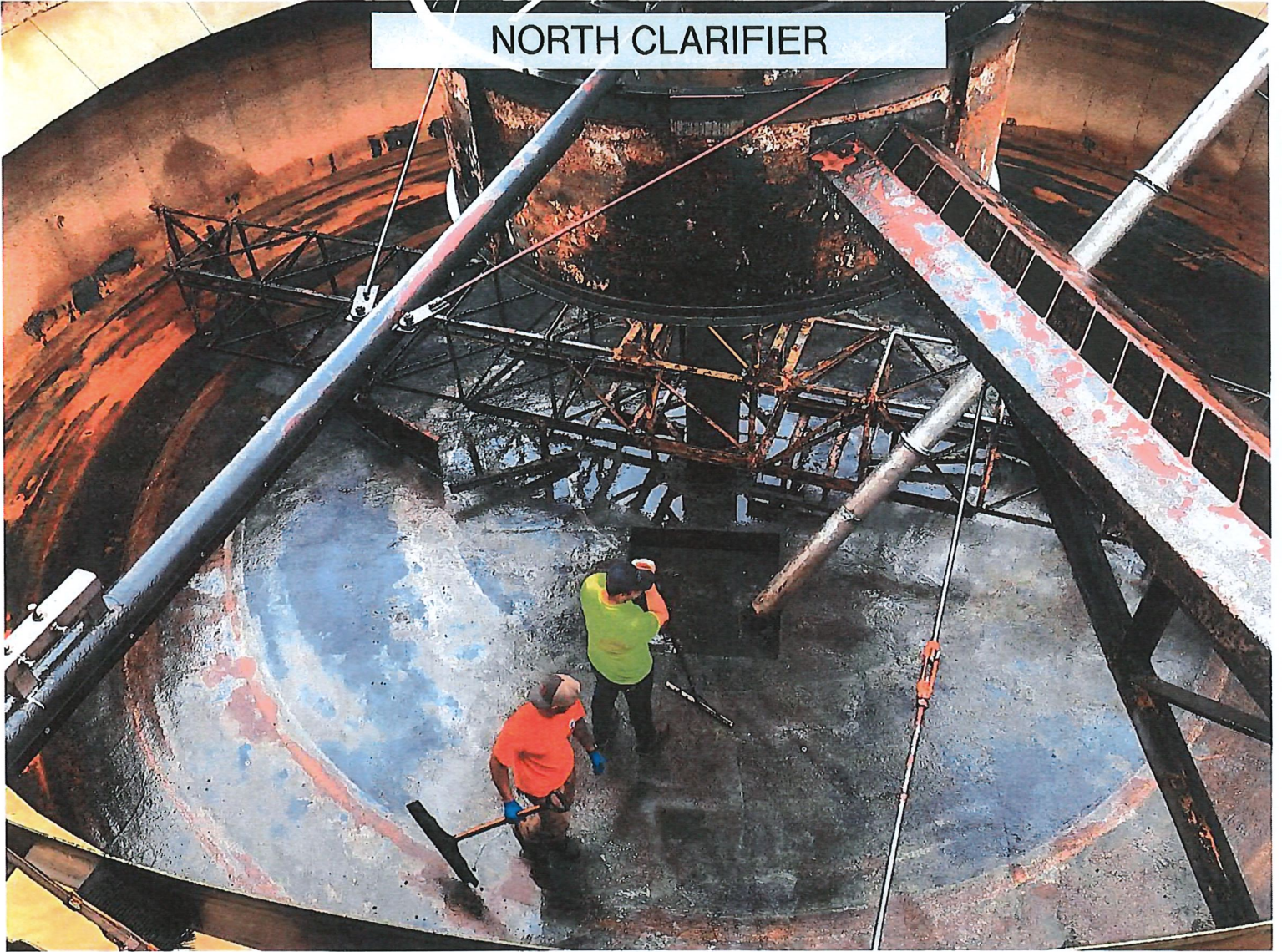
UV System

Installed 15 New Bulbs
Cleaned Out UV Channel
Set Up Meeting With Kennedy For New System

Admin Building

Removed 30 Yards of Garbage
Made Lab Functional Again
Cleaned/Painted Office
Changed Out Lights

NORTH CLARIFIER



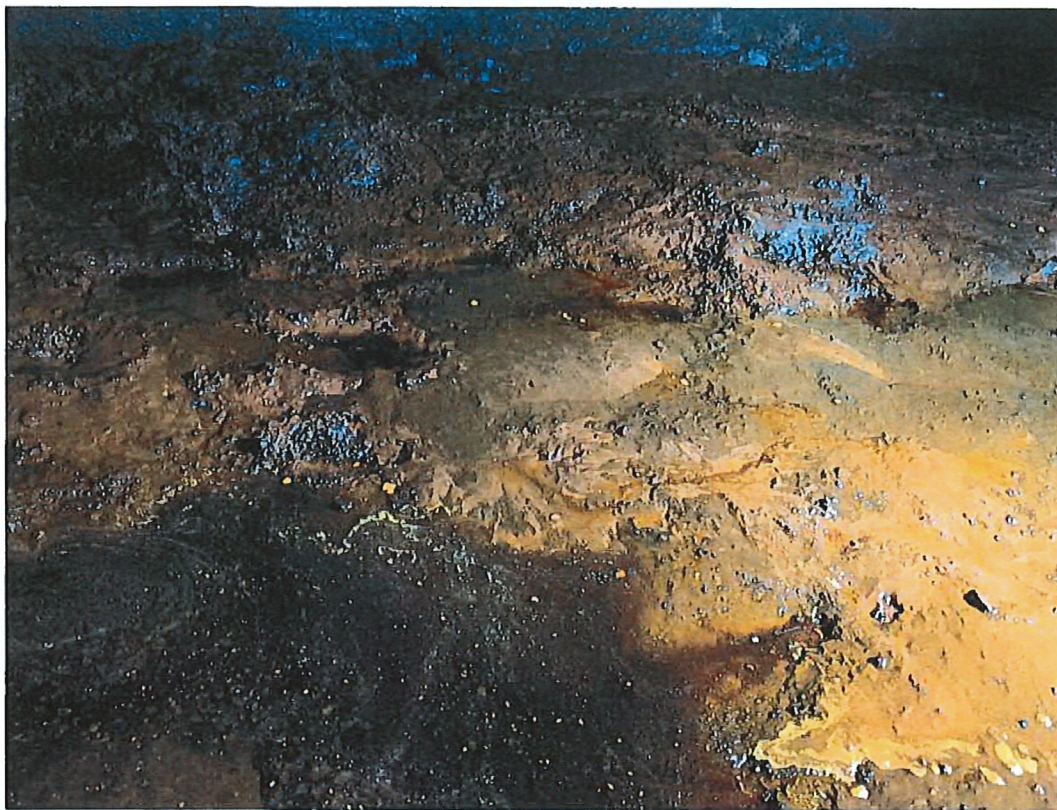
UV INFLUENT CHANNEL



CLARIFIER SCUM PIT



July 2022
Operations Pictures

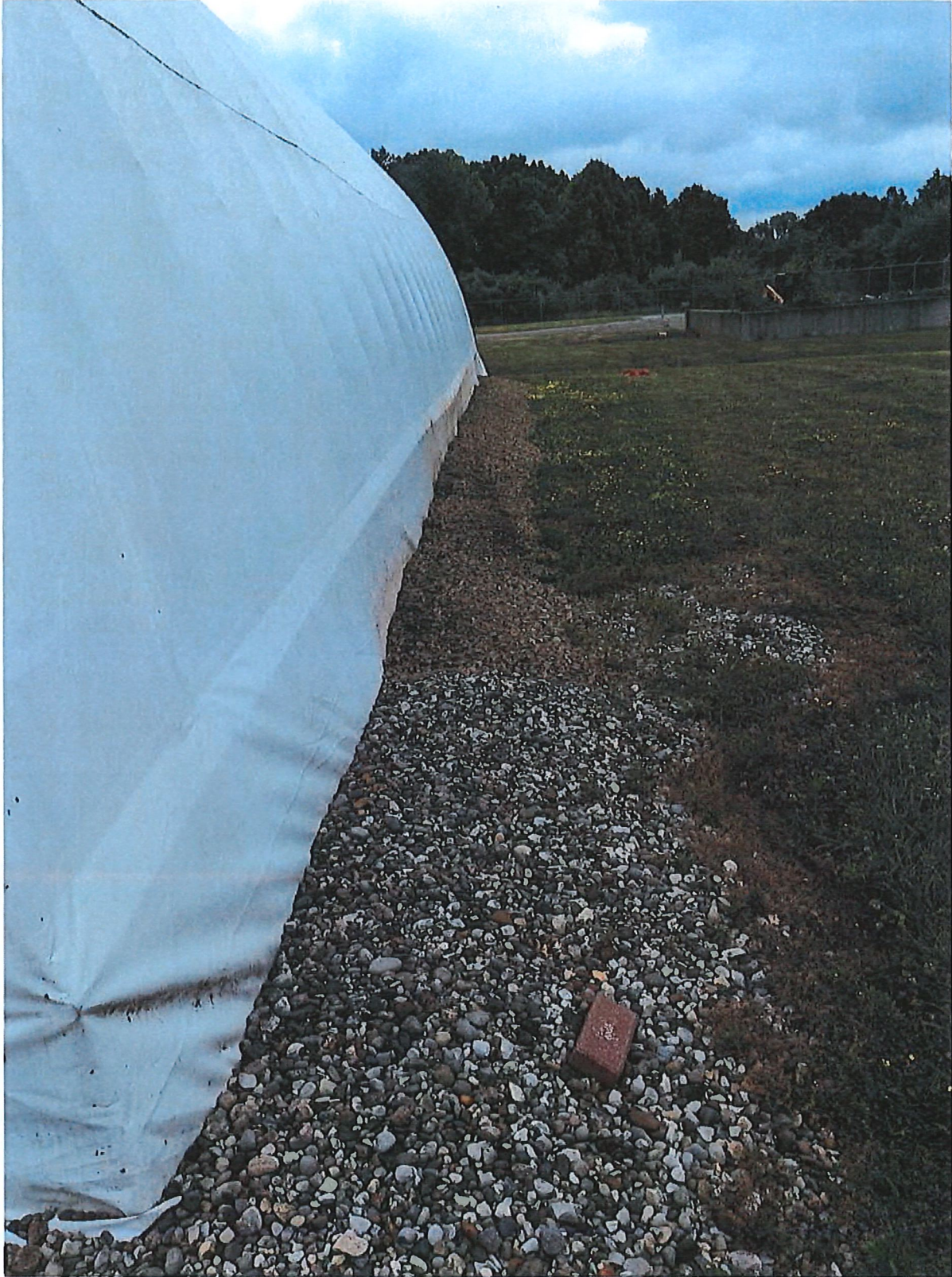




July 2022
Operations Pictures



July 2022
Operations Pictures



July 2022
Operations Pictures



Howell Township Lab Data

TIME	FLOW DATA			PRECIP	TEMP	TEMP	DIS. OXYGEN	DAILY HACH COMP		HT - pH			HT - CO ₂	HT - CBOD		HT - AMMONIA		HT - PHOS		HT - TSS		SETTLING%5	
	INF. MGD	EFF. MGD	LOSS					MGALS	AIR TEMP	WATER	MLSS	MLV5		HT - pH	HT - pH	HT - pH	HT - CBOD	HT - CBOD	HT - AMMONIA	HT - AMMONIA	HT - PHOS		HT - PHOS
0:20:00	0.21000	0.20000	0.00000	0.00	43	17	8.20	7.80	8.40	8.80	7.410	7.430	20.0	7.040	20.1	5.00	1.1	20.1	0.0000	30.70	0.00	0.00	270
0:25:00	0.21000	0.20000	0.00000	0.00	43	17	8.20	7.70	8.30	8.80	7.330	7.350	20.0	7.050	20.1	5.00	1.0	20.1	0.0000	30.80	0.00	0.00	270
0:30:00	0.20000	0.20000	0.00000	0.00	43	17	7.20	6.70	6.30	6.14	7.230	7.250	20.0	6.870	22.0	5.00	1.7	20.7	0.0770	43.70	0.00	0.00	270
0:35:00	0.20000	0.20000	0.00000	0.00	43	17	8.00	8.00	8.40	8.30	7.330	7.350	21.0	7.140	20.0	5.00	1.6	20.5	0.0000	41.80	1.800	10.70	250
0:40:00	0.14000	0.13000	0.01000	0.00	73	17	8.00	7.30	8.27	8.74	7.330	7.350	21.0	7.040	24.0	4.00							250
0:45:00	0.20000	0.20000	0.00000	0.00	71	17	8.00	8.20	8.60	8.50	7.360	7.380	21.0	7.010	25.1								250
0:50:00	0.22000	0.18000	0.04000	0.00	68	17	8.50	7.80	8.60	8.30	7.500	7.520	21.0	6.890	20.1	1.0	20.3	0.0330	42.30	0.00	0.00	250	
0:55:00	0.27000	0.21000	0.06000	0.00	41	17	8.50	8.20	8.60	8.30	7.150	7.170	21.0	6.890	20.0	3.7	1.1	20.7	0.0110	43.80	0.00	0.00	250
1:00:00	0.24000	0.24000	0.00000	0.00	61	17	8.70	8.30	8.67	8.74	8.780	8.800	22.0	7.000	22.0	4.1	1.4	20.8	0.0000	43.50	0.00	0.00	250
1:05:00	0.24000	0.23000	0.01000	0.00	68	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:10:00	0.24000	0.23000	0.01000	0.00	68	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:15:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:20:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:25:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:30:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:35:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:40:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:45:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:50:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
1:55:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:00:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:05:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:10:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:15:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:20:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:25:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:30:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:35:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:40:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:45:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:50:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
2:55:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0
3:00:00	0.22000	0.21000	0.01000	0.00	69	17	8.10	8.10	8.54	8.33	8.840	8.860	22.0	7.040	21.0	7	1.0	20.6	0.0110	46.40	0.011	7.43	0

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY:
 PERMITTEE NAME: **Howell Township WWTP**
 MAILING ADDRESS: **3525 Byron Road**
Howell, MI 48855
 FACILITY: **Howell Township WWTP**
 LOCATION: **1222 Packard Drive**
 Permit NO. **MI0055727**

DAILY DISCHARGE MONITORING REPORT

Violations		
NO.	Parameter	Limit
2	Ammonia	2.0 mg/L
2	Fecal	400
3	pH	Report Daily
14	Dissolved Oxygen	Report Daily
1	Total Phosphorus	0.50 mg/L Monthly AVG.

PARAMETER	FLOW	SUSPENDED SOLIDS				CBOD ₅			AMMONIA NITROGEN		TOTAL PHOSPHORUS		TOTAL MERCURY				FECAL COLIFORM	pH MIN	pH MAX	D.O.			
		7 DAY AVG		<1.0		7 DAY	daily max	<0.01	7 DAY	daily max	<0.1	<0.5		<0.2	7 DAY	0-1	6.5	9.0	Daily MIN				
Dates	MGD	mg/l	lbs/day	mg/l	lbs/day	lbs/avg	lbs/day	mg/l	lbs/avg	lbs/day	mg/l	lbs/day	ng/l	lbs/day	ng/l	ng/l	ng/l	GEO MEAN	daily MAX	SU	SU	mg/l	
Wednesday, June 1, 2022	0.3400			5.0	14	2.0		5.7	0.08		0.2							140	6.85	6.85			
Thursday, June 2, 2022	0.3700			5.0	15	2.0		6.2	0.04		0.1							75	6.88	6.88			
Friday, June 3, 2022	0.3100			5.0	13	2.0		5.2	0.04		0.1								6.93	6.93		15.9	
Saturday, June 4, 2022	0.2500																		7.00	7.00		14.0	
Sunday, June 5, 2022	0.2700																		6.88	6.88		16.8	
Monday, June 6, 2022	0.2800			6.0	14	4.4		10.3	2.80		6.5	0.16	0.4					2400	6.88	6.88		16.8	
Tuesday, June 7, 2022	0.3200	3.8	10	5.5	15	3.6	5.3	9.6	6.10	3.3	16.3							311	2000	6.92	6.92	16.6	
Wednesday, June 8, 2022	0.2900	3.8	10	5.0	12	2.0	5.2	4.8	0.36	3.4	0.9							295	44	6.91	6.91	16.2	
Thursday, June 9, 2022	0.2600	3.8	9	5.0	11	2.0	4.9	4.3	0.17	3.5	0.4							255	68	6.73	6.73	16.5	
Friday, June 10, 2022	0.3000	3.8	9	5.0	13	2.0	4.9	5.0	0.02	3.4	0.1							241	57	6.84	6.84	16.1	
Saturday, June 11, 2022	0.2900	3.8	9				4.9			3.4								196	69	7.03	7.03	15.8	
Sunday, June 12, 2022	0.2300	3.8	9				4.9			3.4								196		7.13	7.13	15.5	
Monday, June 13, 2022	0.2900	3.6	9	5.0	12	2.0	4.1	4.8	0.05	2.5		0.42	1.0					122	140				
Tuesday, June 14, 2022	0.2900	3.6	9	5.0	12	2.0	3.4	4.8		0.2								74	102	7.15	7.15		
Wednesday, June 15, 2022	0.2900	3.6	9	5.0	12	2.0	3.4	4.8	0.04	0.1	0.1							75	48	6.93	6.93		
Thursday, June 16, 2022	0.2700	3.6	9	5.0	11	2.0	3.4	4.5	0.03	0.0	0.1							101	390	7.02	7.02		
Friday, June 17, 2022	0.2800	3.6	8	5.0	12	2.0	3.4	4.7	0.03	0.1	0.1							139	390	7.28	7.28		
Saturday, June 18, 2022	0.2700	3.6	8				3.4			0.1								160		6.98	6.98		
Sunday, June 19, 2022	0.3300	3.6	8				3.4			0.1								160		7.16	7.16		
Monday, June 20, 2022	0.2600	3.6	8	5.0	11	2.0	3.3	4.3	0.01	0.0	0.0	0.38	0.8					140	73	7.09	7.09		
Tuesday, June 21, 2022	0.3100	3.6	8	5.0	13	2.0	3.4	5.2	0.02	0.0	0.1							107	26	7.15	7.15		
Wednesday, June 22, 2022	0.2300	3.6	8	5.0	10	2.0	3.2	3.8	0.67	0.2	1.3							146	230	7.24	7.24	16.4	
Thursday, June 23, 2022	0.2400	3.6	8	5.0	10	2.0	3.1	4.0	1.20	0.5	2.4							137	280	7.35	7.35	16.2	
Friday, June 24, 2022	0.3100	2.9	6				2.5			0.5								110	130	7.30	7.30	15.6	
Saturday, June 25, 2022	0.3100	2.9	6				2.5			0.5								110		7.14	7.14		
Sunday, June 26, 2022	0.2150	3.9	8	7.2	13	1.0	2.7	1.8	0.05	0.6	0.1							110					
Monday, June 27, 2022	0.2150	3.8	8	4.6	8	1.1	2.4	2.0	0.05	0.6	0.1							161	500	7.41	7.41	7.8	
Tuesday, June 28, 2022	0.2350	3.8	7	5.0	10	1.0	1.9	2.0	0.04	0.6	0.1							384	2000	7.33	7.33	7.2	
Wednesday, June 29, 2022	0.2409	3.8	7	4.6	9	1.7	1.9	3.4	0.68	0.6	1.4							461	570	7.23	7.23	6.7	
Thursday, June 30, 2022	0.2557	3.7	7	4.2	9	1.6	1.8	3.4	0.55	0.4	1.2	1.96	4.2					750	3200	7.35	7.35	8.0	
Friday, July 1, 2022																							

PARAMETER FLOW SUSPENDED SOLIDS CBOD₅ AMMONIA NITROGEN **AVG 0.73** PHOSPHORUS TOTAL MERCURY FECAL COLIFORM pH MIN pH MAX D.O.

Name/Title of Principal Executive Officer or Authorized Agent: _____
 Signature of Principal Executive Officer or Authorized Agent: _____
 Deputy Director: James Aulette

FROM TO 6/1/2022 6/30/2022

When completed mail this report to: PCS-Data Entry, MDEQ-408, P.O. Box 30273, Lansing MI 48909-7773

**Howell Township
Plant Repair Projects Summary**

Wastewater Treatment Plant		
No.	Project Description	Cost
1	Lakeside Fine Screen Per DuBois Cooper Email Dated 7-18-22	\$22,294
2	Air Compressor	
3	North RAS Pump	\$7,190
4	Packing and Seal on Middle RAS Pump	
5	New South RAS Pump	
6	Building for Influent Sampler	
7	Ferric Room Sump Pumps	
8	Plant Lighting Improvements	
9	Painting of Plant Doors, Rooms, Floors, Etc.	



1022 E Devon Ave, BARTLETT IL 60103
 T: (630) 837-5640 F: (630) 837-5647 E: parts@lakeside-equipment.com
<https://www.lakeside-equipment.com/>

PARTS REPLACEMENT QUOTE

DATE: 07/18/2022 **EMAIL:**
FOR: DUBOIS-COOPER ASSOCIATES INC. **SUBJECT:** Quote #:99-202 HOWELL TOWNSHIP, MI
ATTN: GREG TATARA **QUOTE NO:** Q22000701
FROM: LaVar Parish **Replacement Parts**

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivery of the message to the intended recipient, YOU ARE HEREBY NOTIFIED that any dissemination, distribution, publication, or copying of this message is strictly prohibited. If you have received this message in error, please notify Lakeside immediately by phone at 630-837-5640 and return the message by U.S. Mail.

Dear : GREG TATARA

We are pleased to quote the following replacement parts for your Equipment(s). Your current costs are as follows:

Equipment No :	1) 1 - 20MS-0.25-176 Micro Strainer	99-202-01	
	1 EA 20MS BRUSH ASSEMBLY w/ CLIPS & HDW	A48364AA-P005	\$1,164.00
	1 EA SCREEN TROUGH WELDMENT	D75963C	\$12,010.00
	1 EA 20MS TROUGH GASKET ASSEMBLY	B87534F	\$715.00
	2 3/4" LOWER BEARING BAR	A109601	\$216.00
	1 EA D56316G SPRAY WASH PIPING	NOTE	\$5,599.00
	1 EA D59539 DISCHARGE EXTENSION CHUTE	NOTE	\$2,590.00

Please be advised that this quotation will be honored for 30 days.

The above prices are F.O.B. factory with freight allowed to the job site. Terms of payment are net 30 days from date of shipment and the Conditions of Sales are in accordance with GIL-108, copy attached

NOTE: Lakeside will accept payment by Credit Card. A 3% Service Charge will be added to the invoice upon shipment

Shipment would be 8-10 WEEKS after receiving an order subject to the shop's backlog at the time of the order.

