

**Kirkwood Meadows Public Utility District**  
**Operations Committee**  
**REGULAR MEETING AGENDA**

NOTICE IS HEREBY GIVEN that the Operations Committee of the Kirkwood Meadows Public Utility District has called a Regular Meeting of the Committee to be held on **Wednesday, May 29, 2019 at 3:30 p.m.** at the Kirkwood Meadows Public Utility District, Community Services Building, 33540 Loop Road, Kirkwood, CA 95646.

The Agenda for this Regular Meeting is:

1. **Overhead Electric Line Clearance.** Update.
2. **Utilities Update/Issues.**
  - a. **Electric**
  - b. **Propane**
  - c. **Water**
  - d. **Wastewater.....Pgs. 2-3**
  - e. **Solid Waste**
3. **2019/20 Capital Budget.** Discussion and possible action. **Pgs. 4-15**
4. **Future Topics.**
5. Next Meeting/Staff Recommendation: *Wednesday, June 26, 2019 - 3:30pm.*

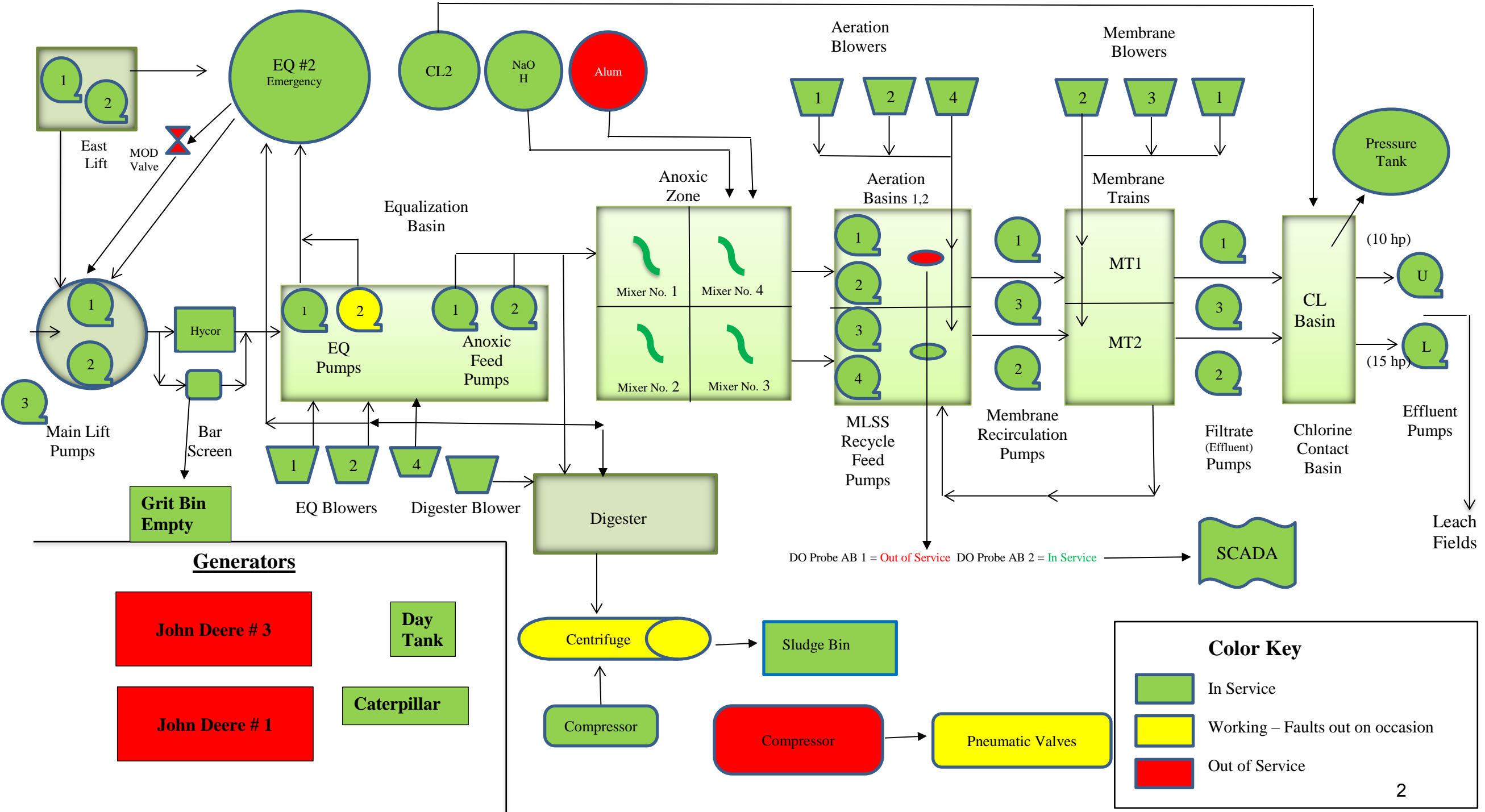
Dated: May 22, 2019

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Kirkwood Meadows PUD

The Kirkwood Meadows Public Utility District is an Equal Opportunity Provider and Employer.

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the District at (209) 258-4444, by email to [jgillies@kmpud.com](mailto:jgillies@kmpud.com). Requests must be made as early as possible, and at least two business days before the meeting.



**Color Key**

- In Service
- Working – Faults out on occasion
- Out of Service

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<b>Equipment Failure Description</b>	<b>Status</b>	<b>Repair Plan</b>
MOD Valve water damaged by 2017 flood.	Quote from Aqua Sierra.	Budgeted as Below the Line.
Alum Tank chemical feed for phosphorus removal.	Taken out of service due to fouling of membranes.	None.
John Deere Generators	Control screen out of service.	Decommission both units.
Centrifuge Polymer Feed System	Works on Internal control only. External offline.	Steff Neff to diagnose then Tesco or Aqua Sierra
DO Probe AB 1	Out of Service	Replaced Oxy 1100. Still offline.
Duplex Air Compressor for Valves	Failed 4/24/19	Purchased Atlas Copco Rotary Screw Compressor 5/16/19

<b>Pneumatic Valves</b>	<b>Status/Issues</b>	<b>Repair Plan/Preventative Maintenance Plan</b>
CV217 Backflush Valve.	Failed.	Replace Valve Solenoid.
CV117 Backflush Valve.	Several Failures. Replaced Solenoids. Operating.	New Compressor and Solenoid Rehab. Kits.
