LS # 11

Roth Professional Solutions

LIFT STATION CONDITION ASSESSMENT FORM

Assessment Date: 25 April 2023

Location: Parcel #:14527072	140096, Glade (Ot	Municipalit	y: Village	of Kronenwetter	LS Type: Dup	olex Submersible		
Engineer: Roth Professional Solutions Technical & Equipment Assistance: B&M Technical Services									
House Keeping: Good Sump Pu	N/A Pomp Inoperable	oor Lighting [resent No Fall Protection No Potential for Shock		sure to Raw Wastewater in Dry Wo		
Health and Safety Issues:									
Other Observations: Rags Iss	ues. PH Conver	sion							
	,								
Asset Class	Asset Present	Year Installed	Cond. Rank	Perf. Rank	Field Observations/Co	mments			
		Sit	e Improv	ement (SIM)				
* Access Driveway	X								
* Parking	X								
* Gate and Fencing									
* Site Drainage Paved Drainage Okay									
* Grounding System	X								
* Site Lighting									
* Site Alarm Horn and Strobe Lighting	X								
General Site Electrical Observa	tions								
Access Driveway Details:	Cravel of	r aggragata hasar	course only	Conc	rete Pavement 🔳 Bitu	ıminous Pavemen	•		
Parking Details: None		Paved		conc	rete i avement	illillous Faveillell	·		
Fence Details: Chain		Fencing Height (· ft)·	F	encing Length (ft): N/A				
Tener Betails: — Chair			,.		chang zengen (reji vari				
Gate Type: Single	Double	N/A							
Traffic: Othe	r 🗆	Site too Close	to Traffic N	N/A					
Grounding System Details:	ent 🗌 Ground	ling Rings 🔳 (Grounding R	ods					
If applicable, approximate pa	rking area:								
If applicable, approximate si	te area:								
Other Notes:									
Vortexing From Influent									





Asset Class	CMMS Code	Asset Present	Year Installed	Cond. Rank	Perf. Rank	Utiliz. (%)	Field Observations/Comments		
Structure and Wetwell (PST)									
* Building		<					Valve Vault		
Building Structures: None Concrete Walls Concrete Floor Doors Total Floor Area: Plan Floor Area:									
Field Observations: Good	Field Observations: Good N/A Roof Degraded Doors and Security Failing Needs Paint								
Crac	ks on the Wall	Cracks on the F	Floor Othe	r					
* Odor Control		V							
Odor Details: Ven	t Pipe	Other	Details						
Field Observations: Operational and in use On site, but not required Does not operate, needs repair Other									
* Crane/Hoist		V					Portable Off-Site		
Crane Details: Man	ufacturer:		Model:		Ser	ial Number	r:		
Field Observations: Goo	od operating condition	n Does n	not operate, requ	iires repair	Mou	nting Hard	ware intact		
☐ Oth	er								
* Bar Screen or Com minuter	N/A								
System Description: N	lo Bar Screen	Manually Raked	Bar Screen	Mechanic	ally Raked	Bar Screen	Screen Bypass Provided?		
Mechanical Bar Screens:	Manufacturer:		Model:	Seria	al Number:		Power Requirements (hp):		
Odor Details: N/A	Screens need	frequent cleaning	g Shor	t repsonse t	ime 🗌	Odor fly n			
Othe					_	,			
* Flow Meter	N/A								
Type: N/	A Type:	Ma	anufacturer:		Model:		Serial Number:		
Flow Meter Field Observati	ons: Operation	al		L	ocation				
	Other								
* Wet Well		~							
Walls: Concre	te Steel	Fiberglass							
Slab/Cover: 🔳 Reinfor	rced Concrete	Steel Pur	mps, motors and	d electric p	anel are m	ounted or	n cover/slab directly over wet well		
Pump Control System:	Floats Bubble	r System	Ultrasonic	Transduc	er 0-5 PS	I			
Measurement (PPM): MPC									
Wet Well Field Observation	Wet Well Field Observations: Good PN/A Hatch Damaged or Difficult to Open Wet Structure Spalling or Cracked								
Evidence of Concrete Corrosion Wet Well Needs Cleaning - Solids/Grease Other									
Hatch Field Observations: Good Fair: Minor Corrosion to Hatches, Hinges, or Latches Poor:Corroded or Broken Hatches, Hinges, or Latches									
Other									
Wet Well Ladder Observations	Wet Well Ladder Observations: Good Fair: Surface Corrosion; Steps Intact and Solid; Minor Anchor Bolt Corrosion								
	Poor: Corr	oded or Broken S	teps; Corroded o	r Broken Wa	all Anchors [Other			
Wet Well Wall Observations: Good Fair: Concrete Sealant Peeled or Cracked; Concrete Soft at Surface									
	Poor: Exposed	Missing Aggregat	te; Exposed/Miss	ing Re-bar	Other				
Slab/Cover Observations:	Good Fair:	Concrete or Alum	ninum Grate Sligh	ntly Corrode	d But Safe				
	Poor: Concrete Ag	gregate Missing/	/Exposed; Grate	Corroded o	· Warped; D	ebris Over	Platform Other		





