

## Board of County Commissioners Agenda Request

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Agenda Item #

Requested Meeting Date: February 13, 2018

Title of Item: Bonding Options - Paul Steinman

✓ REGULAR AGENDA	Action Requested:	✓ Direction Requested
CONSENT AGENDA	Approve/Deny Motion	Discussion Item
INFORMATION ONLY	Adopt Resolution (attach dra *provide	aft) Hold Public Hearing* e copy of hearing notice that was published
Submitted by: Jessica Seibert, County Administrator		Department: Administration
Presenter (Name and Title): Jessica Seibert, County Administrator		Estimated Time Needed: 15 min.
Summary of Issue:		
Paul Steinman with Springsted, Inc. will option to proceed with. Three scenario	ll discuss bonding options with the Bo os for consideration are attached in ad	ard and request direction regarding which dition to the bond schedule.
Alternatives, Options, Effects on	Others/Comments:	
		-
Recommended Action/Motion: Provide direction for Springsted, Inc. to	move forward with the bonding proces	ss.
Financial Impact: Is there a cost associated with this What is the total cost, with tax and Is this budgeted?  Yes	•	No



Springsted Incorporated 380 Jackson Street, Suite 300 Saint Paul, MN 55101-2887

Tel: 651-223-3000 Fax: 651-223-3002 www.springsted.com

#### **MEMORANDUM**

TO:

Aitkin County Board of Commissioners

Jessica Seibert, County Administrator

FROM:

Paul T. Steinman, Vice President

DATE:

February 6, 2018

SUBJECT:

General Obligation Capital Improvement (CIP) Bonds 2018A

The purpose of this memo is to support a discussion of 3 bond scenarios for issuance of the County's CIP Bonds for Courthouse and Administration improvements. The maximum amount of bonds that can be issued as per the resolution approving the Capital Improvement Plan on March 28, 2017 is \$10,500,000.

Of complexity here is the issue of Bank Qualified (BQ) bonds vs. Non-Bank Qualified (NBQ) bonds. This issue can be defined simply by the fact that BQ bonds enjoy a tax advantage when purchased by commercial banks. NBQ bonds do not get the same advantage. The tax advantage by commercial banks translates into an interest rate advantage to you, the issuer, because it increases the demand for your bonds (more bidders). An entity is allowed by federal law to issue a maximum of \$10M of BQ bonds in a calendar year. Here are the challenges associated with this issue:

- Your project needs every bit of \$10.5M, otherwise you could simply reduce the amount of bonds
- BQ vs. NBQ is very difficult to pinpoint in the market right now
  - Federal tax bill recently adopted is anticipated to change the dynamics of the benefit of BQ (decrease in corporate tax rate results in less benefit of BQ for banks); more time is needed to see an actual trend
  - Limited number of municipal bond sales in January 2018, combined with market fluctuations in early February, are making it difficult to determine differences in yields between BQ and NBQ municipal bonds

Our most recent research on BQ vs. NBQ has yielded the following results:

 From the limited information available in the second half of January 2018, it appears there is little or no difference in BQ and NBQ through about 2027; marginal increase in yields for NBQ in 2028; and up to 0.30% higher yields for NBQ 2029 and thereafter, with some indication the spreads could be lower than 0.30% in 2034 through 2038.

Another important issue to understand is capitalized interest. When bonds are issued, the entity is required to make an interest payment within 1 year (bonds are typically structured for payment 2/1 and 8/1 of any given year). For bonds that are issued in spring of 2018, the entity would levy for in the fall of 2018 and the first interest payment would be 2/1/19. Fall 2018 levy dollars (in this example) aren't available to the entity until sometime after May 15, 2019, so there is no receipt of funds from that levy that would be available to make the interest payment required on 2/1/19. To address this common issue, we included capitalized interest in the principal amount of the bonds to make the first interest payment. In your case we cannot increase the par amount of bonds above \$10,500,000, so paying for capitalized interest out of the principal amount of the bonds reduces the net bond proceeds available to pay for the

**Public Sector Advisors** 

<u>project (a direct reduction in your project fund).</u> Additionally, until bids have been taken on the bonds, we won't know exactly how much capitalized interest is needed to make the first payment on 2/1/19. <u>As bond interest rates increase, the capitalized interest number will also increase causing an equal reduction in the deposit to your project construction fund.</u>

Over the past couple months, we have structured 3 bond scenarios to compare them side by side to assist you in determining the best and most efficient approach for Aitkin County. The assumptions we used for these scenarios are as follows:

- 1. Interest rates are estimates only, spread to current market rates; changes in rates may cause significant alterations to this analysis.
- 2. The project fund amount is based on a projected draw schedule provided by Contegrity Group; then adjusted (reduced) monthly on a pro rata basis to equal the estimated net proceeds that will be generated from a total principal borrowing of \$10,500,000.
- 3. Capitalized interest will make the first interest payment due on February 1, 2019 on the 2018 series of bonds in Scenario 1.
- 4. Capitalized interest will make the first interest payment due on February 1, 2019 for Scenario 2 Series 2018 and on February 1, 2020 for Series 2019.
- 5. In scenario 3, Aitkin county is assumed to use cash to make the first interest payment due on February 1, 2019.
- 6. Costs of issuance includes Municipal Advisor, Bond Counsel, Registrar, rating, and Official Statement posting and printing.
- 7. Total interest cost is based on all issues structured with principal payments due February 1, 2020 through 2039 to result in approximately level annual levies.
- 8. Investment earnings on the project fund are based on an assumed investment rate of 1.20%. Investment earnings are gross funded, meaning they are <u>not</u> used to reduce the borrowing amount, but would be available to fund additional project costs or for deposit into the debt service fund upon completion of construction.
- 9. For purposes of these analyses we assumed all the bond structures would have the same interest rates. Interest rates today are currently about 35bps (0.35%) higher than they were in early January when this analysis was prepared. The actual rates for Scenario 2 will be dependent on market conditions at the time of sale (January 2019).