CV017 Backflush Valve.	Several Failures. Replaced Solenoids. Operating.	New Compressor and Solenoid Rehab. Kits.
CV005 Backflush Valve.	Several Failures. Replaced Solenoids. Operating.	New Compressor and Solenoid Rehab. Kits.
CV153 Membrane Blower Valve.	Several Failures. Replaced Solenoids and Network Monitor. Operating.	New Compressor and Solenoid Rehab. Kits.
CV253 Membrane Blower Valve.	Several Failures. Replaced Solenoids and Network Monitor. Operating.	New Compressor and Solenoid Rehab. Kits.
CV212 Filtrate Pump Valve.	Several Failures. Replaced Solenoids. Operating.	New Compressor and Solenoid Rehab. Kits.
CV214 Filtrate Pump Valve.	One-Time Failure. Replaced Solenoid. Operating.	New Compressor and Solenoid Rehab. Kits.
CV113 Filtrate Pump Valve.	One-Time Failure. Replaced Solenoid. Operating.	New Compressor and Solenoid Rehab. Kits.

**Kirkwood Meadows Public Utility District  
FY 18/19 Capital Improvement Projects**

<b>Expense</b>	<b>35 Yr Total</b>	<b>5 Yr Total</b>	<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>2022-2023</b>
<b>Capacity Component</b>						
Water	240,000	240,000	65,000	175,000	0	0
Wastewater	0	0	0	0	0	0
Employee Housing	2,100,000	0	0	0	0	0
Fire	0	0	0	0	0	0
Electric	0	0	0	0	0	0
Propane	0	0	0	0	0	0
Snow Removal	0	0	0	0	0	0
Cable	0	0	0	0	0	0
Parks and Rec	0	0	0	0	0	0
Solid Waste	0	0	0	0	0	0
Operations Shared	0	0	0	0	0	0
<b>Total Capacity Expense</b>	<b>2,340,000</b>	<b>240,000</b>	<b>65,000</b>	<b>175,000</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>						
Water	150,000	45,000	35,000	0	5,000	0
Wastewater	1,145,000	855,000	395,000	310,000	40,000	40,000
Employee Housing	36,500	31,000	31,500	9,100	1,500	9,100
Fire	349,500	19,700	6,900	13,200	21,200	65,700
Electric	355,750	265,750	177,750	260,000	51,500	94,000
Propane	907,250	319,250	205,250	216,000	166,000	91,000
Snow Removal	749,500	171,000	122,000	13,000	11,500	13,000
Cable	77,000	11,000	7,000	1,000	1,000	1,000
Parks and Rec	120,500	27,500	11,000	15,000	0	1,500
Solid Waste	85,000	10,000	5,000	5,000	5,000	5,000
Operations Shared	166,400	74,000	63,500	3,000	1,500	3,000
<b>Total Replacement Expense</b>	<b>8,901,300</b>	<b>3,276,500</b>	<b>1,071,400</b>	<b>1,061,800</b>	<b>354,200</b>	<b>361,900</b>
<b>Total Capital Expense</b>	<b>14,627,800</b>	<b>3,804,000</b>	<b>1,136,400</b>	<b>1,236,800</b>	<b>354,200</b>	<b>649,400</b>