In an effort to become more efficient Lakeside would prefer to invoice clients by email whenever possible. When ordering if you could verify the email address you wish to have the invoice sent to it would be appreciated. We will Still be glad to mail the invoice if you wish

We thank you for this opportunity to quote and are looking forward to being of service to you

Very truly yours,

LaVar L. Parish

LaVar Parish
 E-Mail:lp@lakeside-equipment.com
 CC :

QUOTATION ACCEPTED BY:	
Sign as Agent for Purchaser	
Print Name	
Title	
Company	
Date	



KENNEDY
INDUSTRIES

INNOVATE
SOLVE
MONITOR
REPAIR

QUOTATION		
DATE	NUMBER	PAGE
3/29/2022	0045784	1 of 2

B HOW201
I HOWELL TOWNSHIP
L 3525 BYRON RD
T assessor@howelltownshipmi.org
O HOWELL, MI 48855

Accepted By: _____
Company: _____
Date: _____
PO#: _____

ATTENTION:
JASON HALL 810-624-9656 jason.hall@inframark.com

WE ARE PLEASED TO PROPOSE THE FOLLOWING FOR YOUR CONSIDERATION:

CUSTOMER REF/PO#	JOB TITLE	SLP	SHIPPING TYPE
	RAS PUMPS AND BURKHART RD, HAYWARD GORDON, PUMP, XCS4-C, SEWAGE	BHS/CRB	FIELD SERVICE
QTY	DESCRIPTION		

THE FOLLOWING QUOTE IS FOR THE COST OF LABOR AND MATERIALS TO REPAIR THE ABOVE REFERENCED PUMP.

NEW PARTS REQUIRED:

- (1) MECHANICAL SEAL
- (1) STUFFING BOX GASKET
- (1) DISCHARGE GASKET
- (1) SUCTION GASKET
- (1) THRUST BEARING - PUMP
- (1) RADIAL BEARING - PUMP
- (1) BEARING LOCK NUT
- (1) BEARING LOCK WASHER
- (1) SNAP RING
- (1) RADIAL BEARING - MOTOR
- (1) THRUST BEARING - MOTOR
- (1) SET OF O-RINGS
- (1) SET OF FITTINGS
- (1) SET OF FASTENERS
- (1) COUPLING INSERT
- (2) LIPSEALS

LABOR REQUIRED:

PICKUP AT JOB SITE AND TRANSPORT TO KENNEDY INDUSTRIES' WIXOM REPAIR FACILITY.

PERFORM ALL ELECTRICAL TESTS ON MOTOR AND TEST RUN.

DISASSEMBLE COMPLETE PUMP AND MOTOR.

SANDBLAST COMPONENTS AND PREP FOR INSPECTION.

DIMENSIONALLY MEASURE ALL OPERATING CLEARANCES AND RECORD ON INSPECTION REPORT.

ASSEMBLE ALL ROTATING PARTS ON SHAFT AND PLACE IN BALANCE MACHINE.

VERIFY T.I.R'S THEN DYNAMICALLY BALANCE ROTATING ELEMENT TO 4W/N.

ASSEMBLE PUMP AND MOTOR COMPLETE WITH NEW PARTS LISTED.

PERFORM ALL ELECTRICAL TESTS ON MOTOR AND TEST RUN.



QUOTATION		
DATE	NUMBER	PAGE
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QTY	DESCRIPTION
-----	-------------

PRESSURE TEST TO ENSURE LEAK FREE.
 PAINT THEN PRESERVE PUMP FOR FIELD SERVICE INSTALLATION.

TOTAL COST: \$4,995.00

DELIVERY: 4 WEEKS (AFTER RECEIPT OF ORDER)

THE FOLLOWING QUOTE IS FOR FIELD SERVICE REQUIRED ON YOUR ABOVE REFERENCED PUMP STATION:

FIELD SERVICE LABOR REQUIRED:

KENNEDY INDUSTRIES WILL PROVIDE (2) FIELD SERVICE TECHNICIAN(S) ONSITE TO INSTALL YOUR REPAIRED PUMP, START UP, TEST RUN AND VERIFY PROPER OPERATION.

TOTAL FIELD SERVICE COST: \$2,195.00

TOTAL REPAIR COST: \$4,995.00

TOTAL FIELD SERVICE COST: \$2,195.00

TOTAL COST: \$7,190.00

DELIVERY: 4 WEEKS (AFTER RECEIPT OF ORDER)

PLEASE PROVIDE WRITTEN OR VERBAL AUTHORIZATION SO THAT WE MAY RESPOND TO YOUR REQUIREMENTS. IF YOU HAVE ANY QUESTIONS, COMMENTS, OR ARE IN NEED OF ADDITIONAL INFORMATION PLEASE FEEL FREE TO CONTACT ME AT (248) 684-1200.

SINCERELY,

KENNEDY INDUSTRIES

MIKE HORN
 MHORN@KENNEDYIND.COM
 REPAIR CENTER MANAGER

CRB

<p>This quote is subject to and incorporates by reference Kennedy Industries, Inc.'s ("Kennedy") Terms & Conditions (Rev'd 4/2019) and Customer Warranty available at www.kennedyind.com which will be provided by email upon written request. Kennedy reserves the right to change the Terms & Conditions and Customer Warranty for future orders. By accepting this quote and/or issuing a purchase order relative to this quote, buyer expressly agrees to the provisions set forth in the Terms & Conditions and Customer Warranty posted on Kennedy's website.</p> <p>QUOTE VALID FOR 30 DAYS. CREDIT CARD PAYMENTS ARE SUBJECT TO AN ADDITIONAL 3% CHARGE NO TAXES OF ANY KIND ARE INCLUDED IN THIS PROPOSAL. PAYMENT TERMS: NET 30</p>	<p>TOTAL: \$7,190.00</p>
--	---------------------------------

Existing

PART I

Section A. Limitations and Monitoring Requirements

1. Final Effluent Limitations, Monitoring Point 001A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge treated municipal wastewater from Monitoring Point 001A through Outfall 001. Outfall 001 discharges to the South Branch of the Shiawassee River at Latitude 42.61222, Longitude -83.96444. Such discharge shall be limited and monitored by the permittee as specified below.

Parameter	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring Frequency	Sample Type																						
	Monthly	7-Day	Daily	Units	Monthly	7-Day	Daily	Units																								
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow																						
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)																																
May - November	25	63	(report)	lbs/day	4	---	10	mg/l	5× Weekly	24-Hr Composite																						
December - March	81	130	(report)	lbs/day	13	---	20	mg/l	5× Weekly	24-Hr Composite																						
April	75	110	(report)	lbs/day	12	---	18	mg/l	5× Weekly	24-Hr Composite																						
Total Suspended Solids																																
May - November	130	190	(report)	lbs/day	20	30	(report)	mg/l	5× Weekly	24-Hr Composite																						
December - April	190	280	(report)	lbs/day	30	45	(report)	mg/l	5× Weekly	24-Hr Composite																						
Ammonia Nitrogen (as N)																																
May - November	3.1	13	(report)	lbs/day	0.5	---	2.0	mg/l	5× Weekly	24-Hr Composite																						
December - March	---	44	(report)	lbs/day	---	---	7.0	mg/l	5× Weekly	24-Hr Composite																						
April	---	34	(report)	lbs/day	---	---	5.4	mg/l	5× Weekly	24-Hr Composite																						
Total Phosphorus (as P)	3.1	---	(report)	lbs/day	0.50	---	(report)	mg/l	Weekly	24-Hr Composite																						
Fecal Coliform Bacteria	---	---	---	---	200	400	(report)	cts/100 ml	5× Weekly	Grab																						
Total Mercury																																
-- Corrected	(report)	---	(report)	lbs/day	(report)	---	(report)	ng/l	Quarterly	Calculation																						
-- Uncorrected	---	---	---	---	---	---	(report)	ng/l	Quarterly	Grab																						
-- Field Duplicate	---	---	---	---	---	---	(report)	ng/l	Quarterly	Grab																						
-- Field Blank	---	---	---	---	---	---	(report)	ng/l	Quarterly	Preparation																						
-- Laboratory Method Blank	---	---	---	---	---	---	(report)	ng/l	Quarterly	Preparation																						
<table border="0" style="width:100%; text-align:center;"> <tr> <td></td> <td>12-Month</td> <td></td> <td></td> <td></td> <td>12-Month</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Rolling Average</td> <td></td> <td></td> <td></td> <td>Rolling Average</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>												12-Month				12-Month							Rolling Average				Rolling Average					
	12-Month				12-Month																											
	Rolling Average				Rolling Average																											
Total Mercury	0.000019	---	---	lbs/day	3.0	---	---	ng/l	Quarterly	Calculation																						
<table border="0" style="width:100%; text-align:center;"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Minimum</td> <td></td> <td>Minimum</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Monthly</td> <td></td> <td>Daily</td> <td></td> <td></td> <td></td> </tr> </table>																Minimum		Minimum									Monthly		Daily			
					Minimum		Minimum																									
					Monthly		Daily																									
Total Suspended Solids Minimum % Removal	---	---	---	---	85	---	(report)	%	Monthly	Calculation																						
<table border="0" style="width:100%; text-align:center;"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Minimum</td> <td></td> <td>Maximum</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Daily</td> <td></td> <td>Daily</td> <td></td> <td></td> <td></td> </tr> </table>																Minimum		Maximum									Daily		Daily			
					Minimum		Maximum																									
					Daily		Daily																									
pH	---	---	---	---	6.5	---	9.0	S.U.	Daily	Grab																						
Dissolved Oxygen																																
May - November	---	---	---	---	5.0	---	---	mg/l	Daily	Grab																						
December - April	---	---	---	---	7.0	---	---	mg/l	Daily	Grab																						

PART I

Section A. Limitations and Monitoring Requirements

1. Final Effluent Limitations, Monitoring Point 001A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge treated municipal wastewater from Monitoring Point 001A through Outfall 001. Outfall 001 discharges to the South Branch of the Shiawassee River at Latitude 42.6122, Longitude -83.9644. Such discharge shall be limited and monitored by the permittee as specified below.

Parameter	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring Frequency	Sample Type
	Monthly	7-Day	Daily	Units	Monthly	7-Day	Daily	Units		
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)										
May – November	25	63	(report)	lbs/day	4	---	10	mg/l	5x Weekly	24-Hr Composite
December – March	81	130	(report)	lbs/day	13	---	20	mg/l	5x Weekly	24-Hr Composite
April	75	110	(report)	lbs/day	12	---	18	mg/l	5x Weekly	24-Hr Composite
Total Suspended Solids (TSS)										
May – November	130	190	(report)	lbs/day	20	30	(report)	mg/l	5x Weekly	24-Hr Composite
December – April	190	280	(report)	lbs/day	30	45	(report)	mg/l	5x Weekly	24-Hr Composite
Ammonia Nitrogen (as N)										
May – November	3.1	13	(report)	lbs/day	0.5	---	2.0	mg/l	5x Weekly	24-Hr Composite
December – March	---	44	(report)	lbs/day	---	---	7.0	mg/l	5x Weekly	24-Hr Composite
April	---	34	(report)	lbs/day	---	---	5.4	mg/l	5x Weekly	24-Hr Composite
Total Phosphorus (as P)	3.1	---	(report)	lbs/day	0.5	---	(report)	mg/l	5x Weekly	24-Hr Composite
Fecal Coliform Bacteria	---	---	---	---	200	400	(report)	cts/100 ml	5x Weekly	Grab
Chloride	---	---	---	---	(report)	---	(report)	mg/l	Monthly	24-Hr Composite
Sulfate	---	---	---	---	(report)	---	(report)	mg/l	Monthly	24-Hr Composite
Total Mercury										
Corrected	(report)	---	(report)	lbs/day	(report)	---	(report)	ng/l	Quarterly	Calculation
Uncorrected	---	---	---	---	---	---	(report)	ng/l	Quarterly	Grab
Field Duplicate	---	---	---	---	---	---	(report)	ng/l	Quarterly	Grab
Field Blank	---	---	---	---	---	---	(report)	ng/l	Quarterly	Preparation
Laboratory Method Blank	---	---	---	---	---	---	(report)	ng/l	Quarterly	Preparation

PART I

Section A. Limitations and Monitoring Requirements

Parameter	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring Frequency	Sample Type
	Monthly	7-Day	Daily	Units	Monthly	7-Day	Daily	Units		
	12-Month Rolling Avg				12-Month Rolling Avg		Minimum % Daily			
Total Mercury	0.000019	---	---	lbs/day	3.0	---	---	ng/l	Quarterly	Calculation
					Minimum % Monthly					
TSS Minimum % Removal										
December – April	---	---	---	---	85	---	(report)	%	Monthly	Calculation
					Minimum Daily		Maximum Daily			
pH	---	---	---	---	6.5	---	9.0	S.U.	Daily	Grab
Dissolved Oxygen										
May – November	---	---	---	---	5.0	---	---	mg/l	Daily	Grab
December – April	---	---	---	---	7.0	---	---	mg/l	Daily	Grab

The following design flow was used in determining the above limitations, but is not to be considered a limitation or actual capacity: 0.75 MGD.

- a. **Narrative Standard**
The receiving water shall contain no turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge in unnatural quantities which are or may become injurious to any designated use.
- b. **Sampling Locations**
Samples for Carbonaceous Biochemical Oxygen Demand (CBOD₅), Total Suspended Solids (TSS), Ammonia Nitrogen (as N), Total Phosphorus (as P), Chloride, and Sulfate shall be taken prior to disinfection. Samples for Fecal Coliform Bacteria, Total Mercury, pH, and Dissolved Oxygen shall be taken after disinfection. The Department may approve alternate sampling locations that are demonstrated by the permittee to be representative of the effluent.
- c. **Quarterly Monitoring**
Quarterly samples shall be taken during the months of January, April, July, and October. If the facility does not discharge during these months, the permittee shall sample the next discharge occurring during the period in question. If the facility does not discharge during the period in question, a sample is not required for that period. For any month in which a sample is not taken, the permittee shall enter "*G" on the Discharge Monitoring Report (DMR). (For purposes of reporting on the Daily tab of the DMR, the permittee shall enter "*G" on the first day of the month only).
- d. **Ultraviolet Disinfection**
It is understood that ultraviolet light will be used to achieve compliance with the fecal coliform limitations. If disinfection other than ultraviolet light will be used, the permittee shall notify the Department in accordance with Part II.C.12. of this permit.

Section 2
Collection System Operation

Howell Township Pump Stations

Summary

- **PS-70 (Trans West)**
 - Cleaned Wet Well

- **PS-71 (Burkhart North)**
 - Relocated Generator Outlet
 - Met with Contractors about Rehabbing Station

- **PS-72 (Burkhart South)**
 - Replaced Phase Monitor
 - Replaced Generator Block Heater
 - Replaced Transfer Switch Battery
 - Replaced Cabinet Fan
 - Replaced Exhaust Fan

- **PS-73 (Lambert)**
 - Pump #1 VFD is Bad
 - Pump #2 Installed Hour Meter
 - Cleaned Wet Well
 - Installed Quick Connect to Bypass Line

- **PS-74 (Tooley)**
 - Installed Sump Pump in Metering Pit
 - Installed Fuses in Surge Suppressor
 - PLC is Bad (Waiting on Kennedy)

- **PS-75 (South Oak Grove)**
 - UIS onsite to Fix Pump 1
 - Replaced Carbon Fan
 - Installed New High/Low Level Floats
 - Replaced Transfer Switch Battery
 - Installed New Cabinet Fan
 - Filled Ruts in Lawn with Top Soil and Grass Seed

- **PS-76 (North Oak Grove)**
 - Pump at Kennedy (\$12,590)
 - Replaced Transfer Switch Battery

- Replaced Generator Block Heater
- Ordered New Secondary Surge Arrestor

- **PS-77 (Operator School)**
 - Replaced Soft Start for Pump #2
 - Replaced Cabinet Fan
 - Replaced Surge Arrestor
 - Installed Tracer Box

- **PS-78 (Grand River)**
 - Removed Silt Fence
 - Replaced Cabinet Exhaust Blower

PS 75



Pump Station 70 Weekly Checks

Date	Time	Initials	Pump 1	Pump 2	KWH	Generator Hours	Fuel/Gas Read	Hours #1	Hours #2	HOURS SINCE LAST CHECK IN	# OF DAYS	Avg Runtime Day Pump 1	Avg Runtime Day Pump 2	KWH Net	Generator Net	Fuel/Gas Net	Comments
6/28/2022	12:50 PM	bc	4479.7	4220.0	21127	444	80								#VALUE!	#VALUE!	
7/5/2022	8:35 AM	db	4494.3	4234.5	21448	444	80	14.6	14.5	163.8	6.8	2.140	2.125	321.0	0.0	0.0	
7/19/2022	9:10 AM	ds	4525.6	4265.3	22107	444	80	31.3	30.8	336.6	14.0	2.232	2.196	659.0	0.0	0.0	Generator Not Exercising, Looking Into

Pump Station 71

Date	Time	Initials	Pump 1	Pump 2	KWH	Hours #1	Hours #2	HOURS SINCE LAST CHECK IN	# OF DAYS	AVG RUNTIME / DAY PUMP 1	AVG RUNTIME / DAY PUMP 2	KWH Net	Comments
6/28/2022	9:50 AM	bc	5531.6	411.1	53613								
7/5/2022	9:50 AM	db	5534.5	414.0	53791	2.9	2.9	168.0	7.0	0.414	0.414	178.0	
7/19/2022	9:25 AM	ds	5540.1	420.2	54154	5.6	6.2	335.6	14.0	0.400	0.443	363.0	Good

Pump Station 72

Date	Time	Initials	Pump 1	Pump 2	KWH	Generator Hours	Fuel/Gas Read	Hours #1	Hours #2	HOURS SINCE LAST CHECKIN	# OF DAYS	Avg Runtime Day Pump 1	Avg Runtime Day Pump 2	KWH Net	Generator Net	Fuel/Gas Net	Comments
6/28/2022	10:15 AM	bc	508.6	1393.3	52862	1008	598								#VALUE!	#VALUE!	
7/5/2022	10:15 AM	db	510.9	1399.4	52770	1008	599	2.3	6.1	168.0	7.0	0.329	0.871	108.0	0.5	1.0	Pump 2 is 3.8 hours higher
7/19/2022	9:55 AM	ds	515.5	1412.3	52984	1009	602	4.6	12.9	335.7	14.0	0.329	0.922	214.0	0.7	3.0	Need to Adjust VFD on Pump 2

Pump Station 73

Date	Time	Initials	Pump 1	Pump 2	Pump 3	KWH	Generator Hours	Fuel/Gas Read	Hours #1	Hours #2	Hours #3	AVG FLOW RATE PUMP 1	AVG FLOW RATE PUMP 2	AVG FLOW RATE PUMP 3	KWH Net	Generator Net	Fuel/Gas Net	Comments		
6/28/2022	10:40 AM	bc	2256.7	2256.7	2729.6	2760	481	70												
7/5/2022	2:40 PM	db	2256.7	2256.7	2737.1	2766	482	70	0.0	0.0	7.5	172.0	7.2	0.000	0.000	1.047	6.0	0.6	0.0	only pump 3 running?
7/19/2022	8:40 AM	ds	2256.7	14.1	2748.6	2778	483	70	0.0	-2242.6	11.5	330.0	13.8	0.000	-163.098	0.836	12.0	1.1	0.0	Pump 2 - New Hour Meter 1st Reading, Pump 1 Lower Priority At This Time

Pump Station 74

Date	Time	Initials	Pump 1	Pump 2	KWH	Generator Hours	Fuel/Gas Read	Hours #1	Hours #2	HOURLY DELTA CHECK IN	# OF DAYS	Avg Relative Sat Pump 1	Avg Relative Sat Pump 2	KWH Net	Generator Net	Fuel/Gas Net	Comments
6/28/2022	11:10 AM	bc	177.8	177.8	0	1439	80								#VALUE!	#VALUE!	pump 1 turned off leaking
7/5/2022	2:15 PM	db	179.6	178.8	0	1440	80	1.8	1.2	171.1	7.1	0.253	0.168	0.0	0.8	0.0	Repaired Leak, PLC Screen Blank After Battery Change
7/19/2022	8:25 AM	ds			0	1442	80	-179.6	-178.8	330.2	13.8	-13.055	-12.997	0.0	1.6	0.0	Running on Floats, No Hour Meter Readings

Pump Station 75

Date	Time	Initials	Pump 1	Pump 2	KWH	Generator Hours	Fuel/Gas Read	Hours #1	Hours #2	POWER FACTOR COS φ	EFFICIENCY	AVG RATED: kW PUMP 1	AVG RATED: kW PUMP 2	KWH Net	Generator Net	Fuel/Gas Net	Comments
6/28/2022	1:40 PM	bc	518.4	2304.0	2086	779	3375		7.4	167.7	7.0	0.014	1.059	5.0	#VALUE!	#VALUE!	Fixed Output Card On PLC, Pump 1 Working Again
7/5/2022	1:20 PM	db	518.5	2311.4	2091	780	3378	0.1									
7/19/2022	8:10 AM	ds	524.8	2320.3	2109	780	3380	6.3	8.9	330.8	13.8	0.457	0.646	18.0	0.8	2.0	Okay

Pump Station 76

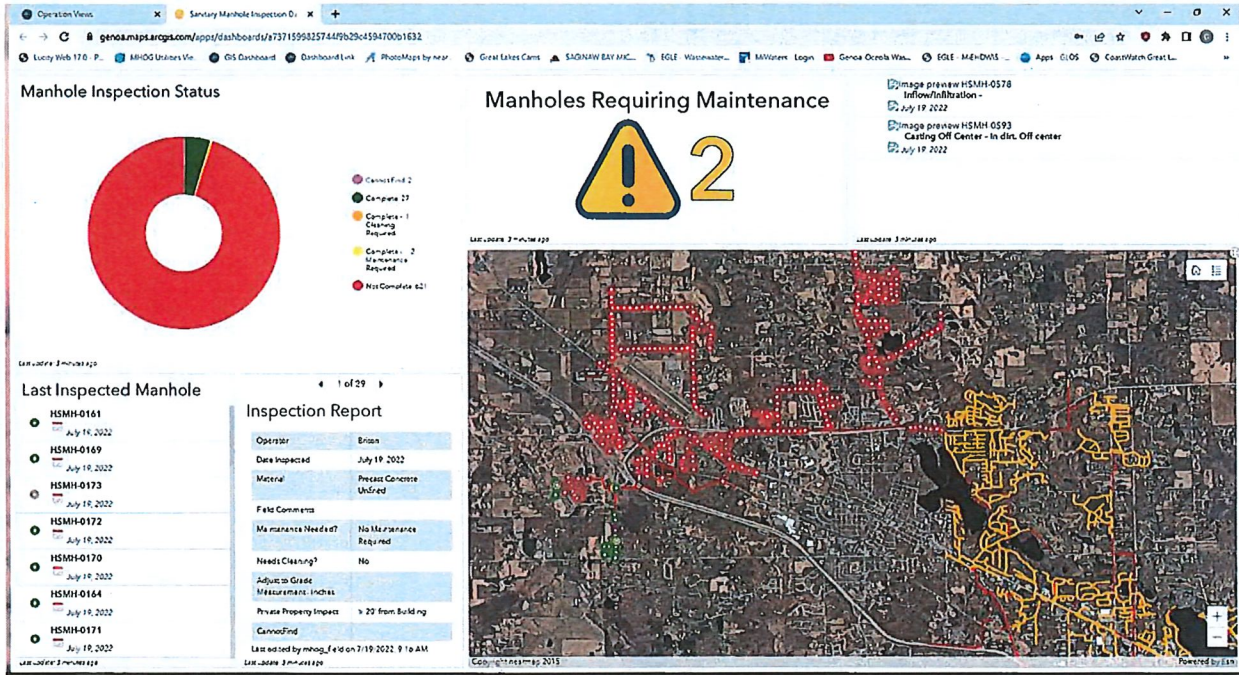
Date	Time	Initials	Pump 1	Pump 2	KWH	Generator Hours	Fuel/Gas Read	Hours #1	Hours #2	Hours #3	Hours #4	Hours #5	Hours #6	KWH Net	Generator Net	Fuel/Gas Net	Comments
6/28/2022	1:15 PM	bc	2779.6	2236.8	79817	474	50								#VALUE!	#VALUE!	
7/5/2022	1:40 PM	db	2787.9	2236.8	79913	474	50	8.3	0.0	168.4	7.0	1.183	0.000	96.0	0.0	0.0	
7/18/2022	8:45 AM	ds	2805.7	2236.8	80139	474	50	17.8	0.0	307.1	12.8	1.391	0.000	226.0	0.0	0.0	Generator Not Exercising, Looking Info