#### These are the 3 scenarios:

Scenario 1) One series of bonds issued March/April 2018 in the par amount of \$10.5M

- NBQ with capitalized interest
- First levy 2018, collect 2019
- Average levy \$752,454
- Deposit to project fund \$10,024,420
- Total interest paid \$4,105,527

Scenario 2) Two series of bonds issued March/April 2018 and Jan/Feb 2019 in the par amount of \$10.5M

- Both issues BQ because each is under \$10M and issued in different years
- Capitalized interest on both issues
- First levy 2018, collect 2019 \$482,281
- First levy 2019, collect 2020 \$279,300
- Average levy \$762,895
- Deposit to project fund total \$9,972,296
- Total interest paid \$4,035,537

Scenario 3) One series of bonds issued March/April 2018 in the par amount of \$10.5M

- NBC
- County cash in place of Capitalized Interest (estimate \$258,388)
- Levy 18, collect 19 \$439,488
- Levy 19, collect 20 \$752,230
- Average levy \$736,072

- Deposit to project fund total \$10,279,577
- Total interest paid \$4,479,828
  - More interest vs. scenario 1 due to the step levy increase

First Lew/Collection
County Cash Contribution
First Lewy
Average Levy at 105%
Bond Sale/Receipt of Proceeds
Interest Rate Assumption
Bank Qualified
Deposit to Project Fund
Principal
Capitalized interest
Costs of Issuance
Total Interest Cost
Investment Earnings on Project Fund

Scenario 1
Series 2018
2018/2019
None
\$731,495
\$752,454
March/April 2018
0.25% over current
No
\$10,024,420
\$10,500,000
\$252,915
\$62,100
\$4,105,527
\$82,749

	Scenario 2		Scenario 3	
Series 2018	Series 2019	Total	Series 2018	
2018/2019	2019/2020		2018/2019	
None	None		\$258,388	
\$482,281	\$279,300		\$439,488	
\$481,664	\$281,231	\$762,895	\$736,072	
March/April 2018	Jan/Feb 2019	10 month time difference	March/April 2018	
0.25% over current	0,25% over current		0.25% over current	
Yes	Yes		No	
\$6,395,062	\$3,577,233	\$9,972,296	\$10,279,577	
\$6,710,000	\$3,790,000	\$10,500,000	\$10,500,000	
\$161,667	\$110,383	\$272,050	None	
\$51,815	\$44,140	\$95,955	\$62,100	
\$2,626,217	\$1,409,321	\$4,035,537	\$4,479,828	
\$30,369	\$16,311	\$46,680	\$84,856	

#### **Observations**

- Scenario 1 and 3 have the lowest interest rate risk since they are being issued shortly
- Scenario 2 has the lowest projection of total interest cost by \$69,990
  - An estimated increase of 15bps over the rates used in the 2<sup>nd</sup> series in scenario 2 would approximately equal the amount of the interest cost savings over scenario 1
- Scenario 2 has the highest interest rate risk due to the 2<sup>nd</sup> tranche issued in 2019
- Using cash in place of capitalized interest increases the bond proceeds deposited to the project fund
- Stepping up your levy in scenario 3 increases total interest because approximately \$300k of principal now must be spread out into the remaining years of the term
  - Levy 18 for collect 19 estimated \$439,488
  - Levy 19 for collect 20 estimated \$752.230

Using additional cash opens another option to allay concerns about NBQ rates. This option slightly modifies scenario 3, whereby the County is already putting in \$258,388. The bonds would be structured at \$10M par (BQ) and would require the County to provide an additional (approximately) \$500,000 cash to get your project fund to the same level as scenario 3, which is \$10,279,577. Total County cash in for this structure would be \$258,388 plus approximately \$500,000.

Lastly, on a cautionary note, all the scenarios shown here are still valid for making side by side comparisons and discussing the impacts shown to your project fund, the impact of paying cash in place of capitalized interest and making other comparisons. But as was mentioned earlier in this memo, the market is up about .35% over January 9 when these scenarios were structured. If the market holds, the numbers most impacted (regardless of the scenario chosen) will be the capitalized interest (which negatively affects the project fund except where the County substitutes cash for capitalized interest) and the resulting levy estimates. I will revise Scenario 3 for the meeting on the 13th with rates updated from this week's comparable sales so that we can discuss the impact. Rates shown in any of these structures are not an indication or projection of future rates, they simply use rates from comparable (size and credit rating) sales. Actual rates will be entirely dependent upon market conditions on the day of the sale.

I will be present at the Board meeting on February 13 to present this information and address any questions. Thank you.

## **SCENARIO 1**

## \$10,500,000

## Aitkin County, Minnesota

General Obligation Capital Improvement Plan Bonds, Series 2018

Non-Bank Qualified

#### Sources & Uses

Dated 04/09/2018   Delivered 04/09/2018	
28	
Sources Of Funds	
Par Amount of Bonds	\$10,500,000.00
Total Sources	\$10,500,000.00
Uses Of Funds	
Deposit to Project Construction Fund  Deposit to Capitalized Interest (CIF) Fund  Total Underwriteria Discount (4.500%)	10,024,419.57
Deposit to Capitalized Interest (CIF) Fund	252,914.58
Total Underwriter's Discount (1.500%)	157,500.00
Total Underwriter's Discount (1.500%)	62,100.00
Rounding Amount	3,065.85
Total Uses	\$10,500,000.00