Asset Class	CMMS Code	Asset Present	Year Installed	Cond. Rank	Perf. Rank	Utiliz. (%)	Field Observations/Comments				
Influent Pipe Observations:	Good Fair:	Slight Corrosion;	Pipe Intact	Poor: Sev	ere Pipe Co	orrosion	Other Some Vortexing				
Alarm Float Observations: Good Fair: Some Grease But Operating Properly Poor: Covered in Grease or Broken Other											
Pump Vent Line Observations:	Pump Vent Line Observations: Good Fair: Slight Corrosion But Operates Properly; Needs Sealant Around Opening										
Poor: Any One Vent Does Not Operate; Corroded or Broken Off at Wall Other											
* Dry Well		~					Valve Vault				
Location Type:	None Un	derground pump	vault with acces	s tube and	adder	Locat	ed below grade inside building				
Lighting:	Yes No										
Cathodic Protection	Not Required	None	Yes								
Access Tube and Ladder Field	Observations: Poor: Corroded or	N/A Good			· ·	ntact and So	olid; Minor Anchor Bolt Corrosion				
Underground Vault Observati	1	□ N/A 🔳 Goo		rface Corros		Poor: Corr	osion Other				
	J/A Good Goor: Exposed/Missing	Fair: Concrete Sea g Aggregate; Expo		_		at Surface					
Staircases/Stairwells:	¬ N/A ┌┐ Good [Fair: Concrete	Cracked; Concr	ete Soft at S	Surface						
	Poor: Exposed/Mi	 ssing Aggregate; E	xposed/Missing I	Re-bar	Other						
Building Walls:	N/A Good	Fair: Concrete	Sealant Peeled	or Cracked;	Concrete S	oft at Surfa	ce				
	Poor: Exposed/Mis	ssing Aggregate; E	xposed/Missing	Re-bar	Other						
Sump Pump: No Ye	es Type	Model:		Power (h	p):	-	TDH: Serial:				
Field Observations: No	t Operational	Poor Floor Drain	age 🗌 O	ther							
* Cathodic Protection	N/A										
Field Observations: Di	sconnected (Other									
			HVAC (HVA	A)							
* Dry Well HVAC	N/A										
Asset Size:											
Field Observations: Go	od N/A	Old V	entilation Inope	rable	Makes	Noise	Fans Vibrate				
Ve	ntilation Duct Work	Corroded	Belts Loose or	r Torn	Louv	vers	Roof Vents Other				
* Wet Well HVAC	N/A										
Asset Size:											
Field Observations: Good N/A Old Ventilation Inoperable Makes Noise Fans Vibrate Belts Loose or Torn											
☐ Ventilation Duct Work Corroded ☐ Louvers ☐ Roof Vents ☐ Other											
Electrical Systems (ELE)											
* Control Panel		✓					Phase Conversion System				
Asset Size (Volts) 240		Single	phase	Three Pha	ise						
Manufacturer: Rockwe	II Automation	Model: VFDs	PowerFlex40	Serial Nu	mber:						
Power Supply Manufactu	Power Supply Manufacturer: Model: Type:										





