CITY OF BREEZY POINT
2024 CAPITAL IMPROVEMENT PLAN

LIFT STATION 10-YEAR BUDGET

Lift Station ID	Location	Original Construction / Purchase Date	Pump #1 Install / Rebuild	Pump #2 Install / Rebuild	Pump HP	Control Panel Install / Refit	2025		2026		2027		2028		2029		2030		2031		2032		2033		2034	
							Cost Code	Cost	Cost Code	Cost	Cost Code	Cost	Cost Code	Cost	Cost Code	Cost	Cost Code	Cost	Cost Code	Cost	Cost Code	Cost	Cost Code	Cost	Cost Code	Cost
LS 1	CR-4 & Thrane Dr	1976	2023	2023	36	2017					Panel	$33,000											Pumps	$65,000		
LS 2	CR-4 & Piney Way	1977	1977	1977	2.5	2018	Pumps	$16,000																		
LS 3	Shoreview Lane & Sand Beach Drive	1976	2007	2007	5	2015					Pumps	$20,000													Panel	$20,000
LS 4	Breezy Point Drive North	1976	2022	2022	15	2018																				
LS 5	North Lakeview Drive & Squirrel Drive	1976	2021	2021	10	2018																				
LS 6	CR-11 (near Appalacian Dr)	2002	2002	2002	15	2019	Pumps	$20,000																		
LS 7	CR-11 (West of Clinic)	2003	2022	2022	15	2016																			Panel	$20,000
LS 8	Sparrow Drive	2005	2005	2005	5	2005			Pumps	$18,000									Pumps	$22,000						
LS 9	Airport Road	2008	2008	2008	5	Unknown							Pumps	$22,000	Panel	$18,000										
LS 10	*City Hall**	*1996*	*1996*	*0*	*1*	*1996*																				
	Lift Station General Maintenance							$50,000		$50,000		$50,000		$50,000		$50,000		$60,000		$60,000		$60,000		$60,000		$60,000
						ANNUAL COST:		**$86,000**		**$68,000**		**$103,000**		**$72,000**		**$68,000**		**$60,000**		**$82,000**		**$60,000**		**$125,000**		**$100,000**

* Note: City Hall lift station is no longer in use after City Hall Remodel.

BAXTER LIFT STATIONS
PUMP INFORMATION

Lift Station Number	Location	Original Construction Date	Pump #1 Install / Rebuild	Pump #1 Manufacturer	Pump #1 Model	Pump #1 Flow	Pump #2 Install / Rebuild	Pump #2 Manufacturer	Pump #2 Model	Pump #2 Flow
1	CR-4 & Thrane Dr	1976	2023	KSB	KSB-F100-316/294X	0	2023	KSB	KSB-F100-316/294X	0
2	CR-4 & Piney Way	1977	1977	0	0	0	1977	0	0	0
3	Shoreview Lane & Sand Beach Drive	1976	2007	KSB	KSB-E80-200/34X	0	2007	KSB	KSB-E80-200/34X	0
4	Breezy Point Drive North	1976	2022	KSB	99-F100-250/114X	0	2022	KSB	99-F100-250/114X	0
5	North Lakeview Drive & Squirrel Drive	1976	2021	KSB	KSB-F100-250/74X	0	2021	KSB	KSB-F100-250/74X	0
6	CR-11 (near Appalacian Dr)	2002	2002	0	0	0	2002	0	0	0
7	CR-11 (West of Clinic)	2003	2022	KSB	KSB-E80-253/114X	0	2022	KSB	KSB-E80-253/114X	0
8	Sparrow Drive	2005	2005	0	0	0	2005	0	0	0
9	Airport Road	2008	2008	0	0	0	2008	0	0	0
10	City Hall*	1996	1996	0	0	0	0	0	0	0

LIFT STATION COST CODE SUMMARY (2024 ESTIMATED COSTS)