## Aitkin County, Minnesota

General Obligation Capital Improvement Plan Bonds, Series 2018

Non-Bank Qualified

### NET DEBT SERVICE SCHEDULE

	Principal	Coupon	Interest	Total P+I	CIF	Net New D/S	105% Overlevy	Fiscal Total
02/01/2019	-	•	252,914.58	252,914.58	(252,914,58)	(*)	•	
08/01/2019	:=	*	155,906.25	155,906.25	220	155,906,25	163,701.56	
02/01/2020	405,000.00	2,150%	155,906.25	560,906.25		560,906,25	588,951.56	731,494
08/01/2020			151,552.50	151,552.50	1961	151,552,50	159,130.13	701,101
02/01/2021	415,000.00	2.200%	151,552.50	566,552.50	120	566,552,50	594,880.13	754,010
08/01/2021		1.2	146,987,50	146,987,50		146,987.50	154,336,88	101,010
02/01/2022	425,000.00	2.250%	146,987.50	571,987.50		571,987.50	600,586.88	754,923
08/01/2022	·	:(+)	142,206,25	142,206,25	151	142,206,25	149,316.56	704,020
02/01/2023	435,000.00	2.300%	142,206,25	577,206,25		577,206,25	606,066,56	755,383
08/01/2023		-040	137,203.75	137,203,75		137,203.75	144,063.94	755,565
02/01/2024	445,000.00	2.400%	137,203.75	582,203.75	-	582,203.75	611,313.94	755,377
08/01/2024		020	131,863.75	131,863,75		131,863,75	138,456,94	155,511
02/01/2025	455,000.00	2.500%	131,863.75	586.863.75		586,863,75	616,206.94	754.000
08/01/2025	*		126,176.25	126,176,25		126,176.25		754,663
02/01/2026	465,000.00	2.600%	126,176,25	591,176,25	•	· ·	132,485.06	750.000
08/01/2026	100,000,00	2.00070	120,170.25	120,131,25		591,176.25	620,735.06	753,220.
02/01/2027	475,000.00	2.650%	120,131.25	595,131.25		120,131.25	126,137.81	754.000
08/01/2027	410,000,00	2,000 /0	113,837,50	113,837,50	•	595,131.25	624,887.81	751,025.
02/01/2028	490,000.00	2.750%	113,837.50	•	5	113,837.50	119,529.38	
08/01/2028	430,000,00	2.73070	107,100.00	603,837.50		603,837.50	634,029.38	753,558
02/01/2029	505,000.00	2.850%	•	107,100.00	-	107,100.00	112,455.00	
08/01/2029	303,000.00	2.05076	107,100.00	612,100.00		612,100.00	642,705.00	755,160.
02/01/2029	E1E 000 00	2.0500/	99,903.75	99,903.75		99,903.75	104,898.94	
08/01/2030	515,000.00	2.950%	99,903.75	614,903.75		614,903,75	645,648,94	750,547.
02/01/2030	500 000 00	0.0500/	92,307,50	92,307.50	5.	92,307.50	96,922.88	
	530,000,00	3.050%	92,307.50	622,307.50		622,307.50	653,422,88	750,345
08/01/2031	550 000 00	0.45004	84,225.00	84,225.00	2	84,225.00	88,436,25	
02/01/2032	550,000.00	3.150%	84,225.00	634,225.00	5	634,225.00	665,936.25	754,372
08/01/2032	· · · · · · · · · · · · · · · · · · ·		75,562,50	75,562.50	≥	75,562.50	79,340.63	
02/01/2033	565,000.00	3.250%	75,562.50	640,562.50	2	640,562,50	672,590.63	751,931
08/01/2033		<b>≅</b>	66,381,25	66,381.25	-	66,381.25	69,700.31	
02/01/2034	585,000.00	3.350%	66,381.25	651,381.25	<u> </u>	651,381.25	683,950,31	753,650.
08/01/2034	200		56,582.50	56,582.50	*	56,582,50	59,411.63	
02/01/2035	605,000.00	3.400%	56,582.50	661,582.50	÷	661,582,50	694,661.63	754,073
08/01/2035	•	-	46,297.50	46,297.50		46,297.50	48,612.38	
02/01/2036	625,000.00	3.450%	46,297.50	671,297.50	F#1	671,297.50	704,862.38	753,474
08/01/2036	(4):	2	35,516,25	35,516.25		35,516.25	37,292.06	,
2/01/2037	645,000.00	3.500%	35,516.25	680,516.25	700	680,516,25	714,542,06	751,834
08/01/2037			24,228.75	24,228.75	82	24,228,75	25,440,19	, 5 , 1004
2/01/2038	670,000.00	3.550%	24,228,75	694,228.75	7.5	694,228.75	728,940.19	754,380
08/01/2038	. 30		12,336.25	12,336.25		12,336.25	12,953.06	154,500
2/01/2039	695,000.00	3.550%	12,336.25	707,336.25	11.590 (pias	707,336.25	742,703.06	755,656
Total	\$10,500,000.00	-	\$4,105,527.08	\$14,605,527.08	(252,914.58)	\$14,269,863.11	\$14,983,356,27	/ 55,050

#### SIGNIFICANT DATES

Dated Date Delivery Date First Coupon Date	4/09/2018 4/09/2018 2/01/2019
Yield Statistics	
Bond Year Dollars Average Life Average Coupon	\$128,641.67 12.252 Years 3.1914443%
Net Interest Cost (NIC)  True Interest Cost (TIC)  Bond Yield for Arbitrage Purposes  All Inclusive Cost (AIC)	3.3138774% 3.3174380% 3.1630454% 3.3792185%
IRS Form 8038 Net Interest Cost Weighted Average Maturity	3.1914443% 12.252 Years