Pump Station 77

Date	Time	Initials	Pump 1	Pump 2	KWH	Hours #1	Hours #2	HOURS SINCE LAST CHECK IN	# OF DAYS	AVG RUNTIME / DAY PUMP 1	AVG RUNTIME / DAY PUMP 2	KWH Net	Comments
6/28/2022	2:15 PM	bc	349.2	509.5	14860								
7/5/2022	1:00 PM	db	349.6	509.8	14895	0.4	0.3	166.7	6.9	0.058	0.043	35.0	
7/18/2022	8:30 AM	ds	350.0	510.6	14959	0.4	0.8	307.5	12.8	0.031	0.062	64.0	Repaired Motor Starter for Pump 2

Pump Station 78

Date	Time	Initials	Pump 1	Pump 2	KWH	Hours #1	Hours #2	HOURS SINCE LAST CHECK IN	# OF DAYS	AVG RUNTIME / DAY PUMP 1	AVG RUNTIME / DAY PUMP 2	KWH Net	Comments
6/28/2022	2:35 PM	bc	811.4	873.5	17079								
7/7/2022	12:15 PM	bc	821.8	884.8	17476	10.4	11.3	213.7	8.9	1.168	1.269	397.0	OK
7/19/2022	10:15 AM	ds	835.9	900.4	18013	14.1	15.6	286.0	11.9	1.183	1.309	537.0	OK



Monthly Missdig Log

June-22											
Date	Missdig Tickets					Marked					
	Received	Positive Response	Marked	Cleared	Out of System	MHOG	OPW	LE	G/O	OPS	HTS
Wednesday, June 01, 2022	15	25	10	15	0	7	0	0	1	2	0
Thursday, June 02, 2022	34	32	5	27	0	5	0	0	0	0	0
Friday, June 03, 2022	26	28	3	25	0	1	1	0	0	1	0
Saturday, June 04, 2022	4	0	0	0	0	0	0	0	0	0	0
Sunday, June 05, 2022	5	0	0	0	0	0	0	0	0	0	0
Monday, June 06, 2022	36	32	7	25	0	7	0	0	1	0	0
Tuesday, June 07, 2022	35	27	8	19	0	6	0	0	2	0	0
Wednesday, June 08, 2022	28	27	8	19	0	8	0	0	0	0	0
Thursday, June 09, 2022	26	29	16	12	1	7	1	0	7	1	0
Friday, June 10, 2022	23	34	9	25	0	4	2	0	1	2	0
Saturday, June 11, 2022	4	0	0	0	0	0	0	0	0	0	0
Sunday, June 12, 2022	1	0	0	0	0	0	0	0	0	0	0
Monday, June 13, 2022	37	34	10	24	0	6	1	0	2	1	0
Tuesday, June 14, 2022	24	31	5	26	0	2	0	0	2	1	0
Wednesday, June 15, 2022	29	19	8	11	0	5	1	0	1	1	0
Thursday, June 16, 2022	32	26	7	19	0	5	0	0	0	2	0
Friday, June 17, 2022	8	0	0	0	0	0	0	0	0	0	0
Saturday, June 18, 2022	4	0	0	0	0	0	0	0	0	0	0
Sunday, June 19, 2022	23	0	0	0	0	0	0	0	0	0	0
Monday, June 20, 2022	22	44	11	33	0	6	0	0	4	1	0
Tuesday, June 21, 2022	21	26	7	19	0	5	0	0	2	0	0
Wednesday, June 22, 2022	14	30	4	26	0	3	0	0	0	1	0
Thursday, June 23, 2022	18	20	9	11	0	9	0	0	0	0	0
Friday, June 24, 2022	14	14	3	11	0	1	0	0	0	2	0
Saturday, June 25, 2022	14	0	0	0	0	0	0	0	0	0	0
Sunday, June 26, 2022	6	0	0	0	0	0	0	0	0	0	0
Monday, June 27, 2022	21	20	8	12	0	5	0	0	2	1	0
Tuesday, June 28, 2022	20	36	3	33	0	2	0	0	0	1	0
Wednesday, June 29, 2022	24	27	5	22	0	3	0	0	2	0	0
Thursday, June 30, 2022	28	26	5	21	0	4	0	0	0	1	0
Total	596	587	151	435	1	101	6	0	27	18	0
	Received	Positive Response	Marked	Cleared	Out of System	MHOG	OPW	LE	G/O	OPS	HTS
	20	20	5	15	0	Total				152	
	Average Per Day					% Marked to Received					
						25%					

MHOG = MHOG Water System
 OPW = Oak Pointe Water System

LE = Lake Edgewood Sewer System
 G/O = G/O Sewer System
 OPS = Oak Pointe Sewer System
 HTS = Howell Township Sewer System

**Howell Township
Collection System Repair Projects Summary**

Collection System		
No.	Project Description	Cost
1	PLC at Station 74 on Tooley Road	
2	Pump 3 at Station 73 (Lambert Drive)	
3	Pump 2 at Station 76 (N. Oak Grove Road)*	\$12,590

* Quote Attached



QUOTATION		
DATE	NUMBER	PAGE
3/28/2022	0045755	1 of 2

B HOW201
 I
 L HOWELL TOWNSHIP
 L 3525 BYRON RD
 T assessor@howelltownshipmi.org
 O HOWELL, MI 48855

Accepted By: _____
 Company: _____
 Date: _____
 PO#: _____

ATTENTION:
 JASON HALL 810-624-9656 jason.hall@inframark.com

WE ARE PLEASED TO PROPOSE THE FOLLOWING FOR YOUR CONSIDERATION:

CUSTOMER REF/PO#	JOB TITLE	SLP	SHIPPING TYPE
	STATION #6, PUMP #2, FLYGT, PUMP, 3127.090-0630176, SEWAGE	BHS/CRB	FIELD SERVICE
QTY	DESCRIPTION		

THE FOLLOWING QUOTE IS FOR THE COST OF LABOR AND MATERIALS TO REPAIR THE ABOVE REFERENCED PUMP.

NEW PARTS REQUIRED:

- (1) UPPER MECHANICAL SEAL
- (1) LOWER MECHANICAL SEAL
- (1) UPPER BEARING
- (1) LOWER BEARING
- (1) O-RING KIT
- (74') POWER CABLE
- (2) CABLE SEALS
- (1) LEAKAGE SENSOR
- (1) STATOR - FACTORY MUTUAL EXPLOSION PROOF
- (1) SET OF FASTENERS

LABOR REQUIRED:

PICK UP AND TRANSPORT TO KENNEDY INDUSTRIES' WIXOM REPAIR FACILITY.

PERFORM ALL ELECTRICAL TESTS.

DISASSEMBLE, SANDBLAST, CLEAN AND INSPECT COMPLETE PUMP.

DIMENSIONALLY MEASURE ALL OPERATING CLEARANCES AND RECORD ON INSPECTION REPORT.

PREP MACHINE SHAFT FOR HARD CHROME PLATING AT MECHANICAL SEAL JOURNAL.

CHROME PLATE JOURNAL THEN GRIND TO O.E.M. SPECIFICATIONS.

ASSEMBLE ALL ROTATING PARTS ON SHAFT AND PLACE IN BALANCE MACHINE.

VERIFY TOTAL INDICATOR RUN OUTS THEN DYNAMICALLY BALANCE ROTOR TO ISO G2.5.

ASSEMBLE PUMP COMPLETE WITH NEW PARTS LISTED.

PRESSURE TEST SEAL CHAMBER TO ENSURE LEAK FREE.

INSTALL NEW OIL IN SEAL CHAMBER.

PERFORM ALL ELECTRICAL TESTS AND TEST RUN.



QUOTATION		
DATE	NUMBER	PAGE
3/28/2022	0045755	2 of 2

QTY	DESCRIPTION
-----	-------------

PRESERVE AND CRATE FOR FIELD SERVICE INSTALLATION.

TOTAL REPAIR COST: \$11,495.00

DELIVERY: 4 WEEKS (AFTER RECEIPT OF ORDER)

THE FOLLOWING QUOTE IS FOR FIELD SERVICE REQUIRED ON YOUR ABOVE REFERENCED PUMP STATION:

FIELD SERVICE LABOR REQUIRED:

KENNEDY INDUSTRIES WILL PROVIDE (1) FIELD SERVICE TECHNICIAN(S) ONSITE TO INSTALL YOUR REPAIRED FLYGT 3127.090 PUMP, START UP, TEST RUN AND VERIFY PROPER OPERATION.

TOTAL FIELD SERVICE COST: \$1,095.00

TOTAL REPAIR COST: \$11,495.00

TOTAL FIELD SERVICE COST: \$1,095.00

TOTAL COST: \$12,590.00

DELIVERY: 4 WEEKS (AFTER RECEIPT OF ORDER)

PLEASE PROVIDE WRITTEN OR VERBAL AUTHORIZATION SO THAT WE MAY RESPOND TO YOUR REQUIREMENTS. IF YOU HAVE ANY QUESTIONS, COMMENTS, OR ARE IN NEED OF ANY ADDITIONAL INFORMATION PLEASE FEEL FREE TO CONTACT ME AT (248) 684-1200.

SINCERELY,
 SARAH RAHN
 SRAHN@KENNEDYIND.COM

CRB

<p>This quote is subject to and incorporates by reference Kennedy Industries, Inc.'s ("Kennedy") Terms & Conditions (Rev'd 4/2019) and Customer Warranty available at www.kennedyind.com which will be provided by email upon written request. Kennedy reserves the right to change the Terms & Conditions and Customer Warranty for future orders. By accepting this quote and/or issuing a purchase order relative to this quote, buyer expressly agrees to the provisions set forth in the Terms & Conditions and Customer Warranty posted on Kennedy's website.</p> <p>QUOTE VALID FOR 30 DAYS. CREDIT CARD PAYMENTS ARE SUBJECT TO AN ADDITIONAL 3% CHARGE NO TAXES OF ANY KIND ARE INCLUDED IN THIS PROPOSAL. PAYMENT TERMS: NET 30</p>	<p>TOTAL: \$12,590.00</p>
--	----------------------------------

Section 3
Capital Improvement Plan

Howell Township
Capital Improvement Plan Summary

Wastewater Treatment Plant			
No.	Project Description	Criticality	Cost
1	Lining of Influent Channel Due to Corrosion, Causing Bypass of Screen (Need to Add Cost of Bypass Pumping Headworks)	High	\$17,250
2	SCADA System for Plant	Moderate	
3	UV Disinfection System Upgrade	High	
4	Walker North Clarifier Upgrade and Coating	High	
5	Junction Chamber and Ferric Chloride Injection Improvements	High	



M.H.O.G.
600 Chilson Rd.
Howell, MI 48843

July 5, 2022

SUBJECT: Channel Lining Howell Sanitary Sewer System

Advanced Rehabilitation Technology LLC is pleased to offer the following pricing to install OBIC Liner on the Flow Channel at the Howell Sanitary Sewer System Plant in Howell, MI. Flow Channel to be lined is approx.. 650 Sq. Ft. in area.

Conditions & Clarifications:

- This quote is good for 30 days
- Pricing is for installation of the Liner System including surface preparation, average leak stoppage (up to 1 gallon of chemical grout), materials for minor concrete patching, installation and supervision.
- Requires Application Truck access within 100' of the channel to be provided.
- Off road locations may require assistance from owner for access.
- DOT Traffic Control to be provided by others if required. Our crew will supply cones for the immediate work area.
- By-pass Pumping, if required, is to be provided by others.
- Permits, Fees and Inspector Rates are not included in this quote.
- We ask that a vac-truck be supplied to remove debris after our hydro-blasting of the pump station. This will be a small amount of water and sand/stone less than ½ yard.
- Quote is based on completing structure in 1 mobilization.

OBIC Liner Installation as Described Above: \$17,250.00

Upon agreeing to the terms we ask you acknowledge in the area below and fax to our office.
Should you have any questions regarding this proposal, please feel free to call me.

Thank you,
Eric Stanford
Advanced Rehabilitation Technology
419-636-2684 Office
419-636-7437 Fax

Signature: _____
Name: _____
P.O. #: _____
Date: _____



Large Station Lining Process:

- **We are generally the last ones in. Complete any mechanical work and penetrations before we arrive.**
- **We ask that a water supply be made available. A garden hose spigot or nearby hydrant is fine.**
- **When we arrive we will Hydro-Blast the interior. Sometimes this is completed by the end of the first day and sometimes it runs into the second.**
- **After the Hydro-Blasting is complete we ask that you have a Vac-Truck come and suck out the debris. Our crew will be able to be the ones inside the channel just send the Vac-Truck with a hose. This debris is just sand and stone from profiling the surface and is less than ½ yard. Generally the Vac-Truck is only on site for an hour or so.**
- **After the Flow Channel is sucked out we would dry, prime and then line it. Sometimes these are completed on the second day but please plan on 3 days for larger stations.**
- **The material cures in minutes and if needed, the station can be put into service an hour after completion.**

**Howell Township
Capital Improvement Plan Summary**

Collection System			
No.	Project Description	Criticality	Cost
1	Lining of Burkhart Road Pump Station (Station No. 71)	High	\$17,250
2	SCADA System for 6 Kennedy Stations	Moderate	

Cost Estimate
Burkhart Pump Station 71 Lining and Repair

Company	Work Scope	Price
ETNA Supply	Piping Parts for Bypass Connection	\$3,386
TLS Construction	Excavation and Installation of Bypass Piping (T&M Est. of 1 Day -	\$6,000
McCallister/CAT	2 - Weeks Bypass Pumping	\$23,889
CSM Mechanical	New Piping To Inside and Outside Wetwell	\$44,200
ART	Obic Liner of Wetwell and Piping	\$19,750
	<i>Subtotal</i>	<i>\$97,225</i>
	Contingency (5%)	\$4,861
	Grand Total Project Estimate	\$102,086

Previous Quote \$195,759

Savings **\$93,673**



ETNA SUPPLY - GRAND RAPIDS
 4901 CLAY AVENUE SW
 GRAND RAPIDS, MI 49548-3038
 616 241 5414
 Fax 616 241 4786



Quotation

QUOTE DATE	QUOTE NUMBER
07/14/2022	S104647994
ETNA SUPPLY PO Box 772107 DETROIT, MI 48277-2107 P-616 248 9182 F-616 245 9940	PAGE NO.
	2 of 2

QUOTE TO:

SHIP TO:

M H O G SEWER & WATER
 2911 DORR RD
 BRIGHTON, MI 48116-9498

M H O G SEWER & WATER
 900 CHILSON RD
 HOWELL, MI 48843

CUSTOMER NUMBER	JOB NAME / PO NUMBER	JOB NAME / RELEASE NUMBER	SALESPERSON	
20331			Jason McClanahan	
WRITER	SHIP VIA	TERMS	EXPIRE DATE	FREIGHT EXEMPT
Nate Bordewyk		NET 25TH	07/21/2022	No
ORDER QTY	DESCRIPTION		UNIT PRICE	EXT PRICE
2ea	6 MEGALUG RET GLAND FOR PVC PIPE SERIES 2000 Pn: 64822		44.000/ea	88.00
2ea	6" MJ BOLT AND GASKET SET CONSISTS OF: 1) 6" MJ GASKET 6) 3/4 X 31/2 MJ T-BOLTS W/NUTS Pn: 6197		22.000/ea	44.00

This Quotation is controlled by ETNA's standard terms and conditions ("ETNA's Standard Terms") found at <https://www.etnasupply.com/TermsandConditionsofQuotation>. Any other terms are expressly rejected. To the extent there is a conflict between any of the terms appearing on the face of this Quotation and ETNA's Standard Terms, the terms appearing on the face of the Quotation control. TAXES ARE NOT INCLUDED ON THIS QUOTE!

Prices are firm for 7 days. Price subject to change after 7 days.

Subtotal	3386.00
S&H Charges	0.00
Amount Due	3386.00



MacAllister Rentals

7825 NORTHPORT DRIVE
LANSING, MI 48917
248-674-0000

Contract No.	Date
4736678	20JUL2022

COPY QUOTE

L E S S E E 2919181 GENOA-OCEOLA WATER AND SEWER A 2911 DORR RD BRIGHTON, MI 48116 Phone: 810-227-5225 Fax: 810-227-3420	Date out		Date In	
	01SEP2022		8:00 AM	
	Job Number		Purchase Order	
	1 - GENOA-OCEOLA WAT		PENDING	
	Job Location		Ordered by	
	PS-71 BYPASS EQUIPMENT, HOWELL		GREG 810-224-5837	
WYNSTEVEJ		000333		

Qty	Equipment #	Min	Day	Week	4 Week	Amount
1	MISCELLANEOUS RENTAL Forcemain Bypass System 1-6" Thompson Diesel Pump (Primary)		1500.00	4500.00	13500.00	9000.00
	1-6" Thompson Diesel Pump (Stand-by) 3-6"x10' Bauer Suction Hose 3-6"x20' Composite Discharge Hose					
	1-6" Bauer TEE 2-6" Flanged TEE 1-6" Flange w/ ARV					
1	3-6" Check Valve REMOTE CALL OUT BOX 0750450	500.00	500.00	800.00	1800.00	1600.00
1	MISCELLANEOUS RENTAL 22k Frac Tank Tank will be used to collect sewage from force main tap. Auto-Start Floats will be installed to signal pumps to run and discharge to force main bypass connection.		85.00	595.00	2380.00	1020.00
SALES ITEMS:						
Qty	Item number	Unit	Price			
			CONTINUED			

IMPORTANT! Please note and acknowledge safety instruction by initialing here: _____

By his/her Initial, Lessee will provide All safety accessories as required, per safety instructions. Initial here: _____
PAYMENT: Net-30 days from invoice date unless otherwise specified herein. A service charge will apply to all past due accounts.

RENTAL EQUIPMENT PROTECTION PLAN ("REP"): Lessee will purchase REP (terms at www.macallister.com/rep and incorporated herein by reference) if Lessee fails to obtain insurance coverage and provide MacAllister with proof of such coverage or if such insurance contains coverage amounts that are inadequate to cover the Equipment at any time.

TERMS AND CONDITIONS: The rental agreement terms and conditions found at www.macallister.com/rentalterms ("Rental Terms") are incorporated herein by this reference and apply to your rental of Equipment from or provision of Services by MacAllister (as defined in the Rental Terms). Please read carefully. This agreement includes an indemnification clause, a jury waiver, warranty disclaimers, and limitations of MacAllister's liability. By accepting delivery of or using the Equipment or Services or making payment(s) to MacAllister for the same, Lessee agrees to be bound by the Rental Terms and REP Terms, even if this Rental Out form has not been fully executed.

ACCEPTED BY CUSTOMER _____



July 11, 2022

Burkhart Road Pump Station
Howell, MI

ATTENTION: Mr. James Aulette
Quotation No.: CSM 07.11.22
SUBJECT: Burkhart Road Pump Station Rehab

CSM Mechanical, LLC is pleased to provide a proposal for the rehab of the Burkhart Rd. pump station in Howell Twp. pursuant to our recent site visit and meeting.

OUR PROPOSAL INCLUDES:

ITEM #1: Pump 1 & 2 Outlet Piping Replacement

- Provide skilled labor, equipment, and material necessary to excavate, remove, and replace the damaged pump piping at the Burkhart Rd. pump station in Howell, Michigan
 - Provide excavation roughly 6-8' below grade to access the damaged / leaking pump 1 & 2 outlet piping
 - Provide saw cutting outside of manhole chamber and removal of all ductile iron piping and fittings back to the pump outlet flanges
 - Provide procurement and installation of new 6" ductile iron MJ fittings (to connect to existing pipe outside of the manhole chamber), 6" ductile iron piping, and ductile iron fittings
 - Backfill excavated hole with existing spoils
 - NOTE: All bypass pumping, and dewatering to be handled by customer
- Provide jobsite supervision, confined space entry and degress, and removal of debris

ITEM #2: Wet Well Inlet Piping Modifications

- Provide skilled labor, equipment, and material necessary to modify the inlet piping to allow for proper discharge near the water level of the wet well at the Burkhart Rd. pump station in Howell, Michigan
 - Provide excavation roughly 6-8' below grade to access the damaged / leaking pump 1 & 2 outlet piping
 - Utilize Sch. 80 CPVC pipe and fittings to bring the inlet piping down within the wet-well
 - Backfill excavated hole with existing spoils
 - NOTE: All bypass pumping, and dewatering to be handled by customer
- Provide jobsite supervision, confined space entry and degress, and removal of debris

OUR PRICE TO PROVIDE ALL THE ITEMS ABOVE IS:

\$44,200.00

NOTE: This proposal is based on STRAIGHT-TIME working hours

This proposal is based on LUMP SUM billing practices with payment terms of Net (30) days per occurrence

This proposal is based on straight time working hours, Monday through Friday, 7:00 am until 3:30 pm. This
7400 Hickory Valley Drive • Fenton, MI 48430 • Phone (248) 302-2078 • Fax (517) 540-9704



quotation is valid for thirty (30) days.

The proposed work will begin upon receipt of signed proposal. If you have any further questions regarding the above proposal, please do not hesitate to contact our office at your earliest convenience.

Respectfully,
CSM Mechanical, LLC

Logan H. Mortz



M.H.O.G.
900 Chilson Rd.
Howell, MI 48843

July 5, 2022

SUBJECT: N. Burkhart Rd Wet Well

Advanced Rehabilitation Technology LLC is pleased to offer the following pricing to install the OBIC Armor Multi-Layer Liner System into 1 Wet Well in Howell, MI Wet Well is approximately 8' x 32'.

