## City of Lawrence, Kansas

## Recommendations for Issuance of Bonds

## \$9,730,000 Water and Sewage System Refunding Revenue Bonds, Series 2015-B

The City Commission has under consideration the issuance of bonds to achieve interest cost savings by refunding an outstanding series of water and sewage system revenue bonds. This document provides information relative to the proposed issuance.

KEY EVENTS: The following summary schedule includes the timing of some of the key events that will occur relative to the bond issuance.

June 23, $2015 \quad$ City Commission sets sale date and terms
Week of June 29, 2015
July 14, 2015, 11:00 AM
July 14, 2015, 5:45 PM
On or about August 18, 2015
November 1, 2015

Rating conference is conducted
Competitive bids are received
City Commission considers award of bonds
Proceeds are received
Redeem the Series 2005 Bonds

RATING:

THE MARKET:

An application will be made to Moody's Investors Service for a rating on the Bonds. The City's water and sewage system revenue debt is currently rated 'Aa2' by Moody's.

Performance of the tax-exempt market is often measured by the Bond Buyer's Index ("BBl") which measures the yield of high grade municipal bonds in the $20^{\text {th }}$ year for general obligation bonds (the BBI 20 Bond Index) and the 30th year for revenue bonds (the BBI 25 Bond Index). The following chart illustrates these two indices over the past five years.

BBI 25-bond (Revenue) and 20-bond (G.O.) Rates for 5 Years Ending 6/11/2015


Dates

## POST ISSUANCE COMPLIANCE:

## SUPPLEMENTAL INFORMATION AND BOND RECORD:

The issuance of these bonds will result in post-issuance compliance responsibilities. The responsibilities are in two primary areas: i) compliance with federal arbitrage requirements and ii) compliance with secondary disclosure requirements.

Federal arbitrage requirements include a wide range of implications that have been taken into account as this issue has been structured. Post-issuance compliance responsibilities for tax-exempt issues include both rebate and yield restriction provisions of the IRS Code. In general terms the arbitrage requirements control the earnings on unexpended bond proceeds, including investment earnings, moneys held for debt service payments (which are considered to be proceeds under the IRS regulations), and/or reserves. Under certain circumstances any "excess earnings" will need to be paid to the IRS to maintain the taxexempt status of the Bonds. Any interest earnings on gross bond proceeds or debt service funds should not be spent until it has been determined based on actual facts that they are not "excess earnings" as defined by the IRS Code.

The arbitrage rules provide spend-down exceptions for proceeds that are spent within either a 6 -month, 18 -month or 24 -month period in accordance with certain spending criteria. Proceeds that qualify for an exception will be exempt from rebate. These exceptions are based on actual expenditures and not based on reasonable expectations, and expenditures, including any investment proceeds will have to meet the spending criteria to qualify for the exclusion. Because the Series 2005 Bonds will be redeemed within 90 days of settlement, the Bonds will qualify for the 6 -month spending exception.

Regardless of whether the issue qualifies for an exemption from the rebate provisions, rebate and yield restriction provisions will apply to the debt service fund and debt service reserve fund under certain conditions and any unspent bond proceeds remaining after three years. These funds should be monitored throughout the life of the Bonds.

Secondary disclosure requirements result from an SEC requirement that underwriters provide ongoing disclosure information to investors. To meet this requirement, any prospective underwriter will require the City to commit to providing the information needed to comply under a continuing disclosure agreement.

Springsted and the City will enter into an Agreement for Municipal Advisor Services, under which Springsted will provide arbitrage and continuing disclosure compliance services for the City.

Supplementary information will be available to staff including detailed terms and conditions of sale, comprehensive structuring schedules and information to assist in meeting postissuance compliance responsibilities.

Upon completion of the financing, a bond record will be provided that contains pertinent documents and final debt service calculations for the transaction.

PURPOSE:
Proceeds of the Bonds, together with funds on hand in the Series 2005 Bonds debt service fund and debt service reserve fund, will be used to refund the November 1, 2015 through 2025 maturities of the City's Water and Sewage System Improvement Revenue Bonds, Series 2005, dated August 1, 2005 (the "Series 2005 Bonds"). The entire $\$ 12,720,000$ remaining principal amount of the Series 2005 Bonds will be refunded. The transfer from

## AUTHORITY:

## SECURITY AND

 SOURCE OF PAYMENT:the Series 2005 debt service fund of $\$ 2,088,025$ is the amount of scheduled principal and interest payment due for the Series 2005 Bonds on November 1, 2015.