## Aitkin County, Minnesota

#### General Obligation Capital Improvement Plan Bonds, Series 2018 Non-Bank Qualified

### **Operation Of Project Construction Fund**

**	Principal	Rate	Interest	-Transfers	Receipts	Disbursements	Cash Balance
05/01/2018	631,122.24	1.2000000%	<u> </u>		631,122.24	631,122.24	
06/01/2018	161,149.60	1.2000000%	7,495.17	(7,495.17)	161,149.60	161,149.60	
07/01/2018	378,644.50	1.2000000%	9,209.15	(9,209.15)	378,644.50	378,644.50	
08/01/2018	572,498.65	1.2000000%	8,831.45	(8,831.45)	572,498.65	572,498.65	
09/01/2018	761,624.65	1.2000000%	8,260.38	(8,260.38)	761,624.65	761,624.65	
10/01/2018	912,925.45	1,2000000%	7,500.65	(7,500.65)	912,925.45	912,925.45	
11/01/2018	941,294.35	1.2000000%	6,590.00	(6,590.00)	941,294.35	941,294.35	
12/01/2018	794,721.70	1.2000000%	5,651.05	(5,651.05)	794,721.70	794,721.70	
01/01/2019	657,605.35	1.2000000%	4,858.31	(4,858.31)	657,605.35	657,605.35	
02/01/2019	586,683.10	1.2000000%	4,202.34	(4,202.34)	586,683.10	586,683.10	
03/01/2019	501,576.40	1.2000000%	3,617.12	(3,617.12)	501,576.40	501,576.40	
04/01/2019	449,566.75	1.2000000%	3,116.79	(3,116.79)	449,566.75	449,566.75	
05/01/2019	350,275.60	1.2000000%	2,668.34	(2,668.34)	350,275.60	350,275.60	
06/01/2019	326,634.85	1.2000000%	2,318.94	(2,318.94)	326,634.85	326,634.85	
07/01/2019	182,201,15	1.2000000%	1,993.12	(1,993.12)	182,201.15	182,201.15	
08/01/2019	222,615.55	1.2000000%	1,811.37	(1,811.37)	222,615.55	222,615.55	
09/01/2019	317,178.55	1.2000000%	1,589.31	(1,589.31)	317,178.55	317,178.55	
10/01/2019	340,819.30	1.2000000%	1,272.92	(1,272.92)	340,819.30	340,819.30	
11/01/2019	364,460.05	1.2000000%	932.95	(932.95)	364,460.05	364,460.05	
12/01/2019	309,613.39	1.2000000%	569.40	(569.40)	309,613.39	309,613.39	
01/01/2020	261,208.39	1.2000000%	260.56	(260.63)	261,208.39	261,208.39	
Total	\$10,024,419.57		\$82,749.32	(82,749.39)	\$10,024,419.57	\$10,024,419.50	

Investment Model [PV, GIC, or Securities].  Default investment yield target.	GIC Unrestricted
Cost of Investments Purchased with Bond Proceeds	10,024,419.57 \$10,024,419.57
Target Cost of Investments at bond yield	\$9,810,780.62
Yield to Receipt Yield for Arbitrage Purposes	1.1999999% 3.1630454%



## **SCENARIO 2, TRANCHE 1**

## \$6,710,000

## Aitkin County, Minnesota

General Obligation Capital Improvement Plan Bonds, Series 2018 Bank Qualified

#### Sources & Uses

### Dated 04/09/2018 | Delivered 04/09/2018

Sources Of Funds	
Par Amount of Bonds	\$6,710,000.00
Total Sources	\$6,710,000.00
Uses Of Funds	
Deposit to Project Construction Fund	6,395,062,41
Deposit to Capitalized Interest (CIF) Fund	161.666.61
Total Underwriter's Discount (1.500%)	100.650.00
Costs of Issuance	51,815.00
Rounding Amount	805.98
Total Uses	\$6 710 000 00