Sanitary Sewer Lift Stations

Item	Description		
A	Base Lift Station Upgrade Stainless Steel control panel with LC 150 controller with pressure transducer and floats 5HP KSB 80-200 pumps with Type F impeller Pump rail and base elbow replacement By-pass pumping, mobilization, clean-up Wet well water blast, vacuum, spot repairs Precast cover replacement with aluminum hatch Discharge piping replacement Total - Item A		$163,150.00
B	Base Lift Station Upgrade Stainless Steel control panel with LC 150 controller with pressure transducer and floats 20HP KSB 80-251 pumps with Type F impeller Pump rail and base elbow replacement By-pass pumping, mobilization, clean-up Wet well water blast, vacuum, spot repairs Precast cover replacement with aluminum hatch Discharge piping replacement Total - Item A		$171,150.00
C	Base Valve Vault Upgrade Replace piping, check valves, valves and fittings Precast cover replacement with aluminum hatch Total - Item A		$80,450.00
D	Complete valve vault replacement with by-pass piping system		$96,850.00
G	Duplex pump replacement (2 pumps)		$17,600.00
H	Duplex pump replacement (2 pumps) (LS 1)		$45,100.00
I	Control Panel Replacement (LS 1) Control Panel Replacement		$51,100.00
J	LS 2 Generator Replacement		$119,600.00
K	LS 2 Generator Maintenance		$1,075.00
L	Portable Generator Replacement		$41,500.00
M	Portable Generator Maintenance		$4,400.00
		Unit #2206	$1,100.00
		Unit #2230	$1,100.00
		Unit #2231	$1,100.00
		Unit #2232	$1,100.00

Storm Sewer Lift Stations

Item	Description	
A	Duplex 15 HP pump replacement (2 pumps)	$38,400.00
B	Duplex 7.5 HP pump replacement (2 pumps)	$30,150.00
C	Control Panel Replacement	$51,100.00

LIFT STATION DATA

Lift Station #	1
Location	CR-4 & Thrane Dr
Date of Original Construction	1976

Wetwell

Structure Size	8.0' ID
Rails / Cables	
Access Hatch	
Notes	New Panel, transducer and cables in 2017

Control Panel

Latest Refit Date	2017
Serial Number	Nema 3X, SS Duplex (PANEL-23092)
Manufacturer	Quality Flow
Controller / PLC	1500ct
Floats	1 float backup
Pressure Transducers	A1000i
SCADA	
Notes	Has GuardDog

Pumps

#1 Manufacturer	KSB
Model	KSB-F100-316/294X
Hp	36
Voltage	
Impeller	261
Date of Installation / Rebuild	2023
#2 Manufacturer	KSB
Model	KSB-F100-316/294X
Hp	36
Voltage	
Impeller	261
Date of Installation / Rebuild	2023
Notes	

Valve Manhole

Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	1
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	
Water Level Before Running Both Pumps		Ft.	Notes	
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		

LIFT STATION DATA

Lift Station #	2
Location	CR-4 & Piney Way
Date of Original Construction	1977

Wetwell

Structure Size	6' ID
Rails / Cables	
Access Hatch	
Notes	

Control Panel

Latest Refit Date	2018
Serial Number	NEMA 4X Douplex (Panel-24383)
Manufacturer	QCI
Controller / PLC	
Floats	
Pressure Transducers	
SCADA	
Notes	Has GuardDog

Pumps

#1 Manufacturer	
Model	
Hp	2.5
Voltage	
Impeller	
Date of Installation / Rebuild	1977
#2 Manufacturer	
Model	
Hp	2.5
Voltage	
Impeller	
Date of Installation / Rebuild	1977
Notes	

Valve Manhole

Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	
Water Level Before Running Both Pumps		Ft.	Notes	
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		

LIFT STATION DATA

Lift Station #	3
Location	Shoreview Lane & Sand Beach Drive
Date of Original Construction	1976

