

# anthem

## community council

### Memorandum

To: ACC Board of Directors

From: Neal Shearer, Community Executive Officer  
Doug Greenstein, Community Finance and Operations Officer

Date: October 18, 2018

Re: 2018 Reserve Study

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#### **Recommendation**

ACC Staff recommends acceptance of the 2018 Reserve Study as prepared by Criterium-Kessler Engineers concurrent with the acceptance of Funding Option 3 [Alternative #2] (as described herein).

#### **Background**

ACC Staff had previously received authorization from the Board of Directors to perform a Reserve Study in 2018, as a successor study to the 2012-2013 Reserve Study. The amount of \$50,000 was included in the approved 2018 ACC budget to fund this project.

Executive Staff, with the assistance and support of the ACC Directors, management analyst Dawn Dworak and the Fiscal and Resource Management (FaRM) Committee members, created an RFP document to invite interested Reserve Analyst organizations to bid the project. Five (5) Phoenix-area firms responded to the RFP, and the internal team and FaRM vetted those RFP responses and interviewed three (3) finalists. The consensus recommendation was to award the project to Criterium-Kessler Engineers. The Kessler group initiated their field work in the latter part of Q1 2018 and has been building the Study during the intervening six (6) months.

#### **Reserve Study Objectives**

The ACC has an asset base in excess of \$32,000,000 and is poised to add approximately \$3,000,000 in new amenities within the next two years. Anthem's Board of Directors and Staff have a fiduciary and business obligation to protect and maintain this asset base. Within Master Planned Communities, the deployment of periodic Reserve Studies is the accepted vehicle to recognize the financial impact for maintaining a community's infrastructure.

Anthem's practice has been to have an independent third-party reserve study performed every four to five years so that it can recognize and incorporate into its assessment funding the impact of changes in maintenance and repair costs, as impacted by both use and inflation. While the ACC has elected to do updated (abbreviated) studies in the past, since Anthem has added over \$8,000,000 in new amenities during this decade, Staff believed it prudent to commission a "full"

Reserve Study in 2018, which would provide a complete field work review by reserve analysts and which would properly incorporate the estimated maintenance and repair impact of these new amenities and additions.

A Reserve Study can be most simply described as a “deferred maintenance plan,” wherein an organization creates a complete listing of its infrastructure which, over the course of time, will need periodic maintenance, repair and, as necessary, replacement. As assets and amenities are “consumed” through daily use, a community has an obligation to build up a cash reserve to timely and properly maintain these assets and amenities, as a function of safety and as a function of maintaining the value of the community and its residential and commercial units. The Reserve Study, as prepared by qualified reserve analysts and reserve engineers, places a dollar figure as to the future costs (impacted for inflation) for which a community should obligate itself, to maintain the infrastructure safely, properly, in a timeline manner.

### **Appropriate Funding Levels**

While Reserve Studies are a de-facto requirement for Master Planned Communities and HOAs, there is no “hard” level of funding that any community has to follow. In general, an “underfunded” reserve results in delayed maintenance to the community infrastructure and can result in special assessment” being charged to owners when a significant maintenance project is necessary and funding is inadequate. Conversely, an “overfunded” reserve results in an unnecessary or excessive amount of assessments being collected. Reserve analysts and engineers try to determine an appropriate level of funding when performing a Reserve Study, and that appropriate level can be described as either maintaining a funding balance at or above a minimum threshold level, or being as close to “100% fully funded” as reasonably possible and practical. When preparing their reports, reserve analysts and engineers will present to their clients multiple funding scenarios, which demonstrate to the client the impact of underfunding, appropriate funding and overfunding. In Staff’s opinion, and in the opinion of most reserve analysts and engineers, a “prudent Board which recognizes its fiduciary obligations” elects to do appropriate funding – and neither “kicks the can down the road” nor “overfunds to build up an unrealistic surplus.”

### **The ACC 2018 Reserve Study Results and Recommendations**

Attached to this memo are three (3) funding proposals for ACC consideration, which reflect the above concerns. Each of the funding options incorporate an estimate of 3% annual inflation, 2.25% interest earnings on investments, and performing appropriate annual maintenance and repair/replacement of assets and amenities at the end of their useful lives.