## \$6,710,000

## Aitkin County, Minnesota

General Obligation Capital Improvement Plan Bonds, Series 2018 Bank Qualified

#### **NET DEBT SERVICE SCHEDULE**

Date	Principal	Coupon	Interest	Total P+I	CIF	Net New D/S	105% Overlevy	Fiscal Total
02/01/2019		*	161,666.61	161,666.61	(161,666,61)			
08/01/2019	- 2	150	99,657,50	99,657,50		99,657.50	104,640.38	
02/01/2020	260,000.00	2.150%	99,657,50	359,657.50	12	359,657.50	377,640.38	482,280.7
08/01/2020	(**)	340	96,862,50	96,862.50		96,862,50	101,705.63	402,200.7
02/01/2021	265,000,00	2.200%	96,862.50	361,862,50		361,862.50	379,955.63	481,661,2
08/01/2021		-	93,947.50	93,947,50		93,947.50	98,644.88	401,001,2
02/01/2022	270,000.00	2,250%	93,947,50	363,947.50		363,947.50	382,144,88	480,789.7
08/01/2022		-	90,910.00	90,910.00		90,910.00	95,455.50	400,700,7
02/01/2023	275,000.00	2,300%	90,910.00	365,910.00	2	365,910.00	384,205.50	479,661.0
08/01/2023	540	€	87,747.50	87,747.50	-	87,747.50	92,134.88	475,001.0
02/01/2024	285,000.00	2,400%	87,747.50	372,747.50		372,747.50	391,384,88	483,519.7
08/01/2024	(#Y	3	84,327,50	84,327.50	1	84,327,50	88,543,88	403,519.7
02/01/2025	290,000.00	2,500%	84,327.50	374,327.50		374,327.50	393,043,88	481,587.7
08/01/2025			80,702,50	80,702.50	2	80,702.50	84,737.63	401,007,7
02/01/2026	295,000.00	2.600%	80,702.50	375,702,50	2	375,702.50	394,487.63	470.005.05
08/01/2026	-	~	76,867,50	76,867.50	5	76,867.50	80,710.88	479,225.25
02/01/2027	305,000.00	2.650%	76,867.50	381,867.50	2	381,867.50	400,960.88	404 674 75
08/01/2027	*		72,826.25	72,826,25		72,826,25	76,467,56	481,671,75
02/01/2028	315,000.00	2.750%	72,826,25	387,826,25	=======================================	387,826.25	407,217.56	100.005.4
08/01/2028			68,495,00	68,495.00		68,495.00	· ·	483,685.1
02/01/2029	320,000.00	2.850%	68,495.00	388,495.00		388,495.00	71,919.75	470 000 5
08/01/2029		2	63,935.00	63,935.00	(E)	63,935.00	407,919.75	479,839.50
02/01/2030	330,000.00	2.950%	63,935.00	393,935.00	12	393,935,00	67,131,75	400
08/01/2030	*	The state of the s	59,067.50	59,067,50	-	• 5/1	413,631.75	480,763.50
02/01/2031	340,000.00	3.050%	59,067.50	399,067,50	3.5 7.4	59,067,50	62,020.88	
08/01/2031		1967	53,882.50	53,882,50		399,067.50	419,020,88	481,041.75
02/01/2032	350,000.00	3.150%	53,882.50	403,882.50		53,882.50	56,576.63	
08/01/2032			48,370.00	48,370.00	383	403,882.50	424,076.63	480,653,25
02/01/2033	360,000.00	3.250%	48,370.00	408,370.00	•	48,370,00	50,788.50	
08/01/2033	14	0.20070	42,520.00	42,520.00		408,370.00	428,788.50	479,577.00
02/01/2034	375,000.00	3.350%	42,520,00	417,520.00		42,520.00	44,646.00	
08/01/2034	160	0.00070	36,238.75	36,238.75		417,520.00	438,396.00	483,042,00
02/01/2035	385,000.00	3.400%	36,238.75	421,238.75	(\$1)	36,238,75	38,050.69	
08/01/2035	:=:	0,10070	29,693.75	29,693,75	::::::::::::::::::::::::::::::::::::::	421,238.75	442,300,69	480,351,38
02/01/2036	400,000.00	3.450%	29,693.75	429,693.75	-	29,693.75	31,178.44	
08/01/2036	,	0.40070	22,793.75			429,693.75	451,178.44	482,356.88
02/01/2037	415,000.00	3.500%	22,793.75	22,793.75	±± 	22,793.75	23,933.44	a strategical
08/01/2037	,	0,000 /0	15,531.25	437,793.75		437,793.75	459,683,44	483,616.88
02/01/2038	430,000.00	3.550%	15,531.25	15,531,25		15,531.25	16,307.81	
08/01/2038	400,000.00	0.00076		445,531.25		445,531.25	467,807.81	484,115.63
02/01/2039	445,000.00	3.550%	7,898.75	7,898.75	8	7,898.75	8,293,69	
		3,330 //	7,898.75	452,898.75	•	452,898.75	475,543.69	483,837.38
Total	\$6,710,000.00		\$2,626,216.61	\$9,336,216,61	(161,666.61)	\$9,144,180.69	\$9,601,389.72	

#### SIGNIFICANT DATES

Dated Date	4/09/2018 4/09/2018
Yield Statistics	2/01/2019
Bond Year Dollars	\$82,272,56 12,261 Years
Net Interest Cost (NIC)	3.1920931%
Net Interest Cost (NIC)  True Interest Cost (TIC)  Bond Yield for Arbitrage Purposes  All Inclusive Cost (AIC)	3.3144304% 3.3180139% 3.1637143%
All Inclusive Cost (AIC)	3.3987336%
Net Interest Cost Weighted Average Maturity	3.1920931% 12.261 Years



Springsted

## \$6,710,000

### Aitkin County, Minnesota

### General Obligation Capital Improvement Plan Bonds, Series 2018 Bank Qualified

## **Operation Of Project Construction Fund**

Cash Balance	Disbursements	Receipts	-Transfers	Interest	Rate	Principal	Date
	791.874.71	791.874.71	(4,216.03)	4,216.03	1.2000000%	791,874.71	05/01/2018
	378.454.70	378.454.70	(5,589,23)	5,589.23	1.2000000%	378,454.70	06/01/2018
	572.211.68	572,211,68	(5,211,72)	5,211.72	1.2000000%	572,211.68	07/01/2018
	761.242.88	761,242,88	(4,640.93)	4,640.93	1.2000000%	761,242.88	08/01/2018
	912.467.84	912,467,84	(3,881.59)	3,881.59	1.2000000%	912,467,84	09/01/2018
	940,822.52	940.822.52	(2,971.39)	2,971.39	1.2000000%	940,822.52	10/01/2018
	794.323.34	794.323.34	(2,032.91)	2,032.91	1.2000000%	794,323,34	11/01/2018
0.0	657,275,72	657,275,72	(1,240,57)	1.240.57	1.2000000%	657,275.72	12/01/2018
0.0	586,389.02	586,389.02	(584.94)	584.93	1.2000000%	586,389.02	01/01/2019
	\$6,395,062.40	\$6,395,062.41	(30,369.31)	\$30,369.30	ie:	\$6,395,062.41	Totai

Investment Model [PV, GIC, or Securities]	GIC Unrestricted
Cost of Investments Purchased with Bond Proceeds	6,395,062.41 \$6,395,062.41
Target Cost of Investments at bond yield	\$6,316,060.55
Yield to Receipt	1.2000001% 3.1637143%

### **SCENARIO 2, TRANCHE 2**

#### \$3,790,000

### Aitkin County, Minnesota

General Obligation Capital Improvement Plan Bonds, Series 2019
Bank Qualified

#### Sources & Uses

#### Dated 02/03/2019 | Delivered 02/03/2019 **Sources Of Funds** Par Amount of Bonds..... \$3,790,000.00 \$3,790,000.00 **Uses Of Funds** Deposit to Project Construction Fund..... 3,577,233.28 Deposit to Capitalized Interest (CIF) Fund..... 110,383.33 Total Underwriter's Discount (1.500%)..... 56,850.00 Costs of Issuance..... 44,140.00 Rounding Amount..... 1,393.39 \$3,790,000.00