**Kirkwood Meadows Public Utility District  
FY 18/19 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
<i>Distribution</i>									
Water Model	40,000	40,000		1	40,000				
Well 6	200,000	200,000		1	25,000	175,000			
<i>Storage</i>									
<i>Water Rights</i>									
<b>Total Water Capacity Expense</b>	<b>240,000</b>	<b>240,000</b>			<b>65,000</b>	<b>175,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
Well Pumps	90,000	15,000	Two Years	1	5,000		5,000		5,000
Treatment Building Power Replacement	10,000	10,000	One-Time	1	10,000				
Wells 2, 3 & 5 Telemetry & Controls	50,000	20,000	Five Years	1	20,000				
<b>Total Water Replacement Expense</b>	<b>150,000</b>	<b>45,000</b>			<b>35,000</b>	<b>0</b>	<b>5,000</b>	<b>0</b>	<b>5,000</b>
<b>Total Water Capital Expense</b>	<b>390,000</b>	<b>285,000</b>			<b>100,000</b>	<b>175,000</b>	<b>5,000</b>	<b>0</b>	<b>5,000</b>

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FY 18/19 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
<i>Collection</i>									
<i>Treatment</i>									
<i>Disposal</i>									
<b>Total Wastewater Capacity Expense</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
<i>Collection</i>									
Collection System Infiltration/Inflow Repairs	280,000	200,000	Annual for 10 Years	1	40,000	40,000	40,000	40,000	40,000
Jetter Camera	25,000	25,000	One Time	1	25,000				
<i>Treatment</i>									
WWTP Refurbish Conditioned Space	200,000	200,000	One Time	1		200,000			
WWTP Process Basin Area Exhaust Fans	70,000	70,000	One Time	1		70,000			
WWTP Roof/Wall Repair	310,000	310,000	One Time	1	310,000				
New Sludge Bins (2)	20,000	20,000	One Time	1	20,000				
<i>Disposal</i>									
Pumps/Controls, Absorption Beds	45,000	0	Ten Years	1					
<i>General</i>									
<b>Total Wastewater Replacement Expense</b>	<b>1,145,000</b>	<b>855,000</b>			<b>395,000</b>	<b>310,000</b>	<b>40,000</b>	<b>40,000</b>	<b>40,000</b>
<b>Total Wastewater Capital Expense</b>	<b>1,145,000</b>	<b>855,000</b>			<b>395,000</b>	<b>310,000</b>	<b>40,000</b>	<b>40,000</b>	<b>40,000</b>

**Kirkwood Meadows Public Utility District  
FY 18/19 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
Lava Rock II	2,100,000	0	When Staff needs exceed available housing	5					
<b>Total Employee Housing Capacity Expense</b>	<b>2,100,000</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
Concrete Coring/Venting	25,000	25,000	One Time	1	25,000				
Concrete Paving for Snow Removal	5,000	5,000	One Time	1	5,000				
Dishwashers	6,500	1,000	Two Years (Until all 8 Replaced, then 10 Years)	1		500		500	
Roof Repairs	0	0	One Time	1					
<b>Total Employee Housing Replacement Expense</b>	<b>36,500</b>	<b>31,000</b>			<b>31,500</b>	<b>9,100</b>	<b>1,500</b>	<b>9,100</b>	<b>1,500</b>
<b>Total Employee Housing Capital Expense</b>	<b>2,136,500</b>	<b>31,000</b>			<b>31,500</b>	<b>9,100</b>	<b>1,500</b>	<b>9,100</b>	<b>1,500</b>