**Funding Option 1 [No Change]:** This option demonstrates “underfunding” by keeping the ACC annual reserve contribution unchanged each year in the future. It shows how the fund would be quickly depleted within the mid-term future, and how it would place a significant financial burden on future property owners. Using the standard 30-year reserve planning window, this option demonstrates that without reasonable increases in funding in future years, the Reserve Fund would result in a DEFICIT fund balance of over \$11,000,000 at the end of the 30-year window.

**Funding Option 2 [Alternative #1]:** This option demonstrates “overfunding” by increasing the funding requirement each year at a compound 3% rate. It shows how the fund would build up unnecessary amounts of cash, beyond reasonable needs for expenditures. This methodology

essentially penalizes both current and future property owners to build a fund balance well in excess of reasonable needs. Using the standard 30-year reserve planning window, this option demonstrates that the Reserve Fund would result in an EXCESSIVE fund balance of over \$35,000,000 at the end of the 30-year window.

**Funding Option 3 [Alternative #2]:** This option demonstrates “appropriate funding” by creating a funding plan that incorporates stable annual funding for a number of years followed by increasing funding in the future. This option shows how the fund would maintain an appropriate funding balance to cover reasonable use without placing an excessive burden on assessment levels and coordinates assessment funding to anticipated expenditures in future years. Using the standard 30-year reserve planning window, this option demonstrates that with a combination of short-term funding stability and reasonable increases in funding in future years, the Reserve Fund would result in an APPROPRIATE fund balance of approx. \$15,000,000 at the end of the 30-year window. As an additional note, this funding methodology has been successfully deployed by the ACC since 2014.

### **Conclusions**

The full text of the Reserve Study is available to the Board of Directors and the public on the community website, as it is a voluminous document, and represents a significant work product by the reserve engineers. It should be noted that this 2018 Reserve Study is a work product that bears an engineer’s seal, meaning that it is to a much higher standard of care than a reserve study done by a non-engineer, which is one of the principal reasons that ACC Staff opted to utilize the Criterium-Kessler organization for this full study.

ACC Staff is impressed with the time, research and analysis that the Kessler firm has embedded in this document, and we believe that their recommendations as to asset useful life, repair/replacement methodology, and funding considerations will prove invaluable to the ACC over the next four to six years, at which time a successor update to this Reserve Study should be undertaken to reflect future anticipated changes in the Anthem amenity and asset base. Staff believes that this study will be an appropriate underpinning for updating our annual maintenance checklist so that Anthem’s amenities and assets can remain at the level of safety, quality, appearance and usefulness that they do now.

Capital Reserve Fund – Current Funding Plan  
No Change to Contribution



Contribution Details

	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
First Year	\$ 170,000	\$ 2,040,000	\$ 16.67	\$ 200.00
Last Year	\$ 170,000	\$ 2,040,000	\$ 16.67	\$ 200.00