Statutory Authority: The Bonds are being issued pursuant to Constitution and statutes of the State of Kansas, including K.S.A. 10-101 to 10-125, inclusive, K.S.A. 10-620 et seq. and K.S.A. 10-1201 et seq., as amended and supplemented from time to time.

Existing Covenants/Policies: The resolution authorizing the sale and delivery of the Bonds provides for the issuance of additional long-term parity bonds if the Debt Service Coverage Ratio, as defined below, for the fiscal year immediately preceding the issuance of such additional parity bonds, as reflected by information provided by an independent accountant, shall be not less than 1.20, including the additional parity bonds proposed to be issued. In the event that the City has instituted any increase in rates for the use and services of the system and such increase shall not have been in effect during the full fiscal year immediately preceding the issuance of such proposed additional parity bonds, the additional net revenues, which would have resulted from the operation of the system during said preceding fiscal year had such rate increase been in effect for the entire period, may be added to the stated net revenues for the calculation of the debt service coverage ratio, provided that such estimated additional net revenues shall be determined by an engineering consultant. The City is in compliance with the debt service coverage requirements.
"Debt Service Coverage Ratio" means, for any fiscal year: (a) with respect to the rate covenants, the ratio determined by dividing (i) a numerator equal to the net revenues for such fiscal year by (ii) a denominator equal to the debt service requirements for such fiscal year; and (b) with respect to additional bonds and additional obligations, the ratio determined by dividing (i) a numerator equal to the net revenues for such fiscal year by (ii) a denominator equal to the average annual debt service requirements on all System Indebtedness that does not constitute subordinate lien bonds. In this regard, "System Indebtedness" refers to any and all series of bonds secured by the net revenues of the water and sewer utility system.

The City has the right, without complying with the parity additional bonds test above, to refund any System Indebtedness with parity refunding bonds provided, however, that if only a portion of any series of System Indebtedness is refunded and if that System Indebtedness is refunded with the refunding bonds bear a higher average rate of interest or become due on a date earlier than that of the System Indebtedness which is refunded, then the System Indebtedness may be refunded only with the written consent of a majority of bondholders in principal amount of the System Indebtedness that is not refunded. The City is refunding the entirety of the Series 2005 Bonds and therefore complies with this requirement.

The Bonds will be special obligations of the City payable solely from the net revenues derived by the City from the operation of the water and sewer system, on parity with the City's outstanding and future water and sewage revenue bonds.

We recommend funding a debt service reserve fund (the "Reserve") as additional security for the Bonds as the credit rating agencies and the municipal bond market more commonly expect a Reserve for higher credit rated revenue-only supported issues. Currently there is no parity Reserve requirement for the water and sewer utility system debt. The Reserve for each series of outstanding revenue bonds was computed considering that issue on its own, meaning it is pledged solely to the holders of the individual series of bonds. Consequently, it is not practicable to consider all senior lien parity bonds in the creation of a common Reserve for the debt of the City's water and wastewater utilities. This allows for some degree of
flexibility in the funding of a Reserve for each future series of bonds.
There is a three point federal test limiting the amount of a reasonably required Reserve funded from bond proceeds. That test is as follows: the lesser of (a) $10 \%$ of the stated principal amount of the obligations; (b) the maximum annual principal and interest payable on the obligations in the current year or any future year; and (c) $125 \%$ of the average annual principal and interest requirements for the obligations. Upon the issuance of the Series 2005 Bonds a debt service reserve fund was established in the amount of $\$ 2,281,474$. The Reserve for the Bonds has been sized to be $\$ 973,000$ which is $10 \%$ of the total principal amount of the Bonds and will be pledged solely to the holders of the Bonds.

The table below shows net revenues available for debt service and debt service coverage based on fiscal 2013 actual and fiscal 2014 estimated.