## \$3,790,000

## Aitkin County, Minnesota

General Obligation Capital Improvement Plan Bonds, Series 2019
Bank Qualified

#### NET DEBT SERVICE SCHEDULE

Date	Principal	Coupon	Interest	Total P+I	CIF	Net New D/S	105% Overlevy	Fiscal Total
08/01/2019	( <del>)</del>	-	54,883.33	54,883.33	(54,883,33)	-		
02/01/2020		72	55,500.00	55,500.00	(55,500,00)	:=0		
08/01/2020	12.1		55,500.00	55,500,00	· ·	55,500.00	58,275,00	
02/01/2021	155,000.00	2.150%	55,500.00	210,500.00		210,500.00	221,025,00	279,300.0
08/01/2021	2		53,833.75	53,833.75	-	53,833,75	56,525,44	270,000.0
02/01/2022	160,000.00	2.200%	53,833.75	213,833.75	340	213.833.75	224,525,44	281,050,8
08/01/2022		-	52,073,75	52,073.75		52,073,75	54,677,44	201,000,0
02/01/2023	165,000.00	2,250%	52,073,75	217,073,75	(*)	217,073.75	227,927.44	282,604.8
08/01/2023			50,217.50	50,217.50	(4)	50,217.50	52.728.38	202,004.0
02/01/2024	170,000.00	2.300%	50,217.50	220,217,50	-	220,217.50	231,228,38	283,956.7
08/01/2024	~ ~ ~	· ·	48,262.50	48,262,50	:=::	48,262.50	50,675.63	200,900.7
02/01/2025	170,000.00	2.400%	48,262.50	218,262,50	<b>1</b>	218,262.50	229,175,63	279,851,2
08/01/2025	2	120	46,222.50	46,222,50		46,222.50	48,533,63	219,001,2
02/01/2026	175,000.00	2.500%	46,222,50	221,222.50		221,222.50	232,283.63	280,817.2
08/01/2026		-	44,035.00	44,035.00	12	44,035.00	46,236,75	200,017.2
02/01/2027	180,000.00	2.600%	44,035.00	224,035,00		224,035.00	235,236,75	281,473.50
08/01/2027		:-	41,695.00	41,695,00		41,695.00	43,779,75	201,473.50
02/01/2028	185,000.00	2.650%	41,695.00	226,695,00	2	226,695,00	238,029,75	204 000 5
08/01/2028	2	10111	39,243,75	39,243,75		39,243,75	41,205.94	281,809.50
02/01/2029	190,000.00	2.750%	39,243,75	229,243,75	9	229,243,75	240.705.94	281,911.88
08/01/2029		-	36,631,25	36,631.25		36,631,25	38,462,81	201,911.00
02/01/2030	195,000.00	2,850%	36,631,25	231,631,25		231,631.25	243,212,81	004.075.00
08/01/2030	**	±1,000,0	33,852.50	33,852,50	Ç.	33.852.50	35.545.13	281,675.63
02/01/2031	200,000.00	2.950%	33,852.50	233,852,50	-	233,852,50		004 000 0
08/01/2031	===	2,000,0	30,902.50	30,902,50		30,902.50	245,545,13	281,090.25
02/01/2032	205,000.00	3.050%	30,902.50	235,902,50	-	·	32,447.63	000 445 05
08/01/2032	121	0.00070	27,776.25	27,776.25	-	235,902,50	247,697.63	280,145.25
02/01/2033	210,000.00	3,150%	27,776.25	237,776.25	5	27,776,25	29,165.06	070 000 40
08/01/2033		0,10070	24,468.75	24,468,75		237,776.25	249,665.06	278,830.13
02/01/2034	220,000.00	3.250%	24,468,75	24,468.75	-	24,468.75	25,692.19	000 004 00
08/01/2034	220,000,00	0.20070	20,893,75	20,893.75	*	244,468.75	256,692.19	282,384.38
02/01/2035	225,000.00	3.350%	20,893,75	245,893.75	÷	20,893.75	21,938.44	
08/01/2035	225,000.00	0.00076	17,125.00	17,125,00		245,893.75	258,188.44	280,126,88
02/01/2036	235,000,00	3.400%	17,125.00		*	17,125,00	17,981.25	
08/01/2036	200,000,00	3.400%	13,130.00	252,125.00		252,125.00	264,731.25	282,712.50
02/01/2037	240,000.00	3.450%	1.0	13,130.00	*	13,130.00	13,786.50	
08/01/2037	240,000,00	3,430%	13,130.00	253,130.00		253,130.00	265,786.50	279,573.00
02/01/2038	250,000.00	3.500%	8,990.00	8,990.00	-	8,990.00	9,439,50	1.0
08/01/2038	250,000.00	3.500%	8,990.00	258,990.00	150	258,990,00	271,939.50	281,379.00
08/01/2038	260 000 00	2.5500	4,615.00	4,615.00	0.00	4,615.00	4,845.75	TA.
	260,000.00	3.550%	4,615.00	264,615.00		264,615.00	277,845.75	282,691.50
Total	\$3,790,000.00	: e:	\$1,409,320.83	\$5,199,320.83	(110,383.33)	\$5,072,626.81	\$5,326,258.15	

#### SIGNIFICANT DATES

Dated Date Delivery Date First Coupon Date	2/03/2019 2/03/2019 8/01/2019
Yield Statistics	
Bond Year Dollars  Average Life  Average Coupon	\$44,843.94 11.832 Years 3.1427227%
Net Interest Cost (NIC)	3.2694957% 3.2748088% 3.1166723% 3.3999086%
IRS Form 8038 Net Interest Cost	3.1427227% 11.832 Years