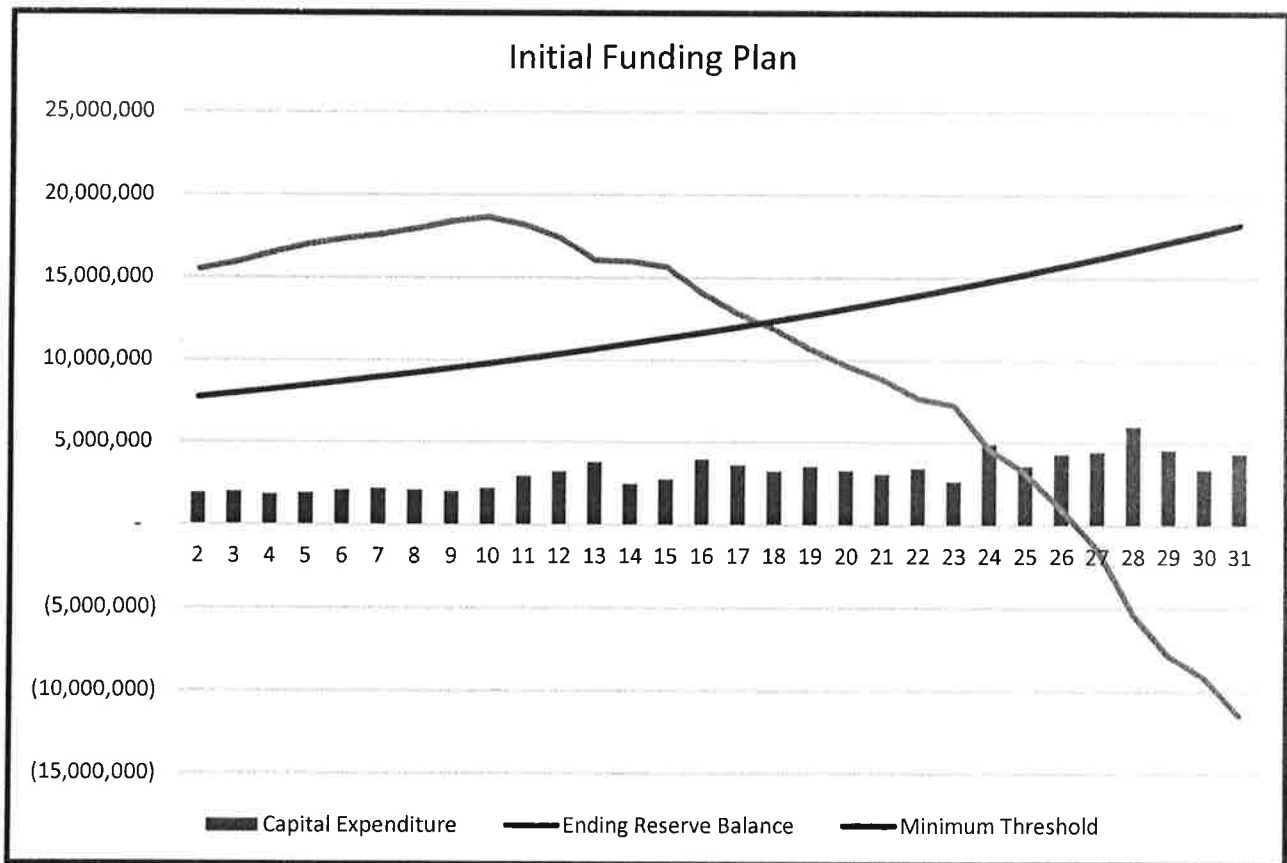
Number of Units:	10200
Fiscal Year starts:	01/01/19
Reserve Funds at start	\$ 15,024,329
Rate of Return on Reserve Funds (%)	2.25%
Inflation Rate (%)	3.00%
Initial Minimum Threshold	\$ 7,500,000