Conditions & Clarifications:

- This quote is good for 30 days
- Pricing is for installation of the Multi-Layer Liner System including surface preparation, average leak stoppage (up to 1 gallon of chemical grout), materials for minor concrete patching, installation and supervision.
- Requires Application Truck access within 100' of the pump station to be provided.
- Off road locations may require assistance from owner for access.
- DOT Traffic Control to be provided by others if required. Our crew will supply cones for the immediate work area.
- By-pass Pumping, if required, is to be provided by others.
- Permits, Fees and Inspector Rates are not included in this quote.
- We ask that a vac-truck be supplied to remove debris after our hydro-blasting of the pump station. This will be a small amount of water and sand/stone less than 1/2 yard.
- Quote is based on completing structure in 1 mobilization.

OBIC Liner System Installation As Described Above: \$19,750.00

The OBIC Liner System Has a 10 Year Limited Warranty.

Upon agreeing to the terms we ask you acknowledge in the area below and fax to our office. Should you have any questions regarding this proposal, please feel free to call me.

Thank you,
Eric Stanford
Advanced Rehabilitation Technology
419-636-2684 Office
419-636-7437 Fax

Signature: _____
Name: _____
P.O. #: _____
Date: _____



Large Station Lining Process:

- **We are generally the last ones in. Complete any mechanical work and penetrations before we arrive. Have the rails and pumps installed.**
- **We ask that a water supply be made available. A garden hose spigot or nearby hydrant is fine.**
- **When we arrive we will set up scaffold and Hydro-Blast the interior. Sometimes this is completed by the end of the first day and sometimes it runs into the second.**
- **After the Hydro-Blasting is complete we ask that you have a Vac-Truck come and suck out the debris. Our crew will be able to be the ones inside the wet well just send the Vac-Truck with a hose. This debris is just sand and stone from profiling the surface and is less than ½ yard. Generally the Vac-Truck is only on site for an hour or so.**
- **After the Wet Well is sucked out we would dry, prime and then line it. Sometimes these are completed on the second day but please plan on 3 days for larger stations.**
- **The material cures in minutes and if needed, the station can be put into service an hour after completion.**

Previous Estimate.



J.K of Michigan
 3201 W. Michigan Ave.
 Jackson, MI 49202
 (517)321-4486
 Fax (517)783-1874

WORK PROPOSAL

PROPOSAL # 1
 DATE 5/12/2022
 PREPARED BY Bryce

SUBMITTED TO	JOB NAME	CONTACT PERSON	
		Inframark 1222 Packard Drive Howell, MI 48843	1009 Burkhart Road Lift station
		SECONDARY PHONE	
		EMAIL	jason.hall@inframark.com

WORK TO BE PERFORMED	PAYMENT TERMS
Rehab & Update Lift Station With Ductile	NET 30

DESCRIPTION	
<p>Wet Well:</p> <p>Clean station, remove existing discharge. Install new Ductile discharge piping, mega flanges, uni flanges, solid sleeves, 90's, stainless steel discharge supports, re-support guide rail bracket, install new SCH 80 drop tee & pipe on pressure main with stainless steel supports, install new wet well vent & filter. All with stainless steel hardware. Resurface & line station walls & coat piping. Remove discharge underground between wet well & valve vault. Install new Ductile discharge, solid sleeves, mega flanges from wet well to valve vault.</p>	\$ 104,889.87
<p>Valve Vault:</p> <p>Remove existing flow meter, pipe stands, spool pieces & replace with Ductile spool pieces, uni flanges, pipe stands, with stainless steel hardware, install new flow meter & remote transmitter. Seal all leaks on vault floor, coat piping & plug drain pipe into wet well.</p>	\$ 26,468.81
<p>Bypass Install:</p> <p>Dig up force main coming into wet well & install shut off valves, valve boxes & risers, bypass connection.</p>	\$ 21,406.12
<p>Bypassing station:</p> <p>Set up bypass pump with frag tank, monitor bypass & service all alarms.</p>	\$ 42,994.00
<p>Some parts may have up to 8 week lead time. Anything found over and above the scope of work on the quote will be brought to the owner's attention and repaired at an additional cost.</p>	

TO ACCEPT THIS QUOTATION SIGN HERE AND RETURN		TOTAL	\$ 195,758.80
SIGNATURE	DATE SIGNED		

HOWELL TOWNSHIP
ENGINEERING STANDARDS

June 2022

Accepted by Township Board: _____

Howell Township Hall
3525 Byron Road
Howell, MI 48855

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GENERAL PLAN SUBMITTAL REQUIREMENTS AND PROCEDURES

PURPOSE

It is the purpose of this Section to specify standards and data requirements, which shall be followed in the preparation of the site plans. It is also the purpose of this Section to ensure that:

1. The proposed use will not be injurious to the surrounding neighborhood and protects the general health, safety, welfare, and character of the Township.
2. Natural resources will be preserved to the maximum extent possible in the site design by developing in a manner which will not detrimentally affect or destroy natural features such as lakes, ponds, streams, wetlands, steep slopes, soils, ground water, and woodlands; and
3. Landscaping, including grass, trees, shrubs, and other vegetation is provided to maintain and improve the aesthetic quality of the site and area.

DEFINITIONS

AASHTO - The American Association of State Highway and Transportation Officials is a standard setting body which publishes specifications, test protocols, and guidelines that are used in highway design and construction throughout the United States.

Frontage - The distance between the two side lot lines of a lot or parcel of land, as measured between the two points at which the two side lot lines each intersect the right-of-way, dedicated easement or minimum building setback line.

HDPE – High Density Polyethylene

Manning's Equation – An empirical formula estimating the average velocity of a liquid flowing in a conduit with open channel flow.

NAD83 – A unified horizontal or geometric datum and successor to NAD27 providing a spatial reference for Canada and the United States.

NGVD88 - The vertical datum for orthometric heights established for vertical control surveying in the United States of America.

PVC - Polyvinyl chloride

RCP – Reinforced Concrete Pipe

Setbacks – The minimum distance which a building or structure must be set back from a property line, road, river, shore, floodplain, or any other place which is deemed to need protection.

Siphons - A tube bent to form two legs of unequal length by which a liquid can be transferred to a lower level over an intermediate elevation by the pressure of the atmosphere in forcing the liquid up the shorter branch of the tube immersed in it while the excess of weight of the liquid in the longer branch when once filled causes a continuous flow

CONSTRUCTION PLAN SUBMITTAL PROCEDURES

1. Following approval of the preliminary and final site plans by the Township, the applicant shall submit to the Zoning Administrator two (2) copies of construction plans and a PDF file of the construction plans, as well as any other data and exhibits hereinafter required, the review fee, and a completed application form. After the initial submittal, subsequent revisions can be sent directly to the Township Engineer.
2. The construction plans shall address the same concerns as the final site plan but shall include much greater detail in accordance with the adopted Howell Township Engineering Standards. Approval of the construction plans is required prior to beginning construction.
3. As part of the review process, the Township Engineer may contact the Township, Fire Department, or other regulatory agencies for comments and feedback. If other agencies (MDOT, EGLE, LCRC, LCDC, etc.) have not completed their reviews, the Township Engineer may request that their comments be supplied to the Township Engineer prior to final approvals. In general, the following agencies shall have review authority over the type of improvement:
 - a) Howell Township
 - i. Sanitary sewer and appurtenances
 - ii. Public and Private water distribution system and appurtenances
 - iii. Private storm sewer and appurtenances
 - iv. Stormwater management (detention, retention, etc.)
 - v. Private roads and paved areas
 - vi. Pathways and sidewalks
 - vii. Grading and restoration
 - viii. Any other improvements not regulated by another agency
 - b) Livingston County Road Commission (LCRC)
 - i. Public roads, streets, and right-of-ways
 - c) Livingston County Drain Commissioner (LCDC)
 - i. Public and private storm sewer and appurtenances
 - ii. Stormwater management (detention, retention, etc.)
 - iii. Soil Erosion Control
 - d) Livingston County Department of Public Health
 - i. Private septic fields
 - ii. Private water wells
 - e) Marion Howell Ocoola Genoa Water Authority (MHOG)
 - i. Public water distribution system and appurtenances
4. When plans are complete and ready for approval the Township Engineer will request additional sets of plans be submitted for distribution to EGLE for sanitary sewer permitting (see item 7 in this Section).

5. The applicant shall be responsible for submitting directly to the LCRC, LCDC, MHOG, and other separate regulatory agencies (MDOT, EGLE for wetland permitting, etc.). Any such approvals shall be forwarded to the Township Zoning Administrator and the Township Engineer prior to beginning construction.
6. All public improvement plans submitted for permits must carry the seal and signature of the Design Engineer licensed in the State of Michigan. Note that the amount and type of sanitary and/or water main pipe must be summarized on the cover sheet when EGLE permitting is required.
7. Sanitary sewer plans along with a completed Basis of Design and EGLE Sanitary Sewer Permit Part 41 Application, shall be provided to the Township Engineer. The Township Engineer will have the Township execute the permit application and then submit application and plans to the EGLE for permitting.
8. **Modification of Plan During Construction** - All improvements shall conform to the final site plan. It shall be the responsibility of the applicant to notify the Zoning Administrator of any such changes prior to such change being made. Any changes which result in a material alteration of the approved final site plan shall require resubmittal of a site plan, which shows the proposed changes, to the Planning Commission including any fees determined by the Township Board of Trustees. The Planning Commission or Township Board of Trustees may require the applicant to correct the changes so as to conform to the approved final site plan.
9. **Phasing of Development** - The applicant may, at their discretion, divide the proposed development into two (2) or more phases. In such case, the preliminary site plan shall cover the entire property involved and shall clearly indicate the location, size, and character of each phase. A site plan for each phase shall be submitted in accordance with the procedure herein for a final site plan including any fees required.
10. **Appeals** - No decision or condition related to a construction plan approval shall be taken to the Zoning Board of Appeals.
11. **Fees** - The Howell Township Board shall establish by resolution a fee schedule to defray costs, which may include but not be limited to plan review, administration, inspection, and enforcement of this section. Before final approval, any costs incurred by the Township shall be paid by the applicant. Please refer to the Howell Township Wastewater Ordinance for more information regarding applicable fees.

INSURANCE

1. Prior to construction, the Contractor shall procure and maintain, during the term of the project, public liability and property damage insurance with a responsible insurance company which meets the approval of Howell Township, in such amounts as will be adequate to protect the public, Howell Township interests, and shall not be less than the limits set forth herein.

TYPE OF INSURANCE:

- a. Workmen's Compensation Insurance and Employer's Liability Limit: As required by laws of State of Michigan

Public Liability & Property Damage:

Bodily Injury:	Each Occurrence:	\$1,000,000
Aggregate:		\$2,000,000
Property Damage:	Each Occurrence:	\$1,000,000
Aggregate:		\$2,000,000

- b. Owner's and Contractor's Protective Liability & Property Damage:
- | | | |
|------------------|------------------|-------------|
| Bodily Injury: | Each Occurrence: | \$1,000,000 |
| Aggregate: | | \$2,000,000 |
| Property Damage: | Each Occurrence: | \$1,000,000 |
| Aggregate: | | \$2,000,000 |
- Motor Vehicle (including Owner, Hired and Non-Owned Vehicles):
- | | | |
|------------------------|------------------|-------------|
| Bodily Injury: | Each Occurrence: | \$1,000,000 |
| Property Damage: | Each Occurrence: | \$1,000,000 |
| Combined Single Limit: | | \$2,000,000 |

2. Policies shall be made available to Howell Township and the Township Engineer for examination as to their validity and any undesirable exclusions deemed improper by legal opinion rendered to the Township regarding same. Underground construction, where applicable, shall be specified in the coverage. Certificates of coverage signed by the insurance carriers shall include a guarantee that 30 days written notice shall be given by the insurance carrier to Howell Township prior to cancellation of, or any change in the respective policies. In the event that the insurance is canceled, operations shall cease prior to the cancellation date and shall not resume until evidence is provided that proper insurance is again in effect. Additional Named Insured under Owners and Contractors Protective Public Liability and Property Damage Insurance shall include Howell Township, the Township Engineer (specifically by name) and members of staff, employees and agents for the Township.
3. The name of the proposed development must be included on the insurance documents.

CONSTRUCTION OBSERVATION PROCEDURES

Howell Township or their designated representative will provide observation on all proposed public utilities and improvements, as well as limited construction observation of private improvements. Any facilities installed without Township provided observation may not be accepted by the Township, and therefore may be required to be re-installed. The requirements and procedures for Construction Observation and final project closure shall be as follows.

1. Pre-Construction Meeting
 - a) Upon construction plan approval and receipt of all permits, but prior to commencing construction, a pre-construction meeting shall be held. The Developer or the Developer's Authorized Representative shall contact the Township Engineer to schedule the pre-construction meeting.
 - b) Attendees shall include: Township representatives, Township Engineer, Marion Howell Ocoala and Genoa (MHOG) Water Authority representative, Developer or Developer's Authorized Representative, Design Engineer, Underground and Paving Contractors, and any interested regulatory agency.
 - c) At the pre-construction meeting, the following information shall be provided:
 - i. Proof of insurance naming Howell Township and its Engineer as additionally insured.
 - ii. All permits from other agencies (MDOT, EGLE, LCRC, MHOG, etc.).
 - iii. Approximate schedule for construction.

- d) Prior to the pre-construction meeting, the contractor shall provide the inspection escrow to the Township. Proof of payment should be forwarded to the Township Engineer. The final approval letter from the Township Engineer will detail the amounts and basis of the escrow based upon industry standard production rates.
 - i. Unused observation and administration escrow funds will be eligible for return as described in the final approval letter.
 - ii. The Township Engineer shall monitor the observation escrow and may require additional deposits. This shall be dependent on the contractor's rate of progress and the difficulty in completing the project.
 - iii. Failure to keep the observation escrow current may result in withholding construction observation, and therefore possibly delaying construction.

- 2. Notice of Construction
 - a. The Township Engineer shall have a minimum 72-hour notice (not including weekends or holidays) prior to the start of any construction requiring observation.
- 3. Construction Inspection
 - a. The Township's Engineer shall observe all public and private sanitary improvements. Full time inspection will be provided by the Township's Engineer. The Township's Engineer may inspect all other operations requested by the Township.
- 4. Sanitary Sewer Testing
 - a. Sanitary sewer will be required to undergo testing 30 days after the completion of construction. Developer/contractor are responsible for arranging and paying for all tests seen below. Township Engineer must witness all tests.
 - i. Pressure Testing
 - 1. The contractor shall conduct a sanitary air test with the Township Engineer witnessing. Air tests shall comply with current testing standards and requirements. Air testing should not be used if the groundwater level is 2 feet or more above the top-of-pipe at the upstream end (reference ASTM F1417)
 - ii. Deflection Testing
 - 1. The contractor shall conduct a deflection test with the Township Engineer witnessing. The test shall take place a minimum of 30 days after backfill has been installed, but not longer than 12 months after installation. Deflection tests shall comply with current testing standards and requirements.
 - iii. TV Testing
 - b. If the sanitary sewer fails to pass any of the above test, the failed portion must be repaired or replaced at the discretion of the Township Engineer.
- 5. Acceptance of final project:
 - a) After the project is substantially complete, including paving, the Township Engineer will perform a site walkthrough and generate a punch list. Once the items have been addressed, the Township and the Township's Engineer will conduct a final site inspection.
 - b) All punch list items must be addressed.
 - c) All fees and escrows must be paid in full.
 - d) Record drawings and related documents must be provided to the Township:
 - i. Upon acceptance of field improvements, the Township Engineer will provide the Developer's Engineer with a copy of Inspector's Daily Reports and any applicable lead reports. The Developer's Engineer will update the drawings using these materials and any of their own notes and submit these to the Township's Engineer for review and approval.

- ii. A grading certificate will be required at this time. This form (provided by the Township's Engineer with IDR's) will also need to be signed and sealed by the Developer's Engineer licensed in the State of Michigan and then submitted to the Township's Engineer along with the record drawings.
 - iii. Easements for public utilities based on "As-Built" conditions requires a sketch and legal description to be submitted by the Developer's Engineer to the Township's Engineer for review and approval along with the record drawings. Once easements documents are approved, the Township's Engineer will mail the Developer/Township the easements to be recorded with the County Register of Deeds. Once the easements are recorded with liber and page number, recorded copies will need to be forwarded to the Township and the Township's Engineer.
 - iv. Once the record drawings are approved by the Township's Engineer, the Developer's Engineer will be instructed as to what is required for final distribution (i.e. CAD files, mylars, etc)
- e) Performance guarantee will be released after all the above items have been completed.

CONSTRUCTION PLAN REQUIREMENTS

The following is a list of requirements that shall be used to assist in Construction Drawing and Record Drawing preparation. Items or criteria not specifically on this list or contained within the Howell Township Zoning Ordinance shall be subject to Township approval, based solely on the Township's discretion as to appropriate standards, regulations, or local impact.

PLAN REQUIREMENTS

GENERAL

1. Plan paper shall be 24" x 36".
2. Plan scale shall be a maximum horizontal scale of 1"=50' and vertical scale of 1"=5'.
3. Plan cover sheet shall include the following: project name, name of Howell Township, Livingston County, Michigan, proprietor's, engineer's, architect's and landscape architect's name, address, phone and fax number, a location map (1" = 2000' scale) with north arrow, parcel ID number(s), agency approvals required, plan sheet index, and professional architect's or engineer's seal Licensed in the State of Michigan.
4. A title block shall be present on each plan sheet.
5. The legal description for the property shall be included, must also be represented by bearing angles and distances in plan view, and shall have a ratio of closure no greater than 1 part in 5000.
6. Zoning information including zoning designation, land use, minimum lot area, frontage, and setbacks; and maximum lot coverage and building height requirements for the site's zoning designation.
7. A topographic survey plan sheet shall be included; additional requirements are outlined in Section II, Topographical Survey, of this document.
8. A general area plan shall be included at 1" = 100' or 1" = 200' when size of the site prohibits a single sheet. The general plan shall show existing and proposed roadways, site location, dimensions, utilities, building structures, landscaping, and topography.
9. A landscaping plan with tree survey information shall be included.
10. Location of wetlands, drainage courses, and floodplain areas shall be shown on the plans.
11. On and offsite permanent and temporary easements shall be shown on the plans.
12. Private and public roadways, road right-of-way, and road easements shall be shown on the plans.
13. Dimensions for existing and proposed road right-of-way and/or easements, roadways, parking areas, driveways, sidewalks, and pathways shall be shown on the plans and shall be in accordance with the Howell Township Zoning Ordinance and the requirements outlined herein.

TOPOGRAPHICAL SURVEY

GENERAL

1. A complete topographical survey is required for all sites. Existing offsite elevations must be given at a minimum of 100' abutting the entire perimeter of the site. Onsite contours are required to establish the existing site drainage. Contours shall be at the following spacing:
 - a) 1-foot contours if scale of plan is less than or equal to 1" = 50'
 - b) 2-foot contours if scale of plan is greater than 1" = 50'
2. A minimum of two (2) benchmarks based on NAD83 or NGVD88 must be included. The datum shall be clearly referenced.
3. Property lines shall be indicated by bearing and distance.

4. All existing conditions shall be shown, including but not limited to the following items (location and elevation):
 - a) All utilities including sanitary, water main, gas, telephone, cable, and electrical (including rim and invert elevations).
 - b) Property lines.
 - c) The building finished floor.
 - d) Sidewalks and pathways.
 - e) Retaining walls.
 - f) Finished grades of all adjacent buildings.
 - g) All easements.
 - h) 100-year flood plain.
 - i) Existing drainage courses and wetlands.
 - j) Upstream and downstream culverts.
 - k) Adjoining road right-of-way.
5. Road Topography shall extend across the entire site with grades shown on both sides of the street for:
 - a) Property line.
 - b) Ditch centerline and top of bank.
 - c) Edge of shoulder.
 - d) Edge of pavement or top of curb.
 - e) Crown or centerline.

UTILITIES (GENERAL)

GENERAL

1. The location, size, and type of pipe of all existing and proposed utilities shall be shown in plan view.
2. Proposed sanitary sewer shall extend across the property frontage(s) or to a property line, as directed by the Township.
3. No new utilities shall be placed below or within a 1:1 influence of a building footprint. The limits of all removals and/or abandonments shall be shown on the plans. The following criteria shall apply for all existing utilities within the influence of a building foundation:
 - a) Utilities within five (5) or less below a footing shall be removed.
 - b) Utilities greater than five (5) feet below a footing shall be grouted full using a standpipe to prevent air voids.
 - c) Utilities that are to be abandoned and are not within the influence of a footing shall be bulkhead unless the utility is determined to be a hazard, nuisance or potential maintenance problem by the Township.
4. A minimum ten (10) feet wide horizontal separation shall be required between water main and sewers.
5. No sanitary sewer shall be within five (5) feet (measured horizontally) from the high-water elevation of a detention, retention, and/or forebay basin.
6. All utility crossings, including sanitary sewer leads, shall specify top and bottom of pipe elevations in both plan and profile view. An 18" minimum vertical clearance between water main and sanitary sewer is required.
7. Sewer and storm mains shall maintain at least 18" minimum vertical clearance. If this cannot be achieved, a concrete cradle must be installed.
8. A casing pipe shall be provided when utilities must cross retaining walls or when a bore is proposed under a roadway. The casing pipe must extend beyond the angle of repose of the retaining wall or roadway. The size, length and invert of the casing pipe shall be indicated. All

bores under roadways shall meet the requirements of the Livingston County Road Commission Requirements.

SANITARY SEWER
GENERAL

1. Follow Howell Township Standard Sanitary Details and Howell Township Sewer Ordinance 21 – Wastewater Collection and Treatment System.
2. Follow Recommended Standards for Waterwater Facilities (10 States Standards).
3. The following must be shown in plan view for sanitary and storm sewer:
 - a) Length, size, type, and class of pipe between structures.
 - b) Top of casting elevation at structures.
 - c) Easement width. Minimum width for sanitary sewer is 25', however a wider easement maybe required based on the depth of the sewer.
 - d) Progressive numbering system for all structures.
4. The following must be shown in profile view for sanitary and storm sewer:
 - a) Length, size, type, class, and slope of pipe between structures.
 - b) Size and type of structure.
 - c) Top of casting and sewer invert elevations at structures.
 - d) Existing and proposed ground elevations.
 - e) Utility crossings, including top and bottom of pipe elevations.
 - f) Special backfill areas under or within pavement areas.
 - g) Progressive numbering system for all structures.
5. A quantity list and design data (on the cover sheet or first sheet of the plans) shall be provided and be in accordance with the current 10 States Standards.
6. Lift stations will not be permitted unless there is no other alternative for sewer service. If a lift station is required, the Design Engineer shall provide the Township with all design details and calculations within flow range, which shall be in accordance with all current Township, County and State requirements.
7. Siphons shall only be allowed when specifically approved by the Township and Township Engineer.