## Lawrence Water/Sewer Revenue Fund

Net Revenues Available For Debt Service Fiscal Years Ended December 31, 2013 and 2014

|  | Actual | Estimated |
| :--- | :---: | :---: |
|  | $\underline{12 / 31 / 2013}$ | $\underline{12 / 31 / 2014}$ |
| Operating Revenue | $\$ 32,259,758$ | $\$ 34,252,077$ |
| Operating Expense | $\underline{-25,194,767}$ | $\underline{-22,713,826}$ |
| Net Operating Income (Loss) | $7,064,991$ | $11,538,252$ |
| Add Back Depreciation and <br> amortization | $6,269,342$ | $3,434,896$ |
| Add Other income | $\underline{81,544}$ | - |
| Available for Debt Service | $\$ 13,415,877$ | $\$ 14,973,148$ |
| Average Aggregate Parity <br> Debt Service <br> Surplus (Shortfall) | $7,883,682$ | $7,883,682$ |
| Coverage of Parity Bonds for | $\$ 5,532,195$ | $\$ 7,089,466$ |
| additional bonds test | $170 \%$ | $190 \%$ |
| Maximum Annual Debt <br> Service (all debt) <br> Overall Coverage | $\$ 12,701,790$ | $\$ 12,701,790$ |
|  | $105 \%$ | $118 \%$ |

The City currently has five outstanding parity first lien bond issues outstanding. We have included an aggregate debt service schedule showing the debt service requirements for the individual parity issues, with the Bonds and the subordinate debt. We have not included the Series 2005 Bonds in the aggregate debt service since it will be refunded in its entirety.

The City has one issue of subordinate debt consisting of a Kansas Public Wastewater Loan Fund that it entered into in 2000 . Subordinate debt is not included in the coverage calculation for the issuance of additional bonds. Average annual debt service on the state loan is approximately $\$ 2,942,000$.

## STRUCTURING

 SUMMARY:In consultation with the City, the Bonds have been structured to provide approximately level annual savings over a term matching that of the Series 2005 Bonds.

Based on current interest rates, this refunding is projected to result in total future value savings of approximately $\$ 1,008,231$, with a net present value of $\$ 995,925$. These saving are after payment of all expenses related to the transaction.

SCHEDULES Schedules attached include: a preliminary feasibility summary, estimated debt service ATTACHED: requirements and interest cost savings, given the current interest rate environment, and aggregate water and sewage system debt service.

RISKS/SPECIAL The outcome of this financing will rely on the market conditions at the time of the sale. Any CONSIDERATIONS: projections included herein are estimates based on current market conditions.

SALE TERMS AND Variability of Issue Size: A specific provision in the sale terms permits modifications to the MARKETING: issue size and/or maturity structure to customize the issue once the price and interest rates are set on the day of sale.

Prepayment Provisions: Based on the short duration of the Bonds, and to avoid possible negative pricing impacts, the Bonds will not be subject to redemption prior to their stated maturities.

Bank Qualification: The City expects to issue more than $\$ 10$ million in tax-exempt obligations in the current calendar year; therefore the Bonds are not designated as bank qualified.

Good Faith Deposit: The lowest bidder will be required to provide a good faith deposit within a specified time after receipt of proposals. The good faith deposit will be deducted from the purchase price otherwise due at the time of closing. In the event the lowest bidder fails to comply with the accepted bid proposal, the Issuer will retain the good faith deposit.

## \$9,730,000

## City of Lawrence, Kansas

Water and Sewage System Refunding Revenue Bonds, Series 2015-B
Current Refunding of Series 2005 Water
Preliminary Feasibility Summary
Dated 08/18/2015 | Delivered 08/18/2015
Sources Of Funds
Par Amount of Bonds ..... \$9,730,000.00
Transfers from Prior Issue DSR Funds. ..... 2,281,473.77
Transfers from Prior Issue Debt Service Funds. ..... 2,088,025.00
Total Sources ..... \$14,099,498.77
Uses Of Funds
Deposit to Current Refunding Fund. ..... 12,988,025.00
Deposit to Debt Service Reserve Fund (DSRF) ..... 973,000.00
Total Underw riter's Discount (0.725\%) ..... 70,542.50
Costs of Issuance ..... 65,000.00
Rounding Amount. ..... 2,931.27
Total Uses. ..... \$14,099,498.77
ISSUES REFUNDED AND CALL INFORMATION
Prior Issue Call Price. ..... 100.000\%
Prior Issue Call Date. ..... 11/01/2015
SAVINGS INFORMATION
Net Future Value Benefit. ..... \$1,008,231.39
Net Present Value Benefit ..... \$995,924.86
Net PV Benefit / \$13,963,708.29 PV Refunded Debt Service ..... 7.132\%
BOND STATISTICS
Average Life. 5.596 Years
Average Coupon. ..... 2.3956863\%
Net Interest Cost (NIC) ..... 2.5252456\%
True Interest Cost (TIC) ..... 2.5198192\%
$\$ 9,730,000$
City of Lawrence, Kansas
Water and Sewage System Refunding Revenue Bonds, Series 2015-B
Current Refunding of Series 2005 Water