**SUMMARY**

No change to contribution

No Special Assessments

Special Assessments		
Year	Total/Year	Per Unit
		\$ -
		\$ -
		\$ -



Capital Reserve Fund – Current Funding Plan  
No Change to Contribution



Year	Fiscal Year	Beginning Reserve Balance	Revenue	Special Assessment	Investment Earnings	Capital Expenditure	Ending Reserve Balance	Minimum Threshold
2019	2	15,024,329	2,040,000	-	338,047	1,900,350	15,502,027	7,725,000
2020	3	15,502,027	2,040,000	-	348,796	1,977,530	15,913,293	7,956,750
2021	4	15,913,293	2,040,000	-	358,049	1,822,545	16,488,797	8,195,453
2022	5	16,488,797	2,040,000	-	370,998	1,899,592	17,000,203	8,441,316
2023	6	17,000,203	2,040,000	-	382,505	2,080,946	17,341,761	8,694,556
2024	7	17,341,761	2,040,000	-	390,190	2,178,970	17,592,981	8,955,392
2025	8	17,592,981	2,040,000	-	395,842	2,070,428	17,958,395	9,224,054
2026	9	17,958,395	2,040,000	-	404,064	1,997,973	18,404,486	9,500,776
2027	10	18,404,486	2,040,000	-	414,101	2,200,660	18,657,927	9,785,799
2028	11	18,657,927	2,040,000	-	419,803	2,927,999	18,189,731	10,079,373
2029	12	18,189,731	2,040,000	-	409,269	3,222,330	17,416,670	10,381,754
2030	13	17,416,670	2,040,000	-	391,875	3,795,088	16,053,457	10,693,207
2031	14	16,053,457	2,040,000	-	361,203	2,461,861	15,992,799	11,014,003
2032	15	15,992,799	2,040,000	-	359,838	2,746,741	15,645,895	11,344,423
2033	16	15,645,895	2,040,000	-	352,033	3,967,878	14,070,050	11,684,756
2034	17	14,070,050	2,040,000	-	316,576	3,605,037	12,821,590	12,035,298
2035	18	12,821,590	2,040,000	-	288,486	3,252,426	11,897,650	12,396,357
2036	19	11,897,650	2,040,000	-	267,697	3,524,677	10,680,670	12,768,248
2037	20	10,680,670	2,040,000	-	240,315	3,276,129	9,684,857	13,151,295
2038	21	9,684,857	2,040,000	-	217,909	3,077,910	8,864,856	13,545,834
2039	22	8,864,856	2,040,000	-	199,459	3,425,000	7,679,315	13,952,209
2040	23	7,679,315	2,040,000	-	172,785	2,622,368	7,269,732	14,370,776
2041	24	7,269,732	2,040,000	-	163,569	4,897,636	4,575,665	14,801,899
2042	25	4,575,665	2,040,000	-	102,952	3,552,295	3,166,322	15,245,956
2043	26	3,166,322	2,040,000	-	71,242	4,294,009	983,556	15,703,334
2044	27	983,556	2,040,000	-	22,130	4,429,640	(1,383,954)	16,174,435
2045	28	(1,383,954)	2,040,000	-	-	5,985,319	(5,329,273)	16,659,668
2046	29	(5,329,273)	2,040,000	-	-	4,538,876	(7,828,149)	17,159,458
2047	30	(7,828,149)	2,040,000	-	-	3,367,693	(9,155,842)	17,674,241
2048	31	(9,155,842)	2,040,000	-	-	4,332,845	(11,448,687)	18,204,469

Capital Reserve Fund - Funding Plan - Alternate 1  
Annual Increase w/ Inflation



Contribution Details

	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
First Year	\$ 170,000	\$ 2,040,000	\$ 16.67	\$ 200.00
Last Year	\$ 400,616.14	\$ 4,807,394	\$ 39.28	\$ 471.31

Number of Units:	10200
Fiscal Year starts:	01/01/19
Reserve Funds at start	\$ 15,024,329
Rate of Return on Reserve Funds (%)	2.25%
Inflation Rate (%)	3.00%
Initial Minimum Threshold	\$ 7,500,000