### \$3,790,000

### Aitkin County, Minnesota

# General Obligation Capital Improvement Plan Bonds, Series 2019 Bank Qualified

### **Operation Of Project Construction Fund**

Date	Principal	Rate	Interest	-Transfers	Receipts	Disbursements	Cash Balance
03/01/2019	494,810.14	1.2000000%	: <b>5</b> 1	597	494,810.14	494,810,14	
04/01/2019	443,502.10	1.2000000%	3,074,75	(3,074.75)	443,502,10	443,502,10	
05/01/2019	345,550,39	1,2000000%	2,632,35	(2,632.35)	345,550,39	345,550,39	
06/01/2019	322,228,55	1.2000000%	2,287.66	(2,287,66)	322,228,55	322.228.55	
07/01/2019	179,743.25	1.2000000%	1,966,23	(1,966,23)	179,743,25	179.743.25	
08/01/2019	219,612.47	1.2000000%	1,786.94	(1,786.94)	219.612.47	219.612.47	
09/01/2019	312,899.81	1,2000000%	1,567.87	(1,567.87)	312.899.81	312,899,81	
10/01/2019	336,221.65	1.2000000%	1,255.75	(1,255.75)	336,221,65	336,221,65	
11/01/2019	359,543.49	1.2000000%	920.37	(920,37)	359,543,49	359,543,49	
12/01/2019	305,436.72	1.2000000%	561.72	(561,72)	305,436.72	305,436.72	
01/01/2020	257,684.71	1.2000000%	257.04	(257,05)	257,684.71	257,684.71	
Total	\$3,577,233.28		\$16,310.68	(16.310.69)	\$3,577,233,28	\$3,577,233,27	

Investment Model [PV, GIC, or Securities]	GIC Unrestricted
Cost of Investments Purchased with Bond Proceeds	3,577,233,28 \$3,577,233,28
Target Cost of Investments at bond yield.	\$3,535,469.69
Yield to Receipt	1.2000007% 3.1166723%

### **SCENARIO 3**

## \$10,500,000

## Aitkin County, Minnesota

General Obligation Capital Improvement Plan Bonds, Series 2018 Current Rates Plus 0.25%, Cash Contribution

### Sources & Uses

### Dated 04/09/2018 | Delivered 04/09/2018

Sources Of Funds	
Par Amount of Bonds.	\$10,500,000.00
County Cash Contribution for 1st Interest Payment	258,387.56
Total Sources	\$10,758,387.56
Uses Of Funds	
Deposit to Project Construction Fund.	10,279,577,00
Deposit to First Interest Payment Total Underwriter's Discount (1.500%) Costs of Issuance	258.387.56
Total Underwriter's Discount (1.500%)	157.500.00
Costs of Issuance	62.100.00
Rounding Amount	823.00
Total Uses	\$10 758 387 <b>5</b> 6

## Aitkin County, Minnesota

General Obligation Capital Improvement Plan Bonds, Series 2018 Current Rates Plus 0.25%, Cash Contribution

#### NET DEBT SERVICE SCHEDULE

Date	Principal	Coupon	Interest	Total P+I	Cash	Net New D/S	105% Overlevy	Fiscal Total
02/01/2019	-		258,387,56	258,387.56	(258,387.56)	3.5	:	
08/01/2019	*	*	159,280.00	159,280,00	-	159,280.00	167,244,00	
02/01/2020	100,000,00	2.150%	159,280.00	259,280,00	2.00	259,280,00	272,244,00	439,488.0
08/01/2020			158,205.00	158,205.00	390	158,205,00	166,115.25	100,100.1
02/01/2021	400,000.00	2.200%	158,205.00	558,205,00		558,205.00	586,115,25	752,230,5
08/01/2021	¥	-	153,805,00	153,805,00		153,805,00	161,495.25	, 02,200,2
02/01/2022	410,000.00	2,250%	153,805.00	563,805.00		563,805,00	591,995,25	753,490,5
08/01/2022	1.00		149,192,50	149,192,50	723	149,192.50	156,652,13	700,400.0
02/01/2023	415,000.00	2,300%	149,192,50	564,192,50		564,192,50	592,402,13	749,054.2
08/01/2023		-	144,420,00	144,420,00	130	144,420,00	151,641.00	748,034,2
02/01/2024	425,000.00	2.400%	144,420,00	569,420.00	121	569,420.00	597.891.00	749,532,0
08/01/2024	(Se)	V21	139,320,00	139,320.00		139,320.00	146,286,00	749,532,0
02/01/2025	435,000.00	2,500%	139,320.00	574,320,00		574.320.00	603,036,00	740 000 0
08/01/2025	1961	1,000,00	133,882,50	133,882,50	-	133,882,50		749,322.0
02/01/2026	445,000.00	2.600%	133,882,50	578,882,50		117.0	140,576.63	= 9
08/01/2026	1.10,000,00	2,00070	128,097,50	128,097.50	4	578,882,50	607,826.63	748,403.2
02/01/2027	460,000.00	2.650%	128,097.50	588,097,50	: <del>-</del>	128,097,50	134,502.38	
08/01/2027	400,000,00	2,000 /6	122,002.50		42	588,097,50	617,502,38	752,004.7
02/01/2028	470,000.00	2,750%		122,002.50	27	122,002.50	128,102,63	
08/01/2028	470,000.00	2,73076	122,002.50	592,002.50	19	592,002,50	621,602,63	749,705.2
02/01/2029	485,000.00	2.850%	115,540.00	115,540.00	-	115,540,00	121,317.00	
08/01/2029	465,000.00	2,830%	115,540.00	600,540.00	*	600,540.00	630,567.00	751,884.0
02/01/2029	E00 000 00	0.0500/	108,628.75	108,628.75		108,628.75	114,060,19	
	500,000.00	2.950%	108,628.75	608,628.75	湿	608,628.75	639,060.19	753,120.3
08/01/2030	545.000.00		101,253,75	101,253,75		101,253.75	106,316.44	
02/01/2031	515,000.00	3.050%	101,253,75	616,253.75	*	616,253.75	647,066,44	753,382.8
08/01/2031		(*)	93,400.00	93,400.00	2	93,400.00	98,070,00	
02/01/2032	530,000.00	3.150%	93,400.00	623,400.00		623,400.00	654,570,00	752,640.0
08/01/2032		-	85,052,50	85,052.50		85,052.50	89,305.13	
02/01/2033	545,000.00	3,250%	85,052.50	630,052.50	9	630,052,50	661,555.13	750,860.2
08/01/2033		-	76,196.25	76,196,25		76,196.25	80,006.06	• • • • • • • • • • • • • • • • • • • •
02/01/2034	565,000,00	3,350%	76,196.25	641,196,25	*	641,196.25	673,256,06	753,262.13
08/01/2034	*	-	66,732.50	66,732.50	20	66,732.50	70,069,13	,,,
02/01/2035	580,000.00	3.400%	66,732,50	646,732,50	-	646,732,50	679,069,13	749,138,2
08/01/2035	8		56,872,50	56,872,50		56,872.50	59,716,13	1 10,100.2
02/01/2036	600,000.00	3.450%	56,872.50	656,872.50	23	656,872,50	689,716,13	749,432.25
08/01/2036	2	-	46,522,50	46,522,50	2	46,522.50	48,848,63	1-10,102.2.
02/01/2037	620,000.00	3,500%	46,522,50	666,522,50	-	666,522.50	699,848.63	748,697.2
08/01/2037	-		35,672.50	35,672.50		35,672.50	37,456.13	740,037.2
02/01/2038	645,000.00	3.550%	35,672.50	680,672.50		680,672,50	714,706,13	752,162.25
08/01/2038		\$**0 <u>\( \begin{align*}   \] \( \begin{align*}   \]</u>	24,223.75	24,223.75	150	24,223,75	25,434.94	1 72, 102.23
2/01/2039	665,000.00	3.550%	24,223.75	689,223.75	955 955	689,223.75	723,684.94	740 140 0
8/01/2039	-		12,420,00	12,420.00	-	12,420.00		749,119,8
02/01/2040	690,000.00	3.600%	12,420.00	702,420.00	(2)	702,420.00	13,041.00	750 500 0
Total	\$10,500,000.00	0,00070			1000 000 000		737,541.00	750,582,00
TOtal	Ψ10,500,000.00		\$4,479,827.56	\$14,979,827,56	(258,387.56)	\$14,636,584.42	\$15,457,512.00	