SEWER

1. Sanitary sewer size, grade, and structure spacing table:

Size	Min. Grade (%)	Max. Grade (%)	Max Spacing (ft)
8"*	0.40	10	400
10"	0.28	6.2	400
12"	0.22	6.0	400
15"	0.15	3.6	400
18"	0.12	2.8	400
21" & greater	0.10	2.2	400

*minimum allowable sanitary sewer size is 8"

2. Where Manning's equation is used to compute flow, a minimum value for "n", roughness coefficient shall be 0.013.
3. A minimum cover of 5' is required over all sanitary sewers, including leads.

4. A minimum 25' wide easement is required for all public sanitary sewer. Wider easements will be required for deeper sewer to maintain a 1:1 excavated side slope within the easement. The sanitary sewer shall be centered within the public easement. No buildings should be located within the easement.

MANHOLES

General

1. All pipe connections at structures shall be separated by a minimum of one (1) foot between pipe walls and 40% of the structure circumference must remain intact. The design engineer shall provide details for all structures with multiple pipe connections not meeting the requirements below:

Structure Diameter	Max. Pipe Size for Straight Through Installation	Max. Pipe Size for Right Angle Installation
48"	24"	18"
60"	36"	24"
72"	42"	36"
96"	60"	42"

2. The Township Engineer will inspect all sanitary taps into existing Township structures.
3. When there is a change in direction in a sewer at a manhole, an allowance of 0.10 feet in grade shall be made for a loss of head through the manhole.
4. Whenever there is a change in pipe size, the inverts of both sewers shall be set at a grade so that both sewers maintain the same energy gradient.

Drop Connections

1. External drop connections are required when there is an 18" vertical difference between inverts on the outlet and inlet pipes and shall be constructed according to Standard Details.
2. The Township must approval internal drop connections. The connection shall be based on field conditions an in accordance with standard details.

SERVICE LEADS

General

1. The Township will own sanitary lead within the ROW or easement. The property owner will own the lead outside the ROW or easement and will be responsible for maintenance of this portion of the lead.
2. A cleanout should be provided at the ROW and at every change of direction of the lead.
3. The building lead location, size, type, and slope (minimum 6" diameter and 1% per Ordinance 21, Section 5) shall be provided. In order to verify the slope of the lead, invert elevations shall be provided at the finished grade of the building and at the connection to the mainline sanitary sewer. The 6" lead shall extend all the way to the building.
4. In sanitary sewers where construction of building leads to the property line is not required, a wye branch shall be installed for sewer for 14' or shallower and a tee installed for sewer that is deeper than 14' for each lot or potential building site.

5. Leads shall not be connected to manholes unless specifically approved by the Township for connection to the last manhole or connection to deep sewer. An exterior drop connection will be required at connections to manholes.

Grinder Pump Connections

1. Grinder pump connection should connect to manhole where possible.
2. Grinder pumps may be connected to gravity sewer directly with a gravity lead with a cleanout located at the Right-of-Way line.
3. Manholes with grinder pump connection must be lined with interior corrosion protection.

Grease Interceptor

1. Grease interceptor shall be provided for all food service facilities and any facilities with a commercial kitchen, as required by the Planning Commission.
2. Grease interceptor shall be connected to all food service drains which include mop sinks, dishwashers, food prep sinks, and floor drains. Non-food wastewater shall not pass through the grease interceptor and be connected downstream of the grease interceptor.
3. A cleanout shall be provided after the grease interceptor.
4. Grease interceptors shall be located outside the building, outside of the ROW or easement, and underground.
5. The minimum size for grease interceptors is 1,000 gallons.
6. A maintenance schedule shall be provided.

Industrial/Manufacturing Sites

1. Oil water separators should be provided all industrial/manufacturing sites and as required by the Township Engineer.
2. A manhole shall be provided at the ROW instead of cleanout for inspection and sample collection purposes.

PUBLIC PUMP STATIONS

GENERAL

1. Pump stations should be designed in accordance to:
 - a. Recommended Standards for Wastewater Facilities (Ten State Standards)
 - b. Howell Township Standard Pump Station Drawings and Specifications
 - c. Howell Township Sewer Ordinance 21 – Wastewater Collection and Treatment System.
2. Pump stations may be designed by Howell Township Engineer, if requested.
3. Each station’s configuration shall be dependent on the proposed flow rate, based on the chart below. Final configuration to be approved by Howell Township.

Peak Flow (GPM)	Pumps	Discharge Piping Size	Configuration
10-90	Submersible	2” – 3”	Aboveground controls/ below ground Valve Vault
80-600	Submersible	4” – 6”	Aboveground Hut
>250	Submersible	≥ 4”	Aboveground Building

4. Wet well shall be appropriately sized for all future flows.

5. Buoyancy calculations and necessary ballast concrete for Wet well and valve vault (where applicable) must be included.
6. All pump stations shall be equipped with a flow meter.
7. Five-year warranty should be supplied from the time of start up.
8. All cabinetry, hatches, and other devices requiring locks shall be locked with a keyed pad lock.
9. Bollards, fences, and concrete pads may be required per discretion of Howell Township, depending on site location, and proximity to road.
10. A bypass connection shall be supplied with connect to match Howell Township pumps.
11. Aboveground shelters facade shall be approved by Howell Township.

CONTROLS

1. Primary Level Control Method: Submersible Pressure Transducer.
 - a. Power: 24 VDC, 4-20mA
 - b. Range: 0 to 10 PSI.
 - i. Scale: 0 to 23.1 Feet.
2. Backup Level Control Method: Float Switch Array.
 - a. High Level Alarm / Pumps Start
 - b. Low Level Alarm / Pumps Stop
3. Each pump shall be provided with a Hand-Off-Auto selector switch.
 - a. The "Hand" position provides Township personnel to operate each pump manually, regardless of other pump station conditions (sensor failures, alarms, etc.).
 - b. The "Off" position prevents starting of pumps due to pump station conditions.
 - c. The "Auto" position allows the pumps to operate in Automatic mode, which shall be a lead/lag method.
4. While in "Auto" mode pumps shall operate as follows:
 - a. When liquid level in wet well rises to elevation of "lead pump start" setpoint, start lead pump. When lead pump is started, run pump until liquid level in wet well is drawn down to "lead pump stop" setpoint, and then shut down lead pump.
 - b. When lead pump cannot keep up with influent flow, liquid level in wet well rises to "lag pump start" setpoint that starts lag pump. When lag pump is started, run pump until liquid level in wet well is pumped down to "lag pump stop" setpoint and shut down lag pump. Lead pump shall continue to run until wet well is drawn down to "lead pump stop" setpoint.
 - c. Automatically alternate lead and lag status of pumps after each pumping cycle (lead pump shutdown upon reaching "lead pump stop" setpoint).
5. When liquid level in wet well rises to elevation of the "wet well high level" float switch start lead pump, after an adjustable time delay start the lag pump, energize the "Wet Well High Level" alarm relay and light located on pump control panel, and activate the secondary control method. The secondary controls shall remain active until reset by pressing the "Alarm Reset" button.
6. When liquid level in wet well is pumped down to elevation of "wet well low level" float switch, shut down pumps and energize "Wet Well Low Level" alarm relay and light located on pump control panel.
7. Pumps shall be equipped with high temperature and seal leak detectors that shall shut down the pumps and alert Township personnel.
8. The following information, at a minimum, shall be made available via the township's remote monitoring and alarming system. These signals shall be wired to a dedicated terminal strip in the control panel, for wiring to alarming/monitoring device.
 - a. Power Failure / Phase Monitor.
 - b. Pump No. 1 Motor High Temperature/Seal Failure.

- c. Pump No. 2 Motor High Temperature/Seal Failure.
 - d. High Wet Well Level.
 - e. Wet Well Low Level.
 - f. Pump No. 1 Running.
 - g. Pump No. 2 Running.
 - h. Wet Well Level.
 - i. Flow Rate.
 - j. Flow Totalizer.
9. Substituting operator interface devices such as indicator lights, elapsed time meters, pushbuttons, and selector switches with objects on a graphical interface (ie. Touchscreen or computer screen) shall only be allowed when given prior approval by the Township.

GENERATOR

1. An onsite Standby Generator shall be required at all pump stations.
 - a. A portable generator may be purchased for the Township in leu of an onsite generator, if approved by Howell Township, depending on location of pump station.
2. Generators smaller than and including 100KW shall be natural gas. Generators larger than 100KW may be diesel.
3. Generator engine speed shall be 1800 rpm. High-speed generators will not be acceptable.
4. All generators shall include the following accessories, at a minimum. Additional products may be necessary based on pump station location.
 - a. Coolant heater
 - b. Battery charger
 - c. Batteries
 - d. Exhaust silencer, critical type
 - e. Battery tray heater
 - f. Alternator heater
 - g. Convenience receptacle
5. Generator shall be equipped with a weatherproof, insulated, level 2 sound attenuated enclosure.
6. Generator shall be sized according to pump sizes, other electrical loads required per pump station, and must be approved by Howell Township.
7. An Automatic Transfer Switch (ATS) shall be sized to handle the electrical service and generator requirements. ATS shall be from the Generator supplier and approved by the Generator manufacturer for each specific application.

PUMPS

1. Pump shall be sized as to pump peak flow through one pump at any given time.
2. Pumps must be able to pass flushable wipes.
3. Pump discharge piping 3" or larger must be ductile iron. Discharge piping may only be one size larger than the pump discharge, as recommended by the manufacturer.
4. Pump discharge piping less than 3" must be PVC Sch 80.
5. For pump discharge less than 3", grinder pumps are required.
 - a. VFDs with a manual backflow option shall be provided for all grinder pumps.

FORCEMAIN

1. Forcemain shall be a minimum of 2" but may not be smaller than the outlet of the pumps.

2. Connect to Howell Township manhole or pump station as approved by Howell Township.
3. Forcemain material shall be HDPE or PVC.

9B

Proposal for:
Howell Township, Livingston County MI

July 19, 2022

Quoted by: Keegan Nixon

Software and Services for BS&A Cloud Upgrade



Thank you for the opportunity to quote our software and services.

At BS&A, we are focused on delivering unparalleled service, solutions, support, and customer satisfaction. You'll see this in our literature, but it's not just a marketing strategy... it's a mindset deeply embedded in our DNA. Our goal is to provide such remarkable customer service that our customers feel compelled to remark about it.

*We are extremely proud of the many long-term customer relationships we have built. Our success is directly correlated with putting the customer first and consistently choosing to **listen**. Delivering unparalleled customer service is the foundation of our company.*

Cost Summary

Software is licensed for use only by municipality identified on the cover page. If used for additional entities or agencies, please contact BS&A for appropriate pricing. Prices subject to change if the actual count is significantly different than the estimated count.

Upgrade - Cloud Modules

Financial Management

General Ledger	\$2,520
Accounts Payable	\$2,135
Cash Receipting	\$2,135
Utility Billing (<i>approximately 928 utility accounts</i>)	\$1,350

Personnel Management

Payroll	\$3,455
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Community Development

Building Department	\$3,305
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Property

Assessing	\$2,755
Tax	\$2,395
Special Assessment	\$1,275
Delinquent Personal Property	\$660

BS&A Online

Public Records Search + Online Bill Pay <i>With use of integrated Credit Card Processor</i>	\$0
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Subtotal **\$21,985**



Project Management and Implementation Planning

Services include:

- Analyzing customer processes to ensure all critical components are addressed.
- Creating and managing the project schedule in accordance with the customer's existing processes and needs.
- Planning and scheduling training around any planned process changes included in the project plan.
- Modifying the project schedule as needed to accommodate any changes to the scope and requirements of the project that are discovered.
- Providing a central contact between the customer's project leaders, developers, trainers, IT staff, conversion staff, and other resources required throughout the transition period.
- Installing the software and providing IT consultation for network, server, and workstation configuration and requirements.
- Reviewing and addressing the specifications for needed customizations to meet customer needs (when applicable).

\$9,250

Implementation and Training

- \$1,000/day
- Days quoted are estimates; you are billed for actual days used

Services include:

- Setting up users and user security rights for each application
- Performing final process and procedure review
- Configuring custom settings in each application to fit the needs of the customer
- Setting up application integration and workflow methods
- Onsite verification of converted data for balancing and auditing purposes
- Training and Go-Live

Software Setup	Days:	4		\$4,000
Financial Management Modules	Days:	5		\$5,000
Personnel Management Modules	Days:	3		\$3,000
Community Development Modules	Days:	3		\$3,000
Property Modules	Days:	2		\$2,000
	Total:	17	Subtotal	\$17,000

Cost Totals

Not including Annual Service Fees

Modules	\$21,985
Project Management and Implementation Planning	\$9,250
Implementation and Training	\$17,000
Total Proposed	\$48,235
<i>Travel Expenses</i>	\$1,495
<i>Hosting Fees</i>	\$5,500

Payment Schedule

- 1st Payment: **\$9,250** to be invoiced upon execution of this agreement.
- 2nd Payment: **\$27,485** to be invoiced at activation of customer's site.
- 3rd Payment: **\$18,495** to be invoiced upon completion of training.

Cloud Annual Service Fees

Unlimited support is included in your Annual Service Fee. Service Fees are billed annually. After two (2) years, BS&A Software reserves the right to increase the Annual Service Fee by no more than the yearly Consumers Price Index for All Urban Consumers U.S. city average (CPI-U)."

Financial Management	
General Ledger	\$2,520
Accounts Payable	\$2,135
Cash Receipting	\$2,135
Utility Billing	\$1,350
Personnel Management	
Payroll	\$3,455
Community Development	
Building Department	\$3,305
Property	
Assessing	\$2,755
Tax	\$2,395
Special Assessment	\$1,275
Delinquent Personal Property	\$660
BS&A Online	
Public Records Search	\$4,700
Total Annual Service Fees	\$26,685

Hosting Fees

Fees relating to the hosting and storage of data through Microsoft Azure are to be billed annually, for all modules included above.

\$5,500



Additional Information

Program Customization

BS&A strives to provide a flexible solution that can be tailored to each municipality's needs. However, in some cases, custom work may be required. Typical examples include:

- custom payment import/lock box import
- custom OCR scan-line
- custom journal export to an outside accounting system
- custom reports

If you require any custom work, please let us know so that we can better understand the scope of your request and include that in a separate proposal.

Cash Receipting Hardware

	Quantity	Cost
Epson THM-6000V Series Receipt Printer*	\$925 x ____	= \$ _____
APG Series 100Cash Drawer**	\$250 x ____	= \$ _____
Honeywell Hyperion 1300g Linear-Imaging Scanner	\$250 x ____	= \$ _____
Credit Card Reader (if using Invoice Cloud)	\$75 x ____	= \$ _____

This will add \$ _____ to the Total Proposed.

**IMPORTANT. The receipt printer must be plugged into the USB port on one workstation (not your server). This printer is not to be shared with other workstations. If more than one workstation will be used for receipting, please consider purchasing more than one receipt printer.*

Please provide the number of cash drawers that will be hooked up to the printer _____

Note: The availability, model numbers, and pricing for all third party hardware listed above is subject to availability from the manufacturers. In the event that the listed hardware is no longer available at the time of purchase, a comparable replacement will be available, at the then current cost. Returns require pre-approval, and all purchased equipment must be shipped back to BS&A in its original packaging. Returns are subject to a re-stocking fee of \$50.00.

Additional Training - Building Department Report Designer

Most of our Building Department customers heavily use our Report Designer, which is included free with the program. Report Designer Training is not included in the training quoted on this proposal and is highly recommended. You may attend a class at our office in Bath Township, or we can train at your location. Report Designer Training is typically completed in one day.

Please check the option you are interested in. Report Designer Training will be scheduled after successful implementation and training of your Building Department software.

___ Classroom training, \$205/person/day

___ On-site training (unlimited attendees), \$1,000/day, travel not included



BS&A Online

Connection Requirements

BS&A Cloud modules require a high-speed internet connection (cable modem or DSL).

Payment Processing Requirements

Acceptance of online payments requires a contract with one of BS&A's approved Online Credit Card Processing companies. Please visit <https://www.bsasoftware.com/solutions/bsaonline/public-records-search/> for information.

9C



3121 E. Grand River Howell, MI 48843
517.546.4836 fax 517.548.1670
www.bosseng.com

August 2, 2022

Ms. Jean Graham, Clerk
Howell Township
3525 Byron Road
Howell, Mi. 48855

Re: Burkhart Ridge Manufactured Housing Community REU Request

Dear Ms. Graham,

On behalf of Burkhart Ridge, LLC and Burkhart Road Associates, LLC , owner of the Burkhart Ridge Manufactured Housing Community, please accept this letter as request to appear before the Township Board on August 8, 2022 to request the following two items:

1. Confirmation by the Board of the reduction of the Residential Equivalent Unit factor for sewer to 0.58 REU's per new lot based on the attached Howell Township's letter dated March 4, 2019 responding to Burkhart's request for the REU reduction based on actual water meter readings. There is currently a 192 lot expansion underway that will begin home occupation in the fourth quarter of this year.
2. Request a tap fee offset based on the 0.58 REU confirmation to adjust for overcharge of the tap fee on the initial 306 sites that are built and occupied. Please reference the attached April 19, 2022 documentation (including the memorandum dated March 7, 2022) addressed to the Township Supervisor.

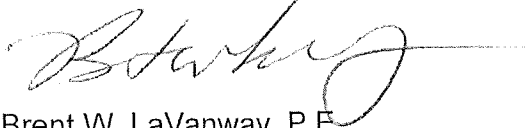
The documents that form the basis of the requests are the Consent Decree entered into in 1996 between Howell Township and Burkhart Road Associates, LLC and Section 7 D. of the Howell Township Sewer Ordinance. The Consent Decree allows for, and Section 7 D. of the Howell Township Sewer Ordinance requires, adjustment of REU values based upon the actual water meter readings in lieu of the presumed REU values in the Howell Township Sewer Ordinance, provided such readings are reasonably available to the Township, as is the case since the water meter readings are available through the Marion, Howell, Oceola and Genoa Water Authority (MHOG).

Thank you in advance for the opportunity to further discuss this important matter with the Board.

If you have any questions, please feel free to contact me. Thank you.

Sincerely,

Boss Engineering Company

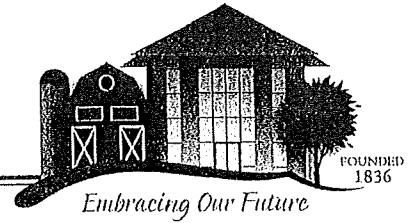
A handwritten signature in black ink, appearing to read "B. LaVanway", with a long horizontal flourish extending to the right.

Brent W. LaVanway, P.E.
President, Director of Engineering

CC: K:\DOCS\18-039twpcclerkletter
Attachments-March 4, 2019 Howell Township letter and April 19, 2022 Boss Engineering letter

Howell Township

3525 Byron Road • Howell, MI 48855
Phone: (517) 546-2817 • Fax (517) 546-1483
www.howelltownshipmi.org



March 4, 2019

Re: Burkhart Ridge Manufactured Housing Community

Dear Mr. LaVanway,

Per your letter of January 15, 2019 that requested a reduction of future sewer and water REU'S to 0.5 per manufactured home. I have ask MHOG to complete a water usage study to determine the Residential Equivalent Unit per manufactured home.

MHOG has completed a study to determine the REU per occupied site based on yearly water consumption for 2017 & 2018. MHOG has determined that that the residential equivalent unit per manufactured home is 0.58.

I have attached MHOG's evaluation that show the peak quarter, account history, and a copy of the MHOG Board approved methodology.

If you have any question feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Joe Daus".

Joe Daus
Zoning Administrator



3121 E. Grand River Howell, MI 48843
517.546.4836 fax 517.548.1670
www.bosseng.com

April 19, 2022

Mr. Michael Coddington, Supervisor
Howell Township
3525 Byron Road
Howell, Mi. 48855

Re: Burkhart Ridge Manufactured Housing Community

Dear Mr. Coddington,

As you are aware Burkhart Ridge is well underway with the 192 lot expansion. The park is at full occupancy thus new lots will be brought on line to meet demand. As a part of this process we had requested a reduction of the REU factor to 0.5 based on actual usage data from the 306 occupied sites.

Upon submittal of this request the Township requested the MHOG water authority to conduct a water usage study and MHOG determined the appropriate REU factor to be 0.58.

Thus, based on the above documentation and the attached REU analysis dated March 7, 2022, we respectfully request on behalf of Burkhart Ridge, LLC, the successor to Burkhart Road Associates, LLC, that the REU fees for the current expansion be waived due to the original application of the 1.0 REU factor for the first 306 lots plus clubhouse.

Also, as a result of the actual usage calculations the Burkhart Ridge sanitary pump station available capacity should be adjusted and documented at 558 REU's per the calculations provided in the Boss Engineering memo dated March 7, 2022.

If you have any questions, please feel free to contact me. Thank you.

Sincerely,

Boss Engineering Company

A handwritten signature in black ink, appearing to read "Brent W. LaVanway".

Brent W. LaVanway, P.E.
President, Director of Engineering

CC: K:\DOCS\18-039reureductionrequestletter
Attachments



3121 E. Grand River Howell, MI 48843
517.546.4836 fax 517.548.1670
www.bosseng.com

March 7, 2022

Memorandum

To: Mr. Paul Chosid, Burkhart Ridge Manufactured Housing Community

Re: Evaluation of allocated and proposed Residential Equivalent Units for Sewer and Water

Dear Paul,

Pursuant to your request I have evaluated past Burkhart Ridge sanitary sewer connection charges and provide the following information:

Based on the Marion, Howell, Oceola, Genoa (MHOG) Water Authority analysis performed in 2019 as noted in the Howell Township letter dated March 4, 2019 the appropriate Residential Equivalent Unit (REU) factor for the Burkhart Ridge Manufactured Housing Community is 0.58. In other words each manufactured home uses the water/sanitary sewer equivalent of 0.58 single family homes. As noted the resultant REU factor is based on an analysis of actual water usage for the years 2017 and 2018.

The Burkhart Ridge, Phase 4 expansion of 192 lots will bring the total number of lots to 498. The first 306 lots were charged 1.0 REU per lot based on the Equivalent User Table in the Howell Township "Wastewater Collection and Treatment System Ordinance" dated June 30, 1989 and amended January 1, 2004. It is now known, based on the MHOG study that each lot in Burkhart Ridge uses the equivalent of 0.58 REU's.

Extrapolating the 0.58 factor back to the first 306 lots results in the following:

$0.58 \times 306 = 177.48$ (round to 178) REU's being the accurate allocation.

The overage is $306 - 178 = 128$.

For Phase 4, the 192 lots, with a factor of 0.58 applied is equal to 111.36 (round to 112)

If the 128 lot overage is applied to Phase 4 then there should be a credit of 16 REU's (128-112).