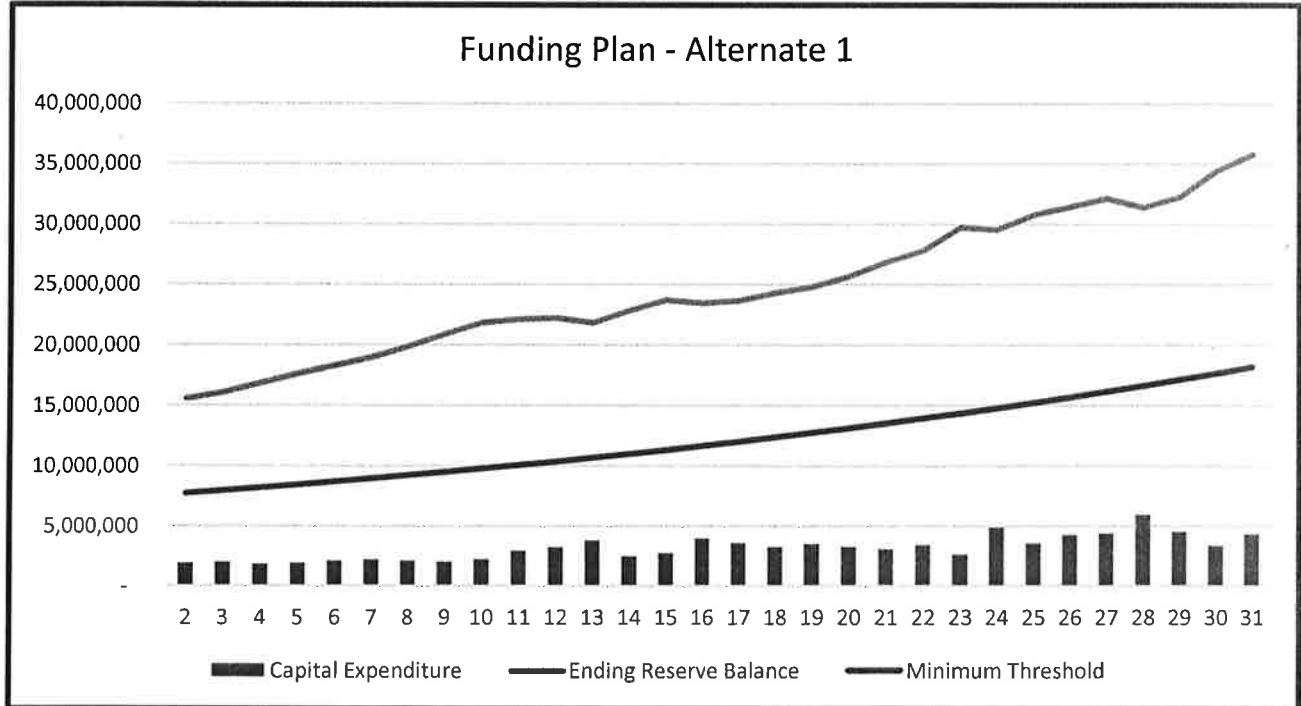
**SUMMARY**

Increase with Inflation  
Annually (3%)

No lump sum increase

No Special Assessments

Special Assessments		
Year	Total/Year	Per Unit
		\$ -
		\$ -
		\$ -



Capital Reserve Fund - Funding Plan - Alternate 1  
Annual Increase w/ Inflation



Year	Fiscal Year	Beginning Reserve Balance	Revenue	Special Assessment	Investment Earnings	Capital Expenditure	Ending Reserve Balance	Minimum Threshold
2019	2	15,024,329	2,101,200	-	338,047	1,900,350	15,563,227	7,725,000
2020	3	15,563,227	2,164,236	-	350,173	1,977,530	16,100,106	7,956,750
2021	4	16,100,106	2,229,163	-	362,252	1,822,545	16,868,976	8,195,453
2022	5	16,868,976	2,296,038	-	379,552	1,899,592	17,644,974	8,441,316
2023	6	17,644,974	2,364,919	-	397,012	2,080,946	18,325,959	8,694,556
2024	7	18,325,959	2,435,867	-	412,334	2,178,970	18,995,190	8,955,392
2025	8	18,995,190	2,508,943	-	427,392	2,070,428	19,861,096	9,224,054
2026	9	19,861,096	2,584,211	-	446,875	1,997,973	20,894,209	9,500,776
2027	10	20,894,209	2,661,737	-	470,120	2,200,660	21,825,407	9,785,799
2028	11	21,825,407	2,741,589	-	491,072	2,927,999	22,130,068	10,079,373
2029	12	22,130,068	2,823,837	-	497,927	3,222,330	22,229,501	10,381,754
2030	13	22,229,501	2,908,552	-	500,164	3,795,088	21,843,129	10,693,207
2031	14	21,843,129	2,995,809	-	491,470	2,461,861	22,868,548	11,014,003
2032	15	22,868,548	3,085,683	-	514,542	2,746,741	23,722,032	11,344,423
2033	16	23,722,032	3,178,254	-	533,746	3,967,878	23,466,153	11,684,756
2034	17	23,466,153	3,273,601	-	527,988	3,605,037	23,662,706	12,035,298
2035	18	23,662,706	3,371,809	-	532,411	3,252,426	24,314,501	12,396,357
2036	19	24,314,501	3,472,963	-	547,076	3,524,677	24,809,863	12,768,248
2037	20	24,809,863	3,577,152	-	558,222	3,276,129	25,669,109	13,151,295
2038	21	25,669,109	3,684,467	-	577,555	3,077,910	26,853,221	13,545,834
2039	22	26,853,221	3,795,001	-	604,197	3,425,000	27,827,419	13,952,209
2040	23	27,827,419	3,908,851	-	626,117	2,622,368	29,740,019	14,370,776
2041	24	29,740,019	4,026,116	-	669,150	4,897,636	29,537,650	14,801,899
2042	25	29,537,650	4,146,900	-	664,597	3,552,295	30,796,852	15,245,956
2043	26	30,796,852	4,271,307	-	692,929	4,294,009	31,467,080	15,703,334
2044	27	31,467,080	4,399,446	-	708,009	4,429,640	32,144,896	16,174,435
2045	28	32,144,896	4,531,430	-	723,260	5,985,319	31,414,266	16,659,668
2046	29	31,414,266	4,667,372	-	706,821	4,538,876	32,249,584	17,159,458
2047	30	32,249,584	4,807,394	-	725,616	3,367,693	34,414,900	17,674,241
2048	31	34,414,900	4,951,615	-	774,335	4,332,845	35,808,005	18,204,469