Wetwell

Structure Size	6' ID
Rails / Cables	
Access Hatch	
Notes	

Control Panel

Latest Refit Date	2015
Serial Number	NEMA 3R Duplex
Manufacturer	QCI
Controller / PLC	
Floats	
Pressure Transducers	
SCADA	
Notes	Has GuardDog

Pumps

#1 Manufacturer	KSB
Model	KSB-E80-200/34X
Hp	5
Voltage	
Impeller	190
Date of Installation / Rebuild	2007

#2 Manufacturer	KSB
Model	KSB-E80-200/34X
Hp	5
Voltage	
Impeller	190
Date of Installation / Rebuild	2007
Notes	

Valve Manhole

Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	3
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	
Water Level Before Running Both Pumps		Ft.	Notes	
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		

LIFT STATION DATA

Lift Station #	4
Location	Breezy Point Drive North
Date of Original Construction	1976

Wetwell

Structure Size	6' ID
Rails / Cables	
Access Hatch	
Notes	

Control Panel

Latest Refit Date	2003	
Serial Number	NEMA 3R Duplex (99-USF-FASTPAC)	
Manufacturer	USFilter	?
Controller / PLC	1500ct	
Floats	Single float	
Pressure Transducers	A1000i	
SCADA		
Notes	Controller and transducers installed in 2018	
	Has GuardDog	

Pumps

#1 Manufacturer	KSB	
Model	99-F100-250/114X	
Hp	15	
Voltage		
Impeller	238	
Date of Installation / Rebuild	2022	Last pump install was 2008
#2 Manufacturer	KSB	
Model	99-F100-250/114X	
Hp	15	
Voltage		
Impeller	238	
Date of Installation / Rebuild	2022	Last pump install was 2008
Notes		

Valve Manhole

Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	
Water Level Before Running Both Pumps		Ft.	Notes	
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		

LIFT STATION DATA

Lift Station #	5
Location	North Lakeview Drive & Squirrel Drive
Date of Original Construction	1976

Wetwell

Structure Size	6' ID
Rails / Cables	
Access Hatch	aluminum hatch
Notes	

Control Panel

Latest Refit Date	2018
Serial Number	NEMA 3R SS
Manufacturer	Quality Control
Controller / PLC	1500ct
Floats	float backup
Pressure Transducers	A1000
SCADA	
Notes	Has GuardDog

Pumps

#1 Manufacturer	KSB
Model	KSB-F100-250/74X
Hp	10
Voltage	
Impeller	215
Date of Installation / Rebuild	2021
#2 Manufacturer	KSB
Model	KSB-F100-250/74X
Hp	10
Voltage	
Impeller	215
Date of Installation / Rebuild	2021
Notes	#2 pump in need of rebuild.

Valve Manhole

Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	5
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	
Water Level Before Running Both Pumps		Ft.	Notes	
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		

LIFT STATION DATA

Lift Station #	6
Location	CR-11 (near Appalacian Dr)
Date of Original Construction	2002

Wetwell

Structure Size	
Rails / Cables	Cables
Access Hatch	
Notes	Cables new in 2024
	new base elbows and hardware in 2024

Control Panel

Latest Refit Date	2019
Serial Number	
Manufacturer	
Controller / PLC	1500ct
Floats	
Pressure Transducers	A1000i
SCADA	
Notes	Has GuardDog
	Panel remodel in 2020

Pumps

#1 Manufacturer	
Model	
Hp	15
Voltage	
Impeller	
Date of Installation / Rebuild	2002
#2 Manufacturer	
Model	
Hp	15
Voltage	
Impeller	
Date of Installation / Rebuild	2002
Notes	

Valve Manhole

Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	6
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	4/2/07
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	Mike R. & Curt
Water Level Before Running Both Pumps		Ft.	Notes	Inflow approx. 10gpm during test.
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		

LIFT STATION DATA

Lift Station #	7
Location	CR-11 (West of Clinic)
Date of Original Construction	2003