Also, for the 850 REU sanitary sewer pump station the remaining capacity, after build out of the additional 192 lots, should be the following:

850 REU capacity

0.58x498 lots=288.84 REU's (round to 289)

3 REU's for the Clubhouse

Resultant available capacity=850-289-3=558 REU's

If you have any questions please feel free to contact me. Thank you.

Brent W. LaVanway, P.E.
President, Director of Engineering

CC: G:\18-039\docs\18-039reuanalysis.doc

10C

July 8, 2022

GEOTECHNICAL MEMORANDUM

RE: Pioneer Cemetery
Groundwater & Geotechnical Investigation

By: Nils Lindwall, P.E.
Senior Project Manager | Geotechnical Engineer
Spicer Group, Inc.

This memorandum summarizes Spicer Group's investigation of subsurface conditions at Howell Township's Pioneer Cemetery, located in Livingston County, Michigan. Pioneer Cemetery is located on North Burkhart Road, north of Marr Road, as shown on Figure 1.

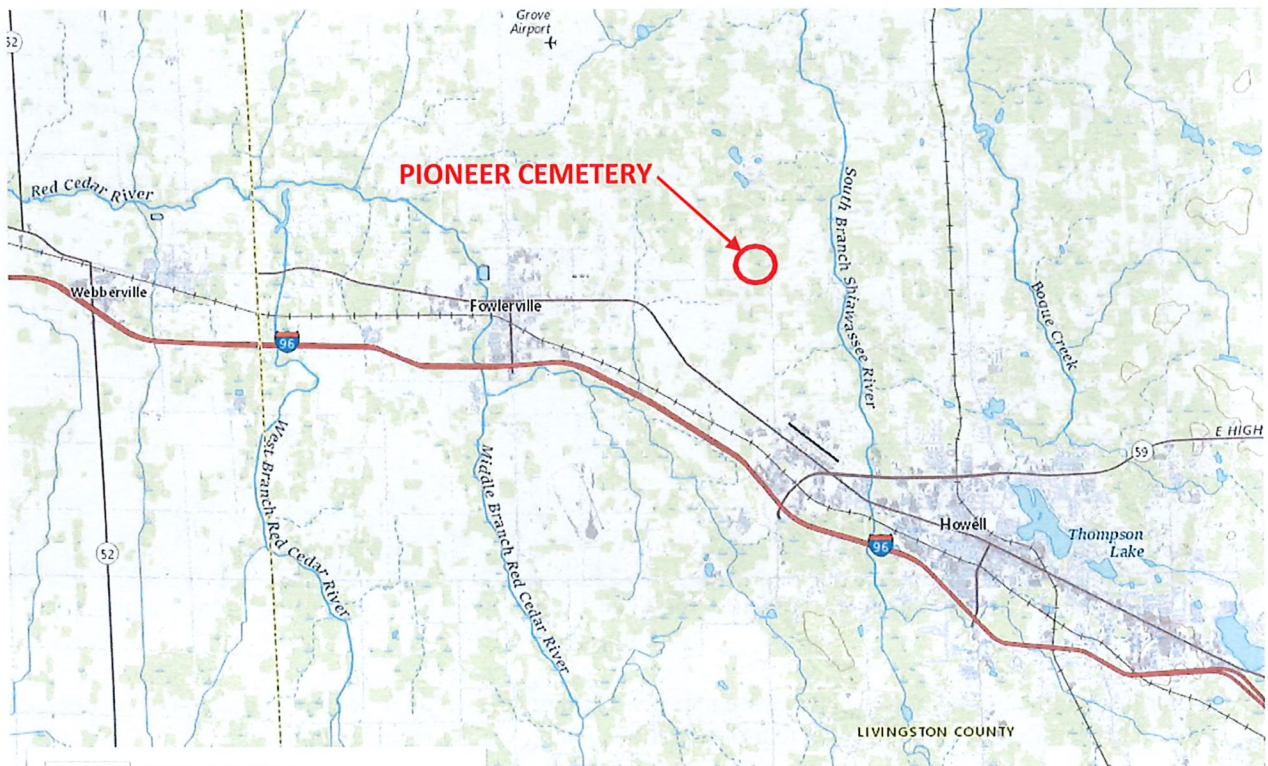


Figure 1 – Vicinity Map

Project Overview:

The cemetery is located on an approximately 3½ -acre parcel. The northeastern quarter of the site is cleared and maintained as lawn and the remainder is wooded. The east half of the cleared area currently contains graves. A “P”-shaped roadway traverses the site. High groundwater has limited the use of the cemetery. The Township is considering options for mitigating the high groundwater or modifying the use of the site. The purpose of our work was to investigate subsurface conditions, monitor groundwater levels, and provide

Note that groundwater levels will be influenced by weather and climate and likely vary seasonally.

Analysis & Conclusions

Soils encountered in the borings consisted of silty clay and clay with sandy and silty seams. The upper soils were generally medium stiff, but became very stiff to hard at a depth of about 4 to 4.5 feet. Groundwater was encountered at depths of 2 to 3.5 feet during drilling.

Interpolating between groundwater measurements from the monitoring wells, and assuming a planar groundwater surface, results in the idealized groundwater surface as shown in the following figure:



Figure 3 – Groundwater Contours

Groundwater appears to generally flow from east-northeast to south-southwest, and approximates the surface topography. We expect much of the groundwater flows through the sandy and silty seams that were encountered throughout our explorations. The groundwater table is generally about 2.5 feet below the existing ground surface. A hole excavated below this level will fill with water to about that level. We understand that graves are about 6 feet deep, which would result in about 3.5 feet of water depth. Concrete burial vaults will become buoyant in about 1 to 1.5 feet of water, depending upon the specific dimensions. We expect that groundwater levels must be at least 5 feet – and preferably 6 feet – below the ground surface to be able to utilize the site for standard burials.

We considered two potentially feasible mitigation alternatives: an underdrain system and site fill.

An underdrain system would consist of perforated pipe installed in a trench and backfilled with permeable aggregate. Pipe should be 6-inch diameter PVC. Excavation can either be performed with an excavator or a trencher. The permeable aggregate can either be clean sand (MDOT Class II AA) or coarse, uniform aggregate such as MDOT 34R. If sand is used, the pipe should incorporate a geotextile sock. If coarse aggregate is used geotextile blanket material should be placed between the aggregate and in-place soil. The drain would intercept and locally lower the groundwater table. We would recommend outletting to a low area on site. It appears that

July 8, 2022
Page 5 of 5

Alternatively, the open area of the site, as well as the wooded portion of the property could be used as a scatter garden for cremated remains.

Recommendations

In our opinion, the underdrain option is the most cost-effective alternative and will maintain the site close to its current configuration. We would develop a simple bidding and construction package with drawings and specifications for the work. We do not anticipate that additional survey would be required, though the elevation of the proposed outlet location should be confirmed. Since the drain would not outlet into wetlands, no EGLE permit is necessary. Similarly, the project disturbance is not large enough to require an SESC permit. With the drain will discharging on Township property and the flow will being minor, authorization by the neighbor adjacent to the outlet is not required; however, we suggest notifying the neighbor to avoid future dispute.



**LOG OF HAND
AUGER BORINGS**

Client: Howell Township
Project No: 132438SG2022

Project Name: Pioneer Cemetery Groundwater Investigation
Project Location: Livingston County, Michigan

HA01

Location: NW corner of driveway loop
Lat: 42.668822
Surface: grass

Elev: 912 ft
Long: -83.996158
GW: 2.5 ft after drilling

By: JLH/NWL
Date: 5/16/2022

Depth	Material Description	Sample	DCPT	Other
0	5 inches topsoil			
1	Brown, fine SILTY SAND (SM), few fine gravel - moist - loose			
2	Brown SILTY CLAY (CL-ML), trace fine sand and gravel - wet - medium stiff		4 8 7	
3	Brown CLAY (CL), trace coarse sand, numerous fine sandy silt layers - wet - medium stiff trace coarse gravel			
4	becomes very stiff, scattered silty sand seams		12 21 23	
5				
6				

Refusal on coarse gravel at 6.0 feet below ground surface. Well installed: screened 6 ft to 1 ft, filter sand 6 ft to 1 ft, 0.5-ft bentonite seal, plastic surface box.



**LOG OF HAND
AUGER BORINGS**

Client: Howell Township
Project No: 132438SG2022

Project Name: Pioneer Cemetery Groundwater Investigation
Project Location: Livingston County, Michigan

HA03

Location: S side of driveway loop
Lat: 42.668558
Surface: grass

Elev: 913 ft
Long: -83.99591
GW: 2.0 ft during drilling

By: JLH/NWL
Date: 5/16/2022

Depth	Material Description	Sample	DCPT	Other
0	12 inches loamy topsoil			
1	Mottled brown SILTY CLAY (CL-ML), trace fine sand - moist - medium stiff			
2	becomes light brown, wet		8 7 8	
3	few fine to medium sand			
4				
5	becomes hard			
6	numerous fine SILTY SAND seams, trace fine gravel		12 30 38	
7	trace fine to coarse gravel			
8	few fine to coarse SAND			

Boring terminated at 8 feet below ground surface. Well installed: screened 8 ft to 3 ft, filter sand 8 ft to 1 ft, 0.5-ft bentonite seal, plastic surface box.

10D

ADD REU

Permit #	Contractor	Job Address	Fee Total
PREU22-001	K & K LEASING LLC	1695 HYDRAULIC DR	\$6,700.00
Work Description:			

Total Permits For Type: 1
Total Fees For Type: \$6,700.00

Commercial Land Use

Permit #	Contractor	Job Address	Fee Total
P22-041	K & K LEASING LLC	1695 HYDRAULIC DR	\$250.00
Work Description: SITE GRADING AND BALANCING			
P22-098	K & K LEASING LLC	1695 HYDRAULIC DR	\$250.00
Work Description: CONSTRUCTION OF 8 SELF STORAGE BUILDINGS, A 720 SQ FT OFFICE BUILDING AND PAVED AREA FOR OUTDOOR STORAGE.			

Total Permits For Type: 2
Total Fees For Type: \$500.00

MHOG

Permit #	Contractor	Job Address	Fee Total
PMHOG22-020	JANUSZKA CHERYL	3041 IVY WOOD CIR	\$0.00
Work Description:			
PMHOG22-019	WESTVIEW CAPITAL LLC	3079 IVY WOOD CIR	\$0.00
Work Description:			
PMHOG22-017	BAIN JOYCE J	2424 OAK GROVE RD	\$0.00
Work Description:			

Total Permits For Type: 3
Total Fees For Type: \$0.00

Residential Land Use

Permit #	Contractor	Job Address	Fee Total
P22-090	SABO MARCUS	989 W ALLEN	\$50.00
Work Description: GROUND MOUNTED SOLAR ARRAY			
P22-093	GUENTHER RYAN AND LINDE	4747 W MARR	\$75.00
Work Description: 3061 SQ FT TWO STORY DWELLING ON A FULL BASEMENT WITH A 3 CAR ATTACHED GARAGE			
P22-091	BOWMAN LUKE AND ANNA	3680 W MARR	\$50.00
Work Description: 218 SQ FT DECK ATTACHED TO HOUSE			
P22-089	MACHIN PHILIP AND ANDREA	3691 AMBER OAKS DR	\$50.00
Work Description: 16 X 32 ABOVE GROUND POOL			
P22-101	ROLTSCH JOSHUA AND MELIN	3288 HILL HOLLOW LN	\$50.00
Work Description: ROOFTOP SOLAR SYSTEM			
P22-096	WESTVIEW CAPITAL LLC	3079 IVY WOOD CIR	\$105.00
Work Description: 1576 SQ FT 2 STORY DWELLING ON A FULL UNFINISHED BASEMENT WITH A 2 CAR ATTACHED GARAGE.			
P22-095	VELFLING MICHELLE	3195 FISHER RD	\$75.00
Work Description: REPAIR OF FIRE DAMAGE			
P22-103	SMITH SCOTT	889 W BARRON	\$75.00
Work Description: 646 SQ FT ADDITION ON A CRAWL AND A 176 SQ FT ADDITION ON PIERS.			
P22-099	GAUCI CHARLES AND PHYLLI	2446 AMBERWOOD TRL	\$10.00
Work Description: REMOVE AND REPLACE ROOFING SYSTEM - NO STRUCTURE CHANGES			
P22-100	GREEN RANDALL AND LINDS	3150 CRANDALL	\$75.00
Work Description: 2,880 SQ FT SINGLE STORY DWELLING ON A CRAWL SPACE / BASEMENT WITH A 2 CAR ATTACHED GARAGE.			
P22-102	GOLSCH KEVIN AND JENNIFE	2201 BREWER	\$75.00
Work Description: 1,883 SQ FT 2 STORY DWELLING ON A FULL BASEMENT WITH A 3 CAR ATTACHED GARAGE.			
P22-094	BRIDEAU WAYNE AND WAND	2078 OAK GROVE RD	\$50.00
Work Description: 13 X 25 ROOF COVER OVER EXISTING PATIO			
P22-092	GRILL RICHARD AND JULIE	2263 KAREN DR	\$10.00
Work Description: REROOF - ON HOUSE AND GARAGE NO STRUCTURAL CHANGES			
P22-097	SAMPEY DENNIS AND ELIZAB	5478 SPRING CRK	\$10.00
Work Description: GENERATOR INSTALLATION			
P22-088	TRUSS SHANE	3500 MASON RD	\$50.00
Work Description: 17 X 34 INGROUND POOL AND FENCE			

Total Permits For Type: 15
Total Fees For Type: \$810.00

Sewer Connection

Permit #	Contractor	Job Address	Fee Total
PWS22-004	K & K LEASING LLC	1695 HYDRAULIC DR	\$5,000.00

Work Description:

Total Permits For Type: 1
Total Fees For Type: \$5,000.00

Sign

Permit #	Contractor	Job Address	Fee Total
P22-018	K & K LEASING LLC	1695 HYDRAULIC DR	\$225.00

Work Description: 62" X 173" GROUND SIGN.

Total Permits For Type: 1
Total Fees For Type: \$225.00

Water Connection

Permit #	Contractor	Job Address	Fee Total
PWS22-003	BAIN JOYCE J	2424 OAK GROVE RD	\$5,000.00

Work Description:

PWS22-005	K & K LEASING LLC	1695 HYDRAULIC DR	\$5,000.00
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Work Description:

Total Permits For Type: 2
Total Fees For Type: \$10,000.0

Report Summary

Population: All Records
Permit.DateIssued Between
7/1/2022 12:00:00 AM AND
7/31/2022 11:59:59 PM

Grand Total Fees:

\$23,235.0

Grand Total Permits:

25

10E

Monthly Activity Report for July 2022 – Assessing Dept/Brent Kilpela

MTT UPDATE:

2022

Chestnut Woods v Howell Township: Filed answer to appeal on June 22nd. The Michigan Tax Tribunal will schedule discovery and hearing dates according to their calendar.

Antolin Interiors USA, Inc. v Howell Township: Filed answer to appeal on July 18th. The Michigan Tax Tribunal will schedule discovery and hearing dates according to their calendar.

SMALL CLAIMS TRIBUNAL:

Violet Storey v Howell Township: Hearing has been scheduled for September 1st.

ASSESSING OFFICE:

ASSESSOR: Field work is progressing. We have done sections 5-9 thus far. July Board of Review was held on July 19th. The July Board of Review docket contained 7 petitions. Recent legislation was handed down that changes the way Principal Residence Exemptions will be handled going forward. The Board of Review was stripped of the power to rule on previous year exemptions. The Assessor now has the power to put eligible PRE's in place for the 3 previous years. Administrative items still must be addressed but this is common when legislation is first passed. The Township Board needs to be aware of a change with any future IFT applications. This change affects personal property included in the application. If the personal property qualifies for the Eligible Manufacturing Personal Property (EMPP) Exemption, then it should **not** be included in the application.

OTHER: Attended a walkthrough meeting at our Waste Water Treatment Plant with the new operator. Prepared year end wrap for fiscal year 2021-2022.

10F

Oceola Township
Fire Authority Meeting:
July 20, 2022 6pm

Personnel Committee: Personnel Committee recommended and Board approved the same salary increase for the Fire Chief as the rest of the crew received.

Software: The State requires Fire Departments to have software that tracks certain information on their runs. Board approved software from First Due for \$16,000 per year. The current software being used will not be compliant as of January 1st, and the current software company has been unresponsive to questions about being updated.

MIOSHA: MIOSHA received a complaint about the Fire Authority and made an unscheduled visit on July 1st and requested a lot of information and documents from the Department. MIOSHA will be returning on July 22nd to conduct interviews with staff.

Union Contract: Kevin will be starting negotiations soon on the new union contract.

Respectfully submitted,
Jonathan Hohenstein

10G

Oceola Township
MHOG Meeting:
July 20, 2022 5pm

Lawsuits: Discussed the status of the Hometown and Padnos lawsuits.

REU Evaluation: Discussed and approved an REU evaluation to be completed by Tetra Tech. An REU was set at 218 gallons per day in 2013. Greg has looked into what an average house is using today and it is around 150 gallons per day. The evaluation will also look into the impact that this has on other sources of revenue. It was also brought up that the REU calculation does not include irrigation water. Irrigation water is what generates MHOG's revenue but also causes the most demand on the system. The MHOG Board will seriously need to consider how to accurately reflect the cost of this extra demand and the improvements to the system that it requires.

Approvals: The Board approved the replacement of failing concrete around the north plant lime silo and a new sonar level sensor for the hypochlorite day tank.

Respectfully submitted,
Jonathan Hohenstein

10L

LAND PURCHASE AGREEMENT

This LAND PURCHASE AGREEMENT ("Agreement") is made July 21, 2022, by and between Leo Soave ("Purchaser") and Howell Township, of 3525 Byron Rd, Howell, MI 48855 ("Seller") as follows:

BACKGROUND

Seller desires to sell, and Purchaser desires to purchase vacant land located in Howell Township, Livingston County, Michigan (the "Land"), which Land is owned by Seller in fee simple.

AGREEMENT

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS AND CONDITIONS SET FORTH HEREIN THE PARTIES AGREE AS FOLLOWS:

1. Land. Seller agrees to sell and Purchaser agrees to purchase vacant Land located in Howell Township, Livingston County, State of Michigan, identified as Parcel ID No. 4706-17-400-031, legally described on Exhibit "A".

2. Purchase Price. The Purchase Price shall be two hundred fifteen thousand Dollars (\$215,000.00), paid in cash in United States currency or its equivalent at closing.

3. Deposit. Purchaser hereby tenders to Seller a good faith deposit in the amount of Six Thousand Dollars (\$6,000.00) with Scott Griffith at Griffith Realty, 502 W. Grand River Ave., Brighton, Michigan 48116, to be credited to the Purchase Price at the time of Closing. This deposit is nonrefundable except as may otherwise be provided in this Agreement. An earnest money or escrow agreement consistent with this Agreement, to the extent required by Griffith Realty, shall be completed by both parties to effectuate this Agreement.

4. Payment of Property Taxes. Property taxes for the year of Closing shall be pro-rated as of the date of Closing on a calendar basis based upon the amount of such taxes if known at the time of Closing. Taxes will be treated as if they cover the calendar year in which they are first billed. Taxes first billed in years prior to year of Closing will be paid by Seller without proration. If any bill for taxes is not issued as of the date of Closing, the then current taxable value and tax rate and any administrative fee will be substituted.

5. Inspection Period. Purchaser shall have sixty (16) days following the execution date noted in this Agreement ("Inspection Period") to conduct its due diligence. If Purchaser is not satisfied, in its discretion, that it has been or likely will be satisfied with the conditions required of this Agreement, Purchaser may terminate this Agreement by providing written notice to Seller, and upon such termination, Purchaser's good faith deposit shall be returned. Upon commencement of the Inspection Period and throughout the term of this Agreement, Purchaser and its agents shall have the right to enter upon the Land to conduct the Examinations, which shall include soil borings, surveys, drilling and all tests normally performed for the determination of the suitability of real estate and for the collecting of all information necessary thereto (except to the extent that any right to exercise Purchaser's termination ends as of the expiration of the Inspection Period). The Examinations are to be made at Purchaser's expense and Purchaser shall be liable for any damage (ordinary wear and tear excepted) caused to the Land during said Examinations. Further, Purchaser agrees to indemnify and hold harmless Seller from and against

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any damages or claims for injuries to any persons or to the Land that arise as a direct result of such Examinations, except to the extent such damages or claims are caused by or arise from preexisting conditions or Seller's, or its officers', directors', members', managers', principals', employees' or agents', negligence or intentional misconduct, which indemnity shall survive the Closing or any earlier termination of this Agreement. Purchaser shall provide Seller with evidence of insurance coverage, from Purchaser or any of its consultants entering the Land pursuant to this Section. If Purchaser terminates during the Inspection Period, Purchaser shall provide to Seller all reports and information obtained regarding the Land.

6. Closing Deadline; Schedule. The parties agree to schedule a closing at the earliest possible time, but in no event later than twenty-one (21) days following the date of this Agreement. Seller and Purchaser agree to use Bell Title Insurance Company, 6910 S. Cedar St., Suite 1, Lansing, Michigan 48911, as closing agent.

7. Seller's Closing Deliveries. At the Closing, Seller shall deliver to the Purchaser a Limited Warranty or Special Warranty Deed conveying to Purchaser only such title to the Land as is held by Seller, executed and acknowledged by Seller in recordable form.

8. Purchaser's Closing Deliveries. At Closing, Purchaser shall deliver to Seller the balance of the Purchase Price in the form of cash in U.S. currency or certified funds, and execute a signed Closing Statement, transfer tax declarations and state and local law reports and forms, evidence satisfactory to establish Purchaser's authority to purchase the Land and other documents as are necessary and appropriate for the consummation of this transaction by Purchaser.

9. Closing Costs. Seller shall pay for the following costs of the Closing, including (i) all transfer and/or conveyance taxes, if any, assessed in connection with the Closing, (ii) the premium for the Title Policy. Purchaser will pay for the following costs of the Closing, including (iii) any Closing fee charged by the title company in connection with this transaction, (iv) any special assessments (water, sewer or otherwise) that currently are due at the time this Agreement is executed, and (v) any and all other regular and customary costs and expenses related to the Land.

10. Title. Seller shall at its own expense order a commitment for an owner's policy of title insurance (the "Title Policy") within ten (10) days of the date of this Agreement. If Purchaser is not satisfied with the title to Land as shown by the Title Policy, Purchaser may cancel this Agreement within thirty (30) days after the date of this Agreement, but not thereafter. Seller shall have no obligation to cure any alleged defects or objections to title to the Land.

11. Survey. Within ten (10) days of the date of this Agreement, Purchaser may order, at its own expense, a new ALTA survey (the "Survey") of the Land, showing the legal description of the Land, any boundary encroachments that may impact the Land, all easements affecting the Land and such other matters desired by Purchaser. If Purchaser is not satisfied with the Land as shown by the Survey, Purchaser may cancel this Agreement within thirty (30) days after the date of this Agreement, but not thereafter. Seller shall have no obligation to cure any alleged defects or objections shown by the Survey.