Capital Reserve Fund - Funding Plan - Alternate 2  
 Lump Sum Increase Year 2 (2019)  
 Annual Increase with Inflation Years 12 - 31



**Contribution Details**

	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
First Year	\$ 185,083	\$ 2,221,000	\$ 18.15	\$ 217.75
Last Year	\$ 334,254	\$ 4,011,048	\$ 32.77	\$ 393.24

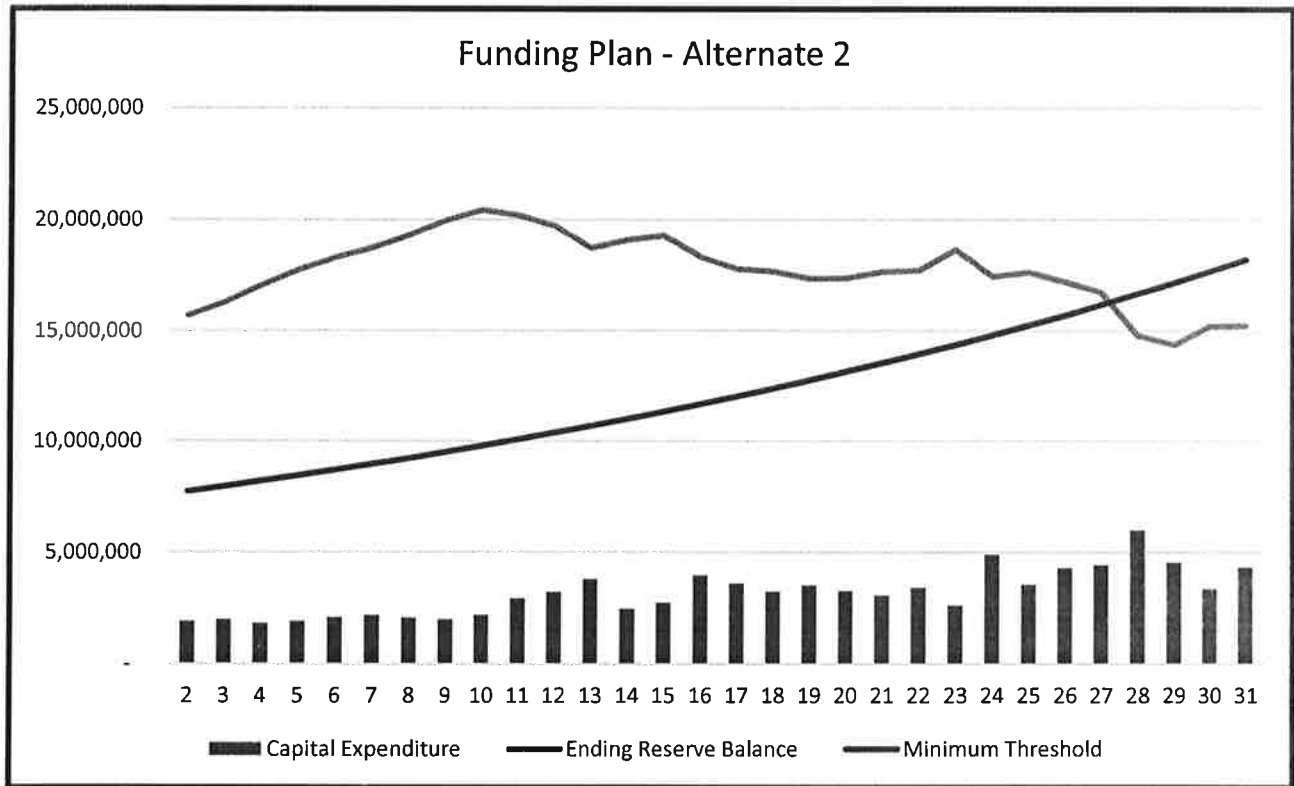
Number of Units:	10200
Fiscal Year starts:	01/01/19
Reserve Funds at start	\$ 15,024,329
Rate of Return on Reserve Funds (%)	2.25%
Inflation Rate (%)	3.00%
Initial Minimum Threshold	\$ 7,500,000