Asset Class	CMMS Code Asset Year Cond. Perf. Utiliz. Field Observations/Comments Present Installed Rank Rank (%)									
Field Observations:	Good Panel Corroded Old / Outdated / Obsolete Contacts Loose Cables Fatigued Checked Dust Inside Panel Exposed Wires Shop Drawings Available UL Listed Uncovered Holes Surge Protection Grounded Wiring Labelled Panel Labelled Other									
* Lighting Panel	N/A									
Asset Size (Volts)										
Manufacturer:	Model: Serial Number:									
Field Observations:	Good Panel Corroded Old / Outdated / Obsolete Contacts Loose Cables Fatigued Checked Dust Inside Panel Exposed Wires Switch Gear Worn Bus and or lugs corroded Spare Spaces Available Breakers Labelled Panel Grounded Panel Labelled Other									
* Main Switch	N/A									
Asset Size (Volts)										
Manufacturer:	Model: Serial Number:									
Field Observations:	Good Panel Corroded Old / Outdated / Obsolete Contacts Loose Cables Fatigued Checked Dust Inside Panel Exposed Wires Switch Gear Worn Lugs Corroded Panel Grounded Panel Labelled Other									
* Transfer Switch	Generator Manual Transfer									
Asset Size (Volts)	240 VAC 90 AMP Single Phase									
Manufacturer:	Model: Serial Number:									
Field Observations:	Good Panel Corroded Old / Outdated / Obsolete Contacts Loose Cables Fatigued Checked Dust Inside Panel Exposed Wires Switch Gear Worn Lugs Corroded Panel Grounded Panel Labelled Other									
* Motor Control C	enter N/A									
Asset Size (Volts)										
Manufacturer:	Model: Serial Number:									
Field Observations:	Good Panel Corroded Old / Outdated / Obsolete Contacts Loose Cables Fatigued Checked Dust Inside Panel Exposed Wires Switch Gear Worn Lugs Corroded Panel Labelled Other									
* Junction Box	N/A									
Asset Size (Volts)										
Manufacturer:	Model: Serial Number:									
Field Observations:	Good Panel Corroded Old / Outdated / Obsolete Contacts Loose Cables Fatigued Checked Dust Inside Panel Exposed Wires Switch Gear Worn Lugs Corroded Panel Grounded Panel Labelled Other									
* Miscellaneous Pa	nel 1 N/A									
Asset Size										
Manufacturer:	Model: Serial Number:									
Field Observations:	Good Panel Corroded Old / Outdated / Obsolete Contacts Loose Cables Fatigued Checked Dust Inside Panel Exposed Wires Switch Gear Worn Lugs Corroded Panel Grounded Panel Labelled Other									



LS # 11____

Roth Professional Solutions

Asset Class	CMMS Code	Asset Present	Year Installed	Cond. Rank	Perf. Rank	Utiliz. (%)	Field Observations/Comments			
Generator (GEN)										
* Emergency Generator										
* Emer. Gen. Connector		✓					Portable Off-Site			
Asset Size: M	lanufacturer:		Model:		Serial:		Generator Type:			
	Poor Accessibility Panel Grounded Panel Labelled Diesel Containment Other									
Instrumentation (INS)										
* Auto Dialer		<u>~</u>					Sensaphone 1104			
Manufacturer:		Model:			Phone Nu	mber:				
Alarms: High Level	Low Level	Generator	Running	Power Fail	Other	•				
* Float Controls	Back up	✓	2 Float							
* Bubbler Controls										
Manufacturer:			Model:							
* Submersible Level Controls		✓					SCADAPack Controller 0-5 PSI			
Field Observations: Goo	od N/A B in Condensate Traps	•	or Failing Floats Tan		logged / Ful Controls C		re Other			
			SCADA (SCA)						
Field Observations: Goo	od 🔳 N/A 🗌	Obsolete	Other							
Variable Frequency Drive										
* Control Panel - VFD	N/A									
* Harmonic Filter	N/A									
* Output Filter	N/A									
Asset Size:	Manufactu	rer:		Model:			Observed RPM:			
Field Observations: Goo	od 🗌 N/A 🗌	Makes Noise	Obsolete	Panel	Corroded /	Dusty / Lea	aky 🗌 Other			
			Motors (N	/ITR)						
* Motor 1		✓					Sithe Chopper Pumps			
Asset Size (HP) 5										
Manufacturer: Barnes Model: Serial Number:										
Field Observations: Good N/A Makes Noise Vibrates Shaft Bearing Noise Opposite End Bearing Noise Overheating Needs Lubrication Over Lubricated Mount Failing Leaking Emergency Stop Button in Dry Well Inoperable Mount Rags, Other Blockages										
	ciecicy stop button	III DIY Well lilope	i abie C	Miei Rag	s, Omer Bl	ockages	Cith a Channan Days			
							Sithe Chopper Pumps			
Asset Size (HP): ⁵	Manufactu	rer: Barnes		Model:			Serial Number:			
Field Observations: Good N/A Makes Noise Vibrates Shaft Bearing Noise Opposite End Bearing Noise Overheating Needs Lubrication Over Lubricated Mount Failing Leaking Emergency Stop Button in Dry Well Inoperable Other Rags, Other Blockages										