12. Environmental Matters. Within ten (10) days of the date of this Agreement, Purchaser may, at its own expense, conduct such environmental site evaluations of the Land as it deems appropriate including, without limitation, a Phase I and Phase II environmental site assessment and/or a Baseline Environmental Assessment (collectively, the "Site Investigation Reports"). If

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Purchaser is not satisfied with the Land as shown by the Site Investigation Reports, Purchaser may cancel this Agreement within thirty (21) days after the date of this Agreement, but not thereafter. Seller shall have no obligation to cure any alleged defects or objections shown by the Site Investigation Reports.

13. Representations of Seller. Seller hereby represents to Purchaser that to the best of Seller's knowledge, as of the date hereof and on the date of Closing, but without additional investigation by Seller:

A. Seller has the right, power and authority to enter into this Agreement and to sell the Land in accordance with the terms hereof, and Seller has granted no option or right of first refusal to any other person or entity to purchase the Land and has not entered into any contract to sell the Land as of the date of the Agreement. The individuals signing this Agreement and all other documents executed or to be executed pursuant hereto on behalf of Seller are and shall be duly authorized to sign the same on Seller's behalf and to bind Seller thereto.

B. Except as set forth in the Site Investigation Reports, Seller has not received any notice of, and has no knowledge of, existing violations on the Land or any portion thereof of any zoning, building, fire, health, pollution, environmental protection, hazardous or toxic substance or waste disposal law or ordinance.

C. Seller will convey the Land to Purchaser pursuant to the Limited Warranty or Special Warranty Deed.

D. All prior due general real estate related property taxes and assessments shall have been paid when due.

E. There is no litigation, proceeding or investigation pending or, to and to Seller's officials' knowledge, threatened against or involving Seller or the Land, and Seller does not know or have reason to know of any grounds for any such litigation, proceeding or investigation, which could have an adverse impact on Purchaser or Purchaser's title to or use of the Land, either before or after Closing.

F. Seller is not a "foreign person" as that term is defined in section 1445 of the Internal Revenue Code of 1986, as amended.

G. Except as set forth in any reports obtained or provided and to Seller's officials' knowledge, the Land and Seller are in full compliance with all requirements of federal, state and local environmental, health or safety laws, regulations and administrative or judicial decrees, as amended (the "Environmental Laws"), limited only to within the time-frame from when the seller acquired the interest being conveyed and the closing of the Land to the Purchaser.

H. With the exception of the documents provided to the Purchaser and to Seller's officials' knowledge, there are no reports, studies, appraisals, engineering reports, correspondence, agreements with governmental authorities, wetland studies or reports, flood plain studies or reports and/or other written information related to the Land of which Seller is aware or that are in Seller's possession or control.

13. Representations of Purchaser. Purchaser hereby represents to Seller, which representations and warranties shall survive Closing, that as of the date hereof, and on the date of Closing:

A. Purchaser has the full power and authority to execute, deliver and perform this Agreement and all of Purchaser's obligations under this Agreement; and

B. The individuals signing this Agreement and all other documents executed or to be executed pursuant hereto on behalf of Purchaser are and shall be duly authorized to sign the same on Purchaser's behalf and to bind Purchaser thereto.

C. Purchaser acknowledges that the Land was obtained by Seller through foreclosure sale and may dictate that title is transferred with a covenant or special warranty deed recognizing the same.

14. Default and Remedies.

A. Purchaser's Default; Seller's Remedy. If the Purchaser fails to close on the purchase of the Land, Seller may, as its sole and exclusive remedy terminate this Agreement by giving an appropriate Notice of Default as provided below. Upon termination, Seller may retain any deposit paid by Purchaser to Seller, except as otherwise provided in this Agreement.

B. Seller's Default; Purchaser's Remedies. In the event Seller fails to timely perform any material act, or provide any material document or information required to be provided by Seller, then Purchaser shall be entitled to (i) terminate this Agreement, and (ii) seek return of the deposit.

C. Notice of Default. In the event either party declares the other to be in default, such declaration shall be in writing, with an outline of the actions required to cure such default. The recipient of such notice of default shall have 30 days to cure the alleged default.

15. Sale and Assignment of Agreement. Neither party may assign its rights or delegate its obligations under this Agreement without the consent of the other party, which consent may be withheld in such other party's sole discretion.

16. Right to Split Land. The Land may be located within the vicinity of farmland or farm operation. Generally accepted agricultural and management practices which may generate noise, dust, odors, and other associated conditions may be used and are protected by the Michigan right to farm act. The Seller grants to the Purchaser the right to make ___ division(s) under section 108 of the Land Division Act, Act No 288 of the Public Acts of 1967. (If no number is inserted, the right to make divisions stays with the portion of the parent tract retained by the Seller; if all of the parent tract is conveyed, then all division rights are granted.) No number or will shall be inserted on the line before divisions and has been intentionally left blank.

17. Special Assessments. Purchaser acknowledges that there are Special Assessments for sewer and water against the Land that will come due for payment in the future and that are in the principal amount of \$145,865.00 exclusive of interest. Purchaser agrees to pay said Special Assessments in full as they come due. Purchaser agrees to pay said special assessments in full at closing. Once easement is agreed upon, Buyer shall have 3 business days to review and approve easement granted to 3295 N BURKHART RD HOWELL, property owner.

18. Miscellaneous.

A. TIME IS OF THE ESSENCE OF THIS AGREEMENT.

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B. This Agreement shall be governed by and construed under the laws of the state of Michigan.

C. This Agreement supersedes all prior discussions and agreements between Seller and Purchaser with respect to the conveyance of the Land and all other matters contained herein and constitutes the sole and entire agreement between Seller and Purchaser with respect thereto. This Agreement may not be modified or amended unless such amendment is set forth in writing and signed by both Seller and Purchaser.

D. All notices, payments, demands or requests required or permitted to be given pursuant to this Agreement shall be in writing and shall be deemed to have been properly given or served effective on the second (2nd) business day after being deposited in the United States mail, postpaid and registered or certified with return receipt requested; or when sent by private courier service for same-day delivery or one day after being sent by private courier service for next-day delivery. Notices shall be sent to the respective addresses set forth below:

To Seller: Howell Township
Attention: Jean Graham, Clerk
3525 Byron Rd
Howell, MI 48855

With a copy to: Fahey Schultz Burzych Rhodes PLC
Attn: Christopher S. Patterson
4151 Okemos Road
Okemos, MI 48864
Phone: 517-381-0100

To Purchaser: Leo Soave
2771 Seven Mile Road
Suite C
Livonia, MI 48152

With a copy to: Cheryl McKinnon
Real Estate One Novi
41430 Grand River
Novi, MI 48375
(248)798-3555

E. This Agreement shall inure to the benefit of and bind the parties hereto and their respective heirs, legal representatives, successors and permitted assigns.

F. Purchaser shall be responsible for any compensation owing to any broker or consultant that they created in connection with the transaction contemplated by this Agreement and agrees to indemnify and hold the Seller harmless against any and all liability, loss, cost, damage and expense (including, but not limited to, attorneys' fees and costs of litigation) that the

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EXHIBIT A

Legal Description of Land:

A parcel of land situated in Howell Township, Livingston County, Michigan containing approximately 18.13 acres, legally described as follows:

SEC 17 T3NR4E HOWELL TWP COMM AT THE SE COR OF SEC 17; TH ALG THE E LINE OF SEC 17 AND CL OF BURKHART RD, N00°01'51"W 816.50 FT, TO POB. TH S89°08'53"W 1323.59 FT; TH N00°05'04"W 781.23 FT; TH S89°09'15"E 1324.34 FT TH S00°01'51"E 66.01 FT; TH N89°09'15"W 519.91 FT; TH S01°06'25"W 304.95 FT TH S89°09'15"E 525.97 FT; TH S00°01'51"E, 82.12 FT; TH S89°58'09"W, 360.33 FT; TH S00°01'51"E, 148.22 FT; TH SOUTHERLY ON AN ARC RIGHT, HAVING A LENGTH OF 16.41 FT, A RADIUS OF 533.00 FEET, A CENTRAL ANGLE OF 01°45'52", AND A LONG CHORD WHICH BEARS S 00°51'05" W, 16.41 FT; TH N 89°58'09"E, 360.58 FT; TH S00°01'51"E, 124.25 FT, TO THE POB. CONT 18.13 AC M/L SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD. SPLIT/COMBINED ON 01/15/2020 FROM 4706-17-400-029, 4706-17-400-026;

12

Howell Township
Invoice and Check Registers
As of 7/31/2022

User: BRENT KILPELA
 DB: Howell Twp
 Inv Num
 Inv Ref#

Vendor Description
 Inv Date Entered By
 Due Date
 Inv Amt
 Amt Due
 Status
 Jnlized Post Date

6/30/2022
 21008
 HOWELL TOWNSHIP PETTY CASH
 PETTY CASH REPLENISHMENT
 101-247-703.00
 101-265-727.01
 101-265-726.00

BRENT KILPELA
 BOARD OF REVIEW SALARY
 TWP HALL OFFICE SUPPLIES EXPENSE
 TWP HALL POSTAGE EXPENSE
 06/30/2022
 91.17
 0.00
 Paid
 Y
 06/30/2022

6/14/2022
 21046
 DTE ENERGY
 2700 TOOLEY JUNE 2022
 592-442-920.00

06/14/2022
 BRENT KILPELA
 WWTP ELECTRICITY EXPENSE
 07/06/2022
 183.53
 0.00
 Paid
 Y
 06/22/2022

6/15/2022
 21047
 DTE ENERGY
 271 E HIGHLAND JUNE 2022
 592-442-920.00

06/15/2022
 BRENT KILPELA
 WWTP ELECTRICITY EXPENSE
 07/07/2022
 35.63
 0.00
 Paid
 Y
 06/22/2022

0004673438
 21048
 LIVINGSTON DAILY PRESS & ARGUS
 MAY PUBLICATIONS
 101-268-882.00
 101-101-900.00

05/31/2022
 BRENT KILPELA
 TWP AT LARGE SPRING CLEAN UP EXPENSE
 TWP BOARD PRINT & PUBL EXPENSE
 06/20/2022
 350.00
 120.00
 230.00
 0.00
 Paid
 Y
 06/22/2022

6/12/2022
 21049
 PURCHASE POWER
 PREPAID POSTAGE
 101-000-123.00

06/12/2022
 BRENT KILPELA
 GEN FUND PREPAID EXPENSES
 07/10/2022
 1,510.00
 0.00
 Paid
 Y
 06/22/2022

IN-7021
 21050
 SMART BUSINESS SOURCE, LLC
 NON PROFIT STAMP FOR ELECTIONS
 101-191-727.00

06/21/2022
 BRENT KILPELA
 ELECTION SUPPLIES EXPENSE
 07/21/2022
 201.75
 201.75
 0.00
 Paid
 Y
 06/22/2022

2165461
 21052
 CARLISLE WORTMAN ASSOC, INC.
 BD Bond Refund
 101-000-203.00

06/27/2022
 BRENT KILPELA
 BSP22-0003
 07/04/2022
 32.50
 32.50
 0.00
 Paid
 Y
 06/27/2022

2165462
 21053
 CARLISLE WORTMAN ASSOC, INC.
 GENERAL CONSULTATION
 101-400-801.00

06/13/2022
 BRENT KILPELA
 PLANNING-CONTRACTED PLANNER EXPENSE
 07/13/2022
 750.00
 750.00
 0.00
 Paid
 Y
 06/27/2022

6/27/2022
 21054
 MARK & JULIE SANDERS
 ZBA APPLICATION REFUND
 101-000-609.00

06/27/2022
 BRENT KILPELA
 GEN FUND ZBA FEES INCOME
 07/15/2022
 400.00
 400.00
 0.00
 Paid
 Y
 06/27/2022

09146
 21055
 LEPPER LANDSCAPES & NURSERY
 LAWN MAINTENANCE APRIL - JUNE
 101-265-931.00

06/27/2022
 BRENT KILPELA
 TWP HALL GROUNDS CARE EXPENSE
 07/01/2022
 4,125.00
 4,125.00
 0.00
 Paid
 Y
 06/27/2022

User: BRENT KILPELA
 DB: Howell Twp
 Inv Num
 Inv Ref#

Vendor Description
 GL Distribution

Inv Date Entered By
 Due Date
 Inv Amt
 Amt Due
 Status
 Jnlized Post Date

202609298445	CONSUMERS ENERGY	06/20/2022	07/15/2022	52.48	0.00	Paid	Y	06/27/2022
21056	JUNE 2022	BRENT KILPELA						
	101-265-922.00	TWP HALL NATURAL GAS EXPENSE		52.48				
001378525133	MUTUAL OF OMAHA INSURANCE COMPANY	06/20/2022	07/15/2022	186.38	0.00	Paid	Y	07/01/2022
21057	JULY 2022	BRENT KILPELA						
	101-265-721.00	TWP HALL LIFE INSURANCE EXPENSE		186.38				
206168805257	CONSUMERS ENERGY	06/17/2022	07/14/2022	24.05	0.00	Paid	Y	06/27/2022
21058	391 N BURKHART RD	BRENT KILPELA						
	592-442-922.00	WWTTP NATURAL GAS EXPENSE		24.05				
202164321232	CONSUMERS ENERGY	06/20/2022	07/14/2022	97.41	0.00	Paid	Y	06/27/2022
21059	1222 PACKARD DR	BRENT KILPELA						
	592-442-922.00	WWTTP NATURAL GAS EXPENSE		97.41				
206613589173	CONSUMERS ENERGY	06/22/2022	07/15/2022	108.43	0.00	Paid	Y	06/27/2022
21060	2571 OAKGROVE	BRENT KILPELA						
	592-442-922.00	WWTTP NATURAL GAS EXPENSE		108.43				
6/27/2022	LIVINGSTON COUNTY TREASURER	06/27/2022	07/15/2022	765.00	0.00	Paid	Y	06/27/2022
21061	MOBILE HOME FEES	BRENT KILPELA						
	701-000-239.00	TRUST MOBILE HOME TAX PAYABLE		765.00				
208.0627003	HOWELL PARKS AND RECREATION	06/27/2022	07/27/2022	28,375.00	0.00	Paid	Y	06/27/2022
21062	HAPRA PART FEE 3RD QTR	BRENT KILPELA						
	220-000-801.00	REC FUND CONTRACTED SVCS EXPENSE		28,375.00				
06282	FIRE PROTECTION PLUS, INC	06/28/2022	07/15/2022	205.00	0.00	Paid	Y	06/28/2022
21063	FIRE EXTINGUISHER INSPECTION	BRENT KILPELA						
	101-265-930.00	TWP HALL GROUND EQUIP REPAIR EXPENSE		205.00				
763365	PVS TECHNOLOGIES, INC	06/27/2022	07/27/2022	1,031.00	0.00	Paid	Y	06/28/2022
21064	SODA ASH 49 BAGS	BRENT KILPELA						
	592-442-729.00	WWTTP CHEMICALS EXPENSE		1,031.00				
44655	MICHIGAN TWP ASSOC	05/30/2022	07/01/2022	6,852.61	0.00	Paid	Y	07/01/2022
21065	HOWELL TWP DUES	BRENT KILPELA						
	101-265-957.00	TWP HALL DUES & SUBSCRIPTION EXPENSE		6,852.61				

User: BRENT KILPELA
 DB: Howell Twp
 Inv Num
 Inv Ref#

Vendor Description
 GL Distribution

Inv Date Entered By
 Due Date
 Inv Amt
 Amt Due
 Status
 Jnlized Post Date

5720	PERFECT MAINTENANCE	06/30/2022	07/15/2022	195.00	0.00	Paid	Y
21066	JULY 2022	BRENT KILPELA					
	101-265-775.00	TWP HALL OFFICE CLEANING EXPENSE		195.00			07/01/2022
6/29/2022							
21067	JULIUS DAUS III	06/29/2022	07/15/2022	442.92	0.00	Paid	Y
	ZONING ADMINISTRATOR EXPENSES	BRENT KILPELA					
	101-402-860.00	ZONING MILEAGE & EXPENSES		187.79			06/29/2022
	101-265-727.01	TWP HALL OFFICE SUPPLIES EXPENSE		255.13			
6/30/2022							
21068	CAROL MAKUSHIK	06/30/2022	07/15/2022	31.12	0.00	Paid	Y
	DEPUTY TREASURER MILEAGE	BRENT KILPELA					
	101-253-860.00	TREASURER MILEAGE & EXPENSES		31.12			06/30/2022
6/30/2022							
21069	MHOG	06/30/2022	07/15/2022	2,840.00	0.00	Paid	Y
	MHOG METERS FOR JUNE 2022	BRENT KILPELA					
	701-000-210.00	TRUST DUE TO OTHER GOV UNIT (MHOG)		2,840.00			06/30/2022
CS100139							
21070	CHLORIDE SOLUTIONS, LLC	06/17/2022	07/17/2022	13,428.57	0.00	Paid	Y
	DUST CONTROL	BRENT KILPELA					
	204-000-802.00	ROAD CHLORIDE EXPENSE		13,428.57			06/30/2022
214836							
21071	SPICER GROUP	06/27/2022	07/27/2022	155.25	0.00	Paid	Y
	DANGEROUS BUILDINGS	BRENT KILPELA					
	101-447-801.00	ENGINEERING CONTRACTED SVCS EXPENSE		155.25			06/30/2022
OE-52570-1							
21072	SMART BUSINESS SOURCE, LLC	06/30/2022	07/15/2022	227.28	0.00	Paid	Y
	OFFICE SUPPLIES	BRENT KILPELA					
	101-265-727.01	TWP HALL OFFICE SUPPLIES EXPENSE		227.28			06/30/2022
68364							
21073	ECONO PRINT	06/30/2022	07/15/2022	1,065.49	0.00	Paid	Y
	2022 SUMMER TAX BILLS	BRENT KILPELA					
	101-253-726.01	TREASURER POSTAGE		1,065.49			07/01/2022
INV-10915							
21074	UTS ACCOUNTING DEPT	06/16/2022	07/15/2022	62.50	0.00	Paid	Y
	SERVICE CALL	BRENT KILPELA					
	101-265-930.01	TWP HALL OFFICE EQUIPMENT & REPAIR		62.50			06/30/2022
6/22/2022							
21075	COMCAST	06/22/2022	07/13/2022	424.49	0.00	Paid	Y
	JULY 2022	BRENT KILPELA					
	101-265-850.00	TWP HALL TELEPHONE EXPENSE		424.49			07/01/2022

INVOICE REGISTER REPORT FOR HOWELL TOWNSHIP

08/01/2022 03:01 PM
 User: BRENT KILPELA
 DB: Howell Twp
 Inv Num
 Inv Ref#
 Vendor Description
 GI Distribution
 Inv Date
 Entered By
 Due Date
 Inv Amt
 Amt Due
 Status
 Jnlized Post Date

6/30/2022 21076 JONATHAN HOHENSTEIN
 TREASURER EXPENSES
 101-253-860.00
 101-191-726.00
 101-253-720.00
 101-265-930.01
 06/30/2022
 BRENT KILPELA
 07/15/2022
 250.79
 0.00
 Paid
 Y
 06/30/2022

TREASURER MILEAGE & EXPENSES
 ELECTON POSTAGE EXPENSE
 TREASURER EDUCATION EXPENSE
 TWP HALL OFFICE EQUIPMENT & REPAIR
 97.04
 28.03
 50.00
 75.72
 06/30/2022
 BRENT KILPELA
 07/11/2022
 248.63
 0.00
 Paid
 Y
 07/01/2022

150560912
 21077
 AT&T
 WWTW JULY 2022
 592-538-850.00
 06/19/2022
 BRENT KILPELA
 WWTW TELEPHONE EXPENSE
 07/15/2022
 248.63
 0.00
 Paid
 Y
 06/30/2022

6/30/2022 21078 LIVINGSTON COUNTY TREASURER
 DOG LICENSES JUNE 2022
 701-000-238.00
 06/30/2022
 BRENT KILPELA
 TRUST DUE TO COUNTY DOG LICENSE
 07/15/2022
 55.50
 0.00
 Paid
 Y
 06/30/2022

6/30/2022 21079 LIVINGSTON COUNTY TREASURER
 DEPT - JAN - JUNE 2022
 701-000-228.00
 06/30/2022
 BRENT KILPELA
 TRUST DUE TO COUNTY
 07/15/2022
 1,873.05
 0.00
 Paid
 Y
 06/30/2022

6/30/2022 21080 HOWELL PUBLIC SCHOOLS
 DEPT JAN - JUNE 2022
 701-000-225.00
 06/30/2022
 BRENT KILPELA
 TRUST DUE TO HOWELL SCHLS OPER
 07/15/2022
 1,216.83
 0.00
 Paid
 Y
 06/30/2022

6/30/2022 21081 HOWELL PUBLIC SCHOOLS
 DEPT JAN - JUNE 2022
 701-000-225.01
 06/30/2022
 BRENT KILPELA
 TRUST DUE TO HOWELL SCHLS DEBT
 07/15/2022
 2,372.09
 0.00
 Paid
 Y
 06/30/2022

6/30/2022 21082 HOWELL AREA FIRE AUTHORITY
 DEPT JAN - JUNE 2022
 701-000-234.00
 06/30/2022
 BRENT KILPELA
 TRUST DUE TO HOWELL FIRE AUTH
 07/15/2022
 962.15
 0.00
 Paid
 Y
 06/30/2022

6/30/2022 21083 LIV EDUC SERVICE AGENCY
 DEPT JAN - JUNE 2022
 701-000-227.00
 06/30/2022
 BRENT KILPELA
 TRUST DUE TO LESEA
 07/15/2022
 517.92
 0.00
 Paid
 Y
 06/30/2022

6/30/2022 21084 HOWELL CARNEGIE LIBRARY
 DEPT JAN - JUNE 2022
 701-000-223.00
 06/30/2022
 BRENT KILPELA
 TRUST DUE TO HOWELL LIBRARY
 07/15/2022
 699.45
 0.00
 Paid
 Y
 06/30/2022

11082018-437
 21085 GENOA TOWNSHIP DPW
 JULY 2022
 592-538-801.00
 07/01/2022
 BRENT KILPELA
 WWTW CONTRACTED SERVICES EXPENSE
 07/30/2022
 23,886.99
 0.00
 Paid
 Y
 07/05/2022

User: BRENT KILPELA
 DB: Howell Twp
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 Inv Ref#

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 Description
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 Entered By