Debt Service Schedule

| Date | Principal | Coupon | Interest | Total P+I |
| :---: | ---: | ---: | ---: | ---: |
| $11 / 01 / 2015$ | - | - | - | - |
| $11 / 01 / 2016$ | $1,380,000.00$ | $0.800 \%$ | $234,658.94$ | $1,614,658.94$ |
| $11 / 01 / 2017$ | $875,000.00$ | $1.100 \%$ | $184,057.50$ | $1,059,057.50$ |
| $11 / 01 / 2018$ | $880,000.00$ | $1.500 \%$ | $174,432.50$ | $1,054,432.50$ |
| $11 / 01 / 2019$ | $890,000.00$ | $1.750 \%$ | $161,232.50$ | $1,051,232.50$ |
| $11 / 01 / 2020$ | $905,000.00$ | $2.000 \%$ | $145,657.50$ | $1,050,657.50$ |
| $11 / 01 / 2021$ | $920,000.00$ | $2.300 \%$ | $127,557.50$ | $1,047,557.50$ |
| $11 / 01 / 2022$ | $935,000.00$ | $2.500 \%$ | $106,397.50$ | $1,041,397.50$ |
| $11 / 01 / 2023$ | $955,000.00$ | $2.700 \%$ | $83,022.50$ | $1,038,022.50$ |
| $11 / 01 / 2024$ | $985,000.00$ | $2.750 \%$ | $57,237.50$ | $1,042,237.50$ |
| $11 / 01 / 2025$ | $1,005,000.00$ | $3.000 \%$ | $30,150.00$ | $1,035,150.00$ |
| Total | $\$ 9,730,000.00$ | - | $\$ 1,304,403.94$ | $\$ 11,034,403.94$ |

## Yield Statistics

| Bond Year Dollars. | \$54,448.03 |
| :---: | :---: |
| Average Life. | 5.596 Years |
| Average Coupon. | 2.3956863\% |
| Net Interest Cost (NIC). | 2.5252456\% |
| True Interest Cost (TIC). | 2.5198192\% |
| Bond Yield for Arbitrage Purposes.. | 2.3784492\% |
| All Inclusive Cost (AIC). | 2.6513869\% |
| IRS Form 8038 |  |
| Net Interest Cost.. | 2.3956863\% |
| Weighted Average Maturity. | 5.596 Years |

## \$9,730,000

## City of Lawrence, Kansas

Water and Sewage System Refunding Revenue Bonds, Series 2015-B Current Refunding of Series 2005 Water