Asset Class	CMMS Code	Asset Present	Year Installed	Cond. Rank	Perf. Rank	Utiliz. (%)	Field Observations/Comments			
Hor/Vert Centrifugal Pumps										
* Pump 1	N/A									
Manufacturer:		Мо	del:			Serial Numl	ber:			
Discharge Size (in)	Suction D	iameter (in)		Pump Siz	e (GPM)		TDH Size (hp): ressureReading: ating Belts Loose TDH Size (hp): ressureReading: ting Belts Loose			
Priming Pump Ma	anufacturer:	N	1odel:		Serial	No.:	Size (hp):			
Pressure Gauge	anufacturer:		Pressure Rang	ge:			PressureReading:			
Field Observations: Good N/A Seals Leaking Vibrating Shaft Deflection Cavitating Belts Loose Bearing Noise Mount Failing Evidence of Pipe Strain Other										
* Pump 2	N/A									
Discharge Size (in)	Suction Di	ameter (in)		Pump Size	e (GPM)		TDH			
Priming Pump	nufacturer:	Mo	odel:		Serial I	No.:	Size (hp):			
Pressure Gauge Ma	nufacturer:		Pressure Range	e:			PressureReading:			
_		Seals Leaking	☐ Vibrating☐ Evidence of P		Deflection Oth		itating Belts Loose			
		Sub	mersible Pur	mps (SUB)						
* Pump 1		V								
Manufacturer:	Barnes	Mod	lel: Site Chop	per	Seri	al:				
Discharge Size (in) 4"	Suction Dia	meter (in)		Pump Size	(GPM) 10	0	TDH 5 HP			
	ood N/A R	ail System Corro	ded Doe	s Not Seat \	Well	Cables Co	rroded or Failing			
* Pump 2		✓								
Manufacturer: B	arnes	Mod	lel: Site Chopp	per	Seri	al:				
Discharge Size (in) 4"	Suction Dia	meter (in)		Pump Size	(GPM) 10	0	TDH 5 HP			
	ood 🗌 N/A 📗 R her	ail System Corro	ded 🗌 Doe	es Not Seat \	Well	Cables Co	rroded or Failing			
			Check Valv	es						
* Pump 1		~								
Size (in): 4"	Manufa	cturer:		Mod	del:		Serial No:			
Field Observations: Good N/A Valve Operator Stuck Valve Seat Leaking Check Valve Not Seating Check Valve Not Operating Other										
* Pump 2		✓								
Size (in): 4"	Manufa	cturer:		Mod	el:		Serial No:			
Field Observations: Go	od N/A _{Va} eck Valve Not Seating	alve Operator Stu	ck	Seat Leakin Operating	g		s Leaking Other ce of Pipe Strain			





Asset Class	CMMS Code	Asset Present	Year Installed	Cond. Rank	Perf. Rank	Utiliz. (%)	Field Observations/Comments		
Piping and Valves Suction Isolation Valves									
* Pump 1	N/A								
Size (in):	Manuf	acturer:	1	Mod	del:		Serial No:		
Field Observations:	Good N/A Check Valve Not Seating Other	Valve Operator S	tuck	e Seat Leakir t Operating	ng		es Leaking nce of Pipe Strain		
* Pump 2	N/A								
Size (in):	Manuf	acturer:		Mod	del:		Serial No:		
Field Observations:	Good N/A Check Valve Not Seatin Other	Valve Operator S	tuck	e Seat Leakir t Operating	ng		es Leaking nce of Pipe Strain		
		Disch	narge Isolation	n Valves					
* Pump 1		✓	_						
Size (in): 4"	Manufa	acturer:		Mod	el:		Serial No:		
Field Observations:	Good N/A N Check Valve Not Seating Other	/alve Operator St	uck	e Seat Leakin COperating	g		es Leaking nce of Pipe Strain		
* Pump 2	N/A								
Size (in):	Manuf	acturer:		Mod	lel:		Serial No:		
Field Observations:	Good N/A Check Valve Not Seating Other	√alve Operator St	tuck	e Seat Leakin t Operating	g		es Leaking nce of Pipe Strain		