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 Post Date

200053729247	DTE ENERGY	06/30/2022	08/10/2022	460.46	0.00	Paid	Y	07/05/2022
21086	STREETLIGHTS	BRENT KILPELA						
	101-268-920.00	TWP AT LARGE STREETLIGHT EXPENSE		460.46				
64512	MICRO WORKS COMPUTING, INC	06/23/2022	07/13/2022	150.00	0.00	Paid	Y	06/30/2022
21087	SERVICE CALL	BRENT KILPELA						
	101-265-728.01	TWP HALL IT SUPPORT EXPENSE		150.00				
64538	MICRO WORKS COMPUTING, INC	06/30/2022	07/20/2022	187.50	0.00	Paid	Y	06/30/2022
21088	INSTALL WINDOWS, AND NEW SSD	BRENT KILPELA						
	101-265-728.01	TWP HALL IT SUPPORT EXPENSE		187.50				
64543	MICRO WORKS COMPUTING, INC	06/30/2022	07/20/2022	399.50	0.00	Paid	Y	06/30/2022
21089	INSTALL BATTERY BACKUPS	BRENT KILPELA						
	101-265-728.01	TWP HALL IT SUPPORT EXPENSE		399.50				
64553	MICRO WORKS COMPUTING, INC	06/30/2022	07/20/2022	647.00	0.00	Paid	Y	06/30/2022
21090	INSTALL DYMO PRINTERS	BRENT KILPELA						
	101-265-728.01	TWP HALL IT SUPPORT EXPENSE		647.00				
4124585049	CINTAS CORPORATION	07/07/2022	07/17/2022	81.47	0.00	Paid	Y	07/07/2022
21091	BLUE MATS	BRENT KILPELA						
	101-265-775.00	TWP HALL OFFICE CLEANING EXPENSE		81.47				
6/30/2022	JEAN GRAHAM	06/30/2022	07/30/2022	118.63	0.00	Paid	Y	06/30/2022
21092	CLERK EXPENSES	BRENT KILPELA						
	101-268-882.00	TWP AT LARGE SPRING CLEAN UP EXPENSE		118.63				
11082018-443	GENOA TOWNSHIP DPW	07/06/2022	08/05/2022	5,914.50	0.00	Paid	Y	06/30/2022
21093	MHOG UTIL DEPT APR - MAY 2022	BRENT KILPELA						
	592-442-801.00	WTTP CONTRACTED SERVICES EXPENSE		5,914.50				
3124	BIOTECH AGRONOMICS, INC	06/29/2022	07/28/2022	28,746.90	0.00	Paid	Y	06/30/2022
21094	BIO SOLIDS HAULING JUNE 21-23	BRENT KILPELA						
	592-442-969.01	WTTP BIOSOLIDS REMOVAL EXPENSE		28,746.90				
9351	TRUE VALUE HARDWARE	07/08/2022	08/15/2022	29.90	0.00	Paid	Y	07/11/2022
21095	KEYS	BRENT KILPELA						
	592-538-956.00	WTTP MISCELLANEOUS EXPENSE		29.90				

User: BRENT KILPELA
 DB: Howell Twp
 Inv Num Vendor
 Inv Ref# Description
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Inv Date Entered By Due Date Inv Amt Amt Due Status Jnlized Post Date

1998828	APPLIED IMAGING	07/07/2022		427.29	0.00	Paid	Y	06/30/2022
21096	ELECTION MANUAL COPIES	BRENT KILPELA						
	101-191-727.00	ELECTION SUPPLIES EXPENSE		427.29				

7/11/2022	LIV CO MUNIC CLERKS ASSOC	07/11/2022		20.00	0.00	Paid	Y	07/11/2022
21097	2022/2023 DUES	BRENT KILPELA						
	101-215-957.00	CLERK DUES & SUBSCRIPTION EXPENSE		20.00				

224015	PRINTING SYSTEMS	07/01/2022		486.35	0.00	Paid	Y	07/11/2022
21098	UTILITY BILL STOCK	BRENT KILPELA						
	592-537-726.00	UTILITY BILLING POSTAGE EXPENSE		486.35				

59451574	ABSOPURE	06/30/2022		12.00	0.00	Paid	Y	07/01/2022
21099	COOLER RENTAL 7/1/22 - 7/31/22	BRENT KILPELA						
	101-265-727.00	TWP HALL KITCHEN/BATH SUPPLIES EXPENSE		12.00				

4158	FAHEY SCHULTZ BURZYCH RHODES PLC	07/01/2022		9,228.50	0.00	Paid	Y	06/30/2022
21100	RAINBOW	BRENT KILPELA						
	101-268-801.01	TWP AT LARGE LEGAL EXPENSE		9,228.50				

4159	FAHEY SCHULTZ BURZYCH RHODES PLC	07/01/2022		1,934.00	0.00	Paid	Y	06/30/2022
21101	GENERAL	BRENT KILPELA						
	101-268-801.01	TWP AT LARGE LEGAL EXPENSE		1,934.00				

4160	FAHEY SCHULTZ BURZYCH RHODES PLC	07/01/2022		1,416.00	0.00	Paid	Y	06/30/2022
21102	OAKLAND TACTICAL	BRENT KILPELA						
	101-268-801.01	TWP AT LARGE LEGAL EXPENSE		1,416.00				

3383	COMPLETE OUTDOOR SERVICES, INC.	07/06/2022		845.00	0.00	Paid	Y	07/12/2022
21103	CEMETERY MAINTENANCE (3 OF 8)	BRENT KILPELA						
	101-276-931.00	GROUPS CARE & MAINT.		845.00				

0004748399	LIVINGSTON DAILY PRESS & ARGUS	06/30/2022		160.00	0.00	Paid	Y	06/30/2022
21104	JUNE PUBLICATIONS	BRENT KILPELA						
	101-412-900.00	BOARD OF APPEALS PRINT & PUBL EXPENSE		80.00				
	101-101-900.00	TWP BOARD PRINT & PUBL EXPENSE		80.00				

7/1/2022	DTE ENERGY	07/01/2022		317.48	0.00	Paid	Y	07/12/2022
21105	2571 OAK GROVE RD JULY 2022	BRENT KILPELA						
	592-538-920.00	TWTP ELECTRICITY EXPENSE		317.48				

User: BRENT KILPELA
 DB: Howell Twp
 Inv Num Vendor Description
 Inv Ref# GI Distribution
 Inv Date Entered By
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7/5/2022 DTE ENERGY 07/05/2022 07/27/2022 71.23 0.00 Paid Y
 21106 391 N BURKHART JULY 2022 BRENT KILPELA
 592-538-920.00 WWTW ELECTRICITY EXPENSE 71.23
 07/12/2022

7/5/2022 DTE ENERGY 07/05/2022 07/27/2022 111.80 0.00 Paid Y
 21107 1009 N BURKHART JULY 2022 BRENT KILPELA
 592-538-920.00 WWTW ELECTRICITY EXPENSE 111.80
 07/12/2022

28896500 GRANGER WASTE SERVICES 06/30/2022 07/25/2022 20.71 0.00 Paid Y
 21108 JULY 2022 GARBAGE SERVICE BRENT KILPELA
 101-265-775.00 TWP HALL OFFICE CLEANING EXPENSE 20.71
 07/12/2022

7/11/2022 PURCHASE POWER 07/11/2022 08/07/2022 88.12 0.00 Paid Y
 21109 TWP POSTAGE BRENT KILPELA
 101-265-726.00 TWP HALL POSTAGE EXPENSE 88.12
 07/13/2022

OE-52980-1 SMART BUSINESS SOURCE, LLC 07/13/2022 08/13/2022 260.75 0.00 Paid Y
 21110 PAPER, FOLDERS BRENT KILPELA
 101-265-727.01 TWP HALL OFFICE SUPPLIES EXPENSE 260.75
 07/13/2022

2165686 CARLISLE WORTMAN ASSOC, INC. 07/12/2022 08/12/2022 750.00 0.00 Paid Y
 21111 GENERAL CONSULTATION BRENT KILPELA
 101-400-801.00 PLANNING-CONTRACTED PLANNER EXPENSE 750.00
 06/30/2022

215123 SPICER GROUP 07/12/2022 08/12/2022 786.25 0.00 Paid Y
 21112 HOWELL GENERAL SERVICES BRENT KILPELA
 101-447-801.00 ENGINEERING CONTRACTED SVCS EXPENSE 786.25
 06/30/2022

215116 SPICER GROUP 07/12/2022 08/12/2022 1,002.50 0.00 Paid Y
 21113 ENGINEERING STANDARDS BRENT KILPELA
 101-447-801.00 ENGINEERING CONTRACTED SVCS EXPENSE 1,002.50
 06/30/2022

7/18/2022 HOWELL PUBLIC SCHOOLS 07/18/2022 07/18/2022 53,215.17 0.00 Paid Y
 21114 2022 SUMMER TAXES 7/1/22 - 7/15/22 BRENT KILPELA
 703-000-225.00 TAX DUE TO HOWELL SCHLS DEBT SUMMER 53,215.17
 07/18/2022

7/18/2022 HOWELL PUBLIC SCHOOLS 07/18/2022 07/18/2022 116,849.85 0.00 Paid Y
 21115 2022 SUMMER TAXES 7/1/22 - 7/15/22 BRENT KILPELA
 703-000-225.01 TAX DUE TO HOWELL SCHLS OPER SUMMER 116,849.85
 07/18/2022

User: BRENT KILPELA
 DB: Howell Twp
 Inv Num Vendor
 Inv Ref# Description
 GL Distribution

Inv Num	Vendor	Inv Date	Due Date	Inv Amt	Amt Due	Status	Jrnalized Post Date
7/18/2022 21116	LIVINGSTON COUNTY TREASURER 2022 SUMMER TAXES 7/1/22 - 703-000-228.01	07/18/2022 BRENT KILPELA TAX DUE TO COUNTY SET SUMMER	07/18/2022	120,250.44 120,250.44	0.00	Paid	Y 07/18/2022
7/18/2022 21117	LIV EDUC SERVICE AGENCY 2022 SUMMER TAXES 7/1/22 - 703-000-227.00	07/18/2022 BRENT KILPELA TAX DUE TO LEESA SUMMER	07/18/2022	64,177.16 64,177.16	0.00	Paid	Y 07/18/2022
7/18/2022 21118	LIVINGSTON COUNTY TREASURER 2022 SUMMER TAXES 7/1/22 - 703-000-228.00	07/18/2022 BRENT KILPELA TAX DUE TO COUNTY SUMMER	07/18/2022	64,311.43 64,311.43	0.00	Paid	Y 07/18/2022
US4344554 21119	PICTOMETRY INTERNATIONAL INC 2022 CHANGE FINDER 101-265-728.00	07/14/2022 BRENT KILPELA TWP HALL COMPUTER SUPPORT EXPENSE	08/14/2022	2,408.00 2,408.00	0.00	Paid	Y 07/18/2022
7/11/2022 21120	DTE ENERGY 2559 W GRAND RIVER JULY 2022 592-538-920.00	07/11/2022 BRENT KILPELA WWTP ELECTRICITY EXPENSE	08/02/2022	202.21 202.21	0.00	Paid	Y 07/18/2022
7/11/2022 21121	DTE ENERGY 1216 PACKARD DR JULY 2022 592-538-920.00	07/11/2022 BRENT KILPELA WWTP ELECTRICITY EXPENSE	08/02/2022	22.01 22.01	0.00	Paid	Y 07/18/2022
7/11/2022 21122	DTE ENERGY 3888 OAKGROVE JULY 2022 592-538-920.00	07/11/2022 BRENT KILPELA WWTP ELECTRICITY EXPENSE	08/02/2022	67.75 67.75	0.00	Paid	Y 07/18/2022
7/11/2022 21123	DTE ENERGY 1222 PACKARD DRIVE JULY 2022 592-538-920.00	07/11/2022 BRENT KILPELA WWTP ELECTRICITY EXPENSE	08/02/2022	3,976.96 3,976.96	0.00	Paid	Y 07/18/2022
7/11/2022 21124	DTE ENERGY 1575 N BURKHART RD JULY 2022 592-538-920.00	07/11/2022 BRENT KILPELA WWTP ELECTRICITY EXPENSE	08/02/2022	348.57 348.57	0.00	Paid	Y 07/18/2022
7/11/2022 21125	DTE ENERGY 1034 AUSTIN CT JULY 2022 592-538-920.00	07/11/2022 BRENT KILPELA WWTP ELECTRICITY EXPENSE	08/02/2022	210.62 210.62	0.00	Paid	Y 07/18/2022

User: BRENT KILPELA
 DB: Howell Twp
 Inv Num
 Inv Ref#

Vendor Description
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7/13/2022	DTE ENERGY		07/13/2022	08/04/2022	173.16	0.00	Paid	Y
21126	2700 TOOLEY JULY 2022		BRENT KILPELA					07/18/2022
	592-538-920.00	WWTP ELECTRICITY EXPENSE			173.16			

51921173	TETRA TECH INC		07/18/2022	07/25/2022	50.00	0.00	Paid	Y
21127	BD Bond Refund		BRENT KILPELA					07/18/2022
	101-000-203.00	BSP20-0006			50.00			

7/11/2022	DTE ENERGY		07/11/2022	08/02/2022	535.11	0.00	Paid	Y
21128	TWP HALL JULY 2022		BRENT KILPELA					07/18/2022
	101-265-920.00	TWP HALL ELECTRICITY EXPENSE			535.11			

142368	BS&A SOFTWARE		08/01/2022	08/31/2022	8,614.00	0.00	Paid	Y
21129	BUILDING, AP, CR, GL, PR, UB, ONLI		BRENT KILPELA					07/18/2022
	101-265-728.00	TWP HALL COMPUTER SUPPORT EXPENSE			5,095.00			
	101-265-851.00	TWP HALL WEB SITE EXPENSE			3,519.00			

TD1855	GREEN OAK TWP TREASURER'S OFFICE		07/12/2022	08/12/2022	20.00	0.00	Paid	Y
21130	SUMMER DEFERMENT AD		BRENT KILPELA					07/18/2022
	101-253-900.00	TREASURER PRINT & PUBL EXPENSE			20.00			

of Invoices: 85 # Due: 0 Totals: 586,439.24 0.00
 # of Credit Memos: 0 # Due: 0 Totals: 0.00 0.00

Net of Invoices and Credit Memos: 586,439.24 0.00

Agrees with Check Register
 BK

08/01/2022 03:01 PM
 User: BRENT KILPELA
 DB: Howell Twp

Inv Num
 Inv Ref#

Vendor
 Description
 GL Distribution

Inv Date
 Entered By

Due Date

Inv Amt

Amt Due
 Status
 Jrnalized
 Post Date

---- TOTALS BY FUND ----

101 - GENERAL FUND				48,234.52	0.00
204 - ROAD FUND				13,428.57	0.00
220 - RECREATION FUND				28,375.00	0.00
592 - SWR/WTR				66,295.11	0.00
701 - TRUST & AGENCY				11,301.99	0.00
703 - TAX FUND				418,804.05	0.00

---- TOTALS BY DEPT/ACTIVITY ----

000 - OTHER				473,902.11	0.00
101 - TOWNSHIP BOARD				310.00	0.00
191 - ELECTIONS				657.07	0.00
215 - CLERK				20.00	0.00
247 - BOARD OF REVIEW				56.31	0.00
253 - TREASURER				1,263.65	0.00
265 - TOWNSHIP HALL				26,100.61	0.00
268 - TOWNSHIP AT LARGE				13,277.59	0.00
276 - CEMETERY				845.00	0.00
400 - PLANNING COMMISSION				1,500.00	0.00
402 - ZONING ADMINISTRATION				187.79	0.00
412 - BOARD OF APPEALS				80.00	0.00
442 - WWTP				36,141.45	0.00
447 - ENGINEERING				1,944.00	0.00
537 - CHARGES FOR SERVICES				486.35	0.00
538 - WWTP				29,667.31	0.00

Check Date	Bank	Check	Vendor Name	Amount
Bank GEN GENERAL FUND CHECKING				
07/05/2022	GEN	101001750(E)	CONSUMERS ENERGY	52.48
07/05/2022	GEN	18130	CARLISLE WORTMAN ASSOC, INC.	782.50
07/05/2022	GEN	18131	COMCAST	424.49
07/05/2022	GEN	18132	JULIUS DAUS III	442.92
07/05/2022	GEN	18133	DTE ENERGY	460.46
07/05/2022	GEN	18134	ECONO PRINT	1,065.49
07/05/2022	GEN	18135	FIRE PROTECTION PLUS, INC	205.00
07/05/2022	GEN	18136	JONATHAN HOHENSTEIN	250.79
07/05/2022	GEN	18137	HOWELL PARKS AND RECREATION	28,375.00
07/05/2022	GEN	18138	LEPEK LANDSCAPES & NURSERY	4,125.00
07/05/2022	GEN	18139	LIVINGSTON DAILY PRESS & ARGUS	350.00
07/05/2022	GEN	18140	CAROL MAKUSHIK	31.12
07/05/2022	GEN	18141	CHLORIDE SOLUTIONS, LLC	13,428.57
07/05/2022	GEN	18142	MICRO WORKS COMPUTING, INC	1,384.00
07/05/2022	GEN	18143	MARK & JULIE SANDERS	400.00
07/05/2022	GEN	18144	MICHIGAN TWP ASSOC	6,852.61
07/05/2022	GEN	18145	MUTUAL OF OMAHA INSURANCE COMPANY	186.38
07/05/2022	GEN	18146	PERFECT MAINTENANCE	195.00
07/05/2022	GEN	18147	HOWELL TOWNSHIP PETTY CASH	91.17
07/05/2022	GEN	18148	PURCHASE POWER	1,510.00
07/05/2022	GEN	18149	SMART BUSINESS SOURCE, LLC	429.03
07/05/2022	GEN	18150	SPICER GROUP	155.25
07/05/2022	GEN	18151	UTS ACCOUNTING DEPT	62.50
07/19/2022	GEN	101001751(E)	DTE ENERGY	535.11
07/19/2022	GEN	18152	ABSOPURE	12.00
07/19/2022	GEN	18153	APPLIED IMAGING	427.29
07/19/2022	GEN	18154	BS&A SOFTWARE	8,614.00
07/19/2022	GEN	18155	CARLISLE WORTMAN ASSOC, INC.	750.00
07/19/2022	GEN	18156	CINTAS CORPORATION	81.47
07/19/2022	GEN	18157	COMPLETE OUTDOOR SERVICES, INC.	845.00
07/19/2022	GEN	18158	FAHEY SCHULTZ BURZYCH RHODES PLC	12,578.50
07/19/2022	GEN	18159	JEAN GRAHAM	118.63
07/19/2022	GEN	18160	GRANGER WASTE SERVICES	20.71
07/19/2022	GEN	18161	GREEN OAK TWP TREASURER'S OFFICE	20.00
07/19/2022	GEN	18162	LIV CO MUNIC CLERKS ASSOC	20.00
07/19/2022	GEN	18163	LIVINGSTON DAILY PRESS & ARGUS	160.00
07/19/2022	GEN	18164	PICTOMETRY INTERNATIONAL INC	2,408.00
07/19/2022	GEN	18165	PURCHASE POWER	88.12
07/19/2022	GEN	18166	SMART BUSINESS SOURCE, LLC	260.75
07/19/2022	GEN	18167	SPICER GROUP	1,788.75
07/19/2022	GEN	18168	TETRA TECH INC	50.00

GEN TOTALS:

Total of 41 Checks:	90,038.09
Less 0 Void Checks:	0.00
Total of 41 Disbursements:	90,038.09

Bank T&A TRUST & AGENCY CHECKING

07/05/2022	T&A	3537	HOWELL AREA FIRE AUTHORITY	962.15
07/05/2022	T&A	3538	HOWELL CARNEGIE LIBRARY	699.45
07/05/2022	T&A	3539	HOWELL PUBLIC SCHOOLS	1,216.83
07/05/2022	T&A	3540	HOWELL PUBLIC SCHOOLS	2,372.09
07/05/2022	T&A	3541	LIV EDUC SERVICE AGENCY	517.92
07/05/2022	T&A	3542	MHOG	2,840.00
07/05/2022	T&A	3543	LIVINGSTON COUNTY TREASURER	765.00
07/05/2022	T&A	3544	LIVINGSTON COUNTY TREASURER	55.50
07/05/2022	T&A	3545	LIVINGSTON COUNTY TREASURER	1,873.05

T&A TOTALS:

Total of 9 Checks:	11,301.99
Less 0 Void Checks:	0.00
Total of 9 Disbursements:	11,301.99

Bank TAX TAX CHECKING

07/18/2022	TAX	5679	HOWELL PUBLIC SCHOOLS	53,215.17
07/18/2022	TAX	5680	HOWELL PUBLIC SCHOOLS	116,849.85
07/18/2022	TAX	5681	LIV EDUC SERVICE AGENCY	64,177.16
07/18/2022	TAX	5682	LIVINGSTON COUNTY TREASURER	120,250.44
07/18/2022	TAX	5683	LIVINGSTON COUNTY TREASURER	64,311.43

TAX TOTALS:

Total of 5 Checks:	418,804.05
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Check Date	Bank	Check	Vendor Name	Amount
Less 0 Void Checks:				0.00
Total of 5 Disbursements:				418,804.05

Bank UTYCK UTILITY CHECKING

07/06/2022	UTYCK	2895	GENOA TOWNSHIP DPW	23,886.99
07/06/2022	UTYCK	2896	PVS TECHNOLOGIES, INC	1,031.00
07/06/2022	UTYCK	590003629(E)	AT&T	248.63
07/06/2022	UTYCK	590003630(E)	CONSUMERS ENERGY	24.05
07/06/2022	UTYCK	590003631(E)	CONSUMERS ENERGY	97.41
07/06/2022	UTYCK	590003632(E)	CONSUMERS ENERGY	108.43
07/06/2022	UTYCK	590003633(E)	DTE ENERGY	183.53
07/06/2022	UTYCK	590003634(E)	DTE ENERGY	35.63
07/19/2022	UTYCK	2897	BIOTECH AGRONOMICS, INC	28,746.90
07/19/2022	UTYCK	2898	GENOA TOWNSHIP DPW	5,914.50
07/19/2022	UTYCK	2899	PRINTING SYSTEMS	486.35
07/19/2022	UTYCK	2900	TRUE VALUE HARDWARE	29.90
07/19/2022	UTYCK	590003635(E)	DTE ENERGY	317.48
07/19/2022	UTYCK	590003636(E)	DTE ENERGY	71.23
07/19/2022	UTYCK	590003637(E)	DTE ENERGY	111.80
07/19/2022	UTYCK	590003638(E)	DTE ENERGY	202.21
07/19/2022	UTYCK	590003639(E)	DTE ENERGY	22.01
07/19/2022	UTYCK	590003640(E)	DTE ENERGY	67.75
07/19/2022	UTYCK	590003641(E)	DTE ENERGY	3,976.96
07/19/2022	UTYCK	590003642(E)	DTE ENERGY	348.57
07/19/2022	UTYCK	590003643(E)	DTE ENERGY	210.62
07/19/2022	UTYCK	590003644(E)	DTE ENERGY	173.16

UTYCK TOTALS:

Total of 22 Checks:	66,295.11
Less 0 Void Checks:	0.00
Total of 22 Disbursements:	66,295.11

REPORT TOTALS:

Total of 77 Checks:	586,439.24
Less 0 Void Checks:	0.00
Total of 77 Disbursements:	586,439.24

*(Agrees with
Invoice Register
BK*