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FY 18/19 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
<b>Total Fire Capacity Expense</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
Hose Replacement	52,500	7,500	Annual	1	1,500	1,500	1,500	1,500	1,500
Radio Reprogramming	12,500	2,500	Annual	1	500	500	500	500	500
SCBA's (7,000 per unit + spare cylinder)	255,700	3,700	10 years	1	3,700				
Structure Gear / PPE	28,800	6,000	Annual	1	1,200	1,200	1,200	1,200	1,200
<b>Total Fire Replacement Expense</b>	<b>349,500</b>	<b>19,700</b>			<b>6,900</b>	<b>13,200</b>	<b>21,200</b>	<b>65,700</b>	<b>3,200</b>
<b>Total Fire Capital Expense</b>	<b>349,500</b>	<b>19,700</b>			<b>6,900</b>	<b>13,200</b>	<b>21,200</b>	<b>65,700</b>	<b>3,200</b>



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FY 18/19 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
<b>Total Electric Capacity Expense</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
T1 Line Antifreeze Gel Project	75,000	75,000	10 years	1	75,000				
Ammonia Tank Relocation	25,000	25,000	One Time	1	25,000				
Transformer Retaining Walls	6,000	6,000	One Time	1	6,000				
Gate Replacement	6,000	6,000	One Time	1	6,000				
Mountain Club Transformer	30,000	30,000	One Time	1	30,000				
OV Cabinet Replacement	80,000	50,000	15 years	1		50,000			
Riser Vaults (8)	40,000	40,000	Annual for 4 years	1	10,000	10,000	10,000	10,000	
Rugged Laptop (Split with Propane)	1,750	1,750	One Time	1	1,750				
Snowmaking Compressor Transformer	20,000	20,000	One Time	1	20,000				
Service Lines	72,000	12,000	Two Years	1	4,000		4,000		4,000
<b>Total Electric Replacement Expense</b>	<b>355,750</b>	<b>265,750</b>			<b>177,750</b>	<b>260,000</b>	<b>51,500</b>	<b>94,000</b>	<b>94,500</b>
<b>Total Electric Capital Expense</b>	<b>355,750</b>	<b>265,750</b>			<b>177,750</b>	<b>260,000</b>	<b>51,500</b>	<b>94,000</b>	<b>94,500</b>

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Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
<b>Total Propane Capacity Expense</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
Meter Replacment (Commercial)	334,000	40,000	10% a year	1	8,000	8,000	8,000	8,000	8,000
Meter Replacment (Residential)	334,000	40,000	10% a year	1	8,000	8,000	8,000	8,000	8,000
Propane Tank Roof	100,000	100,000	One Time	1	100,000				
Propane Tank Shed - Lava Rock and WWTP	3,500	3,500	One Time	1	3,500				
Propane Tank, Repiping & Valving	80,000	80,000	One Time	1	80,000				
Rugged Laptop (Split with Electric)	1,750	1,750	One Time	1	1,750				
Vaporizer Roof	50,000	50,000	One Time	1		50,000			
Air Line Replacement	4,000	4,000	One Time	1	4,000				
<b>Total Propane Replacement Expense</b>	<b>907,250</b>	<b>319,250</b>			<b>205,250</b>	<b>216,000</b>	<b>166,000</b>	<b>91,000</b>	<b>38,000</b>
<b>Total Propane Capital Expense</b>	<b>907,250</b>	<b>319,250</b>			<b>205,250</b>	<b>216,000</b>	<b>166,000</b>	<b>91,000</b>	<b>38,000</b>