| Debt Service Comparison |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Date | Total P+l | DSR | Net New D/S | Old Net D/S | Savings |
| $11 / 01 / 2015$ | - | $(1,970.10)$ | $(1,970.10)$ | $2,076,617.63$ | $2,078,587.73$ |
| $11 / 01 / 2016$ | $1,614,658.94$ | $(9,730.00)$ | $1,604,928.94$ | $1,835,435.26$ | $230,506.32$ |
| $11 / 01 / 2017$ | $1,059,057.50$ | $(9,730.00)$ | $1,049,327.50$ | $1,281,147.76$ | $231,820.26$ |
| $11 / 01 / 2018$ | $1,054,432.50$ | $(9,730.00)$ | $1,044,702.50$ | $1,277,897.76$ | $233,195.26$ |
| $11 / 01 / 2019$ | $1,051,232.50$ | $(9,730.00)$ | $1,041,502.50$ | $1,273,160.26$ | $231,657.76$ |
| $11 / 01 / 2020$ | $1,050,657.50$ | $(9,730.00)$ | $1,040,927.50$ | $1,271,935.26$ | $231,007.76$ |
| $11 / 01 / 2021$ | $1,047,557.50$ | $(9,730.00)$ | $1,037,827.50$ | $1,269,010.26$ | $231,182.76$ |
| $11 / 01 / 2022$ | $1,041,397.50$ | $(9,730.00)$ | $1,031,667.50$ | $1,264,385.26$ | $232,717.76$ |
| $11 / 01 / 2023$ | $1,038,022.50$ | $(9,730.00)$ | $1,028,292.50$ | $1,263,060.26$ | $234,767.76$ |
| $11 / 01 / 2024$ | $1,042,237.50$ | $(9,730.00)$ | $1,032,507.50$ | $1,264,822.76$ | $232,315.26$ |
| $11 / 01 / 2025$ | $1,035,150.00$ | $(982,730.00)$ | $52,420.00$ | $(1,022,013.51)$ | $(1,074,433.51)$ |
| Total | $\$ 11,034,403.94$ | $(1,072,270.10)$ | $\$ 9,962,133.84$ | $\$ 13,055,458.96$ | $\$ 3,093,325.12$ |

## PV Analysis Summary (Net to Net)

| Net FV Cashflow Savings. | 3,093,325.12 |
| :---: | :---: |
| Gross PV Debt Service Savings. | 4,233,708.29 |
| Effects of changes in DSR investments. | (1,152,689.70) |
| Net PV Cashflow Savings @ 2.378\%(Bond Yield). | 3,081,018.59 |
| Transfers from Prior Issue Debt Service Fund. | (2,088,025.00) |
| Contingency or Rounding Amount | 2,931.27 |
| Net Future Value Benefit. | \$1,008,231.39 |
| Net Present Value Benefit. | \$995,924.86 |
| Net PV Benefit / \$2,623,437.55 PV Refunded Interest. | 37.963\% |
| Net PV Benefit / \$13,963,708.29 PV Refunded Debt Service. | 7.132\% |
| Net PV Benefit / \$12,720,000 Refunded Principal.. | 7.830\% |
| Net PV Benefit / \$9,730,000 Refunding Principal.. | 10.236\% |

## Refunding Bond Information

Refunding Dated Date................................................................................................................................................................................................................................................. 8/18/2015
Refunding Delivery Dat........2015