SIGNIFICANT DATES \$736,072.00	
Dated Date Delivery Date First Coupon Date.	4/09/2018 4/09/2018 2/01/2019
Yield Statistics	
Bond Year Dollars	\$138,276.67 13.169 Years 3.2397567%
Net Interest Cost (NIC)	3.3536588% 3.3564505% 3.2107193% 3.4147529%
IRS Form 8038 Net Interest Cost Weighted Average Maturity 1/ 9/2018   4:03 PM	3,2397567% 13,169 Years

### Aitkin County, Minnesota

General Obligation Capital Improvement Plan Bonds, Series 2018 Current Rates Plus 0.25%, Cash Contribution

### **Operation Of Project Construction Fund**

Date	Principal	Rate	Interest	-Transfers	Receipts	Disbursements	Cash Balance
05/01/2018	647,187.00	1,2000000%	7/	-	647,187.00	647,187.00	
06/01/2018	165,251.00	1,2000000%	7,685.95	(7,685.95)	165,251,00	165,251.00	
07/01/2018	388,282,00	1.2000000%	9,443.56	(9,443,56)	388,282.00	388,282.00	
08/01/2018	587,071.00	1.2000000%	9,056,24	(9,056.24)	587,071.00	587,071.00	
09/01/2018	781,011.00	1:2000000%	8,470.63	(8,470.63)	781,011.00	781,011.00	
10/01/2018	936,163.00	1.2000000%	7,691.57	(7,691.57)	936,163.00	936,163.00	
11/01/2018	965,254,00	1.2000000%	6,757.74	(6,757,74)	965,254,00	965,254.00	
12/01/2018	814,950,00	1.2000000%	5,794.89	(5,794.89)	814,950.00	814,950.00	
01/01/2019	674,344.00	1,2000000%	4,981.97	(4,981.97)	674,344.00	674,344.00	
02/01/2019	601,616.00	1.2000000%	4,309.30	(4,309,30)	601,616,00	601,616.00	
03/01/2019	514,343.00	1.2000000%	3,709.19	(3,709.19)	514,343.00	514.343.00	
04/01/2019	461,010,00	1.2000000%	3,196,12	(3,196,12)	461,010.00	461,010.00	
05/01/2019	359,191,00	1.2000000%	2,736.26	(2,736.26)	359,191.00	359,191,00	
06/01/2019	334,949.00	1.2000000%	2,377.97	(2,377.97)	334,949.00	334,949.00	
07/01/2019	186,839.00	1.2000000%	2,043.85	(2,043,85)	186,839,00	186,839,00	
08/01/2019	228,282.00	1.2000000%	1,857.48	(1,857.48)	228,282,00	228,282.00	
09/01/2019	325,252.00	1.2000000%	1,629.76	(1,629.76)	325,252,00	325,252,00	
10/01/2019	349,494.00	1.2000000%	1,305.32	(1,305,32)	349,494.00	349,494.00	
11/01/2019	373,737.00	1.2000000%	956.70	(956.70)	373,737.00	373,737.00	
12/01/2019	317,494.00	1,2000000%	583.89	(583.89)	317,494.00	317,494.00	
01/01/2020	267,857.00	1.2000000%	267.19	(267.19)	267,857.00	267,857.00	
Total	\$10,279,577.00	:51	\$84,855.58	(84,855.58)	\$10,279,577,00	\$10,279,577.00	

Investment Model [PV, GIC, or Securities]  Default investment yield target	GIC Unrestricted
Cost of Investments Purchased with Bond Proceeds Total Cost of Investments	10,279,577.00 \$10,279,577.00
Target Cost of Investments at bond yield	\$10,057,275.31
Yield to Receipt	1.1999999% 3.2107193%