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FY 18/19 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
[No Capital Capacity Improvements]									
<b>Total Snow Removal Capacity Expense</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
924G 12' Blade	51,000	17,000	Fifteen Years	1	17,000				
924G Tires	84,000	12,000	Five Years	1	12,000				
950GC RPM Controls	7,500	7,500	One Time	1	7,500				
950F Front Axle/Motor/Transmission Rebuild	140,000	35,000	Ten Years	1	35,000				
Chain Rack	8,000	8,000	One Time	1	8,000				
Diesel Fill Station (Powerhouse)	25,000	25,000	One Time	1	25,000				
Loader Chains	262,500	37,500	Annual	1	7,500	7,500	7,500	7,500	7,500
Snow Stake Storage Container	6,000	6,000	One Time	1	6,000				
Trackless Chains	140,000	20,000	Annual	1	4,000	4,000	4,000	4,000	4,000
Trackless Tires	25,500	3,000	Two Years	1		1,500		1,500	
<b>Total Snow Removal Replacement Expense</b>	<b>749,500</b>	<b>171,000</b>			<b>122,000</b>	<b>13,000</b>	<b>11,500</b>	<b>13,000</b>	<b>11,500</b>
<b>Total Snow Removal Capital Expense</b>	<b>749,500</b>	<b>171,000</b>			<b>122,000</b>	<b>13,000</b>	<b>11,500</b>	<b>13,000</b>	<b>11,500</b>

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FY 18/19 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
[No Capital Capacity Improvements]									
<b>Total Cable Capacity Expense</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
Channel 19 Equipment/ Education	35,000	5,000	Annual	1	1,000	1,000	1,000	1,000	1,000
Cable Equipment	42,000	6,000	Five Years	2	6,000				
<b>Total Cable Replacement Expense</b>	<b>77,000</b>	<b>11,000</b>			<b>7,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>
<b>Total Cable Capital Expense</b>	<b>77,000</b>	<b>11,000</b>	<b>0</b>		<b>7,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>

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FY 18/19 Capital Improvement Projects**

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<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
[No Capital Capacity Improvements]									
<b>Total Parks and Rec Capacity Expense</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
Playground Equipment Certification	31,000	1,000	Ten Years	1	1,000				
Playground & ADA Improvements	10,000	10,000	One Time	1	10,000				
Playground Equipment	79,500	16,500	Two Years Repair/Ten Years Replace	2		15,000		1,500	
<b>Total Parks and Rec Replacement Expense</b>	<b>120,500</b>	<b>27,500</b>			<b>11,000</b>	<b>15,000</b>	<b>0</b>	<b>1,500</b>	<b>0</b>
<b>Total Parks and Rec Capital Expense</b>	<b>120,500</b>	<b>27,500</b>			<b>11,000</b>	<b>15,000</b>	<b>0</b>	<b>1,500</b>	<b>0</b>

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Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
[No Capital Capacity Improvements]									
<b>Total Solid Waste Capacity Expense</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
Recycling	90,000	15,000	Two Years	1	5,000		5,000		5,000
Dumpsters	85,000	10,000	Two Years	2		5,000		5,000	
<b>Total Solid Waste Replacement Expense</b>	<b>85,000</b>	<b>10,000</b>			<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>
<b>Total Solid Waste Capital Expense</b>	<b>85,000</b>	<b>10,000</b>			<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>

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FY 18/19 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
<b>Capacity Component</b>				<b>Scale 1-5 1=Critical</b>					
[No Capital Capacity Improvements]									
<b>Total Operations_Shared Capacity Expense</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Replacement Component</b>									
416C Backhoe - Quick Coupler & Compactor	12,000	12,000	One Time	1	12,000				
416C Tires	4,200	0	Nine Years	1					
Computer	27,000	9,000	Every Year for 5 / Then Biannually	1	3,000	1,500	1,500	1,500	1,500
Concrete Paving for Snow Removal	5,000	5,000	One Time	1	5,000				
CSB Windows	15,000	0	Ten Years	1					
Hose Reel Oil/Hydro/Air	5,000	5,000	One Time	1	5,000				
Fall Protection	11,700	1,500	Five Years	1					1,500
Office Equipment	18,000	3,000	Two Years	1		1,500		1,500	
Concrete Floor & Pallet Racks	10,000	10,000	One Time	1	10,000				
Digital Radio & Antenna (1st Year)	40,000	25,000	10 Years	1	25,000				
Shoring	15,000	0	Fifteen Years	1					
Rugged Laptop	3,500	3,500	One Time	1	3,500				
<b>Total Operations_Shared Replacement Expens</b>	<b>166,400</b>	<b>74,000</b>			<b>63,500</b>	<b>3,000</b>	<b>1,500</b>	<b>3,000</b>	<b>3,000</b>
<b>Total Operations_Shared Capital Expense</b>	<b>166,400</b>	<b>74,000</b>			<b>63,500</b>	<b>3,000</b>	<b>1,500</b>	<b>3,000</b>	<b>3,000</b>