Wetwell

Structure Size	
Rails / Cables	Cables
Access Hatch	
Notes	Cables new in 2024
	new base elbows and hardware in 2024

Control Panel

Latest Refit Date	2016
Serial Number	
Manufacturer	
Controller / PLC	
Floats	
Pressure Transducers	
SCADA	
Notes	Has GuardDog

Pumps

#1 Manufacturer	KSB
Model	KSB-E80-253/114X
Hp	15
Voltage	
Impeller	240
Date of Installation / Rebuild	2022

#2 Manufacturer	KSB
Model	KSB-E80-253/114X
Hp	15
Voltage	
Impeller	240
Date of Installation / Rebuild	2022
Notes	

Valve Manhole

Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	7
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	
Water Level Before Running Both Pumps		Ft.	Notes	
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		

LIFT STATION DATA

Lift Station #	8
Location	Sparrow Drive
Date of Original Construction	2005
Wetwell	
Structure Size	
Rails / Cables	
Access Hatch	
Notes	
Control Panel	
Latest Refit Date	2005
Serial Number	
Manufacturer	
Controller / PLC	
Floats	
Pressure Transducers	
SCADA	
Notes	
Pumps	
#1 Manufacturer	
Model	
Hp	5
Voltage	
Impeller	
Date of Installation / Rebuild	2005
#2 Manufacturer	
Model	
Hp	5
Voltage	
Impeller	
Date of Installation / Rebuild	2005
Notes	
Valve Manhole	
Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	8
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	
Water Level Before Running Both Pumps		Ft.	Notes	
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		

LIFT STATION DATA

Lift Station #	9
Location	Airport Road
Date of Original Construction	2008
Wetwell	
Structure Size	6' dia.
Rails / Cables	
Access Hatch	
Notes	
Control Panel	
Latest Refit Date	
Serial Number	
Manufacturer	
Controller / PLC	1500ct
Floats	
Pressure Transducers	
SCADA	
Notes	controller replaced in 2019
Pumps	
#1 Manufacturer	
Model	
Hp	5
Voltage	
Impeller	
Date of Installation / Rebuild	2008
#2 Manufacturer	
Model	
Hp	5
Voltage	
Impeller	
Date of Installation / Rebuild	2008
Notes	
Valve Manhole	
Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	9
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	
Water Level Before Running Both Pumps		Ft.	Notes	
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		

LIFT STATION DATA

Lift Station #	10
Location	City Hall*
Date of Original Construction	1996
Wetwell	
Structure Size	
Rails / Cables	
Access Hatch	
Notes	
Control Panel	
Latest Refit Date	1996
Serial Number	
Manufacturer	
Controller / PLC	
Floats	
Pressure Transducers	
SCADA	
Notes	
Pumps	
#1 Manufacturer	
Model	
Hp	1
Voltage	
Impeller	
Date of Installation / Rebuild	1996
#2 Manufacturer	
Model	
Hp	
Voltage	
Impeller	
Date of Installation / Rebuild	
Notes	
Valve Manhole	
Check Valves	
Isolation Valves	
Notes	

LIFT STATION DATA

FLOW TEST RESULTS

Water Level Before Running Pump 1		Ft.	Lift Station #	10
Water Level After Running Pump 1		Ft.		
Runtime		Min.	Date	
Water Level Before Running Pump 2		Ft.		
Water Level After Running Pump 2		Ft.		
Runtime		Min.	Tested By	
Water Level Before Running Both Pumps		Ft.	Notes	
Water Level After Running Both Pumps		Ft.		
Runtime		Min.		
Wetwell Diameter		Ft.		Field Measurements
Wetwell Volume		Gal. / Ft.		Calculated from Field Measurements
Wetwell Volume		Ft.^3 / Ft.		
Pump 1	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Pump 2	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		
Both Pumps	Drawdown	Ft.		
	Flow	Gal. / Min.		
	Flow	Ft.^3 / Min.		