**SUMMARY**

Increase Annual  
 Contribution to \$2,221,000  
 YR 2 (2019) then Annual  
 increase with inflation  
 (3%) YRS 12 - 31 (2029 -  
 2048)

No Special Assessments

Special Assessments		
Year	Total/Year	Per Unit
		\$ -
		\$ -
		\$ -





Capital Reserve Fund - Funding Plan - Alternate 2  
 Lump Sum Increase Year 2 (2019)  
 Annual Increase with Inflation Years 12 - 31



Year	Fiscal Year	Beginning Reserve Balance	Revenue	Special Assessment	Investment Earnings	Capital Expenditure	Ending Reserve Balance	Minimum Threshold
2019	2	15,024,329	2,221,000	-	338,047	1,900,350	15,683,027	7,725,000
2020	3	15,683,027	2,221,000	-	352,868	1,977,530	16,279,365	7,956,750
2021	4	16,279,365	2,221,000	-	366,286	1,822,545	17,044,106	8,195,453
2022	5	17,044,106	2,221,000	-	383,492	1,899,592	17,749,006	8,441,316
2023	6	17,749,006	2,221,000	-	399,353	2,080,946	18,288,413	8,694,556
2024	7	18,288,413	2,221,000	-	411,489	2,178,970	18,741,933	8,955,392
2025	8	18,741,933	2,221,000	-	421,693	2,070,428	19,314,198	9,224,054
2026	9	19,314,198	2,221,000	-	434,569	1,997,973	19,971,795	9,500,776
2027	10	19,971,795	2,221,000	-	449,365	2,200,660	20,441,500	9,785,799
2028	11	20,441,500	2,221,000	-	459,934	2,927,999	20,194,434	10,079,373
2029	12	20,194,434	2,287,630	-	454,375	3,222,330	19,714,109	10,381,754
2030	13	19,714,109	2,356,259	-	443,567	3,795,088	18,718,847	10,693,207
2031	14	18,718,847	2,426,947	-	421,174	2,461,861	19,105,107	11,014,003
2032	15	19,105,107	2,499,755	-	429,865	2,746,741	19,287,986	11,344,423
2033	16	19,287,986	2,574,748	-	433,980	3,967,878	18,328,835	11,684,756
2034	17	18,328,835	2,651,990	-	412,399	3,605,037	17,788,188	12,035,298
2035	18	17,788,188	2,731,550	-	400,234	3,252,426	17,667,546	12,396,357
2036	19	17,667,546	2,813,496	-	397,520	3,524,677	17,353,885	12,768,248
2037	20	17,353,885	2,897,901	-	390,462	3,276,129	17,366,120	13,151,295
2038	21	17,366,120	2,984,838	-	390,738	3,077,910	17,663,786	13,545,834
2039	22	17,663,786	3,074,383	-	397,435	3,425,000	17,710,605	13,952,209
2040	23	17,710,605	3,166,615	-	398,489	2,622,368	18,653,341	14,370,776
2041	24	18,653,341	3,261,613	-	419,700	4,897,636	17,437,018	14,801,899
2042	25	17,437,018	3,359,462	-	392,333	3,552,295	17,636,518	15,245,956
2043	26	17,636,518	3,460,246	-	396,822	4,294,009	17,199,576	15,703,334
2044	27	17,199,576	3,564,053	-	386,990	4,429,640	16,720,980	16,174,435
2045	28	16,720,980	3,670,975	-	376,222	5,985,319	14,782,857	16,659,668
2046	29	14,782,857	3,781,104	-	332,614	4,538,876	14,357,700	17,159,458
2047	30	14,357,700	3,894,537	-	323,048	3,367,693	15,207,592	17,674,241
2048	31	15,207,592	4,011,373	-	342,171	4,332,845	15,228,291	18,204,469