Springsted

City of Lawrence, Kansas
Water and Sewage System Revenue Bonds

## Aggregate Debt Service

| Does not include the Series 2005 Bonds which are being refunded in their entirety. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DATE | 2007 Water \& Sewage Sys Imp Rev Bonds - | 2008 Water \& Sewage Sys Imp Rev Bonds | 2009-A Tax Wtr <br> Swr Sys Imp <br> Rev (BABs) - PS | 2015A - Wtr \& Swr <br> Sys Imp Rev - PS | TOTAL Existing Parity | Series 2015-B (the "Bonds") | TOTAL Parity | 2000 KS State Loan | TOTAL Parity and Subordinate |
| 11/01/2016 | 1,491,900.00 | 316,760.00 | 649,577.50 | 5,703,000.00 | 8,161,237.50 | 1,614,658.94 | 9,775,896.44 | 2,925,893.65 | 12,701,790.09 |
| 11/01/2017 | 1,907,875.00 | 319,822.50 | 650,493.76 | 5,703,200.00 | 8,581,391.26 | 1,059,057.50 | 9,640,448.76 | 2,932,037.15 | 12,572,485.91 |
| 11/01/2018 | 1,898,825.00 | 317,510.00 | 650,477.26 | 5,704,650.00 | 8,571,462.26 | 1,054,432.50 | 9,625,894.76 | 2,938,393.82 | 12,564,288.58 |
| 11/01/2019 | 1,902,975.00 | 320,010.00 | 654,489.00 | 5,705,450.00 | 8,582,924.00 | 1,051,232.50 | 9,634,156.50 | 2,944,971.04 | 12,579,127.54 |
| 11/01/2020 | 1,894,650.00 | 322,135.00 | 652,789.00 | 5,702,450.00 | 8,572,024.00 | 1,050,657.50 | 9,622,681.50 | 2,951,776.46 | 12,574,457.96 |
| 11/01/2021 | 1,894,300.00 | 318,335.00 | 655,283.00 | 5,705,200.00 | 8,573,118.00 | 1,047,557.50 | 9,620,675.50 | 2,958,817.99 | 12,579,493.49 |
| 11/01/2022 | 1,441,475.00 | 319,110.00 | 656,894.64 | 5,701,450.00 | 8,118,929.64 | 1,041,397.50 | 9,160,327.14 | - | 9,160,327.14 |
| 11/01/2023 | 1,441,425.00 | 319,005.00 | 657,594.64 | 5,706,200.00 | 8,124,224.64 | 1,038,022.50 | 9,162,247.14 |  | 9,162,247.14 |
| 11/01/2024 | 1,434,575.00 | 318,225.00 | 657,488.64 | 5,702,450.00 | 8,112,738.64 | 1,042,237.50 | 9,154,976.14 |  | 9,154,976.14 |
| 11/01/2025 | 1,431,150.00 | 321,750.00 | 656,696.88 | 5,704,400.00 | 8,113,996.88 | 1,035,150.00 | 9,149,146.88 |  | 9,149,146.88 |
| 11/01/2026 | 1,435,925.00 | 319,600.00 | 660,209.64 | 5,706,250.00 | 8,121,984.64 |  | 8,121,984.64 |  | 8,121,984.64 |
| 11/01/2027 | 1,433,450.00 | 322,000.00 | 662,679.14 | 5,704,250.00 | 8,122,379.14 |  | 8,122,379.14 |  | 8,122,379.14 |
| 11/01/2028 | 1,438,950.00 | 318,725.00 | 664,079.38 | 5,703,400.00 | 8,125,154.38 |  | 8,125,154.38 |  | 8,125,154.38 |
| 11/01/2029 | 1,431,975.00 | - | 664,384.38 | 5,701,400.00 | 7,797,759.38 |  | 7,797,759.38 |  | 7,797,759.38 |
| 11/01/2030 | 1,437,975.00 |  | 663,738.76 | 5,704,000.00 | 7,805,713.76 |  | 7,805,713.76 |  | 7,805,713.76 |
| 11/01/2031 | 1,441,275.00 |  | 667,129.50 | 5,705,800.00 | 7,814,204.50 |  | 7,814,204.50 |  | 7,814,204.50 |
| 11/01/2032 | 1,436,875.00 | - | 659,343.76 | 5,701,600.00 | 7,797,818.76 | - | 7,797,818.76 |  | 7,797,818.76 |
| 11/01/2033 | - | - | 660,578.14 | 5,706,400.00 | 6,366,978.14 | - | 6,366,978.14 |  | 6,366,978.14 |
| 11/01/2034 | - | - | 660,796.88 | 5,704,600.00 | 6,365,396.88 | - | 6,365,396.88 | - | 6,365,396.88 |
| 11/01/2035 | - | - |  | 5,706,200.00 | 5,706,200.00 |  | 5,706,200.00 |  | 5,706,200.00 |
| 11/01/2036 | - | - |  | 5,705,800.00 | 5,705,800.00 | - | 5,705,800.00 |  | 5,705,800.00 |
| 11/01/2037 | - | - |  | 5,703,200.00 | 5,703,200.00 | - | 5,703,200.00 |  | 5,703,200.00 |
| 11/01/2038 | - | - | - | 5,703,200.00 | 5,703,200.00 | - | 5,703,200.00 |  | 5,703,200.00 |
| 11/01/2039 | - | - |  | 5,705,400.00 | 5,705,400.00 | - | 5,705,400.00 | - | 5,705,400.00 |
| 11/01/2040 | - | - | - | 5,704,400.00 | 5,704,400.00 | - | 5,704,400.00 | - | 5,704,400.00 |
| Total | \$26,795,575.00 | \$4,152,987.50 | \$12,504,723.90 | \$142,604,350.00 | \$186,057,636.40 | \$11,034,403.94 | \$197,092,040.34 | \$17,651,890.12 | \$214,743,930.46 |
|  |  |  |  |  |  | Average | 7,883,681.61 | Maximum | 12,701,790.09 |

Par Amounts Of Selected Issues


[^0]
[^0]:    Aggregate | 6/16/2015 | $2: 30$ PM

